ATTACHMENT 1

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ATTACHMENT 2

PACIFIC GAS AND ELECTRIC COMPANY
Gas Operations Data Response

PG&E Data Request Index No.:	10707.08 Supp02		
Request Date:	03-27-2017	Date Sent:	06-06-2017
Requesting Party:	GOST-CPUC SED/CPSD		
External Requester:	Darryl Gruen	PG&E Contact:	Jon Pendleton

PG&E's responses to the following SED data request(s) are intended to comply with the Instructions provided on March 27, 2017. PG&E has no objection to SED's instructions that restate Commission Rules of Practice and Procedure, such as the duty of candor, since PG&E is required to follow such rules regardless of such instructions.

Per the Instructions, PG&E has provided the name of the person(s) answering each request, their title, the name and title of the person to whom they report, and contact information.

Question	Responded By	Title	Contact	Reports To	Title
08 Supp01	Vincent Whitmer	Supervisor, Gas Quality Management	VEW4@pge.com	Frances Yee	Gas Qlty Mgmt Specialist, Principal

QUESTION 10707.08: Please provide the following information regarding PG&E's IRTHNet database in another spreadsheet organized in a similar fashion to the spreadsheet requested in questions 1 and 6 above. Specifically, for each question, provide a breakdown of entries by month, starting with January, 2012 and ending in February, 2017.

a. Please provide the total number of late tickets for each division beginning in January, 2012 and ending in February, 2017.
b. Please provide the total number of late tickets for each district beginning in January, 2012 and ending in February, 2017.

RESPONSE 10707.08:

a) PG&E has prepared a yearly breakdown of late tickets for each division, 2012 to February 2017. See attachment "Index 10707-08_2012 - Feb 2017 Total Late - Division.xlsx." PG&E is still gathering late ticket information broken down by month for each division and anticipates delivering it by May 22, 2017.

b) PG&E does not have data available for late tickets broken down by districts. The data source used includes districts in the counts for divisions and cannot be separated.

RESPONSE 10707.08 Supp01: See attachment "*Index 10707-08_2012 - Feb 2017 Total Late - Division_Monthly.xlsx*" for the previously provided late ticket data broken down by month for each division January 2012 – February 2017. After further reviewing the late ticket data for the preparation of the monthly breakdown by division, PG&E would like to update the number of late tickets for 2015 to 3,450 (from 3,385). Refer to tab "2015" of the spreadsheet for these updated numbers.

RESPONSE 10707.08 Supp02: PG&E is providing additional data, which has been collected by the Quality Management (QM) organization, a group whose function is to perform quality assurance (QA) for gas work streams.

For the time period of January 1, 2016, to May 31, 2017, QM identified USA ticket responses that were not handled in accordance with PG&E procedures. These "field late" tickets would be identified as on-time in IRTHnet, but would have been a late ticket if processed correctly per PG&E procedures. These "field late" tickets identified by QM were not included in the original late ticket report. As a result, these late tickets were excluded from the late ticket counts provided in PG&E Responses 10707.08 and 10707.08 Supp01 (delivered to SED on April 19, 2017, and May 22, 2017, respectively).

Locate and Mark QM Review
"Field Late" Tickets
January 1, 2016, to May 31, 2017

Year	# of Late Tickets Found	# of Tickets Reviewed	Find Rate
2016	31	1,984	1.56%
2017[1]	5	563	0.89%

[1] As of 5/31/2017

For the "field late" tickets included in the table above, QM identified the following reasons for why a USA ticket was showing as being responded to on-time in IRTHnet, but would be considered late per PG&E procedures.

- "Left message with excavator but no verbal discussion": A message regarding a renegotiated start time was left for the excavator; however, the locator did not speak to them directly about renegotiating a new start time.
- "Did not call to inform excavator": The locator did not contact the excavator to renegotiate the ticket; however, a response was issued that closed the ticket on-time.
- "Inclement weather": The locator was unable to locate and mark facilities due to weather, but failed to renegotiate the ticket with the excavator prior to selecting the "inclement weather" status in IRTHnet.
- "Phased a single address ticket": Phasing a ticket for a large excavator project is acceptable as long as the locator works with the excavator to properly schedule an appropriate locate scope and frequency for the large project; however, locators should not phase a ticket involving a single address as that would not constitute a large project.
- "Did not mark by renegotiated new start time": The status of the ticket showed a notification of new start time, but the locator failed to perform the locate and mark by the new start time.

A breakdown of "field late" tickets identified by QM, by QM reason, for the January 1, 2016 to May 31, 2017 time period, is provided in the following table:

Locate and Mark QM Review "Field Late" Tickets by Status Change Reason January 1, 2016, to May 31, 2017		
Reason for Status Change	**2016**	**2017[1]**
Left message with excavator but no verbal discussion	14	4
Did not call to inform excavator	7	0
Inclement weather	3	1
Phased a single address ticket	4	0
Did not mark by renegotiated New Start Time	3	0

[1] As of 5/31/2017

Note, starting in January 2016, in an effort to bring greater visibility to the specific reasons for field late tickets, QM developed the reason codes as depicted above. Prior to January 2016, all late tickets identified by QM included tickets identified as late by IRTHnet (which would be present in the original late ticket reports), as well as tickets that were on-time in IRTHnet but should have been late per PG&E standards ("field late" tickets). Refer to the table below for the results from QM's entire Locate and Mark ticket review for the time period of January 1, 2012 – May 31, 2017.

Locate and Mark QM Review Total Late Tickets January 1, 2012, to May 31, 2017			
Year	**# of Late Tickets Found[1]**	**# of Tickets Reviewed**	**Find Rate**
2012	96	2,396	4.01%
2013	84	1,319	6.37%
2014	77	1,565	4.92%
2015	30	1,702	1.76%
2016	40	1,984	2.02%
2017[2]	8	563	1.42%

[1] These ticket counts include tickets considered late in IRTHnet, as well as tickets that were on-time in IRTHnet but should have been late per PG&E standards.

[2] As of 5/31/2017

ATTACHMENT 3

Guidepost

Experience guides us. Solutions define us.

Investigation Report: Locate and Mark

Pacific Gas and Electric Company

Pacific Gas and Electric Company
77 Beale Street
San Francisco, CA 94105

[redacted]
Guidepost Solutions LLC
[redacted]

April 26, 2018

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I. Introduction

Guidepost Solutions LLC ("Guidepost") submits this report to Pacific Gas and Electric Company ("PG&E") following its investigation of the Locate and Mark function ("L&M") at PG&E. We explain here our mandate, our methodology, and our findings. We note that PG&E cooperated fully and without reservation during the investigation and made clear numerous times that we could have access to any and all information we deemed relevant, and could speak to or interview any PG&E employee at any level. PG&E also made clear that it would not seek to influence our judgement in any way. All of these promised conditions were met.

A. About Guidepost

Guidepost Solutions is a global leader in investigations, due diligence, security and technology consulting, immigration and cross-border consulting, and monitoring and compliance solutions. We help companies, government agencies, individuals and their advisors solve problems, advance business opportunities, mitigate risks and resolve disputes – among many other services. Our professional team includes former federal and state prosecutors and law enforcement officials and leaders in the security, investigations, and intelligence and public safety communities.

Our experience includes assisting a variety of multi-national companies around the globe in various industries. Guidepost professionals have experience working with companies in the public and private sectors throughout the world, including the United Kingdom, Canada, and Mexico, and the continents of South America, Europe, Asia, and Africa.

II. Mandate

The investigation focused on the PG&E Gas Operations Division. Specifically, PG&E asked Guidepost to investigate its response to notices from construction contractors and others who sought to excavate in furtherance of their building projects anywhere within PG&E's geographical area of operation. As will be explained in more detail below, upon such notice of an excavator's intent to excavate, utilities, pursuant to California law, have 48 hours to locate their underground facilities, such as gas pipelines, and mark them, as a means to indicate the existence of the subsurface installations, and so that the excavators do not mistakenly damage the facilities.[1] Hence Locate and Mark. The safety implications are obvious, making PG&E's proper performance of this function extremely important. With some exceptions discussed below, in instances where the utility does not perform the L&M function within 48 hours, the response is considered "late".

PG&E already had been tracking and reporting late responses for years but had also determined that many responses which appeared timely were in fact, upon further investigation, actually late. PG&E asked us to investigate the reasons for this discrepancy and

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[1] Cal. Gov. Code §4216.2 provides that "an excavator planning to conduct an investigation shall notify the appropriate regional call center of the excavator's intent to excavate at least two working days, and not more than 14 calendar days, before beginning that excavation. §4216.3(a)(1)(A) provides that "unless the excavator and operator mutually agree to a later start date and time, or otherwise agree to the sequence and timeframe in which the operator will locate and …mark, an operator shall" perform the locate and mark function "before the legal excavation start date and time.". §4216.3(a)(1)(A) also provides that an operator shall advise the excavator if it "operates no subsurface installations in the area delineated for excavation", and §4216.3(a)(1)(B) provides that an operator must also indicate the presence of any abandoned subsurface installations. Because the law ("hereafter" "4216") allows as little as two working days' notice, in actual practice, the requirement is treated as a requirement of action within 48 hours and PG&E operated on that basis in the years in question. We will therefore refer to this legal requirement accordingly.

to determine approximately when the discrepancy began. Finally, PG&E asked us to determine whether certain senior officers had been aware of this discrepancy.

III. Scope and Methodology

On September 1, 2017, PG&E selected Guidepost to perform this investigation.[2] We began by reviewing background materials regarding L&M, so that we would have a good understanding of the job itself and the way it is organized at PG&E. Specifically, we reviewed L&M policies and procedures including a handbook which sets forth, step by step, how the L&M function is to be performed. We also reviewed certain audits of the L&M function and materials relating to a peer review of L&M performed by the American Gas Association ("AGA") in March 2017. We also received data provided by PG&E regarding late responses from 2012-17 as of the date of our engagement.[3]

Additionally, we reviewed all the relevant document and information demands issued to PG&E by the California Public Utilities Commission ("CPUC") and its Safety and Enforcement Division ("SED"), as well as all of PG&E's responses[4] as of the date of our engagement.

We reviewed emails and other documents culled from the electronic files of a representative sample of L&M supervisors between 2012 and 2017, and from the files of certain

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[2] Guidepost had submitted a proposal on August 18, 2017.

[3] Guidepost did not validate the data provided by PG&E; PG&E has apparently retained a third-party to conduct this analysis.

[4] We understand that the SED has conducted interviews of certain PG&E personnel regarding the issue at hand. We did not attend the interviews and did not have access to transcripts of the interviews. We are informed by PG&E that PG&E did not attend the majority of such interviews and that PG&E has not received copies of the transcripts.

officers of PG&E, and other relevant PG&E personnel. We accomplished this review by agreeing with PG&E on certain search terms to apply to the data, in keeping with current legal and investigative practice, so that we would review only documents likely to be relevant to the inquiry.[5] In order to manage the large amount of data to be reviewed even after application of the search criteria, Guidepost retained contract attorneys to conduct a "first-level" review. The contract attorneys then reviewed 258,072 potentially relevant documents and forwarded 10,007 documents to Guidepost for further review. Guidepost's team of three reviewed these documents.

Finally, we conducted 40 interviews, including the personnel mentioned above and selected L&M supervisors from the years before 2012[6].

IV. Executive Summary

In general, and as explained above, PG&E is required by California law to locate and mark its underground facilities within 48 hours of a notification from a construction contractor or other third-party excavator of its intent to excavate. It is therefore obviously important to perform these tasks on time. In 2012, and particularly from 2014 to 2016, there was a dramatic rise in the number of such notifications.

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[5] We shared the proposed search terms with PG&E's federal monitor, Kirkland & Ellis, LLP, in advance of their application to the data. In this regard, we note that we briefed the monitor team on the investigation on a weekly basis, and that the monitor team attended most of the interviews we conducted. Additionally, that team attended daily briefings at the end of all six interview days as well as a final briefing on March 14, 2018.

[6] These interviews of selected "early years" L&M supervisors who remained with PG&E in 2018 were designed to provide information on the origins of the practices at issue. We did not review emails or other electronic data for these individuals.

During most of the period in question, and particularly from 2012 -2017, PG&E struggled to maintain a sufficient staffing level in L&M to complete its work in a timely manner and thereby to meet the 48-hour requirement on a consistent basis. Locators (employees who actually perform the L&M function and who are assigned to geographic "divisions")[7] therefore felt great pressure to meet the 48-hour requirement, particularly from 2013 to 2016, when the L&M Director made it clear that he would not tolerate any violation of the 48 hour requirement.

Locators reacted by making false notations in their records, which had the effect of "stopping the 48-hour clock". This had the effect of creating records which appeared timely, but which upon further examination, were actually late.

These practices were common knowledge among L&M supervisors, and certain leaders also knew or should have known of these practices. Meanwhile, L&M leadership reported precipitously dropping numbers of late "tickets", as each job was known. Thus, in the face of rising numbers of tickets and continuing staffing challenges, and in the face of indicators that locators were falsifying records, L&M leadership claimed to have reduced late tickets to implausibly low levels. We therefore find that the discrepancy discussed above arose from a confluence of factors: insufficient staffing, inherent pressure on locators to complete the work; added pressure from the Director to avoid any late tickets; falsification of records designed to

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[7] Each division consisted of locators, lead or senior locators (who were more experienced), a clerk and a supervisor. The supervisors reported to a Superintendent (one responsible for the Southern and one for the Northern part of PG&E's service area.). The Superintendents reported to Joel Dickson, who was the Director. As used in this report, "supervisors" are the supervisors within a division. "L&M leadership" refers to the Superintendents and the Director of L&M.

avoid criticism for lack of timeliness; and failure to recognize and/or failure to report the inaccuracy of timeliness data created by these factors.

V. L&M Overview

A. The L&M Function

California law provides that a person or entity seeking to excavate whether in furtherance of a construction project or for some other purpose must notify a call center of its intent to excavate. The relevant call center for PG&E is the Underground Service Alert of Northern/Central California and Nevada, ("USA North 811"). The excavator calls the telephone number 811 or logs the request online. USA North then generates a "ticket" and conveys it to PG&E. The ticket essentially constitutes a work order. PG&E then generally has 48 hours to locate and mark the proposed excavation site. See explanation of 48-hour requirement supra.

Upon receipt of a ticket, PG&E allocates the tickets on a geographic basis, distributing them in "folders" within specific geographical areas, or "divisions". A supervisor then allocates the work among the locators. The locator then proceeds to the location of his or her assigned tickets and locates the underground facilities by using equipment which receives a signal emitted by the underground facility and marks the location, usually with paint or flags, as we were told in numerous interviews, and as the aforementioned handbook makes clear.

Certain aspects of the L&M work made it intrinsically difficult to complete the work in 48 hours. First, in certain locations, there are not only gas facilities, but electric facilities. Under certain circumstances, a Qualified Electric Worker ("QEW") must be present to assist the locator. The L&M function, in the relevant years, did not have QEW's within its ranks and had to seek help from the Electric Department. This caused significant delay and was a factor in causing late tickets. For instance, one senior locator, [redacted], told us that the lack of QEW's was a "huge issue" and this is confirmed in many email communications between supervisors and the Director of L&M, and involving other PG&E employees.

Additionally, inclement weather can cause delay. Locators usually mark the location in question with paint or flags. The paint washes away in the rain and this often necessitates "renegotiating", (rescheduling) the locate and mark service. It is also difficult to perform the work within 48 hours when the excavator is unresponsive to calls from the locators or fails to delineate the proposed excavation area.

Locators may legitimately extend the 48-hour window in several ways. First, they may renegotiate the start time of an excavation, and thereby extend the time within which they must locate PG&E's facilities and mark them. Second, if the proposed excavation site is too large to complete the L&M function in one day, the locator may arrange with the excavator to complete the project in phases. This is called "phasing". Phasing is generally only appropriate for large or complex jobs. For instance, if the excavator is proposing to build a shopping mall, as opposed to a single-family home, the project is appropriate for phasing. Importantly, Section §4216, as described above, requires that there be "mutual agreement" between the excavator and the utility in order to extend the 48-hour window in these ways. The PG&E L&M handbook makes clear that in order to achieve mutual agreement with an excavator, the locator must make "positive contact" with the excavator. Positive contact means a two-way communication, and simply leaving a message is insufficient[8].

B. The L&M Organization

Before 2013, L&M was part of the Maintenance and Construction Department. That department was also responsible for other very important damage prevention tasks, such as Leak Survey and Corrosion. Responding to and preventing gas leaks and corrosion in gas pipelines are obviously crucial safety initiatives. Damage prevention employees performed these tasks as well as L&M duties, so that an employee might one day address locate and mark needs and the next, leak survey, as we were told in interviews of supervisors for the years before 2013.

Between 2013 and 2017, L&M was a separate department, and in 2017, it became part of Field Services. Our primary focus in this report is the 2013-17 time period. In 2013, Joel Dickson became the Director of the newly separate L&M group. He also had Leak Survey reporting to him.

VI. High Pressure, Late Tickets and "Gaming the Late Ticket Metric"

We have discussed the L&M function and the requirements that govern it, including the 48-hour window, the legitimate ways to extend it, and the goal of avoiding late tickets. We

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[8] Leaving a voicemail is therefore insufficient to constitute positive contact. We note that this method of contact was only recently removed as a drop-down option for locators documenting their communications with excavators. It appears that some locators in years before 2017 believed that leaving a message such as a voicemail was sufficient to constitute positive contact, while others knew it was not. At least one supervisor told us that in 2006-2008, it was acceptable merely to leave a voicemail. The confusion demonstrates at least that training programs had failed to make this point clear.

now turn to the events that underlie this report. In short, as the number of tickets grew to unmanageable amounts, PG&E struggled to keep up with the demand, while at the same time increasing the pressure on locators to meet a goal of "zero late tickets". Locators responded by cutting corners. Specifically, they entered inaccurate and false notes in the database which tracked tickets.[9] These notes "stopped the 48-hour clock", thereby giving the misleading impression that the tickets in question had been timely handled.

We discuss our findings in this regard as to three time periods: a.) the years before 2008; b.) 2008-2012; c.) 2013-2017.

A. L&M Before 2008

We interviewed several employees who are or had been L&M supervisors or locators before 2008. They confirmed that avoiding late tickets was and had been a goal. In these years, locators tended to be senior employees, with years of experience. Although avoidance of late tickets was a goal, there was much less scrutiny of late tickets. As Supervisor Scott Farrell told us, in 2003, "either they got done or they didn't get done…and the tickets simply got resolved when they got resolved." There was no on-line management of tickets, and instead tickets were managed with a "paper" system. Locators received their assignments from the mapping department, and the tickets were stapled to a map. There was no way to check locator's whereabouts or timeliness. Locators documented their completion of a particular ticket by writing their initials on the ticket. We uncovered no evidence of false notes or other

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[9] See discussion below at subsection B.

inappropriate actions before 2008. We do note that we did not review emails or other data from this time period, and that the employees denied seeing such practices. We also note that in the absence of high demand and high pressure, there was presumably no reason to "cut corners".

B. L&M 2008-2012

In 2008, PG&E introduced an on-line system to manage its L&M function, including the tickets which were generated by the 811 system. The system, which is called IRTHnet, can track ticket volume and the timeliness of the locators' completion of the L&M tasks. Between 2008 and 2011, total tickets remained relatively constant, but their numbers began to rise in 2012. One employee, [redacted], attributed this to the nation's recovery from the 2008 financial crisis and an increase in construction associated with it.[10] A public awareness campaign which promoted the 811 system surely contributed to the rising ticket numbers as well. The total ticket data, whether or not related to the financial recovery or the public awareness campaign, played a part in the growing problems we discuss here. See the chart below[11]:

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[10] We did not obtain data regarding construction in PG&E's service area and as mentioned above, did not validate the data supplied by PG&E.

[11] Note, that the late ticket data are missing for 2008, and that late ticket numbers are as reported. They may or may not be valid for the reasons giving rise to this investigation.

	2008	2009	2010	2011
Late Tickets (as initially reported)		17,603	19,395	7,674
Total Tickets	512,682	481,662	470,254	509,949
Dig-in Rate*			3.50	2.99

See also, the chart for 2012-2016.

	2012	2013	2014	2015	2016
Late Tickets (as initially reported)	4,623	13,546	13,391	3,450	44
Total Tickets	760,177	671,015	702,275	820,455	898,120
Dig-in Rate*	2.53	2.75	2.42	2.11	2.02

*Dig-in rate for 2017 was 1.89.
*Data Supplied by PG&E

Meanwhile, the experienced employees who performed L&M work among their other duties apparently did not like IRTHnet. Supervisor Scott Farrell described the advent of IRTHnet as a "big change for the locators", who did not feel comfortable with the technology, and may not have been comfortable with the increased level of scrutiny and oversight that was now possible. As another supervisor, William Seib, explained, "the "[o]ld timers didn't like the technology changes." As a result, the demographic characteristics of the L&M function changed, and evolved from a senior and experienced organization to one featuring inexperienced and entry-level employees. Soon after PG&E began to use IRTHnet, the company had reason to believe that locators were entering falsified notes in IRTHnet in an effort to "stop the 48-hour clock".

In 2009, The Gas Operations Quality Assurance group ("QA")[12] conducted an audit of the Damage Prevention department (Audit Number 2009-0115) and reported on its findings on March 10, 2010. QA reported in its Nonconformance Report ("NCR") that "3.8% of all September 2009 tickets indicated that a new start date/time was negotiated. The majority of these tickets were entered into IRTHnet as 'negotiated' primarily as a means to keep the ticket from going overdue. As a result, incorrect data is being used to report on-time results." The NCR further explained that "employees are indicating that a new start date/time was negotiated, when, in fact, no mutual agreement was reached. Furthermore, when the negotiation occurred after the date/time the ticket originally came due, the ticket is not included in the reporting of late tickets." Finally, QA was told during the audit that some Mark & Locate[13] employees entered comments into IRTHnet stating that a new start date/time had been negotiated specifically as a "work around" to keep from going late. The NCR analyzed the impact of such practices as follows: "Incorrect data is being used to report on-time results. This data, in turn makes the M&L on-time performance appear better than it is. This may result in too few resources being provided to Mark & Locate personnel to timely respond to tickets"[14]. Indeed, Dean Churchwell, a supervisor we interviewed who had worked in L&M from 2007 to

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[12] Later "Quality Management" ("QM").

[13] The function was apparently called "Mark and Locate" and then changed to "Locate and Mark" to comport with the actual sequence of the tasks in question.

[14] These findings were incorporated in a broader report on Damage Prevention issued on March 18, 2010 See EO SR&S Quality Assurance Final Report, Gas QA Audit, Damage Prevention Program.

2009, told us that the "the volume and size of the requests are unmanageable, and it is not reasonable to believe that the workload can be completed properly in 48 hours and with a fixed amount of resources".

By 2011, there had been little change. In 2011, PG&E's Internal Audit Group ("IA") conducted an assessment of the damage prevention program, upon which it reported on February 10, 2012. The report noted that the earlier assessments by IA and QA regarding "recordkeeping processes used to establish the on-time performance of [PG&E's] mark and locate program had a system glitch, in that the time-clock feature of the software would be halted just by opening the record without performing the work or documenting an agreement with the excavator to perform the work. As a result, the report for on-time performance using this software showed a 99% on-time response for 2010 that cannot be relied upon." As of the date of the report, that deficiency had not been corrected. We note that the 2009/10 materials produced to us contained no discussion of such a "system glitch", and instead, as described above, discussed deliberate "work arounds" by employees, with the intent to avoid tickets from "going late".[15]

IA noted that it had, in 2011, received information from field employees that tickets in certain divisions were "several weeks behind schedule" and attributed this circumstance to

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[15] As such, the January 2012 IA report appears to have missed the mark, at least in part, but nevertheless, to have raised questions about the accuracy of on-time data for locate and mark. Moreover, there was apparently some confusion about whether the "glitch" had been addressed and/or when. A 2012 document entitled "Damage Prevention 1. Mark & Locate Timeliness – Action Plan – 2012" claimed that the "glitch" had been corrected as of November 2011, while the audit report of February 10 claimed that it would be corrected by April 20, 2012. In any event, we believe the "glitch" has in fact been addressed, and that as stated, the real issue is not the glitch, but the "workarounds" by locators.

"unexpectedly high demand for mark and locate services coupled with shortages of employees qualified to perform the work…".

The 2012 audit recommendations were to correct the "system glitch", and create a weekly "late ticket metric" to be "used by supervisors to evaluate their team's performance, and to be used by superintendents and directors to evaluate [the] supervisor's performance." Additionally, the report recommended that the IRTHnet application require more detailed information when a locator negotiates a new start time, including the name and telephone number of the excavator and the method of communication[16] [17]. See Damage Prevention Mark and Locate Timeliness – Action Plan – 2012. The audit was closed on December 27, 2012.

Meanwhile, in 2011, Nick Stavropoulos joined PG&E as Executive Vice President, Gas Operations (now President and Chief Operating Officer), and recruited Jesus Soto, Senior Vice President, Gas Operations to join him. Mr. Stavropoulos told us that upon his arrival he believed that things at PG&E were "a mess". Of course, the 2010 San Bruno explosion was very much on the minds of PG&E's leaders (and others), and safety was very much at the forefront of the Company's concerns. In fact, Mr. Stavropoulos told us that his efforts, which he undertook with "great intensity", were designed to prevent "another San Bruno". Indeed, Messrs. Stavropoulos and Soto began a major series of initiatives and improvements, of which

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[16] One method of communication which was available was voicemail. This undercut the requirement of "positive contact" and apparently led some locators to believe that a voicemail was sufficient without actual contact (See fn. 7).

[17] The weekly late ticket metric had been created by 2010. The IRTHnet application upgrade was supposedly in place by the end of 2012. We note that in 2017, additional upgrades required locators to enter the very same information in order to renegotiate a ticket, indicating that the recommendation had not in fact been satisfied in 2012.

L&M was only a small part. For instance, they found that PG&E's pipelines right-of-way had not been protected. In other words, there were encroachments, including dwellings and other structures which had been built over the pipelines, incompatible vegetation that had been allowed to flourish near the pipelines, and other obstructions. Stavropoulos and Soto therefore embarked on a $500 million, 5-year project to clear the right of way for thousands of miles of pipeline.

PG&E also began efforts to confirm the exact centerline location of the entire pipeline system, to confirm the "depth of cover", which means the depth of the pipeline in all locations, and to confirm the presence of pipeline markers. An article in the Pipeline Gas Journal of April 1, 2014, called these efforts, "one of the biggest pipeline testing, enhancement and replacement efforts in the industry's history." Stravropoulos also worked to improve the "safety culture" of PG&E. During our discussion with Mr. Stavropoulos, he told us about an employee who had self-reported mapping errors which led to missed leak surveys, and told us that the company had been required to pay a penalty of approximately $17 million. He had made it known that PG&E would continue to self-report in such circumstances, despite the possibility of penalties, thereby strongly affirming the "safety culture". Finally, he oversaw the construction of a new gas control center in San Ramon, California. In connection with these projects, as Mr. Stavropoulos told us, PG&E hired 2,000 field workers in the first several years of his tenure. It is clear that Stavropoulos and Soto oversaw many large strategic projects. Damage Prevention was but one of these, and L&M was one part of Damage Prevention.

With regard to L&M, the officers focused on reducing the dig-in rate[18], which is measured by calculating dig-ins per 1000 tickets. In support of this goal, these officers worked on a public awareness campaign to promote the 811 system and worked to hire more staff and to obtain better tools and better training for L&M. Additionally, they oversaw the creation of the Dig-in Reduction Team (DiRT) (which among other things, actively patrols to seek out excavators who violate the requirements of §4216 and the 811 system), and an L&M handbook. Thus, these officers both told us that their primary focus was on safety and specifically, the reduction of the dig-in rate. They appear to have been successful in this regard. John Higgins, who also joined the Company in 2012, had direct responsibility for these damage prevention efforts.[19] In keeping with this responsibility, Mr. Higgins embarked on a "listening tour" in the Damage Prevention department. He learned that among other things which could be improved, locator timeliness was an issue. Additionally, as Mr. Higgins told us, he was aware of the 2009 audit which identified issues regarding the accuracy of late ticket data, and of the 2012 audit. Mr. Soto was not aware of these audits until the AGA Peer Review in 2017, and Mr. Stavropoulos also appears not to have been familiar with them.

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[18] Dig-ins occur when an excavator hits and damages a gas line. This is obviously an important safety issue. Mr. Soto told us that in 2012 and 2013, he had been "laser focused" on the dig-in rate.

[19] Mr. Higgins has held several positions at PG&E. In 2012, he was Director of Operations, and responsible for scheduling and field safety. In 2013, he was Senior Director, Field Services, responsible for meters and leak investigations. In 2014, he was assigned to "Super Gas Operations", responsible for process flow and work effectiveness. In 2015-16, he was VP Transmission and Distribution, responsible for System Maintenance, Pipeline Operations, Leak Survey, L&M and damage claims. His LinkedIn page lists his responsibilities from 2012 to present as "Resource Planning and Scheduling; Labor Strategy; Quality Assurance; Operations Safety, and System Damage Prevention".

In keeping with these officers' goal of improving the performance of Damage Prevention, PG&E conducted an Analysis of Damage Prevention in August 2012. A primary goal of the exercise was to understand and reduce dig-ins, and particularly "at-fault dig-ins", which are dig-ins caused by PG&E's errors. Sixteen percent of the at-fault dig-ins studied had been caused by locator errors and/or failure to follow work procedures. Among the most common work procedure infractions were "[c]alling contractors to delay response to tickets without reaching mutual consent" and "[c]onsistently utilizing start date renegotiation as a work load management tool." The analysis also stated:

> "During most interviews with production locate employees, time pressure is mentioned. The employee can see the workload as it is created in real time, [and] this creates an overwhelming feeling of the need to hurry and lends itself to the justification of taking shortcuts when unsure of locate accuracy."[20]

Following the Damage Prevention Analysis, there were continuing indications that staffing was still an issue and that ticket timeliness was in question because of it. For example, on September 17, 2012, John Higgins wrote an email to Chris McGowan, an L&M "process owner" and others, supporting the use of contractors to address staffing needs, writing that this would help in identifying how many locators each division needed, so that locators could do the job "properly…and complete tickets on time without using a negotiated start time to manage tickets." In our interview, he told us that late tickets were "not necessarily bad from a leader

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[20] The reason the locators could see the work being created in real time is that they could see it on their tablets. This underscores the fact that the advent of IRTHnet, ironically, contributed to the feeling of pressure experienced by the locators. See the discussion of the reaction of older locators to the IRTHnet technology, supra.

perspective…and were an indicator that you need to shift resources." A supervisor, William Pierce, told us of a meeting in 2012, during which Mr. Higgins had indicated that although the company claimed to have no late tickets, there were in fact, late tickets, and they needed to be exposed so that resources could be properly allocated.

Importantly, there were also indications that PG&E's reported on-time performance data were significantly overstated, as the audits discussed above had stated. For instance, on October 5, 2012, John Higgins wrote to Lorene Harden, stating: "I'm worried about the safety goals for 2013 as it relates to Damage Prevention. There is a current metric that indicates an "on time" ticket completion percentage of 99.2%. The supervisors tell me it's more like 60%." In the fall of 2012, Mr. Higgins continued to receive distress signals regarding staffing problems and its relation to on-time ticket performance. On October 11, 2012, he was copied on a series of emails between PG&E and the International Brotherhood of Electrical Workers ("IBEW") regarding the proposed use of contract workers. Steven Rayburn of PG&E cited the "tremendous amount of turnover" in L&M as a reason for the staffing shortages. On October 15, 2012, Maria Arquines wrote to Mr. Higgins that the staffing issues were "affecting [sic] performance metrics for the on-time locates and if it continues without assistance, we will not meet our target goal."

On October 25, 2012, Dawn Curtis, a supervisor, wrote to Mr. Higgins to say that her division had late tickets because it had more tickets than employees to address them. He replied, "I agree that this is no way to run a company."[21] On November 1, 2012, Katherin Mack, at that time a supervisor and later a superintendent, wrote to John Higgins to discuss a "mark and locate QC scoring system" whereby a late ticket caused a 25 point deduction. She told Higgins that locators were apparently checking the box indicating positive contact, when in fact, they had not been able to reach the excavator, so that it was "not a truly renegotiated [ticket] anyway it like [sic] we are just stamping the box". Ms. Mack explicitly linked these issues to staffing challenges.[22] Jesus Soto, in an effort to address staffing and other issues in Damage Prevention, convened a Special Attention Review ("SAR") on November 19, 2012. The SAR document noted that both dig-in rates and at fault dig-in rates had improved over a 12-month rolling period. The document cited an on-time ticket completion rate of 98.7% for the year 2012. Curiously, several pages later, the document stated "we respond to approximately 60% of tickets on time". It alluded to poor tools and a high "rate of churn[23] in Locate and Mark role (estimated 80% turnover in last two years)."

The report identified the following areas for improvement:

- Mapping records
- Automated systems
- Increased public awareness

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[21] Mr. Higgins did write a second response indicating that "if a ticket's late, it's late…as long as we've reached out to the contractor, you've done your best with the meager resources we've given you.".

[22] When we asked Mr. Higgins about this document, he did not see it as confirmation that PG&E was failing to have positive contact in order to renegotiate tickets.

[23] "Churn" as found repeatedly in PG&E emails and documents, and in conversations with PG&E employees, refers to constant turnover in the workforce, caused by employees who move to other parts of PG&E or leave the company.

- Clarify work procedures
- Improve field audits
- Improve training quality
- Improve tools
- Reduce employee churn

Mr. Stavropoulos told us that he had been satisfied that the 2012 SAR would address the serious problems evident in L&M[24], and in November 19, 2012 wrote to Mr. Higgins, "Glad we are nailing down proper procedures and measurement of "late tickets". Mr. Soto also believed that the 2012 SAR and its identified areas for improvement would address the issues satisfactorily, as he told us.

Finally, on December 14, 2012, Chris McGowan, a L&M "process owner", wrote to L&M supervisors, copying Mr. Higgins, that "[l]ate tickets are no longer a success metric. We will still report on it, but it will no longer be related to your STIP[25] metrics. We want to see real late tickets from now on to better help us staff appropriately and someday get to a place where we can respond to tickets within the two-working day time frame. Late tickets are no longer looked at as a bad thing, but more as a sign that your area might need help". Thus, it was obviously clear that timeliness statistics were not "real". Despite this attempt to address this

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[24] Mr. Stavropoulos told us that he had made it clear that inappropriate notes in IRTHnet were "unacceptable".

[25] STIP stands for "Short Term Incentive Plan". An employee may have goals that are not part of STIP but which are part of his or her overall objectives.

problem by decreasing the pressure on L&M employees, Joel Dickson was soon to increase the pressure.

Thus, in 2008-12, important themes had emerged:

- Ticket numbers were rising.
- Staffing was a serious issue.
- Locators had developed "workarounds" to avoid "going late".
- On-time statistics were therefore seriously overstated.

C. 2013 -2017

As mentioned above, in 2013, L&M became a separate function, so that locators no longer performed leak survey, corrosion or other work. Joel Dickson became Director, and Jeff Carroll soon followed as Superintendent.[26] Mr. Dickson reported to John Higgins directly in 2015-16.

As Jeff Carroll told us, he and Mr. Dickson focused originally on cost, which made hiring additional staff difficult. He attributed the high cost of L&M activities to underperforming locators and poor supervision.

Soon thereafter, however, Mr. Dickson's focus changed, and his first priority was to eliminate all late tickets, or as he repeated again and again, "Zero late tickets". This demand remained consistent in the years that followed. For instance, on May 5, 2015, Mr. Dickson

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[26] The Superintendent position was later divided so that Jeff Carroll became Superintendent – North, and Several other individuals became Superintendent – South.

wrote an email to the L&M supervisors, among others, stating: "I want to reinforce my expectation that the only number we should see in the late ticket column is zero"[27]. Mr. Dickson did ask supervisors to ensure that locators were making "positive contact with contractors if we believe we will miss the 48-hour window."[28] On May 20, 2015, the agenda for the Locate & Mark North All Hands meeting included a "Director's Message", which among other things, stated: "Late tickets and AFDI[29] unacceptable", and "no late tickets". Similarly, the Locate and Mark Team Meeting agenda for July 14, 2015 was styled: "Theme: Quality: HOW DO WE GET TO ZERO? AND STAY THERE!." This message was reinforced by the fact that supervisors' performance objectives—as well as Jeff Carroll's—included an item relating to reduction in late tickets. For example, one supervisor's performance goals dated August 5, 2015 include the following goal: "Reduce late tickets to ZERO". Supervisor Adam Mayfield explained that supervisors felt pressure from above and that it "trickled down" to locators, a view that was confirmed by Vanessa White, who served as a backup to IRTHnet Administrator Steven Walker.

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[27] This stands in contrast to Jesus Soto's understanding, as expressed to us in our interview, that the Company had no absolute directive that "thou shalt not" have late tickets.

[28] This is evidence that despite Mr. Dickson's failure to react to evidence of manipulation by locators, he did seem to direct them to comply with the required procedures. We note that it may not have been clear to locators that the 48-hour requirement was a legal requirement, as one senior locator, [redacted], told us that when he joined PG&E in 2013, he had no idea that the 48-hour requirement was based in California law, and that other locators had a similar lack of understanding. In any event, Mr. Dickson did reiterate that proper procedures should be followed. For instance, on July 28, 2016 in an email to supervisors in which he instructed that there should be "no more gaming the late ticket metric", he also asked for focus on "quality, safety and compliance."

[29] AFDI stands for "at-fault dig-ins".

We learned that this message from Mr. Dickson and Mr. Carroll was delivered in a heavy-handed way, evincing a rather confrontational management style. Indeed, several supervisors used strong words in this regard. Katherin Mack called L&M "dysfunctional" under Mr. Dickson. Ron Yamashita told us that Mr. Dickson led with a "heavy hand" and that the period when Mr. Dickson led the L&M function was the "dark time". Mack said that Mr. Dickson had "unrealistic goals"[30], a view which is supported by Mr. Stavropoulos' statement in our interview that "nobody in the country gets 100% [on-time tickets] every day". Similarly, on July 23, 2015, Jeff Carroll responded to an email from Katherin Mack about locators who relied on Steven Walker, the IRTHnet administrator, to keep tickets from "going late". Mr. Carroll, writing to the North area supervisors, after having congratulated them for "accomplishing ZERO Late Tickets for almost two weeks", wrote:

> "There have been two late tickets in the last two days-and as I have shared with you-because we are at ZERO, ANY Late Ticket gets intense focus. Trust me, NONE of you want to be in position of explaining why a single ticket went late."

Indeed, one supervisor, Fred Charles, characterized Mr. Dickson's approach, saying that he led by intimidation and the zero late ticket policy was delivered by pounding his fist on a table and saying in effect, "if there is a single late ticket on a desk, you will answer to me.".

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[30] Mr. Dickson seems to have understood on some level that his demands were unrealistic. He told us that "[a]s a competitor by nature, I relished mission impossible tasks". Mr. Higgins, in Dickson's 2015 performance review, said that Dickson had to "reach a place where the backlog is zero".

We note that both Mr. Dickson and Mr. Carroll denied their management style was intimidating.[31] However, the reports we received from others are supported by the extremely apologetic, - even fearful – responses that some locators and supervisors sent to Mr. Carroll and Mr. Dickson. On April 11, 2016, one supervisor, Vinny Matsu, wrote: "I am very aware of the severity of this incident. And I apologize abundantly…I can assure you this is an isolated incident. With incredibly bad timing. I do take full responsibility for not Making [sic] sure I can be reached at every seacond [sic]…I hope this does not affect [sic] your assurance on my Ability [sic] to do this job…".

Meanwhile, the overall number of tickets continued to rise, while dig-ins were being reduced. See the chart on page 12.

Staffing continued to be a challenge to L&M, bearing on L&M's ability to complete its work in a timely manner, and causing great concern. In 2013, 20-25 employees were added to L&M's resources, as a May, 2013 Gas Financials report indicated. However, the problems continued throughout the period from 2013-2017.

A Locate and Mark 2015 Resources Forecast, presented by Jeff Carroll and Katherin Mack in April of that year, noted that L&M was "severely manpower constrained", citing increased ticket count at levels 16% higher for the first 12 weeks of 2015 than for that period in 2014. The report also cited "continued locator churn" and the elimination of the "8-inch rule"

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[31] [redacted] denied that he was intimidating but said that many people are afraid of a "big, bald, Black guy."

as factors[32], and sought 45 additional headcount. The same month, Joel Dickson wrote an email to John Higgins and others stating that L&M had grown from "1900 [late tickets] in march [sic] as reported at rcc[33] to 2750… We are 6 to 7 day weeks running 30% OT and still cannot keep pace. Most alarming is this isn't our heavy season yet…[and] we have a definitive short-term resource issue but an even bigger longer term staffing issue we cannot lose site [sic] of." John Higgins wrote the next day (April 22) to [redacted] of IBEW that "Joel Dickson had signaled that we have been crushed with USA requests, and we are unable to keep up." Higgins explained to [redacted] that the Company would try to find internal resources before turning to outside contractors. On May 28, 2015, John Higgins wrote an email to the training group emphasizing the need for more L&M training classes, and stating that "[w]e cannot live like this!". On May 28, 2015, Mr. Dickson, responding to Mr. Higgins' email, further explained the need for training classes, and summarized the issue as follows: "The issue today isn't any different than it has been in the past, churn is decimating the resources needed to handle a 22% increase in ticket demand system wide". It is also clear that staffing challenges led to late tickets. For example, on September 22, 2015, [redacted], a lead locator, wrote to Jesus Soto of "19 past due tickets due to the need for a QEW to locate electrical." Mr. Soto's administrative assistant forwarded this email to Mr. Higgins and Mr. Dickson. Mr. Dickson

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[32] Shallow excavations had previously been excluded from the locators' remit and was no longer excluded, thereby adding to the ticket volume. See discussion of churn, <u>infra.</u>

[33] "rcc" refers to the Gas Operations Risk and Compliance Committee. In 2015 this body was chaired by Nick Stavropoulos and its Vice Chair was Jesus Soto. In 2016, its Chair was Jesus Soto and there was no Vice Chair. John Higgins and Mel Christopher were members in both years. We have no record reflecting attendance on the dates to which Mr. Dickson refers.

explained to Mr. Higgins in response, that the lack of support from the Electrical department was an ongoing issue.[34]

Dickson and Higgins continued to try to find internal assistance to handle the overwhelming number of tickets. For instance, on January 4, 2016, Dickson wrote to [redacted] of PG&E's Labor Relations department, copying John Higgins, to ask whether contract issues had any effect on "compliance reps being trained to complete primary electric locating….This issue continues to plague our team and hamper our ability to timely respond to the 800k+ USA tickets we executed in 2015". In fact, the QPIC Dashboard report for December 2015, in its section addressing L&M[35], found that "L&M has been challenged to maintain a competent highly-trained workforce due to a high level of attrition. Competency issues are compounded by a 19% volume increase YTD [in tickets] which has resulted in high levels of OT and 7-day work weeks which is [sic] not sustainable". The QPIC report also noted that "Jesus Soto has convened a Locate and Mark SAR…to identify both short and longer term strategies to address issues stemming from outdated technology and resource churn." The report also noted that L&M leadership in conjunction with QM would assess individual locators' performance. Mr. Soto told us that he believed these processes were addressing the issue. By June of 2016, a presentation prepared for the L&M offsite meeting identified staffing as an "improvement area".

In an effort to combat late tickets, Mr. Dickson created the "war room" at the Bishop Ranch site. There, the IRTHnet administrator, Steven Walker, functioned as the fifth "layer of

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[34] In a second response on September 25, Mr. Dickson claimed the 19 tickets were phased, and not late.

[35] QPIC stands for "Quality and Process Improvement Council". In 2015, Messrs Soto, Higgins and Christopher were members of QPIC.

protection" to prevent late tickets.[36] The war room contained white boards with running late ticket statistics. Steven Walker "closed" many of these late tickets. Mr. Walker told us that he rarely contacted excavators himself but instead indicated in the IRTHnet database that a ticket had been renegotiated based on the supervisor's assertion that he or she (or the locator) had in fact had "positive contact" with the excavator. He admitted that he did not know in such circumstances whether there had actually been "positive contact". Walker's backup, Vanessa White, told us that Walker also entered data upon the assertion by the supervisor that he or she "would" make positive contact.

White told us that Walker had said that he entered notes in IRTHnet in order to avoid pressure from Dickson and that, in her view at least, he "would add notes to artificially delay the clock". White said that Walker had informed her that his goal was "no late tickets on his watch" and had apparently implied that she should proceed accordingly. When she discussed this with Katherin Mack, a supervisor and later a superintendent, Mack said, "Don't falsify those records". White explained that Walker "was getting pressure. Zero was the pressure". An operations analyst, [redacted], told us that "it would have been impossible for [Walker] to make all the calls" necessary to close tickets legitimately. Jeff Carroll told us that when he learned that Walker was closing tickets without contacting the excavator himself, he told Walker to stop closing tickets from the "war room".

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[36] The others were the locator himself or herself, the lead or senior locator, the division clerk, and the supervisor.

The L&M supervisors we interviewed saw staffing as "the main issue"[37] making it difficult to meet the 48-hour requirement, and while acknowledging the "incremental" staffing increases between 2013 and 2017, saw staffing as an continuing issue. Jeff Carroll explained in our interview that "we decided we [Carroll, Dickson and Higgins] would staff the valley and use creativity to handle the peak"[38], but acknowledged that staffing issues were part of the problem "the entire time I was there and it remains the single most important factor regarding the number of late tickets." Mr. Higgins confirmed that PG&E had sought to address peak demand by using third-party contractors for L&M work. We learned, however, that many third-party contractors were often ineffective, making this solution to the staffing issues imperfect. For instance, [redacted], a senior locator, told us that in his view, contractors were not effective, and that in his yard, the L&M group had used only 2 of 7 contractors they had been sent, and "sent the rest back" because they were unqualified. Supervisors Bobbie Weeck and Ron Yamashita made similar comments to us. Yamashita told us that contractors often ask how to do the job. Supervisor Adam Mayfield told us that PG&E did not effectively fill open jobs, and that in his view, having approved headcount and actual "bodies" in the field are two different

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[37] We heard this from the following employees: Basham, [redacted] Churchwell, Gambill, Mack, Mayfield, [redacted] Walker and Weeck.

[38] Joel Dickson claimed the L&M was only staffed to 70-75% of workload, and that he "could not get head count approval…to staff to full volume. I was always in the neighborhood of 25 to 50 people short". This stands in contrast to Carroll's claim that the staffing approach was a calculated approach designed to contain cost. Dickson's claim also seems inconsistent with the account provided to us by one supervisor, Frank Charles, who characterized Dickson's and Carroll's response to supervisors who complained of staffing shortages as follows: "you are not getting another person and you just need to figure it out….". It is also inconsistent with Mr. Soto's statement to us that staffing decisions would have been based on the recommendation of Mr. Dickson. Finally, it contradicts his statement in an email to supervisors on July 28, 2016, that "[e]verything I have asked our Sr. [sic] leaders for; [sic] resources, money, training, tools etc. we received.".

things. He was unsure whether this was a leadership issue or a Human Resources issue but felt it needed to be addressed.

It was also clear that a significant reason for the staffing problems in L&M was, as has been mentioned, "churn". A presentation entitled 2016 Locate & Mark No-Mark/Mis-Mark Dig-ins, and found in Mr. Carroll's files, which was prepared in mid-2016 , stated that: " in the first 6 months of 2016, Locate and Mark experienced a 10% turnover in staff." The report cited "high levels of stress caused by having to work on too many tickets a day, lack of vacation and sick days because of ticket counts, and the fact that other positions had less stress for similar pay", as reasons for the churn.[39] Supervisors we interviewed agreed that stress was a primary reason for churn. For instance, Supervisor Bobbie Weeck told us that every locator she had ever met experienced high stress and some lost sleep because of the tension. Lead locator [redacted] called L&M "an impossible task in an impossible time frame". In our interview of Mr. Dickson, he acknowledged the stress, telling us L&M is "the hardest role" in the company, and linking that stress directly with churn but said "the goal was still zero".[40]

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[39] The presentation also noted poor training as a basis for churn, and proposed remedial actions.

[40] The three officers we interviewed, Messrs. Stavropoulos, Soto and Higgins, did not see stress as a reason for churn, instead citing more desirable jobs in geographical areas with lower cost of living, and the fact that union pay scales were the same for easier jobs. Mr. Stavropoulos also identified the lack of "lines of progression" as a reason for churn. In other words, because there were no identified routes for advancement for locators, it was not an attractive job. Mr. Stavropoulos told us he had spent more than a year negotiating six lines of progression with the union. We note that in Mr. Higgins' 2013 performance review, Kevin Knapp (his supervisor at the time) gave him credit for "singled [sic] handily [sic] manag[ing] the line of progression negotiations with IBEW…".

In the midst of these staffing struggles, perhaps not surprisingly, there were continuing indications that locators, in order to avoid late tickets and to reduce stress, were still falsifying their notes with respect to the timeliness of tickets.

Vince Whitmer, of QM, told us that he had conducted an assessment of a sample of supposedly timely tickets every year since 2011, and had found that his samples contained numerous instances of tickets which had not been renegotiated properly because there had not been "positive contact" with the excavator, or because the job had been phased inappropriately. Whitmer reported these findings to supervisors and locators in 2011 and 2012, and after L&M became a separate function, to "the director" in 2013, 2014 and 2015. The director was Joel Dickson.

On April 11, 2013, Chase Zearbaugh, a supervisor in San Jose, wrote in an email (which was then forwarded to John Higgins) about late tickets in his group by citing the staffing issues, and by explaining "I have not been faking late tickets…"[41] Supervisor Bobbie Weeck wrote on December 12, 2014 to Mr. Carroll and Mr. Dickson that the "locators were under the impression that by adding a note to the excavator before the due time that would stop it from going late." Additionally, Vince Whitmer of QM continued to report to both Dickson and Carroll that locators were entering improper notes and that therefore late ticket statistics were inaccurate. Meanwhile, in 2015 and 2016, Mr. Dickson reported precipitously declining late ticket numbers. See chart at page 13. In response to a report from Mr. Dickson on July 30, 2015 that there had

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[41] In our interview of Mr. Higgins, he acknowledged that this was an indication that other employees were faking late tickets. Additionally, one supervisor told us that he had told Mr. Higgins of such practices, although he was not sure when that occurred.

been no late tickets that day, John Higgins wrote to Mr. Dickson on July 31, 2015: "This continues to sound like good news, but when I speak to people in yards, it sounds like we're still behind, strapped for help and carrying a backlog for which we're making phone calls. Is there a better way to help all of us understand our current status? Should we begin holding over any employee that elects to bid out?[42]

In fact, as many we interviewed acknowledged, it was common knowledge among supervisors that locators entered false notes in the IRTHnet database to avoid "going late.[43] Indeed, [redacted], an operations specialist, told us that she had attended meetings in 2015 and 2016 during which supervisors repeatedly addressed the issue of locators who were "gaming the system". Other supervisors, such as Bobbie Weeck, indicated that when they saw evidence of such practices, they would counsel the locator to make clear the practices were unacceptable. When we asked the IRTHnet administrator, Steven Walker, whether Dickson, Carroll (and a particular supervisor) knew about such data manipulation he said, "yes, I hate to say it."

In the Spring of 2016, Supervisor Ron Yamashita attended a town hall and suggested to Jesus Soto that he meet with Vince Whitmer of QM to discuss late ticket data. Mr. Soto

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[42] Mr. Higgins, in response to our questions about this email, told us that there could be a backlog that did not give rise to late tickets. However, it seems to us there was reason to question PG&E's ability to reduce late tickets so dramatically.

[43] Each claimed it did not happen often or at all in his or her group and that if it did happen, he or she would "counsel" the locator. We did not have data of a detailed enough level to ascertain whether such claims are accurate, nor was such an inquiry within our mandate. The following employees acknowledged that such practices were well known: Churchwell, [redacted] Mayfield, Narte, [redacted] [redacted] Walker, Weeck, Yamashita and Zearbough.

followed up on this and met with Mr. Whitmer. Mr. Whitmer told Mr. Soto about the tickets that did not appear late in IRTHnet but were in fact late because the locators had entered false notes in IRTHnet. Mr. Soto told us that he "didn't know what to make of this information", and "didn't make the extrapolation" that the information could have a bearing on the accuracy of aggregate late ticket statistics.[44]

Mr. Soto then asked Mr. Higgins to meet with Mr. Whitmer. Although Mr. Higgins did not recall such a meeting when we asked him about it, one of Mr. Whitmer's colleagues, Jennifer Burrows, does recall the meeting, during which Mr. Whitmer told Mr. Higgins about the false data. Mr. Higgins wanted to know why he had not received the QM data earlier. Ms. Burrows told us, and she explained to him, that QM had provided the data to Mr. Dickson on a monthly basis. She recalled a meeting with Dickson in May 2016 in which he claimed that the problem of "inappropriate" notes was "due to a few new supervisors – problem solved.". Burrows told us that she and her colleagues had instead found the problem to be widespread. Additionally, we asked Mr. Higgins about an untitled note found in his file and dated May 26, 2016. The note reads, in part, "Late tickets…Mid [sic] characterized…10/667 late…inappropriate phasing…Jeff Joel aware…" He did not recall the note and speculated that he was taking notes while on a conference call. He was unable to remember when this took

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[44] It appears that neither Mr. Soto nor Mr. Stavropoulos regularly received late ticket data although Mr. Soto may have received some information about the issue. In Mr. Higgins' 2015 performance review, Mr. Soto credited Mr. Higgins as follows: "Expanded size of locating workforce that ultimately drove a 75% reduction in late tickets for the full year, and a 99% reduction in late tickets for the second half of the year, effectively eliminating this issue." This underscores his surprise at the news Mr. Whitmer brought in the Spring of 2016.

place, and again speculated that it might have been when he first joined PG&E.[45] It is possible that he wrote the notes during or after the meeting with Mr. Whitmer. Mr. Higgins told us that he "didn't put two and two together" in the face of indications that the late ticket data was questionable. Mr. Higgins told us that he did not find it surprising that late ticket numbers would drop precipitously while staffing remained an issue and total ticket numbers were rising, reasoning that if the locators had been falsifying data, there would have been more dig-ins. He said that nobody had ever told him that "people were playing games with late tickets.".

On June 30, 2016, there was a Locate and Mark and Standby[46] offsite meeting, which apparently took place at Pismo Beach. One supervisor, Adam Mayfield, recognized a presentation found in Jeff Carroll's files and linked it with the June meeting. The presentation listed four different inappropriate ways that the locators avoided late tickets, including renegotiation of the due date without customer contact and phasing tickets without customer contact. The presentation also stated that this practice had been noted in the "end-of-day reports, QC reports, Schedule [sic] D Risk Assessment, and PUC customer complaints".[47]

The meeting "deck", for the June meeting identifies "Late ticket workarounds" as an improvement area, and identifies the benefit of such an improvement: "[r]easonable targets, adequate staff, visibility of gaming, shut off tricks. Accurate data so we can work on it."

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[45] The date is obviously four years after Mr. Higgins joined PG&E, and we attribute this to fatigue at the end of a three-hour interview.

[46] "Standby" personnel stay and watch excavations near "critical facilities".

[47] This presentation does not appear in the June meeting "deck" discussed below. "Schedule D" is a misnomer. It should be "Session D".

On July 19, 2016, L&M supervisors received an invitation to a supervisors' meeting called "to discuss solutions to prevent late ticket workarounds". A PowerPoint "deck" from the meeting first set forth "the problem", citing Schedule [sic] D (an internal risk assessment report), and referred to "a late ticket where a locator left a voicemail and did not negotiate a new start time (Invalid/inappropriate notes, phasing a ticket that does not qualify for phasing)". The presentation also discussed the "[v]isibility of gaming" and said that the issue was "[e]asy to see". Among the identified impacts of "the problem" were dig-ins and PUC [sic] complaints.[48] At around the same time, Jeff Carroll sent an email to supervisors asking for their observations regarding the kinds of "mistakes" they had seen locators making. Supervisor Frank Narte, responded on July 20, 2016: "I am trying to get my locators out of bad habits and change the bad ticket info and late ticket culture…I observed locators putting improper notes on tickets…"[49]. Another supervisor, Mike DeJarnette, observed the next day that "[o]ne of the main reasons for locating issues is time. Locators think they have to rush through each and every job to get the numbers down…". A third supervisor, Adam Mayfield, responded also on July 21, that locators were entering inappropriate and incomplete notes in support of the renegotiation of start times and of phasing. He explained that some locators claimed that they did not understand the requirements in relation to extending tickets.

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[48] The presentation asked the question, in relation to the CPUC, "false submissions?".

[49] Jeff Carroll's response when we asked him about this email was that Narte was a "poor supervisor". Additionally, Carroll said that Narte must have been referring to past practices at PG&E and that he should not have spoken about things which took place before his time. Given that this explanation is an implicit admission that locators were falsifying notes before Narte joined PG&E and that he joined PG&E in January of 2016, it only serves to re-affirm that such practices had indeed occurred and that Carroll was aware of it.

On July 28, 2016, Joel Dickson wrote a strongly-worded email to the L&M supervisors following a dig-in for which L&M had, on a daily operations call, been "called out". Among the things Dickson demanded from his supervisors was "no more gaming the late ticket metric…".

When we asked Mr. Dickson about the ways locators "stopped the clock" and his knowledge of their falsifications, he said "I trust you unless you give me a reason not to. I was not aware of purposeful falsification. I was never told. Was there innuendo? Allegations? QC reports by Jennifer Burrows? Yes. But I was not personally aware of L&M falsifying a ticket". He also said that he did not know what "late ticket workarounds" or "gaming the late ticket metric" meant.

In contrast, Jeff Carroll understood "gaming the late ticket metric" to mean inappropriate notes entered by locators but said that Vince Whitmer gave him the impression that the instances of such practices "were in the teens".

In August, apparently nothing had changed. Katherin Mack, by then Supervisor of the Super Gas Operations group, approached Mr. Dickson that month with a random audit she had done, which revealed that data manipulation was continuing. Mr. Dickson said, "What do you expect me to do with this?".

On October 27, 2016, [redacted], a senior locator, sent Jeff Carroll and some other supervisors an example of "locators inappropriately responding to a ticket. By doing [this] the ticket will not show up initially as a late ticket, but in the eyes of QM, audit, and the CPUC [t]here will be late tickets. No attempt to contact the excavator was made, no attempt to locate was made.".

On December 20, 2016, Mr. Dickson texted Jeff Carroll, and said "I'm with Vince [Whitmer] and he's sharing in rcc we have 36 late tix QA found that we aren't tracking…" When we asked Mr. Dickson about this report, he claimed that it was not necessarily factual, stating, "just because they report it doesn't mean it is accurate".

The next day, Vince Whitmer forwarded a chart to Jeff Carroll and several supervisors which set forth late ticket data through November 2016, and which set forth the status in IRTHnet, and the reason the ticket was actually late. Mr. Carroll told us in response to our question about this document that "you cannot look at the IRTHnet data and entries and not speak with the locator and ascertain why the specific entries were made—were the entries made in error or were they purposefully made to circumvent the polices and the system?" At the end of 2016, Mr. Dickson reported 44 late tickets for all of 2016, attributing this result, during our interview, to "meetings, tools and training".[50]

Following these events, there was a study by QM and a peer review coordinated by the American Gas Association ("AGA") which set forth the circumstances we have discussed here. The AGA peer review was the first that Mr. Stavropoulous had heard of the issues surrounding late tickets since 2012. It was also the first that Mr. Soto had heard of the falsification issues since he had asked Mr. Higgins to meet with Mr. Whitmer in 2016. He told us that the information "rocked" him and that he was "disappointed", but said that the Company would learn from these matters.

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[50] Dickson claimed in our interview that the 44 late tickets reported excluded "PG&E tickets", meaning excavation requests made by PG&E itself, a distinction missing in any other interview or document.

Mr. Soto initiated a new SAR in 2017, and among the results was an IRTHnet upgrade which required locators to include more information about their contact with excavators. Specifically, inclement weather is no longer an available basis for locators to extend the 48-hour window. Additionally, renegotiation and phasing now require detailed information about locators' contact with the excavator including the name of the excavator, the time of the conversation, and the new date, and the basis for phasing, to be entered in three separate forms for each circumstance. Additionally, in November 2017, Mel Christopher, Vice President of Gas Transmission and Distribution Operations, conducted a "stand down"[51]. He told L&M that the QM study and the AGA Peer Review had revealed discrepancies in late ticket reporting. He said that the "unclear reporting" had given leadership a "false impression that all was going well with L&M". He said, "I also understand there was a directive that "0" late tickets were only acceptable number. At this time I am telling you, there is "NO" directive to achieve "0 late tickets". He explained that locators should follow the standards for the work and do their best to avoid late tickets, and if "you've followed the procedures and done everything you can and the ticket goes late, then it is late. I do not want anyone to mask, hide or inappropriately avoid a late ticket. Any action to inappropriately avoid a late ticket is unacceptable and will not be tolerated".

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[51] A stand down requires all department members to stop work and participate in a meeting or telephone conference. We base our detailed recounting of the meeting on talking points dated November 9, 2017 which were in Mr. Soto's file.

Thus, between 2013 and 2017 ticket totals continued to rise. While the company made incremental staffing additions, staffing challenges continued to plague L&M. At the same time, Joel Dickson and Jeff Carroll bluntly demanded "zero late tickets". Supervisors felt the pressure, and it "trickled down" to locators, who continued to falsify notes to "stop the clock". In the face of indications that these practices continued and that late ticket data was suspect, Mr. Dickson reported dramatically falling late ticket numbers, and reported 44 late tickets for all of 2016. The QM study demonstrated that the late ticket data reported by Mr. Dickson were seriously inaccurate.

VII. Conclusion

We conclude that the Company failed to address staffing issues sufficiently in the time period in question, and relating to L&M. Thus, it became an unmanageable task to address the rising ticket numbers. This fact, combined with unrelenting pressure to eliminate <u>all</u> late tickets, caused locators to "cut corners", which is unfortunately a dynamic which has been seen in other corporate contexts outside of PG&E, when employees face targets that cannot legitimately be met. The issue was compounded by the failure of some leaders to accept that this dynamic was occurring and deal with it, perhaps driven by the desire to tout excellent results in what was, as Mr. Dickson put it, "mission impossible".

ATTACHMENT 4

Pacific Gas and Electric Company®

Mel Christopher
Vice President
Gas T&D Operations

Pacific Gas and Electric Company
6121 Bollinger Canyon Road
San Ramon, CA 94583

May 2, 2018

Elizaveta Malashenko
Director, Safety and Enforcement Division
California Public Utilities Commission
505 Van Ness Avenue
San Francisco, CA 94102

Re: Locate and Mark – Safety and Enforcement Division's Preliminary Investigation

Dear Ms. Malashenko:

Enclosed please find three documents relating to concerns identified regarding the reliability of late ticket information from the Locate and Mark program in PG&E's Gas Operations. PG&E has previously indicated in data request responses provided to the Safety and Enforcement Division ("SED") that PG&E was conducting this work and would provide these documents to SED.

The first document is a report prepared by Guidepost Solutions LLC ("Guidepost"), a global compliance and investigative firm. PG&E asked Guidepost to investigate locate and mark late ticket under-reporting issues and prepare an independent, non-privileged report on the causes of the under-reporting. The Guidepost report that is provided replaces certain employee names with generic names for privacy reasons and/or because a review of employment actions related to PG&E's Code of Conduct is currently underway.

The second document is a report prepared by Bates White LLC ("Bates White"), an economic consulting firm. Bates White was asked by PG&E to determine, to the greatest extent possible based on the data available in the electronic database that PG&E uses to track its responses to USA tickets, which tickets should be properly categorized as late during the period of January 1, 2012 – February 28, 2017. Bates White's report describes its methodology and the resulting late ticket counts. We believe the logic applied by Bates White is conservative and in some instances counts as late some tickets that may in fact be timely. As we had indicated to SED in data request responses and conversations, these late ticket counts are different than those previously provided to SED, and supersede late ticket totals for these years that PG&E has previously provided to SED.

The third document is a supplement to Data Request 11836.10 (provided to SED March 20, 2018) that includes additional information regarding the number of dig-ins that are associated with the tickets that Bates White identified as late during the five-year period in question. We have reviewed investigative and other records concerning the dig-ins that Bates White found associated with tickets identified as late, and found that of the approximately 3.8 million tickets submitted from 2012 to 2017, there are 31 dig-ins on which a late response by PG&E may have contributed to, or there is insufficient evidence to determine whether the late response contributed to, the incident. Based on currently available information, of these 31 dig-ins over the five-plus year period, we believe that none resulted in injury to customers, the general public, or PG&E employees or contractors.

In addition to the Guidepost and Bates White efforts to understand the causes and extent of late ticket under-reporting, PG&E has implemented operational corrective actions to foster accurate reporting of any late responses to USA tickets going forward. Among other things, our operational corrective actions include:

- implemented technical solutions and safeguards to the electronic database used to track PG&E's responses to USA tickets, designed to prevent under-reporting of late tickets and expand the late ticket reporting criteria;

- incorporating ticket reviews into the Quality Control process so that tickets are completed per PG&E standards and procedures, and to determine if newly implemented controls are effective;

- providing increased training and additional guidance on the importance of accurate late ticket information;

- additional staffing to support the locate and mark work; and,

- enhancing ticket routing to prioritize and route tickets in the most effective, efficient manner and implementing a work plan and daily huddle focusing on aligning resources to the priority tickets that are coming due.

PG&E recognizes that these reports and the data request response cover long periods of time, many employees, voluminous data, and detailed data analysis. We want to address any outstanding questions that the Commission may have about these issues, and, to that end, PG&E would propose an in-person meeting to discuss these reports with the Commission. At that meeting, we will also be prepared to discuss the corrective actions that have been implemented and employment actions being taken based on the conduct that occurred in the Locate and Mark program.

Sincerely,

Mel Christopher
Vice President, Gas T&D Operations

cc: Leslie Palmer, Deputy Director, Office of Utility Safety
Kenneth Bruno, Program Manager, Gas Safety and Reliability Branch
Arocles Aguilar, General Counsel
Darryl Gruen, Staff Counsel
Robert Kenney, Vice President, Regulatory Affairs
Meredith Allen, Senior Director, Regulatory Relations

Attachments

Guidepost

Experience guides us. Solutions define us.

Investigation Report: Locate and Mark

Pacific Gas and Electric Company

Pacific Gas and Electric Company
77 Beale Street
San Francisco, CA 94105

[redacted]
Guidepost Solutions LLC
[redacted]

April 26, 2018

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CONFIDENTIAL REDACTED VERSION

www.guidepostsolutions.com

I. Introduction

Guidepost Solutions LLC ("Guidepost") submits this report to Pacific Gas and Electric Company ("PG&E") following its investigation of the Locate and Mark function ("L&M") at PG&E. We explain here our mandate, our methodology, and our findings. We note that PG&E cooperated fully and without reservation during the investigation and made clear numerous times that we could have access to any and all information we deemed relevant, and could speak to or interview any PG&E employee at any level. PG&E also made clear that it would not seek to influence our judgement in any way. All of these promised conditions were met.

A. About Guidepost

Guidepost Solutions is a global leader in investigations, due diligence, security and technology consulting, immigration and cross-border consulting, and monitoring and compliance solutions. We help companies, government agencies, individuals and their advisors solve problems, advance business opportunities, mitigate risks and resolve disputes – among many other services. Our professional team includes former federal and state prosecutors and law enforcement officials and leaders in the security, investigations, and intelligence and public safety communities.

Our experience includes assisting a variety of multi-national companies around the globe in various industries. Guidepost professionals have experience working with companies in the public and private sectors throughout the world, including the United Kingdom, Canada, and Mexico, and the continents of South America, Europe, Asia, and Africa.

II. Mandate

The investigation focused on the PG&E Gas Operations Division. Specifically, PG&E asked Guidepost to investigate its response to notices from construction contractors and others who sought to excavate in furtherance of their building projects anywhere within PG&E's geographical area of operation. As will be explained in more detail below, upon such notice of an excavator's intent to excavate, utilities, pursuant to California law, have 48 hours to locate their underground facilities, such as gas pipelines, and mark them, as a means to indicate the existence of the subsurface installations, and so that the excavators do not mistakenly damage the facilities.[1] Hence Locate and Mark. The safety implications are obvious, making PG&E's proper performance of this function extremely important. With some exceptions discussed below, in instances where the utility does not perform the L&M function within 48 hours, the response is considered "late".

PG&E already had been tracking and reporting late responses for years but had also determined that many responses which appeared timely were in fact, upon further investigation, actually late. PG&E asked us to investigate the reasons for this discrepancy and

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[1] Cal. Gov. Code §4216.2 provides that "an excavator planning to conduct an investigation shall notify the appropriate regional call center of the excavator's intent to excavate at least two working days, and not more than 14 calendar days, before beginning that excavation. §4216.3(a)(1)(A) provides that "unless the excavator and operator mutually agree to a later start date and time, or otherwise agree to the sequence and timeframe in which the operator will locate and …mark, an operator shall" perform the locate and mark function "before the legal excavation start date and time.". §4216.3(a)(1)(A) also provides that an operator shall advise the excavator if it "operates no subsurface installations in the area delineated for excavation", and §4216.3(a)(1)(B) provides that an operator must also indicate the presence of any abandoned subsurface installations. Because the law ("hereafter" "4216") allows as little as two working days' notice, in actual practice, the requirement is treated as a requirement of action within 48 hours and PG&E operated on that basis in the years in question. We will therefore refer to this legal requirement accordingly.

to determine approximately when the discrepancy began. Finally, PG&E asked us to determine whether certain senior officers had been aware of this discrepancy.

III. Scope and Methodology

On September 1, 2017, PG&E selected Guidepost to perform this investigation.[2] We began by reviewing background materials regarding L&M, so that we would have a good understanding of the job itself and the way it is organized at PG&E. Specifically, we reviewed L&M policies and procedures including a handbook which sets forth, step by step, how the L&M function is to be performed. We also reviewed certain audits of the L&M function and materials relating to a peer review of L&M performed by the American Gas Association ("AGA") in March 2017. We also received data provided by PG&E regarding late responses from 2012-17 as of the date of our engagement.[3]

Additionally, we reviewed all the relevant document and information demands issued to PG&E by the California Public Utilities Commission ("CPUC") and its Safety and Enforcement Division ("SED"), as well as all of PG&E's responses[4] as of the date of our engagement.

We reviewed emails and other documents culled from the electronic files of a representative sample of L&M supervisors between 2012 and 2017, and from the files of certain

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[2] Guidepost had submitted a proposal on August 18, 2017.

[3] Guidepost did not validate the data provided by PG&E; PG&E has apparently retained a third-party to conduct this analysis.

[4] We understand that the SED has conducted interviews of certain PG&E personnel regarding the issue at hand. We did not attend the interviews and did not have access to transcripts of the interviews. We are informed by PG&E that PG&E did not attend the majority of such interviews and that PG&E has not received copies of the transcripts.

officers of PG&E, and other relevant PG&E personnel. We accomplished this review by agreeing with PG&E on certain search terms to apply to the data, in keeping with current legal and investigative practice, so that we would review only documents likely to be relevant to the inquiry.[5] In order to manage the large amount of data to be reviewed even after application of the search criteria, Guidepost retained contract attorneys to conduct a "first-level" review. The contract attorneys then reviewed 258,072 potentially relevant documents and forwarded 10,007 documents to Guidepost for further review. Guidepost's team of three reviewed these documents.

Finally, we conducted 40 interviews, including the personnel mentioned above and selected L&M supervisors from the years before 2012[6].

IV. Executive Summary

In general, and as explained above, PG&E is required by California law to locate and mark its underground facilities within 48 hours of a notification from a construction contractor or other third-party excavator of its intent to excavate. It is therefore obviously important to perform these tasks on time. In 2012, and particularly from 2014 to 2016, there was a dramatic rise in the number of such notifications.

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[5] We shared the proposed search terms with PG&E's federal monitor, Kirkland & Ellis, LLP, in advance of their application to the data. In this regard, we note that we briefed the monitor team on the investigation on a weekly basis, and that the monitor team attended most of the interviews we conducted. Additionally, that team attended daily briefings at the end of all six interview days as well as a final briefing on March 14, 2018.

[6] These interviews of selected "early years" L&M supervisors who remained with PG&E in 2018 were designed to provide information on the origins of the practices at issue. We did not review emails or other electronic data for these individuals.

During most of the period in question, and particularly from 2012 -2017, PG&E struggled to maintain a sufficient staffing level in L&M to complete its work in a timely manner and thereby to meet the 48-hour requirement on a consistent basis. Locators (employees who actually perform the L&M function and who are assigned to geographic "divisions")[7] therefore felt great pressure to meet the 48-hour requirement, particularly from 2013 to 2016, when the L&M Director made it clear that he would not tolerate any violation of the 48 hour requirement.

Locators reacted by making false notations in their records, which had the effect of "stopping the 48-hour clock". This had the effect of creating records which appeared timely, but which upon further examination, were actually late.

These practices were common knowledge among L&M supervisors, and certain leaders also knew or should have known of these practices. Meanwhile, L&M leadership reported precipitously dropping numbers of late "tickets", as each job was known. Thus, in the face of rising numbers of tickets and continuing staffing challenges, and in the face of indicators that locators were falsifying records, L&M leadership claimed to have reduced late tickets to implausibly low levels. We therefore find that the discrepancy discussed above arose from a confluence of factors: insufficient staffing, inherent pressure on locators to complete the work; added pressure from the Director to avoid any late tickets; falsification of records designed to

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[7] Each division consisted of locators, lead or senior locators (who were more experienced), a clerk and a supervisor. The supervisors reported to a Superintendent (one responsible for the Southern and one for the Northern part of PG&E's service area.). The Superintendents reported to Director 1, who was the Director. As used in this report, "supervisors" are the supervisors within a division. "L&M leadership" refers to the Superintendents and the Director of L&M.

avoid criticism for lack of timeliness; and failure to recognize and/or failure to report the inaccuracy of timeliness data created by these factors.

V. L&M Overview

A. The L&M Function

California law provides that a person or entity seeking to excavate whether in furtherance of a construction project or for some other purpose must notify a call center of its intent to excavate. The relevant call center for PG&E is the Underground Service Alert of Northern/Central California and Nevada, ("USA North 811"). The excavator calls the telephone number 811 or logs the request online. USA North then generates a "ticket" and conveys it to PG&E. The ticket essentially constitutes a work order. PG&E then generally has 48 hours to locate and mark the proposed excavation site. See explanation of 48-hour requirement supra.

Upon receipt of a ticket, PG&E allocates the tickets on a geographic basis, distributing them in "folders" within specific geographical areas, or "divisions". A supervisor then allocates the work among the locators. The locator then proceeds to the location of his or her assigned tickets and locates the underground facilities by using equipment which receives a signal emitted by the underground facility and marks the location, usually with paint or flags, as we were told in numerous interviews, and as the aforementioned handbook makes clear.

Certain aspects of the L&M work made it intrinsically difficult to complete the work in 48 hours. First, in certain locations, there are not only gas facilities, but electric facilities. Under certain circumstances, a Qualified Electric Worker ("QEW") must be present to assist the locator. The L&M function, in the relevant years, did not have QEW's within its ranks and had to seek help from the Electric Department. This caused significant delay and was a factor in causing late tickets. For instance, one senior locator, Employee 1, told us that the lack of QEW's was a "huge issue" and this is confirmed in many email communications between supervisors and the Director of L&M, and involving other PG&E employees.

Additionally, inclement weather can cause delay. Locators usually mark the location in question with paint or flags. The paint washes away in the rain and this often necessitates "renegotiating", (rescheduling) the locate and mark service. It is also difficult to perform the work within 48 hours when the excavator is unresponsive to calls from the locators or fails to delineate the proposed excavation area.

Locators may legitimately extend the 48-hour window in several ways. First, they may renegotiate the start time of an excavation, and thereby extend the time within which they must locate PG&E's facilities and mark them. Second, if the proposed excavation site is too large to complete the L&M function in one day, the locator may arrange with the excavator to complete the project in phases. This is called "phasing". Phasing is generally only appropriate for large or complex jobs. For instance, if the excavator is proposing to build a shopping mall, as opposed to a single-family home, the project is appropriate for phasing. Importantly, Section §4216, as described above, requires that there be "mutual agreement" between the excavator and the utility in order to extend the 48-hour window in these ways. The PG&E L&M handbook makes clear that in order to achieve mutual agreement with an excavator, the locator must make "positive contact" with the excavator. Positive contact means a two-way communication, and simply leaving a message is insufficient[8].

B. The L&M Organization

Before 2013, L&M was part of the Maintenance and Construction Department. That department was also responsible for other very important damage prevention tasks, such as Leak Survey and Corrosion. Responding to and preventing gas leaks and corrosion in gas pipelines are obviously crucial safety initiatives. Damage prevention employees performed these tasks as well as L&M duties, so that an employee might one day address locate and mark needs and the next, leak survey, as we were told in interviews of supervisors for the years before 2013.

Between 2013 and 2017, L&M was a separate department, and in 2017, it became part of Field Services. Our primary focus in this report is the 2013-17 time period. In 2013, Director 1 became the Director of the newly separate L&M group. He also had Leak Survey reporting to him.

VI. High Pressure, Late Tickets and "Gaming the Late Ticket Metric"

We have discussed the L&M function and the requirements that govern it, including the 48-hour window, the legitimate ways to extend it, and the goal of avoiding late tickets. We

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[8] Leaving a voicemail is therefore insufficient to constitute positive contact. We note that this method of contact was only recently removed as a drop-down option for locators documenting their communications with excavators. It appears that some locators in years before 2017 believed that leaving a message such as a voicemail was sufficient to constitute positive contact, while others knew it was not. At least one supervisor told us that in 2006-2008, it was acceptable merely to leave a voicemail. The confusion demonstrates at least that training programs had failed to make this point clear.

now turn to the events that underlie this report. In short, as the number of tickets grew to unmanageable amounts, PG&E struggled to keep up with the demand, while at the same time increasing the pressure on locators to meet a goal of "zero late tickets". Locators responded by cutting corners. Specifically, they entered inaccurate and false notes in the database which tracked tickets.[9] These notes "stopped the 48-hour clock", thereby giving the misleading impression that the tickets in question had been timely handled.

We discuss our findings in this regard as to three time periods: a.) the years before 2008; b.) 2008-2012; c.) 2013-2017.

A. L&M Before 2008

We interviewed several employees who are or had been L&M supervisors or locators before 2008. They confirmed that avoiding late tickets was and had been a goal. In these years, locators tended to be senior employees, with years of experience. Although avoidance of late tickets was a goal, there was much less scrutiny of late tickets. As Supervisor 1 told us, in 2003, "either they got done or they didn't get done…and the tickets simply got resolved when they got resolved." There was no on-line management of tickets, and instead tickets were managed with a "paper" system. Locators received their assignments from the mapping department, and the tickets were stapled to a map. There was no way to check locator's whereabouts or timeliness. Locators documented their completion of a particular ticket by writing their initials on the ticket. We uncovered no evidence of false notes or other

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[9] See discussion below at <u>subsection</u> B.

inappropriate actions before 2008. We do note that we did not review emails or other data from this time period, and that the employees denied seeing such practices. We also note that in the absence of high demand and high pressure, there was presumably no reason to "cut corners".

B. L&M 2008-2012

In 2008, PG&E introduced an on-line system to manage its L&M function, including the tickets which were generated by the 811 system. The system, which is called IRTHnet, can track ticket volume and the timeliness of the locators' completion of the L&M tasks. Between 2008 and 2011, total tickets remained relatively constant, but their numbers began to rise in 2012. One employee, Employee 2, attributed this to the nation's recovery from the 2008 financial crisis and an increase in construction associated with it.[10] A public awareness campaign which promoted the 811 system surely contributed to the rising ticket numbers as well. The total ticket data, whether or not related to the financial recovery or the public awareness campaign, played a part in the growing problems we discuss here. See the chart below[11]:

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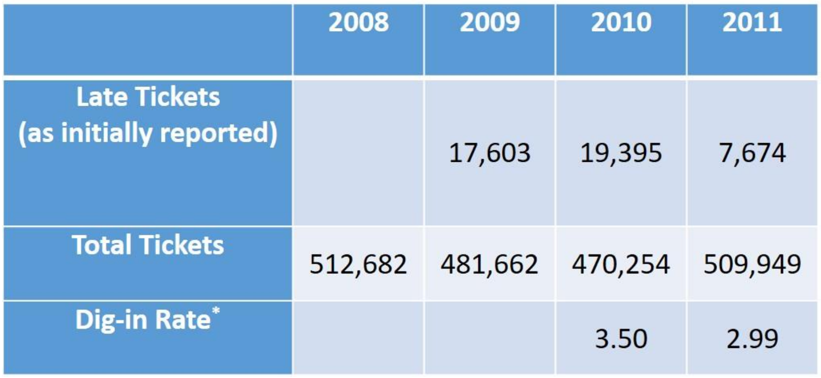
[10] We did not obtain data regarding construction in PG&E's service area and as mentioned above, did not validate the data supplied by PG&E.

[11] Note, that the late ticket data are missing for 2008, and that late ticket numbers are as reported. They may or may not be valid for the reasons giving rise to this investigation.



	2008	2009	2010	2011
Late Tickets (as initially reported)		17,603	19,395	7,674
Total Tickets	512,682	481,662	470,254	509,949
Dig-in Rate*			3.50	2.99

See also, the chart for 2012-2016.

	2012	2013	2014	2015	2016
Late Tickets (as initially reported)	4,623	13,546	13,391	3,450	44
Total Tickets	760,177	671,015	702,275	820,455	898,120
Dig-in Rate*	2.53	2.75	2.42	2.11	2.02

*Dig-in rate for 2017 was 1.89.
*Data Supplied by PG&E

Meanwhile, the experienced employees who performed L&M work among their other duties apparently did not like IRTHnet. Supervisor 1 described the advent of IRTHnet as a "big change for the locators", who did not feel comfortable with the technology, and may not have been comfortable with the increased level of scrutiny and oversight that was now possible. As another supervisor, Supervisor 2, explained, "the "[o]ld timers didn't like the technology changes." As a result, the demographic characteristics of the L&M function changed, and evolved from a senior and experienced organization to one featuring inexperienced and entry-level employees. Soon after PG&E began to use IRTHnet, the company had reason to believe that locators were entering falsified notes in IRTHnet in an effort to "stop the 48-hour clock".

In 2009, The Gas Operations Quality Assurance group ("QA")[12] conducted an audit of the Damage Prevention department (Audit Number 2009-0115) and reported on its findings on March 10, 2010. QA reported in its Nonconformance Report ("NCR") that "3.8% of all September 2009 tickets indicated that a new start date/time was negotiated. The majority of these tickets were entered into IRTHnet as 'negotiated' primarily as a means to keep the ticket from going overdue. As a result, incorrect data is being used to report on-time results." The NCR further explained that "employees are indicating that a new start date/time was negotiated, when, in fact, no mutual agreement was reached. Furthermore, when the negotiation occurred after the date/time the ticket originally came due, the ticket is not included in the reporting of late tickets." Finally, QA was told during the audit that some Mark & Locate[13] employees entered comments into IRTHnet stating that a new start date/time had been negotiated specifically as a "work around" to keep from going late. The NCR analyzed the impact of such practices as follows: "Incorrect data is being used to report on-time results. This data, in turn makes the M&L on-time performance appear better than it is. This may result in too few resources being provided to Mark & Locate personnel to timely respond to tickets"[14]. Indeed, Supervisor 3, a supervisor we interviewed who had worked in L&M from 2007 to 2009,

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[12] Later "Quality Management" ("QM").

[13] The function was apparently called "Mark and Locate" and then changed to "Locate and Mark" to comport with the actual sequence of the tasks in question.

[14] These findings were incorporated in a broader report on Damage Prevention issued on March 18, 2010 See EO SR&S Quality Assurance Final Report, Gas QA Audit, Damage Prevention Program.

told us that the "the volume and size of the requests are unmanageable, and it is not reasonable to believe that the workload can be completed properly in 48 hours and with a fixed amount of resources".

By 2011, there had been little change. In 2011, PG&E's Internal Audit Group ("IA") conducted an assessment of the damage prevention program, upon which it reported on February 10, 2012. The report noted that the earlier assessments by IA and QA regarding "recordkeeping processes used to establish the on-time performance of [PG&E's] mark and locate program had a system glitch, in that the time-clock feature of the software would be halted just by opening the record without performing the work or documenting an agreement with the excavator to perform the work. As a result, the report for on-time performance using this software showed a 99% on-time response for 2010 that cannot be relied upon." As of the date of the report, that deficiency had not been corrected. We note that the 2009/10 materials produced to us contained no discussion of such a "system glitch", and instead, as described above, discussed deliberate "work arounds" by employees, with the intent to avoid tickets from "going late".[15]

IA noted that it had, in 2011, received information from field employees that tickets in certain divisions were "several weeks behind schedule" and attributed this circumstance to

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[15] As such, the January 2012 IA report appears to have missed the mark, at least in part, but nevertheless, to have raised questions about the accuracy of on-time data for locate and mark. Moreover, there was apparently some confusion about whether the "glitch" had been addressed and/or when. A 2012 document entitled "Damage Prevention 1. Mark & Locate Timeliness – Action Plan – 2012" claimed that the "glitch" had been corrected as of November 2011, while the audit report of February 10 claimed that it would be corrected by April 20, 2012. In any event, we believe the "glitch" has in fact been addressed, and that as stated, the real issue is not the glitch, but the "workarounds" by locators.

"unexpectedly high demand for mark and locate services coupled with shortages of employees qualified to perform the work…".

The 2012 audit recommendations were to correct the "system glitch", and create a weekly "late ticket metric" to be "used by supervisors to evaluate their team's performance, and to be used by superintendents and directors to evaluate [the] supervisor's performance." Additionally, the report recommended that the IRTHnet application require more detailed information when a locator negotiates a new start time, including the name and telephone number of the excavator and the method of communication[16] [17]. See Damage Prevention Mark and Locate Timeliness – Action Plan – 2012. The audit was closed on December 27, 2012.

Meanwhile, in 2011, Nick Stavropoulos joined PG&E as Executive Vice President, Gas Operations (now President and Chief Operating Officer), and recruited Jesus Soto, Senior Vice President, Gas Operations to join him. Mr. Stavropoulos told us that upon his arrival he believed that things at PG&E were "a mess". Of course, the 2010 San Bruno explosion was very much on the minds of PG&E's leaders (and others), and safety was very much at the forefront of the Company's concerns. In fact, Mr. Stavropoulos told us that his efforts, which he undertook with "great intensity", were designed to prevent "another San Bruno". Indeed, Messrs. Stavropoulos and Soto began a major series of initiatives and improvements, of which

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[16] One method of communication which was available was voicemail. This undercut the requirement of "positive contact" and apparently led some locators to believe that a voicemail was sufficient without actual contact (See fn. 7).

[17] The weekly late ticket metric had been created by 2010. The IRTHnet application upgrade was supposedly in place by the end of 2012. We note that in 2017, additional upgrades required locators to enter the very same information in order to renegotiate a ticket, indicating that the recommendation had not in fact been satisfied in 2012.

L&M was only a small part. For instance, they found that PG&E's pipelines right-of-way had not been protected. In other words, there were encroachments, including dwellings and other structures which had been built over the pipelines, incompatible vegetation that had been allowed to flourish near the pipelines, and other obstructions. Stavropoulos and Soto therefore embarked on a $500 million, 5-year project to clear the right of way for thousands of miles of pipeline.

PG&E also began efforts to confirm the exact centerline location of the entire pipeline system, to confirm the "depth of cover", which means the depth of the pipeline in all locations, and to confirm the presence of pipeline markers. An article in the Pipeline Gas Journal of April 1, 2014, called these efforts, "one of the biggest pipeline testing, enhancement and replacement efforts in the industry's history." Stravropoulos also worked to improve the "safety culture" of PG&E. During our discussion with Mr. Stavropoulos, he told us about an employee who had self-reported mapping errors which led to missed leak surveys, and told us that the company had been required to pay a penalty of approximately $17 million. He had made it known that PG&E would continue to self-report in such circumstances, despite the possibility of penalties, thereby strongly affirming the "safety culture". Finally, he oversaw the construction of a new gas control center in San Ramon, California. In connection with these projects, as Mr. Stavropoulos told us, PG&E hired 2,000 field workers in the first several years of his tenure. It is clear that Stavropoulos and Soto oversaw many large strategic projects. Damage Prevention was but one of these, and L&M was one part of Damage Prevention.

With regard to L&M, the officers focused on reducing the dig-in rate[18], which is measured by calculating dig-ins per 1000 tickets. In support of this goal, these officers worked on a public awareness campaign to promote the 811 system and worked to hire more staff and to obtain better tools and better training for L&M. Additionally, they oversaw the creation of the Dig-in Reduction Team (DiRT) (which among other things, actively patrols to seek out excavators who violate the requirements of §4216 and the 811 system), and an L&M handbook. Thus, these officers both told us that their primary focus was on safety and specifically, the reduction of the dig-in rate. They appear to have been successful in this regard. Director/Officer 1, who also joined the Company in 2012, had direct responsibility for these damage prevention efforts.[19] In keeping with this responsibility, Director/Officer 1 embarked on a "listening tour" in the Damage Prevention department. He learned that among other things which could be improved, locator timeliness was an issue. Additionally, as Director/Officer 1 told us, he was aware of the 2009 audit which identified issues regarding the accuracy of late ticket data, and of the 2012 audit. Mr. Soto was not aware of these audits until the AGA Peer Review in 2017, and Mr. Stavropoulos also appears not to have been familiar with them.

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[18] Dig-ins occur when an excavator hits and damages a gas line. This is obviously an important safety issue. Mr. Soto told us that in 2012 and 2013, he had been "laser focused" on the dig-in rate.

[19] Director/Officer 1 has held several positions at PG&E. In 2012, he was Director of Operations, and responsible for scheduling and field safety. In 2013, he was Senior Director, Field Services, responsible for meters and leak investigations. In 2014, he was assigned to "Super Gas Operations", responsible for process flow and work effectiveness. In 2015-16, he was VP Transmission and Distribution, responsible for System Maintenance, Pipeline Operations, Leak Survey, L&M and damage claims. His LinkedIn page lists his responsibilities from 2012 to present as "Resource Planning and Scheduling; Labor Strategy; Quality Assurance; Operations Safety, and System Damage Prevention".

In keeping with these officers' goal of improving the performance of Damage Prevention, PG&E conducted an Analysis of Damage Prevention in August 2012. A primary goal of the exercise was to understand and reduce dig-ins, and particularly "at-fault dig-ins", which are dig-ins caused by PG&E's errors. Sixteen percent of the at-fault dig-ins studied had been caused by locator errors and/or failure to follow work procedures. Among the most common work procedure infractions were "[c]alling contractors to delay response to tickets without reaching mutual consent" and "[c]onsistently utilizing start date renegotiation as a work load management tool." The analysis also stated:

> "During most interviews with production locate employees, time pressure is mentioned. The employee can see the workload as it is created in real time, [and] this creates an overwhelming feeling of the need to hurry and lends itself to the justification of taking shortcuts when unsure of locate accuracy."[20]

Following the Damage Prevention Analysis, there were continuing indications that staffing was still an issue and that ticket timeliness was in question because of it. For example, on September 17, 2012, Director/Officer 1 wrote an email to Employee 3, an L&M "process owner" and others, supporting the use of contractors to address staffing needs, writing that this would help in identifying how many locators each division needed, so that locators could do the job "properly…and complete tickets on time without using a negotiated start time to manage tickets." In our interview, he told us that late tickets were "not necessarily bad from a leader

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[20] The reason the locators could see the work being created in real time is that they could see it on their tablets. This underscores the fact that the advent of IRTHnet, ironically, contributed to the feeling of pressure experienced by the locators. See the discussion of the reaction of older locators to the IRTHnet technology, supra.

perspective…and were an indicator that you need to shift resources." A supervisor, Supervisor 4, told us of a meeting in 2012, during which Director/Officer 1 had indicated that although the company claimed to have no late tickets, there were in fact, late tickets, and they needed to be exposed so that resources could be properly allocated.

Importantly, there were also indications that PG&E's reported on-time performance data were significantly overstated, as the audits discussed above had stated. For instance, on October 5, 2012, Director/Officer 1 wrote to Employee 4, stating: "I'm worried about the safety goals for 2013 as it relates to Damage Prevention. There is a current metric that indicates an "on time" ticket completion percentage of 99.2%. The supervisors tell me it's more like 60%." In the fall of 2012, Director/Officer 1 continued to receive distress signals regarding staffing problems and its relation to on-time ticket performance. On October 11, 2012, he was copied on a series of emails between PG&E and the International Brotherhood of Electrical Workers ("IBEW") regarding the proposed use of contract workers. Employee 5 of PG&E cited the "tremendous amount of turnover" in L&M as a reason for the staffing shortages. On October 15, 2012, Employee 6 wrote to Director/Officer 1 that the staffing issues were "affecting [sic] performance metrics for the on-time locates and if it continues without assistance, we will not meet our target goal."

On October 25, 2012, Supervisor 5, a supervisor, wrote to Director/Officer 1 to say that her division had late tickets because it had more tickets than employees to address them. He replied, "I agree that this is no way to run a company."[21] On November 1, 2012, Supervisor/Superintendent 1, at that time a supervisor and later a superintendent, wrote to Director/Officer 1 to discuss a "mark and locate QC scoring system" whereby a late ticket caused a 25 point deduction. She told Director/Officer 1 that locators were apparently checking the box indicating positive contact, when in fact, they had not been able to reach the excavator, so that it was "not a truly renegotiated [ticket] anyway it like [sic] we are just stamping the box". Supervisor/Superintendent 1 explicitly linked these issues to staffing challenges.[22] Jesus Soto, in an effort to address staffing and other issues in Damage Prevention, convened a Special Attention Review ("SAR") on November 19, 2012. The SAR document noted that both dig-in rates and at fault dig-in rates had improved over a 12-month rolling period. The document cited an on-time ticket completion rate of 98.7% for the year 2012. Curiously, several pages later, the document stated "we respond to approximately 60% of tickets on time". It alluded to poor tools and a high "rate of churn[23] in Locate and Mark role (estimated 80% turnover in last two years)."

The report identified the following areas for improvement:

- Mapping records
- Automated systems

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[21] Director/Officer 1 did write a second response indicating that "if a ticket's late, it's late…as long as we've reached out to the contractor, you've done your best with the meager resources we've given you.".

[22] When we asked Director/Officer 1 about this document, he did not see it as confirmation that PG&E was failing to have positive contact in order to renegotiate tickets.

[23] "Churn" as found repeatedly in PG&E emails and documents, and in conversations with PG&E employees, refers to constant turnover in the workforce, caused by employees who move to other parts of PG&E or leave the company.

- Increased public awareness
- Clarify work procedures
- Improve field audits
- Improve training quality
- Improve tools
- Reduce employee churn

Mr. Stavropoulos told us that he had been satisfied that the 2012 SAR would address the serious problems evident in L&M[24], and in November 19, 2012 wrote to Director/Officer 1, "Glad we are nailing down proper procedures and measurement of "late tickets". Mr. Soto also believed that the 2012 SAR and its identified areas for improvement would address the issues satisfactorily, as he told us.

Finally, on December 14, 2012, Employee 3, a L&M "process owner", wrote to L&M supervisors, copying Director/Officer 1, that "[l]ate tickets are no longer a success metric. We will still report on it, but it will no longer be related to your STIP[25] metrics. We want to see real late tickets from now on to better help us staff appropriately and someday get to a place where we can respond to tickets within the two-working day time frame. Late tickets are no longer looked at as a bad thing, but more as a sign that your area might need help". Thus, it was obviously clear that timeliness statistics were not "real". Despite this attempt to address this

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[24] Mr. Stavropoulos told us that he had made it clear that inappropriate notes in IRTHnet were "unacceptable".

[25] STIP stands for "Short Term Incentive Plan". An employee may have goals that are not part of STIP but which are part of his or her overall objectives.

problem by decreasing the pressure on L&M employees, Director 1 was soon to increase the pressure.

Thus, in 2008-12, important themes had emerged:

- Ticket numbers were rising.
- Staffing was a serious issue.
- Locators had developed "workarounds" to avoid "going late".
- On-time statistics were therefore seriously overstated.

C. 2013 -2017

As mentioned above, in 2013, L&M became a separate function, so that locators no longer performed leak survey, corrosion or other work. Director 1 became Director, and Superintendent 2 soon followed as Superintendent.[26] Director 1 reported to Director/Officer 1 directly in 2015-16.

As Superintendent 2 told us, he and Director 1 focused originally on cost, which made hiring additional staff difficult. He attributed the high cost of L&M activities to underperforming locators and poor supervision.

Soon thereafter, however, Director 1's focus changed, and his first priority was to eliminate all late tickets, or as he repeated again and again, "Zero late tickets". This demand remained consistent in the years that followed. For instance, on May 5, 2015, Director 1 wrote

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[26] The Superintendent position was later divided so that Superintendent 2 became Superintendent – North, and Several other individuals became Superintendent – South.

an email to the L&M supervisors, among others, stating: "I want to reinforce my expectation that the only number we should see in the late ticket column is zero"[27]. Director 1 did ask supervisors to ensure that locators were making "positive contact with contractors if we believe we will miss the 48-hour window."[28] On May 20, 2015, the agenda for the Locate & Mark North All Hands meeting included a "Director's Message", which among other things, stated: "Late tickets and AFDI[29] unacceptable", and "no late tickets". Similarly, the Locate and Mark Team Meeting agenda for July 14, 2015 was styled: "Theme: Quality: HOW DO WE GET TO ZERO? AND STAY THERE!." This message was reinforced by the fact that supervisors' performance objectives—as well as Superintendent 2's—included an item relating to reduction in late tickets. For example, one supervisor's performance goals dated August 5, 2015 include the following goal: "Reduce late tickets to ZERO". Supervisor 6 explained that supervisors felt pressure from above and that it "trickled down" to locators, a view that was confirmed by Employee 7, who served as a backup to IRTHnet Administrator Employee 8.

We learned that this message from Director 1 and Superintendent 2 was delivered in a heavy-handed way, evincing a rather confrontational management style. Indeed, several

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[27] This stands in contrast to Jesus Soto's understanding, as expressed to us in our interview, that the Company had no absolute directive that "thou shalt not" have late tickets.

[28] This is evidence that despite Director 1's failure to react to evidence of manipulation by locators, he did seem to direct them to comply with the required procedures. We note that it may not have been clear to locators that the 48-hour requirement was a legal requirement, as one senior locator, Employee 1, told us that when he joined PG&E in 2013, he had no idea that the 48-hour requirement was based in California law, and that other locators had a similar lack of understanding. In any event, Director 1 did reiterate that proper procedures should be followed. For instance, on July 28, 2016 in an email to supervisors in which he instructed that there should be "no more gaming the late ticket metric", he also asked for focus on "quality, safety and compliance."

[29] AFDI stands for "at-fault dig-ins".

supervisors used strong words in this regard. Supervisor/Superintendent 1 called L&M "dysfunctional" under Director 1. Employee 9 told us that Director 1 led with a "heavy hand" and that the period when Director 1 led the L&M function was the "dark time". Supervisor/Superintendent 1 said that Director 1 had "unrealistic goals"[30], a view which is supported by Mr. Stavropoulos' statement in our interview that "nobody in the country gets 100% [on-time tickets] every day". Similarly, on July 23, 2015, Superintendent 2 responded to an email from Supervisor/Superintendent 1 about locators who relied on Employee 8, the IRTHnet administrator, to keep tickets from "going late". Superintendent 2, writing to the North area supervisors, after having congratulated them for "accomplishing ZERO Late Tickets for almost two weeks", wrote:

> "There have been two late tickets in the last two days-and as I have shared with you-because we are at ZERO, ANY Late Ticket gets intense focus. Trust me, NONE of you want to be in position of explaining why a single ticket went late."

Indeed, one supervisor, Supervisor 7, characterized Director 1's approach, saying that he led by intimidation and the zero late ticket policy was delivered by pounding his fist on a table and saying in effect, "if there is a single late ticket on a desk, you will answer to me.".

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[30] Director 1 seems to have understood on some level that his demands were unrealistic. He told us that "[a]s a competitor by nature, I relished mission impossible tasks". Director/Officer 1, in Director 1's 2015 performance review, said that Director 1 had to "reach a place where the backlog is zero".

We note that both Director 1 and Superintendent 2 denied their management style was intimidating.[31] However, the reports we received from others are supported by the extremely apologetic, - even fearful – responses that some locators and supervisors sent to Superintendent 2 and Director 1. On April 11, 2016, one supervisor, Supervisor 8, wrote: "I am very aware of the severity of this incident. And I apologize abundantly…I can assure you this is an isolated incident. With incredibly bad timing. I do take full responsibility for not Making [sic] sure I can be reached at every seacond [sic]…I hope this does not affect [sic] your assurance on my Ability [sic] to do this job…".

Meanwhile, the overall number of tickets continued to rise, while dig-ins were being reduced. See the chart on page 12.

Staffing continued to be a challenge to L&M, bearing on L&M's ability to complete its work in a timely manner, and causing great concern. In 2013, 20-25 employees were added to L&M's resources, as a May, 2013 Gas Financials report indicated. However, the problems continued throughout the period from 2013-2017.

A Locate and Mark 2015 Resources Forecast, presented by Superintendent 2 and Supervisor/Superintendent 1 in April of that year, noted that L&M was "severely manpower constrained", citing increased ticket count at levels 16% higher for the first 12 weeks of 2015 than for that period in 2014. The report also cited "continued locator churn" and the

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[31] Director 1 denied that he was intimidating but said that many people are afraid of a "[employee description redacted]."

elimination of the "8-inch rule" as factors[32], and sought 45 additional headcount. The same month, Director 1 wrote an email to Director/Officer 1 and others stating that L&M had grown from "1900 [late tickets] in march [sic] as reported at rcc[33] to 2750… We are 6 to 7 day weeks running 30% OT and still cannot keep pace. Most alarming is this isn't our heavy season yet…[and] we have a definitive short-term resource issue but an even bigger longer term staffing issue we cannot lose site [sic] of." Director/Officer 1 wrote the next day (April 22) to Employee 10 of IBEW that "Director 1 had signaled that we have been crushed with USA requests, and we are unable to keep up." Director/Officer 1 explained to Employee 10 that the Company would try to find internal resources before turning to outside contractors. On May 28, 2015, Director/Officer 1 wrote an email to the training group emphasizing the need for more L&M training classes, and stating that "[w]e cannot live like this!". On May 28, 2015, Director 1, responding to Director/Officer 1's email, further explained the need for training classes, and summarized the issue as follows: "The issue today isn't any different than it has been in the past, churn is decimating the resources needed to handle a 22% increase in ticket demand system wide". It is also clear that staffing challenges led to late tickets. For example, on September 22, 2015, Employee 1, a lead locator, wrote to Jesus Soto of "19 past due tickets due to the need for a QEW to locate electrical." Mr. Soto's administrative assistant forwarded

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[32] Shallow excavations had previously been excluded from the locators' remit and was no longer excluded, thereby adding to the ticket volume. See discussion of churn, <u>infra.</u>

[33] "rcc" refers to the Gas Operations Risk and Compliance Committee. In 2015 this body was chaired by Nick Stavropoulos and its Vice Chair was Jesus Soto. In 2016, its Chair was Jesus Soto and there was no Vice Chair. Director/Officer 1 and Officer 2 were members in both years. We have no record reflecting attendance on the dates to which Director 1 refers.

this email to Director/Officer 1 and Director 1. Director 1 explained to Director/Officer 1 in response, that the lack of support from the Electrical department was an ongoing issue.[34]

Director 1 and Director/Officer 1 continued to try to find internal assistance to handle the overwhelming number of tickets. For instance, on January 4, 2016, Director 1 wrote to Employee 11 of PG&E's Labor Relations department, copying Director/Officer 1, to ask whether contract issues had any effect on "compliance reps being trained to complete primary electric locating….This issue continues to plague our team and hamper our ability to timely respond to the 800k+ USA tickets we executed in 2015". In fact, the QPIC Dashboard report for December 2015, in its section addressing L&M[35], found that "L&M has been challenged to maintain a competent highly-trained workforce due to a high level of attrition. Competency issues are compounded by a 19% volume increase YTD [in tickets] which has resulted in high levels of OT and 7-day work weeks which is [sic] not sustainable". The QPIC report also noted that "Jesus Soto has convened a Locate and Mark SAR…to identify both short and longer term strategies to address issues stemming from outdated technology and resource churn." The report also noted that L&M leadership in conjunction with QM would assess individual locators' performance. Mr. Soto told us that he believed these processes were addressing the issue. By June of 2016, a presentation prepared for the L&M offsite meeting identified staffing as an "improvement area".

In an effort to combat late tickets, Director 1 created the "war room" at the Bishop Ranch site. There, the IRTHnet administrator, Employee 8, functioned as the fifth "layer of

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[34] In a second response on September 25, Director 1 claimed the 19 tickets were phased, and not late.
[35] QPIC stands for "Quality and Process Improvement Council". In 2015, Messrs Soto, Director/Officer 1 and Officer 2 were members of QPIC.

protection" to prevent late tickets.[36] The war room contained white boards with running late ticket statistics. Employee 8 "closed" many of these late tickets. Employee 8 told us that he rarely contacted excavators himself but instead indicated in the IRTHnet database that a ticket had been renegotiated based on the supervisor's assertion that he or she (or the locator) had in fact had "positive contact" with the excavator. He admitted that he did not know in such circumstances whether there had actually been "positive contact". Employee 8's backup, Employee 7, told us that Employee 8 also entered data upon the assertion by the supervisor that he or she "would" make positive contact.

Employee 7 told us that Employee 8 had said that he entered notes in IRTHnet in order to avoid pressure from Director 1 and that, in her view at least, he "would add notes to artificially delay the clock". Employee 7 said that Employee 8 had informed her that his goal was "no late tickets on his watch" and had apparently implied that she should proceed accordingly. When she discussed this with Supervisor/Superintendent 1, a supervisor and later a superintendent, Supervisor/Superintendent 1 said, "Don't falsify those records". Employee 7 explained that Employee 8 "was getting pressure. Zero was the pressure". An operations analyst, Employee 12, told us that "it would have been impossible for [Employee 8] to make all the calls" necessary to close tickets legitimately. Superintendent 2 told us that when he learned that Employee 8 was closing tickets without contacting the excavator himself, he told Employee 8 to stop closing tickets from the "war room".

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[36] The others were the locator himself or herself, the lead or senior locator, the division clerk, and the supervisor.

The L&M supervisors we interviewed saw staffing as "the main issue"[37] making it difficult to meet the 48-hour requirement, and while acknowledging the "incremental" staffing increases between 2013 and 2017, saw staffing as an continuing issue. Superintendent 2 explained in our interview that "we decided we [Superintendent 2, Director 1 and Director/Officer 1] would staff the valley and use creativity to handle the peak"[38], but acknowledged that staffing issues were part of the problem "the entire time I was there and it remains the single most important factor regarding the number of late tickets." Director/Officer 1 confirmed that PG&E had sought to address peak demand by using third-party contractors for L&M work. We learned, however, that many third-party contractors were often ineffective, making this solution to the staffing issues imperfect. For instance, Employee 1, a senior locator, told us that in his view, contractors were not effective, and that in his yard, the L&M group had used only 2 of 7 contractors they had been sent, and "sent the rest back" because they were unqualified. Supervisors Supervisor 9 and Employee 9 made similar comments to us. Employee 9 told us that contractors often ask how to do the job. Supervisor 6 told us that PG&E did not effectively fill open jobs, and that in his view, having approved headcount and actual "bodies" in the field

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[37] We heard this from the following employees: Employee 13, Employee 14, Supervisor 3, Employee 15, Supervisor/Superintendent 1, Supervisor 6, Employee 1, Employee 16, Employee 8 and Supervisor 9.

[38] Director 1 claimed the L&M was only staffed to 70-75% of workload, and that he "could not get head count approval…to staff to full volume. I was always in the neighborhood of 25 to 50 people short". This stands in contrast to Superintendent 2's claim that the staffing approach was a calculated approach designed to contain cost. Director 1's claim also seems inconsistent with the account provided to us by one supervisor, Supervisor 10, who characterized Director 1's and Superintendent 2's response to supervisors who complained of staffing shortages as follows: "you are not getting another person and you just need to figure it out….". It is also inconsistent with Mr. Soto's statement to us that staffing decisions would have been based on the recommendation of Director 1. Finally, it contradicts his statement in an email to supervisors on July 28, 2016, that "[e]verything I have asked our Sr. [sic] leaders for; [sic] resources, money, training, tools etc. we received.".

are two different things. He was unsure whether this was a leadership issue or a Human Resources issue but felt it needed to be addressed.

It was also clear that a significant reason for the staffing problems in L&M was, as has been mentioned, "churn". A presentation entitled 2016 Locate & Mark No-Mark/Mis-Mark Dig-ins, and found in Superintendent 2's files, which was prepared in mid-2016 , stated that: " in the first 6 months of 2016, Locate and Mark experienced a 10% turnover in staff." The report cited "high levels of stress caused by having to work on too many tickets a day, lack of vacation and sick days because of ticket counts, and the fact that other positions had less stress for similar pay", as reasons for the churn.[39] Supervisors we interviewed agreed that stress was a primary reason for churn. For instance, Supervisor 9 told us that every locator she had ever met experienced high stress and some lost sleep because of the tension. Lead locator Employee 1 called L&M "an impossible task in an impossible time frame". In our interview of Director 1, he acknowledged the stress, telling us L&M is "the hardest role" in the company, and linking that stress directly with churn but said "the goal was still zero".[40]

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[39] The presentation also noted poor training as a basis for churn, and proposed remedial actions.

[40] The three officers we interviewed, Messrs. Stavropoulos, Soto and Director/Officer 1, did not see stress as a reason for churn, instead citing more desirable jobs in geographical areas with lower cost of living, and the fact that union pay scales were the same for easier jobs. Mr. Stavropoulos also identified the lack of "lines of progression" as a reason for churn. In other words, because there were no identified routes for advancement for locators, it was not an attractive job. Mr. Stavropoulos told us he had spent more than a year negotiating six lines of progression with the union. We note that in Director/Officer 1's 2013 performance review, Supervisor 11 (his supervisor at the time) gave him credit for "singled [sic] handily [sic] manag[ing] the line of progression negotiations with IBEW…".

In the midst of these staffing struggles, perhaps not surprisingly, there were continuing indications that locators, in order to avoid late tickets and to reduce stress, were still falsifying their notes with respect to the timeliness of tickets.

Employee 17, of QM, told us that he had conducted an assessment of a sample of supposedly timely tickets every year since 2011, and had found that his samples contained numerous instances of tickets which had not been renegotiated properly because there had not been "positive contact" with the excavator, or because the job had been phased inappropriately. Employee 17 reported these findings to supervisors and locators in 2011 and 2012, and after L&M became a separate function, to "the director" in 2013, 2014 and 2015. The director was Director 1.

On April 11, 2013, Supervisor 12, a supervisor in San Jose, wrote in an email (which was then forwarded to Director/Officer 1) about late tickets in his group by citing the staffing issues, and by explaining "I have not been faking late tickets…"[41] Supervisor 9 wrote on December 12, 2014 to Superintendent 2 and Director 1 that the "locators were under the impression that by adding a note to the excavator before the due time that would stop it from going late." Additionally, Employee 17 of QM continued to report to both Director 1 and Superintendent 2 that locators were entering improper notes and that therefore late ticket statistics were inaccurate. Meanwhile, in 2015 and 2016, Director 1 reported precipitously declining late ticket numbers. See chart at page 13. In response to a report from Director 1 on July 30, 2015 that

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[41] In our interview of Director/Officer 1, he acknowledged that this was an indication that other employees were faking late tickets. Additionally, one supervisor told us that he had told Director/Officer 1 of such practices, although he was not sure when that occurred.

there had been no late tickets that day, Director/Officer 1 wrote to Director 1 on July 31, 2015: "This continues to sound like good news, but when I speak to people in yards, it sounds like we're still behind, strapped for help and carrying a backlog for which we're making phone calls. Is there a better way to help all of us understand our current status? Should we begin holding over any employee that elects to bid out?[42]

In fact, as many we interviewed acknowledged, it was common knowledge among supervisors that locators entered false notes in the IRTHnet database to avoid "going late.[43] Indeed, Employee 18, an operations specialist, told us that she had attended meetings in 2015 and 2016 during which supervisors repeatedly addressed the issue of locators who were "gaming the system". Other supervisors, such as Supervisor 9, indicated that when they saw evidence of such practices, they would counsel the locator to make clear the practices were unacceptable. When we asked the IRTHnet administrator, Employee 8, whether Director 1, Superintendent 2 (and a particular supervisor) knew about such data manipulation he said, "yes, I hate to say it."

In the Spring of 2016, Supervisor Employee 9 attended a town hall and suggested to Jesus Soto that he meet with Employee 17 of QM to discuss late ticket data. Mr. Soto followed

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[42] Director/Officer 1, in response to our questions about this email, told us that there could be a backlog that did not give rise to late tickets. However, it seems to us there was reason to question PG&E's ability to reduce late tickets so dramatically.

[43] Each claimed it did not happen often or at all in his or her group and that if it did happen, he or she would "counsel" the locator. We did not have data of a detailed enough level to ascertain whether such claims are accurate, nor was such an inquiry within our mandate. The following employees acknowledged that such practices were well known: Supervisor 3, Employee 18, Supervisor 6, Supervisor 13, Employee 1, Employee 16, Employee 8, Supervisor 9, Employee 9 and Supervisor 12.

up on this and met with Employee 17. Employee 17 told Mr. Soto about the tickets that did not appear late in IRTHnet but were in fact late because the locators had entered false notes in IRTHnet. Mr. Soto told us that he "didn't know what to make of this information", and "didn't make the extrapolation" that the information could have a bearing on the accuracy of aggregate late ticket statistics.[44]

Mr. Soto then asked Director/Officer 1 to meet with Employee 17. Although Director/Officer 1 did not recall such a meeting when we asked him about it, one of Employee 17's colleagues, Employee 19, does recall the meeting, during which Employee 17 told Director/Officer 1 about the false data. Director/Officer 1 wanted to know why he had not received the QM data earlier. Employee 19 told us, and she explained to him, that QM had provided the data to Director 1 on a monthly basis. She recalled a meeting with Director 1 in May 2016 in which he claimed that the problem of "inappropriate" notes was "due to a few new supervisors – problem solved.". Employee 19 told us that she and her colleagues had instead found the problem to be widespread. Additionally, we asked Director/Officer 1 about an untitled note found in his file and dated May 26, 2016. The note reads, in part, "Late tickets…Mid [sic] characterized…10/667 late…inappropriate phasing…[Director 1 and Superintendent 2] aware…" He did not recall the note and speculated that he was taking notes while on a conference call. He was unable to remember when this took place, and again

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[44] It appears that neither Mr. Soto nor Mr. Stavropoulos regularly received late ticket data although Mr. Soto may have received some information about the issue. In Director/Officer 1's 2015 performance review, Mr. Soto credited Director/Officer 1 as follows: "Expanded size of locating workforce that ultimately drove a 75% reduction in late tickets for the full year, and a 99% reduction in late tickets for the second half of the year, effectively eliminating this issue." This underscores his surprise at the news Employee 17 brought in the Spring of 2016.

speculated that it might have been when he first joined PG&E.[45] It is possible that he wrote the notes during or after the meeting with Employee 17. Director/Officer 1 told us that he "didn't put two and two together" in the face of indications that the late ticket data was questionable. Director/Officer 1 told us that he did not find it surprising that late ticket numbers would drop precipitously while staffing remained an issue and total ticket numbers were rising, reasoning that if the locators had been falsifying data, there would have been more dig-ins. He said that nobody had ever told him that "people were playing games with late tickets.".

On June 30, 2016, there was a Locate and Mark and Standby[46] offsite meeting, which apparently took place at Pismo Beach. One supervisor, Supervisor 6, recognized a presentation found in Superintendent 2's files and linked it with the June meeting. The presentation listed four different inappropriate ways that the locators avoided late tickets, including renegotiation of the due date without customer contact and phasing tickets without customer contact. The presentation also stated that this practice had been noted in the "end-of-day reports, QC reports, Schedule [sic] D Risk Assessment, and PUC customer complaints".[47]

The meeting "deck", for the June meeting identifies "Late ticket workarounds" as an improvement area, and identifies the benefit of such an improvement: "[r]easonable targets, adequate staff, visibility of gaming, shut off tricks. Accurate data so we can work on it."

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[45] The date is obviously four years after Director/Officer 1 joined PG&E, and we attribute this to fatigue at the end of a three-hour interview.

[46] "Standby" personnel stay and watch excavations near "critical facilities".

[47] This presentation does not appear in the June meeting "deck" discussed below. "Schedule D" is a misnomer. It should be "Session D".

On July 19, 2016, L&M supervisors received an invitation to a supervisors' meeting called "to discuss solutions to prevent late ticket workarounds". A PowerPoint "deck" from the meeting first set forth "the problem", citing Schedule [sic] D (an internal risk assessment report), and referred to "a late ticket where a locator left a voicemail and did not negotiate a new start time (Invalid/inappropriate notes, phasing a ticket that does not qualify for phasing)". The presentation also discussed the "[v]isibility of gaming" and said that the issue was "[e]asy to see". Among the identified impacts of "the problem" were dig-ins and PUC [sic] complaints.[48] At around the same time, Superintendent 2 sent an email to supervisors asking for their observations regarding the kinds of "mistakes" they had seen locators making. Supervisor 13, responded on July 20, 2016: "I am trying to get my locators out of bad habits and change the bad ticket info and late ticket culture…I observed locators putting improper notes on tickets…"[49]. Another supervisor, Supervisor 14, observed the next day that "[o]ne of the main reasons for locating issues is time. Locators think they have to rush through each and every job to get the numbers down…". A third supervisor, Supervisor 6, responded also on July 21, that locators were entering inappropriate and incomplete notes in support of the renegotiation of start times and of phasing. He explained that some locators claimed that they did not understand the requirements in relation to extending tickets.

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[48] The presentation asked the question, in relation to the CPUC, "false submissions?".

[49] Superintendent 2's response when we asked him about this email was that Supervisor 13 was a "poor supervisor". Additionally, Superintendent 2 said that Supervisor 13 must have been referring to past practices at PG&E and that he should not have spoken about things which took place before his time. Given that this explanation is an implicit admission that locators were falsifying notes before Supervisor 13 joined PG&E and that he joined PG&E in January of 2016, it only serves to re-affirm that such practices had indeed occurred and that Superintendent 2 was aware of it.

On July 28, 2016, Director 1 wrote a strongly-worded email to the L&M supervisors following a dig-in for which L&M had, on a daily operations call, been "called out". Among the things Director 1 demanded from his supervisors was "no more gaming the late ticket metric…".

When we asked Director 1 about the ways locators "stopped the clock" and his knowledge of their falsifications, he said "I trust you unless you give me a reason not to. I was not aware of purposeful falsification. I was never told. Was there innuendo? Allegations? QC reports by Employee 19? Yes. But I was not personally aware of L&M falsifying a ticket". He also said that he did not know what "late ticket workarounds" or "gaming the late ticket metric" meant.

In contrast, Superintendent 2 understood "gaming the late ticket metric" to mean inappropriate notes entered by locators but said that Employee 17 gave him the impression that the instances of such practices "were in the teens".

In August, apparently nothing had changed. Supervisor/Superintendent 1, by then Supervisor of the Super Gas Operations group, approached Director 1 that month with a random audit she had done, which revealed that data manipulation was continuing. Director 1 said, "What do you expect me to do with this?".

On October 27, 2016, Employee 1, a senior locator, sent Superintendent 2 and some other supervisors an example of "locators inappropriately responding to a ticket. By doing [this] the ticket will not show up initially as a late ticket, but in the eyes of QM, audit, and the CPUC [t]here will be late tickets. No attempt to contact the excavator was made, no attempt to locate was made.".

On December 20, 2016, Director 1 texted Superintendent 2, and said "I'm with Employee 17 [Employee 17] and he's sharing in rcc we have 36 late tix QA found that we aren't tracking…" When we asked Director 1 about this report, he claimed that it was not necessarily factual, stating, "just because they report it doesn't mean it is accurate".

The next day, Employee 17 forwarded a chart to Superintendent 2 and several supervisors which set forth late ticket data through November 2016, and which set forth the status in IRTHnet, and the reason the ticket was actually late. Superintendent 2 told us in response to our question about this document that "you cannot look at the IRTHnet data and entries and not speak with the locator and ascertain why the specific entries were made—were the entries made in error or were they purposefully made to circumvent the polices and the system?" At the end of 2016, Director 1 reported 44 late tickets for all of 2016, attributing this result, during our interview, to "meetings, tools and training".[50]

Following these events, there was a study by QM and a peer review coordinated by the American Gas Association ("AGA") which set forth the circumstances we have discussed here. The AGA peer review was the first that Mr. Stavropoulous had heard of the issues surrounding late tickets since 2012. It was also the first that Mr. Soto had heard of the falsification issues since he had asked Director/Officer 1 to meet with Employee 17 in 2016. He told us that the information "rocked" him and that he was "disappointed", but said that the Company would learn from these matters.

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[50] Director 1 claimed in our interview that the 44 late tickets reported excluded "PG&E tickets", meaning excavation requests made by PG&E itself, a distinction missing in any other interview or document.

Mr. Soto initiated a new SAR in 2017, and among the results was an IRTHnet upgrade which required locators to include more information about their contact with excavators. Specifically, inclement weather is no longer an available basis for locators to extend the 48-hour window. Additionally, renegotiation and phasing now require detailed information about locators' contact with the excavator including the name of the excavator, the time of the conversation, and the new date, and the basis for phasing, to be entered in three separate forms for each circumstance. Additionally, in November 2017, Officer 2, Vice President of Gas Transmission and Distribution Operations, conducted a "stand down"[51]. He told L&M that the QM study and the AGA Peer Review had revealed discrepancies in late ticket reporting. He said that the "unclear reporting" had given leadership a "false impression that all was going well with L&M". He said, "I also understand there was a directive that "0" late tickets were only acceptable number. At this time I am telling you, there is "NO" directive to achieve "0 late tickets". He explained that locators should follow the standards for the work and do their best to avoid late tickets, and if "you've followed the procedures and done everything you can and the ticket goes late, then it is late. I do not want anyone to mask, hide or inappropriately avoid a late ticket. Any action to inappropriately avoid a late ticket is unacceptable and will not be tolerated".

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[51] A stand down requires all department members to stop work and participate in a meeting or telephone conference. We base our detailed recounting of the meeting on talking points dated November 9, 2017 which were in Mr. Soto's file.

Thus, between 2013 and 2017 ticket totals continued to rise. While the company made incremental staffing additions, staffing challenges continued to plague L&M. At the same time, Director 1 and Superintendent 2 bluntly demanded "zero late tickets". Supervisors felt the pressure, and it "trickled down" to locators, who continued to falsify notes to "stop the clock". In the face of indications that these practices continued and that late ticket data was suspect, Director 1 reported dramatically falling late ticket numbers, and reported 44 late tickets for all of 2016. The QM study demonstrated that the late ticket data reported by Director 1 were seriously inaccurate.

VII. Conclusion

We conclude that the Company failed to address staffing issues sufficiently in the time period in question, and relating to L&M. Thus, it became an unmanageable task to address the rising ticket numbers. This fact, combined with unrelenting pressure to eliminate <u>all</u> late tickets, caused locators to "cut corners", which is unfortunately a dynamic which has been seen in other corporate contexts outside of PG&E, when employees face targets that cannot legitimately be met. The issue was compounded by the failure of some leaders to accept that this dynamic was occurring and deal with it, perhaps driven by the desire to tout excellent results in what was, as Director 1 put it, "mission impossible".

BATES WHITE
ECONOMIC CONSULTING

Late Ticket Logic and Count

Prepared for PG&E

May 2, 2018

Table of Contents

I. Overview

Bates White has been retained by PG&E Corporation to determine, based on information available in the irth UtiliSphere system, the number of times PG&E responded late to “call before you dig” requests made through the 811 call centers. Bates White is an economic consulting firm offering services to law firms, Fortune 500 companies, and government agencies. We specialize in advanced economic, financial, and econometric analysis and excel at complex matters that require sophisticated problem solving and deep empirical analysis. Bates White is an organization of more than 200 professionals, with half of our consulting professionals holding PhDs or other advanced degrees.

II. Background

PG&E uses the irth UtiliSphere platform as its ticket management system for requests received by the 811 call centers. Each request is issued a ticket, on which a locator may enter a series of responses that reflect the actions taken to resolve the ticket. The responses are selections available in a drop-down menu that are designed to correspond to certain actions. For example, a locator would choose *Facility Marked* when the site is located and marked, or *Notification of New Start Time* when a new start time is negotiated with the excavator. There are a number of different responses and each has its own meaning.

Tickets contain additional information relevant to the actions taken to resolve a ticket, and that information is often supplied in a notes field that accompanies each response. Locators may use this field to document work performed on site, conversations with the excavator, or attempts to reach the excavator. The notes field captures nuances that the drop-down response fields are unable to convey.

PG&E has previously provided late ticket counts to the Safety and Enforcement Division (SED) of the California Public Utilities Commission, in both April 2017 and February 2018. Both counts were derived from an irth search functionality that had been revised at various points in time. Although the irth search functionality changed over time, two features remained the same. First, the search functionality did not distinguish between types of responses, even though some responses indicate that the ticket has been completed and some responses indicate that further action is needed. For example, *No Conflict* indicates that there are no PG&E facilities near the delineation area and that no further work is needed to complete the ticket. *No Response from Excavator*, however, indicates that the excavator cannot be reached to provide information that is needed to complete the ticket. Second, the search functionality did not use information present in the notes to determine whether a ticket was late, and relied only on limited other information in the ticket.

PG&E indicated at the time of the February 2018 submission that Bates White would be retained to review the ticket information and provide more accurate late ticket counts.

The approach outlined below is the approach Bates White has taken to address the shortcomings of earlier counts. In particular, we implement logic that treats different responses differently, and relies on the notes to provide additional information that is relevant to determining whether a ticket is late.

III. Late ticket logic

The logic described below is tailored to the response type and relies on notes provided by the locator.[1] As a result, developing an understanding of the nuances under which certain responses are used and certain elements are found in the notes has been integral to developing the logic. Bates White has had a number of conversations with PG&E and irth subject matter experts to understand these nuances, and the logic reflects a best interpretation. Nonetheless, the responses and notes reflect a human element that may introduce inconsistencies in the way information is provided. To this extent, and to the extent that the information is available in the irth system, we have applied logic that we believe is conservative, and counts as late some tickets that may in fact be timely.

The logic has two main components: (i) establishing the due time and (ii) applying criteria developed for each response to determine timeliness. To perform the late ticket count, we rely on raw ticket data that we have downloaded from the irth utiliSphere platform and converted into a format that facilitates identification and analysis of ticket information, including information found in the notes. The logic below relies on defined terms provided in the Appendix.

First, to establish the due time, we apply the latest of (i) 5 p.m. on the second business day following the day the ticket is submitted, (ii) the excavation start time, and (iii) a properly established new start time. Under certain circumstances, the locator and the excavator may negotiate a new start time. The locator would then enter a new start time in a new start time field, or in the notes. When we observe a new start time in the field or the notes, we perform a search of the notes for evidence that positive contact with the excavator was established.[2] For example, a notes field that indicates that the locator "spoke" with the excavator and did not leave a "message," is counted by the search functionality as evidence of positive contact.[3] If the notes do not indicate that positive contact was made, the new start time is not applied and the deadline is not extended. Once the due time is established, we are able to determine whether responses are timely or late.

Next, we describe the criteria used to determine whether certain responses render a ticket timely.[4] The logic relies on classification of responses into three categories: (i) responses sufficient to render a ticket

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[1] This approach is a rules-based approach that is designed to be applied to hundreds of thousands of tickets. For any one ticket, there may be additional information that would render a different late ticket determination than the one rendered by this logic.

[2] If a new start time provided in the notes is different from the new start time provided in the field, we take the earlier of the two.

[3] The Appendix provides the full list of search terms.

[4] As is consistent with earlier late ticket counts, we exclude tickets with certain characteristics from the analysis. The tickets excluded are generally those that indicate transmission work, are of an emergency or short notice nature, or are for design

timely, (ii) responses sufficient to render a ticket timely, provided certain additional information is present, and (iii) responses that are not sufficient to render a ticket timely. A complete list of responses and response types is provided in the Appendix.

The first category, sufficient responses, includes those responses that indicate that the excavator request has been fulfilled and that no further action is required to complete the ticket. The presence of one timely sufficient response renders a ticket timely. Examples of sufficient responses include: *Facility Marked*, *No Conflict*, and *No Remark Required*.

The second category, responses that are sufficient provided certain additional information is present, are those that require additional evidence to be counted as timely. Examples include: *Respond to a Phased Ticket*, *Field Meet Requested*, and *No Response from Excavator*. Responses of this type may indicate that a revised schedule will be implemented, that the locator needs to meet the excavator on site, or that all possible steps have been taken to complete a ticket but work remains. The revised logic requires additional evidence, in addition to the response, to make the determination that a ticket is timely. For this category of responses, we search the notes or apply certain other requirements to determine whether the additional information is present. If the additional information is present, we conclude that the criteria have been met and the ticket is rendered timely.[5] The criteria for individual responses in this category are provided in the Appendix.

Most responses in the second category rely on a search of the notes to determine whether a ticket is timely. We have identified several terms that are associated with the presence or absence of particular requirements, and the logic described here searches the notes to determine whether those terms are present. Nonetheless, a text search is imperfect, and certain terms may not always have the desired association. To the extent that the association exists but is not strong for certain terms, we have made the conservative decision to exclude these terms from the search criteria. The examples below illustrate situations in which the locator has made positive contact with the excavator or is performing work as required by the logic for the particular response, but the notes do not contain terms that can be used by an automated process to indicate that the requirements have been met. As a result, the search methodology, out of an abundance of caution, classifies these tickets as late:

1. The locator enters a *Field Meet Requested* response and attempts to make contact with the excavator on at least three occasions. The notes on the second response, which is timely, state, “Let excavator know that I visited site and road was blocked. He will not do job until Monday.”[6]

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purposes. A full list of excluded categories is provided in the Appendix.

[5] Responses that indicate phasing illustrate the need for this category of responses. Large jobs may require a phasing approach that extends the work over a period of time and, through discussion with the excavator, would reasonably extend the deadline. Nevertheless, because the system does not have a preconfigured field that would automatically capture and facilitate a timeliness review of every step of an agreed upon phasing plan, the revised approach will count a phased approach as timely if and only if the first phased response is timely and demonstrates evidence that the locator performed work or made positive contact with the excavator.

[6] *See* ticket number X629300301, version 0, registration code PGEVAC, submitted on October 19, 2016.

The fact that the locator knew the job would not start until Monday suggests that positive contact was made. However, the terms in the response are not sufficient for an automated process to identify positive contact. By the fifth response, contact has been established and is identified by the term "spoke," but the response is entered after the due time and the ticket is counted as late.

2. The locator enters a *Notification of New Start Time* response with note: "Caller [redacted] called me this morning at about 5:59 am on 2-25-13, and he told me that he was going to be in training all day and that maybe we can set-up fld. meet for Tues. the 26th. I called him bk. at 6:50 am on same date to let him know that I received his message, and to call me when he gets a chance to set-up fld. meet."[7] The note indicates that there was a voicemail exchange between the locator and the excavator. However, the voicemail-related terms that we observe are typically associated with a one-way transfer of information, not an exchange of information. For this reason, we use the presence of voicemail-related terms to indicate that positive contact was not established. A *Notification of New Start Time* response requires evidence of positive contact for the new start time to be applied. The presence of voicemail-related terms in this example means that the new start time is not applied, and as a result the ticket is counted as late.

3. The locator enters a *Respond to a Phased Ticket* response with note: "Will work ahead of crew to mark facilities."[8] The note suggests that the locator was working to implement a phasing plan, but it does not have the specific terms the logic requires to find evidence that work was performed. The term "work" is often used as a noun, as in "where the work is being done" or "work will start," and does not provide sufficient evidence that work was performed. The next response entered on this ticket is *Facility Marked*, but the response is entered after the due time. This ticket is therefore counted as late.

The third category, insufficient response, includes all remaining responses. Insufficient responses indicate that the actions taken are not sufficient to address the excavator request, and therefore do not render the ticket timely. Examples include: *Inclement Weather* and *Expired Ticket*. In sum, a ticket is rendered timely if and only if the ticket contains a timely sufficient response or a timely response with the certain additional information required by that response. All tickets not rendered timely are rendered late.

IV. Late ticket count

Implementing the late ticket logic described above, we arrive at the late ticket counts provided in Figure 1.[9,10]

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[7] *See* ticket number 064246, version 0, registration code PGESJO, submitted on February 21, 2013.

[8] *See* ticket number 442237, version 0, registration code PGEAUB, submitted on November 6, 2013.

[9] The list of late tickets is being provided to PG&E under separate cover.

[10] We understand that the total number of tickets differs from the total number of tickets previously provided by PG&E. We

Figure 1: May 2018 revised late ticket count

	2012	2013	2014	2015	2016	Jan-Feb 2017
May 2018 revised late ticket count	13,062	28,829	27,736	32,985	30,684	5,543
Total ticket population	613,789	657,272	701,751	819,041	898,073	130,070
Percent late	2.1%	4.4%	4.0%	4.0%	3.4%	4.3%

V. Dig-ins

We have also associated the late tickets identified using this logic with dig-ins as reported in the 2012 Gas Quarterly Incident Report and in the PG&E Master Dig-In File.[11] We associate a dig-in with a corresponding late ticket when the dig-in date is within 28 days of the date the ticket was submitted.[12] As shown in Figure 2, we find that the number of dig-ins associated with late tickets identified using the logic described above is 195 for the period January 2012 to February 2017. While the 195 dig-ins are associated with the late tickets, we cannot say whether they were caused by the late tickets. Determining the cause of the dig-ins was outside the scope of our work.

Figure 2: Dig-ins associated with late tickets identified in May 2018

	2012 – Feb 2017
Total number of dig-ins associated with late tickets	195
Percent of late tickets associated with dig-ins	0.14%

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have confirmed with irth that the previous counts reflected “ticket splitting,” which divided transmission and distribution work on one ticket into two separate tickets. We also understand from PG&E subject matter experts that tickets are counted by unique ticket number, version number, and registration code combinations, and our count reflects this understanding. The total number of tickets represents the full population before exclusions.

[11] *See* Q32_Dig-In Data Source_LT QC_Final xlsx for the list of dig-ins.

[12] The list of late tickets associated with dig-ins is being provided to PG&E under separate cover.

Appendix A. Procedure to identify late tickets

This Appendix describes in detail the methodology used to identify late tickets.

A.1. Defined terms

1. Evidence of Work: Locator notes contain at least one positive work term and do not contain any negative work terms.

    a. Positive work terms: *marked, flagged, flag, painted, photo, pic, pics, picture, complete, located, offsets, found, work comp, job was done, clear per maps, no PGE, no PG&E, still visible, still visable,*[13] *#"*
    b. Negative work terms: *not marked, will be marked, to be marked, not flagged, will be flagged, to be flagged, not flag, not placed flag, not put flag, not painted, will be painted, to be painted, not complete, will be completed, to be completed, not located, will be located, to be located, not found, no work comp, excavated before, verify mark, unclear, will start*

2. Evidence of Negotiation: Locator notes contain (i) at least one positive past-tense negotiation term, or (ii) more positive negotiation terms than negative negotiation terms and no voicemail-related terms.

    a. Positive past-tense negotiation terms: *communicated, negotiated, spoke, stated, I told, talked, followed up, he said*
    b. Positive negotiation terms: *per, direct contact, contact with, contact from, conversation, scheduled*
    c. Negative negotiation terms: *no contact with, no contact from, no conversation, tried, unable, not able*
    d. Voicemail-related terms: *call back, voice, message, left msg, msg left, left a msg, vm, v/m, text, l m, lm, l/m, lvm*; or, Method of Contact field indicates *Voicemail.*

3. Improper Phased Response: Phased Response (defined below) that is followed by a *No Conflict*, *No Conflict – Cleared From Office*, or *No Remark Required* response. The Phased Response will not be deemed improper if the *No Conflict* response is accompanied by Evidence of Work.

4. No Access: Response *No Response from Excavator* is accompanied by locator notes that contain at least one access term.

    a. Access terms: *arrived, gate, cgi, locked, access, not home, yard, dog, get into, let me into, delineation, dilineation, delniation*[14]

5. Note Date: Locator notes contain a date in one of the following forms:[15]

    a. MM/DD/YYYY or MM/DD, with or without leading zeroes for months and days, with or without century for the year, and with "/", ".", or "-" as separators.

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[13] We include commonly observed misspellings.

[14] We include commonly observed misspellings.

[15] The earlier Note Date is taken if two are found. We apply a due time of 5 p m. on the Note Date.

   b. Full or abbreviated day of the week.
   c. Relative day terms: *tomorrow*, *weekend*, *next week*, *2 week*. The date applied for these terms is relative to the date the response is entered.
   d. Full or abbreviated months and a numerical date in the forms: Day, Month, Day Month, Month Day, Day Month Year, Month Day Year.

A.2. Determining the starting population

The ticket population available on the irth platform includes categories of tickets not relevant to or that have been excluded from previous late ticket counts. These tickets are identified by their ticket type or by the presence of other characteristics on the ticket. Tickets excluded are:

1. Tickets with type: *Cancel*, *Damage/Exposed*, *Damaged Exposed*, *Emergency*, *Now*, *Priority*, *Rush*, and *Short*. The remaining ticket types: *Normal*, *Regular*, and *Remark* are included.
2. Design tickets as identified by:
   a. The presence of the term “design” in the notes field with associated response *Canceled Ticket*, *PG&E Response Not Required*, or *Bad Tix Info – Resubmit*.
3. Transmission tickets as identified by:
   a. Placement in a folder with the term *Trans*, *UET*, or *Pole* in the folder name.
   b. Registration codes with associated areas containing the term *Trans* or *Ground water*.[16]
   c. Registration codes with associated note: *All Tickets Auto-Processed*.[17]
4. Registration code is *PGE* or call center is *IRTHNET*.

Tickets are identified by unique ticket number, version number, registration code combinations.[18]

A.3. Determining the due time

The due time is the latest of:

1. Five p.m. on the second business day following the day the ticket was taken,
2. The excavation start time, and
3. A properly established new start time.

A properly established new start time requires that the new start time is accompanied by Evidence of Negotiation. New start times may be drawn from the new start time field or from the notes (Note Date); the earlier of the two is chosen when both are provided. Properly established new start times are applied to all subsequent responses on a ticket.

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[16] *See* Reg Code Descriptions xlsx.

[17] *Id.*

[18] Ticket numbers may have multiple version numbers, which indicate a follow up or extension of an existing ticket. Ticket numbers may also have multiple registration codes, which indicate the area where work is performed. For a given ticket number, new versions or multiple registration codes are counted as separate tickets.

A.4. Response types

The responses are divided into three categories: Sufficient Response; Sufficient Response, Provided Requirements are Met; and Insufficient Response.

1. Sufficient Response: *No Remark Required, Facility Marked, No Conflict, No Conflict – Cleared From Office, Duplicate Ticket, PG&E Response Not Required, ZZ Pole Test And Treat-Autoclosed, Excavated Before Marked, Located By PG&E Crew, Responding To Complete A Phased Ticket*

2. Sufficient Response, Provided Requirements are Met:

    a. Phased Response: *Respond To A Phased Ticket, Respond To An Open Ticket, Responding To An Ongoing Ticket*

    b. Field Meet Requested Response: *Field Meet Requested – (Trans. Or Dist.)*

    c. Field Meet Performed Response: *Field Meet Performed (Transmission), Field Meet Performed (Distribution)*

    d. No Response from Excavator Response: *No Response From Excavator*

    e. Deadline Response: *No Delineation, Bad Tix Info – Resubmit, Canceled Ticket*

3. Insufficient Response: *Notification Of New Start Time, Inclement Weather, Expired Ticket, Re-Assigned Ticket(Do Not Close!), ZZ Test Positive Response To Excavator, ZZ Gas Transmission Warning, X.No Conflict Sac **(Do Not Use!!!)***

A.5. Rule to identify late tickets

1. One timely Sufficient Response renders a ticket timely.

2. One timely Sufficient Response, Provided Requirements are Met renders a ticket timely, provided:

    a. The timely Phased Response demonstrates Evidence of Work or Evidence of Negotiation, and is not an Improper Phased Response.

    b. The timely Field Meet Requested demonstrates Evidence of Work or Evidence of Negotiation.

    c. The timely Field Meet Performed Response demonstrates Evidence of Work.

    d. The timely No Response from Excavator Response indicates No Access.

    e. The timely Deadline Response is not entered in the two hours directly preceding the due time.

3. A timely Insufficient Response does not render a ticket timely.

PACIFIC GAS AND ELECTRIC COMPANY
Gas Operations Data Response

PG&E Data Request Index No.:	11836.10 Supp01		
Request Date:	03-06-2018	Date Sent:	05-02-2018
Requesting Party:	CPUC-SED		
External Requester:	Darryl Gruen	PG&E Contact:	Jon Pendleton

PG&E's responses to following SED data requests are intended to comply with the Instructions provided on March 6, 2018. PG&E has no objection to SED's instructions that restate Commission Rules of Practice and Procedure, such as the duty of candor, since PG&E is required to follow such rules regardless of such instructions. Also, please note that PG&E has not Bates-labeled or indexed the attachments to its responses below, as the attachments are not voluminous, but has instead labeled each attachment with the applicable Index/Attachment Number.

Per the Instructions, PG&E has provided the name of the person(s) answering each request, their title, the name and title of the person to whom they report, and contact information. Where an instance of Not Applicable is present, PG&E is still gathering this information and a full response is still pending. PG&E will provide the name of the person(s) answering for those requests, their title, the name and title of the person to whom they report, and contact information once complete.

Question	Responded By	Title	Contact	Reports To	Title
10	Jason Klemm	Director, Gas Field Services South	J1Ks@pge.com	Melvin Christopher	VP, Gas T&D Operations

QUESTION 11836.10: For the late ticket counts provided on February 22nd, 2018, please provide the following information for each year from 2012 through 2017:

a. Of those excavations that have a late ticket counted, how many times did the excavator who called in that ticket experience a dig-in on PG&E's system?

b. Of those excavations that have a late ticket counted, and where the excavator who called in the ticket experienced a dig-in on PG&E's system, how many times did PG&E calculate its share of fault resulting from the dig-in based upon the assumption that the ticket was not late?[1]

c. Of those excavations that have a late ticket counted, how many times did PG&E re- schedule the locate and mark start time on that ticket without first having mutual agreement to do so from the excavator.

---

[1] In support of this question, please provide PG&E's method, from 2012 to 2017, for calculating its share of fault related to a third party dig-in when the third party called 811. Please specify the weight PG&E assigned to its fault based upon it having a late ticket for a given dig-in?

d. Of those excavations that have a late ticket counted, how many times did PG&E not respond to the ticket?

e. Of those excavations that have a late ticket counted, how many times did PG&E not respond to the ticket because it closed out the ticket?

f. Of those excavations that have a late ticket counted, how many times did PG&E not respond to the ticket because it closed out the ticket after unsuccessfully attempting to communicate with the excavator.

g. Of those excavations that have a late ticket counted, how many times did PG&E not count a ticket as late because it phased a ticket for a location that did not require phasing?

RESPONSE 11836.10: Much of the information requested in Question 11836.10 would require individualized assessment of large numbers of particular tickets and excavations. Because PG&E expects that the tickets identified as potentially late in Response 11718.01 (delivered to the CPUC on February 23, 2018), will likely change, PG&E proposes conducting the assessments requested -- to the extent these assessments are feasible given the data available in IrthNet -- on the tickets that are identified as late pursuant to the forthcoming revised IrthNet logic once it is completed, so that extensive analysis is not conducted on tickets and excavations that the refined IrthNet search logic later determines to be outside the scope of SED's ultimate interest.

RESPONSE 11836.10 (a) Supp01: As PG&E indicated in Response 11836.10 (delivered to the SED on March 20, 2018), PG&E has conducted the requested assessment – that is, the number of instances in which a late ticket is associated with a dig-in – on the tickets that are identified as late pursuant to the analysis conducted by the third-party consulting firm, Bates White.

Bates White has determined that during the time period of January 1, 2012 through February 28, 2017, there were 195 dig-ins associated with tickets that were likely late. Bates White determined that a dig-in was "associated" with a ticket when the dig-in date was within 28 days of the date that the ticket was submitted, which corresponds to the time period a ticket is valid.

PG&E has further reviewed the 195 dig-ins identified by Bates White for indications that the dig-in was potentially related to or caused by a late response to the ticket. That is, for example, in a circumstance in which the locator marked the facility after the due date, but the marks were placed prior to the dig-in, the dig-in could not be classified as "caused by" the lateness, but had some other root cause. PG&E also reviewed each of the dig-ins to determine whether PG&E records contained any indications that there was an injury associated with the dig-in. As part of this review, PG&E examined records from its DiRT investigative reports, USA ticket information, SAP, and Riskmaster.

PG&E found no evidence that any of the 195 dig-ins that were "associated with" tickets identified as late, using the generalized logic that Bates White developed to assess tickets on an aggregate basis, involved an injury. PG&E determined that of the 195 dig-ins that were "associated with" late tickets, PG&E's late response could be ruled out as a cause for 164 of the dig-ins. While Cal. Code Regs. tit. 8, § 1541(b) prohibits excavators from commencing work until an excavation area has been marked, there were 31 dig-ins on which a late response by PG&E may have contributed to, or there is insufficient evidence to determine whether the late response contributed to, the incident.

ATTACHMENT 5

Late Tickets January 2012 - February 2017

"*Index 10707-08_2012 - Feb 2017 Total Late - Division.xlsx*"

Division	2012	2013	2014	2015	2016	2017*
Central Coast	39	73	320	59	0	0
DeAnza	141	262	369	73	3	0
Diablo	196	99	248	67	8	0
East Bay	136	1,118	1,357	179	9	0
Fresno	153	141	122	80	0	0
Humboldt	158	335	695	706	0	0
Kern	684	473	1,275	285	1	0
Los Padres	880	1,750	603	33	1	0
Mission	212	158	240	20	2	1
North Bay	117	303	370	85	8	4
North Valley	178	91	201	34	0	0
Peninsula	258	1,601	481	88	0	0
Sacramento	162	74	82	35	2	1
San Francisco	117	330	878	165	5	1
San Jose	369	2,397	236	48	2	0
Sierra	99	202	1,953	127	2	1
Sonoma	77	94	290	221	1	0
Stockton	325	3,246	1,920	595	0	0
Yosemite	322	800	1,751	485	0	0
Total	**4,623**	**13,547**	**13,391**	**3,385**	**44**	**8**

**Data are late tickets by division for January and Febraury 2017*

ATTACHMENT 6

Pacific Gas and Electric Company™

Utility Work Procedure WP4412-03

Asset Type:	**Gas and Electric Transmission and Distribution**	Date Issued/Updated:	**August 2009**
Function:	**Operations**	Page:	**1** of **11**

Title: Marking and Locating PG&E Underground Facilities

Overview

This work procedure (WP) provides step-by-step instructions for processing Underground Service Alert (USA) tickets and for marking and locating Pacific Gas and Electric Company (Company) underground gas, electric, and fiberoptic cable facilities.

Governing Document

Utility Standard S4412, "Preventing Damage to Underground Facilities"

Safety

This WP promotes safety by reducing potential hazards to Company underground facilities.

Perform all activities associated with this WP safely and in accordance with applicable safety rules, the *Code of Safe Practices*, and Utility Standard Practice (USP) 22, "Safety and Health Program."

Before Starting this Procedure

Personal Protective Equipment (PPE)

Field employees following this procedure must wear the following personal protective equipment (PPE) at a minimum, plus any other applicable PPE, as specified in the *Code of Safe Practices*:

- Hard hat (must be available)
- Traffic vest
- Proper work footwear, no sneakers allowed
- Long-sleeved shirt
- Long pants
- Gloves (must be available)
- Safety glasses (must be available)

Tools: See Attachment 3, "Mark and Locate Equipment Checklist."

Materials: See Attachment 3.

Qualification: OQ 05-01, "Mark and Locate Facilities."

Processing USA Tickets

The following procedures provide step-by-step instructions for processing USA tickets.

Note: If a buried facility is mis-marked, immediately contact the supervisor responsible for marking and locating underground facilities. The supervisor must then conduct an incident investigation according to WP1465-02, "Gas Event and Near Hit Reporting." Stop excavation until facilities are accurately located.

1. Requirements to Locate and Mark the Approximate Location

Locate and mark USA tickets within 2 working days or before the start of the excavation, whichever is later. A later time may be mutually agreed upon with the excavator. The only exception allowed is for an emergency, as defined by California Government Code §4216(d). USA ticket types include the following:

- **Emergencies:** Zero (0) hours notice.
- **Short Notice Tickets:** Less than 2 working days notice.
- **Normal:** At least 2 working days notice.
- **Extensions:** A valid on-going ticket used for extended excavation projects. A ticket can be extended up to 6 months.
- **Renewals:** Greater than 6 months or a lapsed USA ticket (a new ticket number is issued).

2. Training and Qualification Requirements

- Company mark and locate training.
- Current operator qualification when locating gas facilities.

3. Design Locate Requests

Note: The USA process is not for design purposes.

A. The locator refers all design locate requests to the mark and locate supervisor.

B. The mark and locate supervisor determines if the request is for design purposes.

  - If the request is for design, the mark and locate supervisor refers the excavator to local service planning personnel.
  - If the request is for excavation occurring within 14 days, the locator marks and locates the underground cable facilities.

C. The locator documents all conversations on the USA ticket.

4. Review USA Tickets

A. Consider the following factors when prioritizing work:

1) Identify valid emergency tickets.

2) Prioritize the remaining work by due date, time, and location.

a. Identify and prioritize short notice tickets.

b. Identify late tickets.

3) Schedule field meets requested on USA tickets.

B. Make contact with excavators, as necessary, and document these contacts on USA tickets. Contact the electric transmission underground supervisor if underground electric transmission is in the area.

5. Daily Check

A. Check PPE daily.

B. Perform a daily check to locate instruments (see WP4412-01, "Operating Procedures for Locating Instruments," and WP4412-02, "Locating Instruments Calibration Verification and Repair Procedures").

C. Perform a daily safety check on the mark and locate vehicle.

D. Check the vehicle for supplies daily. Refer to Attachment 3, "Mark and Locate Equipment Checklist."

6. Site Check

A. Check for a delineation. The area to be excavated must be delineated with white chalk, flags, stakes, whiskers, or other suitable markings, including a Company identifier (name, abbreviations, or initials).

1) If a delineation is not present, contact the excavator.

2) If the delineation is not clear, contact the excavator.

B. Visually inspect the area for existing surface markings and/or indications of underground facilities (e.g., risers, patches in the street, meters).

C. Review maps for existing Company facilities within the delineated area. Identify critical and high-priority facilities that may be present in the proximity of the delineated area.

Performing USA Locates

The following is a step-by-step procedure for marking and locating underground cable facilities:

1. Respond to the Excavator "Positive Response/Positive Contact"

A. Never provide the depth of the underground facility.

B. If there **is no conflict with *any* Company underground facilities** (including gas, electric, or fiber facilities) in the delineated work area, provide a response by notifying the excavator by phone, fax, email or automated response system of "no conflict."

   1) If there is no conflict with *any* company underground facilities in the delineated work area while on the jobsite, surface marks of "NO PGE" may be provided.

C. If there **is a conflict with other Company underground facilities** (including gas, electric, or fiber facilities) in the delineated work area and the facilities are not locatable, perform the following tasks:

   1) Notify other affected Company departments of the conflict.

   2) Notify the excavator by phone, fax, email, in person, or automated response system that other Company facilities exist in the excavation area.

2. Locating Methods

Grounding: Conductive locating depends on proper grounding. **Always use an independent ground.**

Locating:

A. The method for locating Company underground facilities is conductive (direct connect).

B. If Company underground facilities cannot be located conductively, perform the following tasks:

   1) Review Attachment 2, "Non-Locatable PG&E Underground Facilities," for possible reasons the facility cannot be located.

   2) Contact other personnel (e.g., corrosion, electric) for assistance, as appropriate, to locate the facility.

C. Use the alternate methods listed below in the following order:

   1) Inductive clamp

   2) Inductive

   3) Passive – 50/60 hertz (Hz)

   4) Passive – radio frequency (RF)

   5) Map records – follow each step below:

      a. If measurements exist on the maps, mark the facility using map measurements.

b. If measurements do not exist on the maps or there are other questions, contact the local mapping department to get information from records, including as-built drawings and service orders.

c. Complete a "Map Correction Form," noting "Unlocatable Facility," and submit it to the local mapping department.

d. Notify the excavator and schedule a field meet. Inform the excavator that the marks are approximate and based on drawings only.

3. Facility Markings

Refer to Table 1, "Color Code Identifiers (American Public Works Association [APWA] Uniform Color Code)," and Table 2, "Facility Marking Abbreviations," on Page 8.

A. Facility locators match markings to existing and expected surface conditions. Markings may include one or any combination of the following: paint, chalk, flags, stakes, whiskers, or offset markings. Use non-permanent markings on private property.

B. Extend all marks a reasonable distance beyond the bounds of the delineated area.

C. Marks in the appropriate color are approximately 12 inches long and spaced no more than 50 feet (ft) apart on straight-line installations. Mark the following information:

- Material type ("STL" for steel, "PL" for plastic, "CI" for cast iron)
- Commodity (also indicate the transmission and line number, if applicable)
- Size
- Number of facilities
- Directional changes
- Taps/tees/laterals
- Horizontal offsets

D. Place marks over the approximate center of the underground facility.

E. Joint trench facilities may not be indicated on the same mark. Each commodity must be located and marked separately and shown in the appropriate color, according to the APWA Uniform Color Code (see Table 1 on Page 8).

3 - 4' Ducts

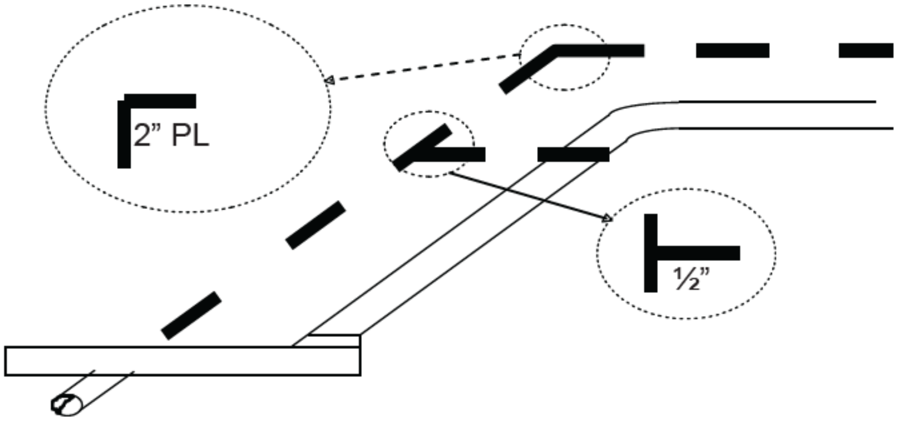
PGE

4" PL

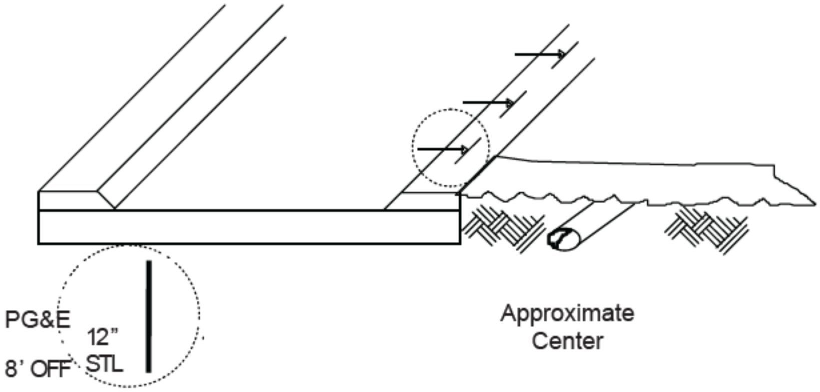
F. Mark Company facilities with "PGE" (if facilities of the same commodity owned by others are present), facility size, composition, and number of ducts, as shown on the map. Mark critical facilities accordingly: "GT" to designate gas transmission, "ET" to designate electric transmission, and "FO" to designate Company-owned telecommunications.

G. Indicate termination points or dead ends as follows:

H. Clearly indicate directional changes and taps/tees/laterals as follows:



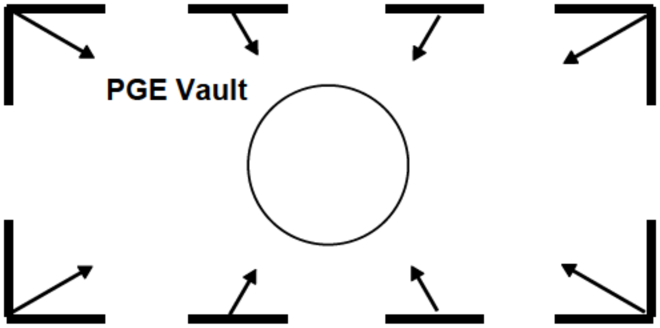
I. When providing offsets, show the direction, distance to, and path of the facility. In the following example, a 12-inch steel gas main is shown in the dirt area, 8 ft to the right of the markings on the sidewalk:



J. Identify facilities (inserted services or mains) installed in casings as shown below. The inserted pipe is followed by the casing size and material in parentheses. In the following examples, a 2-inch plastic pipe is inserted in a 4-inch cast iron casing and a ½-inch plastic pipe is inserted in a ¾-inch steel casing:

2" PL (4" CI) **½" PL (3/4" STL)**

K. Mark structures, such as vaults, to indicate the footprint of the structures.



4. Complete the Locate

A. **Review the map** and surface markings to ensure that all facilities are located and marked.

B. If other Company underground facilities exist in the delineated work area and the locator needs assistance to locate them, notify the affected Company departments of the conflict and the excavator that other Company facilities exist in the delineated work area.

C. Identify the need for a field meet or standby in accordance with Attachment 1, "Determining When a Field Meet and/or Standby is Required."

D. Identify potential future or existing overbuilds in the project area and report to the supervisor in accordance with WP4100-04, "Gas Overbuilds."

5. Complete the USA Ticket

A. Complete all required fields on the USA ticket, and attach any photographs taken to the electronic USA ticket.

B. Document all actions taken.

C. Document all conversations and commitments with the excavator.

6. Check for Errors on Records

Report all errors or discrepancies per the "Map Correction Form."

7. Instruments and Material

Use only Company-approved instruments and marking products. See Gas Numbered Document M-60, "Approved Mark and Locate Instruments, Equipment, and Accessories."

Table 1. Color Code Identifiers (APWA Uniform Color Code)

Red	Electric
Yellow	Gas/oil/steam
Orange	Telephone/communications/cable TV
Blue	Water
Green	Sewer
Purple	Reclaimed water and slurry
White	USA delineation area (proposed excavation area)
Pink	Temporary survey markings

Table 2. Facility Marking Abbreviations

CI	Cast iron
DE	Dead end or termination point
ET	Electric transmission
FO	Company-owned fiberoptic telecommunications
GT	Gas transmission
PGE	Company-owned facility
PL	Plastic
STL	Steel

Definition of Terms

APWA: American Public Works Association.

CGC: California Government Code.

CPUC: California Public Utilities Commission.

Critical facilities: All gas transmission pressure (above 60 pounds per square inch gauge [psig]) facilities and all electric facilities operating at and above 60 kilovolt (kV) are considered "critical facilities" for the purposes of this WP. Critical facilities may also be determined by the local operating area. Those facilities which, if damaged, are likely to result in difficulty controlling the gas flow due to the size, material properties, operating pressure, and/or location of the facility. When determining the difficulty of controlling gas flow, give consideration to employee and equipment availability. Critical facilities are also those electric distribution facilities which, if damaged, are likely to result in extensive (long duration) outages or outages to critical customers.

Delineated work area: The identification of a Company or an external entity's work area by pre-marking the area of proposed excavation with surface markings or by other means.

Emergency: A sudden, unexpected occurrence involving a clear and immediate danger, demanding immediate action to prevent or mitigate the loss of or damage to life, health, property, or essential public services. See California Government Code §4216(d).

High-priority facilities: High-pressure natural gas pipelines with normal operating pressures greater than 415 kilopascal (kPA) gauge (60 psig), petroleum pipelines, pressurized sewage pipelines, high-voltage electric supply lines, conductors, or cables that have a potential to ground greater than or equal to 60 kV, or hazardous materials pipelines that are potentially hazardous to workers or the public, if damaged. See California Government Code §4216(e).

Positive response (positive contact): Information about the location of an underground facility by locating and field marking the approximate location and, if known, the number of subsurface installations that may be affected by the excavation to the extent and degree of accuracy that the information is available in the records of the operator or as determined through the use of standard locating techniques other than excavating. Otherwise, advise the person who contacted the one-call center of the location of the operator's underground facility installations that may be affected by the excavation, or advise that person that the operator does not operate any underground facilities that would be affected by the proposed excavation.

Short notice: A USA ticket with less than 2 working days notice that is not an emergency.

Underground Service Alert (USA): Regional one-call notification centers for the Company service territory. There are two centers serving the Company: Underground Service Alert of Central/Northern California and Nevada (USA North) and Underground Service Alert of Southern California (USA South).

USA ticket: A document created when an excavator calls USA requesting underground facility locations before excavation.

Working days: 20 hours, per California Government Code §4216.

Recision

This WP cancels and supersedes UO Guideline G14412, "Site Delineation and Mark and Locate Surface Markings," dated 1-03.

Reference Documents

American Public Works Association (APWA)

California Government Code §4216 et seq.

Code of Safe Practices

Gas Numbered Document M-60, "Approved Mark and Locate Instruments, Equipment, and Accessories"

Map Correction Form

OQ 05-01, "Mark and Locate Facilities"

Underground Service Alert of Central/Northern California and Nevada (USA North)

Underground Service Alert of Southern California (USA South)

Utility Standard Practice (USP) 22, "Safety and Health Program"

Utility Standard S4412, "Preventing Damage to Underground Facilities"

Utility Work Procedures:

- WP1465-02, "Gas Event and Near Hit Reporting"
- WP4100-04, "Gas Overbuilds"
- WP4412-01, "Operating Procedures for Locating Instruments"
- WP4412-02, "Locating Instruments Calibration Verification and Repair Procedures"
- WP4412-04, "Field Meets and Standby – Damage Prevention"
- WP4412-05, "Excavation Procedures for Damage Prevention"
- WP4412-06, "Handling Excavators, Contractors, and the Public Working Unsafely Around Utility Facilities"

Attachments

Attachment 1, "Determining When a Field Meet and/or Standby is Required"

Attachment 2, "Non-Locatable PG&E Underground Facilities"

Attachment 3, "Mark and Locate Equipment Checklist"

Contact for More Information

[redacted]
Internal [redacted]
External [redacted]

Date Issued

August 2009

Approved by

Robert P. Fassett
Director

Revision History

Chg No.	Date	Description	By (LAN ID)
00	August 2009	Initiated new work procedure.	[redacted]

ATTACHMENT 7

Pacific Gas and Electric Company

Utility Procedure: TD-4412P-03
Publication Date: Rev: 0

Marking and Locating PG&E Underground Facilities

Summary

This work procedure provides step-by-step instructions for processing all Underground Service Alert (USA) tickets received by the Company and for marking and locating Pacific Gas and Electric Company (Company) underground gas, electric, and fiber optic cable facilities

Level of Use: Informational Use

Target Audience

Production Mark and Locate personnel

Non-production Mark and Locate personnel

Mark and Locate supervisors

Anybody who marks an underground facility for any reason.

Safety

Hazards impacting this work include, but are not limited to, the following conditions:

- Dangerous animals
- Tripping and slipping hazards
- Traffic conditions
- Vegetation including poison oak
- Environmental surroundings
- Electrical shock
- Construction sites

Before You Start

Personal Protective Equipment (PPE)

Field employees following this procedure must wear the following personal protective equipment (PPE) at a minimum, plus any other applicable PPE, as specified in the *Code of Safe Practices*:

- Hard hat (must be available)
- Traffic vest
- Proper work footwear, no sneakers allowed
- Long-sleeved shirt
- Long pants

- Gloves (must be available)
- Safety glasses (must be available)

Tools: See Attachment 3, "Mark and Locate Equipment Checklist."

Materials: See Attachment 3.

Qualification: OQ 05-01, "Mark and Locate Facilities." for USA marking and locating, OQ 05-04 "Non-Production Mark and Locate" for crew marking and locating

Table of Contents

Procedure Steps

1 Training and Qualification Requirements for Production Mark and Locate

1.1 Company mark and locate training

1.2 Current operator qualification OQ 05-01 when locating gas facilities

1.3 The annual refresher training (GAS-0800) must be taken annually not to exceed 15 months to the date but at least once each calendar year.

2 Mis-marked Facilities

2.1 IF a buried facility is mis-marked

THEN perform the following actions:

1. Immediately contact the supervisor responsible for marking and locating underground facilities.
    a. The supervisor must then conduct an incident investigation according to WP1465-02, "Gas Event and Near Hit Reporting."
2. Stop excavation until facilities are accurately located.

Marking and Locating PG&E Underground Facilities

3 Processing USA Tickets

3.1 Requirements to Locate and Mark the Approximate Location

1. Locate and mark USA tickets within 2 working days or before the start of the excavation, whichever is later. A later time may be mutually agreed upon with the excavator.

2. The only exception allowed is for an emergency, as defined by California Government Code §4216(d).

3. USA ticket types include the following:

   - **Emergencies:** Zero (0) hours notice.
   - **Short Notice Tickets:** Less than 2 working days notice.
   - **Normal:** At least 2 working days notice.
   - **Extensions:** A valid on-going ticket used for extended excavation projects. A ticket can be extended up to 6 months.
   - **Renewals:** Greater than 6 months or a lapsed USA ticket (a new ticket number is issued).

3.2 Design Locate Requests

1. The USA process is not for design purposes.

2. The locator refers all design locate requests to the mark and locate supervisor.

3. The mark and locate supervisor determines if the request is for design purposes.

   a. IF the request is for design,

      THEN the mark and locate supervisor refers the excavator to local service planning personnel.

   b. IF the request is for excavation occurring within 14 days,

      THEN the locator marks and locates the underground cable facilities.

4. The locator documents all conversations on the USA ticket.

3.3 Review USA Tickets

1. Consider the following factors when prioritizing work:

   a. Identify valid emergency tickets.

b. Prioritize the remaining work by due date, time, and location.

(1) Identify and prioritize short notice tickets.

(2) Identify late tickets.

c. Schedule field meets requested on USA tickets.

2. Make contact with excavators, as necessary, and document these contacts on USA tickets.

3. IF underground electric transmission is in the area

THEN contact the electric transmission underground supervisor.

3.4 Daily Check Before Proceeding to Field

1. Perform a daily check to locate instruments in compliance with WP4412-01, “Operating Procedures for Locating Instruments,” and WP4412-02, “Locating Instruments Calibration Verification and Repair Procedures”.

2. Check PPE daily.

3. Perform a daily safety check on the mark and locate vehicle.

4. Check the vehicle for supplies daily. Refer to Attachment 3, “Mark and Locate Equipment Checklist.”

3.5 Site Check

1. Check for a delineation. The area to be excavated must be delineated with white chalk, flags, stakes, whiskers, or other suitable markings, including a Company identifier (name, abbreviations, or initials).

a. IF a delineation is not present

THEN contact the excavator.

b. IF the delineation is not clear

THEN contact the excavator.

2. Visually inspect the area for existing surface markings and/or indications of underground facilities (e.g., risers, patches in the street, meters).

3. Review maps for existing Company facilities within the delineated area. Identify critical and high-priority facilities that may be present in the proximity of the delineated area.

4 Performing USA Locates

4.1 Respond to the Excavator “Positive Response/Positive Contact”

1. Never provide the depth of the underground facility.

2. IF there **is no conflict with *any* Company underground facilities** (including gas, electric, or fiber facilities) in the delineated work area,

   THEN provide a response by notifying the excavator by phone, fax, email or automated response system of “no conflict.”

   a. IF there is no conflict with *any* company underground facilities in the delineated work area while on the jobsite,

      THEN provide surface marks of “NO PGE”.

3. IF there **is a conflict with other Company underground facilities** (including gas, electric, or fiber facilities) in the delineated work area,

   THEN provide a response by notifying the excavator by phone, fax, email or automated response system of the marks provided. The response will include information about the type of temporary markings and how to identify markings.

   a. Notify other affected Company departments of the conflict.

   b. Notify the excavator by phone, fax, email, in person, or automated response system that other Company facilities exist in the excavation area and that excavation cannot begin until all Company facilities have been located and marked.

4.2 Locating Methods

NOTE

Grounding: Conductive locating depends on proper grounding.

1. The method for locating Company underground facilities is conductive (direct connect). Always use an independent ground.

2. IF Company underground facilities cannot be located conductively,

   THEN perform the following tasks:

Marking and Locating PG&E Underground Facilities

a. Review Attachment 2, "Non-Locatable PG&E Underground Facilities," for possible reasons the facility cannot be located.

b. Contact other personnel (e.g., corrosion, electric, locator who is operator qualified OQ 05-03 for inline locating tape) for assistance, as appropriate, to locate the facility.

c. Use the alternate methods listed below in the following order:

    (1) Inductive clamp

    (2) Inductive

    (3) Passive – 50/60 hertz (Hz)

    (4) Passive – radio frequency (RF)

    (5) Map records – follow each step below:

    - IF measurements exist on the maps,
    - THEN mark the facility using map measurements.IF locating a service using map measurements.
    - THEN contact the local mapping department to get information from records, including as-built drawings and service orders due to possible offsets less than 150' in length which may exist and are not shown on plat maps. IF measurements do not exist on the maps or there are other questions,

      THEN contact the local mapping department to get information from records, including as-built drawings and service orders.

    - Complete a "Map Correction Form," noting "Unlocatable Facility," and submit it to the local mapping department.
    - Notify the excavator and schedule a field meet. Inform the excavator that the marks are approximate and based on drawings only.

    (6) Use specialty instruments listed in M-60.

    (7) Request crew assistance to daylight facilities and to install EMS markers.

4.3 Facility Markings

1. Refer to Table 1, "Color Code Identifiers (American Public Works Association [APWA] Uniform Color Code)," and Table 2, "Facility Marking Abbreviations," on Page 8.

2. Facility locators match markings to existing and expected surface conditions. Markings may include one or any combination of the following: paint, chalk, flags, stakes, whiskers, or offset markings.

3. Use non-permanent markings on private property.

4. Extend all marks a reasonable distance beyond the bounds of the delineated area.

5. Marks in the appropriate color are approximately 12 inches long and spaced no more than 50 feet (ft) apart on straight-line installations.

6. Mark the following information:
   a. Material type (“STL” for steel, “PL” for plastic, “CI” for cast iron)
   b. Commodity (also indicate the transmission and line number, if applicable)
   c. Size
   d. Number of facilities
   e. Directional changes
   f. Taps/tees/laterals
   g. Horizontal offsets

7. Place marks over the approximate center of the underground facility.

8. Joint trench facilities may not be indicated on the same mark. Locate and mark each commodity separately and shown in the appropriate color, according to the APWA Uniform Color Code (see Table 1 on Page 8).

3 – 4” Ducts

PGE

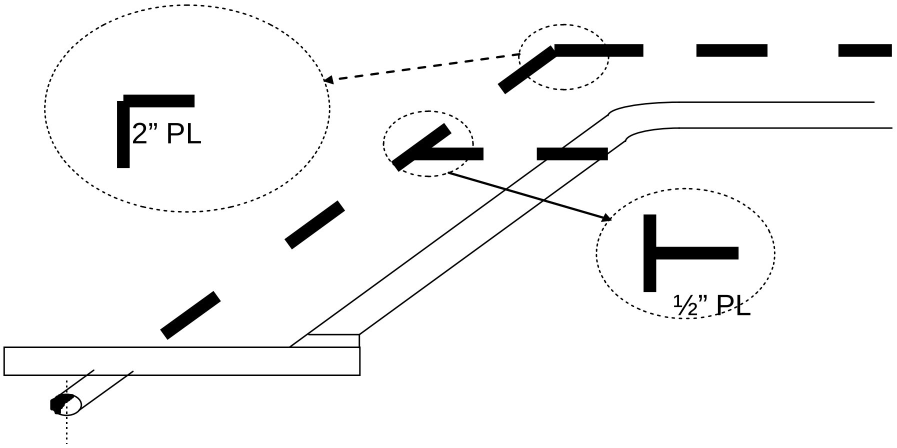
4” PL

9. Mark Company facilities with “PGE” (if facilities of the same commodity owned by others are present), facility size, composition, and number of ducts, as shown on the map.

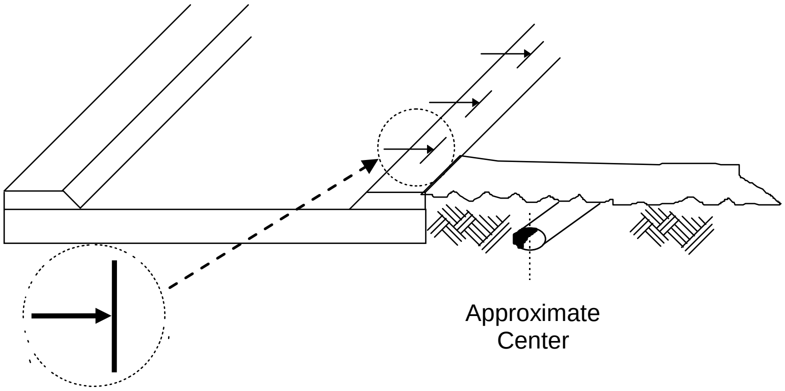
10. Mark critical facilities accordingly: “GT” to designate gas transmission, “ET” to designate electric transmission, and “FO” to designate Company-owned telecommunications.

11. Indicate termination points or dead ends as follows:

12. Clearly indicate directional changes and taps/tees/laterals as follows:



13. When providing offsets, show the direction, distance to, and path of the facility. In the following example, a 12-inch steel gas main is shown in the dirt area, 8 ft to the right of the markings on the sidewalk:

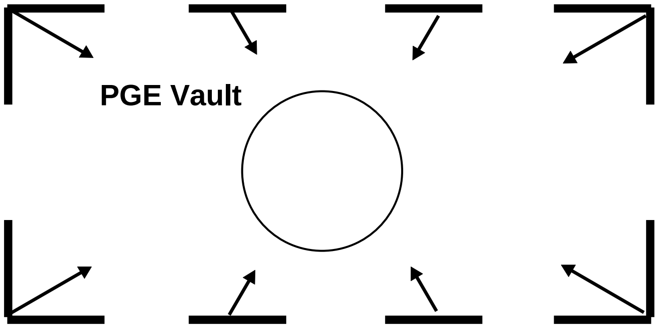


14. Identify facilities (inserted services or mains) installed in casings as shown below. The inserted pipe is followed by the casing size and material in parentheses. In the following examples, a 2-inch plastic pipe is inserted in a 4-inch cast iron casing and a ½-inch plastic pipe is inserted in a ¾-inch steel casing:

2" PL (4" CI)

½" PL (3/4" STL)

15. Mark structures, such as vaults, to indicate the footprint of the structures.



16. Mark cathodic protection wire connecting the rectifier and the anode during the performance of subsurface marking activities.
    a. Using an inductive loop around the conduit coming out of the rectifier is acceptable method of locating in this circumstance.
    b. Contact a corrosion mechanic for assistance as needed.

4.4 Complete the Locate

1. **Review the map** and surface markings to ensure that all facilities are located and marked.

2. IF other Company underground facilities exist in the delineated work area and the locator needs assistance to locate them,

   THEN notify the affected Company departments of the conflict and the excavator that other Company facilities exist in the delineated work area.

3. Identify the need for a field meet or standby in accordance with Attachment 1, "Determining When a Field Meet and/or Standby is Required."

4. Identify potential future or existing overbuilds in the project area and report to the supervisor in accordance with WP4100-04, "Gas Overbuilds."

4.5 Check for Errors on Records

1. Report all errors or discrepancies per the "Map Correction Form."

4.6 Instruments and Material

1. Use only Company-approved instruments and marking products. See Gas Numbered Document M-60, "Approved Mark and Locate Instruments, Equipment, and Accessories."

Table 1. Color Code Identifiers (APWA Uniform Color Code)

Red	Electric
Yellow	Gas/oil/steam
Orange	Telephone/communications/cable TV
Blue	Water
Green	Sewer
Purple	Reclaimed water and slurry
White	USA delineation area (proposed excavation area)
Pink	Temporary survey markings

Table 2. Facility Marking Abbreviations

CI	Cast iron
DE	Dead end or termination point
ET	Electric transmission
FO	Company-owned fiberoptic telecommunications
GT	Gas transmission
PGE	Company-owned facility
PL	Plastic
STL	Steel
DB	Direct buried

5 Performing PG&E Locates for PG&E Crew Work (PG&E sole excavator)

5.1 Training and Qualification Requirements

1. Company mark and locate training.

2. Current **crew operator qualification 05-04** when locating gas facilities

5.2 IF a buried facility is mis-marked

THEN perform the following actions:

1. Immediately contact the supervisor responsible for marking and locating underground facilities.
   a. The supervisor must then conduct an incident investigation according to WP1465-02, "Gas Event and Near Hit Reporting."
2. Stop excavation until facilities are accurately located.

5.3 Before Performing Crew Locate

1. Check PPE.
2. Perform a check to locate instruments in compliance with WP4412-01, "Operating Procedures for Locating Instruments," and WP4412-02, "Locating Instruments Calibration Verification and Repair Procedures".
3. Verify the equipment's calibration has been verified in the last 6 months

5.4 Locating Methods

1. **Grounding:** Conductive locating depends on proper grounding. Always use an independent ground.
2. **Locating:** The method for locating Company underground facilities is conductive (direct connect).
3. IF Company underground facilities cannot be located conductively,

   THEN perform the following tasks:

   a. Review Attachment 2, "Non-Locatable PG&E Underground Facilities," for possible reasons the facility cannot be located.
   b. Contact other personnel (e.g., corrosion, electric) for assistance, as appropriate, to locate the facility.
   c. Use the alternate methods listed below in the following order:
      (1) Inductive clamp
      (2) Inductive
      (3) Passive – 50/60 hertz (Hz)
      (4) Passive – radio frequency (RF)

(5) Map records – follow each step below:

- IF measurements exist on the maps,

  THEN mark the facility using map measurements.

- IF locating a service using map measurements.

  THEN contact the local mapping department to get information from records, including as-built drawings and service orders due to possible offsets less than 150’ in length which may exist and are not shown on plat maps.

- If measurements do not exist on the maps or there are other questions,

  THEN contact the local mapping department to get information from records, including as-built drawings and service orders.

- Complete a “Map Correction Form,” noting “Unlocatable Facility,” and submit it to the local mapping department.

(6) Use specialty instruments listed in M-60.

(7) IF the facilities cannot be located,

THEN follow WP4412P-05 to expose the facilities and install EMS markers

5.5 Facility Markings

1. Facility locators match markings to existing and expected surface conditions. Markings may include paint or chalk.

2. Place marks over the approximate center of the underground facility.

5.6 Complete the Locate

1. Review the map and surface markings to ensure that all facilities are located and marked.

2. IF other Company underground facilities exist in the delineated work area and the locator needs assistance to locate them,

   THEN notify the affected Company departments of the conflict and the excavator that other Company facilities exist in the delineated work area.

Marking and Locating PG&E Underground Facilities

3. Identify the need for a standby in accordance with Attachment 1, “Determining When a Field Meet and/or Standby is Required.”

4. Identify potential future or existing overbuilds in the project area and report to the supervisor in accordance with WP4100-04, “Gas Overbuilds.”

5.7 Complete the USA Ticket

1. Communicate with the production locator in the area and provide them with information to close the USA ticket in IRTH.com.

5.8 Complete Facility Markings on New PG&E Installed Facilities

1. In areas of ongoing construction or potential excavation activities by Company or others, place marks over the approximate center of the newly installed underground facility. This is to ensure the new PG&E installed facility can be identified by other possible excavators working in the area. This is required for both PG&E excavations as well as contract excavators doing work for PG&E.

2. Refer to section 4.3 of this work procedure for examples of facility marking standards.

5.9 Check for Errors on Records

1. Report all errors or discrepancies using the “Map Correction Form.”

5.10 Instruments and Material

1. Use only Company-approved instruments and marking products. See Gas Numbered Document M-60, “Approved Mark and Locate Instruments, Equipment, and Accessories.”

Definitions

APWA: American Public Works Association.

CGC: California Government Code.

CPUC: California Public Utilities Commission.

Critical facilities: All gas transmission pressure (above 60 pounds per square inch gauge [psig]) facilities and all electric facilities operating at and above 60 kilovolt (kV) are considered “critical facilities” for the purposes of this WP. Critical facilities may also be determined by the local operating area. Those facilities which, if damaged, are likely to result in difficulty controlling the gas flow due to the size, material properties, operating pressure, and/or location of the facility. When determining the difficulty of controlling gas flow, give consideration to employee and equipment availability. Critical facilities are also those electric distribution facilities which, if damaged, are likely to result in extensive (long duration) outages or outages to critical customers.

Delineated work area: The identification of a Company or an external entity's work area by pre-marking the area of proposed excavation with surface markings or by other means.

Emergency: A sudden, unexpected occurrence involving a clear and immediate danger, demanding immediate action to prevent or mitigate the loss of or damage to life, health, property, or essential public services. See California Government Code §4216(d).

High-priority facilities: High-pressure natural gas pipelines with normal operating pressures greater than 415 kilopascal (kPA) gauge (60 psig), petroleum pipelines, pressurized sewage pipelines, high-voltage electric supply lines, conductors, or cables that have a potential to ground greater than or equal to 60 kV, or hazardous materials pipelines that are potentially hazardous to workers or the public, if damaged. See California Government Code §4216(e).

Positive response (positive contact): Information about the location of an underground facility by locating and field marking the approximate location and, if known, the number of subsurface installations that may be affected by the excavation to the extent and degree of accuracy that the information is available in the records of the operator or as determined through the use of standard locating techniques other than excavating. Otherwise, advise the person who contacted the one-call center of the location of the operator's underground facility installations that may be affected by the excavation, or advise that person that the operator does not operate any underground facilities that would be affected by the proposed excavation.

Short notice: A USA ticket with less than 2 working days notice that is not an emergency.

Underground Service Alert (USA): Regional one-call notification centers for the Company service territory. There are two centers serving the Company: Underground Service Alert of Central/Northern California and Nevada (USA North) and Underground Service Alert of Southern California (USA South).

USA ticket: A document created when an excavator calls USA requesting underground facility locations before excavation.

Critical facilities: All gas transmission pressure (above 60 pounds per square inch gauge [psig]) facilities and all electric facilities operating at and above 60 kilovolt (kV) are considered "critical facilities" for the purposes of this WP. Critical facilities may also be determined by the local operating area. Those facilities which, if damaged, are likely to result in difficulty controlling the gas flow due to the size, material properties, operating pressure, and/or location of the facility. When determining the difficulty of controlling gas flow, give consideration to employee and equipment availability. Critical facilities are also those electric distribution facilities which, if damaged, are likely to result in extensive (long duration) outages or outages to critical customers.

Delineated work area: The identification of a Company or an external entity's work area by pre-marking the area of proposed excavation with surface markings or by other means.

Emergency: A sudden, unexpected occurrence involving a clear and immediate danger, demanding immediate action to prevent or mitigate the loss of or damage to life, health, property, or essential public services. See California Government Code §4216(d).

High-priority facilities: High-pressure natural gas pipelines with normal operating pressures greater than 415 kilopascal (kPA) gauge (60 psig), petroleum pipelines, pressurized sewage pipelines, high-voltage electric supply lines, conductors, or cables that have a potential to ground greater than or equal to 60 kV, or hazardous materials pipelines that are potentially hazardous to workers or the public, if damaged. See California Government Code §4216(e).

Positive response (positive contact): Information about the location of an underground facility by locating and field marking the approximate location and, if known, the number of subsurface installations that may be affected by the excavation to the extent and degree of accuracy that the information is available in the records of the operator or as determined through the use of standard locating techniques other than excavating. Otherwise, advise the person who contacted the one-call center of the location of the operator's underground facility installations that may be affected by the excavation, or advise that person that the operator does not operate any underground facilities that would be affected by the proposed excavation.

Short notice: A USA ticket with less than 2 working days notice that is not an emergency.

Underground Service Alert (USA): Regional one-call notification centers for the Company service territory. There are two centers serving the Company: Underground Service Alert of Central/Northern California and Nevada (USA North) and Underground Service Alert of Southern California (USA South).

USA ticket: A document created when an excavator calls USA requesting underground facility locations before excavation.

Working days: 20 hours, per California Government Code §4216.

Implementation Personnel performing marking and locating activities are responsible for

Responsibilities

following this procedure.

Supervisors of personnel performing marking and locating activities are responsible for providing the tools and equipment necessary to do the work.

Governing Document

S4412 “Preventing Damage to Underground Facilities”, August 2009

Compliance Requirement/ Regulatory Commitment

California Government Code §4216

49 CFR 192.614 “Damage Prevention Program”

Reference Documents

Developmental References:

[American Public Works Association (APWA)

California Government Code §4216 et seq.

Gas Numbered Document M-60, “Approved Mark and Locate Instruments, Equipment, and Accessories”

Map Correction Form

OQ 05-01, “Mark and Locate Facilities”

OQ 05-04, “Non-Production Mark and Locate”

Underground Service Alert of Central/Northern California and Nevada (USA North)

Underground Service Alert of Southern California (USA South)

Utility Standard S4412, “Preventing Damage to Underground Facilities”

Utility Work Procedures:

- WP1465-02, “Gas Event and Near Hit Reporting”
- WP4100-04, “Gas Overbuilds”
- WP4412-01, “Operating Procedures for Locating Instruments”
- WP4412-02, “Locating Instruments Calibration Verification and Repair

Procedures”
- WP4412-04, “Field Meets and Standby – Damage Prevention”
- WP4412-05, “Excavation Procedures for Damage Prevention”
- TD-4412P-06, “Handling Excavators, Contractors and the Public Working Unsafely Around Utility Facilities”

Appendices

NA

Attachments

Attachment 1, “Determining When a Field Meet and/or Standby is Required”

Attachment 2, “Non-Locatable PG&E Underground Facilities”

Attachment 3, “Mark and Locate Equipment Checklist”

Job Aid TD-4412P-03-JA01 “Taking Digital Photographs at Locate Site”

Job Aid TD-4412P-03-JA02 “Initial Setup of Sony Cyber-shot DSC-S700”

Job Aid TD-4412P-03-JA03 “Zip USA Pictures Process”

Job Aid TD-4412P-03-JA04 “Troubleshooting Zipping USA Pictures”

Job Aid TD-4412P-03-JA05 “Searching for and Printing Tickets from IRTHNet”

Job Aid TD-4412P-03-JA06 “Searching for and Re-Opening a Ticket Using Field Unit”

Job Aid TD-4412P-03-JA07 “Adding Notes to Multiple USA Tickets Using IRTHNet”

Job Aid TD-4412P-03-JA08 “Streets and Trips Route Process”

Job Aid TD-4412P-03-JA09 “IRTHNet Field Unit Data Entry”

Job Aid TD-4412P-03-JA10 “Standard Comments IRTH Field Unit”

Job Aid TD-4412P-03-JA11 “FAS Field Support”

Job Aid TD-4412P-03-JA13 “Determine if a Critical Facility is Involved”

Marking and Locating PG&E Underground Facilities

Document Recision	WP4412-03, “Marking and Locating PG&E Underground Facilities”, August 2009 TD-4412B-007, “Changes to WP4412-03 “Marking and Locating PG&E Underground Facilities”, August 2011 Job Aid WP-4412-03-JA12 “IRTH Field Unit Data Entry”
Approved By	Karen S. Roth, Director, Integrity Management
Document Owner	Chris McGowan – Mark & Locate Process Owner
Document Contact	Chris McGowan – Mark & Locate Process Owner

Revision Notes

Where?	What Changed?
Entire document	Converted to latest template. Renumbered from WP4412-03 to TD-4412P-03
Safety	Added specific hazards
Qualification	Added OQ 05-04 “Non-Production Mark and Locate”
Section 1	New requirement for annual refresher training
Section 2	New section on Mis-marked Facilities (changed from a note)
Section 4.2.2.c	Added items (6) and (7)
Section 4.3.16	New requirement to mark cathodic protection wire.
Section 4.6	Added DB for Direct Buried to Table 2
Section 5	New section. Added steps for Performing PG&E Locates for PG&E Crew Work (PG&E sole excavator)
Section 5.8	New requirement for crew locators to mark newly placed facility if there are other active excavations in the area.
Reference Documents	Added OQ 05-04, “Non-Production Mark and Locate”

Marking and Locating PG&E Underground Facilities

Where?	What Changed?
Job Aids	Revised Job Aids TD-4412P-03 -JA05, TD-4412P-03 -JA06, TD-4412P-03 -JA07, TD-4412P-03 -JA09, TD-4412P-03 -JA 10, Deleted Job Aid WP-4412-03-JA12. Renumbered Job Aids TD-4412P-03 –JA01, TD-4412P-03 –JA02, TD-4412P-03 –JA03, TD-4412P-03 –JA04, TD-4412P-03 –JA08, TD-4412P-03 –JA11. Added Job Aid TD-4412P-03-JA13

ATTACHMENT 8

Marking and Locating PG&E Underground Facilities

Summary

This procedure provides step-by-step instructions for processing all underground service alert (USA) tickets received by Pacific Gas and Electric Company (the Company), and for marking and locating Company underground gas, electric, and fiber optic cable facilities.

Level of Use: Informational Use

Target Audience

Production and non-production mark and locate (M&L) personnel, M&L supervisors, and all personnel who mark an underground facility for any reason.

Safety

Hazards impacting this work include, but are not limited to, the following conditions:

- Dangerous animals.
- Tripping and slipping hazards.
- Traffic conditions.
- Vegetation including poison oak.
- Environmental surroundings.
- Electrical shock.
- Construction sites.

Before You Start

Personal Protective Equipment (PPE)

Field personnel following this procedure must wear the following PPE at a minimum, plus any other applicable PPE, as specified in the *Code of Safe Practices*:

- Hard hat (must be available).
- Traffic vest.
- Proper work footwear, no sneakers allowed.
- Long-sleeved shirt.
- Long pants.
- Gloves (must be available).
- Safety glasses (must be available).

Marking and Locating PG&E Underground Facilities

Tools: See Attachment 3, "Mark and Locate Equipment Checklist."

Materials: See Attachment 3.

Qualification: The following operator qualifications (OQ) apply to the work performed in this procedure:

- OQ 05-01, "Mark and Locate Facilities," for USA marking and locating.
- OQ 05-04, "Non-Production Mark and Locate," for crew marking and locating.

Table of Contents

Procedure Steps

1 Training and Qualification Requirements for Production Mark and Locate

1.1 Personnel must complete Company mark and locate training.

1.2 Personnel must qualify under current OQ 05-01 before locating gas facilities.

1.3 Personnel must complete refresher training GAS-0800 annually, not to exceed 15 months to the date, but at least once each calendar year.

2 Mis-marked Facilities

2.1 IF a buried facility is mis-marked,

THEN perform the following actions:

1. Immediately contact the supervisor responsible for marking and locating underground facilities.

2.1 (continued)

a. The supervisor must then conduct an incident investigation according to Utility Procedure TD-1465P-02, "Gas Event Reporting."

2. Stop excavation until facilities are accurately located.

3 Processing USA Tickets

3.1 Requirements to Locate and Mark the Approximate Location

1. Locate and mark USA tickets within 2 working days or before the start of the excavation, whichever is later. A later time may be mutually agreed upon with the excavator.

2. The only exception allowed is for an emergency, as defined by California Government Code §4216(d).

3. USA ticket types include the following:

   - **Emergencies:** zero (0) hours notice.
   - **Short notice tickets:** less than 2 working days notice.
   - **Normal:** at least 2 working days notice.
   - **Extensions:** a valid ongoing ticket used for extended excavation projects. A ticket can be extended up to 6 months.
   - **Renewals:** greater than 6 months or a lapsed USA ticket (a new ticket number is issued).

3.2 Design Locate Requests

1. The USA process is not for design purposes.

2. The locator refers all design locate requests to the mark and locate supervisor.

3. The mark and locate supervisor determines if the request is for design purposes.

   a. IF the request is for design,

      THEN the mark and locate supervisor refers the excavator to local service planning personnel.

   b. IF the request is for excavation occurring within 14 days,

      THEN the locator marks and locates the underground cable facilities.

Marking and Locating PG&E Underground Facilities

3.2 (continued)

4. The locator documents all conversations on the USA ticket.

3.3 Review USA Tickets

1. Personnel must consider the following factors when prioritizing work:

   a. Identify valid emergency tickets.

   b. Prioritize the remaining work by due date, time, and location. In doing so, complete the following steps:

      (1) Identify and prioritize short notice tickets.

      (2) Identify late tickets.

   c. Schedule field meets requested on USA tickets.

2. Make contact with excavators, as necessary, and document these contacts on USA tickets.

3. IF underground electric transmission is in the area,

   THEN contact the electric transmission underground supervisor.

3.4 Daily Check Before Proceeding to Field

1. Perform a daily check to locate instruments in compliance with Utility Procedure WP4412-01, "Operating Procedures for Locating Instruments," and WP4412-02, "Locating Instruments Calibration Verification and Repair Procedures."

2. Check PPE daily.

3. Perform a daily safety check on the mark and locate vehicle.

4. Check the vehicle for supplies daily. Refer to Attachment 3, "Mark and Locate Equipment Checklist."

3.5 Site Check

1. Check for a delineation. The area to be excavated must be delineated with white chalk, flags, stakes, whiskers, or other suitable markings, including a Company identifier (name, abbreviations, or initials).

3.5 (continued)

a. IF a delineation is not present or is not clear,

THEN contact the excavator.

2. Visually inspect the area for existing surface markings or indications of underground facilities (for example, risers, patches in the street, meters).

3. Review maps for existing Company facilities within the delineated area. Identify critical and high-priority facilities that may be present in the proximity of the delineated area.

4 Performing USA Locates

4.1 Respond to the Excavator “Positive Response/Positive Contact”

1. Never provide the depth of the underground facility.

2. IF there **is no conflict with any Company underground facilities** (including gas, electric, or fiber facilities) in the delineated work area,

   THEN provide a response by notifying the excavator by phone, fax, email, or automated response system of “no conflict.”

   a. IF there is no conflict with *any* company underground facilities in the delineated work area while on the job site,

      THEN provide surface marks of “NO PGE.”

3. IF there **is a conflict with other Company underground facilities** (including gas, electric, or fiber facilities) in the delineated work area,

   THEN provide a response by notifying the excavator by phone, fax, email, or automated response system of the marks provided. The response must include information about the type of temporary markings and how to identify markings.

   a. Notify other affected Company personnel of the conflict.

   b. Notify the excavator by phone, fax, email, in person, or automated response system that other Company facilities exist in the excavation area and that excavation cannot begin until all Company facilities are located and marked.

Marking and Locating PG&E Underground Facilities

4.2 Locating Methods

NOTE

Grounding: conductive locating depends on proper grounding.

1. The method for locating Company underground facilities is conductive (direct connect). Always use an independent ground.

2. IF Company underground facilities cannot be located conductively,

   THEN perform the following tasks:

   a. Review Attachment 2, "Non-Locatable PG&E Underground Facilities," for possible reasons the facility cannot be located.

   b. Contact other personnel (for example, corrosion, electric, locator who is operator qualified OQ 05-03 for inline locating tape) for assistance, as appropriate, to locate the facility.

   c. Use the alternate methods listed below in the following order:

      (1) Inductive clamp.

      (2) Inductive.

      (3) Passive – 50/60 hertz (Hz).

      (4) Passive – radio frequency (RF).

      (5) Map records – follow each step below:

         - IF measurements exist on the maps,

           THEN mark the facility using map measurements.

         - IF locating a service using map measurements,

           THEN contact local mapping personnel to get information from records, including as-built drawings and service orders due to possible offsets less than 150 ft in length which may exist and are not shown on plat maps.

         - IF measurements do not exist on the maps or there are other questions,

           THEN contact local mapping personnel to get information from records, including as-built drawings and service orders.

Marking and Locating PG&E Underground Facilities

4.2 (continued)

- Complete a Map Correction Form, noting "Unlocatable Facility," and submit it to local mapping personnel.
- Notify the excavator and schedule a field meet. Inform the excavator that the marks are approximate and based on drawings only.

(6) Use specialty instruments listed in Numbered Document M-60, "Approved Mark and Locate Instruments, Equipment, and Accessories."

(7) Request crew assistance to daylight facilities and to install electronic marker system (EMS) markers.

4.3 Facility Markings

1. Refer to Table 1, "Color Code Identifiers (American Public Works Association [APWA] Uniform Color Code)," and Table 2, "Facility Marking Abbreviations," for a list of color codes and marking abbreviations.

2. Facility locators match markings to existing and expected surface conditions. Markings may include one or any combination of the following: paint, chalk, flags, stakes, whiskers, or offset markings.

3. Use non-permanent markings on private property.

4. Extend all marks a reasonable distance beyond the bounds of the delineated area.

5. Marks in the appropriate color are approximately 12 inches long and spaced no more than 50 feet (ft) apart on straight-line installations.

6. Mark the following information:

   a. Material type ("STL" for steel, "PL" for plastic, "CI" for cast iron).

   b. Commodity (also indicate the transmission and line number, if applicable).

   c. Size.

   d. Number of facilities.

   e. Directional changes.

   f. Taps/tees/laterals.

   g. Horizontal offsets.

Marking and Locating PG&E Underground Facilities

4.3 (continued)

7. Place marks over the approximate center of the underground facility.

8. Joint trench facilities may not be indicated on the same mark. Locate and mark each commodity separately and in the appropriate color, according to the APWA uniform color code located on Table 1.

3 – 4" Ducts

PGE

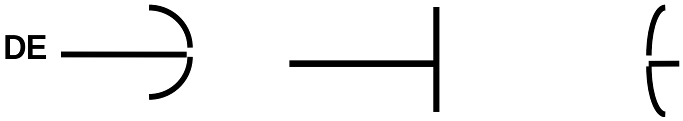
4" PL

9. Mark Company facilities with "PGE" (if facilities of the same commodity owned by others are present), facility size, composition, and number of ducts, as shown on the map.

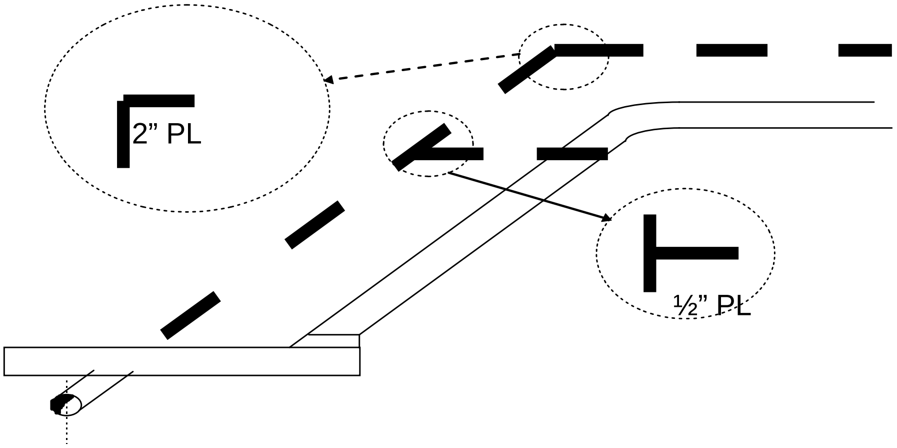
10. Mark critical facilities accordingly: "GT" to designate gas transmission, "ET" to designate electric transmission, and "FO" to designate Company-owned telecommunications.

PGE	PGE	PGE	PGE	PGE
FO	2 - 4" Ducts	24" GT STL	1/2" PL	ET

11. Indicate termination points or dead ends as follows:



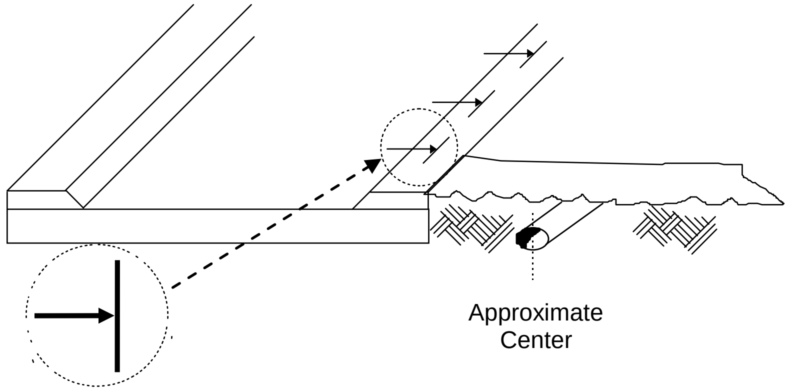
12. Clearly indicate directional changes and taps/tees/laterals as follows:



Marking and Locating PG&E Underground Facilities

4.3 (continued)

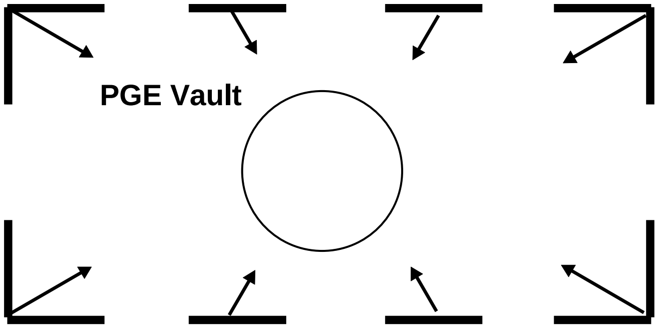
13. When providing offsets, show the direction, distance to, and path of the facility. In the following example, a 12-inch steel gas main is shown in the dirt area, 8 ft to the right of the markings on the sidewalk:



14. Identify facilities (inserted services or mains) installed in casings as shown below. The inserted pipe is followed by the casing size and material in parentheses. In the following examples, a 2-inch plastic pipe is inserted in a 4-inch cast iron casing and a ½-inch plastic pipe is inserted in a ¾-inch steel casing:

2” PL (4” CI) **½” PL (3/4” STL)**

15. Mark structures, such as vaults, to indicate the footprint of the structures.



16. Mark cathodic protection wire connecting the rectifier and the anode during the performance of subsurface marking activities.

    a. Using an inductive loop around the conduit coming out of the rectifier is an acceptable method of locating in this circumstance.

    b. Contact a corrosion mechanic for assistance as needed.

Marking and Locating PG&E Underground Facilities

4.4 Complete the Locate

1. Review the map and surface markings to ensure that all facilities are located and marked.

2. IF other Company underground facilities exist in the delineated work area and the locator needs assistance to locate them,

   THEN notify the affected Company personnel of the conflict and notify the excavator that other Company facilities exist in the delineated work area.

3. Identify the need for a field meet or standby in accordance with Attachment 1, “Determining When a Field Meet and/or Standby is Required.”

4. Identify potential future or existing overbuilds in the project area and report to the supervisor in accordance with Work Procedure WP4100-04, “Gas Overbuilds.”

4.5 Check for Errors on Records

1. Report all errors or discrepancies per the “Map Correction Form.”

4.6 Instruments and Material

1. Use only Company-approved instruments and marking products. See Numbered Document M-60, “Approved Mark and Locate Instruments, Equipment, and Accessories.”

Table 1. Color Code Identifiers (APWA Uniform Color Code)

Red	Electric
Yellow	Gas/oil/steam
Orange	Telephone/communications/cable TV
Blue	Water
Green	Sewer
Purple	Reclaimed water and slurry
White	USA delineation area (proposed excavation area)
Pink	Temporary survey markings

Table 2. Facility Marking Abbreviations

CI	Cast iron
DE	Dead end or termination point
ET	Electric transmission
FO	Company-owned fiberoptic telecommunications
GT	Gas transmission
PGE	Company-owned facility
PL	Plastic

STL	Steel
DB	Direct buried

5 Performing Company Locates for Company Crew Work (Company sole excavator)

5.1 Training and Qualification Requirements

1. Personnel must complete Company mark and locate training.
2. The current crew must first qualify under OQ 05-04 before locating gas facilities.

5.2 IF a buried facility is mis-marked,

THEN perform the following actions:

1. Immediately contact the supervisor responsible for marking and locating underground facilities.
    a. The supervisor must then conduct an incident investigation according to Utility Procedure TD-1465P-02, “Gas Event Reporting.”
2. Stop excavation until facilities are accurately located.

5.3 Before Performing Crew Locate

1. Check PPE.
2. Perform a check to locate instruments in compliance with Work Procedure WP4412-01, “Operating Procedures for Locating Instruments.”
3. Confirm the equipment calibration has been verified in the last 6 months.
4. IF the equipment calibration has not been verified in the last 6 months,

    THEN verify the equipment calibration.

5.4 Locating Methods

1. **Grounding:** conductive locating depends on proper grounding. Always use an independent ground.

Marking and Locating PG&E Underground Facilities

5.4 (continued)

2. **Locating:** the method for locating Company underground facilities is conductive (direct connect).

3. IF Company underground facilities cannot be located conductively,

   THEN perform the following tasks:

   a. Review Attachment 2, "Non-Locatable PG&E Underground Facilities," for possible reasons the facility cannot be located.

   b. Contact other personnel (for example, corrosion, electric) for assistance, as appropriate, to locate the facility.

   c. Use the alternate methods listed below in the following order:

      (1) Inductive clamp.

      (2) Inductive.

      (3) Passive – 50/60 Hz.

      (4) Passive –RF.

      (5) Map records – follow each step below:

      - IF measurements exist on the maps,

        THEN mark the facility using map measurements.

      - IF locating a service using map measurements,

        THEN contact local mapping personnel to get information from records, including as-built drawings and service orders due to possible offsets less than 150 ft in length which may exist and are not shown on plat maps.

      - If measurements do not exist on the maps or there are other questions,

        THEN contact local mapping personnel to get information from records, including as-built drawings and service orders.

      - Complete a "Map Correction Form," noting "Unlocatable Facility," and submit it to local mapping personnel.

      (6) Use specialty instruments listed in Numbered Document M-60, "Approved Mark and Locate Instruments, Equipment, and Accessories."

5.4 (continued)

(7) IF the facilities cannot be located,

THEN follow Utility Procedure WP4412-05, "Excavation Procedures for Damage Prevention" to expose the facilities and install EMS markers.

5.5 Facility Markings

1. Facility locators match markings to existing and expected surface conditions. Markings may include paint or chalk.

2. Place marks over the approximate center of the underground facility.

5.6 Complete the Locate

1. Review the map and surface markings to ensure that all facilities are located and marked.

2. IF other Company underground facilities exist in the delineated work area and the locator needs assistance to locate them,

   THEN notify the affected Company personnel of the conflict and notify the excavator that other Company facilities exist in the delineated work area.

3. Identify the need for a standby in accordance with Attachment 1, "Determining When a Field Meet and/or Standby is Required."

4. Identify potential future or existing overbuilds in the project area and report to the supervisor in accordance with Utility Procedure WP4100-04, "Gas Overbuilds."

5.7 Complete the USA Ticket

1. Communicate with the production locator in the area and provide the locator with information to close the USA ticket in IRTH.com.

5.8 Complete Facility Markings on New Company-installed Facilities

1. In areas of ongoing construction or potential excavation activities by Company personnel or others, place marks over the approximate center of a newly installed underground facility. This is to ensure the new Company-installed facility can be identified by other possible excavators working in the area. This is required for Company excavations, as well as contract excavators doing work for the Company.

2. Refer to Section 4.3 of this procedure for examples of facility marking standards.

5.9 Check for Errors on Records

1. Report all errors or discrepancies using the “Map Correction Form.”

5.10 Instruments and Material

1. Use only Company-approved instruments and marking products. See Numbered Document M-60, “Approved Mark and Locate Instruments, Equipment, and Accessories,” for further details.

END of Instructions

Definitions

Critical facilities: all gas transmission pressure (above 60 pounds per square inch gauge [psig]) facilities and all electric facilities operating at and above 60 kilovolt (kV) are considered “critical facilities” for the purposes of this procedure. Critical facilities may also be determined by the local operating area. Those facilities which, if damaged, are likely to result in difficulty controlling the gas flow due to the size, material properties, operating pressure, or location of the facility. When determining the difficulty of controlling gas flow, consider personnel and equipment availability. Critical facilities are also those electric distribution facilities which, if damaged, are likely to result in extensive (long duration) outages or outages to critical customers.

Delineated work area: the identification of a Company or the work area of an external entity by pre-marking the area of proposed excavation with surface markings or by other means.

High-priority facilities: high-pressure natural gas pipelines with normal operating pressures greater than 415 kilopascal (kPA) gauge (60 psig), petroleum pipelines, pressurized sewage pipelines, high-voltage electric supply lines, conductors, or cables that have a potential to ground greater than or equal to 60 kV, or hazardous materials pipelines that are potentially hazardous to workers or the public, if damaged.

Positive response (positive contact): Information about the location of an underground facility by locating and field marking the approximate location and, if known, the number of subsurface installations that may be affected by the excavation to the extent and degree of accuracy that the information is available in the records of the operator or as determined through the use of standard locating techniques other than excavating. Otherwise, advise the person who contacted the one-call center of the location of the operator's underground facility installations that may be affected by the excavation or advise that person that the operator does not operate any underground facilities that would be affected by the proposed excavation.

Short notice: a USA ticket with less than 2 working days notice that is not an emergency.

Underground service alert (USA): regional one-call notification centers for the Company service territory. There are two centers serving the Company: Underground Service Alert of Central/Northern California and Nevada (USA North) and Underground Service Alert of Southern California (USA South).

USA ticket: a document created when an excavator calls USA personnel requesting underground facility locations before excavation.

Implementation Responsibilities

Personnel performing marking and locating activities must follow this procedure.

Supervisors of personnel performing marking and locating activities must provide the tools and equipment necessary to do work described in this procedure.

Governing Document

Utility Standard S4412, "Preventing Damage to Underground Facilities," governs this document.

Compliance Requirement/ Regulatory Commitment

California Government Code Section 4216.

Code of Federal Regulation (CFR) Title 49: Transportation, Part 192—Transportation of Natural and Other Gas by Pipeline: Minimum Federal Safety Standards, Section 614, "Damage Prevention Program."

Reference Documents

Developmental References:

Map Correction Form.

Numbered Document M-60, "Approved Mark and Locate Instruments, Equipment, and Accessories."

OQ 05-01, "Mark and Locate Facilities."

OQ 05-04, "Non-Production Mark and Locate."

Utility Procedure TD-1465P-02, "Gas Event Reporting."

Work Procedure WP4100-04, "Gas Overbuilds."

Work Procedure WP4412-01, "Operating Procedures for Locating Instruments."

Work Procedure WP4412-02, "Locating Instruments Calibration Verification and Repair Procedures."

Work Procedure WP4412-04, "Field Meets and Standby – Damage Prevention."

Work Procedure WP4412-05, "Excavation Procedures for Damage Prevention."

Utility Procedure TD-4412P-06, "Handling Excavators, Contractors and the Public Working Unsafely Around Utility Facilities."

Utility Standard S4412, "Preventing Damage to Underground Facilities."

Supplemental References:

NA

Appendices NA

Attachments

Attachment 1, "Determining When a Field Meet and/or Standby is Required"

Attachment 2, "Non-Locatable PG&E Underground Facilities"

Attachment 3, "Mark and Locate Equipment Checklist"

Job Aid TD-4412P-03-JA01, "Taking Digital Photographs at Locate Site."

Job Aid TD-4412P-03-JA02, "Initial Setup of Sony Cyber-shot DSC-S700."

Job Aid TD-4412P-03-JA03, "Zip USA Pictures Process."

Job Aid TD-4412P-03-JA04, "Troubleshooting Zipping USA Pictures."

Job Aid TD-4412P-03-JA05, "Searching for and Printing Tickets from IRTHNet."

Job Aid TD-4412P-03-JA06, "Searching for and Re-Opening a Ticket Using Field Unit."

Job Aid TD-4412P-03-JA07, "Adding Notes to Multiple USA Tickets Using IRTHNet."

Job Aid TD-4412P-03-JA08, "Streets and Trips Route Process."

Marking and Locating PG&E Underground Facilities

Job Aid TD-4412P-03-JA09, "IRTHNet Field Unit Data Entry."

Job Aid TD-4412P-03-JA10, "Standard Comments IRTH Field Unit."

Job Aid TD-4412P-03-JA11, "FAS Field Support."

Job Aid TD-4412P-03-JA13, "Determine if a Critical Facility is Involved."

Document Recision

This procedure supersedes the following documents:

- Gas Bulletin TD-4412B-007, "Changes to WP4412-03 "Marking and Locating PG&E Underground Facilities," issued August 2011.
- Job Aid WP-4412-03-JA12 "IRTH Field Unit Data Entry."
- Utility Procedure WP4412-03, "Marking and Locating PG&E Underground Facilities," issued August 2009.

Approved By

Karen S. Roth
Director

Document Owner

Chris McGowan
Process owner

Document Contact

Chris McGowan
Process owner

Revision Notes

Where?	What Changed?
All	Converted to latest template. Renumbered from WP4412-03 to TD-4412P-03.
Safety	Added specific hazards.
Qualification	Added OQ 05-04 "Non-Production Mark and Locate."
Section 1	New requirement for annual refresher training.
Section 2	New section on mis-marked facilities (changed from a note).
Section 4.2.2.c	Added items (6) and (7).

Marking and Locating PG&E Underground Facilities

Where?	What Changed?
Section 4.3.16	New requirement to mark cathodic protection wire.
Section 4.6	Added DB for “Direct Buried” to Table 2.
Section 5	New section. Added steps for Performing Company Locates for Company Crew Work (Company sole excavator).
Section 5.8	New requirement for crew locators to mark a newly placed facility if there are other active excavations in the area.
Reference Documents	Added OQ 05-04, “Non-Production Mark and Locate.”
Job Aids	Revised Job Aids TD-4412P-03 -JA05, TD-4412P-03 -JA06, TD-4412P-03 -JA07, TD-4412P-03 -JA09, TD-4412P-03 -JA 10, Deleted Job Aid WP-4412-03-JA12. Renumbered Job Aids TD-4412P-03 –JA01, TD-4412P-03 –JA02, TD-4412P-03 –JA03, TD-4412P-03 –JA04, TD-4412P-03 –JA08, TD-4412P-03 –JA11. Added Job Aid TD-4412P-03-JA13.

ATTACHMENT 9

TD-5811P-102, Rev. 0

Determining Scope of Locate

Procedure

Summary

This procedure provides step-by-step instructions for evaluating the scope of a USA ticket request and determining the required response.

Target Audience

Locate and mark personnel.

Before You Start

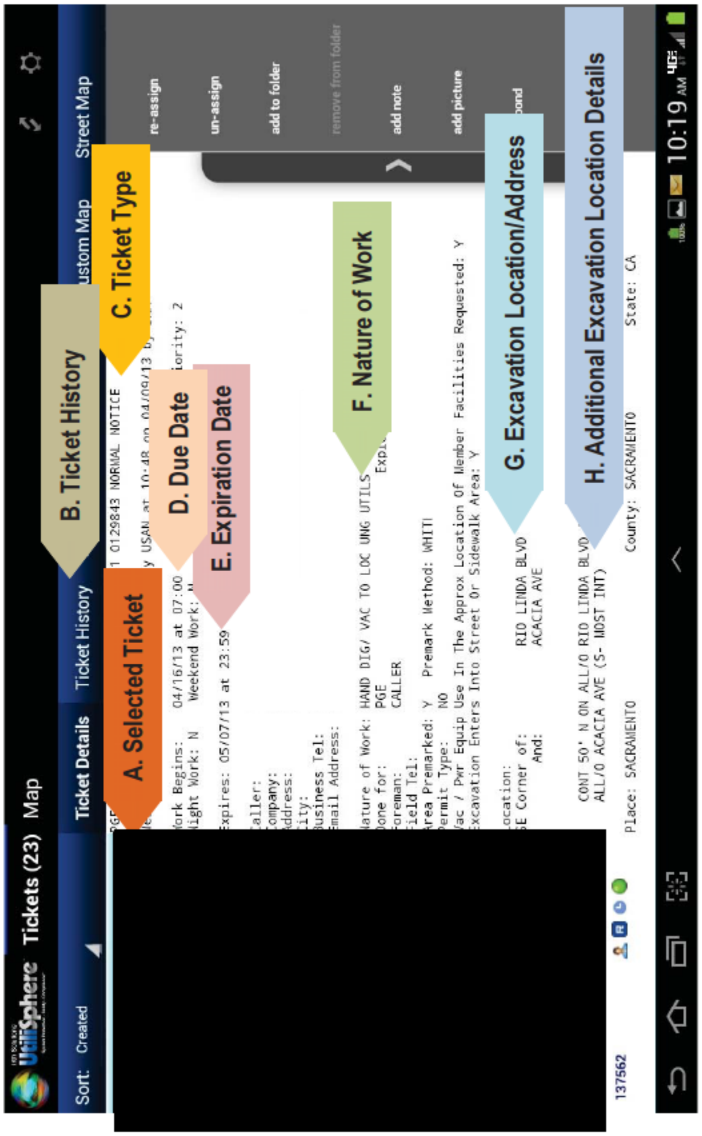
- Read the Safety section of this handbook.
- Wear the appropriate personal protective equipment (PPE) for your specific tasks and work area.

Table of Contents

1 Understanding the Ticket Details Screen

The ticket details screen (Figure 1) contains the scope of the ticket request.

Figure 1. An Example of a USA Ticket Details Screen



[redacted]

PGE 1 0129843 NORMAL NOTICE

y USAN at 10:48 on 04/09/13

ork Begins: 04/16/13 at 07:00 iority: 2
ight Work: N Weekend Work:

xpires: 05/07/13 at 23:59

aller:
ompany:
ddress:
ity:
usiness Tel:
mail Address:

ature of Work: HAND DIG/ VAC TO LOC UNG UTILS
one for: PGE Expi
oreman: CALLER
ield Tel:
rea Premarked: Y Premark Method: WHITI
ermit Type: NO
ac / Pwr Equip Use In The Approx Location Of Member Facilities Requested: Y
xcavation Enters Into Street Or Sidewalk Area: Y

ocation:
E Corner of: RIO LINDA BLVD
And: ACACIA AVE

CONT 50' N ON ALL/O RIO LINDA BLVD
ALL/O ACACIA AVE (S- MOST INT)

Place: SACRAMENTO County: SACRAMENTO State: CA

A. **Select a Ticket** to display its details.

B. **Ticket History** displays tickets history, past responses, and notes.

C. **Ticket Type** describes the urgency nature of the request:

   - **Emergency Notice** is a zero-hour notice that requests an immediate response.
   - **Short Notice** has a start date of less than 2 work days.
   - **Normal Notice** has start date at least 2 work days.
   - **Follow-Up Notice** is a valid ongoing ticket used to request or provide additional information.
   - **Extension Notice** is a valid ongoing ticket used for extending excavation projects. A ticket can be extended up to 6 months.
   - **Renewal Notice** is used when a USA ticket has lapsed over 6 months. A new ticket number is issued for renewal notice.

D. **Due Date** is the date/time the ticket is due. Tickets MUST be responded to within 2 workings days, excluding weekends and holidays OR by the start date of the excavation, whichever is greater.

E. **Expiration Date** is the date ticket stops being valid. Excavators must have a valid ticket to perform excavations. Excavator must contact USA to extend or renew an expired ticket.

F. **Nature of Work** explains the method of excavation (boring, vacuum, trenching, blasting, hand digging, etc.).

G. **Excavation Location/Address** identifies the cross streets or direct address of excavation area.

H. **Additional Excavation Location Details** provides additional information about the excavation area. These details help to determine the size of excavation area and should accurately match the delineations at the site.

2 Arriving at the Excavation Site

1. IF the contractor has begun excavation without following proper excavation procedures OR does not have a standby when required,

   THEN issue a **Record of Warning** to the excavator.

   For instructions, see Job Aid TD-5811-301-JA02 "Issuing a Record of Warning."

---

3 Reviewing USA Ticket Details

1. Open the **Utilisphere™ Application** on your electronic tablet.

   For instructions, see Job Aid TD-5811P-102-JA01, "Using Utilisphere™ on Tablet."

2. Select the ticket you are working on.

3. Look at information in ticket details screen. See Figure 1, "An Example of a USA Ticket Details Screen."

4. Review ticket **Expiration Date**.

   A. IF ticket has expired,

      THEN do the following:

      1) Have excavator contact USA to extend or renew ticket.

      2) DO NOT proceed to locate and mark until ticket has a valid date.

      3) Enter discussion details and description of situation into the **Notes** section of the USA ticket.

         For instructions, see TD-5811P-105, "Responding to a Ticket."

5. Review **Nature of Work** to determine excavation method.

6. Review ticket **Due Date**.

   A. Determine if you're able to complete all required tasks detailed on ticket by the due date.

   B. IF you're unable to complete the entire ticket by the due date because of the excavation size,

   THEN do the following:

   1) Discuss options to phase ticket with excavator.

   2) Develop a plan to locate a different section each day to stay ahead of the excavation schedule. In most situations, the excavator does not plan to excavate a large job in 1 day.

   3) Enter the following information in the **Notes** section of the USA ticket:

      - Name and phone number of person with whom you agreed to phase ticket.
      - Discussion details
      - Phase plans
      - Other pertinent information

      For instructions, see TD-5811P-105, "Responding to a Ticket."

   C. IF you're unable to complete the entire ticket by the due date because of other relevant issues and you must renegotiate a new start time,

   THEN discuss with the excavator to set a new mutually agreeable start date and time to complete the ticket.

   1) Relevant issues include but are not limited to:

      - Qualified Electrical Worker (QEW) needed to complete locate.
      - Emergency ticket pulled you away to another site.
      - Access issues
      - Prioritization
      - Size of project
      - Weather

2) IF a new start date and time was negotiated,

   THEN enter the following information in the USA ticket:

   - Name and phone number of person with whom you agreed to phase ticket.
   - Discussion details
   - New start date and time
   - Other pertinent information

3) IF excavator is unavailable or cannot renegotiate,

   THEN do the following:

   a. IMMEDIATELY notify your supervisor of the situation.

   b. Document details in USA ticket.

7. IF ticket details do not match delineations at the excavation site,

   THEN do the following:

   A. Have excavator contact USA at 811 to update tickets description.

   B. Proceed to work ONLY in delineated areas that match ticket request.

   C. Enter a description of situation into the **Notes** section of your USA ticket.

8. Review PG&E maps of the excavation site if ticket details match delineations.

4 Reviewing Custom Maps

1. Select **Custom Map** tab on your ticket. See Figure 2, "Example of a USA Ticket Custom Map Screen."

Figure 2. Example of a USA Ticket Custom Map Screen

[redacted]

Tap on Custom Map to view PG&E plat maps

2. Identify the following:
   - Service count
   - Conductive hook-up locations
   - Type of facilities to be located (steel plastic, cast iron, copper, fiber, etc.)
   - Abandoned or deactivated facilities
   - Critical facilities
   - Available measurements
   - End of main or stub services
   - Electric conduit counts
   - Proposed facilities that may have already been tied into the system
   - Electric facilities where a QEW is required (above 600 volts)
   - Pad-mounted electric equipment
   - Streetlights
   - Subsurface primary electric enclosures
   - Subsurface secondary boxes
   - Electric primary and secondary risers.
3. Call Mapping if you have questions or concerns about information on maps.
4. IF critical facilities are identified in the excavation area,

   THEN make note of the facilities AND verify the location during the marking procedure.

   For instructions, see TD-5811P-104, "Proper Markings."
5. Identify best hook-up locations based on service types and facility material types. See Table 1, "Hook-up Location Based on Material Types."

Table 1. Hook-up Location Based on Material Types

PLASTIC	CONDUCTIVE METAL STEEL, COPPER, CAST IRON, ETC.	ELECTRIC	FIBER
Tracer wire at riser	Valve at service riser	Electric service riser with inductive clamp	Tracer wire at enclosure /box
Tracer wire at Electrolysis Testing Station (ETS)	Any metal riser where an inductive clamp can fit around	Electric riser at pole location with inductive clamp	
Valve at service riser	Tracer wire at Electrolysis Testing Station (ETS)	Pad-mounted transformer	
		Secondary enclosure/Meter panel	

6. Plan a locate strategy.

   A. If possible, do the following:

   - Hook-up at connection points located in the middle of work area to locate multiple directions from one connection.
   - Identify multiple connection points in case the locating instruments signal becomes weak or is lost.

---

5 Performing Visual Inspection

1. Implement the **Two-Minute** rule.

   For details, see the Safety section of this handbook.

2. Visually inspect excavation area to determine if area is properly delineated.

   A. Types of acceptable delineations are:

   - White paint
   - White flags
   - White whiskers

    - White stakes
    - A combination of any of the above.

B. For home owners:

  1) IF delineations are not found on a private property,

     THEN assist homeowner in creating delineations. Flour is an acceptable means to mark delineations.

  2) Locate and mark according to ticket.

C. For excavators:

  1) IF area contains no delineations,

     THEN do the following:

     a. Require excavator to submit a new ticket when delineations have been established. Leaving a voicemail is an acceptable means of communication.

     b. Take picture of the non-delineated area.

     c. Document details in the **Notes** section of ticket.

     d. Close ticket.

     For instructions to close ticket, see Procedure TD-5811P-105, "Responding to a Ticket."

3. Visually inspect area for existing surface markings or indication of underground facilities (e.g., risers, patches in the street and meters, pipeline markers [see Figure 3, "Pipeline Marker"]).

Figure 3. Pipeline Marker

4. Visually inspect area for possible interferences such as:
   - Overhead power lines
   - Underground facilities that may create bleedover.
   - Radio transmitters
   - Chain link fences
   - Any metallic structures within 25 feet of the area being located.
   - Other locators working in the same area.

5. IF work in a confined space is necessary,

   THEN **refer to Utility Standard D-S0213, "Work Procedures in Confined Spaces" located online in the TIL.**

6. IF working near interferences that may cause signal fluctuation,

   THEN include the following in the locate plan:
   - Look for multiple hook-up locations to complete ticket.
   - Try different frequencies, instruments, or locating methods.

7. Verify the surrounding with maps. For example:
    - Landmarks
    - Overhead and underground equipment
    - Equipment numbers
8. Look for inconsistencies on maps. Map inconsistencies may include but are not limited to:
    - Extra services
    - Missing facilities
    - Missing tracer wire not labeled on map
    - Work in progress (WIP) cloud
    - Map measurements and locate do not match
    - Missing electrolysis testing station (ETS)
    - Incorrect address

---

6 Identifying a Request for Design Purposes

1. USA ticket process is not to be used for design purposes. Use the following information to determine if a ticket might be for design purposes:
    - An excavator is unsure of where to excavate until after PG&E locates and marks facilities.
    - An excavator requested to have an entire block located, but is lacking specific excavation locations or crossings.
    - Look for lack of specific direction in delineations.
    - The **Nature of Work** on ticket details doesn't match delineations at site.
    - Ask excavator for city or county permit number for excavating in the area. **No permit is a red flag!**
    - Excavation is not planned to start for more than 14 calendar days. Excavator cannot submit a USA ticket more than 14 calendar days in advance [CGC law 4216.1.(a)(1)].

2. IF you determine that the ticket is for design purposes,

   THEN do the following:

   A. Provide excavator with PG&E Service Planning phone number to request PG&E maps for their project design plans.

   B. Explain that USA requests are not utilized for design purposes.

   C. IF further explanation is needed,

      THEN refer excavator to call USA at 811 for more details and law specifics.

   D. Close ticket.

      For instructions to close ticket, see Procedure TD-5811P-105, "Responding to a Ticket."

END OF PROCEDURE

Definitions

Critical Facility is any gas transmission facility with pressure above 60 psig and any electric facility operating at or above 60 kilovolt (kV).

The following facilities may also be critical facilities:

- Facilities identified as critical by the local operating area.
- Facilities which, if damaged, are likely to result in difficulty controlling the gas flow due to their size, material properties, operating pressure, or location, as well as the personnel and equipment available.
- Electric distribution facilities which, if damaged, are likely to result in outages of long duration or outages to critical customers.

Bleedover is a condition in which a signal is wide enough to bleed onto another conductor while traveling on its intended path. This condition could cause the wrong conductor to be located.

Electronic Tablet is PG&E issued device for locate and mark personnel to use in the field to complete a USA ticket.

Supplemental References

D-S0213, “Work Procedures in Confined Spaces”

TD-5811P-104, “Proper Markings”

TD-5811P-105, “Responding to a Ticket”

ATTACHMENT 10

Procedure

Summary

This procedure provides step-by-step instructions for evaluating the scope of a USA ticket request and determining the required response.

Target Audience

Locate and mark personnel.

Before You Start

- Read the Safety section of this handbook.
- Wear the appropriate personal protective equipment (PPE) for your specific tasks and work area.

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Section **Page**

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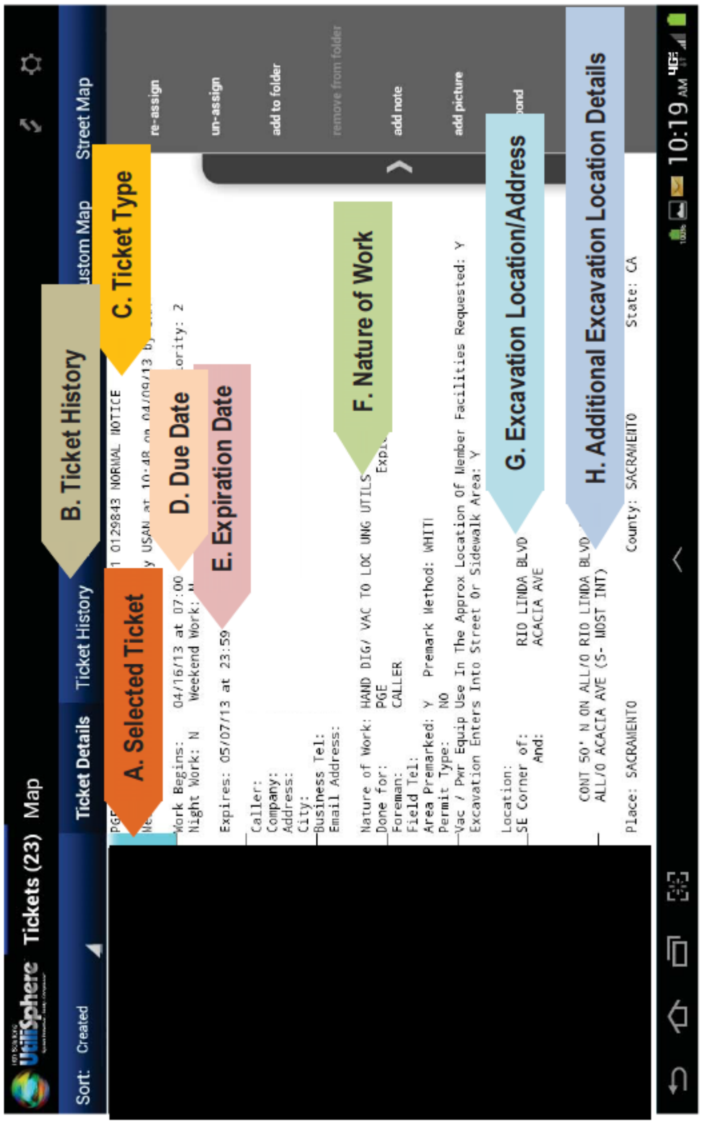

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1 0129843 NORMAL NOTICE

y USAN at 10:48 on 04/09/13 by

Work Begins: 04/16/13 at 07:00 Priority: 2
Night Work: N Weekend Work:

Expires: 05/07/13 at 23:59

Caller:
Company:
Address:
City:
Business Tel:
Email Address:

Nature of Work: HAND DIG/ VAC TO LOC UNG UTILS
Done for: PGE
Foreman: CALLER
Field Tel:
Area Premarked: Y Premark Method: WHITE
Permit Type: NO
Vac / Pwr Equip Use In The Approx Location Of Member Facilities Requested: Y
Excavation Enters Into Street Or Sidewalk Area: Y

Location:
SE Corner of: RIO LINDA BLVD
And: ACACIA AVE

CONT 50' N ON ALL/O RIO LINDA BLVD
ALL/O ACACIA AVE (S- MOST INT)

Place: SACRAMENTO County: SACRAMENTO State: CA

A. **Select a Ticket** to display its details.

B. **Ticket History** displays tickets history, past responses, and notes.

C. **Ticket Type** describes the urgency nature of the request:

- **Emergency Notice** is a zero-hour notice that requests an immediate response.
- **Short Notice** has a start date of less than 2 work days.
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- **Extension Notice** is a valid ongoing ticket used for extending excavation projects. A ticket can be extended up to 6 months.
- **Renewal Notice** is used when a USA ticket has lapsed over 6 months. A new ticket number is issued for renewal notice.

D. **Due Date** is the date/time the ticket is due. Tickets MUST be responded to within 2 workings days, excluding weekends and holidays OR by the start date of the excavation, whichever is greater.

E. **Expiration Date** is the date ticket stops being valid. Excavators must have a valid ticket to perform excavations. Excavator must contact USA to extend or renew an expired ticket.

F. **Nature of Work** explains the method of excavation (boring, vacuum, trenching, blasting, hand digging, etc.).

G. **Excavation Location/Address** identifies the cross streets or direct address of excavation area.

H. **Additional Excavation Location Details** provides additional information about the excavation area. These details help to determine the size of excavation area and should accurately match the delineations at the site.

2 Arriving at the Excavation Site

1. IF the contractor has begun excavation without following proper excavation procedures OR does not have a standby when required,

   THEN issue a **Record of Warning** to the excavator.

   For instructions, see Job Aid TD-5811-301-JA02 "Issuing a Record of Warning."

---

3 Reviewing USA Ticket Details

1. Open the **Utilisphere™ Application** on your electronic tablet.

   For instructions, see Job Aid TD-5811P-102-JA01, "Using Utilisphere™ on Tablet."

2. Select the ticket you are working on.
3. Look at information in ticket details screen. See Figure 1, "An Example of a USA Ticket Details Screen."
4. Review ticket **Expiration Date**.

   A. IF ticket has expired,

      THEN do the following:

      1) Have excavator contact USA to extend or renew ticket.

      2) DO NOT proceed to locate and mark until ticket has a valid date.

      3) Enter discussion details and description of situation into the **Notes** section of the USA ticket.

         For instructions, see TD-5811P-105, "Responding to a Ticket."

5. Review **Nature of Work** to determine excavation method.

6. Review ticket **Due Date**.

   A. Determine if you're able to complete all required tasks detailed on ticket by the due date.

   B. IF you're unable to complete the entire ticket by the due date because of the excavation size,

      THEN do the following:

      1) Discuss options to phase ticket with excavator.

      2) Develop a plan to locate a different section each day to stay ahead of the excavation schedule. In most situations, the excavator does not plan to excavate a large job in 1 day.

      3) Enter the following information in the **Notes** section of the USA ticket:

         - Name and phone number of person with whom you agreed to phase ticket.
         - Discussion details
         - Phase plans
         - Other pertinent information

         For instructions, see TD-5811P-105, "Responding to a Ticket."

   C. IF you're unable to complete the entire ticket by the due date because of other relevant issues and you must renegotiate a new start time,

      THEN discuss with the excavator to set a new mutually agreeable start date and time to complete the ticket.

      1) Relevant issues include but are not limited to:

         - Qualified Electrical Worker (QEW) needed to complete locate.
         - Emergency ticket pulled you away to another site.
         - Access issues
         - Prioritization
         - Size of project
         - Weather

2) IF a new start date and time was negotiated,

   THEN enter the following information in the USA ticket:

   - Name and phone number of person with whom you agreed to phase ticket.
   - Discussion details
   - New start date and time
   - Other pertinent information

3) IF excavator is unavailable or cannot renegotiate,

   THEN do the following:

   a. IMMEDIATELY notify your supervisor of the situation.

   b. Document details in USA ticket.

7. IF ticket details do not match delineations at the excavation site,

   THEN do the following:

   A. Have excavator contact USA at 811 to update tickets description.

   B. Proceed to work ONLY in delineated areas that match ticket request.

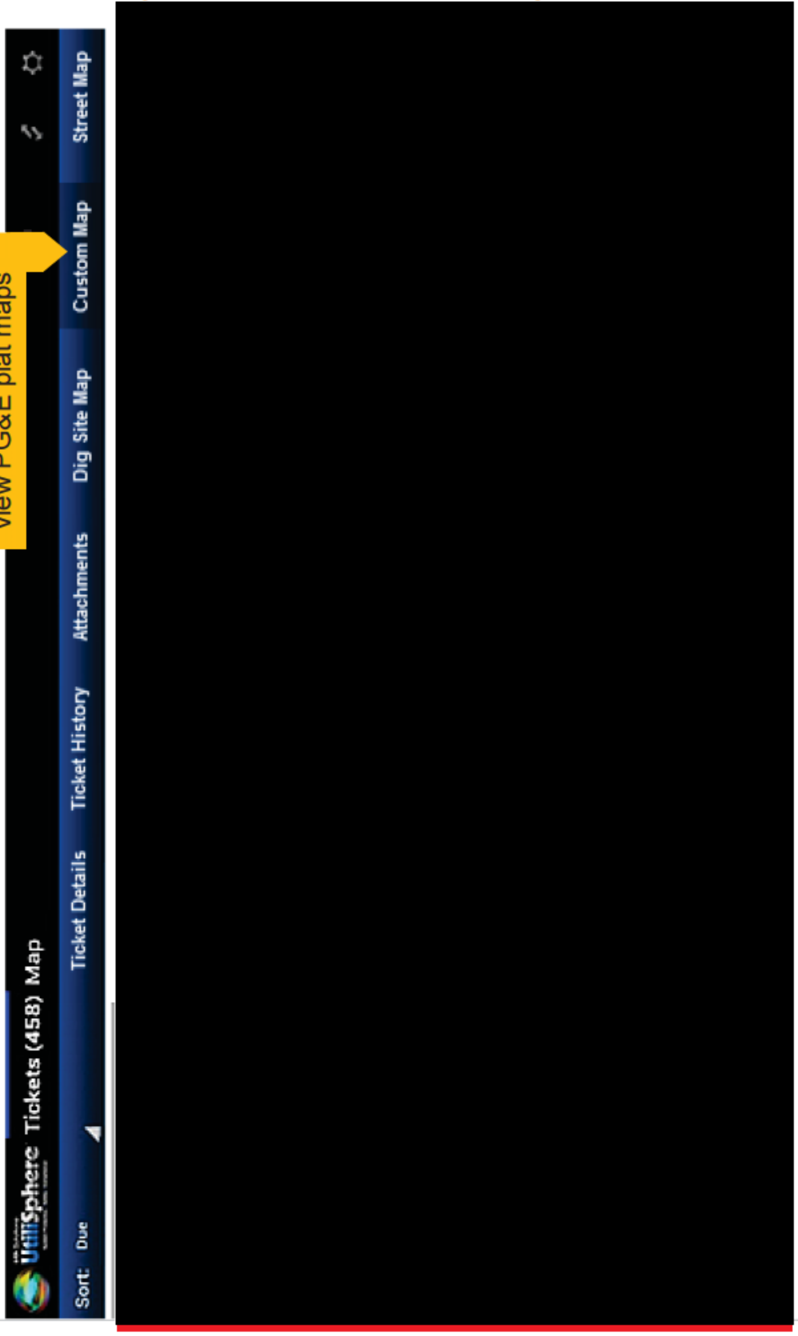
   C. Enter a description of situation into the **Notes** section of your USA ticket.

8. Review PG&E maps of the excavation site if ticket details match delineations.

4 Reviewing Custom Maps

1. Select **Custom Map** tab on your ticket. See Figure 2, "Example of a USA Ticket Custom Map Screen."

Figure 2. Example of a USA Ticket Custom Map Screen



[redacted]

Tap on Custom Map to view PG&E plat maps

2. Identify the following:
    - Service count
    - Conductive hook-up locations
    - Type of facilities to be located (steel plastic, cast iron, copper, fiber, etc.)
    - Abandoned or deactivated facilities
    - Critical facilities
    - Available measurements
    - End of main or stub services
    - Electric conduit counts
    - Proposed facilities that may have already been tied into the system
    - Electric facilities where a QEW is required (above 600 volts)
    - Pad-mounted electric equipment
    - Streetlights
    - Subsurface primary electric enclosures
    - Subsurface secondary boxes
    - Electric primary and secondary risers.
3. Call Mapping if you have questions or concerns about information on maps.
4. IF critical facilities are identified in the excavation area,

    THEN make note of the facilities AND verify the location during the marking procedure.

    For instructions, see TD-5811P-104, "Proper Markings."
5. Identify best hook-up locations based on service types and facility material types. See Table 1, "Hook-up Location Based on Material Types."

Table 1. Hook-up Location Based on Material Types

PLASTIC	CONDUCTIVE METAL STEEL, COPPER, CAST IRON, ETC.	ELECTRIC	FIBER
Tracer wire at riser	Valve at service riser	Electric service riser with inductive clamp	Tracer wire at enclosure /box
Tracer wire at Electrolysis Testing Station (ETS)	Any metal riser where an inductive clamp can fit around	Electric riser at pole location with inductive clamp	
Valve at service riser	Tracer wire at Electrolysis Testing Station (ETS)	Pad-mounted transformer	
		Secondary enclosure/Meter panel	

6. Plan a locate strategy.

   A. If possible, do the following:

   - Hook-up at connection points located in the middle of work area to locate multiple directions from one connection.
   - Identify multiple connection points in case the locating instruments signal becomes weak or is lost.

---

5 Performing Visual Inspection

1. Implement the **Two-Minute** rule.

   For details, see the Safety section of this handbook.

2. Visually inspect excavation area to determine if area is properly delineated.

   A. Types of acceptable delineations are:

      - White paint
      - White flags
      - White whiskers

      - White stakes
      - A combination of any of the above.

   B. For home owners:

      1) IF delineations are not found on a private property,

         THEN assist homeowner in creating delineations. Flour is an acceptable means to mark delineations.

      2) Locate and mark according to ticket.

   C. For excavators:

      1) IF area contains no delineations,

         THEN do the following:

         a. Require excavator to submit a new ticket when delineations have been established. Leaving a voicemail is an acceptable means of communication.

         b. Take picture of the non-delineated area.

         c. Document details in the **Notes** section of ticket.

         d. Close ticket.

         For instructions to close ticket, see Procedure TD-5811P-105, "Responding to a Ticket."

3. Visually inspect area for existing surface markings or indication of underground facilities (e.g., risers, patches in the street and meters, pipeline markers [see Figure 3, "Pipeline Marker"]).

Figure 3. Pipeline Marker

4. Visually inspect area for possible interferences such as:
    - Overhead power lines
    - Underground facilities that may create bleedover.
    - Radio transmitters
    - Chain link fences
    - Any metallic structures within 25 feet of the area being located.
    - Other locators working in the same area.
5. IF work in a confined space is necessary,

    THEN **refer to Utility Standard D-S0213, "Work Procedures in Confined Spaces" located online in the TIL.**
6. IF working near interferences that may cause signal fluctuation,

    THEN include the following in the locate plan:
    - Look for multiple hook-up locations to complete ticket.
    - Try different frequencies, instruments, or locating methods.

7. Verify the surrounding with maps. For example:
   - Landmarks
   - Overhead and underground equipment
   - Equipment numbers
8. Look for inconsistencies on maps. Map inconsistencies may include but are not limited to:
   - Extra services
   - Missing facilities
   - Missing tracer wire not labeled on map
   - Work in progress (WIP) cloud
   - Map measurements and locate do not match
   - Missing electrolysis testing station (ETS)
   - Incorrect address

---

6 Identifying a Request for Design Purposes

1. USA ticket process is not to be used for design purposes. Use the following information to determine if a ticket might be for design purposes:
   - An excavator is unsure of where to excavate until after PG&E locates and marks facilities.
   - An excavator requested to have an entire block located, but is lacking specific excavation locations or crossings.
   - Look for lack of specific direction in delineations.
   - The **Nature of Work** on ticket details doesn’t match delineations at site.
   - Ask excavator for city or county permit number for excavating in the area. **No permit is a red flag!**
   - Excavation is not planned to start for more than 14 calendar days. Excavator cannot submit a USA ticket more than 14 calendar days in advance [CGC law 4216.1.(a)(1)].

2. IF you determine that the ticket is for design purposes,

   THEN do the following:

   A. Provide excavator with PG&E Service Planning phone number to request PG&E maps for their project design plans.

   B. Explain that USA requests are not utilized for design purposes.

   C. IF further explanation is needed,

      THEN refer excavator to call USA at 811 for more details and law specifics.

   D. Close ticket.

      For instructions to close ticket, see Procedure TD-5811P-105, "Responding to a Ticket."

END OF PROCEDURE

Definitions

Critical Facility is any gas transmission facility with pressure above 60 psig and any electric facility operating at or above 60 kilovolt (kV).

The following facilities may also be critical facilities:

- Facilities identified as critical by the local operating area.
- Facilities which, if damaged, are likely to result in difficulty controlling the gas flow due to their size, material properties, operating pressure, or location, as well as the personnel and equipment available.
- Electric distribution facilities which, if damaged, are likely to result in outages of long duration or outages to critical customers.

Bleedover is a condition in which a signal is wide enough to bleed onto another conductor while traveling on its intended path. This condition could cause the wrong conductor to be located.

Electronic Tablet is PG&E issued device for locate and mark personnel to use in the field to complete a USA ticket.

Supplemental References

D-S0213, "Work Procedures in Confined Spaces"

TD-5811P-104, "Proper Markings"

TD-5811P-105, "Responding to a Ticket"

ATTACHMENT 11

See Utility Bulletin
TD-5811B-003

TD-5811P-102, Rev. 2

Determining Scope of Locate

Procedure

Summary

This procedure provides step-by-step instructions for evaluating the scope of a USA ticket request and determining the required response.

Target Audience

Locate and mark personnel.

Before You Start

- Read the Safety section of this handbook.
- Wear the appropriate personal protective equipment (PPE) for your specific tasks and work area.

Table of Contents

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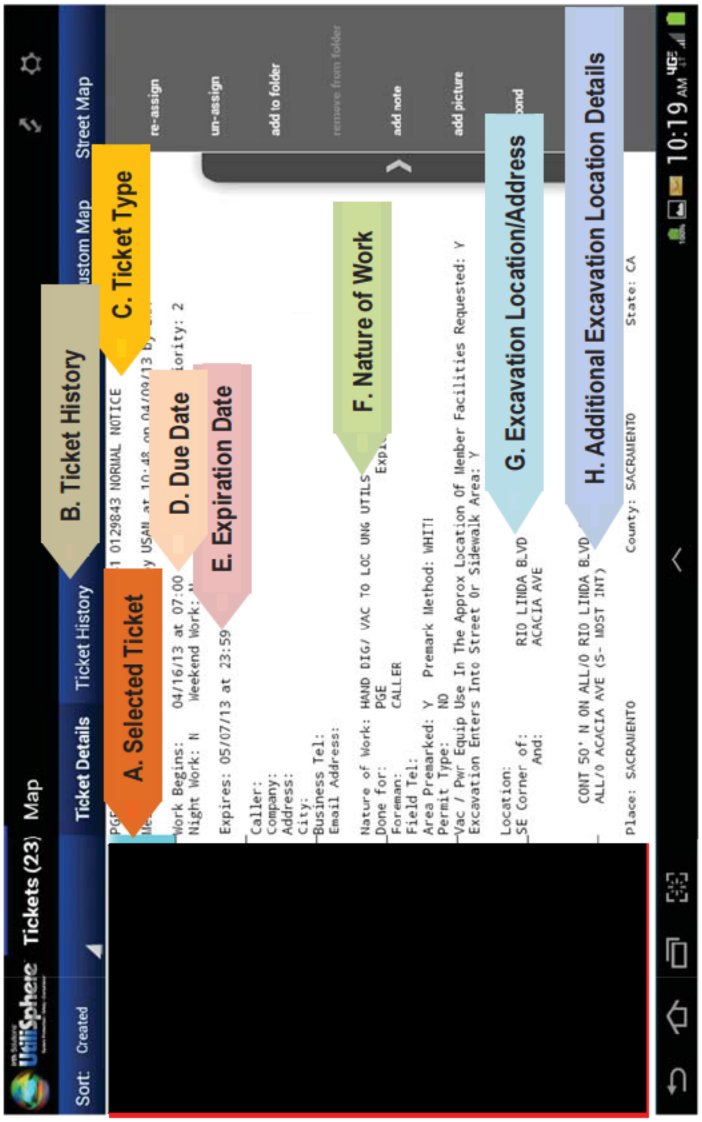
See Utility Bulletin
TD-5811B-003

1 Understanding the Ticket Details Screen

The ticket details screen contains the scope of the ticket request. See Figure 1, "Example of a USA Ticket Details Screen."

Figure 1. Example of a USA Ticket Details Screen



[redacted]

PG 1 0129843 NORMAL NOTICE
Me y USAN at 10:48 on 04/09/13 by iority: 2

Work Begins: 04/16/13 at 07:00
Night Work: N Weekend Work:

Expires: 05/07/13 at 23:59

Caller:
Company:
Address:
City:
Business Tel:
Email Address:

Nature of Work: HAND DIG/ VAC TO LOC UNG UTILS
Done for: PGE Expi
Foreman: CALLER
Field Tel:
Area Premarked: Y Premark Method: WHITI
Permit Type: NO
Vac / Pwr Equip Use In The Approx Location Of Member Facilities Requested: Y
Excavation Enters Into Street Or Sidewalk Area: Y

Location:
SE Corner of: RIO LINDA BLVD
And: ACACIA AVE

CONT 50' N ON ALL/O RIO LINDA BLVD
ALL/O ACACIA AVE (S- MOST INT)

Place: SACRAMENTO County: SACRAMENTO State: CA

See Utility Bulletin
TD-5811B-003

A. **Select a Ticket** to display its details.

B. **Ticket History** displays tickets history, past responses, and notes.

C. **Ticket Type** describes the urgency nature of the request:

- **Emergency Notice** is a zero-hour notice that requests an immediate response.
- **Short Notice** has a start date of less than 2 work days.
- **Normal Notice** has start date at least 2 work days.
- **Follow-Up Notice** is a valid ongoing ticket used to request or provide additional information.
- **Extension Notice** is a valid ongoing ticket used for extending excavation projects. A ticket can be extended up to 6 months.
- **Renewal Notice** is used when a USA ticket has lapsed over 6 months. A new ticket number is issued for renewal notice.

D. **Due Date** is the date/time the ticket is due. Tickets MUST be responded to within 2 workings days, excluding weekends and holidays OR by the start date of the excavation, whichever is greater.

E. **Expiration Date** is the date ticket stops being valid. Excavators must have a valid ticket to perform excavations. Excavator must contact USA to extend or renew an expired ticket.

F. **Nature of Work** explains the method of excavation (boring, vacuum, trenching, blasting, hand digging, etc.).

G. **Excavation Location/Address** identifies the cross streets or direct address of excavation area.

H. **Additional Excavation Location Details** provides additional information about the excavation area. These details help to determine the size of excavation area and should accurately match the delineations at the site.

See Utility Bulletin
TD-5811B-003

2 Arriving at the Excavation Site

1. IF the contractor has begun excavation without following proper excavation procedures OR does not have a standby when required,

   THEN issue a Form TD-5811P-501-F02, "Notice of Unsafe Excavation."

---

3 Reviewing USA Ticket Details

1. Open the **Utilisphere™ Application** on your electronic tablet.

   For instructions, see Job Aid TD-5811P-102-JA01, "Using Utilisphere™ on Tablet."

2. Select the ticket you are working on.

3. Look at information in ticket details screen. See Figure 1, "Example of a USA Ticket Details Screen."

4. Review ticket **Expiration Date**.

   A. IF ticket has expired,

      THEN do the following:

      1) Have excavator contact USA to extend or renew ticket.

      2) DO NOT proceed to locate and mark until ticket has a valid date.

      3) Enter discussion details and description of situation into the **Notes** section of the USA ticket.

         For instructions, see Procedure TD-5811P-105, "Responding to a Ticket."

5. Review **Nature of Work** to determine excavation method.

See Utility Bulletin TD-5811B-003

6. Review ticket **Due Date**.

   A. Determine if you're able to complete all required tasks detailed on ticket by the due date.

   B. IF you're unable to complete the entire ticket by the due date because of the excavation size,

   THEN do the following:

   1) Discuss options to phase ticket with excavator.

   2) Develop a plan to locate a different section each day to stay ahead of the excavation schedule. In most situations, the excavator does not plan to excavate a large job in 1 day.

   3) Enter the following information in the **Notes** section of the USA ticket:

      - Name and phone number of person with whom you agreed to phase ticket.
      - Discussion details
      - Phase plans
      - Other pertinent information

      For instructions, see **Procedure TD-5811P-105, "Responding to a Ticket."**

   C. IF you're unable to complete the entire ticket by the due date because of other relevant issues and you must renegotiate a new start time,

   THEN discuss with the excavator to set a new mutually agreeable start date and time to complete the ticket.

   1) Relevant issues include but are not limited to:

      - Qualified Electrical Worker (QEW) needed to complete locate.
      - Emergency ticket pulled you away to another site.
      - Access issues
      - Prioritization
      - Size of project
      - Weather

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See Utility Bulletin
TD-5811B-003

2) IF a new start date and time was negotiated,

   THEN enter the following information in the USA ticket:

   - Name and phone number of person with whom you agreed to phase ticket.
   - Discussion details
   - New start date and time
   - Other pertinent information

3) IF excavator is unavailable or cannot renegotiate,

   THEN do the following:

   a. IMMEDIATELY notify your supervisor of the situation.

   b. Document details in USA ticket.

7. IF ticket details do not match delineations at the excavation site,

   THEN do the following:

   A. Have excavator contact USA at 811 to update tickets description.

   B. Proceed to work ONLY in delineated areas that match ticket request.

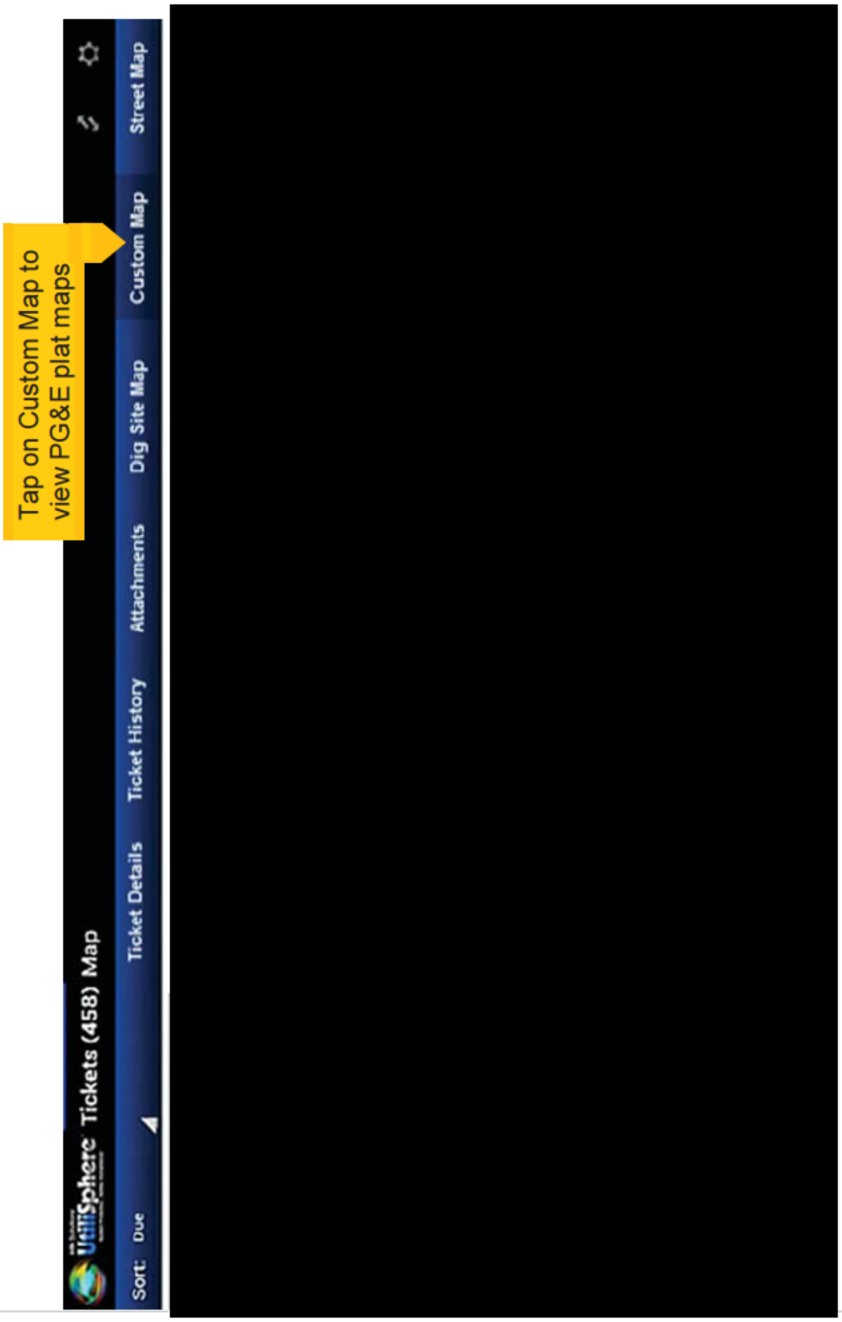
   C. Enter a description of situation into the **Notes** section of your USA ticket.

8. Review PG&E maps of the excavation site if ticket details match delineations.

4 Reviewing Custom Maps

1. Select **Custom Map** tab on your ticket. See Figure 2, "Example of a USA Ticket Custom Map Screen."

Figure 2. Example of a USA Ticket Custom Map Screen



Tap on Custom Map to view PG&E plat maps

[redacted]

See Utility Bulletin
TD-5811B-003

2. Identify the following:
    - Service count
    - Conductive hook-up locations
    - Type of facilities to be located (steel plastic, cast iron, copper, fiber, etc.)
    - Abandoned or deactivated facilities
    - Critical facilities
    - Available measurements
    - End of main or stub services
    - Electric conduit counts
    - Proposed facilities that may have already been tied into the system
    - Electric facilities where a QEW is required (above 600 volts)
    - Pad-mounted electric equipment
    - Streetlights
    - Subsurface primary electric enclosures
    - Subsurface secondary boxes
    - Electric primary and secondary risers.
3. Call Mapping if you have questions or concerns about information on maps.
4. IF critical facilities are identified in the excavation area,

    THEN make note of the facilities AND verify the location during the marking procedure.

    For instructions, see **Procedure TD-5811P-104, "Proper Markings."**
5. Identify best hook-up locations based on service types and facility material types. See **Table 1, "Hook-up Location Based on Material Types."**

Table 1. Hook-up Location Based on Material Types

PLASTIC	CONDUCTIVE METAL STEEL, COPPER, CAST IRON, ETC.	ELECTRIC	FIBER
Tracer wire at riser	Valve at service riser	Electric service riser with inductive clamp	Tracer wire at enclosure /box
Tracer wire at Electrolysis Testing Station (ETS)	Any metal riser where an inductive clamp can fit around	Electric riser at pole location with inductive clamp	
Valve at service riser	Tracer wire at Electrolysis Testing Station (ETS)	Pad-mounted transformer	
		Secondary enclosure/Meter panel	

6. Plan a locate strategy.

   A. If possible, do the following:

   - Hook-up at connection points located in the middle of work area to locate multiple directions from one connection.
   - Identify multiple connection points in case the locating instruments signal becomes weak or is lost.

---

5 Performing Visual Inspection

1. Implement the Two-Minute rule.

   For details, see the Safety section of this handbook.

2. Visually inspect excavation area to determine if area is properly delineated.

See Utility Bulletin TD-5811B-003

A. Types of acceptable delineations are:

- White paint
- White flags
- White whiskers
- White stakes
- A combination of any of the above.

B. For home owners:

1) IF delineations are not found on a private property,

THEN assist homeowner in creating delineations. Flour is an acceptable means to mark delineations.

2) Locate and mark according to ticket.

C. For excavators:

1) IF area contains no delineations,

THEN do the following:

a. Require excavator to submit a new ticket when delineations have been established. Leaving a voicemail is an acceptable means of communication.

b. Take picture of the non-delineated area.

c. Document details in the Notes section of ticket.

d. Close ticket.

For instructions to close ticket, see Procedure TD-5811P-105, "Responding to a Ticket."

3. Visually inspect area for existing surface markings or indication of underground facilities (e.g., risers, patches in the street and meters, pipeline markers [see Figure 3, "Pipeline Marker"]).

See Utility Bulletin
TD-5811B-003

Figure 3. Pipeline Marker

4. Visually inspect area for possible interferences such as:
   - Overhead power lines
   - Underground facilities that may create bleedover
   - Radio transmitters
   - Chain link fences
   - Any metallic structures within 25 feet of the area being located
   - Other locators working in the same area.
5. IF work in a confined space is necessary,

   THEN refer to Standard D-S0213, "Work Procedures in Confined Spaces," located online in the TIL.
6. IF working near interferences that may cause signal fluctuation,

   THEN include the following in the locate plan:
   - Look for multiple hook-up locations to complete ticket.
   - Try different frequencies, instruments, or locating methods.

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See Utility Bulletin TD-5811B-003

7. Verify the surrounding with maps. For example:
   - Landmarks
   - Overhead and underground equipment
   - Equipment numbers
8. Look for inconsistencies on maps. Map inconsistencies may include but are not limited to:
   - Extra services
   - Missing facilities
   - Missing tracer wire not labeled on map
   - Work in progress (WIP) cloud
   - Map measurements and locate do not match
   - Missing electrolysis testing station (ETS)
   - Incorrect address

---

6 Identifying a Request for Design Purposes

1. USA ticket process is not to be used for design purposes. Use the following information to determine if a ticket might be for design purposes:
   - An excavator is unsure of where to excavate until after PG&E locates and marks facilities.
   - An excavator requested to have an entire block located, but is lacking specific excavation locations or crossings.
   - Look for lack of specific direction in delineations.
   - The **Nature of Work** on ticket details doesn't match delineations at site.
   - Ask excavator for city or county permit number for excavating in the area. **No permit is a red flag!**
   - Excavation is not planned to start for more than 14 calendar days. Excavator cannot submit a USA ticket more than 14 calendar days in advance [California Government Code §4216.1.(a)(1)].

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See Utility Bulletin
TD-5811B-003

2. IF you determine that the ticket is for design purposes,

   THEN do the following:

   A. Provide excavator with PG&E Service Planning phone number to request PG&E maps for their project design plans.

   B. Explain that USA requests are not utilized for design purposes.

   C. IF further explanation is needed,

      THEN refer excavator to call USA at 811 for more details and law specifics.

   D. Close ticket.

      For instructions to close ticket, see Procedure TD-5811P-105, "Responding to a Ticket."

END OF PROCEDURE

See Utility Bulletin TD-5811B-003

Definitions

Critical Facility is any gas transmission facility with pressure above 60 psig and any electric facility operating at or above 60 kilovolt (kV).

The following facilities may also be critical facilities:

- Facilities identified as critical by the local operating area.
- Facilities which, if damaged, are likely to result in difficulty controlling the gas flow due to their size, material properties, operating pressure, or location, as well as the personnel and equipment available.
- Electric distribution facilities which, if damaged, are likely to result in outages of long duration or outages to critical customers.

Bleedover is a condition in which a signal is wide enough to bleed onto another conductor while traveling on its intended path. This condition could cause the wrong conductor to be located.

Electronic Tablet is PG&E issued device for locate and mark personnel to use in the field to complete a USA ticket.

Supplemental References

D-S0213, "Work Procedures in Confined Spaces"

TD-5811P-104, "Proper Markings"

TD-5811P-105, "Responding to a Ticket"

ATTACHMENT 12

CALIFORNIA PUBLIC UTILITIES COMMISSION

Safety and Enforcement Division
Gas Safety and Reliability Branch

Incident Investigation Report

Report Date: April 15, 2015

Investigator: Fred Hanes

Incident Number: G 20141107-01

Utility: Pacific Gas & Electric (PG&E)

Date and Time of the Incident: 11/07/2014, 11:00 am

Location of the Incident: Market and Santa Clara Streets
San Jose, CA
County: Santa Clara

Summary of Incident:

On 11/7/2014 at approximately 11:00 am, a third-party excavator, GM Engineering, hit and damaged a PG&E 2" plastic gas distribution main with a backhoe near the corner of Market and Santa Clara Streets in San Jose. GM Engineering had a valid Underground Service Alert (USA) ticket, #0459722. There were no injuries, fire, or explosion. The gas release had a significant negative impact on business in the downtown San Jose area with approximately 2,500 people evacuated from offices, shops, and restaurants. The incident received significant media attention. PG&E also reported the incident to the Pipeline and Hazardous Materials Safety Administration (PHMSA) due to the property damage and repair costs exceeding $50,000.

Based on the information gathered, SED found PG&E in violation of 49 CFR §192.605(a) for failure to follow its own Damage Prevention Procedure and California Government Code 4216.3(a)(1) for failure to provide temporary markings of its underground facilities in response to USA ticket# 0459722 within two working days or reach an alternative agreement with the excavator.

SED also found that the third party excavator commenced excavation on 11/7/2014 without responding to a PG&E message on 11/5/2014 and receiving confirmation that the mark and locate were completed, which is a requirement in

CalOSHA code Title 8 Chapter 4, Article 6, Section 1541(b)(1)(A). Additionally the third party excavator proceeded to excavate using a backhoe when it found a pipe of different material from that indicated on the existing markings for a plastic gas pipe, instead of contacting PG&E as required in GC 4216.4(b).

Casualties: None reported

Estimated Property Damage: $105,000

Utility Facilities involved:
Pipe Material = Plastic main
Pipe Size = 2 inches
MAOP = 60 (psi) Operating Pressure = 57 (psi)

Witnesses: Backhoe Operator, GM Engineering

Evidence:

	Source	*Description*
1	PG&E	Final 420 Report
2	PG&E	IRTH dig ticket file "USA 459722_CONF (2)"
3	PG&E	PHMSA Form 7100.1 #20140111- 15978
4	PG&E	Data Request Response Index 5895
5	PG&E	"A" Form, Index No. 6011_A-form_110714_CONF

Observations and Findings:

On 11/7/2014 at approximately 11:14 am, PG&E was notified of a third party dig-in that occurred at 1 South Market Street in San Jose. The third party excavator, GM Engineering, was using a backhoe when it hit and damaged a 2" plastic gas distribution main that branches off a 4" plastic distribution main. There was significant media attention due to the impact on a large number of businesses in the center of downtown San Jose. PG&E reported that an estimated 2,500 people were evacuated from a two-block area around Market, Santa Clara, First, and San Pedro Streets. Several restaurants lost business due to the evacuation and gas service interruption. Media reports show an ominous cloud resulted from the incident. There were no injuries, fires, or explosions as a result of the incident.

A PG&E Gas Service Representative arrived on scene at 11:31am and the PG&E repair crew arrived at 11:40 am. Gas flow was shut in at 5:02 pm by closing nearby valves, after determining that squeezing pipes would require extensive excavation and shoring due to the pipe depth. Repair to the damaged pipe was completed at 2:00 am on 11/8/2014.

The SED investigator arrived on site the morning after the incident on 11/8/2014. The intersection of Market and Santa Clara Streets was still blocked due to clean-up work. The trench area had been re-paved. USA delineations and yellow gas pipeline markings were visible in the vicinity.

Figures 1 and 2. SED Investigation Photos from day after incident.
Figure 1 on left shows the fresh asphalt patch over digin location.
Figure 2 on right shows a 4” PL yellow gas line marking.

Figures 3 and 4. SED Investigation Photos from day after incident.
Figure 3 on left shows fresh yellow marking over the 2" gas line on Market St.
Figure 4 on right shows PG&E USA delineations

The excavation was part of a high-rise building project at 1 Market Street that had been under construction by general contractor, Beatty Balfour. In the three months prior to 11/7/2014, twenty-one USA tickets had been requested for the area, with consequent markings painted in the project area by the various underground facility operators.

SED met the on-site superintendent from Beatty Balfour, which subcontracted the excavation work to GM Engineering. The Beatty Balfour superintendent commented that the excavation crew had hand-dug the area with the indicated gas pipeline markings and uncovered a steel pipe which was assumed to be the marked gas pipeline. The GM Engineering backhoe operator then proceeded with the remainder of the excavation when the backhoe hit an additional pipe at a different depth.

On 12/9/2014, SED interviewed the GM Engineering field superintendent, who was also the backhoe operator when the incident occurred. The GM Engineering backhoe operator said he had been at the site on11/3/2014 when he painted the USA delineations and called in the request for locate and marks to USA North, two working days before the planned date to start the work. The USA ticket number was 0459722 and had a "Work Begins" date of 11/5/2014 at 11:30 am. He said he got a message on his phone from PG&E at 10:30 am on 11/5/2014 and recalled the voice message as "this is [redacted] from PG&E, give me a call".

The GM Engineering backhoe operator did not return the call, but assumed that he was cleared to start work; having waited 48 hours from the time of the USA request and having noticed yellow pipeline markings on the pavement inside the delineated area. GM Engineering hand dug and exposed a 2" steel pipe at a depth of about 36 inches. Although the existing gas markings indicated plastic pipe, the GM Engineering backhoe operator assumed that the 2" steel pipe was marked in error. The backhoe operator proceeded to excavate using a backhoe when it hit and damaged the actual 2" plastic gas pipe at depth of about five feet. It was later discovered that the 2" steel pipe was an electrical conduit.

Online map from Google Maps Street View dated September 2014 shows yellow markings for the 2-inch gas line in the same location that was hit on 11/7/2014.

Figure 5. Image from Google maps, corner of Market and Santa Clara, September 2014.[1] .

Since the GM Engineering backhoe operator indicated having observed gas markings for a plastic pipeline, it is possible that those markings may have been marks from previous USA requests.

PG&E submitted a Form 7100.1 (Report number: 20140111- 15978) that states: "In response to the ticket, PG&E attempted to make contact with the excavator before locating and marking its facilities. PG&E left a message for the excavator on 11/5/2014 but did not receive a response from the excavator to coordinate the locate and mark prior to the excavation. (As is customary for large excavation projects, PG&E communicates with the excavators to phase the marking of PG&E facilities to ensure markings remain visible in the excavation area.)".

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[1] Source file: https://maps.google.com/maps?ll=37.3353605,-121.8919907&spn=0.18,0.3&cbll=37.3353605,-121.8919907&layer=c&panoid=CjoOkL1Y4Kswn2k98NapRA&cbp=,247.53,,2,25.760002&q=1+S+Market+St,+San+Jose,+CA+95113&output=classic&dg=ntvb

SED's review of PG&E's USA ticket response records found that PG&E attempted to contact GM Engineering by email and telephone on 11/5/2014 between 10:20 and 11:33 am. The first attempts were made by PG&E's automated system but when those failed, a PG&E technician called the excavator and left a message. PG&E's attempt to communicate with the excavator began only about an hour before the indicated "Work Begins" date of 11/5/2014 at 11:30 am on the USA ticket. The PG&E record shows there was no response from the excavator.

SED notes that PG&E's initial Form 420 report contained some errors: (1) the damaged pipe was a 2-inch line, not 4-inch as initially reported, and (2) the USA ticket was called in on 11/3/2014, not on 11/6/2014. The GM Engineering backhoe operator said that when the backhoe contacted the pipe, he found the plastic pipe was enclosed in a steel casing. However, review of PG&E's form "A" and repair photos do not show any indications of a casing around the plastic pipe. SED asked GM Engineering for any photos that might demonstrate the cased gas pipe, however the photos have not been provided to date.

Preliminary Statement of Pertinent General Order, Public Utilities Code Requirements, and/or Federal Requirements:

Title 49 CFR §192.605(a) states in part:
"*Each operator shall prepare and follow for each pipeline, a manual of written procedures for conducting operations and maintenance activities and for emergency response…"*

California Government Code 4216.3(a)(1) states in part:
"Any operator of a subsurface installation who receives timely notification of any proposed excavation work in accordance with Section 4216.2 shall, within two working days of the notification, excluding weekends and holidays, or before the start of the excavation work, whichever is later, or at a later time mutually agreeable to the operator and the excavator, locate and field mark the approximate location and, if known, the number of subsurface installations that may be affected by the excavation. . ."

California Government Code 4216.4(b) states in part:
"If the exact location of the subsurface installation cannot be determined by hand excavating in accordance with subdivision (a), the excavator shall request the operator to provide additional information to the excavator, to the extent that information is available to the operator, to enable the excavator to determine the exact location of the installation…"

CalOSHA Title 8 Chapter 4, Subchapter 4, Article 6, Section 1541(b)(1)(A) states in part:
"Excavation shall not commence until: 2. The excavator has received a positive response from all known owner/operators of subsurface installations within the boundaries of the proposed project; those responses confirm that the owner/operators have located their installations, and those responses either advise the excavator of

those locations or advise the excavator that the owner/operator does not operate a subsurface installation that would be affected".

Conclusion:

PG&E's Damage Prevention Handbook, TD-5811M, states that when a field meeting is necessary to define the project area for marking and: *"IF excavator is unavailable or cannot renegotiate, THEN do the following: a. IMMEDIATELY notify your supervisor of the situation. B. Document details in USA ticket".* PG&E's USA ticket record does not document that a supervisor was notified in this case. Additionally, while PG&E attempted to coordinate the field marking with the excavator, there was no mutual agreement reached as required by code. It is also disconcerting that the attempts were made an hour before the work was scheduled to begin.

PG&E did not perform a field mark in response to the specific USA ticket # 0459722 request within two working days or reach an alternative agreement with the excavator as required in GC 4216.3(a)(1). PG&E failed to follow its Damage Prevention Procedure which is a part of their Operations & Maintenance Plan to satisfy Title 49 CFR §192.614. Thus, SED found PG&E in violation of Title 49 CFR §192.605(a) which requires the operator to follow their manual of written procedures for Operation and Maintenance.

SED's investigation also found that GM Engineering acknowledged having received a voice message from PG&E within two working days prior to the incident but did not indicate responding back to PG&E's message. Instead, GM Engineering commenced excavation without responding to the PG&E message and receiving confirmation from PG&E that the mark and locate were completed, as required in the CalOSHA code Title 8 Chapter 4, Article 6, Section 1541(b)(1)(A).

Additionally, GM Engineering assumed that the 2" steel pipe found during its hand-digging was marked in error. Although the existing gas markings potentially left from previous USA requests indicated plastic gas pipe, GM Engineering proceeded to excavate using a backhoe when it hit and damaged the actual 2" plastic gas pipe at a lower depth. GM Engineering did not contact PG&E, at the point of discovering a steel pipe rather than the indicated plastic pipeline, to request additional information in accordance with GC 4216.4(b).

Recommendations

In addition to following PG&E's existing Damage Prevention procedures and California Government Code 4216.3(a)(1), SED recommends that PG&E adopt stronger damage prevention programs than currently required by code to prevent future incidents like this one. A prudent pipeline operator should consider the Class Location of the dig ticket request and for Class 4 (highest building density) locations such as urban business districts, a knowledgeable gas representative should be dispatched to the construction site to support the excavation until all buried gas lines have been safely exposed.

Further, excavation contractors should take particular care in Class 4 locations. The excavator should make positive verbal contact with each operator of a potentially hazardous (gas and electric) buried facility in the project zone to assure that the locations have all been properly marked prior to digging.

ATTACHMENT 13

BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE
STATE OF CALIFORNIA

PRE-FORMAL INQUIRY INTO PG&E'S LOCATE AND MARK PRACTICES AND PROCEDURES.)

EXAMINATION UNDER OATH OF NICK STAVROPOULOS

REPORTER'S TRANSCRIPT
San Francisco, California
March 2, 2018
Pages 1 - 134

Reported by: Carol A. Mendez, CSR No. 4330
Karly Powers, CSR No. 13991

PUBLIC UTILITIES COMMISSION, STATE OF CALIFORNIA
SAN FRANCISCO, CALIFORNIA

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BE IT REMEMBERED THAT, by Subpoena of the Witness, and on Friday, March 2, 2018, commencing at the hour of 10:18 A.M. thereof, at the offices of the CALIFORNIA PUBLIC UTILITIES COMMISSION, 505 Van Ness Avenue, Room #4300, San Francisco, California 94102, before CAROL A. MENDEZ, CSR No. 4330 and KARLY POWERS, CSR NO. 13991, personally appeared:

(NICK STAVROPOULOS),

called as a witness herein, who, being first duly sworn, was thereupon examined and interrogated as hereinafter set forth.

* * * * *

MR. GRUEN: If we could go on the record. If you could -- one of you could do the swearing in, please?

NICK STAVROPOULOS, having been sworn, testified as follows:

THE WITNESS: Yes.

MR. GRUEN: All right.

So my name is Darryl Gruen and I'm counsel for the Safety & Enforcement Division of the California Public Utilities Commission. And I would ask that everyone state their name and titles for the record as I have just done and if we could go around the room.

THE WITNESS: My name is Nicholas Stavropoulos. I'm President and Chief Operating Officer of Pacific Gas & Electric Company. I like to go by Nick.

MR. VALLEJO: Alejandro Vallejo, V-a-l-l-e-j-o. I like to go by Alex. I'm Senior Director of PG&E appearing here as counsel.

MR. GRUEN: Thank you.

MR. BRUNO: Kenneth Bruno, Program Manager of Safety and Enforcement Division of California Public Utilities Commission.

MR. CHAN: Yes. I'm Wai Yin Franky Chan, Senior Utilities Engineer for Safety Enforcement Division of California Public Utilities Commission.

EXAMINATION

BY MR. GRUEN:

Q Great. Because we're having a record here, I will refer to everyone by their last names.

So, if I can, I will refer to you as Mr. Stavropoulos, if I'm pronouncing it correctly.

A Perfect.

Q Mr. Stavropoulos, your address, please?

A 77 Beale Street, San Francisco,

California.

Q Yes. And I mentioned my name is Darryl Gruen. I'm doing the Examination Under Oath today on behalf of the Safety and Enforcement Division of the Public Utilities Commission.

An Examination Under Oath is just like a deposition, except that there is no underlying proceeding. So we do not know where we are going to go with the information that we learn right now. We're not in any formal proceeding but we can use this information later in a formal proceeding if we choose to do so. Do you understand that?

A I certainly do.

Q And when I ask questions, it is important that you provide truthful and complete answers to them. Please answer my questions directly. If you do not understand my question, either because I have not articulated it well or I have poorly phrased it, either ask me to repeat it or just say you do not understand the question. Please do not speculate or guess about what the question is. Do you understand that?

A I do completely. Thank you.

Q Yeah. And do you know, Mr. Stavropoulos, did your counsel receive a subpoena for you to appear today?

A I don't know.

MR. GRUEN: Counsel, did we --

MR. VALLEJO: We did.

MR. GRUEN: Q And I will, just for the record, hand a copy to counsel and ask if this appears to be a true and accurate copy of what you received.

MR. VALLEJO: Yes, it appears to be.

MR. GRUEN: Thank you. I would ask that this be marked as Exhibit 1.

(Exhibit No. 1 was marked for identification.)

MR. GRUEN: Regarding the subpoena, Mr. Stavropoulos, you're here under compulsion of subpoena and witness fees. We have a statutory authority, Safety and Enforcement Division, to issue the subpoena to compel the attendance of employees to testify and produce documents as part of our supervisorial authority over utilities such as PG&E. This means that you are not here voluntarily. And the information you provide us is not voluntary. You're answering questions because we are requiring it. Do you understand that?

A It wasn't necessary, but I would have been here anyway, but I understand.

MR. VALLEJO: Yeah. It's just to clarify for the record because you mentioned it yesterday with Mr. Soto as well. Just to underscore the point, PG&E has cooperated and we have not resisted or in any way, you know, declined participation.

So just to be clear on the record, even though he is here under subpoena, we are voluntarily cooperating in every respect.

MR. GRUEN: To this point, that would comport with my experience. So I appreciate the stating that. Thank you.

Q Still, just to point this out, do you have any questions about what the subpoena means as far as the requirement to be here, noting the point about PG&E's voluntariness?

A I haven't seen it, so I don't know.

Q Okay.

MR. VALLEJO: No questions for me.

MR. GRUEN: No questions.

Q Has anyone spoken with you about the Examination Under Oath today?

A Meaning?

Q Anyone at PG&E?

A Yes.

Q Okay. And regarding these conversations, has anyone provided you with any goals to achieve coming here to this Examination Under Oath today?

A No.

Q Okay. Thank you. What was the title of and name of the person who spoke with you about the -- about today's Examination Under Oath?

A Mr. Alex.

Q Okay. Mr. Vallejo.

A (Witness nodding in the affirmative.)

Q Okay. Very good. Am I correct in presuming that if I ask any questions about the nature of the conversation, you'd claim privilege on that as you did yesterday?

MR. VALLEJO: I would.

MR. GRUEN: Q Okay. Can you please describe your background? Mr. Stavropoulos, can you please describe your background and experience at PG&E, during your tenure at PG&E?

A At PG&E?

Q Yes, please.

A Okay. So I've been at PG&E since June of '11 -- 2011.

Q Yes.

A I previously was President and Chief Operating Officer of the U.S. Gas

Companies of National Grid, which combined with our gas companies in the UK, was one of the largest gas companies in the world. We had about 14 million customers. And I have been in the Gas and Utility business since I graduated from college in 1979. I know I don't look that old but.

Q I wouldn't have guessed.

A But it's been a long time.

And so you might remember that PG&E experienced a very serious explosion in San Bruno, California in September of 2010.

Q Yes, sir.

A And so PG&E asked me to come out to California to talk with them about taking over running their Gas business. So I agreed to do that and arrived here in June of '11, where I took over responsibility for all of Gas Operations and have been doing that since that time, but my role expanded last year so around actually I think a year ago yesterday when I became President and Chief Operating Officer of the entire utility.

So I'm now responsible for all of our operations. So power generation, including Nuclear, Gas, T&D, Electric T&D Storage and so on. But about a year and-a-half prior to that, the Board of

Directors gave me additional responsibility for IT safety, supply chain, aviation services, fleet and I think that was it.

Q Okay. Thank you. And I appreciate that that's about the level of detail that I was asking for as well. So thank you. That is helpful.

And the questions I ask today are asking about facts you have learned and based on your experiences while at PG&E. So, in particular, please ensure that your answers include the knowledge and information you have because of your time and experience as President and COO, Chief Operating Officer of PG&E. Do you understand that?

A Yes.

Q Okay. One thing to add, I noticed on the website your bio includes that one of your key responsibilities is to serve as the company's lead safety officer.

A Yes.

Q Am I getting that right?

A Yes.

Q And as similarly brief and high level to what you described, can you explain your role as the company's lead safety officer?

A So, I chair the company's Safety

Committee and I'm responsible for overseeing the coordination of safety across our operating utilities. So that would include industrial or occupational safety of our employees, safety of our contracted employees, the safety of the public and the communities that we serve.

Q Very good. Thank you. And does that -- actually, let me continue on into some terminology questions so just so we have a common understanding of some terms that might be used today.

So, are you familiar with the term locating and marking or Locate and Mark?

A Yes. I actually coined the phrase at PG&E.

Q Is that right?

A Because it used to be, when I came it was Mark and Locate. And so it was always odd to me how you could mark something before you located it. And so, when I came to the company, I would say the first week I was here, I went to Vacaville, which is the union hall for the IBEW. It's the largest IBEW local in the country. And I was told I was the first senior executive to step foot in the union hall. I kind of found that hard to believe but I met with all the Gas business agents and we met for about four hours and very much like I'm dressed today, very casual. No Power Point. No notes. I went all by myself and met with about 40 Gas business agents and they shared with me, I said, "You got to tell me. You're the closest to the work, closest to what's going on. Help me identify all the issues." So we met for about four hours and we talked about a whole host of things and they were extraordinarily helpful. And I go back about every four or five months and have the same conversation with them. And one of the guys said, "I've got a pet peeve." So of all the things they've raised, right, you know, being slow to respond to OTA calls, not having the proper tools or the maps, things like that, one guy said, "It's always bothered me that we call it Mark and Locate." And he goes, "It should be Locate and Mark." I said, "You know what? You're absolutely right and we're going to make it so." And so we changed the terminology. It took some time, but we now call it Locate and Mark. But the rest of the of the industries, when you go to other companies, they still call it Mark and Locate.

Q I see. I see. That's an

interesting story. I appreciate that. I'll look to your answer then potentially as the textbook definition of Locate and Mark.

A Thank you.

Q But what is your understanding of the definition of Locate and Mark?

A It's the process that we follow to identify our underground facilities for prevention of damage to those facilities when either for a second or third parties have to do excavation.

Q Okay. Thank you.

A You're welcome.

Q And moving forward, when we use the terms locating and marking or Locate and Mark during this examination under oath, will you understand them to mean the definition that you just gave?

A I will.

Q Okay. Great. The term locator, what does that term mean to you --

A To me that means --

Q -- in the context of locating and marking?

A To me that means the person that actually does the locating and marking.

Q Great. And again, all the terms that I'm asking about, will you understand them to be using the definitions that we're discussing now throughout the day?

A Sure.

Q Great. Okay what about the term ticket? Can you explain your understanding of the definition of that in the context of locating and marking?

A So my understanding is when someone calls to the 811 system, a ticket is produced, that what I think about it as a job order for a particular geography to be located and marked.

Q Okay. Great. And could you briefly describe your understanding of what the requirements are with regards to locating and marking tickets?

A Can you be more specific around what you're looking for there?

Q Yes. The requirements for a timely response on tickets. Are you familiar with what requirements are in place in order for an operator to timely respond to a late ticket or to a ticket rather? I use the term late. And I will get to that in a moment, but and only for purposes at this point of asking about the definition of late ticket, but for now the requirements to timely respond to a ticket order?

A So, my understanding is that from the time the ticket is generated, there's a period of time within which the company has to locate and mark their facilities and that timeline can vary, depending on when that ticket came in and when the ticket is requested to be completed.

Q Are you familiar with the 48-hour requirement or a two-business day requirement to respond to a ticket when it's first called in by the excavator?

A I'm generally familiar. My understanding is there's exceptions to that as well.]

My understanding is there's exceptions to that as well.

Q Mine as well.

A I'm not familiar with what those exceptions are, completely. But I understand that exceptions.

Q One or two to explore.

A Mm-hm.

Q And if you're not familiar, I can move on. But I'll ask to see if this refreshes your recollection. I suspect you have come across this at some point, but we'll see.

Regarding one exception, I

understand, would be if an excavator and locator mutually agree that the time and start date for doing the locating and marking are different, they can arrange their own time up to a certain -- they can arrange a different time than what the requirement would otherwise be -- what the default requirement would be.

Does that refresh your recollection?

A Yeah. It’s not a refreshment. It's a -- that's my general understanding.

Q Okay. Yes. I appreciate the correction.

(Crosstalk.)

MR. GRUEN: And if an excavator proposed excavation to start within the two working day period that's the default requirement to which you've noted there are exceptions, if PG&E wanted to reschedule the time that their locator would come out, that -- they would need to communicate with the excavator and receive agreement from the excavator in order to do that; wouldn't they?

A That's my understanding.

Q Okay. Great.

And I alluded to it before, and I'll ask now. The term "late ticket," are you familiar with that term?

A Yes.

Q And what does that term mean in the context of locating and marking?

A So I think it can mean a lot of things.

Q Okay.

A But I think late ticket is generally a ticket that is either beyond the 48-hour or 2-business-day window or beyond the time that was mutually agreed to extend that 48-hour or 2-business-day window.

Q Very good. I appreciate --

A That's my understanding.

Q I appreciate that.

And working with that, as a general understanding, noting that the requirements may be more technical than what we've both been discussing, but if we could work with that as a common understanding?

A Sure.

Q Okay. Great.

Just to hone this a little bit. To clarify, unless I say otherwise through the day, when I use the term "locating and marking," and the terms that we've discussed thus far, I'm asking questions as they relate to PG&E's underground natural gas infrastructure.

Do you understand that?

A Yes.

Q Okay. Great.

Can we go off the record?

(Off the record.)

MR. GRUEN: If we could go back on the record. And off the record we discussed -- my understanding, and I'll look for your input on this Mr. Vallejo, we discussed a stipulation from PG&E that the information regarding late ticket counts that PG&E provided us in last year, April 2017, provided to SED in a data response, and the late ticket counts that PG&E provided to us last week, I believe it was February 22nd, that those are accurate counts and that we have the documents that accurately reflect those.

Did I capture that correctly? Or is there anything that you want to correct on that?

MR. VALLEJO: No, I think that generally captures it. I think the way I would put it is that PG&E stipulates to the fact that the records state what they state and that we produced those records to SED.

MR. GRUEN: Okay. Very good.

So, with that, maybe what I can do is circulate the records that I understand we're talking about just to be sure that we've got the right stipulation in place. And bear with me, let me get those sets.

(Distributing documents.)

MR. VALLEJO: Great. Thank you.

MR. GRUEN: You bet.

So, Mr. Vallejo, do these appear to be accurate documents that PG&E would stipulate are what they have provided?

MR. VALLEJO: Yes.

MR. GRUEN: Okay. Great.

So just for purposes of marking, the first one I see -- and correct me -- that I asked to be marked is Exhibit 2, it’s a document dated Wednesday April 19th, 2017, from Mr. Jonathan Pendleton to myself Darryl Gruen. It’s entitled, "Subject: Forward Index 10707: Safety Enforcement Division locate and marked data request Number Two."

And the second one I would asked to be marked as Exhibit 3 is a data response sent from PG&E to Safety and Enforcement Division from PG&E's Mike Bradley, to Safety and Enforcement Division, Wai-Yin, or Franky, Chan. It was requested February 6th, 2018, and it was sent by PG&E February 23rd, 2018.

And those are the two documents we're stipulating to.

(Exhibit No. 2 was marked for identification.)

(Exhibit No. 3 was marked for identification.)

MR. VALLEJO: Correct. These appear to be true and correct copies of our data responses to SED.

MR. GRUEN: Great. Okay. Great.

Q And, with that, if -- Mr. Stavropoulos, if I could have -- if I could ask you, please, to turn the April 17th document. If you could turn to the last page of that document --

A The April 19th document?

Q Correct. And let me know when you have that in front of you.

A I do.

Q And for comparison purposes, what I'll ask you to do is also open the February 23rd document and have both documents side by side for comparison purposes.

And, specifically, the February 23rd document, if you could turn to page 2 of that document.

A Okay.

Q And what I'm trying to establish here is the late tickets counts that PG&E provided Safety and Enforcement Division, the total late ticket counts year by year from 2012 through 2016, a comparison of the counts from last year with what was provided last week.

So just to get the numbers on the record, and then I think we can move on, we have 2012, the late tickets provided in last year -- I'm looking at the total line --

A Yeah. I've never seen these documents, so I can't attest to them.

Q Understood. I'll rely on Counsel's statement that they are accurate. And it’s just they are accurate copies of what PG&E provided to us.

A Sure.

Q So with that understanding, are you satisfied that they are accurate copies of what PG&E provided us with that statement?

A Yes.

Q Okay.

A But, again, I've never seen the document. I don't know who prepared it --

Q Understood.

A -- but whatever we stipulated to, I'm happy to agree with that.

Q Okay. And I'll try and stay within the confines of the stipulation. But please correct me if I --

MR. VALLEJO: Yeah. No, but I think it can help, potentially, to shortcut putting these -- I mean, they are going to be into the record by being exhibits. So I'm not sure we need to read through each number. I mean, it’s your examination, but...

MR. GRUEN: Okay. We -- what we can do is, I want to call attention and just ask for the reaction -- for Mr. Stavropoulos's reaction. But, yes, understood.

MR. VALLEJO: Okay.

MR. GRUEN: Q So maybe we can -- the why don't we go to 2014 on the last year's chart. And the total tickets shown there under the 2014 column, at the bottom of the column, where it says 13,391 total late tickets.

Do you see that?

A Yes, sir.

Q And then under -- on page 2 of the February data responses provided to us last week. If you look in the first paragraph, you can see reference to -- I think it’s six lines down, 47,589 late tickets in 2014.

Do you see that?

A I see that, yep.

Q Okay. So we're talking about an approximate increase of maybe -- by my math, and I could stand corrected -- it’s maybe 34,000 late tickets, an increase comparing last week's count with the count provided to us in February 2017.

Does that sound right to you?

A That sounds right.

Q And would that raise a concern for you seeing that increase?

A So I don't know the basis for either one of these documents. So it’s kind of out of context.

Q Let's assume that the basis is comparable, that the two bases for proving the documents of the late ticket is the same, that is the way the ticket counting happened was comparable, if the context -- is that the kind of context that you're looking for?

A I'm not sure. So is the question that we reported one number here and one number there?

Q It’s -- that's part of it.

A Okay.

Q And the other part is the increase for the first number recorded last year to the number reported last week.

A So I would be disappointed that any number that we had reported would be inaccurate. And so I don't know what this new number is or what it represents. So I would certainly be disappointed that any number that we reported to you was inaccurate.

Q Okay. Maybe as additional context, my understanding is that based on this paragraph from the February 2018 data response, that these counts on page 2 are discussing late tickets. Does that -- I understand that haven't seen this before, but does that comport with your understanding of what this document says?

A Do you want me to read it?

Q Yeah. And why don't I specifically direct you to -- starting the third line, now, it does say -- it says on the third line, "As those conditions identified, the total number of late tickets identified may change," so this is subject to change, it’s the status report, "but PG&E expects that its current estimate of 44,794 late tickets received in 2012, 51,272," I'm cutting across but, "51,272 late tickets received in 2013, 47,589 late tickets received in 2014, 61,114 late tickets received in 2015, and 55,666 late tickets received in 2016. And that will change as PG&E's work continues."

But does that provide you context of the late ticket count that SED received last week?

A Okay. Again, so I don't know how the document was prepared from the April 19th, document. I've never seen this. I don't know who Bates and White is. I don't know what they did.

So I don't know the difference between what's on one page and the other. So I wish I could help you, but I don't have any understanding of the difference between the two documents.

Q Let’s assume the numbers are true. Let’s assume these numbers are true. I understand what you told me. But assuming that the differences of late counts are accurate, and this is PG&E's late ticket count for both provided in February of last year and last week, and that they differ on the order of what I've just shown you, would that raise a concern for you?

A I think I answered that. It would concern me that any information we provided to the Commission was inaccurate.

Q Respectfully, I don't think it

answers the question I'm asking. It’s not just about the discrepancy in information, it’s that if the late ticket counts had increased on the order of tens of thousands on the order as shown here, would that raise a concern?

A Concerns about what?

Q Safety-related concerns.

A So from my perspective, whether the number was 13,000 late ticket or 47,000 late tickets, the amount of damage that occurred is the same. So whether there were 13,000 or 47,000 late tickets, it’s not impacting the number of damages that occurred.

Q Okay.

A And on the grand scheme of how many damages occur in our system, the amount attributable to late tickets is small by comparison, like, tiny by comparison. So, for example, we have about 15000 damages on our system a year. About 60 percent of those damages are attributable to operators not calling the 811. About 30 percent of the damages are attributable to excavators that called 811, the facilities were marked and located on time, but the excavators did not adhere to those markings or did not follow correct digging procedures.

About 10 percent of the damages are associated with some other issue, like, the mark wasn't correct, the map was incorrect. And a small percentage of the 1500 damages that occurred relate to late tickets. And that small percentage of actual damages doesn't change whether there are 13,391 late tickets or 47,000 late tickets. So --

Q And just to -- a couple clarifications about what you said.

A Yeah.

Q The 1500, and I think you're using approximate numbers, is that an annual account of damages that you --

A Yes, roughly.

Q So would that be an annual count 2012 through 2017 each year you would see, approximately, give or take 1500?

A What I'm experiencing right now on the system would be --

Q Okay.

A -- somewhere around that number.

Q Okay.

A That's my recollection.

Q Yeah.

A Could be 1600, could be 1700, but the percentage is the same. So when I look at it -- so, for example, when I think about the risks of damages to the system, I have to look at it from layers of protection and sort of what's happening across the entire network.

So based upon the information I shared with you, the biggest risk that I have is not that my ticket might be late. It’s that 60 percent of the damages occur, the excavator never called. So that's why we've ramped up, massively, the amount of education around 811, working with the contractors.

So when you say if the number 13,000 or 47,000, I'm disappointed that we have any late tickets; right? I mean, but when I look at it, what I mean is, it appears that we presented information to you that we later had to correct. And that's concerning to me.

Q Okay. A couple things to explore.

First of all, why -- the information that you described, if there -- in the other category, that may be drivers, if you will, for damages, What's estimate, if you have one, of the percentage -- or how significant are late tickets as a driver in that other category?

A My understanding, it’s a small percentage of the other category.

Q Okay. And is that understanding based upon, would it be accurate to say that it’s based upon the ticket counts that we had received prior to a week ago?

A No. It’s based upon the damages per the number of tickets received. So it’s got nothing to do with the late tickets. It’s got to do with damages per a thousand tickets.

Q Why -- well, why do you have late tickets counted if it has -- if the number of damages have nothing to do with late tickets, why are late tickets important to count?

A Late tickets are important because you want to -- we know that one of the important layers of defense is to properly locate and mark the facilities before the excavator is going to do their excavation; right? So that's very important to us.

But what I'm sharing with you is the actual number of damages resulting from late tickets is a very small percentage of the total damages. And so from a risk standpoint, that's not my biggest exposure to risk. I would like to get it to zero, that's certainty the goal and the objective.

And that's what we thought we were doing. That's why we added staff. That's why we improved training. That's why we developed more training manuals and all of that sort of thing. But the -- whether -- I'm more concerned that we've proved inaccurate information, in that the leadership team had inaccurate information to assess the effectiveness of this layer of defense.

Q Okay.

Go off the record for a second.

(Off the record.)

MR. GRUEN: Back on the record.

Mr. Bruno, do you want to ask some questions at this point?

MR. BRUNO: Yes, Mr. Gruen, thank you.

EXAMINATION

BY MR. BRUNO:

Q Mr. Stavropoulos, what is an acceptable level of late tickets?

A You know, my goal would be to try to get late tickets to as close to zero as possible.

Q And the revised number that PG&E sent to us approximately last week, does the magnitude of those numbers represent an acceptable level?

A No, not at all.

Q Does the magnitude concern you?

A Yeah. The magnitude concerns me. But more importantly, what concerns me is not having visibility into that magnitude.

Q Yes, sir.

Are you assuming that these late tickets that somebody eventually showed up?

A I don't know the basis for the calculation, so I don't know whether that happened or not.

Q So if I were to tell you that some of these tickets nobody ever showed up, would that concern you?

A Very much so.

Q Thank you, Mr. Stavropoulos.

I would also like to ask you about leading and lagging indicators. So would you say that a leading indicator for a hit could potentially be a late ticket?

A Yes, sir.

Q And would you also agree that a hit itself is a lag indicator?

A Yes, sir.

Q So there is, potentially, a correlation between late tickets and hits?

A Yes, sir.]

Yes, but a small correlation because as we know, late tickets are a very small reason for third-party damages. So, even a doubling of damages associated with late tickets would be extremely small compared to the two primary reasons why we have damages. One, is that the excavator never calls which is the reason for 60 percent of the damages. And 30 percent of the time, we locate accurate, and the contractor does not use appropriate and required digging techniques.

Q Yes, sir. So the numbers that are in front of you that were provided as of last week, just to make sure we are interpreting this right, these are tickets where people did call. They did call in a ticket. So Step 1 is completed.

A Yes.

Q The ticket is generated. What is PG&E's responsibility to that?

A It's responsible to locate and mark the facilities within the required period of time.

Q And Mr. Stavropoulos, if they don't mark in the correct amount of time, do you expect the excavator not to begin work?

A I think the excavator might assume that there are no facilities in the area and start excavation.

Q And if I understand the logic and

the, you know, at least as it relates to historical late tickets and incidents, the best path would be if you have to have a late ticket, is there a late ticket the excavator does not start work, PG&E eventually shows up, locates and marks and then the work begins?

A Yes.

Q Would you be concerned if the sequence sometimes happens that the ticket is called in, PG&E doesn't show up on time, they don't show up at all, and then the work begins, the excavation work?

A So, the excavation work begins before the facilities are marked out?

Q Yes. After either the 48 or the mutually-agreed upon time, let's say PG&E -- let me start again.

So Step 1, ticket's called in, PG&E is late. They don't show up to mark at their time or agreed-upon time and then in this situation I'm describing this hypothetical, they don't show up at all and the excavator begins digging. Are you concerned about that scenario?

A That's why you're concerned about late tickets. That's the reason why you're concerned about not performing the work on time, yes. So that layer of protection would be weakened.

Q Yes, sir. Thank you. Okay. Thank you, Mr. Stavropoulos.

EXAMINATION

BY MR. GRUEN:

Q A couple of follow-ups. I want to be sure I got this right.

Mr. Stavropoulos, I think your point in that hypothetical was that if PG&E -- if a locator does not show up, the excavator might assume that they can begin work. Did I understand that right?

A Yes.

Q And if PG&E doesn't show up, would that assumption by the excavator in that instance, if they might assume that they can begin work, in your opinion would this assumption be reasonable?

A I think so.

Q Okay. What about if PG&E did show up but showed up late and the -- would that same assumption on the excavator's part to begin work also be reasonable?

A If they already began the work.

Q Would it be reasonable to make a decision on the excavator's part to begin work, if PG&E came late?

A Well, what you need to be aware of is that we work really hard to first train the excavators that do work, right? So, for example, I went out and met with the largest Ag people in the Fresno area two years ago on 811 day. They were some of our biggest critics for locating and marking. They spoke glowingly about the improvements that we made to the system, our ability to accurately mark our facilities, to be able to have a number that they could call to talk to someone.

So, we really work hard in training those people that do lots of excavation around what good looks like from safe-digging practices. And so an experienced excavator would look around and see that, wait a minute, I might have gas facilities here. I might have other facilities here. Right? And so, you know, and I don't see any marks and they're an excavator that does lots of work. What they're probably going to do is call PG&E and say, "I need these facilities marked. I've got to do something here."

That's what we are trying to train people to do. Because we're never going to get there on time a hundred percent of the time. And so the less experienced excavators are like a homeowner or whomever that doesn't do a lot of excavation, they're probably not as aware, because not all underground facilities get marked. So water facilities don't get marked. So if you're in downtown San Francisco and you're an excavator, you're water facilities aren't necessarily marked out as effectively in all the other communities. Sewer lines aren't necessarily marked out in all locations. So an excavator just because they see markings of a gas facility or an electric facility, it doesn't mean that there aren't other things there.

So experienced excavators, the good ones, we find are careful in what they do. I think that's why I say that damages associated with late tickets is so small as a percent of overall damages.

Q Okay. And a couple of points, I will get to the point you're making. And I have heard you make it several times about damages, your point damages associated with late tickets are a small percentage compared to others. I hear you on that.

But I just want to continue with the assumption on the part of the excavator whether they are aware and have been trained or not.

So, specifically, if PG&E was late,

and hadn't met its timing requirements in response to a called-in ticket that was properly called into 811, you understand that part of the hypo?

A Yes.

Q And PG&E was late but they were intending to show up, would it be reasonable in your assumption to expect that the excavator would wait until PG&E did show in that circumstance?

A What I'm saying is an experienced excavator who understands that there is a likelihood of underground gas facilities, would probably call PG&E and say something like, "When the hell are you going to get out here because I need to dig?" That's what we would expect experienced excavators to do that follow safe-digging practices.

Q Understood. Let's take your fact and add it to the hypo. Let's say the excavator calls in and says in whatever terms he chooses or she chooses to use, "Please come out and dig or please come and out and locate and mark so I can dig. I'm waiting here." And PG&E is still late, still hasn't come in whatever manner that the excavator deems is likely or thinks is necessary, do you think that the excavator at some point is reasonable in beginning to dig under those circumstances?

A Yeah. I'm having trouble with the hypothetical to try to read the mind of an excavator.

Q Well, doesn't PG&E do excavation?

A Yes.

Q So, has PG&E been in this situation where it's waiting for locators and markers before it begins with its own excavation?

A Yes.

Q Okay. And what does PG&E do? Does it wait until the facilities get located and marked before it begins with excavation?

A I don't know specifically what procedures we follow.

Q Okay. Would you expect that PG&E as the excavator, when it's in the role of doing excavation, would you expect that if the locators and markers are late, would you expect that PG&E would wait under all circumstances until the facility was located and marked properly?

A I definitely know that that happens for sure. I can't say that it might happen 100 percent of the time, but certainly that's the objective.

Q Okay. With that lens in mind,

because I think -- what I'm wondering if that gives you an understanding of the perspective of the excavator?

A You're asking me to read the mind of an excavator and we have thousands of excavators, so it's hard for me to answer your hypothetical.

Q Point noted. I'm not asking you to read the mind of any one excavator. That is not where I'm trying to go, but let's say that you were in the shoes of an excavator. Generally-speaking, a reasonable one who is saying -- and let's say there's, you know, and let's say there's cost of waiting.

A Of course there is.

Q And there's -- the excavator's under pressure to get started, as I would imagine is commonly the case. And so to wait until PG&E actually does locating and marking means dollars and cents for the excavator. What I'm struggling with is, is there a cost -- is there a calculus there about when it's worth it to go ahead and excavate from an excavator's perspective, given how much it costs to wait for a late locator to come out and do the marking?

A You would have to ask them.

Q Do you think there would be?

A A cost?

Q Do you think there would be on their part a decision point at which they think it's worth the risk to go ahead and excavate?

A You have to ask them.

Q Do you think it would be for any of them?

A You'd have to weigh the cost of potentially causing an horrific accident, right?

Q Absolutely.

A So, I don't know how contractors would weigh that. I can tell you that there are contractors out there that never call 811; that they go out and they dig and they know there's facilities there and they cause damage, and they're happy to pay the bill when they get the damage bill. And they don't care about the safety of their people. Then there are contractors out there that wouldn't dig until the facility is located and marked no matter what the cost is because they wouldn't put the public or their employees in that situation.

So those are the two ends of the spectrum and contractors are everywhere in between, everywhere in between.

Q I appreciate the answer. That's all helpful context. Thank you.

A Do you mind if --

MR. GRUEN: Should we go off the record?

A Yes.

MR. GRUEN: Off the record.

(Off the record.)

(Break.)

MR. GRUEN: Let's go back on the record.

Q Mr. Stavropoulos, I think before we were off the record, we were just discussing the -- if I can characterize it right, the expectation about whether it would be reasonable for an excavator to wait if a PG&E locator and marker received a ticket call but didn't show up or was late. Do you recall us talking about that?

A I do.

Q That question? Okay. And with regards to that, I think you mentioned that, you know, the chances of, you know, relatively-speaking I understood you to say the percentage of dig-ins that are related to late tickets in the overall spectrum of late tickets, excuse me in the overall spectrum of dig-ins that percentage is relatively small.

Have I understood that correctly?

A Yes, sir.

Q But you also pointed out when a dig-in happens, of course the risk of a major incident is present as well; is that right?

A That's right. That's why when I came to the company, the very first thing that I looked at outside of the information that I had about PG&E's gas transmission business, because I had the benefit of the independent review panel report, the very first thing I asked for was the amount of damages per a thousand tickets. And I saw that in June of 2011, I believe, that it was 4.5 damages per thousand tickets and I was horrified to see that because it was a number that was way out of the bounds with what I was used to.

And so we have driven that down from 4.5 damages per a thousand tickets in June of '11 to this year we hope to be around 1.8, which would be [redacted]. And I think we have consistently from June of 2011 to the present day put in place all the layers of protection to continue to improve our dig-in rate in a state that PHMSA has identified that has the weakest Dig Safe Laws in the country. And so, you know, that's the context within which I answer that question.

Q Okay. And you're talking there about when you're -- that statistic if I understand right is the number of dig-ins per thousand. So that's really, you're providing I think context around how PG&E might measure against perhaps other operators?

A It's the standard in the industry about how people benchmark against each other.

Q But that is not necessarily talking about the specifics that we have in mind regarding late tickets so much. That is a different question about the actual dig-in rate. Am I understanding that right?

A That's correct.

Q Okay. Okay. So the relationship then between late tickets and dig-ins, small as it may be as you have identified it --

A Right.

Q -- relative to other drivers for dig-ins, a small percentage, there's still a concern that late tickets would be -- a dig-in resulting from a late ticket could have a catastrophic consequence. Would you agree?

A Yeah. That's why I said the first

thing I asked for when I came in was the dig-in rate. Because nationally the highest percentage of serious incidents occurs from third-party damage on gas systems. And so that's why we've done everything in our power to reduce the risk of third-party damages on our system, from hiring more people to doing the work, to providing them better training, better tools, better technology, communicating the requirements of the 811 Dig Safe Laws, training contractors. That's why we have done all those things for the past 6 years to drive down that damages per thousand.

Q Okay. Bear with me a second.

Let's go off the record for just a moment.

(Off the record.)

MR. GRUEN: We can go back on the record.

So while we were off the record, I circulated an exhibit that is PG&E-LM-CPUC_00000040 is the Bates stamp on it, and as a brief description, it's an e-mail from Joel Dickson to Jeff Carroll and [redacted]. The subject, it's March 4, 2016, and it's regarding Bullet Points for Fairfield Dig-In.

(Exhibit No. 4 was marked for identification.)

MR. GRUEN: Q Do you see that, Mr. Stavropoulos?

A Yes.

Q I'm reading from the top. Okay. And while we were off the record, we reviewed this, the back of this document. Did you have a chance to read through?

A Briefly, yes.

Q Okay. What is your initial reaction to the -- to what you read in the back of the document?

A Well, I have never seen the document. I don't know what it is, but it appears to be a description of a damage that occurred on our system.

Q And does it appear that a ticket was called by the excavator regarding locating and marking where this damage occurred on the system?

A Yes. I'm happy to stipulate it says what it says.

Q Okay. I think what I'm trying to get at is -- does the -- does the -- is this, in your mind, does this raise a concern of a locator not showing up, giving the excavator a green light and that resulting in a dig-in?

A I don't know. I'm not familiar with the incident.

Q Okay. You didn't receive any information about the Fairfield -- the Fairfield dig-in that is described on the subject line?

A No.

Q Okay. Okay.

Let's assume that the facts are true on the back of this page. Would it raise a concern for you if PG&E's -- if an excavator called in a ticket, PG&E responded, or excuse me, indicated that it had located and marked but it did not and that it sent a positive response and the excavator understood that positive response, went and looked at the site and didn't see any locatings or markings, called PG&E and said -- and asked for a mark to come out -- a locator to come out and do marking. And PG&E never changed the positive response. The excavator went ahead and dug finally, even though PG&E didn't show up and said they would, and the excavator digging resulted in a dig-in and damage to PG&E's -- one of PG&E's gas lines. Would that raise concern for you as a safety officer of PG&E?

A Sure. Of course that's a concern.

We're going to do over 900,000 locate and marks this year. Are we going to get every one right? No. There is no operator in the country that is going to get every one right. Is the locator going to make a mistake from time-to-time? Will the record be incorrect from time-to-time? That is why we put in multiple layers of protection.

So, to expect a hundred percent precision with 900,000 locate and marks that occur over the course of the year, that's completely unreasonable.

Am I concerned of any of the 1,500 dig-ins? Absolutely. When I look at the highest risks associated with how to reduce the amount of damages on our system, we want to have zero, zero late tickets, but I want to make sure that the person -- I want to make sure that the contractor that is going to do that digging is properly informed about 811 and calls a hundred percent of the time. I want to make sure that when they go out and see those locate and marks, that they use proper digging practices and understand the consequences of that. I want to make sure there are enough people to do the work; that they're properly trained; they have the right procedures; they have the right tools; they have the right maps. I want to make sure that the facilities are installed at the right depth; that we have caution tape so that when digging does occur, these are all the layers of protection that I've tried to institute at PG&E.

Am I disappointed that there was an inappropriate and a problem with this locate? Absolutely. Do I know that we have massively improved this program? Absolutely. And so any one incident, I look at those 1,500 damages and I ask myself: What could we have done better to prevent all of those from occurring? Because we take ownership of the 60 percent that occur from contractors that never called. We don't accept that. We look at our obligations to communicate around good and safe digging practices. That is why we developed the Gold Shovel Program.

Did you know that the Gold Shovel Program is now being used nationally? That was developed by John Higgins and the team here at PG&E. We now have Gold Shovel communities here in this state. We also have been lobbying for legislation to improve the Dig Safe Laws so that we can have greater enforcement.

PHMSA has sent the letter to the

State of California saying that they are threatening to withhold Federal funding because the Dig Safe Laws are not adequate in their minds. We have been operating in a state with some of the worst Dig State Enforcement Laws of the country.

I have been operating with the hands behind my back and we have driven down massively the amount of damages that occurred in our system. We have increased massively the number of calls that we get for 811.

So, am I concerned about this one incident? Absolutely. But I'm concerned about all of the incidents that occur in our system and asking myself what can we do better? What can we do better? That is why we created the DIRT teams. We put in the Dig-In Reduction Teams.

We hired investors to go out and look at why these things are happening and communicate and coach and counsel all these underground contractors to do that work.

So, absolutely I'm concerned about this one incident, but I'm concerned about all the incidents that occur in our system because I don't want any incidents to occur. Zero. That is my goal. Zero.

Q I appreciate the answer. It's

beyond the scope of the question, but I understand --

A Oh. It's very-much related.

Q -- your points. Well, the question was focused specifically on this dig.

So, maybe if I could just ask you: Do you see other -- do you have a concern that there are other, given this circumstance, do you have a concern that there are other circumstances like this one on PG&E's system?

A I've asked for a report on the amount of damages that occurred because of late tickets and I have yet to be provided with that information.

Q When did you ask for that?

A Three months ago.

Q Are you surprised you haven't received the update on the information yet?

A We hired -- I don't know the name of the firm. We hired a third-party firm to investigate this whole matter when it was brought to our attention and I'm waiting for that report.

Q How was the matter brought to your attention?

A I first learned about the issue when I was part of a meeting with the

American Gas Association Peer-to-Peer Group which also we created. We created the Peer-to-Peer forum within the American Gas Association when they did a readout in San Bruno, I mean San Ramon, at our Gas headquarters, where the Peer Review Team told us that they had learned that there were issues with late tickets that weren't being reported.

Q Did they describe to you how they had learned that information?

A As part of their Peer Review process.

Q I'm sorry. I may have missed it. When was that meeting with the Peer Review Team approximately?

A I don't have the exact time. I would be guessing. I would have to look.

Q Do you have a rough estimate?

A About a year ago. Something like that.

Q That is helpful. Thank you.

Just with regards to what -- this particular description, does this -- does this description appear to be an accurate mark to you?

A I have no idea.

Q Well, when on the sixth bullet

point, if you see that March 2nd, toward the end of the second line:

> [redacted] told [redacted] that he had quote "messed up" and not marked out this area.
>
> [redacted] told [redacted] that he would come out the next morning and get this area located and marked.

Does that appear to be an accurate -- a description of an accurate mark or, excuse me, of a timely mark to you?

A No.

Q Okay. And in light of the approximately -- excuse me. And given the discussion on, let's see, the 2, 4, 6, 8, I think it's the eighth and ninth bullets, where it says:

> When [redacted] went to get in his work truck, he saw he had a flat tire. He then called PG&E L&M [redacted] and asked him to respond to the location to perform the locate and mark for this area.

And then after that:

> While [redacted] was

doing a locate and mark for underground PG&E utilities in the area -- and I see that was March 3rd -- a Rader employee was using a backhoe within the delineated USA ticket area and struck a two-inch plastic gas main causing the release of gas from a line.

That would be a dig-in, would it not?

A I assume so.

Q Okay. And in the 5th bullet where it says:

[redacted] -- on March 2, 2016, [redacted] made a follow-up USA ticket request. The notes on this request are: Customer sees no evidence of markings. Please contact [redacted] -- at a phone number -- with ETA to mark site or give clearance ASAP.

Does that strike you -- does that give an inference that there was a proper marking, an accurate marking in that case?]

A So it appears that the contractor has no markings. And, as I indicated, I would suspect that the better contractors would call and try to a call PG&E and not go forward. And it appears that that's what he asked PG&E to do, to come up and mark.

Q Right.

A It’s difficult for me to answer because I've never seen this document. And I just read it quickly. And you're asking me a lot of details about something that I really know nothing about.

Q Okay. Okay.

Let's look at -- thank you for your indulgence on it.

A Sure.

Q I appreciate you answering questions.

Let me identify another exhibit to go with that one. Here you go. And it's a second copy.

MR. VALLEJO: Are we off the record?

MR. GRUEN: We can be.

Off the record, please.

(Off the record.)

MR. GRUEN: Back on the record please.

Q Okay. So, Mr. Stavropoulos, we've

been reviewing the email -- the March 4th email from Joel Dickson to Jeffery Carroll.

Do you still have that in front of you?

A I do.

Q Okay. And just to call your attention, we have -- the second bullet there on the back of that email talks about Pennsylvania Avenue to Dana and Gateway Boulevard.

Do you see that?

A I do.

Q So what I've done here is given you the next exhibit which shows an email from Amy Carrigan to Wai-Yin Chan, and that's forwarding the gas quarterly incident report for the first quarter of 2016. And it’s forwarding it from [redacted] of PG&E.

So do you see all that in front of you?

A I do.

Q And are you familiar with the gas quarterly report?

A Not specifically, no.

Q Okay. So are you generally familiar with it?

A I'm aware that there's a gas incident report that's periodically filed with the Commission, but I certainly haven't seen this.

Q Okay. And -- okay.

And what is your understanding of the content of that report as it’s filed with the Commission?

A I don't know.

Q Okay. You haven't seen this?

I'm just struggling --

Let’s go off the record.

(Off the record.)

(Exhibit No. 5 was marked for identification.)

(Exhibit No. 6 was marked for identification.)

(Exhibit No. 7 was marked for identification.)

MR. GRUEN: Back on the record.

So while we were off the record, I understood PG&E to agree to stipulate this document from PG&E to SED says what it says.

Do I understand that correctly?

MR. VALLEJO: Yeah. I don't have personal knowledge that this came from PG&E. It appears to be an email from PG&E to SED, and I will stipulate to that appearance. And I will stipulate that the document says what it says.

MR. GRUEN: Go off the record one more

time.

(Off the record.)

MR. GRUEN: Back on the record.

MR. CHAN: The document presented in front of you is a quarterly report of gas incidents that's required by General Order 112. And all operators in California is to report every quarter of the gas incident. And there are multiple criteria.

And my understanding is most dig-in incidents fall into those criteria. So we get those reports from all operators in California quarterly. And PG&E is one of the biggest utilities we have. And we get a report from them every quarter.

And this is the list of all the incidents that PG&E provided. And if you move to the last page of the document in front of you -- it’s in very small font, but it has all the incidents that were reported in this specific quarter, first quarter of 2016. And this is the information that I have about the requirement and why we receive this document from PG&E.

MR. GRUEN: Q Does that provide you with context about the document, Mr. Stavropoulos?

A Yes.

Q Okay. And with that in mind -- with that understanding that Mr. Chan provided, if you would turn to the -- I'll call it the second page after the email, the enlargement. And what we have done here is simply enlarged the last page of the exhibit so that it’s easier for my eyes to see. I don't read as well as I used to.

A That makes two of us.

Q Okay. And so what I'm trying to do here is just identify and see if this comports with your understanding.

Does this entry appear to match the entry that is provided on the Fairfield dig-in email? Does it appear to match that description?

So where we see, for example, under the City of this entry, it shows Fairfield. And I'm matching that to the heading where it says "Fairfield dig-in," and the incident address "1860 Pennsylvania Avenue.

Let me ask you, do you seed those items there?

A I do.

Q And does those -- does 1860 Pennsylvania Avenue, the incident address -- if you take that address and follow it on the map, the Google map, that I provided, do you see that reference to Pennsylvania Avenue there?

A I do. Isn't that the White House address?

Q I'm not sure if that's Richmond -- or Fairfield. Excuse me. But, otherwise, I see where you're going.

But the 1860 Pennsylvania Avenue there -- and if you see on the map, there's Gateway Boulevard just to the left of that point.

Do you see that?

A Yes, I do.

Q And so does that appear to be approximately where -- do you see where Gateway would intersect Pennsylvania on this map?

A Okay. Yes.

Q Approximately?

So does that appear to be the same location as -- Pennsylvania Avenue from Dana to Gateway Boulevard?

A It’s hard to see on this copy, but certainly no reason to think that it doesn't.

Q Okay. So moving forward just with -- if you turn to the next page.

One other piece of information, the damaging party is a little more than halfway -- I call them halfway across -- damaging party's radar excavating.

Do you see that?

A I do.

Q And that appears to be the same excavator, does it not, identified in the Fairfield dig-in email?

If you look at the first bullet of February 26, 2016, I suppose there's an "E" in the email as opposed to an "A" in the quarterly report. But, otherwise, does that appear to be the same excavator?

A Um, could be.

Q Okay. I guess, what I'm wondering is would you accept -- why don't we put it this way, would you accept subject to check that the email here entitled "Fairfield dig-in" and this entry of the quarterly report are talking about the same incident?

A Subject to check, yes.

Q Okay. Thank you.

And turning to the third page, then, of this -- of the quarterly report that -- and I will represent to you that it’s the same entry as the first two pages. If you look at the column that says "Facility properly marked," and do you see a "Y" after that?

Do you see both of those things?

A On the detailed one?

Q No, I'm sorry. On the third page. The enlarged sheet right before the detailed one.

Do you see that?

A Oh, yes.

Q So looking at that one, the two columns approximately in the center of the page -- the two column headings marked, "Facility properly marked," and "Timely marked."

Do you see those two?

A I do.

Q Okay. And underneath each of those there's and indication "Y."

Do you see that?

A I do.

Q Okay. So would that indicate to you that PG&E is reporting to the Safety and Enforcement Division that the facility at 1860 Pennsylvania Avenue was timely marked and properly marked?

A Assuming that "Y" means yes and assuming that that's what this report is intending to do, I would say, "Yes."

Q Okay. And moving on to the summary on the page where we just were, where it --

do you see the summary column? It’s to the very right on the third enlarged page.

A Okay.

Q Where it shows underneath the summary, "Inadequate excavation practices."

Do you see that?

A Yes.

Q Okay. And in -- assuming that the facts of this email are true, the Richmond din-in that we have been talking about, does it strike you that the inadequate excavation practices that are identified under the summary column heading is a complete description of what happened?

A I would have no way to make that assessment.

Q Do you think that this omits PG&E's actions of failing to timely and properly mark the facility?

A I would have no way to make that assessment.

Q Why not?

A I'm not familiar with the incident at all. I don't know if there are other circumstances associated with this. You showed me one document that I'm completely unfamiliar with.

Q Okay.

A I haven't had a chance to speak with anybody associated with the incident. So I don't know if there are other mitigating factors. I have no idea.

Q Okay. Would you expect to be informed of incidents like this one from your staff?

A No.

Q Would you expect to be informed as PG&E's Safety Officer of incidents in the aggregate like this one?

A Yes.

Q Okay. And how often?

A So I review -- my review relates to a high level of goals and objectives, damages per a thousand tickets, and all of the reasons associated of why damages per a thousand tickets are where they are, and to identify all of the actions that we're going to try to take to reduce those damages per thousand tickets.

So all the of the things that we do -- and that's what I focus on my level. So damages were 4.5 when we started, they're 1.8 now. What are all those things we're doing company-wide to drive down those areas?

So you might imagine, I'm going to invest my time where there's the highest amount of risk. So when you look at damages, where is the highest amount of the risk? Contractors that don't call into 811. Because when that happens, that's where you see the biggest amount of damages. But we have actions on a whole number of fronts.

Q Does it concern you, in light of the increased ticket counts that we provided you with this morning, that perhaps the risk associated with damages related to late tickets is higher than you thought?

A So, the number of late tickets don't change; right? So the number of damages associated with late tickets are what they are --

Q I --

A Let me finish.

Q Just a point of clarification.

MR. VALLEJO: Let him finish his answer if you don't mind.

MR. GRUEN: Absolutely. I stand -- I apologize for that.

Q Please, go ahead.

A So the absolute number of damages, as we talked about earlier this morning is what it is; right? And so whether there is -- we don't want any; right? We're starting from the front.

Q Yeah.

A We don't want any damages on our system. And as I indicated earlier today, you know, the number of late tickets, obviously, you know -- we don't want any late tickets. And so those number of late tickets are, you know, clearly concerning.

Equally concerning, way more concerning, is the contractors that dig on our system and not call for a ticket. Almost equally concerning are the contractors that call for a ticket, we locate and mark, and we haven't convinced them or trained them approximately to use proper digging practices. So we work on all of that. Yeah.

Q I think -- and I apologize for jumping in on your answer. You're absolutely right that I should -- and it sounds like you have had a chance to finish your answer.

And the reason I jumped in, I think you may have caught that you said the number of late tickets don't change. And I just wanted to clarify for the record that you meant -- and maybe you did say the number of dig-ins don't change, not the number of late tickets don't change; is that correct?

A That's correct.

Q Did I follow that correctly?

That's all I meant to clarify.

A Thank you. Appreciate it.

Q Yeah. But in terms of dig-ins, if -- do you think that there is a chance that if you reduce the number of late tickets, that you could reduce the existing number of dig-ins?

A Yes. And that's why we've been trying to reduce the number of late tickets.

Q Thank you. Okay.

I want to just maybe ask you briefly, if you could maybe list what the safety consequences are in your view associated with an increase in late tickets. And, to the best of you understanding and experience, what are the -- if you could list all of the safety consequences that could be associated with an increase in late tickets along the lines of what we have shown you this morning?

A So the increase of what we reported previously to what we re-reported?

Q Correct. What the -- go ahead.

A I would say there was no safety consequence because the number was what it was. So if it was 47,000, that was the number. And if it was not properly reported, the 47,000 was the actual number. So --

Q Okay.

A The reporting of the number has no safety consequence. Because the actual number of late tickets was 47,000, not 13.

Q You know, I didn't show you something earlier.

Let’s go offer for just a moment.

(Off the record.)

MR. GRUEN: While we were off the record, we just discussed -- let me ask a question based on our discussion.

Q Would you accept, subject to check, that the numbers PG&E used in its Keys reports, gas operations, BPR Keys to Success Report in January 2016 and January 2017, the late ticket counts from those reports matched what PG&E provided its late ticket counts for certain years -- and the I think it was 2014, 2015, and 2016, in PG&E's response to SED in April of last year.

Would you accept that subject to check?

A I would.

Q Okay. And the reason I'm asking is just -- if you would -- what's the purpose of the Keys reports? Are you familiar with them?

A I am. I created them.

Q You created them.

With regards to safety, what -- at a high level, what's the purpose of Keys reports?

A So we created the Keys report when I came here to bring together and try to assess the overall performance of gas operations.

Q Okay.

A I haven't been involved into the monthly Keys meeting for quite sometime.

Q Okay.

A So I don't know if it’s evolved or used differently. Because we also have a monthly risk and compliance report --

Q Okay.

A -- monthly risk and compliance meeting where safety risks are reviewed and compliance performance. So that's all done -- you can kind of think of it as a deep dive in the monthly risk and compliance meeting.

Q Okay.]

So, but the Keys to Success was meant to represent all of sort of the balance score card information that you needed to have a sense of how the business was running.

Q Okay. And is locating and marking

a portion of the Keys report?

A Yes, it is.

Q And so the same approach to locating and marking that you just described, that would apply to locating and marking as well?

A That's correct.

Q Okay. Thank you.

A At least up until the time that I attended the Keys meeting. I can't speak to what has happened since.

Q When approximately did you stop attending the Keys meetings?

A Probably about two years ago. Yeah.

Q Before or after January 2016? Do you know?

A I'm guessing -- I'm not guessing. Before.

Q Okay. Okay. Let's assume that PG&E's late ticket count numbers in the Keys reports -- let me back up. Would the count of late tickets provided in the Keys reports be an accurate count that PG&E would use for its internal purposes?

A Yes.

Q Okay. So, assuming then as we have done that the Keys report counts match what

PG&E reported to SED last year, are you with me on that?

A Yes.

Q Okay. With that assumption in mind, is there a concern that PG&E's own internal counting of late tickets would have safety-related concerns?

A Well, to the extent we have any late tickets, we are concerned, right?

Q I think I'm trying to get at if the Keys reports undercounted late tickets, and the reason I'm asking that is because of what we received last week, the counts that we received last week which are much higher than what are shown in the Keys reports, so if the Keys reports in fact undercounted the number of late tickets and PG&E was using those undercounted late counts, would that raise any safety-related concerns for you?

A Well, we also, you have to remember, we have the lagging indicator as well, right, which is the actual number of damages that were occurring from late tickets. And so you have got to look at the actual number of late tickets that are happening, but you also have to look at the number of damages those late tickets were causing. So, you got to look at them both in tandem.

So if you had 10,000 late tickets, but you only had five damages out of 1,500 associated with late tickets, you might say, that's not the worst problem I have in the world. We want to get to zero, but that is not my highest risk. I've got risks in other areas around mismarks because people aren't trained as effectively, or mismarks associated with maps, or mismarks associated with not having the right Locate and Mark equipment associated. I mean so, you got to look at both. You just can't look at that.

And I would say the most important thing to look at is the actual number of damages that are occurring and why are they occurring. Because remember with late tickets, that is just one layer of protection from damages, right? So, it's, as you saw, this contractor, what was their first instinct? Their first instinct was not to dig. Their first instinct was to call PG&E and say, "You know, you've got to come out here and mark this." Right? That's a layer of protection.

When we first came in here in June of '11, contractors, the digging community, this was the Wild West. This was cowboy city. Nobody called. Contractors whose job it is to excavate in the streets did not follow the 811 requirements. Why? They didn't have to because there were no enforcement laws associated with that. And so a late ticket is a flag for that layer of protection which is to get out there on time and mark it before the contractor is going to do work, right? That's one layer of protection; depth of cover, caution tape over the pipe, education for contractors. They're all there.

So, you know, so you got to look at both. That is what I'm saying. You got to look at both of those metrics. 13,000, for example, would give me heartburn.

Q I don't understand. I'm sorry?

A 13,000 late tickets gives me heartburn. Right? So whether it was 13,000 or 45,000, you know, that is concerning to me. At the same time, I've got to look at what's happening and what is causing those damages. And so when we saw late tickets when we first came, when I first came in late 2011 early he 2012, we created a special Action Review Team to look at the overall Damage Prevention Program that we had going on and we created a multi-partied improvement program that we implemented over the proceeding years. We knew that we were understaffed in that area. We were understaffed everywhere when I came to the company. Everything was broken.

We hired, in the first three years after I got here, 2000 people, 2000 field workers, trained them up, deployed them to the field. In the first two or three years when I came, I probably spent 2 billion dollars of shareholder money to do the work that we had to get done.

So, whenever we identify a problem we came up with an expression across the entire patch of the company: Find it and fix it. And we can't fix what we don't know about. And that was the esprit de corps. That is the culture that we try to create and when people needed more resources, we provided them those resources.

So when I look at late tickets, 13,000 late tickets motivates me. I don't need to see whether it's 20,000 or 25,000. We want to drive that down as close to zero as possible.

But you have to look at, all right, what is the consequence of not doing that? Does that make sense?

Q I'm understanding the words you state. I have got a lot of questions about them.

Let's go off the record for just a moment.

(Off the record.)

(Whereupon, at the hour of 12:04 p.m., a recess was taken until 1:04 p.m.)]

* * * * *

AFTERNOON SESSION - 1:04 P.M.

* * * * *

NICK STAVROPOULOS

resumed the stand and testified further as follows:

MR. GRUEN: Let's go on the record.

If we could mark as Exhibit 8, the Gas Operations BPR Keys to Success January 2016 report known as the Keys Report.

(Exhibit No. 8 was marked for identification.)

MR. GRUEN: Mark as Exhibit 9, the Gas Operations BPR Keys to Success January 2017 report.

(Exhibit No. 9 was marked for identification.)

MR. GRUEN: And mark as Exhibit 10, a PG&E Frequently Asked Questions exhibit that has a marking. It has a PG&E Gold Shovel Standard 2014 logo on it.

I'm handing those out now.

(Exhibit No. 10 was marked for identification.)

MR. GRUEN: Mr. Stavropoulos, here is a copy for counsel as well.

With that, having marked that for

the record, I will defer to Mr. Bruno for a few questions on Exhibit 10. Go ahead, Mr. Bruno.

EXAMINATION

BY MR. BRUNO:

Q All right. Thank you, Mr. Gruen.

Mr. Stavropoulos, are you familiar with the Exhibit Number 10 that was just handed out, the Gold Shovel Standard FAQs?

A No, sir.

EXAMINATION

BY MR. GRUEN:

Q I'm sorry. Did you say no?

A Yes.

Q You're not familiar?

A With this document? No. I've never seen it.

Q Okay. Let's just ask generally: Are you familiar with the PG&E Gold Shovel Standard?

A The program in general, yes.

Q The program in general. Okay.

And does this document look authentic to you as a PG&E document?

A It has PG&E on it. It has Gold Shovel Standard on it. No reason to believe it's not.

Q Let's just ask -- Mr. Bruno, if you

want to just ask Mr. Stavropoulos about the areas that you want him to answer and see if those areas he's generally familiar with, that might be a way to accommodate Mr. Stavropoulos with the document.

MR. BRUNO: Yes, Mr. Gruen.

EXAMINATION (Resumed)

BY MR. BRUNO:

Q Mr. Stavropoulos, let's actually step away from this document for one moment.

So earlier you mentioned the Gold Shovel Standard?

A Yes, sir.

Q Could you briefly describe that program?

A My understanding it's a standard that we would like the excavators, when we originally started the program, was to excavators that do work for PG&E commit basically to a pledge that they understood what the requirements were for safe digging; that they would follow the 811 One-Call system and that they would follow safe digging practices. And so we created that program for us. And we felt it was a program that we could try to expand to others across the industry as well.

Q Yes, sir. Thank you. And who

heads that program?

A So, it's within Jesus Soto's organization right now. John Higgins from PG&E I believe is on -- is still on the Board of Directors of the National Gold Shovel Program and it's run through Jesus' organization, but I'm not sure who in Jesus' organization is currently responsible for the program.

Q Yes, sir. Thank you.

MR. GRUEN: Can we go off the record for just a moment?

(Off the record.)

MR. GRUEN: Back on the record, please.

So my understanding is, Mr. Stavropoulos, is that this PG&E Gold Shovel Standard from 2014 was accessed from the PG&E website. And if you need, to the extent we need to ask questions if you need a moment to review it and see if the information we are asking about seems authentic to you, we can afford you that time.

THE WITNESS: Sure. I noticed the copyright of 2015. So it looks like it might be a '15 or after document on the very bottom line.

MR. GRUEN: I see that. Okay. So

there's a '15 copyright at the bottom noted by Mr. Stavropoulos and a 2014 Gold Shovel Standard logo at the top right corner. Do you see that as well?

THE WITNESS: I do.

MR. GRUEN: Good. Thank you.

Mr. Bruno.

MR. BRUNO: Yes, Mr. Gruen. Thank you.

Q Mr. Stavropoulos, the Exhibit 10 in front of you, PG&E document, it's a Frequently Asked Questions regarding the, I believe the PG&E Gold Shovel Standard with the logo marking 2014 in the upper-right part of each page.

I want to ask you a couple of questions on this document. First of all, generally, based on your experience and knowledge, why have FAQs? Why have Frequently Asked Questions? Why have a document explaining Frequently Asked Questions?

A To make it easy for the people who are interested in that subject to find answers that might be relevant and easy to find.

Q Could it also be because the company is giving a question asked several times and it's easier just to put the answer out there?

A Could be.

Q And, Mr. Stavropoulos, on the second page, there's a, about a quarter of the way down the page, it says "Procedural" in black font.

A Yes.

Q And the second question under "Procedural" states:

> What happens when responses to Locate and Mark requests take longer than 48 hours?

Do you see that, sir?

A I do.

Q And if I may, I'll just read this part. The answer to that question is:

> The One-Call Centers each have a follow-up process. If a USA ticket has not been responded to within two business days, the contractor should call 811 again.

So I'm going to stop right there. There is more to that, but I do want to ask you some questions on that. And you see that?

A I do. I'm not familiar with it or

the requirement.

Q Yes, sir.

MR. GRUEN: You're not familiar with which requirement? I'm sorry.

THE WITNESS: Mr. Bruno read that the ticket has not been responded to within two business days, the contractor should call 811 again.

MR. GRUEN: So are you familiar with that as a PG&E statement?

THE WITNESS: Yes. It's on the document, yes.

MR. GRUEN: So you accept, subject to check, that PG&E has put this on its website?

THE WITNESS: The difficulty I'm having here, you're asking me questions about a document that I've never seen, in about a level of detail, quite honestly fellows, you know, you have got the President of the company here. And I'm here to answer any questions that you want, and I will stay here all day, and I will come back as many times as you want, and I will be very respectful to what you want, but the level of detail that you're getting at here is just not the stuff that I deal with.

And so, I'm happy to help, but a lot of these things, I don't want it to come across that I'm not being responsive. You asked me to not speculate. I'm trying to respect the direction that you gave me. But like the questioning that I had on that document, I mean that's great questions for the people that prepared it and worked on it, but, you know, so, I don't want -- I feel like I'm coming across as not responsive and I don't want to be that way. So I just want to put that context. But I'm happy to work through whatever you feel is appropriate to work through.

MR. BRUNO: Q Yes, sir. From my perspective, you're being very responsive and I appreciate that.

A Thank you.

Q With all due respect, when I see 50,000 late tickets, I think it is exactly the President I need to talk to.

A Yup. How about when you see the damage reduction that's the best in the state?

MR. GRUEN: Can we go off the record for a moment?

(Off the record.)

MR. GRUEN: Back on the record.

MR. BRUNO: Thank you, Mr. Gruen.

Q When we were off the record, we

were discussing comments versus questions. And I have a question for Mr. Stavropoulos.

Does 47,589 late tickets deserve the attention of the President of the company?

A Yes, it does.

Q Thank you, sir.

Mr. Stavropoulos, on Exhibit 10, the second question and answer involving: What happens when responses to Locate and Mark take longer than 48 hours? The answer to that, again, second sentence, basically says: If a USA ticket has not been responded to within two business days, the contractor should call 811 again.

My question is: Is that an official policy or procedure?

A I don't know.

Q Is it a requirement in 811 -- excuse me, 4216?

A I don't know.

Q Is it a layer of protection, sir?

A Is what a layer of protection?

Q Asking the contractor to call 811 a second time?

A I would view that as a layer of protection, yes.

Q Is the first layer of protection

PG&E actually responding to the original 811 ticket?

A The first layer of protection is communicating to the contractor community the importance of calling 811, because as we have discussed earlier, we see that 60 percent of our damages occur because contractors didn't call into 811. So that's why we put so much of our focus to public awareness in the importance of using 811. So that is the first layer of protection.

The second layer of protection is to locate and mark the facilities within the intended time. We also see 30 percent of the time when there are damages even when the facilities are located and marked properly, contractors still cause damage to the facilities. And so another layer of protection is then training and coaching and communicating with the contractors on safe digging practices.

So those multiple layers of protection, locating and marking of facilities within the prescribed period of time is certainly one of them.

Q Yes, sir. I appreciate that.

Mr. Stavropoulos, the first question under the same page, under the heading "Procedural" the frequently asked question is:

> Is PG&E going to improve or increase staffing to reduce the number of late tickets?

The answer on this document is:

> PG&E is actively reviewing staffing levels within the Locate and Mark departments and is planning to increase staffing levels in 2015.

A I got that, yeah.

Q Mr. Stavropoulos, do you know if staffing levels were a contributing factor to the number of late tickets?

A I would suspect staffing levels would be. I think it's actually a factor of two things; our effective communication program that drove significant increase in the number of calls to 811. As I shared with you earlier in the day, I was aghast when I came here to California how few contractors actively used 811. And so the first thing we needed to do was to communicate the importance of that. We worked very heavily on that and we saw that increase in 811 tickets.

We also saw the improvement in the

economy and we saw an increase in construction volume occurring and then the drought over a 5 or 6-year period certainly created more days in the year within which to work. And so we saw a much more active -- so we saw a lot more tickets going on.

So it's a combination of a rapid increase in number of tickets, as well as the challenges that we had in order to complete those tickets on time.

So, staffing can be done in two ways. It can be done with internal resources, employees of the company, or it can be done with contractors through the contracting community.

Q Yes, sir. Thank you.

A All of which gets tricky because you can't wave a magic wand and make somebody a qualified contractor. So, you know, you can't put it on Linked In and say, you know, looking for O.Q'ed Locate and Mark professionals. And that is really challenging and hard to do. So it's a constant race against increasing ticket volume which we're seeing again in 2018 and keeping up with the staffing levels.

Q Yes, sir. Mr. Stavropoulos, how are your staffing levels now for Locate and

Mark?

A I don't know the details of the Locate and Mark staffing levels. I know we continue to hire into the bargaining unit. We continue to run people through our training programs. And so I think last year overall for our company, I believe that our field labor force was up another four percent.

Q And, Mr. Stavropoulos, do you feel that current staffing levels are sufficient to drive late tickets to zero, to meet the goal?

A I'm not convinced of that. What I would hope we would do is use the ability to call the contractor or call the person that calls the 811 to negotiate an acceptable alternative time. That would be the first step that we would like to take. In a lot of cases, that's what happens. Contractors put a ticket in. They don't need it done within 48 hours. There's very few circumstances when a contractor waits until two days before and expects it to be done.

So the overwhelming majority of time contractors don't need it within that period of time. That's the self-imposed period of time. But in many cases, contractors call in jobs that are really long in nature. They go from Mile Post 5 to Mile Post 10. They're not going to dig all the way along. They don't need that marked out all that period of time. So just because it doesn't happen within 48 hours doesn't mean that it's ineffective.]

Q And, Mr. Stavropoulos, just in terms of planning the appropriate level of staff, irrespective of the economy and the highs and lows of the tickets, do you have a gauge of current staffing levels and what it’s going to take to drive these late tickets to zero?

A Yeah. So, again, it's what we mean by late ticket. Is a late ticket 24 hours? Or is a late ticket the time by which the contractor needs the work done? So that's the important issue.

Jesus Soto has a Strategic Action Review. He's the responsible office over this area. He created a Strategic Action Review. We have a cross-functional team working to focus on the late ticket issue, in particular. And so he's implementing corrective actions to address the late ticket issue, including increased staffing, whether it be internally or with contractors.

Q Thank you, Mr. Stavropoulos.

A Yeah. We have a business plan review process, all part of our governance. And so we have a high-level BPR review meeting, Business Plan Review meeting. And when the metrics that we track appear to be going off course and the person who's responsible for that area feels that they -- that they are behind in such a way that they are finding it difficult to get back to green, what we do is we create a SAR, an S-A-R, and bring the appropriate people from the appropriate areas to come in and try to address and resolve that issue.

It's extreme focus. Sometimes meetings are twice a week or weekly with the appropriate people. And it's to identify corrective actions and track the effectiveness of those corrective actions. And we use, sort of, the plan-do check act model in that process. So we're trying the implement things and trying to see if they are work.

So I'm very aware that Mr. Soto has a SAR underway on this issue. And I think he launched after we became aware of the underreporting of the late tickets. And that's been underway since. So we've been working really hard to drive that issue down.

Q Mr. Stavropoulos, do you have any information as to the cause of the underreporting of late tickets?

A I don't. Because I've been asked by our internal teams of being aware that you all had a report that we had late tickets and you were initiating an investigation, and that it would be more appropriate for me to make sure that I didn't interfere or be involved with what was going on until the investigation was complete.

We hired an outside firm to come in and take a look. I want to look forward to getting that report so that I can understand the root cause and begin to take action. So I'm comfortable that we have a SAR underway, that the appropriate people are working on that SAR, but that's the level that I'm at.

Q Thank you, Mr. Stavropoulos.

Is that report that you just mentioned, is that also going to tell you how many late tickets resulted in incidents?

A That's my ask. That's my ask. That's my ask.

Q And just -- Mr. Stavropoulos, in terms of your earlier indication that dig-in rate is the metric that you -- I'm paraphrasing here -- but you really look at to measure your safety or your success, is it possible that some of the contributing factors to incidents could be late tickets?

A Yes. And I said late tickets are -- of all the damages that occur on the system, late tickets are the cause of a relatively small percentage of that. I don't have the exact number. But on the grand scheme of things, it’s on the order that I talked about.

So it's 60 percent from not calling, so no request for a mark; 30 percent, even though there's a mark, they still hit our facilities. And 10 percent associated with a mismark that was caused by -- couldn't find the line or the map was wrong or some other issue. And late tickets are involved in that. That's a percentage of that last 10 percent.

Q So if I understand correctly, sir, the numbers that you just cited, that does include, if late -- being late, PG&E being late to locate a mark, if that was a primary cause or contributing factor? In other words, you're going to capture that in those numbers you just stated?

A That's my understanding.

Q Okay. Thank you, Mr. Stavropoulos.

A Oh, you're welcome.

MR. GRUEN: Q I have a few follow-ups. Okay?

A Of course.

Q Maybe since you had just answered a question about -- if I can paraphrase correctly, just, nothing in front of you, but following up on Mr. Bruno's questions.

The relationship between late tickets and dig-ins, just describing the report that you asked for, is that a fair characterization? Am I following?

A So I don't know a lot about the report for the reasons that I indicated --

Q I understand.

A -- but appropriately so. We've got a compliance and ethics team that's working on that hired independently, third-party, external review. And when I was advised that this was what we were going to do, I thought that was great. Because that's been my practice.

So ever since I've come to PG&E, I've really relied on a lot of third parties, right, to come in. So my one ask was, of the late tickets, you know, how many of these late takes actually resulted in third-party damage?

Because damages associated with late tickets that -- when I would go out and talk to contractors, that didn't seem to be, sort of, a burning platform anymore. It was when I first came to the company, and we heard that loud and clear from contractors; you can't get there on time, when you get up there, you're not marking accurately, and so on. So we thought we fixed all of those things. And, so, that was why I said, so how many are actually resulting in damages?

So I'm hoping when we get the report, that that would be one of -- but I'm thinking that they are looking at everything; right? But that's one thing that I've asked for. Yeah.

Q Okay.

A Yeah. I'm hoping.

Q And, just clarification, I think you may have stated, but I want to be sure I understand. When you say, "Of the late tickets, how many resulted in third-party damage?"

A Right.

Q Are you talking about the late ticks that had previously not been counted but had recently -- new counts have been provided to us? Are you talking about that subset of late tickets? The delta between the old count and new count?

A I'm talking about in total.

Q In total.

A Yes, in total.

Q And in total of what? Which count?

A Whatever the most accurate count is.

Q Okay.

A So, again, I'm operating a little blind here.

Q Okay.

A Because I'm not involved in the preparation of the report.

Q I follow.

A I wish I could be.

Q That's helpful.

A Yeah.

Q Thank you.

A Yeah.

Q When do you expect to receive the report?

A I'm not aware of what the timing is.

Q Okay.

A But I think I've been told that they are nearing the end of speaking to whom they needed to speak to internally, originally. But I don't have the timing.

Q Okay. Do you have an idea of what the report will find with regards to the latest, most accurate count of late tickets, and the resulting third-party damages?

A I have no information about the report.

Q Okay. Thank you.

Regarding -- and I'm paraphrasing -- but I think there was a general statement that you made that one layer of protection is for third-party excavators to call PG&E in the event that they have -- and I'm specifically talking about after they've made a call for a ticket now --

A Mm-hm.

Q -- that's my understanding that you had identified that as a layer of protection.

So the later of protection would be the excavator calling a second time, if you will, if the locator has not come out and properly marked. Am I understanding that right?

A I think the question was, "Would that be a layer of protection?" So an additional call would provide a layer of protection.

Q Okay. And just a clarification about -- do you view that as a -- let me ask a clarification about what you said.

Would you view the onus to be on the contractor to call PG&E a second time if the locator had not marked in the required time?

A My understanding is that the requirement, the regulatory requirement, is on us to contact the contractor. So I think that's that regulatory requirement. I think what is meant by that action is, hey, if you don't get a call, maybe you get hit by a car, maybe his wife went into labor and ended up in the hospital and they I couldn't come up and mark. You know, for frequent contractors, to have that two-way communication, I think they value you that.

You know, I talked to the big excavators, and they want to have that communication. They do that communication. "Hey, you're not out here. What's the story? When are you going to get here?" That sort of thing.

It’s not a requirement that I'm aware of on our part. I don't have the detailed knowledge of the procedures. I don't have the detailed knowledge of the specific California regulations.

But that's what happens in practice is -- the regular regulator, the frequent excavators, the people that are excavating, you know, 90 percent of the time. I'm not talking about the one-offs here. They wouldn't know they would call 811. You know, that's just not something they do on a regular basis. But people whose business it is to excavate, they want to be safe excavators, you're going to find that this two-way communication goes on.

Q Okay. I see your point.

And would you expect that PG&E could rely on an excavator to make a second call if its locator is late in doing a mark?

A As I indicated, no. We wouldn't rely on that. But, certainly, as part of our communications with them say, "We have a two-way communication." And my understanding -- and, again, the excavation man loves to have the name of the locator in their area. I call them, I have a dialogue, I know who they are. That's what goes on in the real world.

Q Okay.

A It’s not a requirement. It’s not

an expectation. But it is what happens.

Q Okay. Thank you.

A Yeah.

Q I wanted to follow up -- you -- I think you mentioned that you're not convinced staffing is adequate to drive late tickets to zero is what I heard you say.

Did I capture that right?

A Yeah. So we're seeing an increase. So we're very concerned about staffing levels. And, so, that's a constant challenge, you know. I could not advertise 811, decrease the number of calls, and improve my late ticket response.

But, to me, that's not the way to go about solving this problem. To me, we should aggressively communicate the importance of 811, aggressively train 811, get as many as we can, and try to staff up and meet that requirement.

Q Okay. What are the indicators that you would use to inform an adequate staffing level to drive late tickets to zero?

A The number of late tickets.

Q Okay. So if there was an undercount in the number of late tickets, in your mind, could that result from erroneous staffing levels?

A It could. It could. But we had late tickets, so clearly we're trying to catch up with staffing levels based on the number of late tickets; whether it was 13,000 late tickets, 20,000 late tickets, 25,000 late tickets, it really doesn't matter; right? We're trying to catch up, we're bringing in the resources that we need to try to augment that staff. And, as I said, there's no LinkedIn account where you go out and magically make these people appear.

Q Okay.

A Yeah.

Q Just harkening back, I see -- just regarding the -- I'm paraphrasing it. But I think it’s the two-way communication between a locator and an excavator --

A Mm-hm.

Q -- perhaps in a realistic situation as you described?

A Yes.

Q If that would be a fair characterization.

What does that mean, the two-way communication that you described?

A Yeah. So I'm not giving you a regulatory requirement or any of that. What I'm saying is the excavators -- you know, I know this just from talking to the excavator community, that they value very much the two-way communications that they have. They want to know that you're my locator and you're the person I can count on. And I may have to call you and say, "Can you do this one right away? Reorder this for me?" Because they don't have one ticket, they might have 20 tickets. And, you know I need this one tomorrow.

Q Yeah.

A So that's the two-way communication that I'm talking about.

Q Would -- what if the excavator wasn't reachable? Would two-way communication, would it be adequate to simply leave a voicemail?

A So you're confusing two things.

Q I'm asking clarification?

A No, no, no, you're mixing apples and oranges.

Q Okay. How so?

A What I was talking about was the normal work back and forth.

Q Okay.

A I'm not talking about what is required.

Q Okay.

A You're getting to what is required. And, so, if I'm a locator and I can't meet the time requirement, my expectation is that I need to call you. And I need to make positive verification that I contacted you. To me, that's what's acceptable. All right?

So what I was talking about is normal communication, sort of, back and forth and trying to develop that working relationship that we have with people.

Q Okay. And if you can't have that communication, that two-way communication -- I mean, would the -- yeah. I see your point.

If you can't have that communication, though, then in the realistic situation that you're describing, what would your expectation be of the locators?

A So we want to work hard to get that work done on time, try to reallocate recourses where possible. You know, I don't know what the procedures are, specifically, when we can't make positive confirmation.

Q And would you recognize that the requirements that apply in the realistic situation that you described still need to be followed?

A Of course.

Q Okay. Thank you. Okay.

So I want to harken back to the late ticket counts that we discussed this morning. And I asked a little bit just before lunch about safety consequences related to an increase in late ticket counts.

And I asked before lunch -- I believe I asked -- if you could list the safety-related consequences. So I want to just be sure that we've exhausted the list.

If there are any other safety-related consequences that you see could result from a changed late ticket count?

A A changed late ticket count?

Q Like the one that we discussed this morning from --

A Yeah. So, as I said, that's a historical number. So there's no safety consequence associated with a changed late ticket count. Because the actual number of damages that occurred over that period of time are the actual number of damages.

Q What about -- I hear you. So I want to run a couple questions related to safety consequences and ask you if, in fact, you would view these as particular concerns. So I'm going to enumerate them and ask you if you would see these as a particular concern.

The first one would be, would a concern of a realtime undercounting of late tickets be that you have not -- PG&E has not correctly identified the number of times in which it is not following the locate and mark requirements?

A Yes, that's pretty obvious; right?

Q Question for you. I don't -- I mean, is that a "Yes"? I don't know what the answer is. I'm asking you genuinely. I'm not going to assume it’s obvious. It’s a question directed at you, sir.

A Yes.

Q Okay. And would you agree that the locate and mark requirement is a safety requirement?

A Yes.

Q Thank you.

What about -- we talked about dig-ins. But, specifically, the fault associated with the dig-in -- and do you understand what I mean by "fault" --

A Yes.

Q Okay. So the calculation of fault associated with a dig-in, does it -- would you expect that a late ticket is a factor that plays into the calculation of fault and whether, specifically, PG&E has any fault?

And, if so, how much related to a dig-in?

A Yes.

Q So, then, would the -- if there was an undercounting in realtime of a late ticket, could a result be that PG&E has miscalculated its fault associated with a dig-in?

A Yes.

Q Would you expect that to be the case in the situation we described, an undercounting of late tickets?

A I don't know.

Q Is that something that PG&E is studying at the moment?

A I'm confused by the question.

Q You talked earlier about PG&E's efforts -- I think you had asked and identified that as a result of whatever the late tickets are, the impact on third-party damages.

Did I get that part right?

A Yes.

Q Are you also asking as part of that request that the report include the impact on late tickets to fault associated with third-party damages?

A I'm asking how many late tickets resulted in third-party damage. That was my ask.

Q Do you think it would be a good idea to include in that ask, to add to that ask, the resulting calculation of PG&E's fault associated with a third-party damage due to the change in late ticket counts?

A If we're late, we're at fault. And I think I indicated earlier, my understanding is that they're calculating it based upon the revised number.

Q I'm -- I hear you. The revised number being what?

A I think you pointed to the 46,000.

Q Okay. Okay.

So they're calculating fault based on the revised numbers for late tickets that we received last week?

A That's my understanding.

Q I follow.

A That's my request.

Q Okay. I did not follow before. Thanks for clarifying.

What about as another potential consequence -- and I'm curious your view -- bear with me a moment.

The potential for PG&E to falsely note that tickets are not late when they, in fact, are late. Is that a concern from a safety perspective for you?

A Sure.

Q To your knowledge, including any of its employees or contractors, falsely noted that a ticket was not late when, in fact, it was?

A Can you ask the question again?

Q Sure. To your knowledge, has any of PG&E's employees or contractors, its personnel generally, said or recorded a ticket as not late when, in fact, it was?

A That's what we've asked the independent review to verify for us and to take a look at.

Q Okay. Do you have any preliminary information that would enable you to answer the question at this time?

A No.

Q Okay. Has -- Okay.

To your knowledge, have any PG&E locate and mark tickets had their due dates rescheduled without mutual agreement from the excavator?

A So I shared with you when I first came here -- I think I didn't share with you that, but we learned when we had the AGA peer-to-peer review that there was reporting of misreporting of that item. So that's when

I became aware of that recently.

When I first came here, the practice of PG&E had been to use a passive reporting system. And we made it clear that that was unacceptable, that the requirement was to have positive confirmation. And so it wasn't until the AGA meeting that I first became aware that that risk might actually be happening. And that's when Jesus created the SAR to begin to focus and work on that.

Q Okay. I appreciate the extra context. Thank you. And passive reporting in this case, when you said that, what would that mean?

A That would be like the locator calling the person that called in for the ticket and leaving a message.

Q I follow. Okay. Thank you.]

To your knowledge, and let me just understand, when you joined, it sounds like your instruction was to change practice so that that would no longer occur in the company. Am I following?

A That's correct.

Q And after you joined, did you learn of instances where it still happened?

A The misreporting?

Q Yes.

A Not until the meeting with the AGA Team.

Q Okay. And, once again, when was that meeting?

A That was -- remember we talked about it? I didn't have the exact date, but at least about a year ago.

Q Okay.

A Yeah.

Q Okay. To your knowledge, was anyone at PG&E at risk of losing their job or suffering punishment from PG&E for not rescheduling due dates on Locate and Mark tickets without mutual agreement from the excavator?

A Were they at risk of losing their jobs for what?

Q Let me state it positively. I will try to restate it. I appreciate the clarification.

If they didn't -- if a locator didn't locate and mark -- if they rescheduled -- if a locator rescheduled without first getting mutual agreement, was anyone -- were any employees pressured on consequence of losing their job or suffering punishment from PG&E to do that practice, to your knowledge?

A I'm still not clear on the question.

Q I will try and restate.

A Yeah. I'm sorry about that. Are you asking were they pressured to report that they --

Q No. No. I'm asking if they were pressured to reschedule without first getting mutual agreement from the excavator?

A No. I would say completely the opposite. That we created across the entire company a speak-up culture that really encouraged compliance with all the requirements and that if you couldn't be in compliance, you should put that on the table and identify that issue.

Q Okay.

A So, if you go back to the creation of the Keys to Success meeting, we were very clear communication around that particular issue. Alex was in almost every one of those Keys to Success meetings once he joined our team. It was hardly a meeting that went by that I didn't say, because we had so many problems we were dealing with, we had all the problems on the Gas Transmission Network, all the problem on the Distribution Networks, things that the SED had no idea about that was going on, things like our rights-of-way that was completely abandoned for a 25-year period of time, we were dealing with all kinds of things, and I made it crystal clear at every single meeting that if you're having a problem meeting some requirements, bring it in the room. This is the place -- this is the safe place to do it. If you hide it, then you've got a problem, but bring it here and it's our collective problem and we're going to solve it.

And there's example, upon example, upon example that we changed that whole culture. Because the culture that was here prior to me coming to this company was a hide-it culture and don't-tell-anybody culture. And the culture that is there now is a speak-up and tell people that are wrong culture. And I can tell you that independently because I hired [redacted] [redacted] and his team that have come in here every five weeks for five to six years and they have unfettered access to everyone in the company, including the union and the community leadership. And they tell me that the speak-up culture here is unlike anything they've seen.

Lloyd's Register, there's been the

45 companies across the world, tell us that we have the best culture with our workforce here than any company that they visited all across the world. Now, does that mean every place and every pocket? But I can tell you unequivocally, unequivocally, that when people would identify problems and say, we are not compliant, we are not issued, they were celebrated. Celebrated.

In December of '11, we had a mapper identified 17 plat maps that we didn't do leak survey on. We self-reported that and we got a $16.8 million fine. And I issued an e-mail that -- to all employees after that $16.8 million fine came out and said this is exactly the behavior that we want. And I don't care if we are fined 17 million or 170 million, I want you to tell us what's going on, because I can't fix what we don't know about.

So there is absolutely no way that people should have felt pressured to misreport information because when they needed resources, they got them.

So, if we have pockets or issues, I think that they're isolated issues and we have got to get to the bottom of that. We have got to understand that. But overall culturally across Gas Operations in the company, that is universally the case.

I urge you to go out and see what goes on. I urge you to talk to [redacted] [redacted]. I urge you to talk to Lloyd's Register who have been here month after month after month for years to see the complete transformation of the culture.

So, I'm very passionate about this because I brought to this -- we brought -- we have it in our safety rules nonpunitive self-reporting -- nonpunitive self-reporting. If you self-identify issues, you will not suffer any consequences.

It used to be at PG&E that you got positive disciple. Do you know what that is? Positive discipline? You do something wrong, you get a letter to your file, you get suspended or terminated. I didn't even know what the term meant. We completely changed that and right in our safety rules we have that. We are all about nonpunitive self-reporting. We took that right from the airline industry and we imbedded that into our program. That was communicated to every leader in the company, including crew leaders of union crews were all trained on that.

The number of -- the number of

suspensions and terminations drastically dropped across the company. So that thing about fear and retribution, completely, completely changed from where it was.

I'm not saying that you can't change. It's really hard to change culture. It's hard to change everybody's sort of mindset and beliefs. You get mindset gravity that sets in, but I'm extraordinarily passionate about this because we have really worked hard to change all that.

I'm sorry I went on, but it's really been my core as a leader of this company to change all of that. And that's why I invite independent third parties to go out and assess and advise, because you can be blinded.

And that's why we created the AGA Peer-to-Peer Program. We went to AGA and said, "INPO, the nuclear industry, has this Peer Review Program. We need to create this." And we got tremendous resistance because the lawyers of all the companies didn't want to create the program. But we got it started. And we were the leading company. And we benefit greatly from it and it identified this problem. It was just a great example of why you need to do that. So we encourage that. We encourage that self-reporting of problems.

I need to take a break.

MR. GRUEN: Let's go off the record.

(Off the record.)

MR. GRUEN: Back on the record, please.

MR. BRUNO: A couple of quick questions.

EXAMINATION

BY MR. BRUNO:

Q Mr. Stavropoulos, before the break, I believe you mentioned Lloyd's.

A Yes, sir.

Q Could you elaborate on Lloyd's and their role?

A Sure. So, one of the best practices I brought to PG&E was the idea of an asset management framework, an asset management system framework. What I saw was we did not have a rigorous end-to-end asset management framework. What I mean by that is what you find for large asset intensive industries, gas and electric, airports, water, highway, things like that, right? What you find is that there's a real asset management structure. So, in its simplest form, it's know what you're responsible for. Know your assets. Know the condition of those assets. Understand what risks those assets face. Understand all the mitigation tools available to you to reduce that risk. Come up and use that risk framework to take resources that you have available to implement those mitigation measures and start all over again, right? That is sort of the asset management process.

So there's a -- at the time I came here, there was an international standard called PAS 55, p-a-s 55. That stands for publically available standard on asset management. And so I wanted to get the company certified under that standard. And there's a couple of international companies that you can use to certify you under that standard. Since then, PAS 55 became an ISO standard. It's slightly different, but it's very much the same. So it's now ISO 55,001.

So I brought Lloyd's in. They're based in London. It's not Lloyd's the insurance company. It's called Lloyd's Register and they do certification assessments under a variety of documents like PAS 55, ISO 55,000 globally. We brought them in and we did a gap assessment.

So there are 24 elements under PAS 55. We did a gap assessment against those 24 elements and then we developed a two-year improvement plan to close those gaps, because basically in order to get certified, you have to be in compliance with the 24 requirements, with a few exceptions around minor nonconformances. But when you have those minor nonconformances, you need to have a path to green, right? So it's not a fact that you have those. So they came in, did the original gap assessment. We were trying to get certified in 24 months. We actually got certified sooner than that. And then the requirement is that they come back annually to do a pulse check. In the three years, they come back and do a full recertification. That wasn't good enough for me. I wanted them to come back every six months.

And so Lloyd's come back every six months to do a certification check and we got completely recertified last year. So it was the end of a three-year cycle. And Lloyd's comes in. They look at and they meet with all your people as to how you're doing under your asset management framework, and then they go out to the field and they verify that, you know, is what's happening in the field, is it consistent with how you're operating? And they try to do that -- they do it through various parts of the territory. Sometimes they go to north, sometimes they go to the south. We have a 70,000-mile territory.

So that's what Lloyd's does. They do this for companies all over the world. The team we have, the leader of that team, [redacted], I think, he's been to 45 companies across the globe to take a look at their operations under their standard.

Q Yes, sir. Thank you.

Mr. Stavropoulos, you've mentioned both gaps and minor nonconformance.

A Uh-huh. (Affirmative response.)

Q Would late tickets fall under either one of those categories?

A So, late tickets would certainly be an item that they would look at. So, certification does not mean perfection. Certification means that you have a really good understanding of the things that I talked about. And that when you identify gaps to excellence, that you have a plan to make improvement.

One of the 24 elements of PAS 55, ISO 55,000 is you have to demonstrate continuous improvement. And so what you will see is -- so, an excellence is that, yeah, you know that you have this gap and, by the way, you're trying to fix it. Because what they look for is when, you know, there's not a structure in place. And so I don't know Lloyd's. I don't want to put myself in their shoes, but generally-speaking what they look for is when there is an issue, they're looking for: Do you have a plan? And when they come back, they hold you to that plan. In other words, did you give us a bedtime story or did you actually do what you say you're going to do?

And one of the other big things that we talk about is have a do-say ratio equal to one. One of the things I think that Lloyd's has told me is that every time they come back, they test our do-say ratio and they feel really good that we fix the things that we say we're going to fix. We have a real strong track record there.

But certification is not perfection of operations.

Q Yes, sir. I understand. Do you know if Lloyd's identified late tickets as an area for improvement?

A I don't recall that they did.

Q And if I understand a do-say ratio,

that is simply you say you're going to do something and you do it?

A Yes.

Q Following through, closing the loop?

A Whatever you commit to, you're going to try to do.

Q Okay. Mr. Stavropoulos, I also want to ask you just in terms of the safety culture, the freedom to bring up safety issues, air them out, don't hide them, are there any disincentives for people doing that at all that you know of?

A There used to be because we had a positive discipline approach, but we are very clear. We have a nonpunitive self-report system. We are very clear. When we actually have serious incidents on our system, we follow the practice of saying: Why did that happen? If our employee didn't follow a procedure, under the old system, we would have terminated the employee or suspended the employee or put a letter in their file. Now we ask: Why didn't that employee follow the procedure? Did they come to work that day saying, "Hey, I'm not going to do what I'm being asked to do." We ask ourselves were they trained properly? Maybe they were trained and qualified, but they hadn't done the work in a year and-a-half. Maybe the training was not adequate. Maybe they didn't have the right tools. Maybe they were fatigued that day. Maybe we didn't set them up for success. So we really start with the "Why?"

So when you look at our causal analysis of our serious injuries, our serious incidents, that's what you will see. And you're going to see we're trying to put in corrective actions. People make mistakes. We know this. We know this from high-hazard injuries. So our job is to identify engineering controls to prevent that what we know to happen, what's going to be a human-performance issue, can we prevent the incident from happening?

And so we really create that environment for people to speak up. As I indicated, the number of terminations and suspensions has dropped drastically over the last four years. So there was a big concern when we were moving from the positive discipline culture to the nonpunitive self-reporting culture. Sorry. I'm talking too fast.

And that in the beginning, there

was real concern because in the past they saw people getting terminated or suspended, that sort of thing. We put in place a Corrective Action Program. So we took from Diablo Canyon Nuclear Power Plant or Diablo Plant. They have had a correction action in place at that facility for over 20 years. The nuclear industry uses corrective action. The airline industry uses a Corrective Action Program. The chemical industry uses a Corrective Action Program.

So I took that system right out of Diablo, put it into Gas Operations three years ago. It's now deployed across the entire company. Everybody has on their phone CAP app. I will show you the app later. So everybody has on their phone an app. We have 40,000 submittals last year into that Corrective Action Program. I think a third of our employees issued some sort of report. Less than three percent of the submittals were anonymous. 97 percent plus put their name on and reported those issues. So to me that is real good signs of -- those are the types of things we are trying to create, but we're not satisfied.

We have embraced what we call a Speak Up, Listen Up, Follow Up culture. That has been part -- we came up with a new mission vision and cultural statements last year. And so we just issued our new codes of conduct built around that, but you hear that all the time in all our meetings, Speak Up, Listen Up, Follow Up. Because what we find is if you don't do the listen and the follow, people stop speaking up.

So those are some of the tools that -- we had to structurally change discipline and we did that. And then we had to give people an easy tool within which to report. We also communicate, there's a Compliance and Ethics Hotline that people can report into in addition to the CAP app. And also we communicate the CPUC hotline so they can communicate to you all. And then you may be aware that PG&E was assigned a monitor, a Federal monitor last year and we've created a hotline to the monitor. So there's four mechanisms within which employees can report. They can report to the CAP. They can report to the internal Compliance and Ethics Hotline. They can report to you or they can report directly to the monitor.

Q Yes, sir. Thank you.

A And we risk rank, all 40,000 of those. They come in, and by line of business we have daily, not every line of business every day, but the big lines of business, electric, gas, power gen, they have notification review team meetings that happen every day. They go into a room like this and every item that comes into CAP is ranked against a risk matrix from high, medium and low and assigned a corrective action owner. That gets processed. When it gets closed out, employees can use a Yelp-like feature and rate the effectiveness of the corrective action. So they can -- there's a continuous loop around. "All right. Here's what we did. Do you think it's going to work or not?" And so those are some of the things that we built in.

Q Mr. Stavropoulos --

A It's a hard name.

Q It is. Is any employee at PG&E evaluated on the late ticket metric?

A Nobody that I know of at my level down through the organization, so I don't know if late tickets are a metric that are used lower down in the organization.

Q As it relates --

A As a performance measuring metric.

Q And as it relates to performance -- individual performance evaluations --

A Yeah.

Q -- to your knowledge, late tickets is not one of those metrics?

A I want to be very clear. So, in the team that reports to me, I don't use that as a metric. We don't use that as a metric within which we pay our incentive comp, for example. So, that's not a metric.

We use damages per a thousand tickets. So, if people are paid through the Incentive Compensation Program, the target is set on damages per thousand tickets. So, the incentive, if you believe that late tickets increase the probability of a damage, the incentive that we pay people on is not to have late tickets. Because we're looking to have the lowest possible damages per a thousand. So, we're encouraging people to perform correctly against late tickets, but at some level down in the organization, they may use that metric on an individual scorecard. But our bargaining unit people don't go through the same performance appraisal process. So the people that actually do the locate and mark, they don't have that type of score card. They're not on a -- they don't get performance appraisals.] They are all part of the bargaining unit.

Q And, Mr. Stavropoulos, how about the manager of that unit? For instance, is the manager of locate and mark, are they either, you know, incentivized by getting a bonus for not having late tickets? Or penalized for having late tickets?

A No bonuses associated with that. The only bonus associated with damages is damages per a thousand tickets. That might be in their performance score card to evaluate your performance, but it doesn't effect your bonus at all.

Q And final question, Mr. Stavropoulos, the CAP program, Corrective Action Program, do you know if late tickets were brought as a concern to CAP?

A I don't know if it was. You know, I review a lot of that. I sit in on a lot of the notification review teams. You know, I hadn't heard that as an issue in CAP. Certainly was aware of the challenges that we were having with late tickets.

So you may have heard about the daily call. So one of the best practices I brought to the company, I actually stole shamelessly from Alaska Air, I was encouraged by [redacted], to go to Alaska Air. Because about 10 years ago, they had terrible plane crash where the jack screw failed and the plane crashed into the Pacific Ocean.

They were perceived as a company that really improved their safety culture and safety practices. And I got to witness their daily call where they have stations from all over North America participate. So we came back and built that daily call.

So every day, it's been going on for a number of years, from 7:30 to 8:00 o'clock every morning, about 300 leaders in the gas business go over the performance. You can dial in and listen. And damages are an agenda item on that call. And late tickets are an item on that call.

You know, how many late tickets did we have? What are we doing about it? Do you need help? How do you fix it? So that's where that was, sort of, reported.

Q Mr. Stavropoulos, do you call into those on occasion?

A I do. I used to call into them all the time.

Q And the late tickets number, are they consistent with the revised numbers that we have? Or are you still surprised of the magnitude of the numbers that we put in front of you?

A As I indicated, I wasn't happy with the 13,000. And 46,000 certainly was a surprise to me.

Q So that's the first time you've heard of it?

A Yes.

Q Thank you, Mr. Stavropoulos.

A Yeah. I would have heard of it earlier, but I've been kind of quarantined from the process because of what's going on. I hope you understand the value in that.

Q Yes, sir.

MR. GRUEN: Q Mr. Stavropoulos, I'm going to show you the January 17th -- excuse me -- January 2017 Gas Operations BPR Keys to Success Report one more time.

A Sure.

Q And I would just like to call your attention to one other thing there. And I've got it open to the page.

Off the record for a second?

(Off the record.)

MR. GRUEN: Back on the record. Just for the sake of housekeeping, the Frequently Asked Questions document -- let me show Mr. Stavropoulos this, just for purposes of marking. I'm identifying this as Exhibit 10, noting that it’s the PG&E Frequently Asked Questions document. We had noted there's a PG&E logo, dated 2014 in the upper right corner, and I believe you, Mr. Stavropoulos, also noted there's a copyright, PG&E 2015, all rights reserved at the bottom.

Am I describing the document accurately?

A Very well.

Q Thank you.

(Exhibit No. 10 was previously marked for identification.)

MR. GRUEN: Q And, Mr. Stavropoulos, do you have the Keys to Success report from January 2017 in front of you?

A I have it.

Q And -- I think it should be turned for you to page 140 at the bottom. It’s also shown to be page 6 of 16.

Do you see that?

A Yes, sir.

Q So if look at the 2015 column and 2016 column in that graph under the late tickets heading -- do you see that?

A I do.

Q Okay. And in 2015 it shows 3,385 late tickets. And in 2016 it shows only 44.

Do you see that?

A I do.

Q And a percent change of 99 percent?

A Yes.

Q Under the percent change column there. Do you see that as well?

A I do.

Q Okay. Does it surprise you to see a change of 99 percent in late tickets from one year to the next like that?

A It’s a big improvement. But we've achieved that in a whole number of areas.

Q And I -- but, specifically, for late tickets. The -- in light of the -- let's look at it, first, from the perspective of the late tickets that have been reported to us as of last year.

Does this number seem like, based on the Keys Reports, the realtime reporting of late ticket information, does it seem that this is a realistic decrease from 2015 to 2016 to you?

A It certainly -- we've seen improvement results across lots of categories of work like that when we put focus on it.

Q Okay.

A So, yeah. It’s hard for me to -- I mean, I'm not close enough to it, you know.

Q Okay. Who do you think would be

the closest person to ask that question to? Or maybe we can ask that question offline if you're not familiar?

A No. This is Jesus Soto's meeting. So Jesus is the person that is running the SAR and is implementing the process improvements relating to our overall damage prevention efforts. So he would be better to do that than I would.

Q Understood. Okay. Thank you.

A But, you know, big improvements. I remember back a number of years ago, we had days to map distribution facilities. I think our average days to map were about 400 days with the longest being 774 days. In one year we got that down to 26 days.

We had 12,000 Grade 2 two leaks on our books at the end of the year four years ago. And we got that to under a hundred within a two-year period of time. It went from 12,000 leaks to under a hundred, while deploying more advanced leak detection technology and increasing the frequency of your leak detection.

So, you know, when we put our focus on things, we really do see significant improvement. So...

Q Okay.

A Yeah.

Q Thank you. That's all I have for that exhibit.

MR. GRUEN: Just a bit of housekeeping while we're on the record, if I may. Let's go off the record for a moment while we get it together.

(Back on the record.)

MR. GRUEN: So we'll move to mark Exhibits 5, 6, 7, 8, 9, 10, and those exhibits as they were identified in the record throughout the course of the day.

Off the record.

(Off the record.)

MR. GRUEN: So back on the record.

Mr. Stavropoulos, that concludes the Examination Under Oath. I want to, on behalf of the Safety Enforcement Division, thank you very much for your attendance. I recognize that it's required, but also recognize your point about cooperating with us. You've been cooperative with us today. We appreciate you talking the time out of your busy schedule to be with us.

And thank you, that concludes the EUO.

MR. STAVROPOULOS: Thank you.

MR. GRUEN: Off the record.

(Off the record.)

(Whereupon, at the hour of 2:39 p.m., this matter having been concluded at San Francisco, California, the Commission then adjourned.)]

* * * * *

BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE
STATE OF CALIFORNIA

PRE-FORMAL INQUIRY INTO PG&E'S LOCATE AND MARK PRACTICES AND PROCEDURES.	))))))

CERTIFICATION OF TRANSCRIPT OF PROCEEDING

I, Carol A. Mendez, Certified Shorthand Reporter No. 4330, in and for the State of California do hereby certify:

That, prior to being examined, NICK STAVROPOULOS, the witness named in the foregoing examination under oath, was by me duly sworn to testify the truth, the whole truth, and nothing but the truth;

That said examination under oath was taken by subpoena at the time and place therein set forth;

And that the pages of this transcript reported by me comprise a full, true and correct transcript of the testimony given by the witness on March 2, 2018.

I further certify that I have no interest in the events of the matter or the outcome of the proceeding.

EXECUTED this 2nd day of March, 2018.

____
Carol A. Mendez
CSR No. 4330

BEFORE THE PUBLIC UTILITIES COMMISSION

OF THE

STATE OF CALIFORNIA

PRE-FORMAL INQUIRY INTO PG&E'S LOCATE AND MARK PRACTICES AND PROCEDURES.	))))))

CERTIFICATION OF TRANSCRIPT OF PROCEEDING

I, Karly Powers, Certified Shorthand Reporter No. 13991, in and for the State of California do hereby certify:

That, prior to being examined, NICK STAVROPOULOS, the witness named in the foregoing examination under oath, was by me duly sworn to testify the truth, the whole truth, and nothing but the truth;

That said examination under oath was taken by subpoena at the time and place therein set forth;

And that the pages of this transcript reported by me comprise a full, true and correct transcript of the testimony given by the witness on March 2, 2018.

I further certify that I have no interest in the events of the matter or the outcome of the proceeding.

EXECUTED this 2nd day of March, 2018.

____
Karly Powers
CSR No. 13991

ATTACHMENT 14

Index 9623.03 - On-Time & Late Tickets January 2014 - June 2016

	2014		2015		January - June 2016	
Division	**On Time**	**Late**	**On Time**	**Late**	**On Time**	**Late**
Central Coast	18,659	320	21,684	59	12,191	0
DeAnza	17,871	369	21,770	73	12,764	1
Diablo	24,072	248	31,210	67	15,973	5
East Bay	22,681	1,357	28,120	179	18,867	4
Fresno	31,704	122	37,774	80	19,973	0
Humboldt	8,726	695	11,633	706	4,907	0
Kern	48,152	1,275	42,468	285	20,277	1
Los Padres	15,878	603	17,260	33	10,225	0
Mission	19,267	240	24,251	20	14,099	1
North Bay	19,965	370	23,694	85	12,510	3
North Valley	19,745	201	24,386	34	10,421	0
Peninsula	22,468	481	26,912	88	14,932	0
Sacramento	60,343	82	72,537	35	40,422	2
San Francisco	14,964	878	18,152	165	11,222	1
San Jose	27,295	236	32,123	48	18,217	0
Sierra	26,387	1,953	32,431	127	15,022	1
Sonoma	13,918	290	15,110	221	8,069	1
Stockton	22,390	1,920	34,423	595	16,831	0
Yosemite	31,758	1,751	38,489	485	18,950	0
Total	**466,243**	**13,391**	**554,427**	**3,385**	**295,872**	**20**

ATTACHMENT 15

Index 9623.03 - 2013 On-Time & Late Tickets

Division	On Time	Late
Central Coast	16,584	73
DeAnza	17,137	262
Diablo	24,386	99
East Bay	20,596	1,118
Fresno	29,662	141
Humboldt	8,352	335
Kern	43,927	473
Los Padres	14,279	1,750
Mission	18,001	158
North Bay	18,657	303
North Valley	19,227	91
Peninsula	19,935	1,601
Sacramento	61,255	74
San Francisco	13,744	330
San Jose	24,897	2,397
Sierra	21,546	202
Sonoma	13,673	94
Stockton	19,753	3,246
Yosemite	29,409	800
Total	**435,020**	**13,547**

ATTACHMENT 16

Chan, Wai-Yin

From: Khatri, Sikandar
Sent: Friday, March 24, 2017 4:36 PM
To: Bruno, Kenneth; Lee, Dennis M.; Chan, Wai-Yin; Gruen, Darryl
Subject: FW: Index 10658: Data Request – Damage Prevention (f/u 10516, 10279, 10592)

Response below for our earlier data request

Sikandar

From: [redacted]
Sent: Friday, March 24, 2017 2:32 PM
To: Khatri, Sikandar
Cc: Richmond, Susie
Subject: Index 10658: Data Request – Damage Prevention (f/u 10516, 10279, 10592)

Sikandar,

Please see below for the response to your Index 10658: Data Request – Damage Prevention (f/u 10516, 10279, 10592).

Gas Operations Data Response

PG&E Data Request Index No.:	10658		
Request Date:	03-13-2017	Date Sent:	03-24-2017
Requesting Party:	GOST-CPUC SED/CPSD		
External Requester:	Sikandar Khatri	PG&E Contact:	[redacted]

QUESTION 10658.01: We understand from CPUC Damage Prevention Audit of PG&E in 2015 that PG&E produces a monthly report called “Keys Report” titled as “T&D Operations Compliance July 2015 for June 2015 Results

Includes Damage Prevention (DP), Public Awareness (PA), Locate & Mark and Aerial Patrol”.

We will appreciate if you can please provide copies of this report for each month of 2012 – February 2017.

RESPONSE 10658.01: PG&E is compiling this information and will provide it as soon as it becomes available.

QUESTION 10658.02: For the following years (please provide response for each year separately), please provide steps and actions taken to reduce the number of late tickets together with the statistics reflecting total number of USA tickets and corresponding late tickets:

(a) 2013

(b) 2014

(c) 2015

(d) 2016

RESPONSE 10658.02:

a) In 2013, the Locate & Mark (L&M) Leadership focused on assessing the challenges in the L&M organization and determining the best course for addressing them. The specific challenges were a dramatic increase in the number of USA tickets and the organization’s ability to respond to this increase. Toward the end of 2013, a new leadership structure was developed for implementation in 2014, which would address these challenges.

See the below table for 2013 L&M late ticket statistics.

PG&E Completed Tickets 2013	
On-Time	435,020
Late	13,547
Total	448,567

b) Prior to 2014, the L&M function was imbedded in the division organization. In 2014, the L&M function was placed under the newly created Compliance Programs Director and the Locate & Mark Superintendent. Within the new leadership structure, supervisor positions were introduced across PG&E’s system, which would allow a singular focus on the safety of our assets, and quality and efficiency within the L&M organization. As supervisors came onboard, they were tasked with assessing their local L&M Operation and ensuring that safety, quality, and efficiency goals were met. Even though completed tickets increased, late tickets began to be addressed and declined. Later in the year, PG&E also significantly increased the number of locaters assigned to the work by increasing employee headcount across the system and bringing on contract locaters to assist with the peak workload. This increased headcount also contributed to the late ticket improvement.

See the below table for 2014 L&M late ticket statistics.

PG&E Completed Tickets 2014	
On-Time	466,243
Late	13,391
Total	479,634

c) In 2015, all L&M supervisors were in place and goals were set to aggressively reduce late tickets. PG&E established a zero late tickets goal and undertook several actions to ensure this took place, such as:

- Looking at best practices within successful divisions and communicating these practices system wide.
- Supervisors taking a direct, hands-on approach to educate the locators regarding accurate and timely data entry into Irthnet and ensuring late tickets were appropriately addressed.

Late tickets were virtually eliminated by mid-2015 and have remained low ever since.

See the below table for 2015 L&M late ticket statistics.

PG&E Completed Tickets 2015	
On-Time	554,427
Late	3,385
Total	557,812

d) In 2016, PG&E continued the actions set in place in 2015. With zero late tickets realized in several divisions, each late ticket was analyzed for root cause, and corrective actions were taken to ensure that a recurrence would not happen. The small number of late tickets can be primarily attributed to tablet computer connectivity issues or failure by the Locater to enter the proper keystrokes. Many of the tickets were completed on time, but the correct information was not entered in a timely fashion.

See the below table for 2016 L&M late ticket statistics.

PG&E Completed Tickets 2016	
On-Time	595,390
Late	44
Total	595,434

[redacted] | Pacific Gas and Electric
Office: [redacted] | Cell: [redacted] | [redacted]

ATTACHMENT 17

PACIFIC GAS AND ELECTRIC COMPANY
Gas Operations Data Response

PG&E Data Request Index No.:	11718		
Request Date:	02-06-2018	Date Sent:	02-23-2018
Requesting Party:	CPUC-SED		
External Requester:	Wai-Yin "Franky" Chan	PG&E Contact:	Mike Bradley

QUESTION 11718.01: On December 20, 2017, PG&E stated,

"*Using the updated information available to us from the recent improvements to IrthNet, we are planning to review all of the data request responses that we have provided to SED on locate and mark issues since mid-2016, and to revise these responses as needed to reflect updated historical late ticket numbers and any other information based upon those numbers. Given the volume of data requests in this matter to date, this may take some time, but our goal is to provide these updated responses to SED in January.*"

On January 26, 2018, PG&E followed up on its December, 2017 statement, saying,

"*My December 20th email to you indicated that we are reviewing all of the data request responses that we have provided to the SED on locate and mark issues since mid-2016, and that we would be revising the responses to reflect updated historical late ticket numbers and any other information based upon those numbers. To be clear, we also will be correcting representations in those responses that the Guidepost investigation indicates, or that we otherwise determine, need to be revised, not just the late ticket numbers and related information.*"

With these statements in mind, please provide the following information:

a. The updated historical late ticket numbers referenced in the January 26, 2018 statement.
b. The methodology used by PG&E for determining the late ticket numbers that were initially reported to SED.
c. The methodology used by PG&E for determining the "updated historical late ticket numbers" that PG&E references in the December 20, 2017 email.
d. The categories of the data that PG&E is updating, including, but not limited to:
    a. Counts of late tickets by division and district.
e. A breakdown of the data that PG&E is updating by year.

RESPONSE 11718.01: As noted in the correspondence referenced herein, PG&E is reviewing the logic that was used to derive historical late ticket counts from IrthNet and is working to determine more inclusive logic to derive revised historical late ticket counts from IrthNet. A third-party consulting firm, Bates White, has been retained to aid in understanding the IrthNet system and developing and validating this logic. Once this revised logic is finalized and reviewed by Bates White, PG&E will update this response to explain how the revised ticket counts were derived based on the information available in IrthNet and provide the resulting data. We anticipate that this data will be able to be broken down by month and division.

At present, as explained above, we anticipate revising historical late ticket numbers from 2012 through 2017. PG&E is continuing to assess its IrthNet reporting logic to identify the actions that could be taken on a ticket that would have caused it to be misclassified. As those conditions are identified, the total number of late tickets identified may change. PG&E expects that its current estimates of 44,794 late tickets out of 760,177 total tickets received in 2012, of 51,272 late tickets out of 671,015 total tickets received in 2013, 47,589 late tickets out of 702,275 total tickets received in 2014, 61,114 late tickets out of 820,455 total tickets received in 2015, and 55,666 late tickets out of 898,120 total tickets received in 2016 will change as PG&E's work continues and the logic of its IrthNet search function becomes more refined. The current estimates reflect tickets from this period that had no initial response and are past the due date time, that had an ongoing response and are past the due date time, or that have a completed response but the completed response was after the due date time.

As to (b), as we previously explained in our response to Index No. 10895.01 (delivered to the SED on June 9, 2017), the late ticket numbers we initially reported to SED for January-June 2016 were queried from IrthNet using the "Past Due Ticket Listing" function. For late ticket numbers prior to January 2016, we utilized the Organizational Reporting Initiative ("ORI"), which is a repository for portions of IrthNet data and SAP data. PG&E has determined that those search functions operated in a manner that would not count tickets as late if the personnel took certain actions in IrthNet prior to the ticket's start time, even if the required locating and marking activities were not completed within the required timeframe.

QUESTION 11718.02: Will the "updated historical late ticket numbers" referenced in PG&E's December 20, 2017 statement show an upward adjustment of the late ticket numbers in each category identified in response to question 1? If not, please identify any category that will see a downward adjustment.

RESPONSE 11718.02: PG&E is continuing to assess its IrthNet reporting logic to identify actions that could be taken on a ticket that cause it to be misclassified. As those conditions are identified, the number of instances at issue may change.

QUESTION 11718.03: Please provide a list identifying each past data request response that PG&E plans to update and/or revise. Please provide an explanation for each update or revision.

RESPONSE 11718.03: Because PG&E's review of the data in consultation with Bates White and, as previously discussed with SED, the Guidepost review are ongoing, PG&E is still in the process of determining the responses that may need to be updated or revised beyond the data discussed above.

QUESTION 11718.04: Please provide, in chronological order, all communications (including emails, messages, reports included Joel Dickson, John Higgins, Jesus Soto, or Nickolas Stavropoulos related to the following:

a. Intentional under-reporting of late tickets
b. Falsification of locate and mark records
c. Any instances of intentional under-reporting of late tickets
d. Any instances of potential falsification of locate and mark records
e. Prior to the Guidepost investigation, matrices for counting late tickets that differed from the matrix PG&E used to count late tickets.
f. Prior to PG&E's own internal Guidepost investigation, approaches for counting late tickets that differed from the approach that PG&E used to count late tickets.

RESPONSE 11718.04: On February 16, 2018, Charles Middlekauff from PG&E and Darryl Gruen from SED agreed to modify this request. That agreement was reflected in a series of e-mails and on February 19, 2018, PG&E provided to SED a red-line version of this request. PG&E and SED agreed to the following revised version.

> *Please provide, in chronological order, all communications from January 1, 2012 through December 31, 2017 (including emails, messages, reports and other documents) on which John Higgins, Jesus Soto, or Nickolas Stavropoulos were included related to the following:*
>
> a. *Intentional under-reporting of late tickets*
> b. *Falsification of locate and mark records*
> c. *Any instances of intentional under-reporting of late tickets*
> d. *Any instances of potential falsification of locate and mark records*
> e. *Prior to the Guidepost investigation, matrices for counting late tickets that differed from the matrix PG&E used to count late tickets, where the communication contains (matri! /10 (option! or alternative!)).*
> f. *Prior to PG&E's own internal Guidepost investigation, approaches for counting late tickets that differed from the approach that PG&E used to count late tickets, where the communication contains (matri! /10 (option! or alternative!)).*
>
> *In addition, PG&E and SED agreed to include the following request to Question 11718.04:*
>
> *Please provide, in chronological order, all communications from January 1, 2014 through December 31, 2016 (including emails, messages, reports and other documents) on which Joel Dickson was included related to the following:*
>
> a. *Intentional under-reporting of late tickets, where the communication contains (falsify falsification false).*
> b. *Falsification of locate and mark records, where the communication contains (falsify falsification false).*
> c. *Any instances of intentional under-reporting of late tickets, where the communication contains (falsify falsification false).*
> d. *Any instances of potential falsification of locate and mark records, where the communication contains (falsify falsification false).*
> e. *Prior to the Guidepost investigation, matrices for counting late tickets that differed from the matrix PG&E used to count late tickets, where the communication contains (matri! /10 (option! or alternative!)).*
> f. *Prior to PG&E's own internal Guidepost investigation, approaches for counting late tickets that differed from the approach that PG&E used to count late tickets, where the communication contains (matri! /10 (option! or alternative!)).*

Based on this agreed to revision, PG&E is producing documents responsive to these requests to SED. PG&E and SED also agreed that the document production would be on a rolling basis and would be completed by February 26, 2018. Provision of these documents does not reflect a determination that the document indicates any employee's knowledge of falsification or intentional under-reporting of locate and mark records or late tickets, but rather reflects PG&E's effort to provide documents that relate to the topics identified in the data request and our discussions with SED as areas of SED's interest.

QUESTION 11718.05: Please identify the first date PG&E became communicated internally about falsification of late tickets. Please provide that communication

.**RESPONSE 11718.05:** PG&E is separately providing email correspondence from a variety of custodians that includes correspondence relating to instances in which an 811 ticket was reported in PG&E's IrthNet system as timely based on actions taken in the IrthNet system other than the completion of the ticket within the time required by California Government Code Section 4216, including correspondence (to the extent any such correspondence exists) responsive to SED's requests regarding the falsification of locate and mark records. Provision of these documents does not reflect a determination that the document indicates any employee's knowledge of falsification or intentional under-reporting of locate and mark records or late tickets, but rather reflects PG&E's effort to provide documents that relate to the topics identified in the data request and our discussions with SED as areas of SED's interest. These documents are being provided in response to Question 11718.04 above. In addition, PG&E will provide the results of the independent review currently being conducted by Guidepost Solutions LLC regarding these issues.

QUESTION 11718.06: Did anyone employed by PG&E authorize the method of PG&E's late ticket counting that PG&E intends to revise to reflect "updated historical late ticket numbers and any other information based upon those numbers"? If so, please identify all such employees and the communications they issued to make such authorizations.

RESPONSE 11718.06: PG&E has identified instances in which PG&E personnel and/or contractors took actions on an IrthNet ticket that caused the system's then-current reporting logic to classify the ticket as timely when it was not completed within the required timeframe. PG&E will provide the results of the independent review currently being conducted by Guidepost Solutions LLC regarding these issues.

QUESTION 11718.07: Did PG&E have a practice, procedure, policy or other PG&E document in place that authorized the method of PG&E's late ticket counting that PG&E intends to revise to reflect "updated historical late ticket numbers and any other information based upon those numbers"? If so, please list all such practices, procedures, policies and PG&E documents, and provide them.

RESPONSE 11718.07: PG&E policy did not authorize employees to take actions in the IrthNet system that were designed to result in a ticket being classified in IrthNet as timely when it was not actually completed within the time required by California Government Code Section 4216. To the extent that any such activity occurred as a matter of practice, PG&E will provide the results of the independent review currently being conducted by Guidepost Solutions LLC regarding these issues.

ATTACHMENT 18

Reports showing details about each incident are available by clicking on any blue link in the report below.

Pipeline Incidents By Cause

Date run: 6/5/2018

Portal - Data as of **6/4/2018**
Data Source: US DOT Pipeline and Hazardous Materials Safety Administration

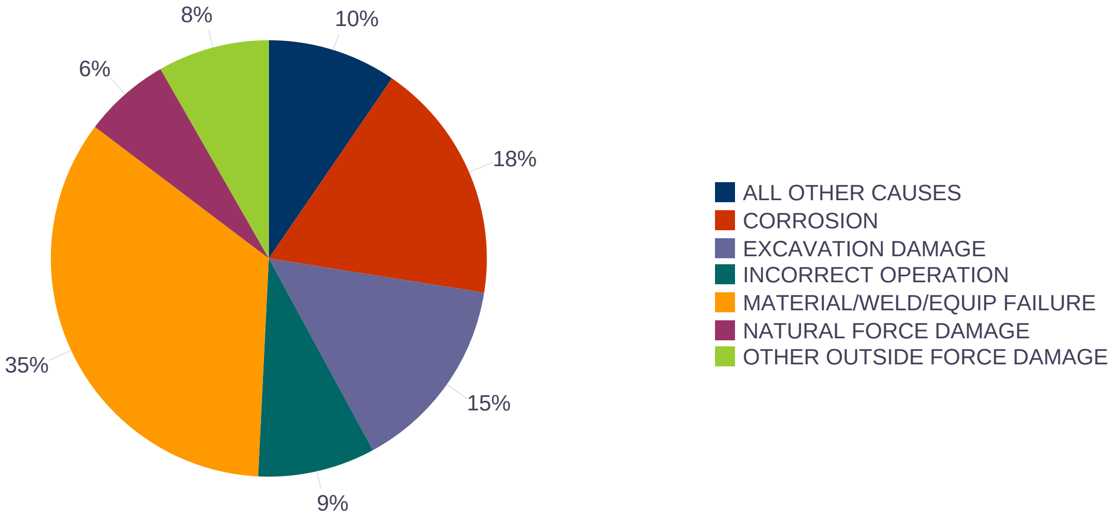
All Reported Incident Cause Breakdown: 20 Year Average (1998-2017)
System Type: (All Column Values) **State:** (All Column Values)

Reported Cause of Incident	Incident Cause SubType	Number	%	Fatalities	Injuries	Total Cost	Barrels Spilled	Net Barrels Lost
ALL OTHER CAUSES	MISCELLANEOUS	894	7.6%	48	194	$426,570,390	229,700	84,604
	UNKNOWN	228	1.9%	39	96	$128,429,013	28,751	19,212
	UNSPECIFIED NATURAL OR OUTSIDE FORCE DAMAGE	1	0.0%	0	0	$50,000	0	0
ALL OTHER CAUSES Total		**1,123**	**9.6%**	**87**	**290**	**$555,049,403**	**258,451**	**103,816**
CORROSION	EXTERNAL	788	6.7%	7	51	$545,212,307	169,926	133,034
	INTERNAL	1,035	8.8%	13	4	$409,720,144	160,605	41,172
	UNSPECIFIED CORROSION	288	2.4%	1	11	$5,632,845	5,338	3,425
CORROSION Total		**2,111**	**18.0%**	**21**	**66**	**$960,565,296**	**335,868**	**177,631**
EXCAVATION DAMAGE	OPERATOR/CONTRACTOR EXCAVATION DAMAGE	213	1.8%	2	38	$50,981,495	70,772	51,663
	PREVIOUS DAMAGE DUE TO EXCAVATION	37	0.3%	0	5	$44,349,814	13,369	4,142
	THIRD PARTY EXCAVATION DAMAGE	1,432	12.2%	91	309	$442,587,130	252,347	180,259
	UNSPECIFIED EXCAVATION DAMAGE	31	0.3%	1	0	$3,714,895	9,692	3,181
EXCAVATION DAMAGE Total		**1,713**	**14.6%**	**94**	**352**	**$541,633,334**	**346,180**	**239,245**
INCORRECT OPERATION	DAMAGE BY OPERATOR OR OPERATOR'S CONTRACTOR	34	0.3%	5	20	$12,755,297	1,997	1,528
	INCORRECT EQUIPMENT	17	0.1%	0	1	$2,163,599	44	28
	INCORRECT INSTALLATION	101	0.9%	0	2	$18,886,949	5,851	2,662
	INCORRECT OPERATION	268	2.3%	12	68	$45,687,667	83,653	26,329
	INCORRECT VALVE POSITION	117	1.0%	1	2	$15,021,541	16,429	14,180
	OTHER INCORRECT OPERATION	168	1.4%	2	38	$101,764,316	13,193	5,076
	OVERFILL/OVERFLOW OF TANK/VESSEL/SUMP	87	0.7%	0	0	$31,828,040	4,725	1,538
	PIPELINE/EQUIPMENT OVERPRESSURED	46	0.4%	0	0	$17,112,189	16,727	13,962
	UNSPECIFIED INCORRECT OPERATION	185	1.6%	0	20	$1,364,832	236	90
INCORRECT OPERATION Total		**1,023**	**8.7%**	**20**	**151**	**$246,584,430**	**142,856**	**65,393**
MATERIAL/WELD/EQUIP FAILURE	BODY OF PIPE	84	0.7%	3	22	$44,179,053	8,778	2,629
	BUTT WELD	74	0.6%	0	2	$47,290,892	37,362	28,247
	COMPRESSION FITTING	6	0.1%	0	0	$1,266,840	0	0
	COMPRESSOR OR COMPRESSOR-RELATED EQUIPMENT	23	0.2%	0	1	$10,564,562	0	0
	CONSTRUCTION, INSTALLATION OR FABRICATION-RELATED	201	1.7%	0	0	$109,079,709	81,626	78,429
	DEFECTIVE OR LOOSE TUBING/FITTING	79	0.7%	0	0	$13,740,013	3,550	1,847
	ENVIRONMENTAL CRACKING-RELATED	62	0.5%	0	3	$1,013,128,130	60,972	35,778
	FAILURE OF EQUIPMENT BODY	79	0.7%	1	0	$14,547,918	3,672	520

Reported Cause of Incident	Incident Cause SubType	Number	%	Fatalities	Injuries	Total Cost	Barrels Spilled	Net Barrels Lost
MATERIAL/WELD/EQUIP FAILURE	FILLET WELD	30	0.3%	0	0	$21,857,776	2,792	1,439
	FUSION JOINT	9	0.1%	0	5	$1,605,252	0	0
	JOINT/FITTING/COMPONENT	204	1.7%	2	7	$67,767,912	32,680	20,803
	MALFUNCTION OF CONTROL/RELIEF EQUIPMENT	560	4.8%	1	4	$83,180,427	48,220	22,955
	MANUFACTURING-RELATED	111	0.9%	8	51	$762,314,646	44,938	31,399
	MECHANICAL FITTING	11	0.1%	1	6	$2,242,043	0	0
	NON-THREADED CONNECTION FAILURE	368	3.1%	0	2	$71,237,477	28,222	11,799
	OTHER EQUIPMENT FAILURE	267	2.3%	2	3	$34,968,384	41,320	12,539
	OTHER PIPE/WELD/JOINT FAILURE	8	0.1%	0	2	$928,499	0	0
	PIPE SEAM	66	0.6%	2	7	$80,136,743	114,348	91,286
	PUMP OR PUMP-RELATED EQUIPMENT	335	2.8%	0	0	$15,905,725	9,004	1,565
	RUPTURED OR LEAKING SEAL/PUMP PACKING	150	1.3%	0	3	$42,840,770	24,747	10,914
	THREADED CONNECTION/COUPLING FAILURE	214	1.8%	1	1	$25,163,502	15,943	7,416
	THREADS STRIPPED, BROKEN PIPE COUPLING	82	0.7%	0	4	$10,223,806	20,592	14,608
	UNSPECIFIED EQUIPMENT FAILURE	756	6.4%	0	0	$4,783,264	979	500
	UNSPECIFIED MATERIAL/WELD FAILURE	217	1.8%	1	19	$16,989,545	175	102
	UNSPECIFIED PIPE BODY OR SEAM	27	0.2%	0	0	$68,446,328	38,142	29,907
	UNSPECIFIED WELD	29	0.2%	0	0	$9,053,350	13,047	7,328
	VALVE	6	0.1%	0	0	$1,563,846	0	0
MATERIAL/WELD/EQUIP FAILURE Total		**4,058**	**34.5%**	**22**	**142**	**$2,575,006,412**	**631,109**	**412,011**
NATURAL FORCE DAMAGE	EARTH MOVEMENT	142	1.2%	10	85	$307,879,536	23,588	15,351
	HEAVY RAINS/FLOODS	200	1.7%	0	1	$1,027,245,597	72,926	46,073
	HIGH WINDS	61	0.5%	1	0	$402,156,311	41,301	15,861
	LIGHTNING	95	0.8%	4	1	$56,106,103	27,097	20,948
	OTHER NATURAL FORCE DAMAGE	30	0.3%	1	5	$28,210,809	1,253	795
	TEMPERATURE	163	1.4%	9	18	$28,912,876	9,561	4,503
	UNSPECIFIED NATURAL FORCE DAMAGE	64	0.5%	0	1	$11,001,976	6,083	3,269
NATURAL FORCE DAMAGE Total		**755**	**6.4%**	**25**	**111**	**$1,861,513,208**	**181,809**	**106,800**
OTHER OUTSIDE FORCE DAMAGE	ELECTRICAL ARCING FROM OTHER EQUIPMENT/FACILITY	37	0.3%	0	11	$75,128,859	3,616	165
	FIRE/EXPLOSION AS PRIMARY CAUSE	279	2.4%	27	35	$95,850,846	13,065	12,805
	FISHING OR MARITIME ACTIVITY	10	0.1%	1	0	$16,847,993	23,702	23,702
	INTENTIONAL DAMAGE	44	0.4%	4	17	$7,637,351	4,833	2,771
	MARITIME EQUIPMENT OR VESSEL ADRIFT	6	0.1%	0	0	$17,442,913	2,245	2,244
	OTHER OUTSIDE FORCE DAMAGE	80	0.7%	1	14	$105,096,721	9,273	1,510
	PREVIOUS MECHANICAL DAMAGE	27	0.2%	0	1	$24,656,301	8,720	5,857
	UNSPECIFIED OUTSIDE FORCE DAMAGE	119	1.0%	4	9	$24,802,596	27,945	27,918

Reported Cause of Incident	Incident Cause SubType	Number	%	Fatalities	Injuries	Total Cost	Barrels Spilled	Net Barrels Lost
OTHER OUTSIDE FORCE DAMAGE	VEHICLE NOT ENGAGED IN EXCAVATION	371	3.2%	27	96	$146,344,089	13,091	9,687
OTHER OUTSIDE FORCE DAMAGE Total		**973**	**8.3%**	**64**	**183**	**$513,807,669**	**106,490**	**86,659**
Grand Total		**11,756**	**100.0%**	**333**	**1,295**	**$7,254,159,752**	**2,002,762**	**1,191,555**

All Reported Incident Cause Breakdown 20 Year Average (1998-2017)
System Type: (All Column Values) **State:** (All Column Values)



ATTACHMENT 19

Chan, Wai-Yin

From:	[redacted]
Sent:	Thursday, November 02, 2017 8:11 AM
To:	Chan, Wai-Yin
Cc:	Bruno, Kenneth; Lee, Dennis M.; Bradley, Mike; Gruen, Darryl; Khatri, Sikandar; Pendleton, Jonathan (Law); Richmond, Susie
Subject:	RE: [Index 11333supp01] RE: SED Data Request - PG&E Damage Prevention Program
Attachments:	Index 11333 Supp01_Confidentiality Declaration.pdf; Index 11333-03_2012-20171010_RT Procedures_SUPP01 CONF.ZIP; Index 11333-03_List of RT Procedures 2012-20171010.xlsx; Index 11333-04_Late Ticket Attachment Sources.xlsx

Franky,

Please see below for the supplemental response to Index 11333.

PG&E is providing this response pursuant to Public Utilities Code §583 because this response and/or the attached documents contain information that should remain confidential and not be subject to public disclosure as it contains one or more of the following: critical infrastructure information that is not normally provided to the general public, the dissemination of which poses public safety risks (pursuant to the Critical Infrastructures Information Act of 2002, 6 U.S.C. §§131-134); sensitive personal information pertaining to PG&E employees; customer information; or commercially sensitive/proprietary information. This information is highlighted yellow below and, if feasible, highlighted yellow or outlined in red in the referenced attachments.
See attached declaration supporting confidential designation ("Index 11333 Supp01_Confidentiality Declaration.pdf").

QUESTION 11333.03: Please provide PG&E's standards and/or procedures (from year 2012 to present) on renegotiating a new start time ("due date") for a USA ticket with the requestor. In answering the following questions, please refer to the applicable standards and/or procedures that show the answer. Please include the applicable section numbers and page numbers. Please also identify each applicable standard, practice and procedure that answers the question, including the date it was made effective.

a. From year 2012 to present, what are PG&E's practices, standards and procedures for a locator to renegotiate a new start time if the requestor cannot be reached by phone call?
b. From year 2012 to present, are there a minimum number of times that a locator is required to call the requestor if previous attempts to reach the requestor failed? If there are a minimum number of attempts that a locator needs to make, please provide PG&E's standards and/or procedures that contain this information.
c. From year 2012 to present, does PG&E track how many attempts a locator makes to reach the requestor by phone call before the locator is allowed to renegotiate a new start time. If yes, please provide this information.
d. From year 2012 to present, if a locator cannot reach the requestor by phone call with three attempts or more, what is PG&E's procedure for the locator? Is it acceptable to adjust the "due date" or close the ticket without performing locate and mark after three call attempts according to PG&E's procedure? If yes, please provide PG&E's standards and/or procedures that contain this information.
e. From year 2012 to present, did any PG&E standards, practices, and/or procedures say anything related to the topic of phased tickets being used to avoid a ticket from showing up as late?

RESPONSE 11333.03:

a. At present (as of October 10, 2017), TD-5811P-102 Rev.2a and TD-5811P-105-JA01 Rev.1 provide guidance for when a requestor cannot be reached (see pages 5 and 6, section 3 of TD-5811P-102 Rev.2a and page 6, section 13 of TD-5811P-105-JA01 Rev.1). If the requestor cannot be reached, then the locator must immediately notify their supervisor and document details in the USA ticket. The internal practice of a supervisor would then be to assist the locator in contacting excavators who requested a ticket and were difficult to reach. If the requestor could not be reached by the start time, the ticket would be considered late. In addition to the aforementioned guidance, a section exists in PG&E procedures on the topic of 'no response from excavator' when additional information is needed before a locator could place marks (see page 6, section 12 of TD-5811P-105-JA01 Rev.1).

Note:

- TD-5811P-102 Rev.2a was published in October 2015 and is being provided in attachment "*Index 11333-03_TD-5811P-102_Rev2a_CONF.pdf*." Attachment "*Index 11333-03_TD-5811P-102_Rev2a_CONF.pdf*" is designated confidential because it contains customer-specific data on pages 2 and 7, and critical energy infrastructure on page 7. This information is outlined in red in the attachment.
- TD-5811P-105-JA01 Rev.1 was published in October 2015 and is being provided in attachment "*Index 11333-03_TD-5811P-105-JA01_Rev1.pdf.*"
- PG&E is still compiling the historic practices, standards, and/or procedures on renegotiating a new start time and will provide this information as soon as possible.

b. PG&E procedures do not specify the minimum number of times a locator must call prior to renegotiating a ticket; however, as indicated in Response 11333.03(a), if the requestor could not be reached by the start time, the ticket would be considered late.

PG&E is still compiling the historic practices, standards, and/or procedures on renegotiating a new start time and will provide this information as soon as possible.

c. Attempts to contact the requestor are tracked in IRTHnet. At present, each attempt is to be documented in the ticket (see page 6, section 3 of TD-5811P-102 Rev.2a and page 6, section 12 of TD-5811P-105-JA01 Rev.1).

Note:

- TD-5811P-102 Rev.2a was published in October 2015 and is being provided in attachment "*Index 11333-03_TD-5811P-102_Rev2a_CONF.pdf*." Attachment "*Index 11333-03_TD-5811P-102_Rev2a_CONF.pdf*" is designated confidential because it contains customer-specific data on pages 2 and 7, and critical energy infrastructure on page 7. This information is outlined in red in the attachment.
- TD-5811P-105-JA01 Rev.1 was published in October 2015 and is being provided in attachment "*Index 11333-03_TD-5811P-105-JA01_Rev1.pdf.*"
- PG&E is still compiling the historic practices, standards, and/or procedures on renegotiating a new start time and will provide this information as soon as possible.

d. See Response 11333.03(a).

e. At present, phased ticket responses are identified in TD-5811P-105 Rev.1a for when a job site was too large to be completed by the start time (page 3 of TD-5811P-105 Rev.1a). In addition, TD-5811P-105-JA01 Rev.1 specifically states not to use a 'respond to phased ticket' response for a notification of a new start time (page 8, section 17 of TD-5811P-105-JA01 Rev.1).

Note:

- TD-5811P-105 Rev.1a was published in October 2015 and is being provided in attachment "*Index 11333-03_TD-5811P-105_Rev1a.pdf*."
- TD-5811P-105-JA01 Rev. 1 was published in October 2015 and is being provided in attachment "*Index 11333-03_TD-5811P-105-JA01_Rev1.pdf.*"
- PG&E is still compiling the historic practices, standards, and/or procedures on renegotiating a new start time and will provide this information as soon as possible.

RESPONSE 11333.03 Supp01: See attachment "*Index 11333-03_List of RT Procedures 2012-20171010.xlsx*" for a list of PG&E's procedures related to renegotiated tickets 2012 – Present (as of October

10, 2017), as well as their confidentiality designations. Unless otherwise noted, attachments referenced in the spreadsheets can be found in attachment "*Index 11333-03_2012-20171010_RT Procedures_SUPP01 CONF.zip*." See the below bullet points for responses to the specific questions asked regarding renegotiated ticket procedures.

a. Before December 31, 2012, PG&E guidance stated that tickets were to be prioritized and completed by the due start time and date and that a later time may be mutually agreed upon. There was no language included for when a requestor could not be reached. Refer to the below table for details regarding WP-4412P-03 and TD-4412P-03, effective during this time period.

PG&E Procedure/ Bulletin Number	PG&E Procedure/ Bulletin Title	Publication Date	Page	Section
WP-4412P-03	Marking and Locating PG&E Underground Facilities	8/2009	2	1
TD-4412P-03 Rev.0	Marking and Locating PG&E Underground Facilities	2012	3	3

On April 11, 2012, TD-4412P-03-JA10 was published, which included the terminology of a "new start time". There was no language included for when a requestor could not be reached. Refer to the below table for details regarding TD-4412P-03-JA10, effective during this time period.

PG&E Procedure/ Bulletin Number	PG&E Procedure/ Bulletin Title	Publication Date	Page	Section
TD-4412P-03-JA10 Rev.0	Standard Responses IRTH Field Unit	4/11/2012	3	Respond To Open Ticket

From October 31, 2013 to present (as of October 10, 2017), TD-5811P-102 and TD-5811P-105-JA01 provide guidance for when a requestor cannot be reached. If the requestor cannot be reached, then the locator must immediately notify their supervisor and document details in the USA ticket. The internal practice of a supervisor would then be to assist the locator in contacting excavators who requested a ticket and were difficult to reach. If the requestor could not be reached by the start time, the ticket would be considered late. Refer to the below table for details regarding TD-5811P-102 and TD-5811P-105-JA01, effective during this time period.

PG&E Procedure/ Bulletin Number	PG&E Procedure/ Bulletin Title	Publication Date	Page	Section
TD-5811P-102 Rev.0	Determining Scope of Locate	10/31/2013	5, 6	6c
TD-5811P-102 Rev.1	Determining Scope of Locate	3/31/2014	5, 6	6c
TD-5811P-102	Determining Scope	10/30/2015	5, 6	6c

Rev.2	of Locate			
TD-5811P-102 Rev.2A	Determining Scope of Locate	10/30/2015	5, 6	6c
TD-5811P-105-JA01 Rev.0	Choosing the Correct Utilisphere™ Response	10/31/2013	6	13
TD-5811P-105-JA01 Rev.1	Choosing the Correct Utilisphere™ Response	10/30/2015	6	13

In addition to the aforementioned guidance, a section exists in PG&E procedures on the topic of ‘no response from excavator’ when additional information is needed before a locator could place marks. Refer to the below table for details regarding TD-5811P-105-JA01, effective during this time period.

PG&E Procedure/ Bulletin Number	PG&E Procedure/ Bulletin Title	Publication Date	Page	Section
TD-5811P-105-JA01 Rev.0	Choosing the Correct Utilisphere™ Response	10/31/2013	6	12
TD-5811P-105-JA01 Rev.1	Choosing the Correct Utilisphere™ Response	10/30/2015	6	12

b. PG&E procedures do not specify the minimum number of times a locator must call to attempt to renegotiate a ticket; however, as indicated in part a, if the requestor could not be reached by the start time, the ticket would be considered late.

Specific to when additional information was needed before a locator could place marks, in 2012, WP-4412P-03-JA10 stated to “Contact excavator.” TD-4412P-03-JA10 published on April 11, 2012, stated “several attempts” to contact an excavator must be made. Refer to the below table for details regarding WP-4412P-03-JA10 and TD-4412P-03-JA10, effective during this time period.

PG&E Procedure/ Bulletin Number	PG&E Procedure/ Bulletin Title	Publication Date	Page	Section
WP-4412P-03-JA10 Rev.0	Standard Responses IRTH Field Unit	4/26/2010	3	No Response From Excavator
TD-4412P-03-JA10 Rev.0	Standard Responses IRTH Field Unit	4/11/2012	2	No Response From Excavator

Starting in October 2013, PG&E’s guidance document stated that a locator was required to call excavator a minimum of three times if more information was needed to complete the ticket. Refer to the below table for details regarding TD-5811P-105-JA01, effective during this time period.

PG&E Procedure/ Bulletin Number	PG&E Procedure/ Bulletin Title	Publication Date	Page	Section
TD-5811P-105-JA01 Rev.0	Choosing the Correct Utilisphere™ Response	10/31/2013	6	12
TD-5811P-105-JA01 Rev.1	Choosing the Correct Utilisphere™ Response	10/30/2015	6	12

c. Attempts to contact the requestor are tracked in IRTHnet. In 2012, each attempt was to be documented in the ticket. Refer to the below table for details regarding WP-4412P-03 and WP-4412P-03-JA10, effective during this time period.

PG&E Procedure/ Bulletin Number	PG&E Procedure/ Bulletin Title	Publication Date	Page	Section
WP-4412P-03	Marking and Locating PG&E Underground Facilities	8/2009	3	Review USA Tickets
WP-4412P-03-JA10 Rev.0	Standard Responses IRTH Field Unit	4/26/2010	3	No Response From Excavator

From October 2013 to present, each attempt is to be documented in the ticket. Refer to the below table for details regarding TD-5811P-102 and TD-5811P-105-JA01, effective during this time period.

PG&E Procedure/ Bulletin Number	PG&E Procedure/ Bulletin Title	Publication Date	Page	Section
TD-5811P-102 Rev.0	Determining Scope of Locate	10/31/2013	6	3
TD-5811P-102 Rev.1	Determining Scope of Locate	3/31/2014	6	3
TD-5811P-102 Rev.2	Determining Scope of Locate	10/30/2015	6	3
TD-5811P-102 Rev.2A	Determining Scope of Locate	10/30/2015	6	3
TD-5811P-105-JA01 Rev.0	Choosing the Correct Utilisphere™ Response	10/31/2013	6	12

PG&E Procedure/ Bulletin Number	PG&E Procedure/ Bulletin Title	Publication Date	Page	Section
TD-5811P-105-JA01 Rev.1	Choosing the Correct Utilisphere™ Response	10/30/2015	6	12

d. See response to part a.

e. In 2010, WP-4412P-03-JA10 included language for phased tickets, identifying it as a response for an ongoing job. TD-4412P-03-JA10 was then published on April 11, 2012 and included language for phased tickets, which could only be used when locating a large excavation site that could only be completed through a series of visits. Refer to the below table for details regarding WP-4412P-03-JA10 and TD-4412P-03-JA10, effective during this time period.

PG&E Procedure/ Bulletin Number	PG&E Procedure/ Bulletin Title	Publication Date	Page	Section
WP-4412P-03-JA10 Rev.0	Standard Responses IRTH Field Unit	4/26/2010	1	Respond To Open Ticket
TD-4412P-03-JA10 Rev.0	Standard Responses IRTH Field Unit	4/11/2012	3	Respond To A Phased Ticket and Respond To A Complete Phased Ticket
TD-4412P-03-JA10 Rev.1	Standard Responses IRTH Field Unit	12/13/2012	3	Respond To A Phased Ticket and Respond To A Complete Phased Ticket

From 2013 to present, phased ticket responses were identified in TD-5811P-105 for when a job site was too large to be completed by the start time. Additionally, TD-5811P-105-JA01 specifically states not to use a 'respond to phased ticket' response for a notification of a new start time. Refer to the below table for details regarding TD-5811P-105 and TD-5811P-105-JA01, effective during this time period.

PG&E Procedure/ Bulletin Number	PG&E Procedure/ Bulletin Title	Publication Date	Page	Section
TD-5811P-105-JA01 Rev.0	Choosing the Correct Utilisphere™	10/31/2013	8	17

	Response			
TD-5811P-105-JA01 Rev.1	Choosing the Correct Utilisphere™ Response	10/30/2015	8	17
TD-5811P-105 Rev.0	Responding to a Ticket	10/31/2013	3	2
TD-5811P-105 Rev.1	Responding to a Ticket	10/30/2015	3	2
TD-5811P-105 Rev.1a	Responding to a Ticket	10/30/2015	3	2

QUESTION 11333.04: For the following items, please identify whether the data used in them comes from IrthNet, PG&E's Quality Management Team's reports on late tickets, or some other data source. If it is another source, please identify the data source.

a. Keys reports;
b. Index 9623-03_2014-June 2016 on time or late ticket count (spreadsheet title);
c. Locate and Mark SED Update, Dated August 4, 2017;
d. All other late ticket information provided in data responses to SED during 2016 and 2017 related to locating and marking.

RESPONSE 11333.04: PG&E is still collecting this information and will provide it as soon as possible.

RESPONSE 11333.04 Supp01:

a) *Keys reports*: generally, there are two instances where late ticket data has been presented in the Keys Reports:
   i. Late Ticket Statistics: PG&E is still gathering this information and will provide it as soon as possible.
   ii. L&M Quality Management Findings: this data (sample USA tickets) was collected from an export of tickets from IRTHnet for Quality Assessments.
b) *Index 9623-03_2014-June 2016 on time or late ticket count (spreadsheet title):*
   i. See row 3, column D in attachment "*Index 11333-04_Late Ticket Attachment Sources.xlsx*."
c) *Locate and Mark SED Update, Dated August 4, 2017:*
   i. The data (sample USA tickets) used in the QA/QC Late Ticket Review Results presented in the Locate and Mark SED Update, dated August 4, 2017, was collected from IrthNet.
d) *All other late ticket information provided in data responses to SED during 2016 and 2017 related to locating and marking:*
   i. Refer to column D of attachment "*Index 11333-04_Late Ticket Attachment Sources.xlsx*" for a list of sources for late ticket data PG&E has provided in response to Locate and Mark data requests from the CPUC between 2016 and 2017 (as of October 26, 2017).

   Note, refer to part a of this response for source information pertaining to late ticket data provided to the CPUC via Keys Reports. Keys Reports were provided in:
      Response 10707.13 (delivered April 19, 2017)
      Response 10707.13 Supp01 (delivered May 10, 2017)
      Response 10707.13 Supp02 (delivered June 20, 2017)
      Response 10707.13 Supp02 Rev01 (delivered June 26, 2017)
      Response 10707.13 Supp03 (delivered June 27, 2017)

Thank you,

[redacted]
Office: [redacted]
Cell: [redacted]

[redacted]

From: [redacted]
Sent: Thursday, October 19, 2017 8:40 AM
To: Chan, Wai-Yin
Cc: Bruno, Kenneth; Lee, Dennis M.; Bradley, Mike; Gruen, Darryl; Khatri, Sikandar; Pendleton, Jonathan (Law); Richmond, Susie
Subject: RE: [Index 11333] RE: SED Data Request - PG&E Damage Prevention Program

Franky,

Please see below for the response and attached accompanying documents for data request 11333.

PG&E is providing this response pursuant to Public Utilities Code §583 because this response and/or the attached documents contain information that should remain confidential and not be subject to public disclosure as it contains one or more of the following: critical infrastructure information that is not normally provided to the general public, the dissemination of which poses public safety risks (pursuant to the Critical Infrastructures Information Act of 2002, 6 U.S.C. §§131-134); sensitive personal information pertaining to PG&E employees; customer information; or commercially sensitive/proprietary information. This information is highlighted yellow below and, if feasible, highlighted yellow or outlined in red in the referenced attachments.
See attached declaration supporting confidential designation ("Index 11333_Confidentiality Declaration.pdf").

QUESTION 11333.01: Under the "Action(s) to get back to green" column in a table in PG&E's 2012 July Keys To Success report (please see the attached Index 10707-13_2012-07_Keys To Success_CONF - Page 109), it states:

"We are restructuring the 'notification of new start time' process, which is still in development phases and has not yet been implemented into the ticket management program. The change is initiated to improve the process and integrity of the company. Currently, PG&E's locators have the ability to call and notify a new start time for a USA ticket with the excavator, which means the 48 hour clock for on-time performance on the USA ticket is reset. However, ***this option has been utilized without safeguards built into the system to ensure proper contact was made*** and a new start time was correctly established. We are currently working with IRTH solutions to create a customization that will require the locators to collect certain information when utilizing this option. This customization may result in added response time for tickets due to collecting additional information. We plan to roll out and pilot the customization to better understand its effects before implementing onto the entire system. This will help us better understand if it will disrupt the locators' work flow. Based on the results of the pilot, we also need to evaluate the impact on resources and determine if additional M&L resources will be needed in order to avoid an increase in late tickets system wide. In addition, the Damage Prevention process team will evaluate the need to track 'negotiate new start time' tickets as a subset of the on time percentage to understand how often we are actually responding to USA tickets within the original 48 hour window…" (Emphasis added.)

With this passage in mind, please answer the following:

a. Please provide SED a description of PG&E's restructuring process of the "notification of new start time" that is mentioned in the above quoted passage of the 2012 Keys To Success Report.
b. It was indicated that the option of call and notify a new start time to reset the 48 hour clock for on-time performance on the USA ticket has been utilized without safeguards built into the system to ensure proper contact was made.
    i. Please provide SED the detail of this finding.
    ii. Is this finding a result of PG&E identifying locators using this option without proper contact?
    iii. Was PG&E management notified of this information? Who received this information?
    iv. Since the above passage was written, please identify all steps that PG&E has taken to "ensure proper contact was made". In this answer, please include all "safeguards built into the system". Please be sure to identify which steps are "safeguards" and which are not.
    v. Please identify each the date each step was taken in response to question 1, b, iv.

c. It was indicated that a customization was made to require locators to collect certain information when resetting the 48 hour clock for a USA ticket.
    i. Please provide SED the detail of this customization. Please include the definition of a customization as used in this context, as well as the documentation related to the customization, and the customization itself, that PG&E created with IrthNet.
    ii. Did PG&E evaluate the effectiveness of this customization to ensure locators were making proper contact with excavators? If so, provide the documentation showing this evaluation.
    iii. Did PG&E's quality management/assurance/control discover any findings associated with this customization? (i.e. improper use of this customization, not collecting the required information, not documenting the information, not making proper contact with excavators, etc) If so, provide all such findings.
    iv. Who was responsible to oversee this process?
d. If this metric item "got back to green",
    i. What was PG&E's basis?
    ii. When did it occur?
    iii. Who made the decision that the metric "got back to green"?
    iv. Did PG&E continue to monitor its damage prevention program to ensure proper contact was made by the locators when resetting the 48 hour clock of a USA ticket? If yes, please describe PG&E's monitoring process.
e. If this metric item did not get back to green:
    i. Why not?
    ii. What happened to this metric item?
    iii. What criteria were not met that prevented "getting back to green"?
    iv. What criteria were met that allowed "getting back to green"?
    v. What efforts were taken to meet each criterion to "get back to green"?
    vi. Please list all underlying criteria necessary for this metric to "get back to green". If there are no underlying criteria, please explain the method for determining if the metric "got back to green".

RESPONSE 11333.01:

a. Prior to restructuring renegotiated start time responses for USA tickets in late 2012, if a renegotiation of a new start time took place, a locator processed the response per the training provided in attachment "*Index 11333-01a_Respond To Open Ticket -New Start Time_9-9-11.pdf.*" In the first stages of Field Unit (the interface used by locators to capture response data that was then uploaded to IRTHnet), locators would "Respond to an Open Ticket," capture the new start time, and provide detailed notes regarding the conversation that took place with the excavator. During this time, the notes field was not a required field in the system; however, a locator was required per their training to make contact with the excavator before identifying a new start time.

   In late 2012, PG&E restructured the process for renegotiated start time responses. A new response type called "Notification of New Start Time" was created, and locators utilized the training outlined in attachment "*Index 11333-01a_IRTH-FU-Android New Start Time - 10-22-12_CONF.pdf*" to complete a response under this new response type. In addition, safeguards were added to ensure the locator captured the information necessary for renegotiating a new start time (which includes the name and number of the individual to whom the locator spoke and the method of contact used by the locator). These safeguards wouldn't allow the ticket to be closed unless this information was entered, whereas the previous notes section in which this information was captured was free form and not a required field. Note, voicemail was initially added as an option for method of contact; however, a new training document was released two months later in December 2012 informing locators and supervisors that this was not a valid option. It was not to be used and was pending removal by IRTHnet. See attachment "*Index 11333-01a_IRTH-FU-Android New Start Time - 12-13-12_CONF.pdf*" for the updated training document.

- Note, attachment "*Index 11333-01a_IRTH-FU-Android New Start Time - 10-22-12_CONF.pdf*" is designated confidential because it contains customer-specific data on pages 12 and 17. This information is outlined in red in the attachment.
- Note, attachment "*Index 11333-01a_IRTH-FU-Android New Start Time - 12-13-12_CONF.pdf*" is designated confidential because it contains customer-specific data on pages 12, 13, 15, 24, and 29. This information is outlined in red in the attachment.

b. In regards to the option to renegotiate a new start time for a USA ticket and reset the 48 hour clock for on-time performance without safeguards:

i. See section 1 titled "Mark and Locate Timeliness" on pages 2 and 3 of attachment "*Index 11333-01b_12-014 Rpt.pdf*" for a report detailing this finding.
ii. As indicated in attachment "*Index 11333-01b_12-014 Rpt.pdf,"* the finding was a result of Internal Auditing (IA) and Quality Management (QM) auditing the Gas Damage Prevention program and noting a system glitch, which would halt the software's time-clock features by opening the record without performing the locate and mark work or documenting an agreement with the excavator to postpone the locate and mark work, as well as receiving information from Field Employees that tickets were several weeks behind schedule.
iii. PG&E records indicate that the aforementioned report was sent to Jane Yura, Vice President – Gas Standards and Policies, on February 10, 2012. PG&E is searching for additional instances where management was identified and will provide them if additional instances are identified.
iv. PG&E is still collecting this information and will provide it as soon as possible.
v. See below for the dates of actions taken by PG&E to ensure proper contact was made to excavators.

Action Taken	**Date Completed**
Creation of New Response Type "Notification of New Start Time" which included: • New Response Type under which responses with negotiated start times are captured • Safeguards to ensure the capture of necessary information for negotiated start times	December 2012
PG&E is still collecting additional information and will provide it as soon as possible.	N/A

c. Regarding the IRTHnet customization requiring locators to collect certain information prior to completing a "Notification of New Start Time" response:
i. See Response 11333.01(a) for details regarding the customization, as well as the documentation for how this customization was implemented.
ii. PG&E records indicate that the safeguard customization was tested prior to its implementation; however, PG&E records do not indicate subsequent evaluations were conducted after the implementation. See page 3 of attachment "*Index 11333-01c_12 014 mark and locate timeliness.pdf*" for IA's close out notes pertaining to issue.
iii. PG&E is still collecting this information and will provide it as soon as possible.
iv. The L&M Process Owner was responsible for overseeing the changes in IRTHnet. The L&M Process Owner at the time of the customization was Chris McGowan; Katherine Mack took over as Process Owner on January 14, 2013. The line of business supervision (i.e. locate and mark supervisors) was responsible for implementing and monitoring the new IRTHnet process.

d. PG&E is still collecting this information and will provide it as soon as possible.

e. PG&E is still collecting this information and will provide it as soon as possible.

QUESTION 11333.02: Under the "Description" column in the "Opportunities Linked to Short-term Initiatives" table in PG&E's 2013 January Keys To Success report (please see the attached Index 10707-13_2013-01_Keys To Success_CONF - Page 40), it states:

"We will be eliminating the option of adjusting ticket 'due date' without agreement by the requestor"

a. Please provide SED the detail of this initiative. (How was it started, who started it, why was it started, etc.)
b. Was adjusting ticket "due date" without agreement by the requestor an acceptable option (in PG&E's practices, standards or procedures) prior to this initiative?
c. Was PG&E management notified of this initiative? Who received this information?
d. Who was responsible to oversee this initiative?
e. Does this initiative have any relation to the metric item as mentioned in question 1 of this SED data request?
f. It was indicated in the table that this initiative was completed,
    vii. Please provide SED the detail of the action(s) taken by PG&E to complete this initiative.
    viii. When did PG&E complete this initiative?
    ix. Did PG&E evaluate the effectiveness of the action(s) taken by PG&E to eliminate the option of adjusting ticket 'due date' without agreement by the requestor?
    x. Did PG&E's quality management/assurance/control discover any findings associated with this initiative after it was completed? (i.e. ticket "due date" was adjusted without agreement by the requestor)
    xi. Did PG&E continue to monitor its damage prevention program to ensure that the option of adjusting ticket "due date" without agreement by the requestor was eliminated? If yes, please describe PG&E's monitoring process.
g. Please identify the last PG&E standard and/or procedure that allowed for "the option of adjusting ticket "due date" without agreement by the requestor".
h. Please identify the first PG&E standard and/or procedure that eliminated "the option of adjusting ticket "due date" without agreement by the requestor".

RESPONSE 11333.02: PG&E is still collecting this information and will provide it as soon as possible.

QUESTION 11333.03: Please provide PG&E's standards and/or procedures (from year 2012 to present) on renegotiating a new start time ("due date") for a USA ticket with the requestor. In answering the following questions, please refer to the applicable standards and/or procedures that show the answer. Please include the applicable section numbers and page numbers. Please also identify each applicable standard, practice and procedure that answers the question, including the date it was made effective.

a. From year 2012 to present, what are PG&E's practices, standards and procedures for a locator to renegotiate a new start time if the requestor cannot be reached by phone call?
b. From year 2012 to present, are there a minimum number of times that a locator is required to call the requestor if previous attempts to reach the requestor failed? If there are a minimum number of attempts that a locator needs to make, please provide PG&E's standards and/or procedures that contain this information.
c. From year 2012 to present, does PG&E track how many attempts a locator makes to reach the requestor by phone call before the locator is allowed to renegotiate a new start time. If yes, please provide this information.
d. From year 2012 to present, if a locator cannot reach the requestor by phone call with three attempts or more, what is PG&E's procedure for the locator? Is it acceptable to adjust the "due date" or close the ticket without performing locate and mark after three call attempts according to PG&E's procedure? If yes, please provide PG&E's standards and/or procedures that contain this information.

e. From year 2012 to present, did any PG&E standards, practices, and/or procedures say anything related to the topic of phased tickets being used to avoid a ticket from showing up as late?

RESPONSE 11333.03:

a. At present (as of October 10, 2017), TD-5811P-102 Rev.2a and TD-5811P-105-JA01 Rev.1 provide guidance for when a requestor cannot be reached (see pages 5 and 6, section 3 of TD-5811P-102 Rev.2a and page 6, section 13 of TD-5811P-105-JA01 Rev.1). If the requestor cannot be reached, then the locator must immediately notify their supervisor and document details in the USA ticket. The internal practice of a supervisor would then be to assist the locator in contacting excavators who requested a ticket and were difficult to reach. If the requestor could not be reached by the start time, the ticket would be considered late. In addition to the aforementioned guidance, a section exists in PG&E procedures on the topic of 'no response from excavator' when additional information is needed before a locator could place marks (see page 6, section 12 of TD-5811P-105-JA01 Rev.1).

Note:

- TD-5811P-102 Rev.2a was published in October 2015 and is being provided in attachment "*Index 11333-03_TD-5811P-102_Rev2a_CONF.pdf.*" Attachment "*Index 11333-03_TD-5811P-102_Rev2a_CONF.pdf*" is designated confidential because it contains customer-specific data on pages 2 and 7, and critical energy infrastructure on page 7. This information is outlined in red in the attachment.
- TD-5811P-105-JA01 Rev.1 was published in October 2015 and is being provided in attachment "*Index 11333-03_TD-5811P-105-JA01_Rev1.pdf.*"
- PG&E is still compiling the historic practices, standards, and/or procedures on renegotiating a new start time and will provide this information as soon as possible.

b. PG&E procedures do not specify the minimum number of times a locator must call prior to renegotiating a ticket; however, as indicated in Response 11333.03(a), if the requestor could not be reached by the start time, the ticket would be considered late.

PG&E is still compiling the historic practices, standards, and/or procedures on renegotiating a new start time and will provide this information as soon as possible.

c. Attempts to contact the requestor are tracked in IRTHnet. At present, each attempt is to be documented in the ticket (see page 6, section 3 of TD-5811P-102 Rev.2a and page 6, section 12 of TD-5811P-105-JA01 Rev.1).

Note:

- TD-5811P-102 Rev.2a was published in October 2015 and is being provided in attachment "*Index 11333-03_TD-5811P-102_Rev2a_CONF.pdf.*" Attachment "*Index 11333-03_TD-5811P-102_Rev2a_CONF.pdf*" is designated confidential because it contains customer-specific data on pages 2 and 7, and critical energy infrastructure on page 7. This information is outlined in red in the attachment.
- TD-5811P-105-JA01 Rev.1 was published in October 2015 and is being provided in attachment "*Index 11333-03_TD-5811P-105-JA01_Rev1.pdf.*"
- PG&E is still compiling the historic practices, standards, and/or procedures on renegotiating a new start time and will provide this information as soon as possible.

d. See Response 11333.03(a).

e. At present, phased ticket responses are identified in TD-5811P-105 Rev.1a for when a job site was too large to be completed by the start time (page 3 of TD-5811P-105 Rev.1a). In addition, TD-5811P-105-JA01 Rev.1 specifically states not to use a 'respond to phased ticket' response for a notification of a new start time (page 8, section 17 of TD-5811P-105-JA01 Rev.1).

Note:

- TD-5811P-105 Rev.1a was published in October 2015 and is being provided in attachment "*Index 11333-03_TD-5811P-105_Rev1a.pdf*."
- TD-5811P-105-JA01 Rev. 1 was published in October 2015 and is being provided in attachment "*Index 11333-03_TD-5811P-105-JA01_Rev1.pdf*."
- PG&E is still compiling the historic practices, standards, and/or procedures on renegotiating a new start time and will provide this information as soon as possible.

QUESTION 11333.04: For the following items, please identify whether the data used in them comes from IrthNet, PG&E's Quality Management Team's reports on late tickets, or some other data source. If it is another source, please identify the data source.

a. Keys reports;
b. Index 9623-03_2014-June 2016 on time or late ticket count (spreadsheet title);
c. Locate and Mark SED Update, Dated August 4, 2017;
d. All other late ticket information provided in data responses to SED during 2016 and 2017 related to locating and marking.

RESPONSE 11333.04: PG&E is still collecting this information and will provide it as soon as possible.

Thank you,

[redacted]
Office: [redacted]
Cell: [redacted]
[redacted]

From: [redacted]
Sent: Tuesday, October 03, 2017 11:49 AM
To: Richmond, Susie; Chan, Wai-Yin
Cc: Bruno, Kenneth; Lee, Dennis M.; Bradley, Mike; Gruen, Darryl; Khatri, Sikandar; Pendleton, Jonathan (Law)
Subject: [Index 11333] RE: SED Data Request - PG&E Damage Prevention Program

Franky,

For your reference, we've logged the request under Index 11333.

Thank you,

[redacted]
Office: [redacted]
Cell: [redacted]
[redacted]

From: Richmond, Susie
Sent: Tuesday, October 03, 2017 11:19 AM
To: Chan, Wai-Yin
Cc: Bruno, Kenneth; Lee, Dennis M.; Bradley, Mike; Gruen, Darryl; Khatri, Sikandar; Pendleton, Jonathan (Law); [redacted]
Subject: RE: SED Data Request - PG&E Damage Prevention Program

Franky,
Mike is currently out on leave, we will forward this on for processing.

Thank you,

Susie Richmond | **Manager, Gas Ops Compliance & Risk**
Pacific Gas and Electric Company
925-328-5776 office | 328-5776 internal | 925-786-0267 cell | susie.richmond@pge.com

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From: Chan, Wai-Yin [mailto:Wai-Yin.Chan@cpuc.ca.gov]
Sent: Tuesday, October 03, 2017 11:03 AM
To: Bradley, Mike
Cc: Bruno, Kenneth; Lee, Dennis M.; Gruen, Darryl; Khatri, Sikandar; Pendleton, Jonathan (Law); [redacted]
Richmond, Susie
Subject: SED Data Request - PG&E Damage Prevention Program

*****CAUTION: This email was sent from an EXTERNAL source. Think before clicking links or opening attachments.*****

Dear Mike,

The Safety and Enforcement Division (SED) of the California Public Utilities Commission is submitting a data request on PG&E's Damage Prevention Program, which is attached with this email.

Please provide a response by COB 10/18/2017.

Sincerely,

Wai-Yin (Franky) Chan
Sr. Utilities Engineer
Gas Safety & Reliability Branch
Safety & Enforcement Division
California Public Utilities Commission
wai-yin.chan@cpuc.ca.gov
Office (415) 703-2482
Cell (415) 471-4306
Fax (415) 703-2625

ATTACHMENT 20

TD-4412P-03-JA10

Publication Date: 04/11/2012, Rev: 0

CONFIDENTIAL - GENERAL ORDER 66D AND DECISION 16-08-024

Standard Responses IRTH Field Unit

Marking and Locating PG&E Underground Facilities

PPE:

- **NA**

Tools:

- **NA**

Guidance Document References:

- **NA**

Level of Use:

☐ **Information**
☑ **Reference**
☐ **Continuous**

Response	Description	Notes	Actions	Standard Comments
FACILITY MARKED	Facilities marked.		• Check one or more types of facility: GT, GD, ET, ED, Fiber. • Close the ticket.	Elec OH Flags Hand Dig only Joint trench Offsets Paint Flags Stakes Whiskers
NO CONFLICT	No Conflict.	No PG&E facilities in conflict with excavation. If other PG&E facilities exist, notify the correct locator or supervisor.	• Notify other PG&E facility owners. • Ensure positive contact is made. • DO NOT paint "NO PGE" unless all PG&E facilities are located by one locator. • Close the ticket.	Cleared from office Notify other PGE Painted "No PGE" Direct contact with excavator Message left for excavator Date: Time: Contact Name:
BAD TICKET INFO - RESUBMIT	Bad ticket info, resubmit ticket through USA.	Bad ticket information (e.g., wrong address).	• Document the conversation with excavator. • Close the ticket.	Address does not exist Wrong Address Wrong Directions Direct contact with excavator Message left for excavator Date: Time: Contact Name:
DUPLICATE TICKET	Identical ticket sent to two offices (e.g., PGESJO, PGEMIL), or superseded by follow-up ticket.		• Document the correct office responsible. • Close the ticket. • NOT to be used to close Follow Up Tickets.	Responsible Office: Superseded by Follow-Up ticket.

Standard Responses IRTH Field Unit

Response	Description	Notes	Actions	Standard Comments
EXCAVATED BEFORE MARKED	Was excavated before being marked by PG&E.		• If excavation is complete, close the ticket. • Complete form SHC 104 – Observed Hazard for follow-up by SH&C. • Stop the job. • Locate and mark remaining facilities in delineated area if excavation is in process. • Use the Facility Marked response. • Fill in the form SHC 104 –Observed Hazard for follow-up by SH&C.	Exc. before marked Job stopped Direct contact with excavator Message left for excavator Date: Time: Contact Name: SHC 104 Submitted Date:
EXPIRED TICKET	Ticket is older than 28 days and is no longer active.		• Verify the ticket has been extended and close the expired ticket. If the excavation is continuing without an extended or renewal ticket, notify the excavator their the ticket is expired and to submit an extension. • Close the ticket.	Expired Ticket Expired Ticket - Excavator needs to open an Extension Ticket in order to have a "valid" USA ticket during excavation. This ticket is no longer valid
NO DELINEATION	No delineation at excavation site. Excavator to resubmit ticket through USA.		• Document the conversation with excavator. • Close the ticket.	Area not delineated Direct contact with excavator Message left for excavator Date: Time: Contact Name:
NO REMARK REQUIRED	Used when the excavator does not require remarks. These are often auto-closed by the system.		• Close the ticket.	Excavator states “No Remarks” No re-marks req'd - closed this ticket. No pictures req'd.
NO RESPONSE FROM EXCAVATOR	Excavator did not respond to positive contact after several attempts to contact.		• Contact excavator. • Document contact. • Close the ticket.	CGI – Dog CGI – Locked gate Message left for excavator Date: Time: Contact Name: SHC 104 Submitted Date:

Standard Responses IRTH Field Unit

Response	Description	Notes	Actions	Standard Comments
PG&E RESPONSE NOT REQUIRED	Used when it is determined that PG&E services are not required at the excavation site. Often used for extension tickets and follow-up tickets.	Document how it was determined PG&E services were not required. Ticket details or communication with excavator.	• Close the ticket	No re-marks or pictures by PG&E are required. Re-marks reqst'd are for another Utility. No pictures req'd.
RE-ASSIGNED TICKET	Ticket routed to incorrect office of responsibility.		• Leave ticket open (uncheck completed box). • Re-assign to responsible office.	Reassigned to responsible office:
RESPOND TO A PHASED TICKET	Used to leave a ticket open when locating a large excavation site which can only be completed through a series of visits.	List work that was completed and date/time planned to return to the site to continue locating.	• Leave the ticket open (uncheck completed box).	Contact Name: Placed Flags Unable to take/attach pictures. Reason: Placed Offsets Painted Facilities Marked with stakes Placed Whiskers
RESPOND TO A COMPLETE PHASED TICKET	Used as the final response to a series of previous phased tickets in order to close the ticket.		• Close the ticket.	Contact Name: Placed Flags Unable to take/attach pictures. Reason: Placed Offsets Painted Facilities Marked with stakes Placed Whiskers
RESPOND TO OPEN TICKET	Often used when the locator has contacted the excavator and negotiated a new start time. Do not use if the ticket is complete and is also not a proper response for a phased ticket.	Document: name, notes, new date, time of excavation.	• Document new start date and time in the "New Start Time" box. • Document the name of the person spoken with. • Keep the ticket open (uncheck completed box).	Changed start date and time Assistance needed from excavator Date: Time: Contact Name:

SITE VISIT/FIELD MEET	Field Meet within 10 feet of critical facility. Field Meet requested by excavator. Un-locatable facilities.	Legal requirement for Field Meet if digging within 10 feet of a critical facility.	• Field Meet required for non-locatable facilities. • Map Correction Form submitted for non-locatable facilities. • Field Meet required for excavations with 10 feet of a critical facility. • Document contact with excavator, date, time and name.	Un-locatable facilities: Map Correction Form Submitted Date: Excavation within 10 feet of critical facility Field Meet requested Unscheduled Site Visit Direct contact with excavator Message left for excavator Field meet Date: Field meet Time: Contact Name:
CANCELLED TICKET	Cancelled ticket.		• Close the ticket. • Close the original ticket.	Canceled Ticket Ticket was later canceled No pictures req'd.

ATTACHMENT 21

Standard Responses IRTH Field Unit

Obsolete

PPE:

NA

Tools:

NA

Guidance Document References:

- **Utility Procedure TD-4412P-03, “Marking and Locating PG&E Underground Facilities.”**

Level of Use:

- ☐ **Information**
- ☑ **Reference**
- ☐ **Continuous**

Marking and Locating PG&E Underground Facilities

Response	Description	Notes	Actions	Standard Comments
FACILITY MARKED	Facilities marked.		• Check one or more type of facility: GT, GD, ET, ED, Fiber. • Close the ticket.	Elec OH Flags Hand Dig only Joint trench Offsets Paint Flags Stakes Whiskers Marked by OTHER PG&E crew
NO CONFLICT	No Conflict.	No PG&E facilities in conflict with excavation. If other PG&E facilities exist, notify the correct locator or supervisor.	• Notify other PG&E facility owners. • Ensure positive contact is made. • DO NOT paint “NO PGE” unless all PG&E facilities are located by one locator. • Close the ticket.	Cleared from office Notify other PGE Painted “No PGE” Direct contact with excavator Message left for excavator Date: Time: Contact Name:
BAD TICKET INFO - RESUBMIT	Bad ticket info, resubmit ticket through USA.	Bad ticket information (e.g. wrong address).	• Document the conversation with excavator. • Close the ticket.	Address does not exist Wrong Address Wrong Directions Direct contact with excavator Message left for excavator Date: Time: Contact Name:
DUPLICATE TICKET	Identical ticket sent to two offices (e.g. PGESJO, PGEMIL), or superseded by follow-up ticket.		• Document the correct office responsible. • Close the ticket. • NOT to be used to close Follow Up Tickets	Responsible Office: Superseded by Follow-Up ticket.

Obsolete

Marking and Locating PG&E Underground Facilities

Response	Description	Notes	Actions	Standard Comments
EXCAVATED BEFORE MARKED	Was excavated before being marked by PG&E.		• If excavation complete, close the ticket. • Complete form SHC 104 – Observed Hazard for follow-up by SH&C. • Stop the job. • Locate and mark remaining facilities in delineated area if excavation in process. • Use the Facility Marked response. • Fill in the form SHC 104 –Observed Hazard for follow-up by SH&C.	Exc. before marked Job stopped Direct contact with excavator Message left for excavator Date: Time: Contact Name: SHC 104 Submitted Date:
EXPIRED TICKET	Ticket is older than 28 days and is no longer active.		• Verify the ticket has been extended and close the expired ticket. If the excavation is continuing without an extended or renewal ticket, notify the excavator their ticket is expired and to submit an extension. • Close the ticket	Expired Ticket Expired Ticket - Excavator needs to open an Extension Ticket in order to have a "valid" USA ticket during excavation. This ticket is no longer valid
NO DELINEATION	No delineation at excavation site. Excavator to resubmit ticket through USA.		• Document the conversation with excavator. • Close the ticket.	Area not delineated Direct contact with excavator Message left for excavator Date: Time: Contact Name:
NO REMARK REQUIRED	Used when the excavator does not require remarks. These are often auto-closed by the system.		• Close the ticket.	Excavator states "No Remarks" No re-marks req'd - closed this ticket. No pictures req'd.
NO RESPONSE FROM EXCAVATOR	Excavator did not respond to positive contact after several attempts to contact them.		• Contact excavator. • Document contact. • Close the ticket.	CGI – Dog CGI – Locked gate Message left for excavator Date: Time: Contact Name: SHC 104 Submitted Date:

Standard Responses IRTH Field Unit

Response	Description	Notes	Actions	Standard Comments
PG&E RESPONSE NOT REQUIRED	Used when it has been determined that PG&E services are not required at the excavation site. Often used for extension tickets and follow-up tickets	Document how it was determined PG&E services were not required. Ticket details or communication with excavator.	• Close the ticket	No re-marks or pictures by PG&E are required. Re-marks requested are for another Utility. No pictures required.
RE-ASSIGNED TICKET	Ticket routed to incorrect office of responsibility.		• Leave ticket open (uncheck completed box). • Re-assign to responsible office.	Reassigned to responsible office:
RESPOND TO A PHASED TICKET	Used to leave a ticket open when locating a large excavation site which can only be completed through a series of visits.	List work that was completed and date/time you plan to return to the site to continue locating.	• Leave the ticket open (uncheck completed box).	Contact Name: Placed Flags Unable to take/attach pictures. Reason: Placed Offsets Painted Facilities Marked with stakes Placed Whiskers
RESPOND TO A COMPLETE PHASED TICKET	Used as the final response to a series of previous phased tickets in order to close the ticket.		• Close the ticket	Contact Name: Placed Flags Unable to take/attach pictures. Reason: Placed Offsets Painted Facilities Marked with stakes Placed Whiskers
NOTIFICATION OF NEW START TIME	Only used when the locator has contacted the excavator and notified him/her of a new start time. This should not be used if the ticket is complete and is also not a proper response for a phased ticket.	Reason for new start time. (Ex: weather, equipment malfunction, emergency ticket, etc.)	• Document new start date and time in the "New Start Time" box • Document the name of who you spoke with • Document the phone number of who you spoke with • Document type of communication • Keep the ticket open (uncheck completed box).	Changed start date and time Assistance needed from excavator

Standard Responses IRTH Field Unit

Response	Description	Notes	Actions	Standard Comments
SITE VISIT/FIELD MEET	Field Meet within 10 feet of critical facility. Field Meet requested by excavator. Un-locatable facilities.	Legal requirement for Field Meet if digging within 10 feet of a critical facility.	• Field meet required for un-locatable facilities. • Map Correction Form submitted for un-locatable facilities. • Field meet required for excavations with 10 feet of a critical facility. • Document contact with excavator, date, time and name.	Un-locatable facilities: Map Correction Form Submitted Date: Excavation within 10 feet of critical facility Field Meet requested Unscheduled Site Visit Direct contact with excavator Message left for excavator Field meet Date: Field meet Time: Contact Name:
LOCATED by PG&E CREW	Used when the ticket was located by the PG&E crew who is also the excavator.	List PM# of crew job	• Close the ticket	No Pictures Located by:
CANCELLED TICKET	Cancelled ticket.		• Close the ticket. • Close the original ticket.	Canceled Ticket Ticket was later canceled No pictures required.

Marking and Locating PG&E Underground Facilities

ATTACHMENT 22

TD-5811P-105, Rev. 0

Responding to a Ticket

Procedure

Summary

This procedure provides step-by-step instructions for responding to and closing a USA ticket request.

Target Audience

Locate and mark personnel.

Before You Start

- Read the Safety section of this handbook.
- Wear the appropriate personal protective equipment (PPE) for your specific tasks and work area.
- Complete the steps presented in Procedure TD-5811P-104, "Proper Markings."

Table of Contents

Publication Date: March 2014

1 Taking Pictures of Work Area

Figure 1. Examples of Good Work Area Photos

Example 1 includes the following:

- Reference points: fence, utility pole, tree, bushes
- Entire delineation
- Facilities owner
- 2 in. plastic.
- Gas main painted using appropriate color
- Marking starts 2 ft outside of premarked work area

Example 2 includes the following:

- Reference points include permanent water structures, parking sign, tree, and building.
- Facilities owner
- 2 in. plastic gas main 5 ft back from edge of asphalt.
- Flags were used for lawn area and paint for asphalt.

Publication Date: March 2014

1. Take pictures of work area when it contains no delineations AND no locate and mark was performed.
2. When taking pictures of your markings, be sure to include:
    - Reference points such as street signs, address, permanent landscaping, etc.
    - Beginning and end of delineated work area
    - **ALL** markings, flags, whiskers, paint, and offsets
    - Close up photos to include necessary details
    - Distance photos to include scope of excavation
3. Attach all picture(s) to the USA ticket.
4. See Figure 1, “Examples of Good Work Area Photos.”

---

2 Entering Information into Ticket Respond Screen

1. Select an appropriate task for the **Response** field. This is the work completed in response to this USA ticket. See Figure 2, “USA Ticket Respond Screen.”
2. Select your name in the **Locator** field.
3. Visually ensure that the **Locate Time** field is accurate. Information in this field auto generates when you select a response for the ticket. This time stamp also marks the ticket’s complete time.
4. Select **Yes** or **No** in the **Complete Job** field.
    - **Yes** means ticket is completely located and marked.
    - **No** means job is ongoing and there is more work to be completed (e.g. phased or new start time tickets).
5. IF a new start time is required,

    THEN change the Response field to **Notification of New Start Time** to activate the **New Start Time** field.

    A. Enter a new start time. A new start time is established by negotiating with the excavator. Include:

    - Name of person with whom the new start time was negotiated.

Publication Date: March 2014

- Method of contact used to negotiate.
- Contact phone number of the person with whom the new start time was negotiated.

Figure 2. USA Ticket Respond Screen


Ticket ID: 123456
Registration: PGESAC (USAN)
Facility Type:
Ticket Folder:
Address 123 Main St
Locate Time 5/28/2013 10:57 AM
Complete Job: YES
Area Premarked?: YES
Un-Locatable?: NO
Heavy Equipment?: NO
Time Arrived 5/28/2013 10:57 AM
Weather: dry
Surface: asphalt
Method Used: Conductive
Conductive: Valve
Critical Facility: YES
Any Other Means?: NO

6. Enter PM number into the **PM #** field if work is for Pacific Gas and Electric Company (PG&E).

7. Enter the time you arrived at the job location into the **Time Arrived** field.

8. Enter estimate length of **gas footage** and **electric footage** (in ft).
9. Select **Yes** or **No** for the **Critical Facility** and **Standby** fields.
    - **Yes** for critical facility means a field meet is required.
    - **Yes** for standby means both field meet AND standby are required.
10. Select a **Standard Comment**. These are comments generated for the response selected in Step 1.
11. Enter **Notes** detailing work performed, all conversations with excavators, and information directly related to locate at job site.

EXAMPLE OF NOTES FOR PHASING A TICKET
Marked gas main; marked gas service; marked electrical secondary; from address 100 North Street to 600 North Street. Had field meet with John Doe 555-123-4567 at excavation site, agreed to phase ticket. Staying ahead of crew.

EXAMPLE OF NOTES FOR STANDBY
Marked gas main; marked gas service; marked branch service. Standby required. Spoke with John Doe at excavation site and notified him of the standby requirements. John Doe 555-123-4567.

EXAMPLE OF NOTES FOR RENEGOTIATING A START TIME
Renegotiated new start time with excavator John Doe 555-123-4567. Need access to address 100 North St. to complete locate. Locked gate.

12. Attach pictures of work area using the **Attachment** field.
13. Select **Yes** or **No** for the **Area Premarked** field.
    - **Yes** means area was delineated properly. Proceed with locate.
    - **No** means no delineations found. Do the following:
        1) DO NOT perform locate.
        2) Notify excavator to submit another ticket when delineations are present.

3) Change the **Response field** to **No Delineation**.

4) Select **Yes** for **Complete Job field**.

5) Save ticket.

14. Select **Yes** or **No** for **Un-Locatable**.
    - **Yes** means you have exhausted all locating methods and troubleshooting options up to requiring a PG&E crew to expose facility.
    - **No** is the default option. It indicates that you were able to locate facility.
15. Select **Yes** or **No** for **Heavy Equipment**.
    - **Yes** means heavy equipment is used directly over PG&E underground facility.
    - **No** means no heavy equipment is used directly over PG&E underground facility.
16. Select all facilities located in work area in the **Facility Types** field.
17. Select a surface type from the **Surface** field. When working on multiple surfaces, select the surface option where the majority of the work is being performed.
18. Select **Conductive** or **Inductive** from the **Method Used** field.
    - Conductive means directly connect to facility to be located.
    - Inductive means inducing signal onto facility to be located.
19. Enter information or notes into the **Add'l Message to Excavator** field. This is a form of communication to the excavator regarding details of the ticket.
20. Select **Save** to save all updated information.
21. Select **Sync** to send information to Utilisphere™ database. Sync sends response information to the excavator and updates new tickets into database ticket folder.

3 Contacting Excavator

1. Contact the excavator to discuss if you encounter any of the following:
   - Access or safety issues at work area.
   - Field meet or standby is needed.
   - Difficult to locate service or main.
   - When hand digging is required.
   - When measurements from maps are used to locate and mark facilities.
2. **NEVER** communicate depth of facility with excavator.
3. Document all communications with excavator in the USA ticket.

---

4 Performing End-of-Job Walkthrough

CAUTION!

NEVER leave a job incomplete without communicating with excavator. This could lead excavator to assume that locating and marking are completed and begin excavation.

1. Before leaving work area:
   A. Look at map to verify that previous facility count of gas and electric facilities was marked.
   B. Ensure that any inaccurate marks are covered in black paint.

Publication Date: March 2014

C. Make sure no hazards are left behind:

- Close all open facilities (boxes, etc.).
- Close gates
- Secure PG&E locks.

5 Documenting Abnormal Operating Condition (AOC)

1. IF you discovered an AOC while responding to a USA ticket request,

   THEN submit a **Corrective Work Form**.

   For instructions to submit the form, see Job Aid TD-5811P-105-JA03, "Corrective Work Form."

6 Correcting Mapping Errors

1. Contact Mapping to discuss all mapping discrepancies.
2. Complete a **Map Correction Form**.

   For instruction to submit the form, see Job Aid TD-5811P-105-JA02, "Submitting a Map Correction Form."

7 Completing a Corrective Work Form

1. Complete a **Corrective Work Form** to address situations such as but not limited to the following:

   - Address AOC's.
   - Request an electrolysis testing station (ETS) to be installed.
   - Request main or service to be lowered due to shallow depth (less than 12 in. deep).
   - Repair decals on markers.

   For instruction to submit the form, see Job Aid TD-5811P-105-JA03, "Corrective Work Form."

8 Issuing a Record of Warning to the Excavator

1. When you observe unsafe work practices being performed by a third party working around or near overhead and/or underground gas, electric, or fiber facilities, issue a **Record of Warning** to the excavator. See **Job Aid TD-5811P-301-JA01, "Handling Excavators Working Unsafely" and Job Aid TD-5811P-301-JA02, "Issuing a Record of Warning."**

END OF PROCEDURE

Definitions

Critical Facility is any gas transmission facility with pressure above 60 psig and any electric facility operating at or above 60 kilovolt (kV).

The following facilities may also be critical facilities:

- Facilities identified as critical by the local operating area.
- Facilities which, if damaged, are likely to result in difficulty controlling the gas flow due to their size, material properties, operating pressure, or location, as well as the personnel and equipment available.
- Electric distribution facilities which, if damaged, are likely to result in outages of long duration or outages to critical customers.

Conductive Locate is the method of locate in which instruments are directly connected to the facility being located.

Inductive Locate is the method of locate in which instruments induce a signal onto the facility being located.

Supplemental References

TD-5811P-104, "Proper Marking"

TD-5811P-105-JA02, "Submitting a Map Correction Form"

TD-5811P-105-JA03, "Corrective Work Form"

TD-5811P-301-JA02, "Issuing a Record of Warning"

Publication Date: March 2014

ATTACHMENT 23

See Utility Bulletin
TD-5811B-003

TD-5811P-105, Rev. 1

Responding to a Ticket

Procedure

Summary

This procedure provides step-by-step instructions for responding to and closing a USA ticket request.

Target Audience

Locate and mark personnel.

Before You Start

- Read the Safety section of this handbook.
- Wear the appropriate personal protective equipment (PPE) for your specific tasks and work area.
- Complete the steps presented in Procedure TD-5811P-104, "Proper Markings."

Table of Contents

Section **Page**

Publication Date: October 2015

1 Taking Pictures of Work Area

Figure 1. Examples of Good Work Area Photos

Example 1 includes the following:

- Reference points: fence, utility pole, tree, bushes
- Entire delineation
- Facilities owner
- 2 in. plastic.
- Gas main painted using appropriate color
- Marking starts 2 ft outside of premarked work area

Example 2 includes the following:

- Reference points include permanent water structures, parking sign, tree, and building.
- Facilities owner
- 2 in. plastic gas main 5 ft back from edge of asphalt.
- Flags were used for lawn area and paint for asphalt.

1. Take pictures of work area when it contains no delineations AND no locate and mark was performed.

2. When taking pictures of your markings, be sure to include:

    - Reference points such as street signs, address, permanent landscaping, etc.
    - Beginning and end of delineated work area
    - **ALL** markings, flags, whiskers, paint, and offsets
    - Close up photos to include necessary details
    - Distance photos to include scope of excavation

3. Attach all picture(s) to the USA ticket.

4. See **Figure 1, "Examples of Good Work Area Photos."**

2

Entering Information into Ticket Respond Screen

1. Select an appropriate task for the **Response** field. This is the work completed in response to this USA ticket. See **Figure 2, "USA Ticket Respond Screen."**

2. Select your name in the **Locator** field.

3. Visually ensure that the **Locate Time** field is accurate. Information in this field auto generates when you select a response for the ticket. This time stamp also marks the ticket's complete time.

4. Select **Yes** or **No** in the **Complete Job** field.

    - **Yes** means ticket is completely located and marked.
    - **No** means job is ongoing and there is more work to be completed (e.g. phased or new start time tickets).

5. IF a new start time is required,

    THEN change the Response field to **Notification of New Start Time** to activate the **New Start Time** field.

    A. Enter a new start time. A new start time is established by negotiating with the excavator. Include:

    - Name of person with whom the new start time was negotiated.

See Utility Bulletin TD-5811B-003

- Method of contact used to negotiate.
- Contact phone number of the person with whom the new start time was negotiated.

Figure 2. USA Ticket Respond Screen


Ticket ID: 123456
Registration: PGESAC (USAN)
Facility Type:
Ticket Folder:
Address 123 Main St
Locate Time 5/28/2013 10:57 AM
Complete Job: YES No
Time Arrived 5/28/2013 10:57 AM
Critical Facility: YES No
Any Other Means? Yes NO
Area Premarked? YES No
Un-Locatable? Yes NO
Heavy Equipment? Yes NO
Weather: dry
Surface: asphalt
Method Used: Conductive
Conductive: Valve

6. Enter PM number into the **PM #** field if work is for Pacific Gas and Electric Company (PG&E).

7. Enter the time you arrived at the job location into the **Time Arrived** field.

8. Enter estimate length of **gas footage** and **electric footage** (in ft).

9. Select **Yes** or **No** for the **Critical Facility** and **Standby** fields.

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    - **No** means no delineations found. Do the following:
        1) DO NOT perform locate.
        2) Notify excavator to submit another ticket when delineations are present.

   3) Change the **Response field** to **No Delineation**.

   4) Select **Yes** for **Complete Job field**.

   5) Save ticket.

14. Select **Yes** or **No** for **Un-Locatable**.

    - **Yes** means you have exhausted all locating methods and troubleshooting options up to requiring a PG&E crew to expose facility.
    - **No** is the default option. It indicates that you were able to locate facility.

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    - **Yes** means heavy equipment is used directly over PG&E underground facility.
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17. Select a surface type from the **Surface** field. When working on multiple surfaces, select the surface option where the majority of the work is being performed.

18. Select **Conductive** or **Inductive** from the **Method Used** field.

    - Conductive means directly connect to facility to be located.
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19. Enter information or notes into the **Add'l Message to Excavator** field. This is a form of communication to the excavator regarding details of the ticket.

20. Select **Save** to save all updated information.

21. Select **Sync** to send information to Utilisphere™ database. Sync sends response information to the excavator and updates new tickets into database ticket folder.

See Utility Bulletin
TD-5811B-003

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    - Access or safety issues at work area.
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    - Difficult to locate service or main.
    - When hand digging is required.
    - When measurements from maps are used to locate and mark facilities.
2. **NEVER** communicate depth of facility with excavator.
3. Document all communications with excavator in the USA ticket.

4 Performing End-of-Job Walkthrough

CAUTION!

NEVER leave a job incomplete without communicating with excavator. This could lead excavator to assume that locating and marking are completed and begin excavation.

1. Before leaving work area:

    A. Look at map to verify that previous facility count of gas and electric facilities was marked.

    B. Ensure that any inaccurate marks are covered in black paint.

    C. Make sure no hazards are left behind:
    - Close all open facilities (boxes, etc.).
    - Close gates
    - Secure PG&E locks.

5 Documenting Abnormal Operating Condition (AOC)

1. IF you discovered an AOC while responding to a USA ticket request,

   THEN submit a **Corrective Work Form**.

   For instructions to submit the form, see **Job Aid TD-5811P-105-JA03, "Corrective Work Form."**

6 Correcting Mapping Errors

1. Contact Mapping to discuss all mapping discrepancies.

2. Complete a **Map Correction Form**.

   For instruction to submit the form, see **Job Aid TD-5811P-105-JA02, "Submitting a Map Correction Form."**

7 Completing a Corrective Work Form

1. Complete a **Corrective Work Form** to address situations such as but not limited to the following:

   - Address AOC's.
   - Request an electrolysis testing station (ETS) to be installed.
   - Request main or service to be lowered due to shallow depth (less than 12 in. deep).
   - Repair decals on markers.

   For instruction to submit the form, see **Job Aid TD-5811P-105-JA03, "Corrective Work Form."**

8 Issuing a Notice of Unsafe Excavation to the Excavator

1. When you observe unsafe work practices being performed by a third party working around or near overhead and/or underground gas, electric, or fiber facilities, issue a **Notice of Unsafe Excavation** to the excavator (**Form TD-5811P-501-F02, "Notice of Unsafe Excavation"**). See **Job Aid TD-5811P-301-JA01, "Handling Excavators Working Unsafely."**

END OF PROCEDURE

Definitions

Critical Facility is any gas transmission facility with pressure above 60 psig and any electric facility operating at or above 60 kilovolt (kV).

The following facilities may also be critical facilities:

- Facilities identified as critical by the local operating area.
- Facilities which, if damaged, are likely to result in difficulty controlling the gas flow due to their size, material properties, operating pressure, or location, as well as the personnel and equipment available.
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Supplemental References

TD-5811P-104, "Proper Marking"

TD-5811P-105-JA02, "Submitting a Map Correction Form"

TD-5811P-105-JA03, "Corrective Work Form"

ATTACHMENT 24

Chan, Wai-Yin

From:	[redacted]
Sent:	Thursday, October 19, 2017 8:40 AM
To:	Chan, Wai-Yin
Cc:	Bruno, Kenneth; Lee, Dennis M.; Bradley, Mike; Gruen, Darryl; Khatri, Sikandar; Pendleton, Jonathan (Law); Richmond, Susie
Subject:	RE: [Index 11333] RE: SED Data Request - PG&E Damage Prevention Program
Attachments:	Index 11333_Confidentiality Declaration.pdf; Index 11333_Attachments_CONF.zip

Franky,

Please see below for the response and attached accompanying documents for data request 11333.

PG&E is providing this response pursuant to Public Utilities Code §583 because this response and/or the attached documents contain information that should remain confidential and not be subject to public disclosure as it contains one or more of the following: critical infrastructure information that is not normally provided to the general public, the dissemination of which poses public safety risks (pursuant to the Critical Infrastructures Information Act of 2002, 6 U.S.C. §§131-134); sensitive personal information pertaining to PG&E employees; customer information; or commercially sensitive/proprietary information. This information is highlighted yellow below and, if feasible, highlighted yellow or outlined in red in the referenced attachments.
See attached declaration supporting confidential designation ("Index 11333_Confidentiality Declaration.pdf").

QUESTION 11333.01: Under the "Action(s) to get back to green" column in a table in PG&E's 2012 July Keys To Success report (please see the attached Index 10707-13_2012-07_Keys To Success_CONF - Page 109), it states:

"We are restructuring the 'notification of new start time' process, which is still in development phases and has not yet been implemented into the ticket management program. The change is initiated to improve the process and integrity of the company. Currently, PG&E's locators have the ability to call and notify a new start time for a USA ticket with the excavator, which means the 48 hour clock for on-time performance on the USA ticket is reset. However, ***this option has been utilized without safeguards built into the system to ensure proper contact was made*** and a new start time was correctly established. We are currently working with IRTH solutions to create a customization that will require the locators to collect certain information when utilizing this option. This customization may result in added response time for tickets due to collecting additional information. We plan to roll out and pilot the customization to better understand its effects before implementing onto the entire system. This will help us better understand if it will disrupt the locators' work flow. Based on the results of the pilot, we also need to evaluate the impact on resources and determine if additional M&L resources will be needed in order to avoid an increase in late tickets system wide. In addition, the Damage Prevention process team will evaluate the need to track 'negotiate new start time' tickets as a subset of the on time percentage to understand how often we are actually responding to USA tickets within the original 48 hour window…" (Emphasis added.)

With this passage in mind, please answer the following:

a. Please provide SED a description of PG&E's restructuring process of the "notification of new start time" that is mentioned in the above quoted passage of the 2012 Keys To Success Report.
b. It was indicated that the option of call and notify a new start time to reset the 48 hour clock for on-time performance on the USA ticket has been utilized without safeguards built into the system to ensure proper contact was made.
    i. Please provide SED the detail of this finding.
    ii. Is this finding a result of PG&E identifying locators using this option without proper contact?
    iii. Was PG&E management notified of this information? Who received this information?

    iv. Since the above passage was written, please identify all steps that PG&E has taken to "ensure proper contact was made". In this answer, please include all "safeguards built into the system". Please be sure to identify which steps are "safeguards" and which are not.
    v. Please identify each the date each step was taken in response to question 1, b, iv.

c. It was indicated that a customization was made to require locators to collect certain information when resetting the 48 hour clock for a USA ticket.
    i. Please provide SED the detail of this customization. Please include the definition of a customization as used in this context, as well as the documentation related to the customization, and the customization itself, that PG&E created with IrthNet.
    ii. Did PG&E evaluate the effectiveness of this customization to ensure locators were making proper contact with excavators? If so, provide the documentation showing this evaluation.
    iii. Did PG&E's quality management/assurance/control discover any findings associated with this customization? (i.e. improper use of this customization, not collecting the required information, not documenting the information, not making proper contact with excavators, etc) If so, provide all such findings.
    iv. Who was responsible to oversee this process?

d. If this metric item "got back to green",
    i. What was PG&E's basis?
    ii. When did it occur?
    iii. Who made the decision that the metric "got back to green"?
    iv. Did PG&E continue to monitor its damage prevention program to ensure proper contact was made by the locators when resetting the 48 hour clock of a USA ticket? If yes, please describe PG&E's monitoring process.

e. If this metric item did not get back to green:
    i. Why not?
    ii. What happened to this metric item?
    iii. What criteria were not met that prevented "getting back to green"?
    iv. What criteria were met that allowed "getting back to green"?
    v. What efforts were taken to meet each criterion to "get back to green"?
    vi. Please list all underlying criteria necessary for this metric to "get back to green". If there are no underlying criteria, please explain the method for determining if the metric "got back to green".

RESPONSE 11333.01:

a. Prior to restructuring renegotiated start time responses for USA tickets in late 2012, if a renegotiation of a new start time took place, a locator processed the response per the training provided in attachment "*Index 11333-01a_Respond To Open Ticket -New Start Time_9-9-11.pdf.*" In the first stages of Field Unit (the interface used by locators to capture response data that was then uploaded to IRTHnet), locators would "Respond to an Open Ticket," capture the new start time, and provide detailed notes regarding the conversation that took place with the excavator. During this time, the notes field was not a required field in the system; however, a locator was required per their training to make contact with the excavator before identifying a new start time.

   In late 2012, PG&E restructured the process for renegotiated start time responses. A new response type called "Notification of New Start Time" was created, and locators utilized the training outlined in attachment "*Index 11333-01a_IRTH-FU-Android New Start Time - 10-22-12_CONF.pdf*" to complete a response under this new response type. In addition, safeguards were added to ensure the locator captured the information necessary for renegotiating a new start time (which includes the name and number of the individual to whom the locator spoke and the method of contact used by the locator). These safeguards wouldn't allow the ticket to be closed unless this information was entered, whereas the previous notes section in which this information was captured was free form and not a required field. Note, voicemail was initially added as an option for method of contact; however, a new training document was released two months later in December 2012 informing locators and supervisors that this was not a valid option. It was not to be used and was pending removal by IRTHnet. See attachment "*Index 11333-01a_IRTH-FU-Android New Start Time - 12-13-12_CONF.pdf*" for the updated training document.

- Note, attachment "*Index 11333-01a_IRTH-FU-Android New Start Time - 10-22-12_CONF.pdf*" is designated confidential because it contains customer-specific data on pages 12 and 17. This information is outlined in red in the attachment.
- Note, attachment "*Index 11333-01a_IRTH-FU-Android New Start Time - 12-13-12_CONF.pdf*" is designated confidential because it contains customer-specific data on pages 12, 13, 15, 24, and 29. This information is outlined in red in the attachment.

b. In regards to the option to renegotiate a new start time for a USA ticket and reset the 48 hour clock for on-time performance without safeguards:

i. See section 1 titled "Mark and Locate Timeliness" on pages 2 and 3 of attachment "*Index 11333-01b_12-014 Rpt.pdf*" for a report detailing this finding.
ii. As indicated in attachment "*Index 11333-01b_12-014 Rpt.pdf,*" the finding was a result of Internal Auditing (IA) and Quality Management (QM) auditing the Gas Damage Prevention program and noting a system glitch, which would halt the software's time-clock features by opening the record without performing the locate and mark work or documenting an agreement with the excavator to postpone the locate and mark work, as well as receiving information from Field Employees that tickets were several weeks behind schedule.
iii. PG&E records indicate that the aforementioned report was sent to Jane Yura, Vice President – Gas Standards and Policies, on February 10, 2012. PG&E is searching for additional instances where management was identified and will provide them if additional instances are identified.
iv. PG&E is still collecting this information and will provide it as soon as possible.
v. See below for the dates of actions taken by PG&E to ensure proper contact was made to excavators.

Action Taken	Date Completed
Creation of New Response Type "Notification of New Start Time" which included: • New Response Type under which responses with negotiated start times are captured • Safeguards to ensure the capture of necessary information for negotiated start times	December 2012
PG&E is still collecting additional information and will provide it as soon as possible.	N/A

c. Regarding the IRTHnet customization requiring locators to collect certain information prior to completing a "Notification of New Start Time" response:
i. See Response 11333.01(a) for details regarding the customization, as well as the documentation for how this customization was implemented.
ii. PG&E records indicate that the safeguard customization was tested prior to its implementation; however, PG&E records do not indicate subsequent evaluations were conducted after the implementation. See page 3 of attachment "*Index 11333-01c_12 014 mark and locate timeliness.pdf*" for IA's close out notes pertaining to issue.
iii. PG&E is still collecting this information and will provide it as soon as possible.
iv. The L&M Process Owner was responsible for overseeing the changes in IRTHnet. The L&M Process Owner at the time of the customization was Chris McGowan; Katherine Mack took over as Process Owner on January 14, 2013. The line of business supervision (i.e. locate and mark supervisors) was responsible for implementing and monitoring the new IRTHnet process.

d. PG&E is still collecting this information and will provide it as soon as possible.

e. PG&E is still collecting this information and will provide it as soon as possible.

QUESTION 11333.02: Under the "Description" column in the "Opportunities Linked to Short-term Initiatives" table in PG&E's 2013 January Keys To Success report (please see the attached Index 10707-13_2013-01_Keys To Success_CONF - Page 40), it states:

"We will be eliminating the option of adjusting ticket 'due date' without agreement by the requestor"

a. Please provide SED the detail of this initiative. (How was it started, who started it, why was it started, etc.)
b. Was adjusting ticket "due date" without agreement by the requestor an acceptable option (in PG&E's practices, standards or procedures) prior to this initiative?
c. Was PG&E management notified of this initiative? Who received this information?
d. Who was responsible to oversee this initiative?
e. Does this initiative have any relation to the metric item as mentioned in question 1 of this SED data request?
f. It was indicated in the table that this initiative was completed,
    vii. Please provide SED the detail of the action(s) taken by PG&E to complete this initiative.
    viii. When did PG&E complete this initiative?
    ix. Did PG&E evaluate the effectiveness of the action(s) taken by PG&E to eliminate the option of adjusting ticket 'due date' without agreement by the requestor?
    x. Did PG&E's quality management/assurance/control discover any findings associated with this initiative after it was completed? (i.e. ticket "due date" was adjusted without agreement by the requestor)
    xi. Did PG&E continue to monitor its damage prevention program to ensure that the option of adjusting ticket "due date" without agreement by the requestor was eliminated? If yes, please describe PG&E's monitoring process.
g. Please identify the last PG&E standard and/or procedure that allowed for "the option of adjusting ticket "due date" without agreement by the requestor".
h. Please identify the first PG&E standard and/or procedure that eliminated "the option of adjusting ticket "due date" without agreement by the requestor".

RESPONSE 11333.02: PG&E is still collecting this information and will provide it as soon as possible.

QUESTION 11333.03: Please provide PG&E's standards and/or procedures (from year 2012 to present) on renegotiating a new start time ("due date") for a USA ticket with the requestor. In answering the following questions, please refer to the applicable standards and/or procedures that show the answer. Please include the applicable section numbers and page numbers. Please also identify each applicable standard, practice and procedure that answers the question, including the date it was made effective.

a. From year 2012 to present, what are PG&E's practices, standards and procedures for a locator to renegotiate a new start time if the requestor cannot be reached by phone call?
b. From year 2012 to present, are there a minimum number of times that a locator is required to call the requestor if previous attempts to reach the requestor failed? If there are a minimum number of attempts that a locator needs to make, please provide PG&E's standards and/or procedures that contain this information.
c. From year 2012 to present, does PG&E track how many attempts a locator makes to reach the requestor by phone call before the locator is allowed to renegotiate a new start time. If yes, please provide this information.
d. From year 2012 to present, if a locator cannot reach the requestor by phone call with three attempts or more, what is PG&E's procedure for the locator? Is it acceptable to adjust the "due date" or close the ticket without performing locate and mark after three call attempts according to PG&E's

procedure? If yes, please provide PG&E's standards and/or procedures that contain this information.

e. From year 2012 to present, did any PG&E standards, practices, and/or procedures say anything related to the topic of phased tickets being used to avoid a ticket from showing up as late?

RESPONSE 11333.03:

a. At present (as of October 10, 2017), TD-5811P-102 Rev.2a and TD-5811P-105-JA01 Rev.1 provide guidance for when a requestor cannot be reached (see pages 5 and 6, section 3 of TD-5811P-102 Rev.2a and page 6, section 13 of TD-5811P-105-JA01 Rev.1). If the requestor cannot be reached, then the locator must immediately notify their supervisor and document details in the USA ticket. The internal practice of a supervisor would then be to assist the locator in contacting excavators who requested a ticket and were difficult to reach. If the requestor could not be reached by the start time, the ticket would be considered late. In addition to the aforementioned guidance, a section exists in PG&E procedures on the topic of 'no response from excavator' when additional information is needed before a locator could place marks (see page 6, section 12 of TD-5811P-105-JA01 Rev.1).

   Note:
   - TD-5811P-102 Rev.2a was published in October 2015 and is being provided in attachment "*Index 11333-03_TD-5811P-102_Rev2a_CONF.pdf.*" Attachment "*Index 11333-03_TD-5811P-102_Rev2a_CONF.pdf*" is designated confidential because it contains customer-specific data on pages 2 and 7, and critical energy infrastructure on page 7. This information is outlined in red in the attachment.
   - TD-5811P-105-JA01 Rev.1 was published in October 2015 and is being provided in attachment "*Index 11333-03_TD-5811P-105-JA01_Rev1.pdf.*"
   - PG&E is still compiling the historic practices, standards, and/or procedures on renegotiating a new start time and will provide this information as soon as possible.

b. PG&E procedures do not specify the minimum number of times a locator must call prior to renegotiating a ticket; however, as indicated in Response 11333.03(a), if the requestor could not be reached by the start time, the ticket would be considered late.

   PG&E is still compiling the historic practices, standards, and/or procedures on renegotiating a new start time and will provide this information as soon as possible.

c. Attempts to contact the requestor are tracked in IRTHnet. At present, each attempt is to be documented in the ticket (see page 6, section 3 of TD-5811P-102 Rev.2a and page 6, section 12 of TD-5811P-105-JA01 Rev.1).

   Note:
   - TD-5811P-102 Rev.2a was published in October 2015 and is being provided in attachment "*Index 11333-03_TD-5811P-102_Rev2a_CONF.pdf.*" Attachment "*Index 11333-03_TD-5811P-102_Rev2a_CONF.pdf*" is designated confidential because it contains customer-specific data on pages 2 and 7, and critical energy infrastructure on page 7. This information is outlined in red in the attachment.
   - TD-5811P-105-JA01 Rev.1 was published in October 2015 and is being provided in attachment "*Index 11333-03_TD-5811P-105-JA01_Rev1.pdf.*"
   - PG&E is still compiling the historic practices, standards, and/or procedures on renegotiating a new start time and will provide this information as soon as possible.

d. See Response 11333.03(a).

e. At present, phased ticket responses are identified in TD-5811P-105 Rev.1a for when a job site was too large to be completed by the start time (page 3 of TD-5811P-105 Rev.1a). In addition, TD-5811P-105-JA01 Rev.1 specifically states not to use a 'respond to phased ticket' response for a notification of a new start time (page 8, section 17 of TD-5811P-105-JA01 Rev.1).

Note:

- TD-5811P-105 Rev.1a was published in October 2015 and is being provided in attachment "*Index 11333-03_TD-5811P-105_Rev1a.pdf.*"
- TD-5811P-105-JA01 Rev. 1 was published in October 2015 and is being provided in attachment "*Index 11333-03_TD-5811P-105-JA01_Rev1.pdf.*"
- PG&E is still compiling the historic practices, standards, and/or procedures on renegotiating a new start time and will provide this information as soon as possible.

QUESTION 11333.04: For the following items, please identify whether the data used in them comes from IrthNet, PG&E's Quality Management Team's reports on late tickets, or some other data source. If it is another source, please identify the data source.

a. Keys reports;
b. Index 9623-03_2014-June 2016 on time or late ticket count (spreadsheet title);
c. Locate and Mark SED Update, Dated August 4, 2017;
d. All other late ticket information provided in data responses to SED during 2016 and 2017 related to locating and marking.

RESPONSE 11333.04: PG&E is still collecting this information and will provide it as soon as possible.

Thank you,

[redacted]
Office: [redacted]
Cell: [redacted]
[redacted]

From: [redacted]
Sent: Tuesday, October 03, 2017 11:49 AM
To: Richmond, Susie; Chan, Wai-Yin
Cc: Bruno, Kenneth; Lee, Dennis M.; Bradley, Mike; Gruen, Darryl; Khatri, Sikandar; Pendleton, Jonathan (Law)
Subject: [Index 11333] RE: SED Data Request - PG&E Damage Prevention Program

Franky,

For your reference, we've logged the request under Index 11333.

Thank you,

[redacted]
Office: [redacted]
Cell: [redacted]
[redacted]

From: Richmond, Susie
Sent: Tuesday, October 03, 2017 11:19 AM
To: Chan, Wai-Yin
Cc: Bruno, Kenneth; Lee, Dennis M.; Bradley, Mike; Gruen, Darryl; Khatri, Sikandar; Pendleton, Jonathan (Law); [redacted]
Subject: RE: SED Data Request - PG&E Damage Prevention Program

Franky,

Mike is currently out on leave, we will forward this on for processing.

Thank you,

Susie Richmond | Manager, Gas Ops Compliance & Risk
Pacific Gas and Electric Company
925-328-5776 office | 328-5776 internal | 925-786-0267 cell | susie.richmond@pge.com

---

From: Chan, Wai-Yin [mailto:Wai-Yin.Chan@cpuc.ca.gov]
Sent: Tuesday, October 03, 2017 11:03 AM
To: Bradley, Mike
Cc: Bruno, Kenneth; Lee, Dennis M.; Gruen, Darryl; Khatri, Sikandar; Pendleton, Jonathan (Law); [redacted] Richmond, Susie
Subject: SED Data Request - PG&E Damage Prevention Program

*****CAUTION: This email was sent from an EXTERNAL source. Think before clicking links or opening attachments.*****

Dear Mike,

The Safety and Enforcement Division (SED) of the California Public Utilities Commission is submitting a data request on PG&E's Damage Prevention Program, which is attached with this email.

Please provide a response by COB 10/18/2017.

Sincerely,

Wai-Yin (Franky) Chan
Sr. Utilities Engineer
Gas Safety & Reliability Branch
Safety & Enforcement Division
California Public Utilities Commission
wai-yin.chan@cpuc.ca.gov
Office (415) 703-2482
Cell (415) 471-4306
Fax (415) 703-2625

ATTACHMENT 25

TD-5811P-105-JA01, Rev. 0

Choosing the Correct Utilisphere™ Response

Job Aid

1 Purpose

Choosing the correct Utilisphere™ response has a direct impact on public safety and damage prevention. It helps you generate the appropriate communication with the excavator and accurately record your work for each specific USA ticket. The Utilisphere™ database stores this information as the official record for each ticket.

Most responses have standard comments already created. Use these standard comments whenever possible.

2 Facility Marked

WHEN TO USE	Locate and mark is completed in one visit.
EXAMPLES OF PROPER NOTES	▪ Marked gas service (branch service) and electric service. Placed flags in lawn. ▪ Excavator excavated area before start date. Stopped job on 07/22 at 10:00am. Completed a “Record of Warning” form and provided a copy to foreman, John Doe, and explained the hazards. Marked remaining excavation area (gas main and services).
ADDITIONAL ACTIONS	1. Check one or more facility types (e.g., GT, GD, ET, ED, fiber). 2. IF you use this response for an area that was excavated before marking, THEN document details of excavation and conversations with excavator into the Notes section. 3. Take pictures of all markings. 4. Close ticket.

Publication Date: March 2014

3 No Conflict

WHEN TO USE	After clearing PG&E facilities from the vicinity of excavation area or from office.
EXAMPLES OF PROPER NOTES	▪ No PG&E facilities near delineations. Closed from office, contacted excavator to notify of no conflict. ▪ PG&E gas and electric distribution are only facilities cleared at this time. Entire excavation area not cleared until you receive a response from PG&E electric.
ADDITIONAL ACTIONS	1. IF you are at excavation site, THEN do the following: A. Paint "NO PGE" in delineations using the appropriate color for the facility identified as clear. B. Take pictures of markings. 2. Contact excavator to inform of no conflict if you are **closing ticket WITHOUT a site visit**. 3. Notify excavator if any PG&E facilities still need to be located by another department (i.e., Gas Transmission, Electric Transmission). 4. IF unable to make contact with excavator, THEN use **Addl Notes to Excavator** option in the response screen to notify of other departments not yet identified as cleared. 5. Close ticket.

Publication Date: March 2014

4 Bad Ticket Info – Resubmit

WHEN TO USE	A ticket contains incorrect information (wrong address, wrong directions, etc.).
EXAMPLES OF PROPER NOTES	▪ Address does not exist. Contacted excavator and left message to re-submit ticket with accurate information. ▪ No PM # provided. Resubmit ticket with PM #.
ADDITIONAL ACTIONS	1. Document details of inaccurate information. 2. Document conversation with excavator. 3. Close ticket.

5 Cancelled Ticket

WHEN TO USE	Excavator cancels a ticket.
EXAMPLE OF PROPER NOTES	Ticket cancelled by excavator.
ADDITIONAL ACTIONS	1. Search your folder for all tickets that have the same ticket number. 2. Close tickets.

6 Duplicate Ticket

WHEN TO USE	Identical tickets exist in your folder, or a ticket was placed in your folder by mistake.
EXAMPLES OF PROPER NOTES	▪ Ticket submitted to wrong area. Informed supervisor. ▪ Ticket is duplicate. Close one copy.
ADDITIONAL ACTIONS	1. IF a ticket is placed in your folder by mistake, THEN do the following: A. Inform supervisor to have ticket reassigned. B. Leave ticket open. 2. Close the duplicate ticket(s) if you can confirm that you have multiple copies of the same ticket.

Publication Date: March 2014

7 Excavated Before Marked

WHEN TO USE	Excavator began excavation before PG&E marks.
EXAMPLE OF PROPER NOTES	Excavator started to excavate area before I could locate and mark. Stopped job at 10:00am. Completed a "Record of Warning" form and provided a copy to excavator. Spoke with foreman, John Doe, and explained the hazards.
ADDITIONAL ACTIONS	1. IF excavation is still in progress, THEN do the following: a. IMMEDIATELY stop excavation. b. Complete a **Record of Warning** form. See Job Aid TD-5811P-301-JA02, "Issuing a Record of Warning." 2. Close ticket if excavation IS completed. 3. IF excavation is NOT completed or facilities still need to be located, THEN do the following: A. Proceed to locate and mark. B. Use the response **Facility Marked** (include notes regarding excavation before marked).

8 Expired Ticket

WHEN TO USE	Ticket is expired (older than 28 days) and has not been extended or renewed.
EXAMPLE OF PROPER NOTES	Ticket is expired. Made direct contact with excavator to notify about extend or renew if job is still active.
ADDITIONAL ACTIONS	1. Inform excavator to submit a renewal or extension ticket. 2. Close ticket.

Publication Date: March 2014

9 Located by PG&E Crew

WHEN TO USE	PG&E's crew locates and excavates.
EXAMPLE OF PROPER NOTES	Located by PG&E crew (John Doe, LanID). PM#1234567. (PM# is needed only if you have spent 15 minutes or longer on ticket.)
ADDITIONAL ACTIONS	1. Document PM#, name, and LanID of person who located facilities. 2. Close ticket.

10 No Delineation

WHEN TO USE	No delineations at excavation site.
EXAMPLE OF PROPER NOTES	Site has no signs of delineation. Contacted the foreman, John Doe (555-367-5309), and informed him to delineate area and re-submit ticket.
ADDITIONAL ACTIONS	1. Document conversation with excavator. 2. Close ticket.

11 No Remark Required

WHEN TO USE	Ticket indicates no remark required.
EXAMPLE OF PROPER NOTES	Excavator indicates on ticket that no remarks are required.
ADDITIONAL ACTIONS	Close ticket.

Publication Date: March 2014

12 No Response from Excavator

WHEN TO USE	Excavator has not responded to 3 requests for help OR information needed to complete ticket.
EXAMPLES OF PROPER NOTES	▪ Left message on 06/29/13 at 2:03pm for John Doe (555-367-5309) requested access to locked gate and more information to complete ticket request. ▪ Left message on 06/30/13 at 8:30am for John Doe (555-367-5309). Same request as first attempt. ▪ Left message on 06/30/13 at 1:00pm for John Doe (555-367-5309). Same request as first attempt.
ADDITIONAL ACTIONS	1. Attempt to contact excavator at least 3 times. 2. Document date, time, and details of each attempt. 3. Close ticket.

13 Notification of New Start Time

WHEN TO USE	After direct contact was made with excavator and a new start date and time have been mutually agreed upon.
EXAMPLES OF PROPER NOTES	Spoke with John Doe (555-367-5309) and discussed a new start date and time due to rain in the area.
ADDITIONAL ACTIONS	1. Document the following: ▪ New start date and time. ▪ Name and phone number of person you contacted. ▪ Method of contact (phone conversation or field meet. Voice message is NOT acceptable). 2. Leave ticket open.

Publication Date: March 2014

14 PG&E Response Not Required

WHEN TO USE	After confirming that PG&E services are NOT required for a ticket request.
EXAMPLES OF PROPER NOTES	▪ Spoke with John Doe (555-367-5309) and was informed that ticket request is for telecom and cable. ▪ Excavator comments on ticket state: “Re-mark Yes, Telecom.”
ADDITIONAL ACTIONS	1. Document the following: ▪ Conversation with excavator (if applicable). ▪ How you determined that PG&E services were not needed. 2. Close ticket.

15 Re-assigned Ticket

WHEN TO USE	For supervisor to use when re-assigning a ticket to a different folder.
EXAMPLE OF PROPER NOTES	Moved ticket to PGE01 folder to even-out work flow.
ADDITIONAL ACTIONS	1. Document reason for re-assignment. 2. Leave ticket open.

16 Completing a Phased Ticket

WHEN TO USE	To log the final response of a phased ticket when job is completed.
EXAMPLE OF PROPER NOTES	Completed locate and mark of the ticket request.
ADDITIONAL ACTIONS	1. Check one or more facility types (e.g., GT, GD, ET, ED, fiber). 2. Take pictures of ALL markings. 3. Close ticket.

17 Respond to a Phased Ticket

WHEN TO USE	Phasing a ticket for large excavations that cannot be completed within the 2 working day time limit. DO NOT use for a notification of new start time.
EXAMPLE OF PROPER NOTES	Spoke with John Doe (555-367-5309). Discussed plan to phase ticket to stay ahead of excavation. Located west side of Main St. between 1st and 2nd St. on 10/22. Will return 10/23 at 10:00am to locate the west side of Main St. between 2nd and 3rd St.
ADDITIONAL ACTIONS	1. Check one or more facility types (e.g., GT, GD, ET, ED, fiber). 2. Document all discussions with excavator, including the agreed phase plans. 3. Take pictures of daily markings. 4. Leave ticket open until job is completed. 5. Use **Respond to a Completed Phased Ticket** to close ticket.

18 Site Visit/Field Meet

WHEN TO USE	Field Meet or Site Visit is held to discuss concerns or excavation scope with excavator. DO NOT use if you locate and mark facilities during visit.
EXAMPLE OF PROPER NOTES	Met with John Doe and discussed concerns regarding excavation 8 ft from a PG&E critical facility. Explained a standby will be required if they come within 5 ft.
ADDITIONAL ACTIONS	1. Document all discussions with excavator and the agreed phase plans. 2. Take pictures of areas of concern. 3. Leave ticket open.

ATTACHMENT 26

TD-5811P-105-JA01, Rev. 1

Choosing the Correct Utilisphere™ Response

Job Aid

1 Purpose

Choosing the correct Utilisphere™ response has a direct impact on public safety and damage prevention. It helps you generate the appropriate communication with the excavator and accurately record your work for each specific USA ticket. The Utilisphere™ database stores this information as the official record for each ticket.

Most responses have standard comments already created. Use these standard comments whenever possible.

2 Facility Marked

WHEN TO USE	Locate and mark is completed in one visit.
EXAMPLES OF PROPER NOTES	▪ Marked gas service (branch service) and electric service. Placed flags in lawn. ▪ Excavator excavated area before start date. Stopped job on 07/22 at 10:00am. Completed a “Notice of unsafe excavation” form and provided a copy to foreman, John Doe, and explained the hazards. Marked remaining excavation area (gas main and services).
ADDITIONAL ACTIONS	1. Check one or more facility types (e.g., GT, GD, ET, ED, fiber). 2. IF you use this response for an area that was excavated before marking, THEN document details of excavation and conversations with excavator into the Notes section. 3. Take pictures of all markings. 4. Close ticket.

Publication Date: October 2015

3 No Conflict

WHEN TO USE	After clearing PG&E facilities from the vicinity of excavation area or from office.
EXAMPLES OF PROPER NOTES	▪ No PG&E facilities near delineations. Closed from office, contacted excavator to notify of no conflict. ▪ PG&E gas and electric distribution are only facilities cleared at this time. Entire excavation area not cleared until you receive a response from PG&E electric.
ADDITIONAL ACTIONS	1. IF you are at excavation site, THEN do the following: A. Paint “NO PGE” in delineations using the appropriate color for the facility identified as clear. B. Take pictures of markings. 2. Contact excavator to inform of no conflict if you are **closing ticket WITHOUT a site visit**. 3. Notify excavator if any PG&E facilities still need to be located by another department (i.e., Gas Transmission, Electric Transmission). 4. IF unable to make contact with excavator, THEN use **Addl Notes to Excavator** option in the response screen to notify of other departments not yet identified as cleared. 5. Close ticket.

4 Bad Ticket Info – Resubmit

WHEN TO USE	A ticket contains incorrect information (wrong address, wrong directions, etc.).
EXAMPLES OF PROPER NOTES	▪ Address does not exist. Contacted excavator and left message to re-submit ticket with accurate information. ▪ No PM # provided. Resubmit ticket with PM #.
ADDITIONAL ACTIONS	1. Document details of inaccurate information. 2. Document conversation with excavator. 3. Close ticket.

5 Cancelled Ticket

WHEN TO USE	Excavator cancels a ticket.
EXAMPLE OF PROPER NOTES	Ticket cancelled by excavator.
ADDITIONAL ACTIONS	1. Search your folder for all tickets that have the same ticket number. 2. Close tickets.

6 Duplicate Ticket

WHEN TO USE	Identical tickets exist in your folder, or a ticket was placed in your folder by mistake.
EXAMPLES OF PROPER NOTES	▪ Ticket submitted to wrong area. Informed supervisor. ▪ Ticket is duplicate. Close one copy.
ADDITIONAL ACTIONS	1. IF a ticket is placed in your folder by mistake, THEN do the following: A. Inform supervisor to have ticket reassigned. B. Leave ticket open. 2. Close the duplicate ticket(s) if you can confirm that you have multiple copies of the same ticket.

7 Excavated Before Marked

WHEN TO USE	Excavator began excavation before PG&E marks.
EXAMPLE OF PROPER NOTES	Excavator started to excavate area before I could locate and mark. Stopped job at 10:00am. Completed a “Notice of unsafe excavation” form and provided a copy to excavator. Spoke with foreman, John Doe, and explained the hazards.
ADDITIONAL ACTIONS	1. IF excavation is still in progress, THEN do the following: a. IMMEDIATELY stop excavation. b. Complete a **Notice of Unsafe Excavation** form. 2. Close ticket if excavation IS completed. 3. IF excavation is NOT completed or facilities still need to be located, THEN do the following: A. Proceed to locate and mark. B. Use the response **Facility Marked** (include notes regarding excavation before marked).

8 Expired Ticket

WHEN TO USE	Ticket is expired (older than 28 days) and has not been extended or renewed.
EXAMPLE OF PROPER NOTES	Ticket is expired. Made direct contact with excavator to notify about extend or renew if job is still active.
ADDITIONAL ACTIONS	1. Inform excavator to submit a renewal or extension ticket. 2. Close ticket.

9 Located by PG&E Crew

WHEN TO USE	PG&E's crew locates and excavates.
EXAMPLE OF PROPER NOTES	Located by PG&E crew (John Doe, LAN ID). PM#1234567. (PM# is needed only if you have spent 15 minutes or longer on ticket.)
ADDITIONAL ACTIONS	1. Document PM#, name, and LAN ID of person who located facilities. 2. Close ticket.

10 No Delineation

WHEN TO USE	No delineations at excavation site.
EXAMPLE OF PROPER NOTES	Site has no signs of delineation. Contacted the foreman, John Doe (555-367-5309), and informed him to delineate area and re-submit ticket.
ADDITIONAL ACTIONS	1. Document conversation with excavator. 2. Close ticket.

11 No Remark Required

WHEN TO USE	Ticket indicates no remark required.
EXAMPLE OF PROPER NOTES	Excavator indicates on ticket that no remarks are required.
ADDITIONAL ACTIONS	Close ticket.

Publication Date: October 2015

12 No Response from Excavator

WHEN TO USE	Excavator has not responded to 3 requests for help OR information needed to complete ticket.
EXAMPLES OF PROPER NOTES	▪ Left message on 06/29/13 at 2:03pm for John Doe (555-367-5309) requested access to locked gate and more information to complete ticket request. ▪ Left message on 06/30/13 at 8:30am for John Doe (555-367-5309). Same request as first attempt. ▪ Left message on 06/30/13 at 1:00pm for John Doe (555-367-5309). Same request as first attempt.
ADDITIONAL ACTIONS	1. Attempt to contact excavator at least 3 times. 2. Document date, time, and details of each attempt. 3. Close ticket.

13 Notification of New Start Time

WHEN TO USE	After direct contact was made with excavator and a new start date and time have been mutually agreed upon.
EXAMPLES OF PROPER NOTES	Spoke with John Doe (555-367-5309) and discussed a new start date and time due to rain in the area.
ADDITIONAL ACTIONS	1. Document the following: ▪ New start date and time. ▪ Name and phone number of person you contacted. ▪ Method of contact (phone conversation or field meet. Voice message is NOT acceptable). 2. Leave ticket open.

Publication Date: October 2015

14 PG&E Response Not Required

WHEN TO USE	After confirming that PG&E services are NOT required for a ticket request.
EXAMPLES OF PROPER NOTES	▪ Spoke with John Doe (555-367-5309) and was informed that ticket request is for telecom and cable. ▪ Excavator comments on ticket state: “Re-mark Yes, Telecom.”
ADDITIONAL ACTIONS	1. Document the following: ▪ Conversation with excavator (if applicable). ▪ How you determined that PG&E services were not needed. 2. Close ticket.

15 Re-assigned Ticket

WHEN TO USE	For supervisor to use when re-assigning a ticket to a different folder.
EXAMPLE OF PROPER NOTES	Moved ticket to PGE01 folder to even-out work flow.
ADDITIONAL ACTIONS	1. Document reason for re-assignment. 2. Leave ticket open.

16 Completing a Phased Ticket

WHEN TO USE	To log the final response of a phased ticket when job is completed.
EXAMPLE OF PROPER NOTES	Completed locate and mark of the ticket request.
ADDITIONAL ACTIONS	1. Check one or more facility types (e.g., GT, GD, ET, ED, fiber). 2. Take pictures of ALL markings. 3. Close ticket.

17 Respond to a Phased Ticket

WHEN TO USE	Phasing a ticket for large excavations that cannot be completed within the 2 working day time limit. DO NOT use for a notification of new start time.
EXAMPLE OF PROPER NOTES	Spoke with John Doe (555-367-5309). Discussed plan to phase ticket to stay ahead of excavation. Located west side of Main St. between 1st and 2nd St. on 10/22. Will return 10/23 at 10:00am to locate the west side of Main St. between 2nd and 3rd St.
ADDITIONAL ACTIONS	1. Check one or more facility types (e.g., GT, GD, ET, ED, fiber). 2. Document all discussions with excavator, including the agreed phase plans. 3. Take pictures of daily markings. 4. Leave ticket open until job is completed. 5. Use **Respond to a Completed Phased Ticket** to close ticket.

18 Site Visit/Field Meet

WHEN TO USE	Field Meet or Site Visit is held to discuss concerns or excavation scope with excavator. DO NOT use if you locate and mark facilities during visit.
EXAMPLE OF PROPER NOTES	Met with John Doe and discussed concerns regarding excavation 8 ft from a PG&E critical facility. Explained a standby will be required if they come within 5 ft.
ADDITIONAL ACTIONS	1. Document all discussions with excavator and the agreed phase plans. 2. Take pictures of areas of concern. 3. Leave ticket open.

Publication Date: October 2015

ATTACHMENT 27

CONFIDENTIAL - GENERAL ORDER 66D AND DECISION 16-08-024

Standard Comments IRTH Field Unit

PPE:

•NA

Tools:

Guidance Document References:

- **NA**

Level of Use:

☐Information

☑Reference

☐Continuous

Response	Description	Notes	Actions	Standard Comments
FACILITY MARKED	Facilities marked.		• Check one or more type of facility: GT, GD, ET, ED, Fiber. • Close the ticket.	Elec OH Flags Hand Dig only Joint trench Offsets Paint Flags Stakes Whiskers
NO CONFLICT	No Conflict.	No PG&E facilities in conflict with excavation. If other PG&E facilities exist, notify the correct locator or supervisor.	• Notify other PG&E facility owners. • Ensure positive contact is made. • DO NOT paint "NO PGE" unless all PG&E facilities are located by one locator. • Close the ticket.	Cleared from office Notify other PGE Painted "No PGE" Direct contact with excavator Message left for excavator Date: Time: Contact Name:
RESPOND TO OPEN TICKET	Phased ticket (ongoing job) Changed start date and time. Assistance needed from excavator.	Document: name, notes, new date, time of excavation.	• Document new date. • Time of excavation. • Keep the ticket open (uncheck completed box).	Phased ticket Changed start date and time Assistance needed from excavator Date: Time: Contact Name:
BAD TICKET INFO - RESUBMIT	Bad ticket info, resubmit ticket through USA.	Bad ticket information (e.g. wrong address).	• Document the conversation with excavator. • Close the ticket.	Address does not exist Wrong Address Wrong Directions Direct contact with excavator Message left for excavator Date: Time: Contact Name:

Standard Comments IRTH Field Unit

Response	Description	Notes	Actions	Standard Comments
CANCELLED TICKET	Cancelled ticket.		• Close the ticket. • Close the original ticket.	
DUPLICATE TICKET	Identical ticket sent to two offices (e.g. PGESJO, PGEMIL), or superseded by follow-up ticket.		• Document the correct office responsible. • Close the ticket.	Responsible Office: Superseded by Follow-Up ticket.
RE-ASSIGNED TICKET	Ticket routed to incorrect office of responsibility.		• Re-assigned to responsible office.	
EXCAVATED BEFORE MARKED	Was excavated before being marked by PG&E.		• If excavation complete, close the ticket. • Complete form SHC 104 – Observed Hazard for follow-up by SH&C. • Stop the job. • Locate and mark remaining facilities in delineated area if excavation in process. • Use the Facility Marked response. • Fill in the form SHC 104 –Observed Hazard for follow-up by SH&C.	Exc. before marked Job stopped Direct contact with excavator Message left for excavator Date: Time: Contact Name: SHC 104 Submitted Date:
NO REMARK REQUIRED	No remarks required.			

Response	Description	Notes	Actions	Standard Comments
NO RESPONSE FROM EXCAVATOR	Excavator did not respond to positive contact.		• Contact excavator. • Document contact. • Close the ticket.	CGI – Dog CGI – Locked gate Direct contact with excavator Message left for excavator Date: Time: Contact Name: SHC 104 Submitted Date:
NO DELINEATION	Resubmit ticket through USA.		• Document the conversation with excavator. • Close the ticket.	Area not delineated Direct contact with excavator Message left for excavator Date: Time: Contact Name:
SITE VISIT/FIELD MEET	Field Meet within 10 feet of critical facility. Field Meet requested by excavator. Unscheduled site visit to check excavator. Un-locatable facilities.	Legal requirement for Field Meet if digging within 10 feet of a critical facility.	• Field meet required for un-locatable facilities. • Field meet required for excavations with 10 feet of a critical facility. • Document contact with excavator, date, time and name. • Map Correction Form submitted for un-locatable facilities.	Un-locatable facilities: Map Correction Form Submitted Date: Excavation within 10 feet of critical facility Field Meet requested Unscheduled Site Visit Direct contact with excavator Message left for excavator Field meet Date: Field meet Time: Contact Name:
Z POLE TEST AND TREAT-AUTOCLOSED	Auto closed tickets.		• Ticket auto-closed.	

ATTACHMENT 28

See Utility Bulletins TD-5811B-003 and TD-5811B-005

TD-5811P-102, Rev. 2a

Determining Scope of Locate

Procedure

Summary

This procedure provides step-by-step instructions for evaluating the scope of a USA ticket request and determining the required response.

Target Audience

Locate and mark personnel.

Before You Start

- Read the Safety section of this handbook.
- Wear the appropriate personal protective equipment (PPE) for your specific tasks and work area.

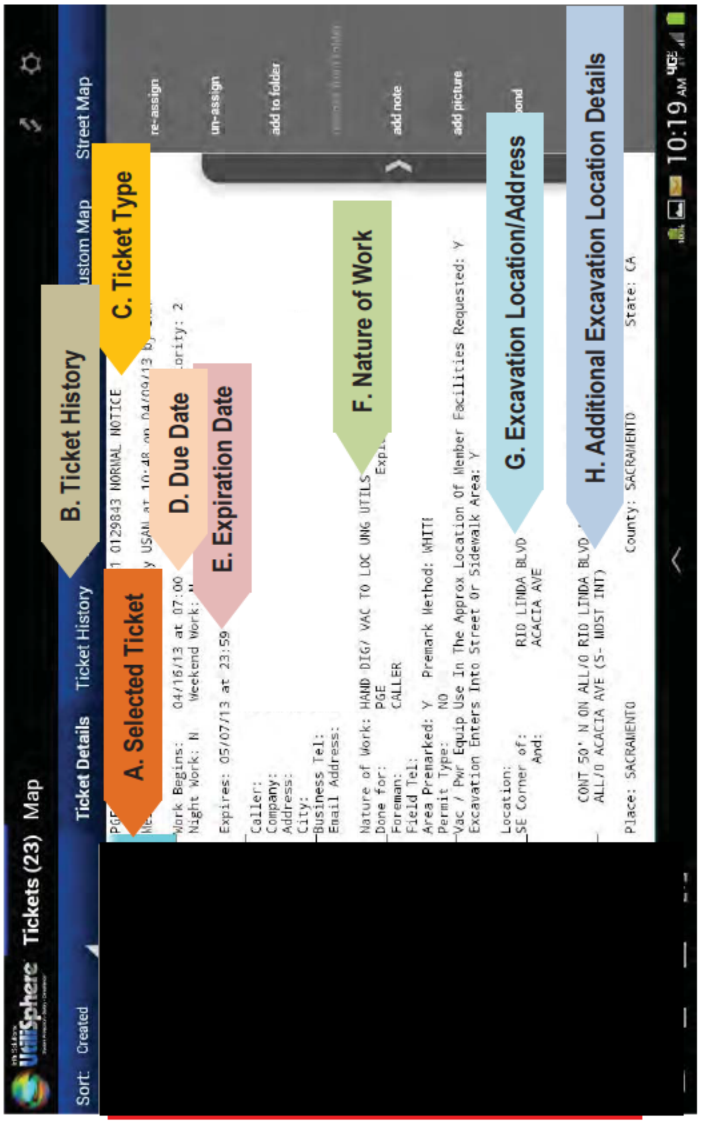
Table of Contents

See Utility Bulletins TD-5811B-003 and TD-5811B-005

1 Understanding the Ticket Details Screen

The ticket details screen contains the scope of the ticket request. See Figure 1, "Example of a USA Ticket Details Screen."

Figure 1. Example of a USA Ticket Details Screen



```
PG      1 0129843 NORMAL NOTICE
      y USAN at 10:48 on 04/09/13 by
Work Begins:   04/16/13 at 07:00           ority: 2
Night Work: N    Weekend Work: N

Expires: 05/07/13 at 23:59

Caller:
Company:
Address:
City:
Business Tel:
Email Address:

Nature of Work: HAND DIG/ VAC TO LOC UNG UTILS
Done for:       PGE                          Expi
Foreman:        CALLER
Field Tel:
Area Premarked: Y   Premark Method: WHITE
Permit Type:    NO
Vac / Pwr Equip Use In The Approx Location Of Member Facilities Requested: Y
Excavation Enters Into Street Or Sidewalk Area: Y

Location:
SE Corner of:     RIO LINDA BLVD
         And:     ACACIA AVE

   CONT 50' N ON ALL/O RIO LINDA BLVD
   ALL/O ACACIA AVE (S- MOST INT)

Place: SACRAMENTO        County: SACRAMENTO        State: CA
```

[redacted]

A. **Select a Ticket** to display its details.

B. **Ticket History** displays tickets history, past responses, and notes.

C. **Ticket Type** describes the urgency nature of the request:

- **Emergency Notice** is a zero-hour notice that requests an immediate response.
- **Short Notice** has a start date of less than 2 work days.
- **Normal Notice** has start date at least 2 work days.
- **Follow-Up Notice** is a valid ongoing ticket used to request or provide additional information.
- **Extension Notice** is a valid ongoing ticket used for extending excavation projects. A ticket can be extended up to 6 months.
- **Renewal Notice** is used when a USA ticket has lapsed over 6 months. A new ticket number is issued for renewal notice.

D. **Due Date** is the date/time the ticket is due. Tickets MUST be responded to within 2 workings days, excluding weekends and holidays OR by the start date of the excavation, whichever is greater.

E. **Expiration Date** is the date ticket stops being valid. Excavators must have a valid ticket to perform excavations. Excavator must contact USA to extend or renew an expired ticket.

F. **Nature of Work** explains the method of excavation (boring, vacuum, trenching, blasting, hand digging, etc.).

G. **Excavation Location/Address** identifies the cross streets or direct address of excavation area.

H. **Additional Excavation Location Details** provides additional information about the excavation area. These details help to determine the size of excavation area and should accurately match the delineations at the site.

2 Arriving at the Excavation Site

1. IF the contractor has begun excavation without following proper excavation procedures OR does not have a standby when required,

   THEN issue a **Form TD-5811P-501-F02, "Notice of Unsafe Excavation."**

---

3 Reviewing USA Ticket Details

1. Open the **Utilisphere™ Application** on your electronic tablet.

   For instructions, see **Job Aid TD-5811P-102-JA01, "Using Utilisphere™ on Tablet."**

2. Select the ticket you are working on.

3. Look at information in ticket details screen. See **Figure 1, "Example of a USA Ticket Details Screen."**

4. Review ticket **Expiration Date**.

   A. IF ticket has expired,

      THEN do the following:

      1) Have excavator contact USA to extend or renew ticket.

      2) DO NOT proceed to locate and mark until ticket has a valid date.

      3) Enter discussion details and description of situation into the **Notes** section of the USA ticket.

         For instructions, see **Procedure TD-5811P-105, "Responding to a Ticket."**

5. Review **Nature of Work** to determine excavation method.

6. Review ticket **Due Date**.

   A. Determine if you're able to complete all required tasks detailed on ticket by the due date.

   B. IF you're unable to complete the entire ticket by the due date because of the excavation size,

      THEN do the following:

      1) Discuss options to phase ticket with excavator.

      2) Develop a plan to locate a different section each day to stay ahead of the excavation schedule. In most situations, the excavator does not plan to excavate a large job in 1 day.

      3) Enter the following information in the **Notes** section of the USA ticket:

         - Name and phone number of person with whom you agreed to phase ticket.
         - Discussion details
         - Phase plans
         - Other pertinent information

         For instructions, see **Procedure TD-5811P-105, "Responding to a Ticket."**

   C. IF you're unable to complete the entire ticket by the due date because of other relevant issues and you must renegotiate a new start time,

      THEN discuss with the excavator to set a new mutually agreeable start date and time to complete the ticket.

      1) Relevant issues include but are not limited to:

         - Qualified Electrical Worker (QEW) needed to complete locate.
         - Emergency ticket pulled you away to another site.
         - Access issues
         - Prioritization
         - Size of project
         - Weather

See Utility Bulletins
TD-5811B-003 and TD-5811B-005

2) IF a new start date and time was negotiated,

   THEN enter the following information in the USA ticket:

   - Name and phone number of person with whom you agreed to phase ticket.
   - Discussion details
   - New start date and time
   - Other pertinent information

3) IF excavator is unavailable or cannot renegotiate,

   THEN do the following:

   a. IMMEDIATELY notify your supervisor of the situation.

   b. Document details in USA ticket.

7. IF ticket details do not match delineations at the excavation site,

   THEN do the following:

   A. Have excavator contact USA at 811 to update tickets description.

   B. Proceed to work ONLY in delineated areas that match ticket request.

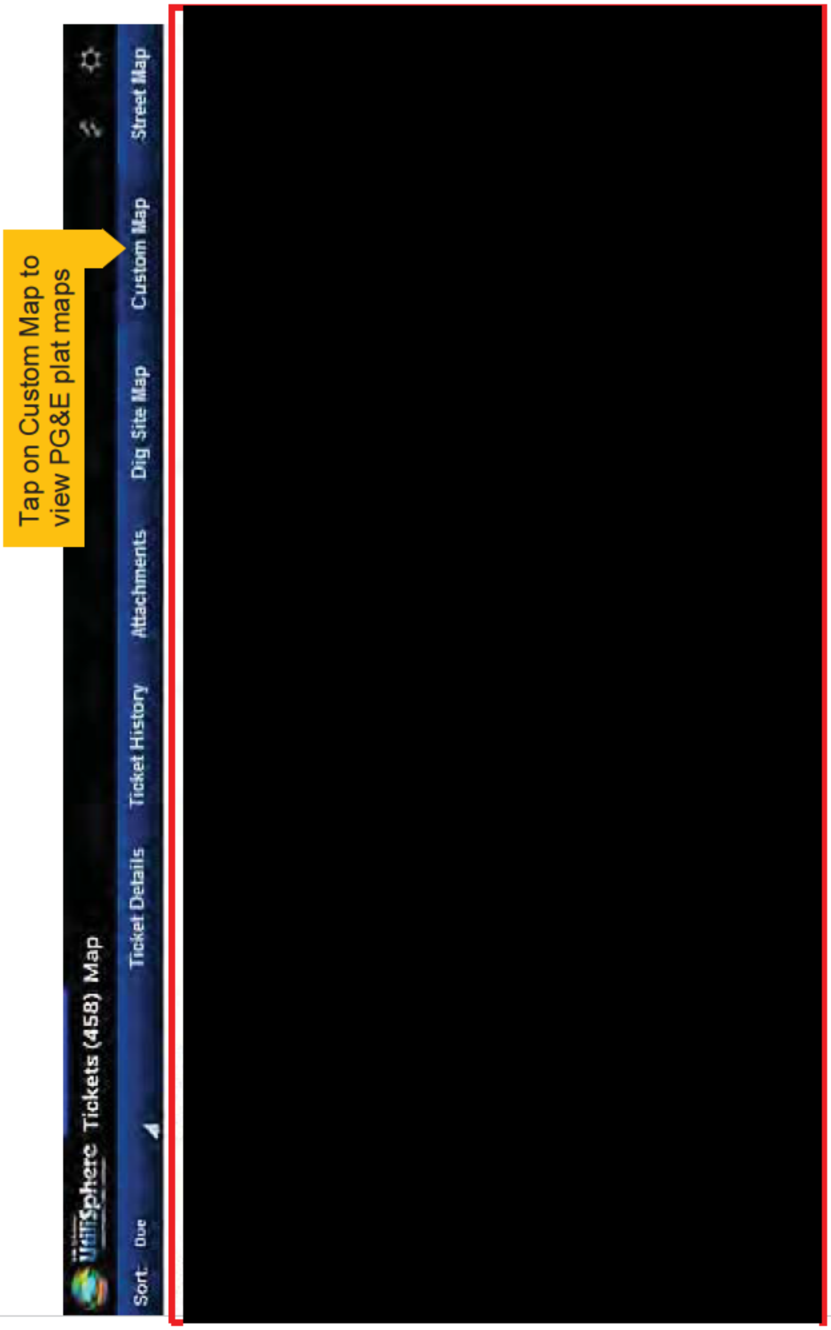
   C. Enter a description of situation into the Notes section of your USA ticket.

8. Review PG&E maps of the excavation site if ticket details match delineations.

4 Reviewing Custom Maps

1. Select **Custom Map** tab on your ticket. See Figure 2, "Example of a USA Ticket Custom Map Screen."

Figure 2. Example of a USA Ticket Custom Map Screen



[redacted]

Tap on Custom Map to view PG&E plat maps

2. Identify the following:

   - Service count
   - Conductive hook-up locations
   - Type of facilities to be located (steel plastic, cast iron, copper, fiber, etc.)
   - Abandoned or deactivated facilities
   - Critical facilities
   - Available measurements
   - End of main or stub services
   - Electric conduit counts
   - Proposed facilities that may have already been tied into the system
   - Electric facilities where a QEW is required (above 600 volts)
   - Pad-mounted electric equipment
   - Streetlights
   - Subsurface primary electric enclosures
   - Subsurface secondary boxes
   - Electric primary and secondary risers.

3. Call Mapping if you have questions or concerns about information on maps.

4. IF critical facilities are identified in the excavation area,

   THEN make note of the facilities AND verify the location during the marking procedure.

   For instructions, see Procedure TD-5811P-104, "Proper Markings."

5. Identify best hook-up locations based on service types and facility material types. See Table 1, "Hook-up Location Based on Material Types."

Publication Date: October 2015

See Utility Bulletins TD-5811B-003 and TD-5811B-005

Table 1. Hook-up Location Based on Material Types

PLASTIC	CONDUCTIVE METAL STEEL, COPPER, CAST IRON, ETC.	ELECTRIC	FIBER
Tracer wire at riser	Valve at service riser	Electric service riser with inductive clamp	Tracer wire at enclosure /box
Tracer wire at Electrolysis Testing Station (ETS)	Any metal riser where an inductive clamp can fit around	Electric riser at pole location with inductive clamp	
Valve at service riser	Tracer wire at Electrolysis Testing Station (ETS)	Pad-mounted transformer	
		Secondary enclosure/Meter panel	

6. Plan a locate strategy.

   A. If possible, do the following:

   - Hook-up at connection points located in the middle of work area to locate multiple directions from one connection.
   - Identify multiple connection points in case the locating instruments signal becomes weak or is lost.

---

5 Performing Visual Inspection

1. Implement the Two-Minute rule.

   For details, see the Safety section of this handbook.

2. Visually inspect excavation area to determine if area is properly delineated.

See Utility Bulletins TD-5811B-003 and TD-5811B-005

A. Types of acceptable delineations are:

- White paint
- White flags
- White whiskers
- White stakes
- A combination of any of the above.

B. For home owners:

1) IF delineations are not found on a private property,

   THEN assist homeowner in creating delineations. Flour is an acceptable means to mark delineations.

2) Locate and mark according to ticket.

C. For excavators:

1) IF area contains no delineations,

   THEN do the following:

   a. Require excavator to submit a new ticket when delineations have been established. Leaving a voicemail is an acceptable means of communication.

   b. Take picture of the non-delineated area.

   c. Document details in the **Notes** section of ticket.

   d. Close ticket.

   For instructions to close ticket, see **Procedure TD-5811P-105, "Responding to a Ticket."**

3. Visually inspect area for existing surface markings or indication of underground facilities (e.g., risers, patches in the street and meters, pipeline markers [see Figure 3, "Pipeline Marker"]).

Figure 3. Pipeline Marker

4. Visually inspect area for possible interferences such as:
   - Overhead power lines
   - Underground facilities that may create bleedover
   - Radio transmitters
   - Chain link fences
   - Any metallic structures within 25 feet of the area being located
   - Other locators working in the same area.
5. IF work in a confined space is necessary,

   THEN refer to Standard D-S0213, "Work Procedures in Confined Spaces," located online in the TIL.
6. IF working near interferences that may cause signal fluctuation,

   THEN include the following in the locate plan:
   - Look for multiple hook-up locations to complete ticket.
   - Try different frequencies, instruments, or locating methods.

7. Verify the surrounding with maps. For example:
   - Landmarks
   - Overhead and underground equipment
   - Equipment numbers
8. Look for inconsistencies on maps. Map inconsistencies may include but are not limited to:
   - Extra services
   - Missing facilities
   - Missing tracer wire not labeled on map
   - Work in progress (WIP) cloud
   - Map measurements and locate do not match
   - Missing electrolysis testing station (ETS)
   - Incorrect address

---

6 Identifying a Request for Design Purposes

1. USA ticket process is not to be used for design purposes. Use the following information to determine if a ticket might be for design purposes:
   - An excavator is unsure of where to excavate until after PG&E locates and marks facilities.
   - An excavator requested to have an entire block located, but is lacking specific excavation locations or crossings.
   - Look for lack of specific direction in delineations.
   - The **Nature of Work** on ticket details doesn't match delineations at site.
   - Ask excavator for city or county permit number for excavating in the area. **No permit is a red flag!**
   - Excavation is not planned to start for more than 14 calendar days. Excavator cannot submit a USA ticket more than 14 calendar days in advance [California Government Code §4216.1.(a)(1)].

See Utility Bulletins
TD-5811B-003 and TD-5811B-005

2. IF you determine that the ticket is for design purposes,

   THEN do the following:

   A. Provide excavator with PG&E Service Planning phone number to request PG&E maps for their project design plans.

   B. Explain that USA requests are not utilized for design purposes.

   C. IF further explanation is needed,

      THEN refer excavator to call USA at 811 for more details and law specifics.

   D. Close ticket.

      For instructions to close ticket, see **Procedure TD-5811P-105, "Responding to a Ticket."**

---

7 Records

1. Retain records per the Record Retention Schedule.

END OF PROCEDURE

Definitions

Critical Facility is any gas transmission facility with pressure above 60 psig and any electric facility operating at or above 60 kilovolt (kV).

The following facilities may also be critical facilities:

- Facilities identified as critical by the local operating area.
- Facilities which, if damaged, are likely to result in difficulty controlling the gas flow due to their size, material properties, operating pressure, or location, as well as the personnel and equipment available.
- Electric distribution facilities which, if damaged, are likely to result in outages of long duration or outages to critical customers.

Bleedover is a condition in which a signal is wide enough to bleed onto another conductor while traveling on its intended path. This condition could cause the wrong conductor to be located.

Electronic Tablet is PG&E issued device for locate and mark personnel to use in the field to complete a USA ticket.

Supplemental References

D-S0213, "Work Procedures in Confined Spaces"

TD-5811P-104, "Proper Markings"

TD-5811P-105, "Responding to a Ticket"

Revision Notes

Revision 2a: Added Section 7 with record retention statement.

Publication Date: October 2015

ATTACHMENT 29

CONFIDENTIAL - GENERAL ORDER 66D AND DECISION 16-08-024

See Utility Bulletins TD-5811B-003 and TD-5811B-005

TD-5811P-105, Rev. 1a

Responding to a Ticket

Procedure

Summary

This procedure provides step-by-step instructions for responding to and closing a USA ticket request.

Target Audience

Locate and mark personnel.

Before You Start

- Read the Safety section of this handbook.
- Wear the appropriate personal protective equipment (PPE) for your specific tasks and work area.
- Complete the steps presented in Procedure TD-5811P-104, "Proper Markings."

Table of Contents

Section **Page**

Publication Date: October 2015

1 Taking Pictures of Work Area

Figure 1. Examples of Good Work Area Photos

Example 1 includes the following:

- Reference points: fence, utility pole, tree, bushes
- Entire delineation
- Facilities owner
- 2 in. plastic.
- Gas main painted using appropriate color
- Marking starts 2 ft outside of premarked work area

Example 2 includes the following:

- Reference points include permanent water structures, parking sign, tree, and building.
- Facilities owner
- 2 in. plastic gas main 5 ft back from edge of asphalt.
- Flags were used for lawn area and paint for asphalt.

1. Take pictures of work area when it contains no delineations AND no locate and mark was performed.
2. When taking pictures of your markings, be sure to include:
   - Reference points such as street signs, address, permanent landscaping, etc.
   - Beginning and end of delineated work area
   - **ALL** markings, flags, whiskers, paint, and offsets
   - Close up photos to include necessary details
   - Distance photos to include scope of excavation
3. Attach all picture(s) to the USA ticket.
4. See **Figure 1, "Examples of Good Work Area Photos."**

---

2 Entering Information into Ticket Respond Screen

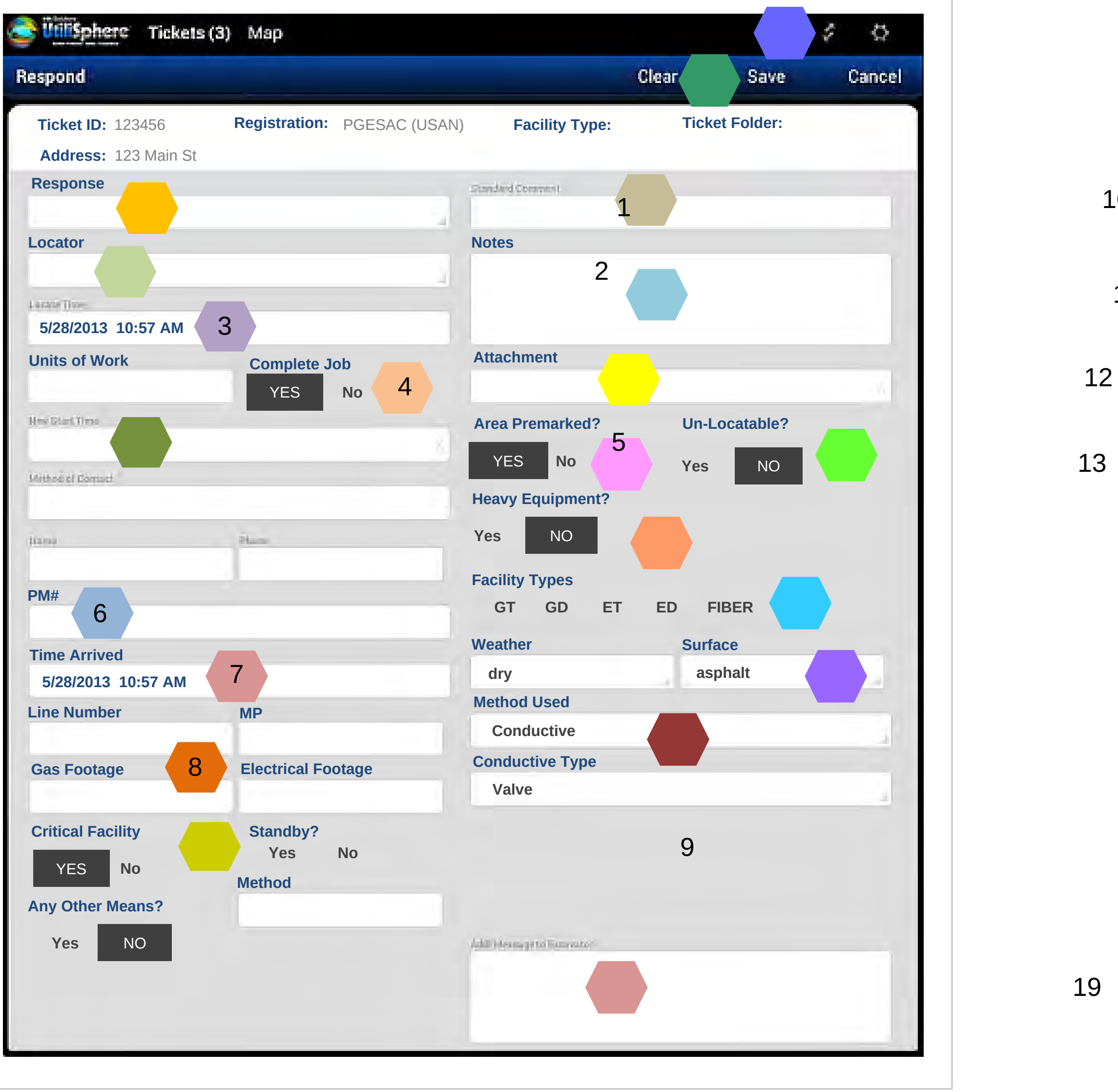
1. Select an appropriate task for the **Response** field. This is the work completed in response to this USA ticket. See **Figure 2, "USA Ticket Respond Screen."**
2. Select your name in the **Locator** field.
3. Visually ensure that the **Locate Time** field is accurate. Information in this field auto generates when you select a response for the ticket. This time stamp also marks the ticket's complete time.
4. Select **Yes** or **No** in the **Complete Job** field.
   - **Yes** means ticket is completely located and marked.
   - **No** means job is ongoing and there is more work to be completed (e.g. phased or new start time tickets).
5. IF a new start time is required,

   THEN change the Response field to **Notification of New Start Time** to activate the **New Start Time** field.

   A. Enter a new start time. A new start time is established by negotiating with the excavator. Include:
      - Name of person with whom the new start time was negotiated.

- Method of contact used to negotiate.
- Contact phone number of the person with whom the new start time was negotiated.

Figure 2. USA Ticket Respond Screen



Ticket ID: 123456
Registration: PGESAC (USAN)
Facility Type:
Ticket Folder:
Address: 123 Main St

Response
Standard Comment
Locator
Notes
Locate Time: 5/28/2013 10:57 AM
Units of Work
Complete Job: YES No
Attachment
New Start Time
Area Premarked?: YES No
Un-Locatable?: Yes NO
Method of Contact
Heavy Equipment?: Yes NO
Name
Phone
Facility Types: GT GD ET ED FIBER
PM#
Time Arrived: 5/28/2013 10:57 AM
Weather: dry
Surface: asphalt
Line Number
MP
Method Used: Conductive
Gas Footage
Electrical Footage
Conductive Type: Valve
Critical Facility: YES No
Standby?: Yes No
Method
Any Other Means?: Yes NO
Add'l Message to Excavator

6. Enter PM number into the **PM #** field if work is for Pacific Gas and Electric Company (PG&E).
7. Enter the time you arrived at the job location into the **Time Arrived** field.

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8. Enter estimate length of **gas footage** and **electric footage** (in ft).

9. Select **Yes** or **No** for the **Critical Facility** and **Standby** fields.

    - **Yes** for critical facility means a field meet is required.
    - **Yes** for standby means both field meet AND standby are required.

10. Select a **Standard Comment**. These are comments generated for the response selected in Step 1.

11. Enter **Notes** detailing work performed, all conversations with excavators, and information directly related to locate at job site.

EXAMPLE OF NOTES FOR PHASING A TICKET
Marked gas main; marked gas service; marked electrical secondary; from address 100 North Street to 600 North Street. Had field meet with John Doe 555-123-4567 at excavation site, agreed to phase ticket. Staying ahead of crew.

EXAMPLE OF NOTES FOR STANDBY
Marked gas main; marked gas service; marked branch service. Standby required. Spoke with John Doe at excavation site and notified him of the standby requirements. John Doe 555-123-4567.

EXAMPLE OF NOTES FOR RENEGOTIATING A START TIME
Renegotiated new start time with excavator John Doe 555-123-4567. Need access to address 100 North St. to complete locate. Locked gate.

12. Attach pictures of work area using the **Attachment** field.

13. Select **Yes** or **No** for the **Area Premarked** field.

    - **Yes** means area was delineated properly. Proceed with locate.
    - **No** means no delineations found. Do the following:
        1) DO NOT perform locate.
        2) Notify excavator to submit another ticket when delineations are present.

3) Change the **Response field** to **No Delineation**.

4) Select **Yes** for **Complete Job field**.

5) Save ticket.

14. Select **Yes** or **No** for **Un-Locatable**.

- **Yes** means you have exhausted all locating methods and troubleshooting options up to requiring a PG&E crew to expose facility.
- **No** is the default option. It indicates that you were able to locate facility.

15. Select **Yes** or **No** for **Heavy Equipment**.

- **Yes** means heavy equipment is used directly over PG&E underground facility.
- **No** means no heavy equipment is used directly over PG&E underground facility.

16. Select all facilities located in work area in the **Facility Types** field.

17. Select a surface type from the **Surface** field. When working on multiple surfaces, select the surface option where the majority of the work is being performed.

18. Select **Conductive** or **Inductive** from the **Method Used** field.

- Conductive means directly connect to facility to be located.
- Inductive means inducing signal onto facility to be located.

19. Enter information or notes into the **Add'l Message to Excavator** field. This is a form of communication to the excavator regarding details of the ticket.

20. Select **Save** to save all updated information.

21. Select **Sync** to send information to Utilisphere™ database. Sync sends response information to the excavator and updates new tickets into database ticket folder.

3 Contacting Excavator

1. Contact the excavator to discuss if you encounter any of the following:
    - Access or safety issues at work area.
    - Field meet or standby is needed.
    - Difficult to locate service or main.
    - When hand digging is required.
    - When measurements from maps are used to locate and mark facilities.
2. **NEVER** communicate depth of facility with excavator.
3. Document all communications with excavator in the USA ticket.

---

4 Performing End-of-Job Walkthrough

CAUTION!

NEVER leave a job incomplete without communicating with excavator. This could lead excavator to assume that locating and marking are completed and begin excavation.

1. Before leaving work area:
    A. Look at map to verify that previous facility count of gas and electric facilities was marked.
    B. Ensure that any inaccurate marks are covered in black paint.
    C. Make sure no hazards are left behind:
        - Close all open facilities (boxes, etc.).
        - Close gates
        - Secure PG&E locks.

5 Documenting Abnormal Operating Condition (AOC)

1. IF you discovered an AOC while responding to a USA ticket request,

   THEN submit a **Corrective Work Form**.

   For instructions to submit the form, see Job Aid TD-5811P-105-JA03, "Corrective Work Form."

6 Correcting Mapping Errors

1. Contact Mapping to discuss all mapping discrepancies.
2. Complete a **Map Correction Form**.

   For instruction to submit the form, see **Job Aid TD-5811P-105-JA02, "Submitting a Map Correction Form."**

7 Completing a Corrective Work Form

1. Complete a **Corrective Work Form** to address situations such as but not limited to the following:

   - Address AOC's.
   - Request an electrolysis testing station (ETS) to be installed.
   - Request main or service to be lowered due to shallow depth (less than 12 in. deep).
   - Repair decals on markers.

   For instruction to submit the form, see **Job Aid TD-5811P-105-JA03, "Corrective Work Form."**

8 Issuing a Notice of Unsafe Excavation to the Excavator

1. When you observe unsafe work practices being performed by a third party working around or near overhead and/or underground gas, electric, or fiber facilities, issue a **Notice of Unsafe Excavation** to the excavator (**Form TD-5811P-501-F02, "Notice of Unsafe Excavation"**). See **Job Aid TD-5811P-301-JA01, "Handling Excavators Working Unsafely."**

Publication Date: October 2015

9 Records

1. Retain records per the Record Retention Schedule.

END OF PROCEDURE

Definitions

Critical Facility is any gas transmission facility with pressure above 60 psig and any electric facility operating at or above 60 kilovolt (kV).

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- Facilities identified as critical by the local operating area.
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Conductive Locate is the method of locate in which instruments are directly connected to the facility being located.

Inductive Locate is the method of locate in which instruments induce a signal onto the facility being located.

Supplemental References

TD-5811P-104, "Proper Marking"

TD-5811P-105-JA02, "Submitting a Map Correction Form"

TD-5811P-105-JA03, "Corrective Work Form"

Revision Notes

Revision 1a: Added Section 9 with record retention statement.

ATTACHMENT 30

CALIFORNIA MEMBERS

As of 3/16/18

A T & T (CALIFORNIA)
A.F.P. MUTUAL WATER COMPANY
AA PRODUCTION SERVICES INC
ABA ENERGY CORP
ADAMS SPRINGS WATER DISTRICT
AERA ENERGY LLC GAS
AERA ENERGY LLC OIL
AERA ENERGY LLC WTR
AFBCA MC CLELLAN AFB
AGATE BAY WATER COMPANY
AHTNA ENVIRONMENTAL INC.
AHTNA ENVIRONMENTAL INC.(AEI)
AHWAHNEE MD46
AIR FORCE REAL PROPERTY AGENCY - MATHER
AIR PRODUCTS MANUFACTURING CORPORATION
AIRCRAFT SERVICE INTERNATIONAL INC
ALAMEDA COUNTY FLOOD CONTROL - ZONE 7
ALAMEDA COUNTY WATER DISTRICT
ALCO WATER SERVICE
ALLENSWORTH COMMUNITY SERVICE DIST
ALLUVIAL/FANCHER WWD #42
ALMONTE SANITARY DIST
ALON BAKERSFIELD PROPERTY INC
ALPAUGH COMMUNITY SERVICES DIST
ALPINE MEADOWS CSA #13
ALPINE NATURAL GAS
ALPINE SPRINGS COUNTY WATER
ALTO SANITARY DIST
AMADOR REGIONAL SANITATION AUTHORITY
AMADOR WATER AGENCY
AMEC
AMERICAN YEAST CORPORATION
AMERICAN WATER SERVICE - EAST PALO ALTO
AMERIGAS LAKE ISABELLA DIST #0320
AMERIGAS - CONCORD 0125
AMERIGAS - LAKEPORT
AMERIGAS - MAMMOTH LAKES
AMERIGAS - REDDING CA
AMERIGAS - SUSANVILLE
AMERIGAS PROPANE
AMERIGAS PROPANE - 1031
AMERIGAS PROPANE - DIST 0071
AMERIGAS PROPANE - WALKER / BRIDGEPORT
ANACAPA OIL CORPORATION
ANCHOR BREWING
ANDEAVOR MARTINEZ REFINERY
ANDERSON SPRINGS COMM SVCS DIST
ANDERSON-COTTONWOOD IRRIGATION DISTRICT
ANTEA GROUP
ANTELOPE VALLEY EAST KERN WATER AGENCY

ANTELOPE VALLEY WATER STORAGE LLC
APPLE INC.
ARBOR POINT MHC
ARBUCKLE PUBLIC UTILITY DISTRICT
ARMONA COMMUNITY SERVICES DISTRICT
ARMSTRONG PETROLEUM CORPORATION
AROMAS WATER DISTRICT
ARROYO SECO ESTATES MUTUAL WATER CO
ARVIN COMMUNITY SERVICES DISTRICT
ARVIN-EDISON WATER STORAGE DISTRICT
ATASCADERO MUTUAL WATER COMPANY
ATLANTIC OIL
AUBURN PUBLIC CEMETERY DISTRICT
AVILA BEACH COMMUNITY SERVICES DISTRICT
B W M R & M ASSOCIATION
BAKMAN WATER COMPANY
BANK OF STOCKTON
BANTA-CARBONA IRRIGATION DISTRICT
BARTON HEALTH
BASS LAKE HEIGHTS MUTUAL WATER CO
BASS LAKE SA2
BASS LAKE WATER CO
BAYSHORE SANITARY DISTRICT
BEAR VALLEY COMM SVC DIST
BEAR VALLEY WATER DISTRICT
BEDEL MUTUAL WATER COMPANY
BELLA VISTA WATER DISTRICT
BELMONT MANOR CSA #14
BELRIDGEWATER STORAGE
BERRENDA MESA WATER DISTRICT
BERRY PETROLEUM CO
BI-STATE PROPANE - PORTOLA
BIG ROCK COMM SVC DIST
BLACK RASCAL WATER CO INC
BLUE DIAMOND GROWERS
BLUE LAKE RANCHERIA DEPT OF ENERGY & TECHNOLOGIES
BLUE LAKE SPRINGS MUTUAL WATER COMPANY
BLUE STAR GAS
BODEGA BAY PUBLIC UTILITY DISTRICT
BOLINAS COMMUNITY PUBLIC UTILITY DISTRICT
BORON COMMUNITY SERVICES DISTRICT
BRIGHT HOUSE NETWORKS - BAKERSFIELD
BRIGHT HOUSE NETWORKS - TEHACHAPI
BROADVIEW TERRACE MUTUAL WATER CO
BROADWAY PLAZA - MACERICH CO.
BROWNS VALLEY IRRIGATION DISTRICT
BUCKEYE TERMINALS LLC
BUCKINGHAM PARK WATER DISTRICT
BUENA VISTA ENERGY
BULLDOG GAS & POWER LLC
BURNEY WATER DISTRICT
BUTTE COUNTY OFFICE OF EDUCATION

BUTTE CREEK UTILITIES LLC
BUTTONWILLOW COUNTY WATER DISTRICT
BYRON BETHANY IRRIGATION DISTRICT
BYRON SANITARY DIST
CA DEPT OF TOXIC SUBSTANCES CONTROL
CADENCE DESIGN SYSTEMS
CAE USA INC
CALAVERAS COUNTY ROAD DISTRICT
CALAVERAS COUNTY WATER DISTRICT
CALAVERAS PUBLIC UTILITY DISTRICT
CALAVERAS TELEPHONE CO
CALIFORNIA AMERICAN WATER CO - MONTEREY
CALIFORNIA AMERICAN WATER CO - SACRAMENTO
CALIFORNIA BROADBAND COOPERATIVE (CA)
CALIFORNIA COLLEGE OF THE ARTS
CALIFORNIA DEPARTMENT OF WATER RESOURCES
CALIFORNIA DEPT PARKS & RECREATION - COL ALLENSWORTH STATE HISTORIC PARK
CALIFORNIA OREGON TELEPHONE CO
CALIFORNIA PINES COMM SVC DIST
CALIFORNIA RESOURCES
CALIFORNIA RESOURCES CORP - NORTH THERMAL OPERATIONS
CALIFORNIA RESOURCES ELK HILLS, LLC
CALIFORNIA RESOURCES PRODUCTION CORPORATION - SAC VALLEY
CALIFORNIA STATE UNIVERISTY - MONTEREY BAY
CALIFORNIA STATE UNIV-SACRAMENTO
CALIFORNIA WTR SVC CO ATHERTON
CALIFORNIA WTR SVC CO BAKERSFIELD
CALIFORNIA WTR SVC CO CHICO
CALIFORNIA WTR SVC CO DIXON
CALIFORNIA WTR SVC CO LAKE ISABELLA
CALIFORNIA WTR SVC CO LIVERMORE
CALIFORNIA WTR SVC CO LOS ALTOS
CALIFORNIA WTR SVC CO MARYSVILLE
CALIFORNIA WTR SVC CO OROVILLE
CALIFORNIA WTR SVC CO QUARTZ HILL
CALIFORNIA WTR SVC CO REDWOOD VALLEY DIST
CALIFORNIA WTR SVC CO SALINAS
CALIFORNIA WTR SVC CO SAN MATEO
CALIFORNIA WTR SVC CO SELMA
CALIFORNIA WTR SVC CO STOCKTON
CALIFORNIA WTR SVC CO VISALIA
CALIFORNIA WTR SVC CO WILLOWS
CALLAYOMI COUNTY WATER DISTRICT
CALNEV PIPELINE
CALNEVA BROADBAND LLC
CALPELLA COUNTY WATER DISTRICT
CALPINE CONST FINANCE CO LP - SUTTER ENERGY
CALPINE-GEYSERS POWER CO LLC
CALPINE KING CITY COGENERATION LLC
CAMBRIA COMMUNITY SERVICES DISTRICT
CAMP MEEKER REC & PARK
CAMPORA PROPANE SERVICE

CANADA WOODS WATER RECLAMATION
CANTUA CREEK CSA #32
CAPITOL OIL CORPORATION
CARMEL AREA WASTEWATER DISTRICT
CARMEL RIVIERA MUTUAL WATER COMPANY
CARMICHAEL WATER DISTRICT
CARUTHERS COMMUNITY SERVICES DISTRICT
CASA LOMA WATER COMPANY, INC
CASPAR SOUTH SERVICES COMPANY
CASTELLA CSA #3
CASTLE AIRPORT AVIATION AND DEVELOPMENT CENTER
CASTRO VALLEY SANITARY DISTRICT
CASTROVILLE COMMUNITY SERVICES DISTRICT
CAWELO WATER DISTRICT
CAYUCOS BEACH MUTUAL WATER COMPANY
CAYUCOS SANITARY DISTRICT
CB&I FEDERAL SERVICES LLC
CEBRIDGE CONNECTIONS
CEDAR FLAT IMPROVEMENT ASSN
CENTERVILLE COMMUNITY SERVICES DISTRICT
CENTRAL COAST WATER AUTHORITY
CENTRAL CONTRA COSTA SANITARY DISTRICT
CENTRAL MARIN SANITATION AGENCY
CENTRAL VALLEY GAS STORAGE LLC
CENTRAL WATER DISTRICT
CEPHEID
CH2M HILL CONSTRUCTORS INC
CHARTER COMM CRESCENT CITY
CHARTER COMM ROSAMOND
CHARTER COMM SAN LUIS OBISPO
CHARTER COMM TULARE
CHARTER COMM TURLOCK
CHARTER COMMUNICATIONS - GILROY
CHESTER PUBLIC UTILITY DISTRICT
CHEVRON CYMRIC
CHEVRON ENVIRONMENTAL MANAGEMENT CO
CHEVRON MIDWAY SUNSET
CHEVRON NORTH AMERICA, EXPLORATION & PRODUCTION
CHEVRON NORTH AMERICA, EXPLORATION & PRODUCTION - COALINGA AREA
CHEVRON PIPE LINE CO - SAN JOAQUIN AREA
CHEVRON, USA INC
CHOWCHILLA WATER DISTRICT
CHRISTIAN VALLEY PARK CSD
CHUCK CHANSI SA14
CIRCLE OAKS COUNTY WATER DISTRICT
CITRUS HEIGHTS WATER DISTRICT
CITY OF ALAMEDA
CITY OF ALBANY
CITY OF ALTURAS
CITY OF AMERICAN CANYON
CITY OF ANDERSON
CITY OF ANGELS CAMP

CITY OF ANTIOCH
CITY OF ARCATA
CITY OF ARROYO GRANDE
CITY OF ARVIN
CITY OF ATASCADERO
CITY OF ATWATER
CITY OF AUBURN
CITY OF AVENAL
CITY OF BAKERSFIELD
CITY OF BELMONT
CITY OF BELVEDERE
CITY OF BENICIA
CITY OF BERKELEY
CITY OF BIGGS
CITY OF BLUE LAKE
CITY OF BRENTWOOD
CITY OF BRISBANE
CITY OF BURLINGAME
CITY OF CALIFORNIA CITY
CITY OF CALISTOGA
CITY OF CAMPBELL
CITY OF CARMEL-BY-THE SEA
CITY OF CERES
CITY OF CHOWCHILLA
CITY OF CITRUS HEIGHTS
CITY OF CLAYTON
CITY OF CLOVERDALE
CITY OF CLOVIS
CITY OF COALINGA
CITY OF COLUSA
CITY OF CONCORD
CITY OF CORCORAN
CITY OF CORNING
CITY OF COTATI
CITY OF CRESCENT CITY
CITY OF CUPERTINO
CITY OF DALY CITY
CITY OF DANVILLE
CITY OF DAVIS
CITY OF DELANO
CITY OF DINUBA
CITY OF DIXON
CITY OF DOS PALOS
CITY OF DUBLIN
CITY OF DUNSMUIR
CITY OF EAST PALO ALTO
CITY OF EL CERRITO
CITY OF ELK GROVE
CITY OF EMERYVILLE
CITY OF ESCALON
CITY OF EUREKA
CITY OF EXETER

CITY OF FAIRFIELD
CITY OF FARMERSVILLE
CITY OF FERNDALE
CITY OF FIREBAUGH
CITY OF FOLSOM
CITY OF FORT BRAGG
CITY OF FORTUNA
CITY OF FOSTER CITY
CITY OF FOWLER
CITY OF FREMONT
CITY OF FRESNO
CITY OF GALT
CITY OF GILROY
CITY OF GONZALES
CITY OF GRASS VALLEY
CITY OF GREENFIELD
CITY OF GRIDLEY
CITY OF GROVER BEACH
CITY OF GUSTINE
CITY OF HAYWARD
CITY OF HEALDSBURG
CITY OF HERCULES
CITY OF HOLLISTER
CITY OF HUGHSON
CITY OF IONE
CITY OF ISLETON
CITY OF JACKSON
CITY OF KERMAN
CITY OF KING CITY
CITY OF KINGSBURG
CITY OF LAKEPORT
CITY OF LARKSPUR
CITY OF LATHROP
CITY OF LEMOORE
CITY OF LINCOLN
CITY OF LINDSAY
CITY OF LIVE OAK
CITY OF LIVERMORE
CITY OF LIVINGSTON
CITY OF LODI
CITY OF LOS ALTOS
CITY OF LOS BANOS
CITY OF LOYALTON
CITY OF MADERA
CITY OF MANTECA
CITY OF MARINA
CITY OF MARTINEZ
CITY OF MARYSVILLE
CITY OF MCFARLAND
CITY OF MENDOTA
CITY OF MENLO PARK
CITY OF MERCED

CITY OF MILL VALLEY
CITY OF MILLBRAE
CITY OF MILPITAS
CITY OF MODESTO
CITY OF MONTAGUE
CITY OF MONTEREY
CITY OF MORGAN HILL
CITY OF MORRO BAY
CITY OF MOUNTAIN VIEW
CITY OF MT SHASTA
CITY OF NAPA
CITY OF NEVADA CITY
CITY OF NEWARK
CITY OF NEWMAN
CITY OF NOVATO
CITY OF OAKDALE
CITY OF OAKLAND
CITY OF OAKLEY
CITY OF ORANGE COVE
CITY OF ORINDA
CITY OF ORLAND
CITY OF OROVILLE
CITY OF PACIFIC GROVE
CITY OF PACIFICA
CITY OF PALO ALTO
CITY OF PARLIER
CITY OF PASO ROBLES
CITY OF PATTERSON
CITY OF PETALUMA
CITY OF PIEDMONT
CITY OF PINOLE
CITY OF PISMO BEACH
CITY OF PITTSBURG
CITY OF PLACERVILLE
CITY OF PLEASANT HILL
CITY OF PLEASANTON
CITY OF PLYMOUTH
CITY OF POINT ARENA
CITY OF PORTERVILLE
CITY OF PORTOLA
CITY OF RANCHO CORDOVA
CITY OF RED BLUFF
CITY OF REDDING
CITY OF REDWOOD CITY
CITY OF REEDLEY
CITY OF RICHMOND
CITY OF RIDGECREST
CITY OF RIO DELL
CITY OF RIO VISTA
CITY OF RIPON
CITY OF RIVERBANK
CITY OF ROCKLIN

CITY OF ROHNERT PARK
CITY OF ROSEVILLE
CITY OF SACRAMENTO
CITY OF SALINAS
CITY OF SAN BRUNO
CITY OF SAN CARLOS
CITY OF SAN JOSE
CITY OF SAN JUAN BAUTISTA
CITY OF SAN LEANDRO
CITY OF SAN LUIS OBISPO
CITY OF SAN MATEO
CITY OF SAN RAFAEL
CITY OF SAN RAMON
CITY OF SANGER
CITY OF SANTA CLARA
CITY OF SANTA CRUZ
CITY OF SANTA ROSA
CITY OF SAUSALITO
CITY OF SCOTTS VALLEY
CITY OF SEASIDE
CITY OF SEBASTOPOL
CITY OF SELMA
CITY OF SHAFTER
CITY OF SHASTA LAKE
CITY OF SO SAN FRANCISCO
CITY OF SOLEDAD
CITY OF SONOMA
CITY OF SONORA
CITY OF SOUTH LAKE TAHOE
CITY OF ST HELENA
CITY OF STOCKTON
CITY OF SUISUN CITY
CITY OF SUNNYVALE
CITY OF SUSANVILLE
CITY OF TAFT
CITY OF TEHACHAPI
CITY OF TEHAMA
CITY OF TRACY
CITY OF TRINIDAD
CITY OF TULARE
CITY OF TURLOCK
CITY OF UKIAH
CITY OF UNION CITY
CITY OF VACAVILLE
CITY OF VALLEJO
CITY OF VISALIA
CITY OF WALNUT CREEK
CITY OF WASCO
CITY OF WATERFORD
CITY OF WATSONVILLE
CITY OF WEED
CITY OF WEST SACRAMENTO

CITY OF WHEATLAND
CITY OF WILLIAMS
CITY OF WILLITS
CITY OF WILLOWS
CITY OF WINTERS
CITY OF WOODLAKE
CITY OF WOODLAND
CITY OF YREKA
CITY OF YUBA CITY
CITY&CO SAN FRANCISCO -LIGHT,HEAT & POWER
CITY&CO SAN FRANCISCO -PARK/TRAFFIC
CITY&CO SAN FRANCISCO - PUBLIC WORKS
CITY&CO SAN FRANCISCO -WATER
CLEAR CREEK COMMUNITY SERVICES DISTRICT
CLEAR CREEK CSD - LASSEN COUNTY
CLEARLAKE OAKS COUNTY WATER DIST
COARSEGOLD SOUTH MD 63A
COASTSIDE COUNTY WATER DISTRICT
COBB AREA COUNTY WATER DISTRICT
COLORADO INTERSTATE GAS (CA)
COLUSA COUNTY WATER DISTRICT
COLUSA PROPERTIES, INC.
COMCAST
COMMUNITY MEDICAL CENTERS
CONCORDIA RESOURCES INC
CONSOLIDATED COMMUNICATIONS
CONSOLIDATED COMMUNICATIONS II
CONTERRA BROADBAND SERVICES
CONTRA COSTA CO WTR DIST #M28
CONTRA COSTA WATER DISTRICT
CORESITE REALTY CORP
CORNING WATER DISTRICT
COSTCO WHOLESALE
COSUMNES COMMUNITY SERVICE DIST
COTTONWOOD CSA #17
COTTONWOOD WATER DISTRICT
COULTERVILLE WATER DISTRICT
COUNTY OF ALAMEDA
COUNTY OF CONTRA COSTA
COUNTY OF DEL NORTE
COUNTY OF LAKE
COUNTY OF NEVADA SANITATION DISTRICT #1
COUNTY OF PLACER
COUNTY OF SACRAMENTO
COUNTY OF SAN JOAQUIN
COUNTY OF SAN LUIS OBISPO
COUNTY OF SAN MATEO
COUNTY OF SANTA CLARA
COUNTY OF SANTA CRUZ
COUNTY OF SONOMA
COUNTY OF STANISLAUS
COUNTY OF YOLO

COUNTY OF YOLO COMMUNICATIONS
COUNTY OF SAN LUIS OBISPO TELECOM
COUNTY SERVICE AREA #23-CRAG VIEW
CPN PIPELINE CO
CREED ENERGY CENTER LLC
CRESTWOOD WEST COAST LLC
CRIMSON PIPELINE LP
CRIMSON RESOURCE MGMT
CROCKETT COGENERATION
CROCKETT SANITARY DEPT
CROSSPOINT COMMUNITY CHURCH OF MODESTO
CROWN CASTLE (CA)
CROWS LANDING COMMUNITY SERVICES DISTRICT
CRUZIO MEDIA, INC.
CUESTA LA HONDA GUILD
CUMORAH KNOLLS CSA #10
CUPERTINO SANITARY DISTRICT
CUTLER PUBLIC UTILITY DISTRICT
CVIN LLC
D.E.O.
DEL ORO WATER - MAGALIA
DEL ORO WATER CO INC
DEL PASO MANOR WATER DISTRICT
DEL REY COMMUNITY SERVICES DISTRICT
DELANO-EARLIMART IRRIGATION DISTRICT
DELHI COUNTY WATER DISTRICT
DELTA DENTAL PLAN OF CALIFORNIA
DELTA DIABLO SANITATION DISTRICT
DELTA ENERGY CENTER LLC
DELTA LIQUID ENERGY
DENAIR COMMUNITY SERVICES DISTRICT
DERWA
DESERT LAKE CSD
DIABLO WATER DISTRICT
DICK BROWN TECHNICAL SERVICE
DICK BROWN TECHNICAL SERVICE - BORAX
DIGITAL TRANSPORT CORPORATION
DIGITAL WEST NETWORKS, INC.
DILLON ESTATES MD60
DON PEDRO SEWER DISTRICT
DONNER SUMMIT PUD
DOS PALOS AREA JOINT POWERS AGENCY
DOW CHEMICAL
DUBLIN-SAN RAMON SERVICES DISTRICT
DUCOR TELEPHONE COMPANY
DUDLEY RIDGE WATER DISTRICT
DUNNIGAN WATER DISTRICT
DURHAM IRRIGATION DISTRICT
E & B NATURAL RESOURCES MGMT CORP
EARLIMART PUB
EAST BAY DISCHARGERS AUTHORITY
EAST BAY MUNICIPAL UTILITY DISTRICT

EAST BAY MUNICIPAL UTILITY DISTRICT - WASTE WATER DIST
EAST CONTRA COSTA IRRIGATION DISTRICT
EAST NILES COMMUNITY SERVICES DISTRICT
EAST PALO ALTO SANITARY DISTRICT
EAST QUINCY SERVICES DISTRICT
EASTERN SIERRA PROPANE
EASTIN ARCOLA MD36
EASTSIDE WATER ASSOCIATION
EL CAMINO IRRIGATION DIST
EL DORADO HILLS COMMUNITY SERVICES DISTRICT
EL DORADO IRRIGATION DISTRICT
EL PASO NATURAL GAS CO
EL PORVENIR CSA #30
ELK GROVE WATER SERVICE
ENERGY OPERATIONS MANAGEMENT/CGG
ENERGY OPERATIONS MANAGEMENT/DGG
ENERGY OPERATIONS MANAGEMENT/SVP
ENERGY OPERATIONS MANAGEMENT/YPC
ERSKINE CREEK WATER COMPANY
ESCAPE BROADBAND
ESPARTO COMM SVC DIST
EXETER IRRIGATION DISTRICT
EXTENET SYSTEMS INC. - CA
EXXON MOBIL PIPELINE CO
FAIR OAKS WATER DISTRICT
FAIRFAX CENTER PROPERTIES, LLC
FAIRFIELD-SUISUN SEWER DISTRICT
FAIRMEAD MD33
FAIRVIEW WATER COMPANY LLC
FALCON CABLE TV - REDDING
FALL RIVER MILLS COMMUNITY SERVICES DISTRICT
FARMERS & MERCHANTS BANK
FERRELLGAS - ELK GROVE
FERRELLGAS - LAKE CO
FERRELLGAS - MENDOCINO CO
FERRELLGAS - NEVADA CO
FIERO LANE MUTUAL WATER COMPANY
FIRST MACE MEADOW WATER ASSN INC
FITCH MOUNTAIN WATER DISTRICT-CSA#24
FLORIN COUNTY WATER DISTRICT
FMC FRESNO
FOLSOM LAKE MUTUAL WATER COMPANY
FOOTHILL ENERGY LLC
FOOTHILL ENERGY LLC - COLUSA
FOREST LAKES MUTUAL WATER COMPANY
FORESTHILL PUBLIC UTILITY DISTRICT
FORESTVILLE WATER DISTRICT
FORT BRAGG TROUT FARM
FPL ENERGY MONTEZUMA WIND LLC
FRANKLIN COUNTY WATER DISTRICT
FRAZIER PARK PUBLIC UTILITY DISTRICT
FREEDOM TELECOMMUNICATIONS LLC dba WILCON

FREESTONE WATER SYSTEM
FRENCH GULCH WATER DIST
FRESNO COUNTY CSA #10-A - MANSIONETTE ESTATES
FRESNO COUNTY CSA #34A - BRIGHTON CREST
FRESNO COUNTY CSA #34B - VENTANA HILLS
FRESNO COUNTY CSA #34C - GRANITE CREST
FRESNO COUNTY CSA #39AB - BERAN WAY
FRESNO COUNTY CSA #43 - RAISIN CITY
FRESNO COUNTY CSA #44A - FRIANT MOBILE HOME PARK
FRESNO COUNTY CSA #44-C - TANQUERAY DEVELOPMENT
FRESNO COUNTY CSA #44-D - MONTE VERDI
FRESNO COUNTY CSA #47 - QUAIL LAKE
FRESNO COUNTY CSA #49 - O'NEILL FARMING
FRESNO COUNTY WATERWORKS DIST #18
FRIED PRIVATE WATER LINE
FRONTIER A CITIZENS COMM CO (CA-2)
FRONTIER - COLUSA
FRONTIER - ELK GROVE
FRONTIER (PATTERSON)
FRUITRIDGE VISTA WATER COMPANY
FULTON WATER CO
GARBERVILLE SANITARY DISTRICT
GARDEN FARMS COMMUNITY WATER DISTRICT
GASQUET COMMUNITY SERVICES DIST
GE HITACHI NUCLEAR ENERGY LLC
GEORGETOWN DIVIDE PUBLIC UTILITY DISTRICT
GERBER LAS FLORES CSD
GILL RANCH STORAGE LLC
GILROY ENERGY CENTER LLC
GILROY ENERGY CENTER LLC FOR FEATHER RIVER
GILROY ENERGY CENTER LLC FOR LAMBIE ENERGY CENTER
GILROY ENERGY CENTER LLC FOR WOLFSKILL ENERGY CENTER
GILROY ENERGY CENTER LLC FOR YUBA CITY ENERGY
GLIDE WATER DISTRICT
GOLD MOUNTAIN COMMUNITY SERVCIES DISTRICT
GOLDEN GATE BRIDGE HWY & TRANSPORTATION
GOLDEN HILLS COMMUNITY SERVICES DIST
GOLDEN HILLS NORTH WIND, LLC
GOLDEN HILLS WIND, LLC
GOLDEN STATE WATER COMPANY
GOLDEN STATE WATER COMPANY (CCC)
GOLDEN STATE WATER COMPANY (LAKE CO)
GOLDEN STATE WATER COMPANY (SLO)
GOLDSIDE MD27
GOOGLE
GOOGLE FIBER CALIFORNIA LLC
GOOSE HAVEN ENERGY CENTER LLC
GOSHEN COMMUNITY SERVICES DISTRICT
GRADUATE THEOLOGICAL UNION
GRANADA SANITARY DISTRICT
GRAVELY FORD WATER DISTRICT
GREAT OAKS WATER COMPANY

GREEN RIVER MUTUAL WATER CO
GREENFIELD COMMUNICATIONS INC
GREENFIELD COUNTY WATER DISTRICT
GREENHORN CREEK CSD
G-REM INC
GREKA
GRIMMWAY ENTERPRISES, INC
GRIZZLY FLATS CSD
GRIZZLY LAKE COMMUNITY SERVICES DISTRICT
GROVELAND COMMUNITY SVCS DIST
GUALALA COMMUNITY SERVICES DISTRICT
HACIENDA OWNERS ASSN
HAMILTON BRANCH COMMUNITY SERVICES DIST
HAMILTON BRANCH MUTUAL WATER COMPANY
HAMILTON CITY COMMUNITY SERVICES DISTRICT
HAPPY CAMP COMMUNITY SERVICES DISTRICT
HAPPY CAMP SANITARY DISTRICT
HAPPY VALLEY TELEPHONE COMPANY
HARBOR VIEW MUTUAL WATER COMPANY
HEART OF SAN MATEO LLC
HEIGHTS MUTUAL WATER CO
HEINRIK NIELSEN - LAND OWNER
HERITAGE RANCH COMMUNITY SERVICES DISTRICT
HERLONG PUBLIC UTILITY DISTRICT
HETCH HETCHY WATER & POWER
HIDDEN LAKES MD1
HIDDEN VALLEY LAKE COMM SVCS DIST
HIGH DESERT PIPELINE INC.
HIGH WINDS LLC
HIGHLANDS WATER COMPANY
HILLS VALLEY IRRIGATION DISTRICT
HILLVIEW WATER COMPANY
HILMAR COUNTY WATER DISTRICT
HILTON CREEK COMMUNITY SERVICES DISTRICT
HOMESTEAD VALLEY SANITARY DIST
HONEYWELL INC
HOOPA VALLEY PUBLIC UTILITY DISTRICT
HOPLAND PUBLIC UTILITY DISTRICT
HORIZON CABLE TV, INC
HORNITOS TELEPHONE COMPANY
HOWELL MOUNTAIN MUTUAL WATER CO
HUMBOLDT BAY MUNICIPAL WATER DISTRICT
HUMBOLDT COMMUNITY SERVICES DISTRICT
HUMBOLDT STATE UNIVERSITY
HUNTER COMMUNICATION, INC.
HYDESVILLE COUNTY WATER DISTRICT
INDIAN LAKES SA1
INDIAN VALLEY CSD
INDIAN WELLS VALLEY WATER DISTRICT
INNEX CALIFORNIA INC
INTEGRA TELECOM INC (CA
INVERNESS PUBLIC UTILITY DISTRICT

INYOKERN COMMUNITY SERVICE DISTRICT
IRISH HILLS MUTUAL WATER COMPANY
IRON MOUNTAIN MUTUAL WATER COMPANY
IRONHOUSE SANITARY DISTRICT
ISLAND ENERGY
IVANHOE PUBLIC UTILITY DISTRICT
J P OIL COMPANY LLC
J S WEST - SONORA
J S WEST PROPANE - COLFAX
J S WEST PROPANE - DIAMOND SPRINGS
J S WEST PROPANE - MODESTO
JACK PINE ROAD MUTUAL WATER COMPANY
JACKSON VALLEY IRRIGATION DISTRICT
JAMESTOWN SANITARY DISTRICT
JENNER COUNTY SERVICES AREA-CSA#34
JOE SIMOES & SONS DAIRY, INC.
JONES VALLEY CSA #6
JUNE LAKE PUBLIC UTILITY DISTRICT
KAISER FOUNDATION
KAMPS PROPANE
KANAWHA WATER DISTRICT
KERMAN TELEPHONE DBA SEBASTIAN
KERN COUNTY WATER AGENCY
KERN OIL & REFINING COMPANY
KERN TULARE WATER DISTRICT
KESWICK WATER DISTRICT-CSA #25
KETTLEMAN CITY COMMUNITY SERVICES DIST
KEYES COMMUNITY SVCS DISTRICT
KINDER MORGAN/SFPP (CA)
KIRKWOOD MEADOWS P U D
KIRKWOOD MOUNTAIN RESORT LLC
KONOCTI COUNTY WATER DISTRICT
KARUK TRIBE
KRISTA MUTUAL WATER COMPANY
KTVU-TV
LA VINA MD37
LAKE ALMANOR COUNTRY CLUB MUTUAL WTR CO
LAKE ALPINE WATER COMPANY
LAKE BERRYESSA RESORT IMPROVEMENT DISTRICT
LAKE DON PEDRO COMMUNITY SERVICES DISTRICT
LAKE OF THE PINES
LAKE OF THE WOODS MUTUAL WATER COMPANY
LAKE OROVILLE AREA PUBLIC UTILITY DISTRICT
LAKE SHASTINA COMMUNITY SERVICES DISTRICT
LAKE SHORE MD6
LAKE SISKIYOU MUTUAL WATER COMPANY
LAKESIDE PARK ASSN INC
LAKEVIEW HILLS COMMUNITY ASSOCIATION
LAMONT PUBLIC UTILITY
LAS GALLINAS VALLEY SANITARY DISTRICT
LASSEN MUNICIPAL UTILITY DISTRICT
LASSEN PLUMAS GAS SERVICE INC

LATHROP IRRIGATION DIST
LATON COMMUNITY SERVICES DISTRICT
LAWRENCE LIVERMORE NATIONAL LABORATORY
LAWRENCE LIVERMORE NATL LAB SITE 300
LAYTONVILLE CO WATER DIST
LE GRAND COMMUNITY SERVICES DISTRICT
LEBEC COUNTY WATER DIST
LEMOORE APARTMENTS LLC
LEPRINO FOODS COMOPANY, LEMOORE WEST
LEVEL 3 COMMUNICATIONS LLC
LEWIS CREEK WATER DIST
LEWISTON COMMUNITY SERVICES DISTRICT
LIBERTY UTILITIES (CALPECO ELECTRIC) LLC
LINDA COUNTY WATER DISTRICT
LINDE LLC
LINDEN COUNTY WATER DISTRICT
LINDMORE IRRIGATION DISTRICT
LINDSAY-STRATHMORE IRRIGATION DISTRICT
LIVERMORE-AMADOR VALLEY WATER MANAGEMENT
LOCH LOMOND MUTUAL WATER COMPANY
LOCKEFORD COMMUNITY SERVICES DISTRICT
LOCUS TECHNOLOGIES - RAYTHEON
LODI GAS STORAGE LLC
LODI MEMORIAL HOSPITAL
LOLETA COMMUNITY SERVICES DISTRICT
LONGBOW LLC
LOS ANGELES DEPT OF WATER AND POWER
LOS OSOS COMM SVCS DIST
LOST HILLS UTILITY DISTRICT
LOST HILLS WATER DISTRICT
LOWER LAKE CO WATERWORKS DIST #1
LUKINS BROTHERS WATER CO INC
MACPHERSON OIL COMPANY
MADERA CHOWCHILLA WATER & POWER AUTHORITY
MADERA IRRIGATION DISTRICT
MADERA RANCHOS MD10
MADERA VALLEY WATER CO
MADERA WATER DISTRICT
MALAGA COUNTY WATER DISTRICT
MAMMOTH COUNTY WATER DISTRICT
MANILA COMMUNITY SERVICES DISTRICT
MANZANA POWER SERVICES, INC.
MARIN MUNICIPAL WATER DISTRICT
MARINA COAST WATER DISTRICT
MARINA VIEW MD7
MARIPOSA PINES SEWER DISTRICT
MARIPOSA PUBLIC UTILITY DISTRICT
MARKLEEVILLE PUD
MARKLEEVILLE WATER CO
MARTINEZ REFINING / EQUILON
MASSINI MUTUAL WATER CO
MASTEC NORTH AMERICA

MATRIX OIL CORPORATION
MAURITSON-PROPERTY OWNER
MAXWELL PUBLIC UTILITY DISTRICT
MCCLELLAN BUSINESS PARK
MCCLOUD COMMUNITY SERVICES DISTRICT
MCIWORLDCOM (CA)
MCKESSON CORPORATION
MCKINLEYVILLE COMMUNITY SERVICES DISTRICT
MCKINNEY WATER DISTRICT
MDY PROPERTIES, INC.
MEADOW VISTA COUNTY WATER DISTRICT
MEDIACOM CALIFORNIA LLC
MEDIACOM CLEARLAKE OAKS
MEDIACOM RIDGECREST
MENDOCINO COUNTY WATER WORKS DISTRICT II
MENTREN CORPORATION
MERCED IRRIGATION DISTRICT-ELEC
MERCED IRRIGATION DISTRICT-IRRIG
MESA BUSINESS PARK
MEYERS WATER COMPANY, INC
MIAMI CREEK MD43
MID PENINSULA WATER DIST
MIDSET COGENERATION COMPANY
MIDWAY COMMUNITY SERVICES DISTRICT
MIDWAY HEIGHTS COUNTY WATER DISTRICT
MIDWAY SUNSET COGENERATION COMPANY
MIL POTRERO MUTUAL WATER COMPANY
MILE HIGH WWD #37
MILLSBRIDGE OFFICE PROJECT
MILLVIEW COUNTY WATER DISTRICT
MIRANDA COMMUNITY SERVICES DISTRICT
MODESTO AND EMPIRE TRACTION CO
MODESTO IRRIGATION DISTRICT
MOJAVE AIR & SPACE PORT
MOJAVE PIPELINE OPERATING COMPANY
MOJAVE PUBLIC UTILITY DISTRICT
MOKELUMNE HILL SANI DIST
MONTARA WATER & SANITARY DISTRICT
MONTEREY BAY AQUARIUM
MONTEREY CO WTR RESOURCES AGENCY
MONTEREY COUNTY PUBLIC WORKS
MONTEREY REGIONAL WTR POLLUTION CONTRL AGENCY
MORGAN HILL UNIFIED SCHOOL DISTRICT
MORRO ROCK MUTUAL WATER COMPANY
MOSBAUGH PROPERTIES, INC.
MOUNT HERMON ASSOCIATION, INC
MOUNTAIN GATE COMMUNITY SERVICES DISTRICT
MOUNTAIN RANCHES MD5
MT KONOCTI MUTUAL WATER CO
MT MESA WATER COMPANY
MT VIEW SANITARY DISTRICT
MUNI OVERHEAD LINES DEPARTMENT

MURPHYS SANITARY DISTRICT
NAFTEX - DICK BROWN TECHNICAL SERVICE
NAFTEX OPERATING COMPANY
NAPA BERRYESSA RESORT IMPROVEMENT DISTRICT
NAPA SANITATION DISTRICT
NCPA - DICK BROWN TECHNICAL SERVICE
NEVADA IRRIGATION DISTRICT
NEXTERA ENERGY RESOURCES VASCO WINDS LLC
NEXTERA ENERGY RESOURCES NORTH SKY RIVER WIND LLC
NEXTERA ENERGY RESOURCES LLC - SKY RIVER
NEXTERA ENERGY RESOURCES TEHACHAPI SUBSTATION COMMUNICATIONS
NICE MUTUAL WATER COMPANY
NIPOMO COMMUNITY SERVICES DISTRICT
NORTH COAST COUNTY WATER DISTRICT
NORTH DOS PALOS WATER DISTRICT
NORTH EDWARDS WATER DISTRICT
NORTH FORK MD8
NORTH GUALALA WATER COMPANY, INC
NORTH KAWEAH MUTUAL WATER COMPANY
NORTH MARIN WATER DISTRICT
NORTH OF THE RIVER MUNICIPAL WATER DISTRICT
NORTH OF THE RIVER SANITARY DISTRICT #1
NORTH SAN JOAQUIN WATER CONSERVATION DISTRICT
NORTH TAHOE PUBLIC UTILITY DISTRICT
NORTH YUBA WATER DISTRICT
NORTHERN CALIFORNIA POWER AGENCY
NORTHLAND CABLE TV - MT SHASTA
NORTHLAND CABLE TV - OAKHURST
NORTHLAND CABLE TV - YREKA
NORTHSTAR COMMUNITY SERVICES DISTRICT
NORTHWEST PETROLEUM INC
NOVATO SANITATION DISTRICT
NPG CALBE INC
NRG ENERGY - S.F.
O'CONNOR TRACT CO-OPERATIVE WATER CO
O.L.S. ENERGY - AGNEWS INC
OACYS TECHNOLOGY
OAKDALE IRRIGATION DISTRICT
OAKHURST MD22
OASIS PROPERTY OWNERS
OCCIDENTAL CANAL COMPANY
OCCIDENTAL COMMUNITY SERVICES DISTRICT
OCEANO COMMUNITY SERVICES DISTRICT
OFFICE OF TECHNOLOGY SERVICES
OILDALE MUTUAL WATER COMPANY
OLAM TOMATO PROCESSORS, INC
OLIN CORPORATION
OLIVEHURST PUBLIC UTILITY DISTRICT
OPTICACCESS LLC
ORANGE COVE IRRIGATION DISTRICT
ORANGEVALE WATER COMPANY
ORLAND-ARTOIS WATER DISTRICT

ORO LOMA SANITARY DISTRICT
OROSI PUBLIC UTILITY DISTRICT
PACIFIC BELL
PACIFIC COAST PRODUCERS
PACIFIC GAS & ELECTRIC
PACIFIC GROVE UNIFIED SCHOOL DISTRICT
PACIFIC POWER & LIGHT CO - CRESCENT CITY DIST
PACIFIC POWER & LIGHT CO - MODOC DISTRICT
PACIFIC POWER & LIGHT CO - YREKA DISTRICT
PACIFIC UNION COLLEGE
PAJARO/SUNNY MESA COMMUNITY SERVICES DISTRICT
PAJARO VALLEY WATER MANAGEMENT AGENCY
PALMER CREEK COMMUNITY SERVICES DISTRICT
PALO ALTO PARK MUTUAL WATER COMPANY
PALO CEDRO CSA #8
PALOMINO LAKES MUTUAL WATER COMPANY
PARADISE IRRIGATION DISTRICT
PARKSDALE SA3
PARKWOOD MD19
PATTERSON IRRIGATION DISTRICT
PAXIO INC
PC LANDING CORP (PACIFIC CROSSING LIMITED)
PEBBLE BEACH COMMUNITY SERVICES DISTRICT
PENNGROVE-KENWOOD WATER COMPANY
PETROGULF CORPORATION
PHILIPS SEMI CONDUCTORS
PHILLIPS 66 COMPANY - SAC
PHILLIPS 66 PIPELINE LLC
PINE GROVE COMMUNITY SVCS DIST
PINECREST PERMITTEES ASSOCIATION
PINEDALE COUNTY WATER DISTRICT
PINNACLES TELEPHONE CO
PINON PINES MUTUAL WATER COMPANY
PINON VALLEY WATER COMPANY
PIXLEY PUBLIC UTILITY DISTRICT
PIONEER EXPLORATION LTD
PLACER CO WTR AGENCY
PLAINS ALL AMERICAN
PLANADA COMMUNITY SVCS DIST
PLUMAS BANK
PLUMAS EUREKA COMMUNITY SVCS DIST
PLUMAS SIERRA RURAL ELECTRIC COOP
PLUMAS-SIERRA TELECOMMUNICATIONS (CA)
POINT TO POINT
PONDEROSA TELEPHONE COMPANY
POPLAR COMM SVC DIST
PORT SAN LUIS HARBOR DIST
PORTER VISTA PUBLIC UTILITY DISTRICT
PRAXAIR, INC. LINDE
PREMIER COMMUNITY CREDIT UNION
PROBERTA WATER DISTRICT
PROCTOR & GAMBLE MFG CO

PURESOURCE WATER, INC
PURISSIMA HILLS WATER DISTRICT
QUAIL VALLEY WATER DISTRICT
QUARTZ MOUNTAIN MD73
QUEST MEDIA & SUPPLIES
QUINCY COMMUNITY SERVICES DISTRICT
QUORUM TECHNOLOGIES, INC.
QWEST COMMUNICATIONS (CA)
R & R RESOURCES, LLC
R R M INC
RACE TELECOMMUNICATIONS, INC.
RAINS CREEK WTR SYSTEM
RAINTREE FAIR OAKS LLC
RANCHO MURIETA ASSOCIATION
RANCHO MURIETA COMMUNITY SVCS DISTRICT
RANCHO TEHAMA TELEPHONE COMPANY
RANCHOS WEST MD95
RAND COMMUNITIES WATER DIST
RECLAMATION DISTRICT 1004
RECLAMATION DISTRICT #999
REDFLEX TRAFFIC SYSTEMS
REDWOOD VALLEY CO WTR DISTRICT (REDWOOD VALLEY)
REPUBLIC SERVICES OF SONOMA COUNTY, INC.
RESORT IMPROVEMENT DISTRICT #1
RICHARDSON BAY SANITARY DISTRICT
RIO LINDA/ELVERTA COMMUNITY WATER DIST
RIPPERDAN MD28
RIVER PINES PUBLIC UTIL DIST
RIVERDALE PUBLIC UTILITY DISTRICT
RIVERLAKE COMMUNITY ASSOCIATION
RIVERSIDE COMMUNITY SVCS DISTRICT
ROBERT L. AND MARY JO THOMPSON, PROPERTY OWNERS
RODEO SANITARY DISTRICT
ROGINA WATER COMPANY, INC
ROLLING HILLS SA19
ROSAMOND COMMUNITY SERVICES DISTRICT
ROSEVIEW HEIGHTS MUTUAL WATER CO
ROYAL ENERGY
RUSSIAN RIVER COUNTY WATER DISTRICT
S & T MUTUAL WATER COMPANY
S F PUC - WATER SUPPLY AND TREATMENT DIV
S.N.M.E. GAS CO. INC.
SACRAMENTO COUNTY OFFICE OF EDUCATION
SACRAMENTO COUNTY WATER AGENCY
SACRAMENTO MUNICIPAL UTILITY DISTRICT
SACRAMENTO REGIONAL TRANSIT
SACRAMENTO SUBURBAN WATER DIST
SADDLEBACK WATER ASSOCIAITION
SALIDA SANITARY DISTRICT
SALMON CREEK WATER DISTRICT-CSA#32
SALSIPUEDES SANITARY DISTRICT
SAN ANDREAS MUTUAL WATER CO

SAN ANDREAS SANITARY DISTRICT
SAN BENITO CO WTR CONSV & FLOOD
SAN CARLOS TELECOM INC
SAN FRANCISCO BAY AREA RAPID TRANSIT DIST
SAN FRANCISCO MUSEUM OF MODERN ART
SAN JOAQUIN FACILITY MANAGEMENT
SAN JOSE WATER COMPANY
SAN JOSE/SANTA CLARA REGIONAL WASTEWATER FACILITY
SAN JUAN SUBURBAN WATER DISTRICT
SAN LORENZO VALLEY WATER DISTRICT
SAN LUCAS CO WATER DIST
SAN LUIS COASTAL UNIFIED SCHOOL DISTRICT
SAN LUIS WATER DISTRICT
SAN MATEO CO. TRANSIT DISTRICT
SAN MIGUEL CSD
SAN MIGUELITO MUTUAL WATER CO
SAN RAFAEL SANITATION DISTRICT
SAN SIMEON COMMUNITY SERVICES DISTRICT
SANDRA TAVARES - HOMEOWNER
SANITARY DISTRICT #1 MARIN
SANITATION DIST#5 OF MARIN COUNTY
SANTA CLARA UNIFIED SCHOOL DISTRICT
SANTA CLARA VALLEY WATER DISTRICT
SANTA LUCIA COMMUNITY SERVICES DISTRICT
SANTA NELLA COUNTY WATER DISTRICT
SARATOGA HEIGHTS MUTUAL WATER
SAUCELITO IRRIGATION DISTRICT
SAUSALITO-MARIN CITY SANITARY DISTRICT
SCHLUMBERGER TECH CORP
SCOTTS VALLEY WATER DISTRICT
SEA RANCH CONNECT
SEARLES VALLEY MINERALS
SEBASTIAN (FORESTHILL)
SELMA KINGSBURG FOWLER CO SANI DIST
SEMITROPIC WATER STORAGE DISTRICT
SENECA RESOURCES CORPORATION
SENTINEL PEAK RESOURCES, LLC
SEQUOIA EXPLORATION, INC.
SERENO DEL MAR WTR SYSTEM
SEWER AUTHORITY MID-COASTSIDE
SEWERAGE AGENCY OF SOUTHERN MARIN
SEWERAGE COMMISSION OF OROVILLE REGION
SHAFTER SOLAR LLC
SHAFTER WASCO IRRIGATION DISTRICT
SHASTA COMMUNITY SERVICES DISTRICT
SHAVER LAKE CSA #31B
SHAVER LAKE POINT 2 MUTUAL WATER COMPANY
SHAVER LAKE PROPANE
SHAVER LAKE WWD #41
SHAVER SPRINGS WWD #40
SHELL AVIATION
SHELL PIPELINE CO., LP

SHILOH I WIND PROJECT LLC
SHORE TERMINALS LLC
SIERRA HIGHLANDS MD58
SIERRA LAKES COUNTY WATER DIST
SIERRA TELEPHONE
SIGNAL HILL PETROLEUM INC
SILICON VALLEY CLEAN WATER
SILICON VALLEY POWER
SISKIYOU TELEPHONE COMPANY
SITE RESOURCES ONE LLC
SIXTY (60) CIVIL ENGINEERS SQ / CEOIF
SKY HARBOUR WWD #38
SKY LONDA MUTUAL WATER CO
SLAWSON EXPLORATION CO INC
SMITH RIVER COMMUNITY SERVICES DISTRICT
SMITH RIVER RANCHERIA
SNELLING COMMUNITY SERVICES DISTRICT
SOLANO IRRIGATION DISTRICT
SONIC TELECOM LLC
SONOMA COUNTY WATER AGENCY
SOQUEL CREEK WATER DISTRICT
SOUTH CLOVERDALE WATER CO
SOUTH DOS PALOS COUNTY WATER DISTRICT
SOUTH FEATHER WATER & POWER
SOUTH PLACER MUNICIPAL UTILITY DISTRICT
SOUTH SAN JOAQUIN IRRIGATION DISTRICT
SOUTH SAN LUIS OBISPO COUNTY SANITATION DISTRICT
SOUTH SUTTER WATER DISTRICT
SOUTH TAHOE PUBLIC UTIL DIST
SOUTHERN CALIFORNIA EDISON - TRANSMISSIONS
SOUTHERN CALIFORNIA EDISON COMPANY
SOUTHERN CALIFORNIA GAS COMPANY
SOUTHERN SAN JOAQUIN MUNICIPAL UTILITY DIST
SOUTHGATE RECREATION & PARK DISTRICT
SOUTHWEST GAS CORPORATION
SPACE SYSTEMS/LORAL
SPALDING COMMUNITY SERVICES DIST
SPRECKELS WATER COMPANY
SPRINGVILLE PUBLIC UTILITY DISTRICT
SPRINT
SQUAW VALLEY MUTUAL WATER COMPANY
SQUAW VALLEY PUBLIC SERVICE DIST
STALLION SPRINGS CSD
STANDARD PACIFIC GAS LINE
STANFORD UNIVERSITY
STANTEC CONSULTING CORPORATION
STARLINK LOGISTICS, INC
STARRH FAMILY FARMS
STATE OF CALIFORNIA LEGISLATIVE DATA CENTER
STEGE SANITARY DISTRICT
STILL MEADOWS MD42
STINSON BEACH COUNTY WATER DISTRICT

STOCKTON EAST WATER DISTRICT
STONE / BENGARD COMMUNITY SERVICE DISTRICT
STRATFORD PUBLIC UTILITY DISTRICT
STRATHMORE PUBLIC UTILITY DISTRICT
STRYKER NEUROVASCULAR
SUBURBAN PROPANE - OAKHURST
SUBURBAN PROPANE - YREKA
SUDDENLINK COMMUNICATIONS - AUBURN
SUDDENLINK COMMUNICATIONS - HUMBOLDT
SUGAR BOWL CORPORATION
SUGARLOAF CSA #2
SUMNER HILL SA16
SUNDALE MUTUAL WATER CO
SUNNYSLOPE COUNTY WATER DISTRICT
SUNSET RIDGE MD40
SURPRISE VALLEY ELECTRIFICATION CORP - CA
SUSANVILLE CONSOLIDATED SANITARY DISTRICT
SUTTER COMMUNITY SERVICES DISTRICT
SUTTER HEALTH
SWEETWATER SPRINGS WATER DISTRICT
TAHOE CEDARS-MADDEN CREEK WATER COMPANY
TAHOE CITY PUBLIC UTILITY DISTRICT
TAHOE KEYS WATER COMPANY
TAHOE PARK WATER COMPANY
TAHOE SWISS VILLAGE UTILITIES, INC
TAHOE-TRUCKEE SANITATION AGENCY
TALMONT RESORT IMPROVEMENT
TAMALPAIS COMMUNITY SERVICES DISTRICT
TAMARACK ESTATES CSA #1
TBI MISSION WEST
TDY INDUSTRIES
TEA POT DOME WATER DISTRICT
TEAFORD MEADOWS MD24
TEHACHAPI CUMMINGS COUNTY WATER DISTRICT
TELEPORT COMMUNICATIONS - SAN FRANCISCO
TEMPLETON COMMUNITY SERVICES DISTRICT
TERRA BELLA IRRIGATION DISTRICT
TERRA DE ORO WATER CO
TERRADEX INC
TESORO
TEXACO CROSS VALLEY FUEL SYSTEM
THE BOEING CO - CA
THE DAVID & LUCILE PACKARD FOUNDATION
THE IRVINE COMPANY
THE NAHABEDIAN EXPLORATION GROUP LLC
THE PIG FARM ENTERPRISES LP
THE PRESIDIO TRUST
THE SEA RANCH WATER COMPANY
THE TERMO CO - PRINCETON
THE VENDO COMPANY
THERMALITO WATER AND SEWER DIST
THOMAS MC LARTY - HOMEOWNER

THREE RIVERS
THREE SIXTY NETWORKS (360 NETWORKS)
TIMBER COVE COUNTY WTR DIST
TIMBERLAND WATER COMPANY
TIME WARNER CABLE
TIPPETT STUDIO
TIPTON COMMUNITY SERVICES DISTRICT
TOKAY PARK WATER COMPANY
TOMALES VILLAGE COMMUNITY SERVICES DISTRICT
TORRANCE LOGISTICS COMPANY LLC
TOWN OF COLMA
TOWN OF DISCOVERY BAY
TOWN OF FORT JONES
TOWN OF HILLSBOROUGH
TOWN OF LOOMIS
TOWN OF LOS ALTOS HILLS
TOWN OF LOS GATOS
TOWN OF MORAGA
TOWN OF ROSS
TOWN OF SAN ANSELMO
TOWN OF TIBURON
TOWN OF TRUCKEE
TOWN OF WOODSIDE
TOWN OF YOUNTVILLE
TPX COMMUNICATIONS I
TPX COMMUNICATIONS II
TRACT 92 COMMUNITY SERVICES DISTRICT
TRANQUILLITY IRRIGATION DISTRICT
TRANS BAY CABLE LLC
TRANSMONTAIGNE
TREASURE CREEK WOODS MUTUAL WATER
TREASURE ISLAND UTILITIES OPERATION
TRICOR REFINING LLC
TRINITY COUNTY PUBLIC UTILITY DISTRICT
TRINITY COUNTY WATERWORKS DISTRICT #1
TROUT GULCH MUTUAL WATER CORPORATION
TRUCKEE DONNER PUBLIC UTILITY DISTRICT
TRUCKEE SANITARY DISTRICT
TRUCKEE TAHOE PROPANE / AMERIGAS
TULARE COUNTY FEDERAL CREDIT UNION
TULARE COUNTY INFORMATION & COMMUNICATION TECHNOLOGY
TULARE LAKE DRAINAGE DISTRICT
TUOLUMNE CITY SANITARY DISTRICT
TUOLUMNE UTILITIES DISTRICT
TURLOCK IRRIGATION DISTRICT
TURNER GAS CO, INC
TUSCARORA GAS TRANSMISSION (CA)
TWAIN HARTE COMM SVCS DIST
TWO SIXTY (260) RESOURCE MANAGEMENT LLC
U S BORAX
U S FILTER
UKIAH VALLEY SANITATION DISTRICT

UNION HEIGHTS MUTUAL WATER CO
UNION PACIFIC RAILROAD
UNION PUBLIC UTILITY DISTRICT
UNION SANITARY DISTRICT
UNIVAR USA INC
UNIVERSAL PARAGON CORPORATION
UNIVERSITY OF CA DAVIS-TELECOMM
UNIVERSITY OF CA-DAVIS-MEDICAL CENTER
UNIVERSITY OF CALIFORNIA BERKELEY
UNIVERSITY OF CALIFORNIA HASTINGS COLLEGE OF THE LAW
UNIVERSITY OF CALIFORNIA MERCED
UNIVERSITY OF CALIFORNIA MERCED - WATER/GAS OPERATIONS
UNIVERSITY OF THE PACIFIC
UNIVERSITY OF THE PACIFIC - SACRAMENTO AREA
UNOCAL/UNION OIL COMPANY
USA MEDIA GROUP-TRUCKEE
USS POSCO INDUSTRIES
UTICA POWER AUTHORITY
UTILITY TELEPHONE, INC.
VALERO ENERGY CORPORATION
VALERO REFINING
VALETA MD85
VALLEJO SANITATION & FLOOD CONTROL DISTRICT
VALLEY CHILDRENS HOSPITAL
VALLEY ELECTRIC ASSOCIATION, INC
VALLEY OF THE MOON WATER DISTRICT
VALLEY SPRINGS PUBLIC UTIL DISTRICT
VALLEY TRANSPORTATION AUTHORITY
VALLEY WATER MANAGEMENT COMPANY
VANDALIA IRRIGATION DISTRICT
VAQUERO ENERGY
VAUGHN WATER COMPANY
VELOCITY COMMUNICATIONS, INC.
VENIDA PACKING COMPANY
VETERANS HOME OF CALIFORNIA
VIASAT, INC. (CA)
VISALIA MEDICAL CLINIC
VOLCANO TELEPHONE CO
WARD WELL WATER COMPANY, INC
WASTE MANAGEMENT
WAVE BROADBAND - CONCORD
WAVE BROADBAND - GARBERVILLE
WAVE BROADBAND - ROCKLIN
WAVE BROADBAND - SAC REGION
WAVE BROADBAND - SF
WEAVERVILLE COMMUNITY SERVICES DISTRICT
WEAVERVILLE SANITARY DISTRICT
WEIMAR WATER COMPANY
WEIR FLOWAY / GEOSYNTEC CONSULTANTS
WES BRADFORD PROPERTIES LLC
WEST ALMANOR MUTUAL WATER COMPANY
WEST BAY SANITARY DISTRICT

WEST COAST GAS CO INC MERCED
WEST COAST GAS CO INC SACRAMENTO
WEST COUNTY WASTEWATER DISTRICT
WEST KERN WATER DISTRICT
WEST SAN MARTIN WATER WORKS
WEST VALLEY CONSTRUCTION COMPANY
WEST VALLEY SANITATION DISTRICT SANTA CLARA
WESTBOROUGH WATER DISTRICT
WESTERN ACRES MUTUAL WATER
WESTERN DIGITAL
WESTERN HILLS WATER DISTRICT
WESTHAVEN COMMUNITY SERVICES DISTRICT
WESTLANDS WATER DISTRICT
WESTON SOLUTIONS. INC.
WESTSIDE SOLAR LLC
WESTSIDE WATER DISTRICT
WESTWOOD COMMUNITY SERVICES DISTRICT
WHEELER RIDGE MARICOPA WTR STORAGE
WHITE KNIGHT PRODUCTION LLC
WHITNEY POINT SOLAR LLC
WICKLAND PIPELINES LLC
WILD GOOSE STORAGE INC
WILDWOOD ISLAND CSA #5
WILLOW COUNTY WATER DISTRICT
WILLOW CREEK COMMUNITY SERVICES DISTRICT
WINDJAMMER CABLD
WINDJAMMER CABLE - SUSANVILLE
WINDSOR WATER DISTRICT
WINTON WATER & SANITATION DISTRICT
WM BOLTHOUSE FARMS INC
WOODLAND-DAVIS CLEAN WATER AGENCY
WOODLANDS MUTUAL WTR CO
WOODVILLE PUBLIC UTILITY
XO COMMUNICATION SEVICES INC dba XO COMMUNICATIONS
YOLO CO FLOOD CONTROL & WATER CONSERV DIST
YOSEMITE NATIONAL PARK
YOSEMITE SPRING PARK UTILITY CO
YOSEMITE WEST WATER DISTRICT
ZAYO - CA

STAKEHOLDERS

CALIFORNIA PUC
UTILIQUEST
WEST VALLEY CONSTRUCTION

SUSTAINING MEMBERS

CENTRAL CALIFORNIA IRRIGATION DIST
GLOBAL UTILITY TRACKING SYSTEM
INSTRUMENT TECHNOLOGY CORP (ITC)

M & M ELECTRIC
PACIFIC COAST LOCATORS
THE DON CHAPIN COMPANY, INC
UNDERGROUND CONSTRUCTION COMPANY, INC
UNDERGROUND UTILITY DETECTION SERVICE
WATTIS CONSTRUCTION COMPANY, INC

ATTACHMENT 31

Locate & Mark
SED Update

Gas T&D Operations

August 4, 2017

Together, Building
a Better California

Agenda

- Life Safety
- Introductions
- Late Ticket Discovery Timelines
- QA/QC Late Ticket Review Process
- SED’s Data Request
- Q/A
- Meeting Adjourned

Late Ticket Discovery Timelines

1. April 22, 2016

As part of the 2016 audit plan Internal Auditing conducted an assessment of PG&E's Locate and Mark program.

Conclusion:

IA noted improvements in the Utility's L&M program controls over the last several years overall, IA concluded that processes and controls related to L&M program need further strengthening. In particular, IA found that (1) the software system ("Irthnet") the Utility uses for L&M production work has limitations that impact the Utility's ability to manage and monitor performance, and (2) the number of quality assessments performed annually for the L&M program does not appear proportionate to the number and risk of L&M tickets being processed.

2. 2016

Quality Management (QM) Field Assessment – Field-Late Ticket results.

During PG&E's planned internal QM field assessments conducted in 2016 the team identified tickets that had been processed beyond the require due date resulting in late tickets. The review of completed "Facility Marked" tickets revealed that tickets were not being properly processed and were not showing up through the normal "Late Ticket" reporting. As a result of the assessments 40 tickets were identified as late out of 1,984 tickets reviewed that was not initially reported.

3. March 20-24, 2017

American Gas Association (AGA) Peer to Peer review session and feedback.

Description: For Damage Prevention, the AGA review team will seek to understand the procedures, programs and initiatives that the host company uses to manage the threat of excavation damage to pipelines and the various risks categorized as outside force damage. The review will include an assessment of how the host company is managing the risk posed by 1st party and 2nd party damages.

The AGA team will compare the host company's programs to those deemed to be common industry practices and identify gaps. The review team will focus on identifying practices and actions that can strengthen the host company's overall damage prevention program.

Conclusion: Peer review team provided feedback on improvements in the following categories.

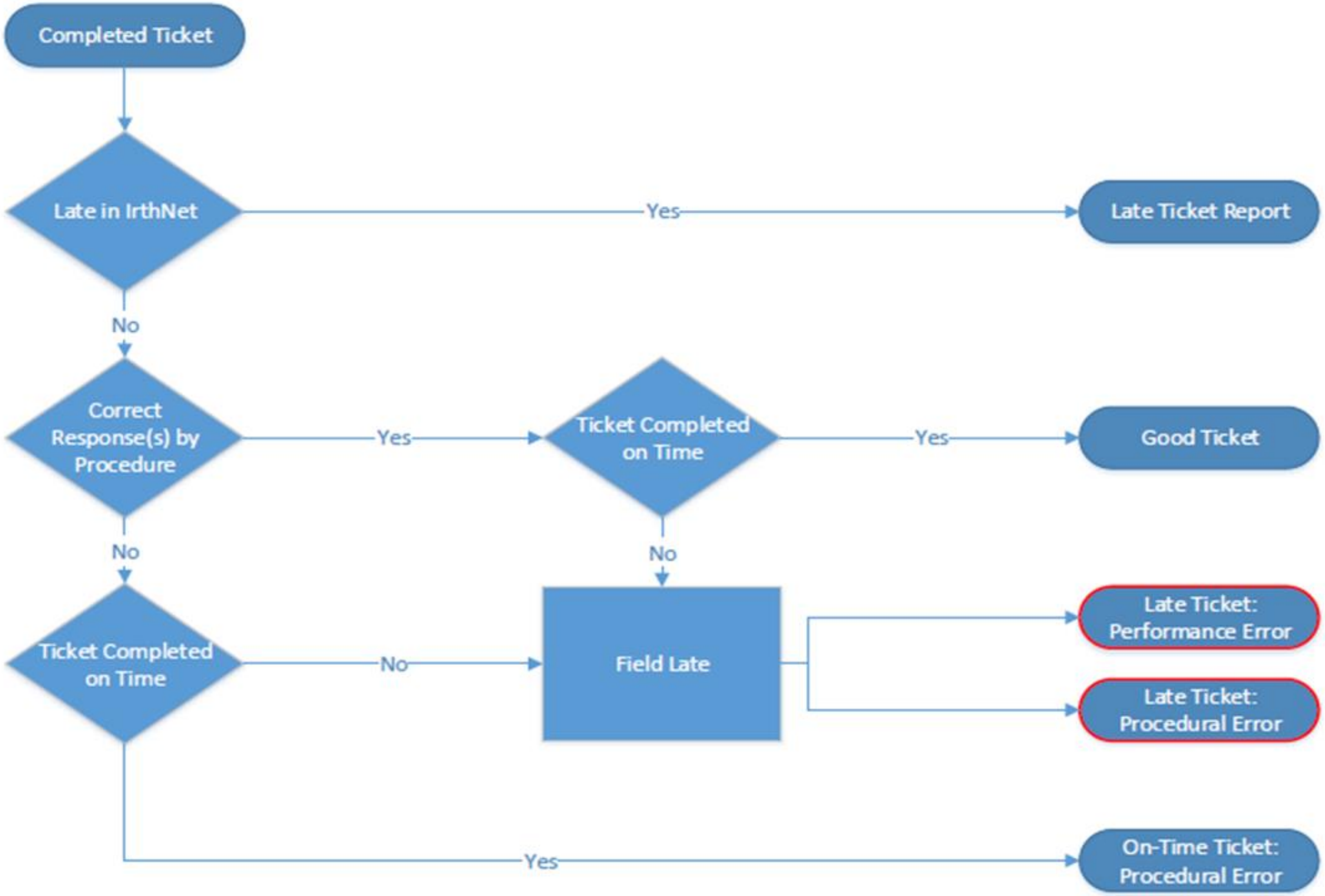
Metrics Discrepancies for L&M	Effectiveness CAP of IA for Damage Prevention	Resource Constraints and Ongoing Support	L&M Contracting	Standby Limitations	Validation of OQs	Timeliness of Map Updates
L&M Training	Routing Employees for L&M Work	Gas T&D Ops Alignment	Accessibility of L&M Handbook	Marking Newly Installed Facilities	811 One Call process	

4. April 21, 2017

As a result of the AGA Peer review feedback, prior concerns and issues PG&E Senior VP of Gas Operations initiated a "Special Attention Review"(SAR). First meeting was held on May 10, 2017 , the team was tasked to identify gaps in controls and implement corrective actions (e.g., program enhancements, training). Follow-up SAR meetings have been held on June 13th and the 27th to report status and progress on corrective actions. Next meeting is scheduled for August 31, 2017.

CONFIDENTIAL - GENERAL ORDER 66D AND DECISION 16-08-024

QA/QC Late Ticket Review Process



Definitions:

Late due to performance – Locator followed procedures as outlined in TD-5811M Locate & Mark Handbook to re-negotiate or phase a ticket but missed the due date. Or did not mark by renegotiated new start time

Late due to non-adherence to procedures – Locator did not follow the procedures to re-negotiate or phase a ticket and missed the due date.

Examples

- Did not re-negotiate or phase ticket properly
- Should have closed due to no delineation or response from excavator

QA/QC Late Ticket Review

Ticket Sampling Methodology

Total tickets processed in 2016 – 898,111.

<u>Tickets removed from sampling</u>

• Irth Tickets reported "Late"	44
• Pole Test & Treat	38,121
• No Remarks Required	253,032
• Total	606,914

<u>Sample Size Determination</u>

- 1%
- Minimum of 10 tickets per Category per Division
- 10~1,000 = 10
- >1,000 = 1%
- Total sampling size = 1.3%
- 22 Types of 1st Responses in IrthNet

*Sample size based on resource availability, not statistical based.

Ticket Review Result as of 8/2/2017

Total Quantity	606,914
Planned Review Total	7,796
Actual Review Total	8,149
Total Late Tickets	469
Late Ticket Find Rate	5.8%
Percent Complete	104.5%

QA/QC Late Ticket Review Results

Total Quantity	7,796
Total reviewed	8,149
Number of tickets late due to Performance	315
Number of tickets late due to non-adherence to Procedures	154
Total tickets late	469

The divisions with the highest late ticket find rates are :

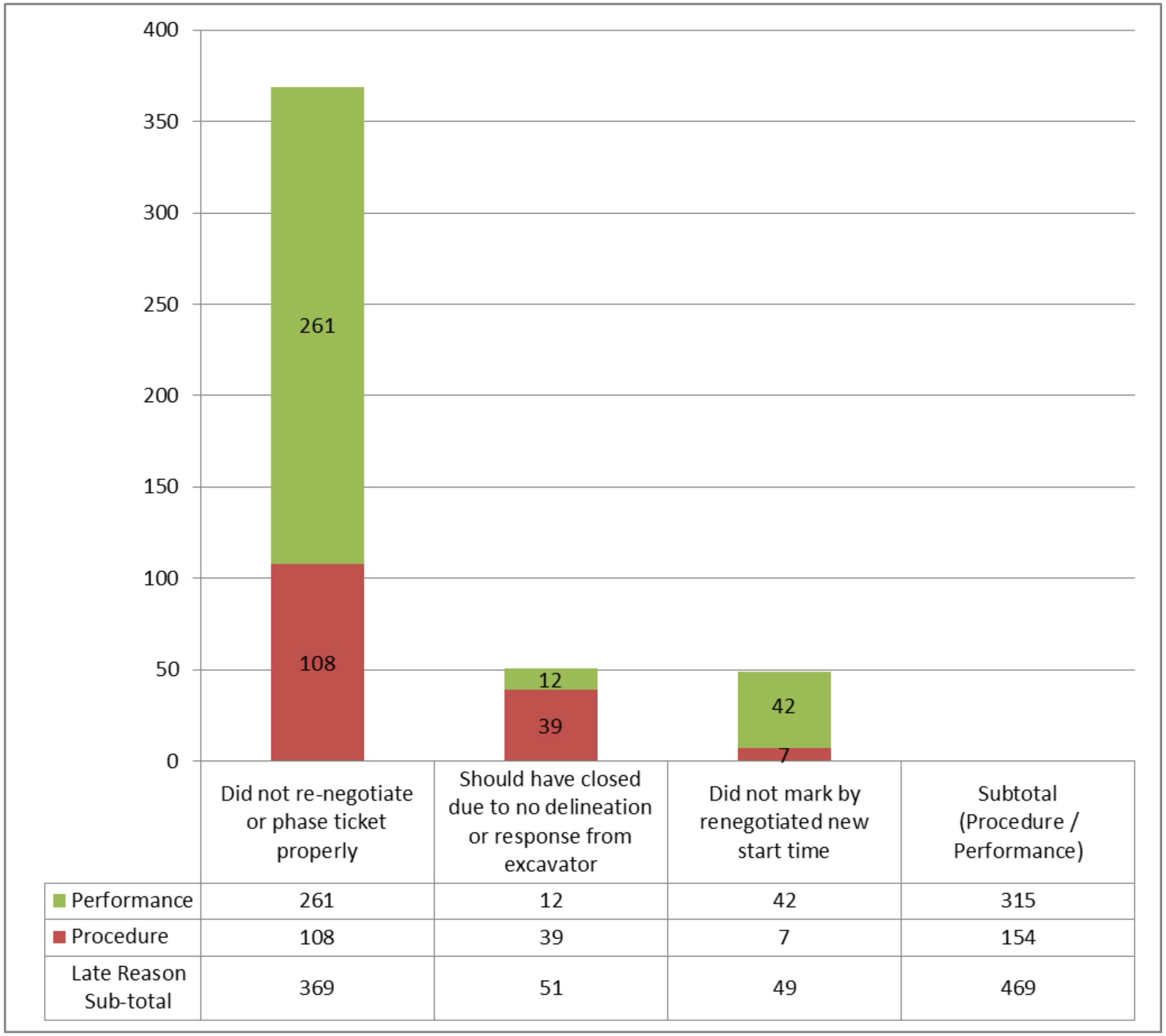
- East Bay;
- San Francisco;
- San Jose;
- De Anza;
- Sacramento.

Division	# of Tickets Reviewed	Sum of Performance	Sum of Procedure	Sum of Late Tickets	Late Ticket Find Rate
East Bay	451	64	4	68	15.1%
San Francisco	334	17	15	32	9.6%
San Jose	515	33	13	46	8.9%
De Anza	350	21	10	31	8.9%
Sacramento	855	44	29	73	8.5%
Central Coast	416	21	12	33	7.9%
Mission	370	10	12	22	5.9%
Yosemite	418	15	9	24	5.7%
Stockton	459	8	17	25	5.4%
Northbay	358	17	2	19	5.3%
Diablo	399	15	5	20	5.0%
Sierra	438	17	4	21	4.8%
Los Padres	329	9	4	13	4.0%
Kern	512	11	8	19	3.7%
Peninsula	404	7	7	14	3.5%
North Valley	320	5	3	8	2.5%
Sonoma	295	1	0	1	0.3%
Fresno	539	0	0	0	0.0%
Other	167	0	0	0	0.0%
Humboldt	220	0	0	0	0.0%
Grand Total	**8,149**	**315**	**154**	**469**	**5.8%**

Late Ticket Reasons

Late Ticket Categories:

1. **Did not re-negotiate or phase ticket properly** - 78.7%
    - Did not renegotiate a new start time correctly
    - Did not call to inform excavator
    - Improper use of phasing a ticket
    - Left message with excavator but no verbal discussion
    - Inclement Weather
2. **Should have closed due to no delineation or response from excavator** – 10.9%
3. **Did not mark by renegotiated new start time** – 10.4%



	Did not re-negotiate or phase ticket properly	Should have closed due to no delineation or response from excavator	Did not mark by renegotiated new start time	Subtotal (Procedure / Performance)
🟩 Performance	261	12	42	315
🟥 Procedure	108	39	7	154
Late Reason Sub-total	369	51	49	469

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SED's Data Request on PG&E's Damage Prevention Program

5. "Please conduct a Quality Management (QM) review for "field late" tickets for all the USA tickets from year 2012 to present that PG&E responded to. Please provide the result of the QM review with the following information for each "field late" ticket in a spreadsheet format."

Reviewing 100% of all USA tickets from 2012 to present date can be done however, it will result in resource and financial impacts. The total population of tickets for this timeframe is approximately 2,611,051. The schedule outlined below is the estimated resource necessary to complete the review at a desired timeline. Resources are based on an average review time of 6 minutes per ticket. The estimate is based on a full 8 hour day, completing 80 tickets a day excluding breaks and lunch.

6 months – 272 FTE's

12 months – 136 FTE's

18 months – 91 FTE's

In lieu of the resource needs and potential delays PG&E would like to propose additional options on the following slides.

Option A: Modified IrthNet Reporting

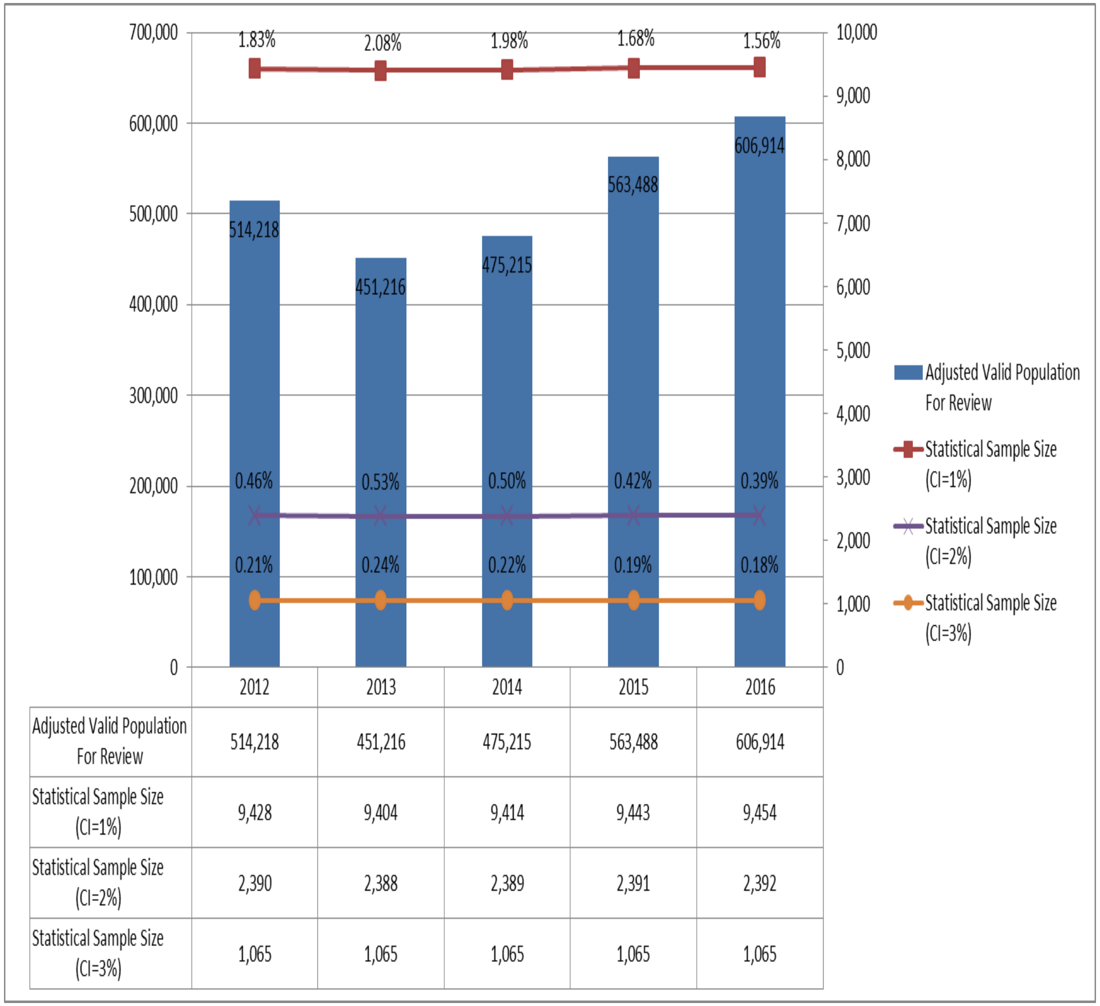
PG&E is currently working with IrthNet programmers to create “Late Ticket” report that will provide visibility of all tickets that did not meet the required timeline for all tickets processed going forward in 2017.

PG&E will be meeting with IrthNet programmers to discuss the potential of modifying the report to allow for reviewing of all completed tickets in prior years, 2012-2016.

If programming can be done PG&E will be able to provide a list of all “Late Tickets” for 2012 to present date. If this is not available PG&E is suggesting Option B.

Option B: Statistical Sampling With a 95% Confidence Level

	2012	2013	2014	2015	2016
Total Number of Tickets Processed	760,002	670,983	702,261	820,447	898,111
Deductions:					
Irth Tickets Reported "Late"	4,623	13,546	13,391	3,450	44
Pole Test & Treat	11,325	5,335	2,573	15,937	38,121
No Remarks Required	229,836	200,886	211,082	237,572	253,032
Adjusted Valid Population For Review	**514,218**	**451,216**	**475,215**	**563,488**	**606,914**
Confidence Level = 95%	95%	95%	95%	95%	95%
i) Confidence Interval = 1%	1%	1%	1%	1%	1%
Statistical Sample Size (CI=1%)	9,428	9,404	9,414	9,443	9,454
Statistical Sample Size (%)	1.83%	2.08%	1.98%	1.68%	1.56%
ii) Confidence Interval = 2%	2%	2%	2%	2%	2%
Statistical Sample Size (CI=2%)	2,390	2,388	2,389	2,391	2,392
Statistical Sample Size (%)	0.46%	0.53%	0.50%	0.42%	0.39%
iii) Confidence Interval = 3%	3%	3%	3%	3%	3%
Statistical Sample Size (CI=3%)	1,065	1,065	1,065	1,065	1,065
Statistical Sample Size (%)	0.21%	0.24%	0.22%	0.19%	0.18%



	2012	2013	2014	2015	2016
Adjusted Valid Population For Review	514,218	451,216	475,215	563,488	606,914
Statistical Sample Size (CI=1%)	9,428	9,404	9,414	9,443	9,454
Statistical Sample Size (CI=2%)	2,390	2,388	2,389	2,391	2,392
Statistical Sample Size (CI=3%)	1,065	1,065	1,065	1,065	1,065

SAR Current Actions and Next Steps

- Continue to work through L&M SAR initiative to identify gaps and drive corrective actions to enhance and improve L&M performance through training, technology and process improvements. Next meeting is schedule on August 31, 2017.
- Work with Irthnet vendor to implement program enhancements, apply controls to address identified gaps around ticket processing and reporting. Enhancements are targeted to be completed by 8/31/2017
- In addition to Quality Assurance field assessment reviews implement a Quality Control review of completed tickets. Develop sampling size, measures, metrics and performance reports. QC reviews planned to start 8/21/2017
- Engage an independent third-party firm to conduct a non-privileged fact-finding investigation to identify the reason(s) for the wide gap between the Irthnet late ticket data and the “field late” totals. Team is in the process of reviewing and identifying a firm.
- Update work procedures and training for all Locators and Supervisors to ensure consistent understanding and application of all L&M requirements.

Questions

ATTACHMENT 32

BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE
STATE OF CALIFORNIA

CONFIDENTIAL

EXAMINATION UNDER OATH
OF
DAVID APPELBAUM

REPORTER'S TRANSCRIPT
San Francisco, California
May 19, 2017
Pages 1 - 133

Reported by: Alejandrina E. Shori, CSR No. 8856
Ana M. Gonzalez, CSR No. 11320

PUBLIC UTILITIES COMMISSION, STATE OF CALIFORNIA
SAN FRANCISCO, CALIFORNIA

IN ATTENDANCE

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I N D E X

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BE IT REMEMBERED THAT, by Consent of the Witness, and on Friday, May 19, 2017, commencing at the hour of 8:40 a.m. thereof, at the offices of the CALIFORNIA PUBLIC UTILITIES COMMISSION, 505 Van Ness Avenue, Room 5100, San Francisco, California 94102, before ALEJANDRINA E. SHORI, CSR No. 8856, and ANA M. GONZALEZ, CSR No. 11320, personally appeared

CARL DAVID APPELBAUM,

called as a witness herein, who, being first duly sworn, was thereupon examined and interrogated as hereinafter set forth.

* * * * *

EXAMINATION

BY MR. GRUEN:

Q And just as we go on the record today, my name is Darryl Gruen. I'm the staff counsel for the California Public Utilities Commission and I'm representing the Safety and Enforcement Division today.

And if we could just go around and if everyone could state their name, and if you have a title that's pertinent today if you could state that for the record as well.

A Name is Carl David Appelbaum. I'm a state evaluator with the U.S. --

What's that? You want the whole

title?

MR. GRUEN: That's fine, state evaluator is fine. Good.

MR. McGUINN: And my name is John McGuinn, and I'm an attorney in California and I represent Carl David Appelbaum.

MR. BRUNO: I'm Ken Bruno. I'm the program manager of the Gas Safety Branch, California Public Utilities Commission.

MR. KHATRI: Sikandar Khatri, senior utilities engineer, Gas Safety and Reliability Branch, San Francisco.

MR. CHEN: Wai-Yin Franky Chen. I'm a senior utilities engineer for Gas Safety and Reliability Branch.

MR. GRUEN: Okay. And Mr. Appelbaum, have you requested Mr. McGuinn as your personal attorney to be with you here today?

A Yes.

Q Okay. Let's see.

Okay. Just as some background here, I'm here to ask -- Mr. Appelbaum, I'm here to ask you questions while you're under oath on behalf of the Safety Enforcement Division. And at some point, other Safety Enforcement Division staff who identified themselves may ask additional questions on the record.

As mentioned, your answers to these questions are under oath, so that's means you've sworn or attested to answer them truthfully to the best of your knowledge. Do you understand that?

A Sure.

Q And if I have not articulated any of the questions well or phrased them poorly in any way, please either ask me to repeat it or just tell me that you do not understand the question. Please do not speculate or guess about what the question is. Okay?

A Understood.

Q Okay. And few words about confidentiality.

We're going to ask the court reporter to mark the transcript of this interview as confidential. And do you agree to keep the communications in the transcript confidential unless a court so other tribunal requires you to divulge them?

A Yes.

MR. McGUINN: And do I as well on his behalf.

MR. GRUEN: Thank you.

Thank you, Mr. McGuinn.

Q And I understand from you Mr. McGuinn, and you, Mr. Appelbaum, that you'll take available steps to protect the communications we discuss today, but also communications that we have related to today's discussion and future communications that we have related to today's communications. Do I understand that correctly?

MR. McGUINN: You do.

THE WITNESS: To the question?

MR. GRUEN: Q Yes.

A Does that include the fact that we did speak, period?

Q Yes, it does.

A So it's not just the content but the fact that we're meeting in the first place?

Q Yes, sir.

A Understood.

Q Okay. And if PG&E requests you to release communications you've had with Safety Enforcement Division about this transcript or in any way related to the transcript, will you let us know immediately?

A Sure.

MR. McGUINN: I will.

MR. GRUEN: Thank you.

Q Okay. At this point, we do not know where we are going with the information from today. We are not in any formal proceeding but we will be using the information in this interview to decide next steps including whether to pursue a formal Investigation. And if you divulge to PG&E communications you've had the Safety Enforcement Division with this transcript or that you've had them related to -- or related to this transcript, it could interfere with the ability of the Safety and Enforcement Division to pursue an investigation of PG&E. And in particular, it could interfere with the ability of the Safety Enforcement Division to investigate whether PG&E has complied with certain safety requirements.

Do you understand all that?

A Understood.

Q Okay. All right with that, just if I could ask a bit of background.

What dates were you employed at PG&E?

A February 25th of 2013 till September 16, 2015.

Q And what were your titles at PG&E, and the approximate dates -- or if you remember the exact dates, that's fine too -- that you held each title while were you at PG&E?

A Just had one title. It was manager damage prevention.

Q And that was for the entire tenure then?

A Correct.

Q Okay. And as manager of damage prevention, what was your role at PG&E?

A The ultimate goal was to prevent damages to underground facilities. We did that in a three-pronged approach, first of which is -- was the public awareness program which is compliance requirement; the second of which is a dig-in reduction team; and the third was to handle and process damage claims.

Q Okay.

A So those three tentacles rolled up to the prevention of damage.

Q Thank you.

Do you recall an e-mail that the California Public Utilities Commission received, and specifically the Safety Enforcement Division received from [redacted] on your behalf? You were cc'd on this e-mail.

A I do -- I do know the e-mail. I just want to be clear on the "behalf."

My boss, [redacted], instructed me to draft him a memo. It was in his prerogative to pass it on.

Q Understood.

A It wasn't at my request.

Q Understood.

A Okay.

Q Thank you.

So the reason for asking my questions today are based upon that e-mail.

A Sure.

Q And as well as follow-up conversations that you and I have had.

And with that introduction, I'd also like to ask you some background questions specifically about locating and marking and the creation of tickets, and then follow from there.

A Sure.

Q Okay. So are you familiar with the term locating and marking?

A Yes.

Q And what does that term mean to you in the context of PG&E's natural gas system?

A The locate and marking, it's a process that occurs where technicians receive an 811 ticket. So somebody that wants to excavate calls 811, or today they can do it electronically, and a ticket is generated and it is dispatched to a team called locate and mark. And all the utilities have them, PG&E included. And that gets put into a folder and handed out to crew, and the crew gets assigned to go locate those tickets. They go out, they identify the underground facility, and they mark it accordingly with assigned colored paint.

Q Okay. And so just as a common understanding as we move forward, when we use the terms "locating" and "marking," that's the definition that you just described --

A Sure.

Q -- that we all understand that to mean throughout the interview?

A Sure.

Q Thank you.

And you mentioned "tickets" several times there.

A Yes.

Q Could you explain for the record in the context of locating and marking what the term "ticket" means?

A Certainly. The formal term is an Underground Service Alert. In California, there are two One Call centers, a north and a south. The southern One Call center is called Dig Alert and the northern center is referred to as USA 811 North. And when somebody wants to excavate when they have a proposed excavation, their procedure is to either phone call 811 or to do it electronically and it goes to one of those two centers. From there, a USA is generated, identify the address, what's the proposed excavation; they provide some instruction about delineating the area and so forth. And after that, information is taken from the call center. They put that together in a ticket, what I'm calling a ticket. It's a One Call ticket, a USA. And that gets dispatched electronically to all the pertinent utilities that could possibly have a facility in that location. And then the utilities receive that and then they manage their piece of it and they perform the locate or they have no conflict, and they feed back into that system the disposition.

Q Okay. So when a ticket is created, it's created by excavators who want to excavate in the territory of the different utilities?

A Well, it's promulgated by the excavator but it's generated by the call center.

Q Thank you.

And then the ticket is, once it's generated by the call center, it's sent to each utility in whose service area the excavator would like to dig?

A Correct. Essentially.

Q Okay. If you want to make any corrections to that, please.

A There are times where it may not be relevant to certain utilities, based on the location. I'm not exactly sure how they filter who it's not relevant to, but...

Q Okay. And just to narrow this a little bit, when I ask questions today about locating and marking and tickets, I'm specifically asking them about matters related to PG&E's natural gas system. Do you understand that?

A Yes.

Q Okay. So with that overview of those terms, are you familiar with Title 49 of the Code of Federal Regulations section 192.614, otherwise titled as the Damage Prevention Program?

A I am.

Q Are you familiar -- I think you stated to earlier but just to be sure -- with California's One Call law that requires operators to respond within two working days after the excavator calls PG&E?

A I am.

Q And is it true also that doesn't include the day the actual call was made but it's two days, two working days after the day that the call is made. Is that accurate to say?

A Correct.

Q Okay.

A I think it's important to clarify.

Q Please.

A The One Call law, the code 4216 when I was working here has since been -- there's been some amendments. I have not followed the amendments. I believe it followed Senate Bill 661. And whatever those updated amendments are, I'm not familiar with.

Q Okay. And since you mentioned two, in terms of the One Call law, do you happen to know the state law that requires -- that sets forth the One Call requirements?

A Government Code 4216?

Q Yes.

A Yes.

Q You're familiar with that --

A I am.

Q -- requirements those sets of requirements?

A Notwithstanding whatever amendments been made recently.

Q Understood. Thank you.

And is an excavator under those One Call requirements -- understanding your qualification.

A Mm-hmm.

Q -- there may have been changes, but is an excavator required to call the One Call system and open a ticket about their dig between two and fourteen working days before their dig not including the calendar day that they establish a ticket?

A Correct.

Q Okay. And if an excavator wants to dig in PG&E's service territory calls 811 and creates a ticket to do that, is PG&E required to respond to that ticket by coming to the excavation site and locating and marking their natural gas lines in the identified excavation area?

A Not quite. They are obligated to, within 2 working days to provide positive confirmation that they addressed the ticket.

There are circumstances where there is no conflict and they are able to close the ticket remotely as a no conflict ticket. Outside of that, the procedures, I remember it, was they would go to the scene and sometimes write the words No Conflict on the ground or they would mark accordingly.

Q All right, thank you.

Now, assuming that there -- that PG&E has to come out there.

A Mm-hmm.

Q If no other arrangements are made between the excavator and PG&E once a ticket is -- after the ticket is created, when is PG&E required to locate and mark their underground natural gas equipment within the identified excavation area?

A 4216 read, at the time I was working there, two work days.

Q Two?

A Right. Not including weekends and holidays.

Q If no other arrangements are made between the excavator and PG&E, and PG&E again has to come out --

A Mm-hmm.

Q -- to do the locating and marking, what happens to the ticket if PG&E does not come out to locate and mark the underground natural gas equipment in the area, the identified area within the required time?

A Well first, the excavator is still, by 4216 requirements, not allowed to excavate until they have positive confirmation. Their procedure is to contact the call center, call 811 again and tell them the utility has not marked their facility. The call center then contacts, and they do that -- I'm not sure exactly how they do that. It may be through an electronic communication. I believe it's through electronic communication where they say There's a recall; you're late.

The procedure with USA North, which was by far the dominant service territory, was to do that three times: Day one, day two and day three. The excavator was required to contact the call center each day if they had not responded. On the third time, the call center would call me directly. And because I was a board member for USA North, they would call me directly and ask me to intervene.

Q Okay. And before it got to you and before there were repeated calls, what is the term used to describe the ticket if PG&E doesn't make an arrangement and PG&E doesn't come out to locate and mark the territory within the two-day time, the required two-day period?

A It's to as a late ticket.

Q A late ticket?

A Right.

Q Okay. And PG&E -- can PG&E go ahead and contact the excavator if they can't make it out in the required time within the required two working day period to rearrange the start time?

A They can, yes.

Q Okay.

A Yes.

Q For the record by clarification, by "start time" I'm asking just a clarification as the time when PG&E would be required to come out and locate and mark the underground equipment so that the excavator could get started with the digging?

A Correct.

Q All right. Great, thank you.

Okay, with that background in mind --

A Mm-hmm.

Q -- do I understand correctly you've raised an issue regarding PG&E's compliance with Title 49 of the Code of Federal Regulations section 192.614 known as the Damage Prevention Program?

A Yes.

Q And specifically, you've identified that PG&E possibly falsified its records related to the damage prevention program?

A Correct.

Q Okay. And let me ask this question, this next question, just clarify that the intent of this question is to elicit a detailed response. So please take as much time as you need in answering it.

A Okay.

Q What is your basis for stating that PG&E possibly falsified records related to the damage prevention program?

A Okay. To tee this up, first I want to recognize that as the manager of damage prevention --

And I'll end up using the first person here, speaking as if I were still at PG&E. I'll do that --

Q Okay.

A -- accidently.

Q Okay.

A That as the manager of damage prevention, I did not have accountability directly over the locating function, the locate and mark function. That was a separate group, so. But I sat as the --

you know, on the board of directors. I had almost every other aspect of damage prevention in my purview.

In beginning the summer of 2014, there was a locate and mark supervisor by the name of Richard Taylor. Richard had some performance issues and his superintendent approached me and said "Would you mind if Richard rotated into your group. He's having some performance issues." Maybe we can fix him if he has -- he can take a stint under my umbrella. I agreed.

And so Richard came over. And shortly after Richard started working for my group, he shared with me that -- he started to air some dirty laundry with the locate and mark group. He made mention that his director Joel Dixon had given instruction not just to him but the entire locate and mark group that there would be no late tickets, that the days of the late tickets were over.

And I remembered asking him what does that mean and the way Richard described it to me, he said, if -- that the instruction from Joel Dixon was if you cannot make your two-day window, you make every effort to renegotiate that start time so we're not in violation of 4216.

And he had told me at the time that the -- I don't know if it was instruction or understanding but it was that at the very least, Joel Dickson expected them to make an attempt, leave a voicemail. But following the attempt, they would go into the system and reestablish the new start time.]

So -- and he shared that with me, because he said, "Dave, that is not legal." You know, the contractor has to agree to a reestablished start time.

And so I remember approaching Katherin Mack after that. Katherin was a supervisor in my group who had, in late 2013, moved to the compliance group that had locate and mark. She went on to become a locate and mark superintendent.

I asked her about this. She confirmed with me that that was their instruction from Mr. Dickson to not have late tickets, and do whatever was needed to be done to reestablish that start time. So that was also summer of '14.

I had probably had a number of conversations with folks after that, but I distinctly remember in February of 2015, because I was down at the Monterey dig-in, or the Carmel dig-in in February of 2015. And I had time to speak with the locate and mark supervisor for that area, and remember asking him about that issue. He said the same thing, yes, Joel Dickson gave orders to basically renegotiate or reflect a renegotiated start time. So, it was common. Everyone knew it. It wasn't a secret that the expectation was these folks reflect whatever they had to do as long as it wasn't reflecting as late. So that is the genesis of how this issue came up.

Q Okay.

A I know on multiple occasions we went to -- I worked very closely with John Higgins, who at the time was a senior director. And my relationship with John Higgins was I was the manager of damage prevention, he was the process owner for damage prevention. So he had the overall accountability to ensure that the damage prevention process was being followed correctly.

And this whole process owner thing was established by Nick Stavropoulos. It is something that Nick apparently brought over from the East Coast where process owners don't own the execution of the work, but they are accountable to ensure that it is done correctly.

So I had daily, sometimes multiple times a day conversations with John Higgins. He was well aware of what was going on. He had indicated to me that he had carried that message to Kevin Knapp, who was the vice president at that time and had direct supervision over Joel Dickson. He also indicated to me he took that message to Jesus Soto, who was the next level up as the senior vice president.

You know, from that point forward, again, it just came up multiple times. I recall walking into John Higgins' office one time with Katherin Mack and addressing this same issue. It was an issue that was brought up multiple times. Again, to this day, I'm not aware that it has ever been -- there has ever been a remedy put in place. And when I hired on back with PHMSA, my boss asked me about my tenure with PG&E and this issue came up. And he subsequently asked for me to write a memo to him.

Q Understood. If I can ask a couple of clarification questions about what you just answered. Okay. So you discussed that Mr. Dickson, Mr. Joel Dickson, had provided instructions that there shall be no late tickets. Did I get that part right?

A Yes.

Q And that the instructions included making every effort to renegotiate the start time, right? Is that right?

A To reflect that renegotiated start time had occurred.

Q And related to your point about reflecting it but not necessarily, you are actually renegotiating it. Just a clarification what that means. So do you want to elaborate what that means?

A Sure. I want -- yes, making every effort means if you can't contact the excavator, you continue to attempt to contact the excavator to get concurrence, get his agreement to renegotiate that start time. The instructions that I had been told by others was make a phone call, leave a voicemail and then change the time. So they weren't making every effort, but they made an effort, just not a sufficient one.

Q Okay. And just for the record to be sure I understand, if PG&E was not able to contact an excavator in order to renegotiate the start time, what would the instructions to not have any late tickets have meant?

A Falsify. They would just go in

and -- that is exact -- you know, your question is exactly what the problem was. Was they would say, okay, well, I have a phone number. I called. I left a message. I've renegotiated. And I'm going to take that leaving the voicemail on the cell phone was sufficient for renegotiation. So I've met my obligation. That was the way that was interpreted.

Q Would PG&E have recorded that whether they reached the excavator or not?

A Sometimes. This is, again, what is related to me. Sometimes I'm told they would put in the ticket. I left a voicemail. I understand sometimes they didn't.

Q Okay. And can you -- when you say it is related to you, can you tell us who related that information to you?

A A lot from Katherin Mack, Richard Taylor and a couple of other locate and mark supervisors.

Q Do you happen -- if you want to take a moment to remember names.

A If I had a list -- the locate and mark supervisor in the Monterey area, if I had a list of names I could tell you who that person was.

Q And later, just I'll clarify with you, I'm going to provide a list of names that captures some of our prior conversations and ask what they mean to you. So there may be an opportunity to recover this.

A Sure. Fresno, Rich Yamaguchi in Fresno. He shared everything I'm telling you with me as well, and just for some reason the name escapes me.

Q If it occurs to you at any time during the interview, take a moment now, if you think you can recall.

A I think John Corona was one of them. I just can't think of them. There was a gentleman that was in Monterey at the time. I believe he is now in Sacramento. I can picture him. I just can't grab his name.

Q Okay. Thank you.

Again, if it occurs to you at any time, please feel free to stop me, jump in.

A Sure.

Q Let us know.

Couple of other follow-ups. Regarding Katherin Mack's role, so Katherin you said moved to the -- she was the locate and mark supervisor in late 2013. Did I get that right?

A Yeah, knocked over 13. She moved

out of my team and went over to the gas compliance team under Joel. Her first responsibility, I don't think she was a superintendent, she was more of a process person. But then they made her -- promoted her to superintendent and gave her I think the southern locators.

Q Okay. And by "southern locators," can you give us an idea of the geography?

A I want to say roughly East Bay south or maybe Diablo south.

Q Thank you.

And just to be sure I understood right, she received instructions, I'm sorry, she told you that she received instructions from Mr. Dickson to not have late tickets? Did I understand that right?

A Yes.

Q Okay. Approximately what time, do you remember what time she told you that?

A In the summer of '14.

Q Summer of '14, okay.

Now, regarding Mr. Higgins' role and specifically the title of process owner for damage prevention, can you talk about what that role means and what it -- specifically what it means to be a process owner for damage prevention, as you understand it?

A Sure. Well, first he was ultimately accountable for the reduction of damages. And concurrent to that, he was responsible for developing financial deficiencies. And so he had folks looking into time spent locating, number of locates performed in a day, whatever it took, you know, the value of having contractors and the cost benefits of those. So he had the overall responsibility to, A, reduce the damages and develop the efficiencies and processes to have a fluid organization.

Q And did your efforts feed into the financial efficiencies to -- for Mr. Higgins?

A Significantly.

Q How so, please?

A Through the reduction of damages we -- well, two prong, through the reduction of damages and through the collection of damages that occurred. There was process that had occurred prior to us where in an attempt to collect the damages of an excavator that broke stuff, PG&E was collecting about 50 cents on the dollar in trying to recover moneys damaged. I created a team where we had boosted that up to 80-85 cents on the dollar for those same damages.

So there was a cost to benefit to that process realizing both of those, the significant one being the reduction in damages. We attributed -- I think in 2014 we attributed a reduction in damages to the tune of $12-$13 million.

Q So these -- I think did I -- I'm trying to remember the word you used to describe it. What did you do in order to get to the point where you could achieve a reduction in damages?

A We developed in 2014 -- I'm just going to tell you how I told them. In 2014 Kevin Knapp was the vice president at the time. He called myself and my boss at the time Steve Fisher into his office and said, "Damages are out of control. What are you going to do about it?" He pushes the glasses up, which meant he was serious. And "What are you going to do about it?"

I said "Kevin," I said "If you look at the way law enforcement addresses a rash of accidents in a particular location, they flood that location with enforcement." I said, "California doesn't have enforcement, which is the single greatest flaw in California right now."

Having said that, my solution is

give me some bodies, some people, and let me train them to go and do two things: Intervene excavators that are currently breaking the one-call law; go to a job site, see if there are marks; ask for the USA ticket; make sure they are respecting the marks and maintaining them and digging with hand tools, where required. I said -- I asked Kevin and I said, "If you give me those bodies, we will train them to do that." Then concurrent to that, if there is a damage we will send those trained folks to those damaged locations to properly assess what has occurred, and so forth.

So we started that. We called it a "strike team" in the summer of 2014. We began a relationship with the California licensing board, CSLB, state licensing board. Where when we had a damage that occurred from an excavator that never got a one-call ticket, we would engage the state licensing board and file a complaint with them and -- because here in California you have to be licensed. And there is actually a stipulation in the license agreement that they follow the one-call rules. So we leveraged that as a tool.

We filed those complaints. We

deployed this strike team, which garnered significant attention, not all good. The excavating community was pretty upset initially. But we got their attention. We got the attention of their insurance carriers. We had now the state government through the CSLB interested, which made fire departments become more interested. And it had a compounding effect. And we were very, very successful at the end of -- Kevin gave me a four-month window. He said go try on it for four months. We ran it until the end of October 2014. We realized a 32 percent reduction in the hit ratio in four months, year over year.

Q By "hit ratio" you mean dig-ins?

A Dig-ins per thousand USA tickets. Your numerator is the number of dig-ins for the month, you're the dominator is number of USA tickets.

Q Yes.

A It is the only way to fairly assess your success. And you take that period of time over that same period of time last year, because weather conditions, number of factors go into how much activity is going on.

MR. McGUINN: Can we just go off the record one second?

MR. GRUEN: Sure.

(Off the record.)

MR. GRUEN: Back on the record, please.

Just clarification about the use of the term "damages," if you would. When you are talking about damages, are you referring specifically to dig-ins, the impact on PG&E's equipment as the result of dig-ins.

A Yes, it is damage to underground subsurface utilities relating from excavation. We follow the memo of the American Gas Association in their definition of a "dig-in."

Q And your point about -- I think you were talking about the increase, if I can use the term "recovery." So as a result of the dig-ins, PG&E would seek to clarify, I'm sorry, to recover the "damages," as you've used the word, from the excavators in certain instances?

A Yes. Where there was liability on the excavator for damaging a subsurface utility, a dig-in, they would attempt to recover those damages.

Q Okay. Understood.

And so you mentioned that the strike force between the time that it started and the time that -- the end of that four-month window, the number of dig-ins per thousand, had you seen a reduction?

A About 32 percent.

Q 32 percent, okay.

Had you -- I think you mentioned too something about recovery that PG&E -- the recovery that PG&E sought from excavators as a result of the damage that you had -- as you've described it?

A Yes.

Q That increased as well?

A It did.

Q One more time for my memory, can you state approximately the amount of increase per, say, thousand dollars?

A Yeah, I don't know. I'm sure they have those current numbers. Most of that was attributed to when we created the DIRT team, the dig-in reduction team in 2015. But I believe prior to my departure, the last number I had heard, we were at 80 to 85 cents on the dollar versus historical 50 cents on the dollar.

Q Thank you.

I understand you are identifying that as an approximate, according to your memory?

A Correct.

Q About the strike team, just a question about them. If I'm understanding right, they were almost as enforcement, in an enforcement role. They were asking questions about the excavators' compliance with underground storage, Ehlert law. So, would the -- would the strike team then document what they had learned as a result of the questions that they had asked?

A Yes.

Q Okay. And they provide documentation back to PG&E presumably to -- was someone responsible within PG&E for receiving that documentation?

A Yes. We created -- we actually hired two contract -- we called them "dispatchers." They were folks at a desk that when a member of a strike team got to a location, they would phone call one of my two "dispatchers," and I use that term loosely. They would say I'm at this location. And that dispatcher would then go into the Earth system to see if there was a USA ticket for that location.

The strike team member had a book that had -- everybody referred to it as our ticket, the PG&E ticket. But what it was, it was a book that had name, address, incident location, violation, name of contractor, and so forth. Then on the back of that piece of paper was public awareness materials. Here is one called "Rule" encouraging them to call 811. So they were instructed to fill that out and give that copy -- a copy of that to the excavator, and then return the original copy back to headquarters and we created a database.

Q Okay. And what happened after the four-month window that you were given from Mr. Knapp?

A We went into the winter months, the low part of the season. And so he had let me hang onto a couple of folks just so we didn't completely lose visibility. The goal was to go back to senior leadership and propose a permanent team, which we did. And then in February of 2015 I had permission to establish the Dig-in Reduction Team, the DIRT team. I was ultimately given authority to hire 18 full-time contracted investigators to complement the three full-time investigators that were on my staff.

Q The investigators, once the 18, the complementary set of 18 were added, they continued to do the same role. You had a larger group of people under you, under your supervision who were doing this role of checking out what the excavators were doing. Is that accurate?

A It is. We did add another aspect to this in that recognizing that though it was good to have intervened, it was good if you caught the bad guy, we wanted to provide a, you know, the follow through. And so my public awareness team, I instructed them to establish workshops. So we -- and as a mitigative step to those that we had intervened, established a number or workshops and encouraged them to attend.

So we had this formal, now this formal strike team, which happened to all be retired law enforcement from I believe chief down to detectives, the whole gamut of skill sets in law enforcement. So they were now much better trained in identifying issues, applying the law, investigating dig-ins. And then we would take that information and refer them to a workshop and continue to refer the no USA violations, now having a one-call ticket to the CSLB. We continued to realize a downward trend.

I actually brought what the downward trend is. It is the very last one.

Q Just for the record, I was just

handed a sheet titled 20 Month Rolling Average: 3rd Party Dig-In (STIP) Ratio.

This I'm seeing shows a graph that, it looks like, if I'm reading this correctly, it shows a decrease in dig-ins over time from third-party excavators. Is that accurate?

A Yes.

Q Okay. Good. Thank you.

This I see too it looks like it is spanning from the time period 2014 to August 2015. Is that right?

A Yes.

Q And I see that it looks like the strike team started in July of 2014?

A Right.

Q And so the four-month window you had referenced from Mr. Knapp earlier would have gone from July to 2014?

A Correct.

Q That is shown here identified as "strike team" on the exhibit?

A That is correct.

Q In October 2014, the SIT team, was that when the additional 18 --

A No. That was kind of the layover of -- I don't even remember what SIT stood for. We had just a small complement that they let me continue to pay for just to keep things moving in a positive direction. When you get over here, and this is shown as April 15, but we brought -- we got permission in February of '15 to start the 18. I think we had fully deployed by April 1.

Q Okay. Just so we have a basis for this, what you've handed me, what is the genesis of this data that you are handing me on this sheet of paper?

A We had a -- on my team I had a data person, full-time data person who kept all the data related to dig-ins, kept a number of different aspects of data. But this actually shows -- this 2.60 was our goal, year-end 2014 goal was 2.6 per thousand and 2015 goal was 2.06. Pretty aggressive target, but you can see we...

Q Just for the record, you are pointing to the sheet of paper you handed me, that two lines on the -- what you've handed me as well?

MR. McGUINN: You want to mark that as an exhibit?

MR. GRUEN: I will in just a minute. Thank you. Appreciate the point.

Q Was this created during your -- the time you were at PG&E?

A It was.

Q Was it created at your instruction?

A It was.

Q Okay. Yeah, and to Mr. McGuinn's point, very well taken, thank you sir, can this be marked as the first exhibit.

(Exhibit No. 1 was marked for identification.)

MR. GRUEN: Again, for the record it is entitled, Exhibit 1 is entitled 20 Month Rolling Average: 3rd Party Dig-In (STIP) Ratio. Thank you.

Q During the course of the investigation, the strike team, back to the strike team, did the strike team identify any other issues, whether it is the excavators or PG&E related to the dig-ins and related to their investigations?

A Yes.

Q Okay.

A Very much so.

Q So you've talked at some length about the excavators. Can you talk about what the strike team's investigations revealed as far as PG&E's behavior related to tickets? And then I'll ask you later again just the same question but related to dig-ins.

A Sure. First of all, this happens

more in the strike team, because when a strike team deployed effectively by 1 April of 2015, we were now -- I'm sorry. The DIRT team, the DIRT team in 2015. Let me start over, because that was confusing.

Q That is okay. Just to clarify, I understand I think and you've said very well the role of the strike team.

A Yes.

Q If you could identify and spell out the term "DIRT" first?

A Yes, "Dig-In Reduction Team."

Q "Dig-In Reduction Team"?

A Yes.

Q And when did the Dig-In Reduction Team or DIRT team begin? When did its role begin?

A They were formally deployed 1 April 2015.

Q Okay. And what was the Dig-In Reduction Team's role?

A They were -- they had two main tentacles of responsibility. The first one was to take efforts to prevent the dig-in from occurring in the first place, so they actively patrolled. They used a number of intelligence sources to determine where to go, who to look for, what to look for. And they began their day by visiting job sites and strategic locations to make their presence known, evaluate, if the rules were being followed and prevent the dig-in from occurring.

Then concurrent with that they were to respond to a dig-in if one occurred. And they would -- they had the accountability to conduct the investigation, really focused on fault, not so much on damage amount, material loss, gas loss. That was handled in operations. But this was a focus on who is at fault and why.

Q Okay.

A So those are their main responsibilities.

Q Thank you. So the Dig-In Reduction Team was, when it was focusing on who was at fault and why, it was focusing regardless of who was at fault it would identify that? So if it was the excavator, it would identify the excavator. If it was PG&E, it would identify PG&E. If it was both, it would identify both the excavator and PG&E?

A Correct.

Q And can you talk -- again, please take as much time as you need about the dig-in reduction or the DIRT team's identification of PG&E's fault?

A Sure. As I recall the data, we were finding that somewhere in the 20 to 40 percent of the dig-ins they were responding to were actually the fault of PG&E. And those reasons for fault included a number of things. They mismarked the facility. They put the marks in the wrong spot. They never marked a facility. They determined that the asset that was hit by the excavator did not exist on a map. They determined that an excavator dug before positive confirmation, before marks were made. However, that there was -- marks were due after the damage occurred so -- or prior to the damage occurring.

So we found on several occasions where, though the excavator had violated the law by digging before positive confirmation, PG&E was late. And they would tell our investigator I had to balance my work demand. The fact that I have crews I'm paying for, equipment I'm paying for, I've called PG&E a number of times and they haven't responded. I had to balance the risk of the damage to the job I'm working. And so that started to really surface with the deployment of this DIRT team. So we would see those were a number of things that they would come across.

One of the other things that was significant that we discovered utilizing this DIRT team was in the past, historically, when we didn't have formal investigators evaluating these dig-ins, PG&E was billing contractors. And there were circumstances, for example, where a contractor would dig before positive confirmation and strike a PG&E asset that caused $5,000 in damage. PG&E would send a bill for $5,000. And the contractor would say, wait a second, you never showed up. And PG&E took the position, yeah, so what? You still broke the law by digging before positive confirmation. You owe us $5,000. And well, we are both at fault. And they would settle out somewhere in the middle. So that is how PG&E would recover money.

When we deployed the DIRT team, when we found circumstances like that, those circumstances would come to my desk. And I refused, I said we will not bill a penny because the smoke before the fire in this case was that we didn't mark it. And that came with the support of our legal department and senior leadership. We were not going to put ourselves in a position when PG&E was at fault in any way that we were going to hold, you know, the little guy accountable. So that raised our at-fault numbers, because we were now identifying things that were in the past not identified as being at fault.

Q Because of the efforts of the DIRT team?

A Because of the -- two things. Not just because the effort of the DIRT team, because now these investigators were separate and isolated from those that were graded on their performance. So the group that historically had been investigating dig-ins was the same group being graded on their performance to conduct those dig-ins. They did not want to be at fault. It was a mark against them.

So when they had the opportunity to say, well, you didn't wait for positive confirmation. We are not at fault. It is their fault. Regardless of how it works out in the end, it didn't look bad for the performance of their group.

Q I want to be clear. Is that to say that there were certain -- there was some encouragement for not recording the -- there was some encouragement from within PG&E not to record when PG&E had either -- had not correctly identified either the information related to dig-ins or had not identified -- had not behaved according to the way it should have to prevent the dig-ins? Is that accurate?

A Can you ask that again. I'm not sure I understood.

Q I certainly agree. That was not worded well.

A I don't feel alone.

Q So maybe I'll ask it in an open-ended way. Can you describe, again, just PG&E's -- what they were looking at in terms of the -- was there any encouragement for PG&E not to properly identify dig-ins?

A Absolutely.

Q Okay. Can you say more about that?

A Sure. Again, they had historically been graded on, they used the term "at fault," meaning PG&E was at fault. And sometimes it is very clear when you are at fault. I never responded and located the facility. I completely mismarked the facility.

But when you had these circumstances where both parties share some culpability, PG&E would always lean in the direction it was not our fault. It was the excavator's fault. We saw that in this scenario I had just given you where digging before positive confirmation, we saw that in mismarked cases where the excavator didn't pothole but the excavator didn't have to pothole because our mark was here. They were digging 10 feet away. They hit our line. We mismarked by 10 feet. And there was an attempt by our gas crews to say you never potholed. If you had potholed, you would have discovered there was no line and you would have called us back to come out and remarked. No. When I investigators deployed, you mismarked, period, we are not going to do that.

There were a lot of attempts that we had discovered historically where those kind of dig-ins were initially reflected as the excavator's fault, because that is what they were graded on. The gas crews were not graded on whether or not they recovered money. In fact, they had zero visibility in whether or not they recovered visibility. Many of them had confessed to our crew, to our investigators that, hey, I know that the collection unit is going to drop this. We are going to not point the fingers.

Q Okay. So if the DIRT team could

have identified or would have identified if PG&E had mismarked, if they had not properly marked or not marked at all, those kinds of things, any other problems on PG&E's part that the DIRT team would have identified?

A I know, I recall getting a case that came to my desk where the contractor failed to maintain the marks. In fact, it happened in San Francisco. So when they -- because they didn't maintain the marks, the blame was put on the contractor. But we went back to the original photographs of the marks, and the marks were off by seven or eight feet. So, you know, it became a question of, well, they didn't maintain the incorrect marks. What difference -- I said no, we were not billing that one. That is our fault.

Those all day long in the past would have been directed at the excavator, because the excavator did in fact fail to maintain the marks, but we discovered that you were maintaining incorrect marks. So that is another example I recall.

Q Do you have any idea of how many times the DIRT team identified a problem with PG&E in its investigations that PG&E had with marking?

A 20 to 40 percent of the dig-ins they responded to.

Q Thank you.

A That might be higher, but by the way. I don't remember the economic numbers.]

Q Okay. That's an approximate, that's an estimate --

A Yes.

Q -- at the time were you there.

Understood. Thank you.

Were these errors recorded on tickets?

A They would not be recorded on the One Call ticket, no.

Q Okay. Okay.

Regarding the relationship between the strike team and the DIRT team, were those -- the DIRT team was under your supervision.

A Mm-hmm.

Q Whose supervision was the strike team under?

A Mine.

Q Yours as well?

A Yeah.

Q So they were working in conjunction with each other?

A Well, the strike team were actual

gas crews. We cherry-picked from available crews. They were not attorney, law enforcement folks.

Q Okay.

A They -- we just had them temporarily assigned to me for --

Q Okay.

A -- this trial period.

Q Good. Okay.

Let me switch now, just to ask a bit more, switch back to tickets.

And I think -- just bear with me if I turn to my notes just briefly.

So I think I just want to --

You talked about -- yeah, regarding tickets, I want to get a couple of things on the record just related to your earlier point about PG&E possibly falsifying tickets.

A Sure.

Q Okay. How many -- and I want to make sure I get the dates right. So you were at PG&E from 2013 to 2015 approximately?

A To September of '15.

Q September of '15. So in 2013 --

A Mm-hmm.

Q -- how many late tickets approximately were there?

A I had been told there were over

51,000 late tickets.

Q Okay. And how about how many late tickets approximately were there in 2014?

A Again, I was told in both cases by Katherin Mack, that that had dropped down to 12,000, something in that area.

Q So a difference of approximately 29,000 late tickets?

A Yeah.

Q Between 2013 and 2014?

A (Nods). It's amazing.

Q And the total number of tickets, how many -- can you give an estimate of the total number of tickets in 2013?

A You know, I believe they were somewhere north of 600-, 650,000. I believe by the time I left, they were upwards north of 700-, 750,000.

Q Okay. So between 2013 and 2015, an increase from approximately let's say 600,000 or so in 2013 to upwards of 750,000 by 2015?

A Yeah. There was an uptick there, about 20 percent over that.

Q And that was -- there was an increase in total tickets between 2013 and 2014?

A Yes.

Q And an increase in tickets from

total tickets from 2014 to 2015 as well?

A A significant jump from '14 to '15, yes.

Q Can you be more specific, noting this is still approximate, but do you have an idea of how many total tickets in 2014?

A I didn't -- the actual number, I don't know.

What do I know is, and it's related to that graph I gave you.

Q Yeah.

A We had realized roughly 20 percent uptick in the generation of One Call tickets --

Q Okay.

A -- by the time I left.

Q Okay. Good.

And also just in terms of I think you mentioned earlier, could you -- did the locate and mark group identify -- how did their budget look in during the time that there was a decrease in late tickets between 2013 and 2014?

A Sure. I don't remember exactly what their budget was, but one of the varying -- vocally advertised accomplishments for yearend 2014 was a reduction in efficiency savings of $7- to

$10 million in the locate and mark budget. I know that by year end '14, they had eliminated all the contracted locaters that they were using. And they had boasted about a significant accomplishment being the $7- to $10 million efficiency realized number.

Q Okay. And what about the typical number of -- do you have a sense of how the reduction, how that savings would have been accomplished?

A Well, sure. So when it came to -- well, to me it was simple. If you're graded on your late tickets and you can show an improvement: Hey, look; I fixed my problem with late tickets, and by the way, I've saved all this money, you look like a hero. So the motive there is to, for personal reasons is to show that (A) I've saved the company money, and (B) I fixed a problem, which, you know, is very transparent to everyone.

Q In your opinion and based upon your experience, would it have been possible to achieve a reduction of approximately 29,000 late tickets in 2014 compared to 2013, and also achieved a savings in the locate and mark group of between $7- and $10 million by the end of 2014?

A Only if 150 locaters chose to work

for free, incremental to the already existing group, the answer is no. It cannot occur. And that's --

No. Sorry to delay the answer. The answer is no, they can't.

Q Thank you.

Who else would be able to speak to that, the reduction in savings and the actions of the physical locators during the time of 2013 and 2014, who could speak to that that's currently within PG&E?

A Katherin Mack, it would absolutely her.

Q Okay.

A I would say to their benefit -- and Katherin is very much responsible for legitimate efficiencies. She went in and visited all the yards. She did that under my umbrella as well. She visited all the yards and established accountabilities and so forth, to generate a, you know, more proficient and efficient operation.

So there is much of that. You know, efficiency is attributed to legitimate reasons but to the tune of $7- to $10 million, yeah, it's not possible.

Q Okay.

A But she'll tell you.

Q Yeah.

In 2014, did PG&E use any contractors to do physical locating?

A Yes.

Q They did. Okay.

Do you have an idea of how many?

A I don't.

Q Okay. Would it have been an increase in the number of contractors compared to 2013 or a decrease or approximately the same?

A You know, I don't know. It would probably be the same.

Q Okay.

A But I don't know.

Q But you don't know?

A (Nods.)

Q What about physical locators within PG&E, actual PG&E personnel, any -- do you have an idea of how many physical locaters there would have been in 2013?

A I don't. I don't know.

Q Okay.

A My reference to locaters, I will tell you that would jump out at me as I got a phone call one day. A locater at a yard, I don't remember where, was handed a folder with 100 USA tickets and told by the supervisor accomplish a hundred USA locates today in one day, and which is just physically impossible.

And so to give you kind of an illustration -- that might be an extreme -- but I got a phone call on that one, going: You are not going to believe this but so and so got a folder with a hundred tickets and asked to have them accomplished by the end of the work day.

So you can see that even a third of that were true, it's very, very difficult to accomplish that.

Q Do you recall who gave those instructions, which supervisor it was?

A I do not.

Q Do you recall who received those instructions?

A I believe one of our DIRT investigators called, had just -- had found out and had called my supervisor, Jorge Gill-Blanco who worked for me, who told me that. We chuckled over that.

Q You heard that from Jorge?

A Yes.

Q Did any PG&E employees tell you that instructions were falsely received to change the start times on a ticket?

A Other than what we discussed earlier, those people?

Q No, please. If it's the same people.

A Yeah. It's the same people.

Q Can you name them?

A Katherin Mack, Richard Taylor, Rich Yamaguchi.

Q Yeah.

A And others. I think Sean Peralta had made mention of that. I --

Q Okay.

A And our investigators ran across this quite a bit, too.

Q And can you name the people? I think you mentioned Richard Taylor on this earlier, but I want to be sure I have a complete list.

A Mm-hmm.

Q That's why I'm asking these.

Any other PG&E employees that told you they were instructed to not be late with tickets?

A Yes. Steven Walker. He was -- he didn't work for me but he was responsible for the computer side of it. In fact, he had the most intimate knowledge on this process.

The locate -- the supervisor that I mentioned was in Monterey and now in Sacramento. Again, the name escapes me but --

Q Okay. And I don't want to state it for the record here, but was Richard Taylor, did I understand correctly earlier that he was one of the people who had told you he had received instructions --

A Yes.

Q -- to not have late tickets?

A He had told me that they had a locate and mark meeting where all the locate and mark folks rendezvoused. I believed they did that down in San Luis Obispo. And in that meeting collectively, Joel Dickson, while addressing the broad audience, said we will have no more late tickets.

Q Okay.

A Do what you have to do to reflect it. Nothing's late.

Q Okay. Who instructed them not to be late?

A Joel Dickson.

Q Okay. What other PG&E staff may be able to speak factually about new start times on tickets?

A Katherin Mack. Steven Walker. I believe Vanessa White could provide some.

Q Okay.

A I had -- again, nothing wrong with -- but I had talked to Katherin Mack a couple months ago. I know that Vanessa, after my departure Vanessa was tasked to assist Steven Walker with the computer side of the IRTH system, that Vanessa White had approached Katherin and for whatever reason told Katherin: I will not falsify these records. I will not do it.

And Katherin said: Do not do it. Support it.

And Vanessa was later removed from that role.

Q And Vanessa worked directly for Katherin?

A She did not. She worked in my group when I was there. After I left, she had -- I think she was working for somebody else. I don't really remember.

Q Okay.

A But she got tasked for a small period of time to assist with the irth system.

Q Do you know who Vanessa received those instructions from?

A I don't.

Q All right. Just regarding the sources of PG&E's ticket information, can you identify who would have -- which -- what the sources are of PG&E's ticket information?

And by sources, I mean specifically the keepers, the entities that would have tracked and gathered and have a comprehensive reservoir or, what's the word I'm looking for, whether it's a database of PG&E's tickets information or some other, some other means of keeping it in a organized way.

A I believe Steven Walker is the overall gatekeeper of the system. I believe he still is. And then the regional supervisors, you know they -- when USA North dispatches a One Call ticket based on its geographical location, it automatically populates into a particular folder, and then the local supervisors have accountability for the tickets within their folders.

Q Okay.

A And then again from a process perspective, Steven Walker has the overall visibility and you know what's late, what's due. Part of his role was to identify tickets that were within a short period of time of being late and making phone calls, you know, engaging to try to reduce the late tickets.

Q Okay.

A Legitimately try to reduce them but --

Q Yeah. And in terms of not people but actual companies, are there -- what's the name of the database in which -- is it -- I'm assuming it's a database. But is there a database that keeps all of PG&E's tickets?

A Yes. And these terms, one is UtiliSphere and the other one is irth Net.

Q Can you spell those for the record?

A UtiliSphere, common spelling.

Q Okay.

A But irth Net was i-r-t-h Net, n-e-t.

Q Okay. And which of those two did PG&E use?

A They're one in the same.

Q Okay.

A One referred to the program, the physical software program. And I believe irth Net was the company name.

Q Okay. Thank you.

Bear with me just a moment.

Can we go off the record for a moment.

(Off the record.)

(Recess taken.)]

MR. GRUEN: Could we go back on the record.

Before we went off the record I wanted to -- you mentioned a couple of names of several people. Just for the record, for clarity, to the best of your recollection, if you can give the spellings of the following people, Sean Peralta.

A P-e-r-a-l-t-a.

Q Sean, S-e-a-n?

A I believe so, yes.

Q Katherin Mack?

A Yes, no "e" on the end K-a-t-h-e-r-i-n, Mack, common spelling.

Q Rich, am I saying Richard Yamaguchi?

A I know him as Rich Yamaguchi. Just how it sounds. I'm not sure.

Q Jorge Gill-Blanco?

A That is J-o-r-g-e, Gill, G-i-l-l dash B-l-a-n-c-o.

Q Thank you.

Also, before we went off the record I understood you to talk about a 20 to 40 percent increase in dig-ins. That is an approximate number, I understood you to say.

A That is not, no.

Q Did I misstate?

A Yeah. What I'm referring to there is out of the total number of dig-ins investigated, percentage of those are because PG&E was at fault, on a percentage of those was the excavator was at fault. We had seen an increase in what -- where PG&E was at fault.

Q Okay.

A And I believe out of the total number, somewhere in the 20-40 might have been higher percentage, we were finding that PG&E was at fault.

Q Thank you. I used the term "dig-ins." And you clarified this is not the excavators, this is PG&E. The point that there is a 20 to 40 percent increase in PG&E's at fault, being at fault, was identified after the DIRT team began its role?

A No.

Q Okay.

A No. Just the -- I don't know what the percentage increase of discovered at-faults was. I'm saying the overall percentage of at-faults ranged somewhere in the 20 to 40, maybe 50 percent.

Q Thank you. Appreciate that.

A Okay.

Q And also, could you -- the Exhibit 1 here, just identifying it for the record again titled 20 Month Rolling Average: 3rd Party Dig-In (STIP) Ratio, I'm handing this to you. Could you identify for the record the person who was responsible for creating that?

A I recall his first name was [redacted]. He worked for Nalini Webster on the claims team, and he was a contractor.

Q Could you please spell for the record the name of Ms. Webster?

A Nalini, N-a-l-i-n-i, Webster, common spelling.

Q What was -- you mentioned, but what was Ms. Webster's role?

A She was the supervisor of damage claims.

Q Okay. So they would have had all of the information necessary to prepare this?

A Yes.

Q The exhibit here, this Exhibit 1?

A Yes. And she also was responsible for all of the data and preparing the monthly Keys report, the Keys report being the leadership report on state of health in gas operations. So all of the damage data and related claims data was collected by her team.

Q Okay. Just a few questions about the Keys Reports. You said the state of health reports for gas operations, did the Keys Reports have data regarding tickets?

A It did.

Q Can you say your understanding of what kind of ticket data the Keys reports contained?

A I recall Keys had the total volume. I know we provided the year-to-date hit ratio, because we had a STIP target, STIP is acronym Short-Term Incentive Program. PG&E has 16, or had I believe 16 corporate STIP targets. It is how they graded themselves. This dig-in ratio was one of those 16. And we provided damage data. We provided -- they started to provide at-fault data where we were at fault. We provided first, second and third-party damage analysis, number of different things.

Q And the Keys reports, were those -- are those reports printed by PG&E?

A Yes.

Q And they are published -- let me not use the word "published" -- they are made exclusively by PG&E?

A Yes.

Q Are they circulated for the public to see?

A Not that I'm aware of, no. Actually, the formal title is "Keys to Success" report, something Nick Stavropoulos, he brought that over from the East Coast.

Q Do you happen to know -- so if they were created when Mr. Stavropoulos came to the company, and forgive me, I'm forgetting, I should know the exact date that he came, and you may not know.

A I don't know.

Q What I'm really trying to get at when the Keys report were first started.

A I presume it was shortly after his arrival, but I could be wrong.

Q Okay. Very good. With that, let me ask you one other question about the Keys report. Would the Keys report, the data in the Keys report, have been created based upon tickets that PG&E recorded in Earth Net?

A Yes. The damage ratio is predicated on tickets recorded. Early on the focus was solely on -- it was focused on the damage rate, hits per thousand. But they also included first-party damages, meaning

PG&E at-faults. It later migrated into a little deeper analysis of number of mismarks, number of no calls, number of late tickets, et cetera.

Q Okay. And so the sources of information for the Keys report includes Earth Net, but it is not limited to Earth Net. It sounds like there is additional analysis that goes into those Keys report?

A It all comes from Earth Net.

Q It I'll comes from Earth Net?

A Absolutely.

Q Okay.

A Except the damage. I'm sorry. The damages don't come -- it is not recorded in Earth Net. That is internally recorded.

Q I see.

A But your enumerator and denominator all come from --

MR. GRUEN: Do you want to go off the record for a moment?

MR. McGUINN: Yeah.

MR. GRUEN: Can we go off the record, please?

(Off the record.)

MR. GRUEN: Back on the record, please.

So, the Keys report -- let me back up. Just for clarify on the record, when you use the term "damages," just to specify exactly what you mean. Are you talking about the results coming from dig-ins?

A Dig-ins, yes.

Q Okay. Not necessarily -- does that include liability that resulted from those dig-ins, or is it just the physical damages to -- the costs to physically repair the results. The --

A I can answer.

Q -- the impacts to PG&E's system?

A Yes. So a dig-in is established when as a result of an excavation a damage to a subsurface utility occurs that requires at least a repair or replacement. So if it is an excavation that scratches a pipe and they have to conduct a repair, that would count as a dig-in.

Q Okay.

A I say that, because if you have a car that drives into an aboveground meter that is damaged but it is not a dig-in because it didn't result from an excavation.

Q Okay. For purposes -- if we use the word "damage" or "damages" from now on in this discussion, do I understand right that you are referring to the cost of repairing a dig-in?

A As I've used the word "damage," it is a dig-in resulting from an excavation to a subsurface utility.

Q Okay.

A So if I have to refer to something that does not constitute a dig-in for metric purposes, I'll articulate it doesn't.

Q Okay. Very good.

A And just so you understand, where that comes into play is electric. So PG&E, as you know, has quite a bit of underground electric. That is not included in this data, because AGA, American Gas Association, looks at only damages to, you know, gas facilities. So again, I'll try to remember if we get to that, point that out.

Q Very good. Thank you. Thank you for the clarification.

If I could switch topics regarding -- I want to ask you a little bit about your time at PG&E including when your employment ended. You mentioned at the outset of our discussion today that your employment ended in September of 2015. Is that right?

A Correct.

Q Did you leave PG&E, or were you discharged from PG&E?

A I was discharged.

Q Okay, you were discharged. I want to ask you several questions then about your discharge. First, I want to ask you about your understanding of the events leading up to your discharge from PG&E. And then I'll ask you some more detailed questions later about the reasons that you think that have led you to believe that you were discharged, the factual reasons.

But first regarding the chronology, to the best of your ability if you can discuss the events leading up to your discharge in chronological order. So, if we could get a time line of the events.

And as I understand it from our offline conversations, maybe the start date could be, at least for this exercise, if you could start with when PG&E decided that they were going to discharge you and continue from there.

A Okay. On August 11th of 2015 -- we had since discovered on August 11th, 2015 an investigation report was completed and submitted to human resources. We have discovered that within a few days after that, I believe by August the 14th, through e-mail conversation that PG&E had made the determination to terminate me. But it was a month and two days later on September the 16th that they actually discharged me.

Q Okay. Between the August 11th date and the September 16th date when they let you go, I'm going to ask you a couple of questions about your understanding of certain things in between those times.

A Sure.

Q First of all, did PG&E say why, say to you why they decided to discharge you?

A They provided, yes, a reason.

Q What was the reason?

A A violation of their code of conduct.

Q Okay. Did they specify what violation it was?

A Can I just ask, just so I say it correctly?

MR. McGUINN: Yes.

MR. GRUEN: Do you want to go off the record for a moment?

THE WITNESS: Yeah.

MR. GRUEN: Let's go off the record.

(Off the record.)

MR. GRUEN: Back on the record, please.

Q So could you describe in your own words your understanding. You were talking I think about a violation of the code of conduct before we went off the record. Can you give us your understanding of what happened before PG&E alleged this violation?

A Pertaining to this violation of code of conduct?

Q Pertaining to the violation of code of conduct, yes.

A PG&E asserted that I violated the code of conduct to the extent that a -- I made inappropriate comments of a sexual nature to subordinate staff, and that I retaliated against the individual that brought the complaint forward.

Q And to your knowledge did anyone, any of the subordinate staff individual corroborate PG&E's assertion?

A None of them did.

Q None of them did. You are stating that factually? You know that to be the case?

A They cannot corroborate what was originally brought forward. In fact, in their investigation the alleged victims refuted what the original complainant brought forward on the record.

Q Thank you.

And this for the record as well,

not only what they said but I want to be clear, PG&E's alleged violation of the code of conduct, you are saying that is inaccurate?

A Correct.

Q Is that correct?

A That is correct.

Q Okay. And also in terms of after the fact, can you talk about was this allegation explored at a later time by anyone, PG&E's alleged violation of the code of conduct?

MR. McGUINN: Explored?

MR. GRUEN: Q Were you when you -- I understand -- let me go off the record for just a second.

(Off the record.)

MR. GRUEN: Back on the record, please.

Q So my understanding is that when you went back to PHMSA, the attorney general looked into this matter PG&E's alleged violation of the code of conduct and they completely cleared you --

A Correct.

Q -- of the matters. That is accurate?

A Correct, as did the Office of Personnel Management, two separate entities.

Q So they both reviewed PG&E's allegations of the violation of code of conduct independently? They both reviewed -- let me ask it this way: They both reviewed it and cleared all PG&E's alleged violations of code of conduct?

A Yes.

Q Understood. Thank you.

With that, did PG&E give you any notice that they were going to discharge you on September 16th?

A No.

Q So what happened that day?

A I got called down to the first floor at Fisher Branch, walked into a room. John Higgins and the NHR director were there. He read me a letter, said we found you in violation of code of conduct. You are terminated. And that was basically it.

MR. McGUINN: And he left.

THE WITNESS: I left.

MR. McGUINN: No, he left.

THE WITNESS: Yeah, John left.

And the HR director briefed me quickly on benefits and last paycheck, and then I left.

MR. GRUEN: Q Okay. Did you -- were you allowed to go back and get your things from your desk?

A No.

Q You were told to leave the premises?

A Yes, and I left. Let's put it that way, I left. There wasn't any conversation.

Q Did PG&E give you any prior notice of -- excuse me. Did PG&E provide you with any suggestion of how your job performance could improve before you were discharged?

A No. In fact, to the opposite. They did these complaints that came from the subordinate were other subordinates were alleged as the victim recognizing that it came to the severity in their minds of termination. Yet, for three months during this whole ordeal, they never moved anybody. They never told me to do anything differently. They kept the chain of command exactly in place as was. In fact, I asked them is there anything I should be doing? And their response was manage as if nothing is going on. So I assumed the whole time this was a nonissue. If it was an issue, normally you would take steps to prevent any potential additional problems. They took no steps.

Q Did PG&E give you any of those

communications in writing about keeping things as they were?

A No, that was a verbal I had with the HR manager.

Q With the HR manager?

A Mm-mm.

Q Do you recall who the HR manager was?

A Maria Eggert.

Q Can you spell her name?

A E-g-g-e-r-t.

Q Thank you.

Do you recall any of the job performance evaluations commending your efforts related to safety specifically?

A Absolutely, yes.

Q Do you have any of those?

A I don't have the actual year-end 2014. What I do have is I had provided a summary of accomplishments I just typed in a Word document, that it later transcribed into the SAP system where the forms are housed.

Q So the information that you have, may I?

A Yeah.

Q Do you mind handing that to me? Thank you.

So the information you typed on the

document, you just handled me, should be available in PG&E's SAP system?

A Yes.

Q And SAP stands for what?

A I have no idea.

Q That is fine. We will clarify.

MR. McGUINN: It is a German company.

MR. GRUEN: Thank you.

Can we have this marked as Exhibit 2 for the record.

(Exhibit No. 2 was marked for identification.)

MR. GRUEN: I might need help just clarifying how to identify this. How would you identify it?

A Well, it is a self-generated document of -- I had listed some bullets for myself to later use to populate the SAP system. These are listed number of items for calendar year 2014 that I listed for myself. That is why I still have that.

Q Great. That is helpful. Thank you.

MR. McGUINN: This is Exhibit 2?

MR. GRUEN: Yes, this is Exhibit 2.

Q Did PG&E say to you -- so let's go back to August 11th when PG&E informed -- they told you that they had decided to discharge you on that date, right?

A No.

Q Not August 11th?

A They told me on September the 16th.

Q They told you on September 16th, but later they told you that the day they decided without telling you the day they decided to discharge you, what date was that?

A We discovered that there was e-mail traffic on August the 14th that said they had made a determination to terminate.

Q August 14th, excuse me. Thank you for the clarification. That is exactly what I'm asking. So August 14th. Okay.

Did the August 14th e-mail traffic that you learned about state what date PG&E meant to discharge you?

A From what I recall, it was -- they did not specify a date. There was I recall some traffic that had alluded to "early next week."

Q And in that case it would have meant early the next week following August 14th?

A Yes.

Q I follow you.

So September 16th, could you talk about -- I understand from our conversation offline that you were to meet with the regulatory affairs group on September 17th. Am I understanding that correctly?

A Correct.

Q Can you describe -- and I believe you had some conversations with the regulatory affairs, certain personnel in regulatory affairs group prior to September 16th, prior to your discharge date?

A Correct.

Q Am I understanding that right?

A Yes.

Q First of all, can you recall -- why were you speaking with the regulatory affairs personnel just prior to your discharge then?

A They had been collecting data and information that my team was providing pertaining to dig-ins and dollar amounts of damages billed, and so forth. A number of different data sources that my team generated for them.

[redacted]

Q Okay. And this was in reference to the order instituting investigation regarding PG&E's gas distribution records?

A I believe so, yes.

Q Okay. And so what was -- you mentioned [redacted] what was her relationship to you professionally?

A [redacted] [redacted] [redacted]

Q And so can you describe the conservation that you had, some of the conversations that we had offline? Can you describe the conversation that you had with the regulatory affairs group regarding the gas distribution records OII prior to your discharge date?

A Yes. So [redacted] and I were talking. And she was asking a couple of questions, factual questions. It led to a conversation.

Q Did you say [redacted]?

A [redacted]

Q [redacted]

A Yes. So [redacted] and I, we had this conservation. It led to a comment that she made, she goes, you know, the Commission, meaning the California Public Utilities Commission, is trying to assert that PG&E is not a safe company. And I sighed, and I went I don't disagree with them. She kind of did a double take and said what do you mean? I go, well, I don't know that we are a safe company. We talked a little bit about what is the basis for establishing safe. And she said, well, I can tell you that leadership -- and we had already been speaking of Jesus Soto and Nick Stavropoulos. So when she said "leadership" she was referring specifically to those two people and her boss, which was Sumeet Singh. We were referring to them. And she said leadership is going to want you to say to the expert witness on the 17th of September that in your opinion as a former PHMSA employee and as our manager of damage prevention, that PG&E is a safe company. And I said [redacted], I can't do that in good conscious. What I can absolutely do is assert that PG&E has made strides towards progress. That they had come a long way. They are moving in the right direction, but there is no way I could assert that we are safe.

She inquired why. I shared with her our continuing challenges with late tickets, with mismarks with the locator mark challenges that were still present. The challenges with our own construction crews hitting or own assets. I said but most importantly is coming from recent conversations and interactions with our construction group, and specifically a gentleman by the name of Pierre Bigras, it is B-i-g-r-a-s, who is or was the director of gas construction.

And she said tell me about that. I said, well, through this continuing development of what I had established as the Gold Shovel Standard program, we were pushing that program into PG&E's first-party crews and Pierre had oversight of a lot of those first-party crews, as well as second-party contractors that worked directly for PG&E. He had all of what they call the "alliance contractors," the big ones. He had the big ones under this responsibility. Him and I had many conversations pertaining to his efforts to improve damage prevention outside of my efforts within the Gold Shovel Standard.]

And I told [redacted] that in several of those conversations, Pierre was asserting that he was better with his program, was better than the Gold Shovel standard, it was more stringent than the Gold Shovel standard because his problem was greater.

And that in describing what that problem was, he had said -- and I remember a quote, "Dave, we don't know" -- meaning PG&E -- "we don't know about 70 percent of the assets coming off of our transmission lines."

And I distinctly remember asking him "What does that mean?" And he said "extensions, dead ends, nipples, valves, stubs." He goes, "They're not mapped. We don't know that they're there and our crews keep hitting them. And we're just lucky to this point that we haven't torn it off the line, caused a serious issue."

And I remember again, through several conversations with Pierre said: "Well, wow. That's not good. That's a significant safety issue." And he goes, "It absolutely is." Which is why he had deployed a number of stringent requirements above and beyond the requirements of the law for his first party, PG&E crews, and for the second party alliance contractors that he is had responsibility for.

And as an example, I remember having dialogue about him deploying a hand-digging requirement five feet on both sides of the outside of the line, 360 degrees. And you know, which far exceeds the requirements of 4216 and raises concerns about employee safety. You know, we were having dialogue about how many back injuries are we going to get, how much longer are those jobs going to take.

So we had a dialogue, but it was all predicated on that PG&E does not know about 70 percent of these assets.

So going back to the conversation with [redacted], here's the circumstance. And I think it's admirable that we as a company are taking stringent steps to improve safety, but we have only addressed a fraction of the excavation community.

And I said, "[redacted], if you total up all the first and second party excavators, they are a fraction of what the third party excavators represent on those that dig near in proximity of our transmission pipelines."

I've asked Pierre "What are we going to do to mitigate that threat, which is by far the greater threat?" And of course Pierre's response was "Well, that's your problem," meaning me being the manager of damage prevention.

And so you know, and I told [redacted] I brought this issue up to John Higgins, senior leadership, and saying -- you know, in fact, when I brought it up to Higgins, I brought it up in the context of Pierre is indicting us. He is, through good efforts, creating a problem. And by deploying these policies and procedures for a small fraction, we are identifying the threat exists, and we don't have any mitigative steps for the bigger population, third party.

And I'm explaining all this to [redacted]. And so and I told her that, you know, John had asked me what I thought, you know, we would do; what's the proper, you know, steps to mitigate that. And I told her what my answers were to John. And so it circled back and said "You know, I hope you understand, [redacted]. I can't in good faith assert that we're safe, but what I can do is say we're making progress." And her response was "I don't think leadership is going to want you to say that."

And I said, "I understand, but that's my position."

And then it was a day or two later that Joel Dickson, who was now my direct supervisor, early September 2015, had come up to my desk and -- and this is where I quoted him.

Do you want me to tell you?

Q Yes, please. If could you tell me

what the conversation was between and you Joel at that point.

A Yeah. So he had walked up to my cubicle and put his arm on my cubicle wall and said, "So you don't think we are a safe company?"

And of course I knew immediately what he was referring to. A little surprised that he was aware of that communication. You know, I don't know how it got to him but I have a suspicion, but I don't know for sure.

But I said, "Well, okay. I know what you're talking about. Let's walk into this conference room and I'll tell you about it."

We get in there and I said, "So what's the issue?" And he goes, "Dave" -- and I quoted him again. He goes, "Dave," comma, "I hope you keep your opinion to yourself. You may think you're doing good but you're confronting your livelihood when you make statements like that."

And I followed that with, "Joel, you boast about the words character and integrity. You broadcast that as your mantra and that you're a man about character and integrity, and nothing else matters and you're -- you are the icon of character and integrity."

And he replied with, "Yeah, but there's two words that are more important, Nick and Jesus."

And you know, and I said, well, you know, I just said "I surrender. I don't know what you want me to do, but that's my position. And I'm not going to lie to this expert witness. I'm not going to lie to Sumeet Singh. That's my position."

And --

Q Okay. Couple of clarifications.

Are you -- when you are saying what Joel Dickson said to you, are you quoting what he said based on the best of your recollection?

A I am quoting -- I had written down what he -- the words he spoke and later transcribed them into a document that I'm referring to now.

Q Okay. And when did you take those notes, approximately, in relation to the time that you spoke with Mr. Dickson?

A Minutes. Once we went our own ways, I went right back to my desk. I remembered -- I believe that when I wrote down on a yellow sticky and put it into a notebook.

Q Okay. So the notes you're referring to now when you're telling us those statements today, are those the same notes that you took minutes after the conversation with Mr. Dickson?

A The content is the same.

Q The content is the same?

A Right.

Q Do you have a copy of those notes that you're able to share today?

A I have a document that was prepared for my attorney --

Q Okay.

A -- that I am referring to, the contemporaneous notes.

MR. GRUEN: Let's go off the record for a moment.

(Off the record.)

MR. GRUEN: Can we go back on the record. Thank you.

Q Okay. While we were off the record, Mr. Appelbaum handed me an excerpt of a document, and I'll ask him to clarify what that excerpt is. But this is, if I could have this document marked as 3, identified as Exhibit 3.

(Exhibit No. 3 was marked for identification.)

MR. GRUEN: Q And I'm going to hand the document back to you. This is a copy I made of the excerpt.

A Okay.

Q If you can describe for the record so we can reference it. Describe this document if you would.

A This is a document that I prepared for my attorney which summarized the concerns, the pretextual -- the whistleblower concerns that led to the pretextual termination.

And this specific page refers to the conversations that addressed the CPUC's OII and my upcoming meeting with the PG&E's expert witness and their internal regulatory vice-president.

Q Thank you.

And the excerpt references your notes from the conversation that you described with Joel Dickson.

A Yes.

Q And it also reflects the conversation you had before that with [redacted]?

A Correct.

Q Both conversations that, just for the record, that you described regarding the safety of PG&E?

A And Pierre Bigras.

Q Pierre?

A And Pierre.

Q And so all three of those conversations were related to your views on your fact-based views on the safety of PG&E. Is that a fair characterization?

A Yes.

Q Okay, thank you.

If I could hand this over. This is Exhibit 3.

(Handing document to reporter).

Q Regarding your conversation with -- let me just get this on the record now.

(Cell phone interruption.)

Excuse me.

As I understand it, from your prior conversations from today, you had a meeting that was scheduled with the Regulatory Affairs Group on September 17th, is that accurate?

A Yes.

Q And that was, as it turned out, the day after you were discharged?

A Correct.

Q Okay. And I want to ask you a couple of questions about that meeting that was scheduled on September 17th with the Regulatory Affairs group.

Was that meeting scheduled for purposes of -- within the context of the -- of PG&E's -- let me say that differently.

Was that meeting for purposes of PG&E procuring for the gas records distribution Order Instituting Investigation?

A I believe so, yes.

Q Okay. And regarding that meeting, who were you supposed to meet with on September 17th?

A I know the two main players were Sumeet Singh, who is the vice president of regulatory affairs, and what everyone had kept telling me was PG&E's expert witness.]

I'm sure that name of who that person was had come across my desk. I don't remember who that person was. But it was represented to me that they had retained an expert witness who would testify on behalf of PG&E to the Commission pertaining to that OII.

Q Did you ever end up speaking with Mr. Singh or with the expert witness you just mentioned?

A No.

Q Were you informed at any time at

the meeting that September 17th was to be canceled?

A No.

Q Okay. How did you learn about the meeting?

A I had a calendar invite on my computer.

Q And who -- on that calendar invite do you recall who was -- who else was invited to attend the meeting?

A I don't recall. I believe Katherin Mack was also invited to that particular meeting, but that came from verbal discussions. I don't remember if they blind copied all of the participants or not. I just don't remember.

Q The meeting was scheduled after your conversation with [redacted]?

MR. McGUINN: No. Yeah. Excuse me.

MR. GRUEN: I'll restate.

Q Was the meeting scheduled after your conversation with [redacted] about your views about the safety of PG&E?

A I believe the meeting invite had gone on prior to that.

Q It had gone out prior?

A It was already on the calendar, and then these series of conversations occurred and they discharged me.

Q Okay. Just a question about when you speak with [redacted] and then Joel Dickson came back to speak to you, the conversations that you quoted, to the best of your recollection earlier. Do you know how Mr. Dickson came to say to you something to the effect of: So you don't think PG&E is the same company -- is a safe company? Excuse me.

A I don't know how he became aware of that, no.

Q Okay. All right. Regarding your conversations with Pierre Bigras, and I understood you to say his statement of -- that he said something to the effect that PG&E doesn't know or 70 percent of its assets are -- that are coming from transmission lines. Did I get that right?

A Yes.

Q And he spoke to you at some length about what he was doing for first and second-party contractors, that is PG&E's own crews and their contracted crews. Is that right?

A Correct.

Q In order to address this 70 percent problem in the field?

A His policies and procedures, he showed them to me as part of this discussion to demonstrate how he was already taking these extraordinary steps.

Q And I think you were suggesting this, but just to state it for the record then, you had discussed with Mr. Bigras, you had asked him whether PG&E was doing anything for third-party contractors in a similar way to what he was telling you he was doing for first and second-party?

A Mr. Bigras, it was more of me telling him, you know, this is good. These are good safety steps, but the bigger population is third party. His position was, well, that is kind of your problem and, hence, the Gold Shovel Standard program and the efforts I was making.

Q I see. Okay. Thank you. So approximately when did you have that conversation with Mr. Bigras about the difference and your approaching him about not doing the same thing for first and second party as you were for third party?

A It followed the deployment of the Gold Shovel Standard, which was formally deployed on August 11th, 8-11, 2014. And the reason that happened was I had approached

Jesus Soto, the senior vice president. And said we've got this program, but we have to -- we now have to look at ourselves. We have to follow the same requirements internally that the Gold Shovel Standard stipulates for external.

And he agreed, and he said go work with Pierre Bigras and make sure we follow the same principles. We started a relationship with Pierre's group. And my point of contact was Mike Bradley, gentleman by the name of Mike Bradley who was a manager for him. He probably did most of the frontline work. And ongoing meetings, in fact, we established a team and a, you know, a recurring meeting to promote this. And it was as we got into that that I discovered that Pierre's group had already -- they were ahead of us in that.

Q And Mike Bradley's role, can you identify his role?

A He was in this group. I don't know what his role -- I know he has moved since then.

Q He worked for PG&E at the time?

A He still does.

Q Still does?

A He is over in the regulatory group,

I believe.

Q I see. Okay.

And you mentioned also that you brought this issue to the attention of John Higgins regarding the differences between what PG&E was doing for first and second-party contractors, the first and second party versus third parties?

A Correct.

Q Can you describe what Mr. Higgins' reaction was when you brought that issue to his attention?

A I would say terrified. And the discussions and several discussions we had, again it started really with sharing with him that, you know, Pierre was unintentionally indicting PG&E by establishing stringent policies for a small pool of excavators where we left the much greater pool of excavators unaddressed. And that, you know, by doing that it looks bad if bad things happen.

And in those conversations John said what would you suggest that we do as a solution to this problem? I said -- I used a term of "corrective action" or I said -- the way I told him is John, if in my days at PHMSA -- this is before, in my opinion -- if there were an accident and PHMSA stepped in and issued a corrective action order or maybe the Commission stepped in and issued a corrective action order, they might require PG&E to perform the excavations within a proximity of all of their transmission lines. So, if a proposed excavation came within 20 feet of a transmission line, the process would be that when they got to 20 feet, PG&E had to send a crew, perform whatever excavation was needed, and then when they got away from 20 feet it went back to the excavator. And John said, you know, Dave, that would cost us millions. And I go, but if something bad happens and we get a CAO, such as that corrective action order such as that, you know, it is going to cost us anyways.

So I answered John with if we got ordered to do it, it could look like -- something like that. I wasn't presenting it as this is my recommendation, this is what we should do. But we should start talking about thinking about if things went back, what would it look like, what can we do between now and then. Maybe what it is is a -- is we at least if we damage something, we damaged it ourselves. Somebody else didn't damage it. Maybe we can put in a communication program to PIR, Potential Impact Ratings, where that excavation is occurring. I said John, we can do a number of things. Yes, they are all going to cost money, but your own director of construction is the one making these assertions. I have to take it as true.

Q Your own director of construction being who?

A Pierre Bigras.

Q Pierre Bigras?

A Is the one making these assertions and proving it by putting in stringent policies. He is telling us this is actually true. This is actually the problem. We can't ignore it.

Q Okay. After your conversation with Mr. Higgins, I think you said it was August of 2014?

A This was a number -- we started working with Pierre August of '14. I started discussing this with John. Remember, he is the process owner for damage prevention. So I have daily communication with this guy. I can't tell you when.

Q Just for the record, it is -- is it accurate to characterize it as multiple conversations with Mr. Higgins on this issue beginning on August of 2014?

A Absolutely, yes.

Q And continuing until approximately when, would you say?

A I would say we had ongoing conversations until roughly April of 2015.

Q Did Mr. Higgins tell you that PG&E was going to do anything to change its policies or procedures on third-party excavation?

A No. It never got -- we had batted around ideas, but he never -- other than indicating that he would have discussions with senior leadership, that we would -- he didn't make any commitments or suggest any resolutions.

Q Regarding communications with PG&E leadership, did he ever indicate to you that he had in fact communicated with PG&E leadership about this issue?

A Yes. I mean, he indicated Jesus was aware, "sensitive," I think is the word he used, sensitive to this issue. And said keep trying to think of reasonable solutions.

Q Do you know why he stopped talking about this with you in April of 2015?

A Him and I started -- our relationship started to sour after the

Monterey dig-in, and it really soured after the Fresno dig-in and it progressively went kind of downhill from there.

Q Do you have reason to believe that your work on the -- and your discussions regarding third-party excavations and the policies and procedures that you were discussing, have anything to do with your discharge --

A Absolutely.

Q From PG&E?

Can you state factually why you think that is the case, the factual basis for why?

A I think it was pretextual, because they had a, you know, their manager of damage prevention who comes from the federal government is asserting that we have a public safety issue, which remedy is expensive. And John Higgins promotes to vice president in late May, early June 2015. He is now directly accountable for this big picture. In his eyes, I'm a problem. I'm the squeaky wheel with credibility that is a problem. And he is going to have challenges meeting budgets. He doesn't want that squeaky wheel on his team.

Q You said June 2015 he promotes

essentially to be your supervisor?

A He promotes, well, he had been a senior director in my chain of command prior to that. But he then promotes to now VP, and now has Joel's organization under him. That is -- so now he has got -- where prior he didn't really care so much about impacts and results of locate and mark, now he has got responsibility and accountability for their budget, their performance and everything else.

Q We talked offline as well about -- let me back up. Let's talk about Fresno for a minute. When you mentioned Fresno in passing in your answer, are you referencing the Fresno dig-in and pipeline rupture?

A Yes.

Q Do you remember approximately the date that occurred?

A April 17th, 2015.

Q Okay. And so had you discussed with Mr. Higgins what happened in the instance of Fresno?

A Yes.

Q And had you made recommendations about what PG&E should do?

A Yes. Do you want me to tell you about the recommendations?

Q So as I understand it, just for the record, this is -- you are discussing now a conversation or set of conversations you had with John Higgins regarding the Fresno pipeline rupture?

A Yes.

Q In April of 2014?

A Correct.

Q Okay. Go ahead.

A Again, I'm tied to the Fresno incident because two of my DIRT investigators, actually one of my full-time PG&E investigators [redacted], and one of my DIRT contracted investigators -- and the name will come me in a minute, [redacted], [redacted] -- were dispatched to that location when it occurred. So I was connected to that initially. I was in the command center at Fisher Branch that first night. And then later my team, Nalini Webster and her team, were accountable for assembling all of the paperwork, requisite paperwork needed to provide to law so they could file a suit against Fresno County.

It was when we were almost done preparing that paperwork a couple of months later after the incident that I had an argument with Mr. Higgins. And I went in and

I talked to him about -- I went in there and opened the conversation with, hey, I really think you and Nick and Jesus need to talk about this before we file suit against Fresno County. Why? I said, well, just -- and I said, made it very clear, I said, John, I don't have an opinion on this. I just want you to hear this. I said there is, in my mind, there is a question whether or not an 811 call was required. And I explained to him why. And I said -- he goes, come on, Dave. If they called 811, I agree. If they called, this incident doesn't occur. The question is did that legally have to call.

I read to him an excerpt out of 4216 talking about known or reasonably known to occur subsurface utility. And I said, does a reasonable person think that a gas company is going to put transmission line, gas line in a berm that catches bullets above grade original grade in a berm that catches bullets. And I said -- and he had said it is a parallel line. We had photos. I said, John, look if you are standing here you can't argue that the direction of firing downrange could be very close to the proximity of the line.

I said, so, the issue is how does

that read? How does that look? What is the optic of this if we go on the offensive and challenge this? And I said -- I mentioned to him, you know, that the -- that I had come to understand there are other gun ranges in our service territory that have similar setups. And I said, you know, I said if this comes to surface the question will be: What are we doing about those? Are we meeting integrity management requirements? Should we be relocating these pipelines?

And he got very angry with me. And I have quoted him also in his responses. Give me a second.

Q And the quote, you are referencing something before you. Is that a quote based on your notes following a conversation with Mr. Higgins?

A I did not make a contemporaneous note in this particular matter. This is from recollection. It was so significant. It was such a major altercation that I had with Mr. Higgins. We were friends. We were actually pretty close friends. So this was such a shocker it is imprinted in my memory.

Q Okay.

A But, let's see. Actually, I had started -- I had asked him if we were taking steps to mitigate the threats, meaning to other gun ranges, in our service territory. He had indicated no, there is no threat. And I protested, and I had brought up -- it got heated. The conversation got heated. And I had made a comment, I said, "John, when I started here you told me my job was to make us do it right." That was a word or sentence he used and Nick Stavropoulos used directly with me. And I told him I think the right answer is to evaluate the other gun ranges. And he replied, "What else you got?" He was being dismissive.

And I went on to tell him that, you know, I wasn't requesting whether 811 call was required, because a reasonable person may not assume we would put a gas pipeline in an above grade like that. Let's see, I mentioned to him at that time that, you know, because he had replied there is a pipeline marker right there where the damage occurred. I relied to John, yes, there was. It happened to have some bullet holes and damage bullet, indications of bullet damage, which tells somebody conducting a patrol that there is bullets flying and that is at least above our pipeline. I said on top of that, you ask people what our pipeline markers are. They will tell you it is either Bob's Barricade or a barber shop sign. We had taken steps prior to that to try to make our transmission markers look more reflective of what the industry uses. And I'm telling John all this. I'm saying to sit there and say we had a pipeline marker, you know, most people aren't going to know what that even means.

He became dismissive. And, you know, let's see. I told him right before leaving to reconsider going on the offensive, to please talk to Nick and Jesus. And he made it very clear, and this is where I quoted him. He said, "Nick" -- meaning Nick Stavropoulos -- "wants to sue Fresno County and you need to keep your mouth shut." I told him I was just trying to help, and I walked out.

Q Do you recall approximately the date of that conversation?

A You know, it was a couple of months after the incident, so it was sometime in June. The best I recall it was in that one-month period after my first director left and Joel Dickson became my supervisor. So I believe it was in June.

Q Of?

A 2015.

Q Okay. Do you have a factual basis -- do you believe that that had to do with your discharge from PG&E, the discussion regarding Fresno with Mr. Higgins?

A Yes.

Q Do you have factual basis to support that belief?

A I believe that PG&E leadership certainly recognizes, recognized, that there would be litigation stemming from that incident. And they viewed me as a very favorable witness for the plaintiffs suing PG&E. And that they -- their interest was to discredit me by terminating me, and thus labeling me a disgruntled former employee as opposed to an active duty manager over this safety issue testifying against them. So I believe this had a lot to do with their pretextual reason to terminate.

Q Did PG&E do anything on the integrity management side for pipelines near gun ranges after Fresno?

A I don't know.

Q Did you see Mr. Higgins after your conversations with him about Fresno and the concerns you raised? Did you have any reason to see him suggesting that PG&E changed the way it handled those kinds of pipelines?

A You have to ask that question.

Q Let me restate.

After your conversation with John Higgins about where you -- after your conversations where you raised the Fresno concerns, did you see PG&E change its behavior about how it handled pipelines near gun ranges?

A No. And I have actually had a conversation with a gentleman by the name of David Wood who was the patrol superintendent. He has since I think left PG&E. But he contacted me, I want to say June of last year 2016. And he had made a comment to me then that they never did anything with -- he even made mention that there were more than four. I don't know what basis he has to know that accept.

Q More than four?

A Gun ranges where similar setups with pipelines occurred.

Q Thank you.

A And he had made mention, Dave, there is more than four of these gun ranges with this present circumstance. Again, he was the aerial patrol superintendent, to the extent that gave him knowledge of this.

Q Thank you.

Can you identify any other safety-related experiences that you believe PG&E would have prompted PG&E to discharge you in September of 2017?

A Yes.

Q Can you please state them.

A My work with Senate Bill 119, and the efforts of my DIRT team and the uptick in the generation of one-call tickets.

THE REPORTER: Excuse me, Mr. Gruen. You said "September of 2017."

MR. GRUEN: Thank you for the clarification. Let me restate the whole question for the record.

Q So the question was: Do you have any reason, any safety-related reasons, any safety-related experiences which prompt you -- which leave you to think that PG&E was prompted to discharge you in September of 2015?

A Yes.

Q I believe the answer you just gave in response to the question would still be the same if I used the word "2015" instead of "2017." Is that accurate?

A Yes.

Q Pardon me for misstating the question. I appreciate the correction.

You talk about the uptick in incidents following the team. Can you describe that a little bit more?

A It would be the uptick the generation of 811 tickets, and it is actually fairly simple. We know, we were seeing at the time of my discharge we had realized that roughly a 20 percent increase in the volume of one-call tickets being generated, which is directly connected to public safety. We want more people calling 811. We want lines being located. That is how we enhance public safety.

The problem was that you have to locate those requests, and PG&E struggled and continues to struggle to meet that requirement.

And I had a discussion -- when I got reorganized into Joel Dickson's group and he became my direct supervisor in July of 2015, in our very first formal one-on-one meeting, the very first topic he brought up was this uptick in 811 tickets. And he said, Dave, you need to slow down. You need to get your DIRT team to slow down, because you are causing a strain on us by -- we can't meet this requirement and you are making us look bad.

Q Do you recall approximately when -- that was Joel Dickson who told you that?

A Yes. That was July 16th, 2015.

Q Okay.

A In fact, I quote him as saying that "I needed to balance my efforts against the practicality of our ability to service those tickets." That is the quote I have.

Q Okay.

A Then I went to say, listen, these were my -- these were my marching orders, that John Higgins has always promoted the efforts we were making. And an increase in 811 tickets is directly reflective of success. And Joel responded, and I have him quoted as saying, "It is funny how John now gives a shit about what I do now that he is responsible for it." And I asked John -- Joel if John had asked him to have my team slow down. And Joel indicated yes, and that we are in a budget overrun.

Q Approximately when was that?

A July 16th, in that meeting.

MR. McGUINN: July 2016?

THE WITNESS: July 15, 2015.

MR. GRUEN: Q Thank you.

A I pleaded with him that slowing

down compromises safety. And Joel finished this, he says, Nick and Jesus have the same -- I told him that I couldn't imagine that Nick or Jesus would want me to slow down on something that was such a good optic. His response to me was that Nick and Jesus have the same budget challenges, and that I needed to figure out -- that I needed to "do what I was told" is what he said. I asked him what is doing what I'm told look like? He said go figure it out. That is one issue.

Q And Senate Bill 119, could you talk briefly about that?

A Yeah. So my previous director, Steve Fisher, had in late 2013 early 2014 had began work with Senator Hill's office to try to enhance the one-call loss. To try to ultimately get an enforcement authority embedded into California. He had a lot of background and experience with -- Steve dragged me into that effort early on. I started to attend stakeholder meetings, and so forth, to try to promote some positive changes to Government Code 4216. I later migrated into PG&E's point person with regard to this effort.

And we had our agenda. PG&E's agenda at that time was to establish an enforcement authority. We later called that an "advisory board" what that purpose and function of that advisory board would do would be to hear cases where a one-call violation occurred, and there was a damage and assess appropriate punitive actions. And that advisory board -- we would follow a similar model to the State of Virginia.

And we -- early on we met tremendous amount of resistance from the stakeholders. They wanted nothing to do with this mainly because they asserted this was nothing more than PG&E trying to hurt the little guy.

And so I had gone to John Higgins and Jesus Soto and said this is the stakeholders making this assertion. I said, you know, I told John and Jesus, said we used this illustration. We were late 51,000 times to tickets in 2013. I said those are violations of Government Code 4216. I said I want to go back to these stakeholders and say time out. We are not about hurting the little guy. In fact, we will be held accountable more so than any other entity, and here is why, we have been late 51,000 tickets. And if Dave Appelbaum is sitting on a advisory board, chances are I would be --

because of my role, I'm going to adjudicate guilty PG&E 51,000 times and hold them accountable to the maximum fine that we had established.

I said to John and Jesus, I want to be able to go to stakeholders and tell them this to establish it is not hurting you, but it is about getting better. Supported it. They said absolutely. We have to hold ourselves accountable. Go do that.

Then it got serious. I went out, and I made that broadcast and I made those assertions in public meetings. And then they realized if it were $1,000 fine times 51,000 violations, that is $51 million. And it got real to them. So in mid-late summer of '15, 2015, they started to change their opinion on supporting Senate Bill 119.

Q When approximately did Mr. Soto and Mr. Higgins give you the go ahead to talk with the communities about them changing and improving the locate and mark requirements?

A Well, that is a hard -- they gave me permission to participate in the development of 119.

Q In the development of 119. Let me restate it.

When did they give you permission

to talk with communities about -- regarding Senate Bill 119?

A In 2014.

Q Okay. They told you to stop again?

A Well, they started to change their support. They started to waiver from their support of 119 when it was getting into print. And, you know, there were clearly some flaws with the proposed 119 with certain exemptions. We agreed. I agreed with him that those are not good for us. But if they give us this advisory board, we can work with this exemption. We can overcome this and alter those exemptions in the future. They wavered and said we are not going to support this bill.

Q Approximately when would you say that was?

A July-August '15.

Q 2015?

A Yeah, and very shortly before.

Q So I believe that they did not want David Appelbaum on an advisory board for one-call violations, because I was very clear I would hold ourselves accountable, thinking that is what they wanted me to do.]

Q And you believe that's another basis for them?

A Yes.

Q For your discharge in September of 2015?

A Yes.

Q Anything else safety related?

A Yes.

Our -- the dig-in response team was -- I believe John Higgins intentionally moved us under Joel Dickson in July of 2015. I believe he did that so that Joel could control the outcome of investigations of dig-ins. And I had pleaded with John to, one, not make that move, and he did so any ways. And we had -- when that move was made, we, our team started to immediately -- started to get pressure from locate and mark supervisors to favor the investigation to their benefit.

And you know, I had at one point had a conversation with Joel Dickson. And actually that first meeting with him and I told him that, you know: We have comprised our credibility by being commingled with locate and mark.

And he said: Well, you know, Dave, your team are PG&E contractors. They're not neutral, unbiased fact-finding entities. They are PG&E employees essentially. So they and you need to remember what team you play for.

And I just said, you know: I think this is a disaster, and I think this is a mistake.

And I believed that my communication about thinking about that this was a mistake to do this just played into them identifying me as a problem.

Q And just a question about moving the DIRT team under Joel.

Whose control of DIRT -- I think you mentioned off-line that you saw a potential or maybe an actual conflict in terms of the DIRT team's interactions or maybe being reorganized alongside the locate and mark group. Can you talk about that briefly?

A I -- there was a specific dig-in, and I don't remember the details, but the locate and mark supervisor --

And PG&E was at fault. It was one of these scenarios where we were at fault but there was culpability on the part of the excavator also.

And that locate and mark supervisor for that area, I think and it was Sacramento, asserted herself onto that investigator to:

You need to find -- your outcome needs to look like this, something that favored the locate and mark group as opposed to an objective.

Q Do you remember the names of those individuals that you just mentioned?

A You know, Jorge Gill-Blanco who oversaw the DIRT team is the one who was telling me.

Q Okay.

A It would have been the locate and mark supervisor in Sacramento, and it's a woman --

Q Okay?

A I can't name.

Q That's fine. Let me switch back to a question. Let me change the direction of the conversation if I can, back to tickets and 811. A couple other questions if I could.

Did you see any incentives offered to people to avoid the reporting of late tickets?

A Well, their performance was directly graded on their ability to meet those requirements.

Q Okay.

A I mean, that was part of their

annual performance.

Q Is there something, is there -- so when you say their performance is graded, it would be shown in their performance evaluations --

A Yes.

Q -- whether they had properly --

When you say "yes," I just want to clarify. Their performance evaluations would show how many late tickets or whether they had late tickets or what would it show.

A I believe the locate and mark supervisors in their performance evaluation of their metrics and their performance evaluation, they had a reduction, percentage reduction of late tickets as a goal and they had a percentage reduction of at-fault dig-ins as a goal. They had budget goals to meet. And so I believe -- I believe that those folks as well as their superintendents as well as the director had in their performance evaluations metrics surrounding late tickets and marks.

Q Did those metrics provide anything to ensure that PG&E was reducing its late tickets in a fashion that comported with the 811 requirements?

A I believe so, but I didn't

physically see this myself.

Q Okay.

A It wasn't in my goals.

Q You're not sure.

A I'm not sure.

Q And we can find a performance evaluation.

Did yours, for example, have anything to that effect?

A My metric is hits per thousand.

Q Hits per thousand. That's all it was?

A That was for me.

Q But it didn't talk about the requirements, the 811 requirements --

A No.

Q -- that apply to that?

A No.

Q That's all I'm clarifying.

A But Katherin Mack would be able to answer that conclusively.

Q But you can speak conclusively that yours did not show --

A Correct.

Q That's the clarification I wanted.

Just for the record, it did not show requirements pertaining to 811, your performance evaluation didn't talk about that?

A Correct.

Q It did, however, talk about the reduction in hits per thousand?

A Yes.

Q Okay. And so presumably, you were graded better if you were able to reduce the hits per thousand?

A Correct.

Q Okay. Do you know of any financial incentives -- did you hear or learn of any financial incentives, things like bonuses that were provided to either PG&E employees, management, PG&E personnel in general in order to reduce late tickets?

A Well, generally speaking, if that were part of their metrics, then the incentive is to meet or exceed their metric goals, and the easy way to do that is to not make it late. And it's how they didn't make it late that became the incentive. And I think that was Joel Dickson's driving force was his perceived performance in the reduction of late tickets.

Q Okay.

A I believe that was one of his goals.

Q It was one of his goals.

And so if you met -- if he met a goal like that, he would see a financial --

A Yes.

Q He would receive a financial benefit for that?

A Yes.

Q If employees under him helped him achieve that goal, they receive financial benefits for that as well?

A Likely, yes.

Q Okay. Can you name other employees under Mr. Dickson who would be responsible for helping him achieve the goal of reducing late tickets?

A His entire locate and mark group, so, yeah. He had two superintendents and a number of supervisors. The -- Steven Walker, probably his key number one person that could -- that could alter the records such that it looked favorable for him.

Q Okay.

A Because he -- Steven could go in regardless to anyone did to the system, Steven has the access rights to change it.

Q Okay.

A Whether he did or not, I don't know but he had a lot of communication with Steven Walker.

Q You and I spoke off line also. I had understood and I want to clarify if I'm getting this correct. I understood you to mention that there was a company who had countersued PG&E that had identified as part of the countersuit that PG&E had falsely changed the start times on a ticket. Did I get that correct?

A Yeah. The de- -- yes. Let me just explain it.

Q Please.

A And it may not -- as far as identifying a falsification. It was Synergy, and I don't know the rest of it, if it's Synergy, Inc. I believe they are housed out of the North Bay.

And this is a story, by the way, that was told to me by Ken Lee who is PG&E's attorney that deals with this topic. And he was telling me the story where somewhere in either late '13 or 2014, Synergy -- we had filed a lawsuit, PG&E filed a lawsuit against Synergy for six or seven damages, dig-ins, dig-in damages that had occurred and we were suing them for roughly $150,000.

Q Okay.

A And they ended up countersuing to the tune of a half a million dollars. And they laid out the reason for their countersuit was the number of times PG&E was late, and the crews and equipment and other expenses that they incurred as a result of PG&E being late.

And that, you know, Ken's point to me was that it was so easy for them to prove because it's right there on the USA tickets when they showed up and whether they were late. And they were taking that difference if time, multiplying it by number of personnel times billable hours, and they came back and countersued. And that PG&E ended up settling in between that where --

You know, so the moral of the story was PG&E sues a company, company countersues, and PG&E pays them.

And so that was the kind of -- but that articulated or illustrated this whole issue with late tickets.

Q Do you recall approximately when Mr. Lee, when Ken Lee told you that story?

A I would say some time in the first half of 2014.

Q Okay. Did he update you on the story? Did he provide any additional information on it?

A No. It was kind of one and done.

Yeah.

Q Good. That's fine. Thank you.

Let's see. I'm going to --

Let's go off the record for just a moment.

(Off the record.)

MR. GRUEN: Can we go back on the record, please.

Q Couple of just clarification questions.

You talked about your efforts to raise public awareness to call 811.

A Yes.

Q Do you -- is it your belief, based on your experience, that PG&E blamed you for doing that?

A At -- yes. They blamed me in a good way and then they blamed me in a bad way. At first, it was good because it was, had a positive optic. But then when it started to have a financial impact on them, it became a bad thing.

Q Did they -- how did they express the blame, the bad blame to you?

A That's what I had mentioned in my -- let me go through it real quick.

Q That's the extent of -- you already provided us with that?

A Yes.

Q Okay.

A It was my meeting with Joel Dickson where he had said: You're causing us to look bad.

Q Did they do any of that in writing?

A No.

Q Okay. Regarding -- I want to touch back on the question of late tickets and renegotiated start times that you had discussed earlier.

So did PG&E -- do you know if PG&E changed records to show that they had actually communicated with an excavator to change the start times when in fact they had not reached the excavator to do that.

A I never personally reviewed a ticket where that had occurred. I had been briefed dozens of times where that had actually occurred, anywhere from just altering the start time with no notification, to leaving a message.

And the way I got aware of -- became aware of this predominantly is when we investigated a dig-in and the investigator fed back through Jorge Gill-Blanco -- I actually distinctly remember one in Fresno, no relation to the incident -- but where that occurred and the investigator had communicated you know the start time is, has been changed.

Q Okay.

A And the contractor's going: I know nothing about a new start time.

That was -- it was, I hate to say so frequent of an example that I don't distinctly remember any individual one.

Q Do you -- regarding your point about frequency. Based on the investigations and the results from them, do you have an idea of how frequent?

A Ongoing. Everyday. Everyday. There's just no way, there's too many One Call tickets to -- I mean, if you do the math, 51,000, 12,000. You said 29,000, divided by how many workdays. It's ongoing.]

Q So you discovered this ongoing problem from the point at which you began assign investigators to --

A Well, I became aware of it in summer of '14 when I think Richard Taylor first brought this issue to my attention, and it became identified. We just saw it. My team saw it when we started to do thorough investigations.

Q Did you point out the problem to

PG&E management?

A Several times.

Q Who did you point it out to?

A Immediately John Higgins, because he was the process and owner for damage prevention, directly related to his goals. And we had this discussion with at the time Kevin Knapp who was the vice president at the time. But I know -- again, my point of contact was John Higgins, several conversations with him.

Q Did they indicate to you in any way that they were going to change the practice?

A Yeah. John indicated that especially when he wasn't in that chain of command, he had indicated that he had brought it up to Jesus and Nick, and they brought it up in the Keys meeting on multiple occasions that this was occurring. And his feedback never to me. He never gave me feedback that we have got a correction in place, because the only correction is to hire more locators, which to their benefit, they did do in 2015.

Q Okay. And did you mention anything about -- specifically about a violation to PG&E management or anyone else at PG&E regarding this violation, a violation of CFR, a violation Subpart O of Title 49?

A With changing the tickets? I clearly told him. Yes, is the answer. I told him it was an obvious violation of 4216. I mentioned to John, I said this could easily be construed as fraud.

Q John Higgins?

A John Higgins. It could be easily construed as fraud. I don't know that I addressed a CFR in any of those discussions.

Q Just for clarity, when you say "4216," that is Government Code Section 4216?

A Correct.

Q Of the California Government Code?

A Yes.

Q Okay.

Off the record, please.

(Off the record.)

MR. GRUEN: Back on the record.

Q Does PG&E have any procedure in place -- or at the time you were there did PG&E have any procedure in place to -- that would prevent them from renegotiating start times without talking with the excavator?

A Yes. And we had developed a damage prevention manual as part of what they called "skunk works." And I was the author or signature on that damage prevention manual. I don't recall the specifics of that procedure, but it did not. It was very clear that you couldn't just self-alter a ticket. You had to go through a step where you communicated and agreed, it wasn't just communication, you had to agree with the excavator on a new time.

Q Thank you.

Do you remember, happen to remember the name and title of this procedure?

A I don't. I can tell you I remember the whole book, and we called it the "damage prevention manual." I think it went through two revisions when I was there. I don't remember the name.

Q How would you recommend identifying this procedure so that PG&E would understand what we are talking about?

A I think if you asked for the procedures that are related to locate and mark, it should be encompassed in that. And then specifically have a process, any changes with, you know, what to do if an area is not delineated. What to do if you can't meet the time requirements. I think it was all spelled out in those procedures.

Q Great. I just want to see really quickly. I think we have everybody.

One other -- I'm noting that there

is one other person I think we mentioned offline that has not been identified. I wanted to just get that name on the record and understand what this name means to you in the context of what we've discussed? Christine Cowsert-Chapman. Can you talk about her role in the context of locate and mark and procedures to assist with damage prevention?

A Christine Cowsert-Chapman was my hiring authority. She was the director of integrity management at the time I hired on, and she was my boss. She was also very closely tied to the public awareness program, and very closely tied to the audits that the Commission did with public awareness.

She is related to this big picture in the context of when my team was to be reorganized, there were several folks that had recommended that my team be reorganized under Christine Cowsert-Chapman because, A, she was connected. Her job responsibilities were related as an integrity management authority. She had the history with the public awareness, and she allowed for a separation of -- from the locate and mark group, which kept our credibility as a team of investigators.

Q So did she recommend against reorganizing the damage prevention group?

A Yes.

Q And the locate and mark group to both be together under Mr. Dickson and ultimately Mr. Higgins?

A She told me that she had discussed with Jesus and Nick, Jesus Soto and Nick Stavropoulos, as well as John Higgins that she wanted that group to come and her and for the reasons why.

MR. GRUEN: Very good. Understood. With that, if we could go off the record, please.

(Whereupon, at the hour of 12:02 p.m., this Examination Under Oath was concluded.)

* * * * *

BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE
STATE OF CALIFORNIA

EXAMINATION UNDER OATH
OF
DAVID APPELBAUM

CERTIFICATION OF TRANSCRIPT

I, Alejandrina E. Shori, Certified Shorthand Reporter No. 8856, in and for the State of California, do hereby certify:

That, prior to being examined, DAVID APPELBAUM, the witness name in the foregoing examination under oath, was by me duly sworn to testify the truth, the whole truth, and nothing but the truth;

That said examination under oath was taken by subpoena at the time and place therein set forth;

And that the pages of this transcript reported by me comprise a full, true and correct transcript of the testimony given by the witness on May 19, 2017.

I further certify that I have no interest in the events of the matter or the outcome of the proceeding.

EXECUTED this 19th day of May, 2017.

____
Alejandrina E. Shori
CSR No. 8856

BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE
STATE OF CALIFORNIA

EXAMINATION UNDER OATH OF DAVID APPELBAUM	)

CERTIFICATION OF TRANSCRIPT

I, Ana M. Gonzalez, Certified Shorthand Reporter No. 11320, in and for the State of California, do hereby certify:

That, prior to being examined, DAVID APPELBAUM, the witness name in the foregoing examination under oath, was by me duly sworn to testify the truth, the whole truth, and nothing but the truth;

That said examination under oath was taken by subpoena at the time and place therein set forth;

And that the pages of this transcript reported by me comprise a full, true and correct transcript of the testimony given by the witness on May 19, 2017.

I further certify that I have no interest in the events of the matter or the outcome of the proceeding.

EXECUTED this 19th day of May, 2017.

____
Ana M. Gonzalez
CSR No. 11320

ATTACHMENT 33

BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE
STATE OF CALIFORNIA

IN THE MATTER OF THE INVESTIGATION PERTAINING TO PG&E'S POLE MAINTENANCE PRACTICES.

EXAMINATION UNDER OATH OF JOEL DICKSON

REPORTER'S TRANSCRIPT
San Francisco, California
November 7, 2017
Pages 1 - 165

Reported by: Doris Huaman, CSR No. 10538
Carol A. Mendez, CSR No. 4330

PUBLIC UTILITIES COMMISSION, STATE OF CALIFORNIA
SAN FRANCISCO, CALIFORNIA

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BE IT REMEMBERED THAT, by Subpoena of the Witness, and on Tuesday, November 7, 2017, commencing at the hour of 9:23 a.m. thereof, at the offices of the CALIFORNIA PUBLIC UTILITIES COMMISSION, 505 Van Ness Avenue, Room 2200, San Francisco, California 94102, before DORIS HUAMAN, CSR No. 10538, and CAROL A. MENDEZ, CSR No. 4330, personally appeared

(JOEL DICKSON),

called as a witness herein, who, being first duly sworn, was thereupon examined and interrogated as hereinafter set forth.

* * * * *

EXAMINATION

BY MR. GRUEN:

Q Let's go on the record.

If we can, I'll get started. All right. Okay. First let's identify everyone -- all the -- yourself and the SED people in the room. So I'm going to ask you to identify your name for the record, please.

MR. DICKSON: It's Joel Dickson, D-I-C-K-S-O-N.

MR. GRUEN: And Joel is J-O-E-L?

MR. DICKSON: J-O-E-L, yes.

MR. GRUEN: Good. And I'm Darryl

Gruen. I'm staff counsel at the Legal Division at the California Public Utilities Commission, and I'm doing the Examination Under Oath today on behalf of the Safety & Enforcement Division. And if I use the term "SED," will you understand that means -- that's short for Safety & Enforcement Division?

MR. DICKSON: Got it. Yup.

MR. GRUEN: And I'll ask the others here to introduce themselves and their names and titles.

MR. CHAN: My name is Wai Yin Franky Chan, W-A-I space Y-I-N and then Franky, F-R-A-N-K-Y, Chan, C-H-A-N. I'm a Senior Utilities Engineer for the Safety & Enforcement Division.

MR. LEE: My name is Dennis Lee, D-E-N-N-I-S. Last name Lee, L-e-e. My title is Program and Project Supervisor in the Safety & Enforcement Division.

MR. GRUEN: Great. Okay. So an Examination Under Oath is just like a deposition except that there is no underlying proceeding here, which is why PG&E doesn't have a right to counsel here. And it's why we're able to have this be like a deposition. We don't know yet where we are going to go with this right now. We are not in any formal proceeding, but we can use this information later in any formal proceeding if we choose to do that.

Do you understand that?

MR. DICKSON: I understand.

MR. GRUEN: When I ask questions, it is important that you provide truthful and complete answers to them, and please answer my questions directly.

Do you understand that?

MR. DICKSON: I understand.

MR. GRUEN: One thing that I failed to do -- Doris, can you swear or affirm in the witness?

JOEL DICKSON, having been sworn, testified as follows:

MR. GRUEN: Q If you do not understand my question, either because I have not articulated it well or I have phrased it poorly, either ask me to repeat it or just say you do not understand the question. Please do not speculate or guess about what the question is.

Do you understand?

A I understand.

Q One logistical matter, just so the court reporters can transcribe as accurately as possible and completely as possible, please wait until I finish a question before answering, and I'll do the same. If I inadvertently jump in before you finish your answer, please just let me know. And I'll stop asking the next question so that you have a chance to complete your answer. And that way hopefully and ideally only one person will be talking at once and the court reporters will have a complete record of what we say today.

Do you understand?

A Understood.

Q Great. Did you receive a subpoena for you to appear today?

A Yes, I did.

Q Let me -- I have a copy of the subpoena here with me. I'll just hand it to you, and take your time, if you would, reviewing it. And I'm handing Mr. Dickson a subpoena, and if you would, does that look like the same subpoena that you received through Mr. Jon Pendleton, PG&E's attorney?

A Yes.

Q Great. Thank you. One thing to clarify on this is there is one thing in error. So I'll just point out to you where it says: In the matter -- on the front page of the subpoena, under the name of inquiry or proceeding, it says, "In the Matter of the Investigation Pertaining to PG&E's Pole Maintenance Practices," just a clarification for you. It's actually -- the title should say, "Preformal Inquiry into PG&E's Locate and Mark Practices and Procedures." Just clarifying the purpose of the subpoena for you.

So with that, do you understand the clarification that I just made?

A Understood.

Q Great. I'm going to ask this to be identified as Exhibit 1.

(Exhibit No. 1 was marked for identification.)

MR. GRUEN: Q And I just handed a copy of the subpoena to the court reporter that you just reviewed. Okay. So that subpoena that we just discussed means you're under compulsion of subpoena and witness fees. We have a statutory authority to issue the subpoena at the Commission, and the Safety & Enforcement Division as part of the Commission has that statutory authority to compel the attendance of employees to testify and to produce documents as part of our supervisorial authority over utilities such as PG&E.

This means you are not here voluntarily, and the information you provide us is not voluntary. You're answering questions because we are requiring it.

Do you understand this?

A Understood.

Q And the subpoena that you just saw, you received that from me last week, correct?

A That is correct.

Q And that was cc'd to -- actually, I think it was sent directly to Mr. Jonathan Pendleton, PG&E's attorney.

A I believe he accepted it on my behalf.

Q Perfect. For the record, do you recall also seeing a letter that was forwarded from Mr. Pendleton from me regarding retaliation?

A An e-mail. I didn't see the -- it's not a letter.

Q That's better said. You're right. An e-mail. And let me just -- you recall that. Let me just say -- read that for the record so we have that and -- just so we're on the same page. "While SED is not asserting retaliation at this time, we want to remind PG&E that any form of retaliation toward employees who report in good faith unsafe conditions to the Commission including the Safety & Enforcement Division, or SED, is prohibited as provided in General Order 112-F, Sections 301 and 302.

"SED will continue to closely monitor whether any of these employees have experienced retaliation following the EUOs. SED requests that you forward this e-mail separately to each employee who has been served a subpoena and cc myself and Mr. Kenneth Bruno of SED. These employees are invited and encouraged to immediately report any retaliation they experience to Mr. Bruno, who is cc's on this e-mail."

Does that language sound like what you received through the e-mail from Mr. Pendleton?

A Yes.

Q Great. And so you understand that PG&E is prohibited from retaliating against you for reporting unsafe conditions to us today?

A Understood.

Q Do you have any questions about what that means?

A None.

Q Has anyone spoken with you about the topics identified in the subpoena today?

A Jon Pendleton.

Q Anyone else?

A No.

Q Regarding these conversations, what did Mr. Pendleton say to you?

A Just asked me to come here and answer the questions relative to a previous position I held.

Q A previous position you held?

A That I've held. I don't currently reside in the position I had, locate and mark, under his charge.

Q Okay. I follow. I follow. Has anyone coached or advised you about goals to achieve coming in here today?

A Goals relative to --

Q To what to achieve today.

A In this proceeding?

Q No.

A No.

Q Not in the proceeding. We don't have a proceeding but just today, the Examination Under Oath.

A No.

Q Has anyone suggested, said or implied that you give answers today in a way that protects PG&E?

A No.

Q In preparations for today, the Examination Under Oath, I might call that an EUO. Will you understand?

A I'm sorry?

Q Yeah. Let me back up. An Examination Under Oath is what we're doing today. This is just -- it's not a deposition in that you don't have PG&E's attorney present and we don't have a proceeding. So the Examination Under Oath, when I use that term, it's just using the term to describe the questions and answers we're having and a court reporter writing down what we're saying today.

So I may use that term, "Examination Under Oath," just at times to describe what's -- this back-and-forth dialogue including questions from Franky and Dennis and the answers you give. So that's what I mean by Examination Under Oath. And also for short, I may use the term "EUO," just the initials of Examination Under Oath.

Do you understand if I refer to that to use the term "Examination Under Oath" or EUO that I'm referring to what I just described?

A Understood.

Q All right. Questions about your

background at PG&E. And I understood -- I received some things from Mr. Pendleton in preparation for the EUO today. So I'll confirm my understanding of them just for the record regarding your background at PG&E.

Did you begin your tenure at PG&E in 1996?

A Yes.

Q And have you worked continuously for PG&E full-time since 1996?

A Yes.

Q Did you write up a list of titles and duties you performed for PG&E in preparation for this Examination Under Oath?

A At Mr. Pendleton's request, yes.

Q Okay. I'll ask you to confirm the titles and duties I received from Mr. Pendleton. Please correct me if I have any of these wrong. I have from 1996 to 1997 the Corporate Services Senior Analyst position?

A Correct.

Q 1997 to 2002, OM&C Gas Electric Supervisor?

A Operation Maintenance and Construction. Correct.

Q Thank you. You read my mind. I was going to ask. Thank you. 2003 to 2006, again, Operation Maintenance and Construction Superintendent for the Locate and Mark group. I understand the Locate and Mark group reported to you as a manager, and responsibilities included resource management, capital tool policy replacement, compliance work procedure, locate execution, standby management, budget accountability, POC for L&M for company, work execution, SIF, LWD, OSHA, MVI investigation.

First I'm going to ask you if that's right, and then I'm going to ask you if that is right to just clarify some of the terms.]

A That's correct. That Locate and Mark was one of the teams that reported to me as the manager.

Q Okay.

A POC.

Q First, Locate and Mark, that's the term just for the record when we use the term L&M is that referring to Locate and Mark?

A Correct.

Q And please, POC, what does that mean?

A POC is point of contact.

Q Point of contact. Okay. So that means you were the point of contact for

Locate and Mark for the company for PG&E?

A For the company, for San Francisco Division because I was located in San Francisco at the time, specifically.

Q Okay. And, so, you were one of multiple contacts in different divisions?

A One of multiple managers that had Locate and Mark teams reporting to them. Yes, that is correct.

Q Got it. Okay. All right. What does the term SIF mean?

A Serious incident or fatality. It's an investigation of a safety-type accident.

Q Okay. And LWD?

A Loss workday case.

Q Okay. OSHA?

A OSHA recordable Occupational Safety Hazard Health.

Q MVI?

A Motor vehicle incident.

Q And when you use the term -- I have the term investigation after all of those acronyms. Can you explain what that investigation -- what that was?

A Sure. I would -- if it's a Locate and Mark issue or a motor vehicle incident or someone got injured, I was the lead to pull the team together to do a complete investigation as to what happened, institute any corrective actions or controls. If there were process or standard issues, I was the person to lead that effort as far as the investigation.

Q Okay. I follow. Thank you. 2006 to 2007, Manager Business Transformation?

A Correct.

Q Did that relate to Locate and Mark duties?

A No.

Q Okay. 2007 to 2009, Director Business Projects, Chief of Staff E&O?

A Yes. Engineering and Operations.

Q Is what E&O stands for?

A That is correct.

Q We are talking fast, and I know I'm going to get told. So, just please let me finish the questions and I will do my best to let you finish the answers, just so we have a complete record.

Let's see. So E&O. What does E&O stand for, one more time?

A Engineering and Operations.

Q Did that relate to Locate and Mark?

A It did not.

Q 2009 to 2010, Director NB WRO Rule 20 projects; is that right?

A That's correct.

Q And what does NB WRO mean?

A NB stands for new business. WRO is work requested by others. So it's work stream where we are asked to move our facilities if they're in the way of a City project or water project.

Q Okay. Good. All right. That doesn't sound like it's related to Locate and Mark either?

A That is correct. It is not related to Locate and Mark.

Q 2010 to 2011 Director Pipeline Safety and Partnership; is that right?

A That's correct.

Q Is that related to Locate and Mark?

A It is not.

Q 2011 to 2013, Director Emergency Preparedness; is that related to Locate and Mark?

A It is not.

Q Did I have it right?

A Yes, you did.

Q All right. And then 2013 to 2017, Director Gas Operations Compliance Programs; is that right?

A That is correct.

Q And I see here, it looks like I was

-- I received a fair bit of information that it looks like this does relate to Locate and Mark. This does include duties that you, well as the Director, you would have managed Locate and Mark duties, others within PG&E that handle Locate and Mark types of matters. Is that accurate to say?

A That is accurate.

Q Okay. Let's let me read through it and see if I have it right. Okay. So the Locate and Mark group reported to you as Director. You were responsible for all damage prevention activities including Locate and Mark. Do I have that part right?

A Yes, you do.

Q I will go by it piece-by-piece. Pardon me. I think I jumped in there before you finished. I will slow down a little bit.

DP metrics, RP 1162; is that part right?

A That's correct.

Q What does DP mean?

A DP is damage prevention.

Q And RP?

A RP is -- I don't know what the full name of it is, but it's referring to public awareness outreach -- public outreach. It's a federal code that relates to public outreach. It just slips me right now.

Q That's helpful. Thank you.

Dig-in reduction? Dig-in investigations, third-party trainings, all internal Locate and Mark training, curriculum design and delivery, USA North adherence, third-party damage billing, gold shovel standard management, tracking all dig-ins to PG&E assets, first responder training, delivery, emergency protocol training, regulatory proceeding support, testimony, governmental -- let me stop there. Is that all accurate as part of your duties?

A That's correct.

Q Governmental agency SME DP; is that accurate?

A That is accurate.

Q What does SME DP stand for?

A Subject matter expert and damage prevention.

Q Thank you. Resource management, contractor management, safety investigations involving MVI, OSHA, LWD injuries; is that all accurate as well?

A That's accurate.

Q I think that you explained what those terms were already. So I won't ask you again. Just to be sure, I'm not seeing LWD.

I will ask you what that means. I might have asked you, but out of an abundance of caution I will ask you again.

A Loss workday cases.

Q You did answer that. I remember that now. Okay.

So all that captured your background up to date?

A That's correct, other than my job title today.

Q And could you identify that and your work duties as well, please?

A Of course. The Senior Director of Transportation Services. My responsibilities is for all fleet assets for PG&E, all of our green, all of our alternate fuel strategy bio fuels, bio diesel for PG&E, in a nutshell.

Q Okay. Thank you. Does that position entitle relate to Locate and Mark?

A It does not.

Q When did you begin that role for PG&E?

A March 22nd, 2017.

Q So, when did your role end as Director of Gas Operations Compliance programs?

A March 22, 2017.

Q So it was a straight transition

from one role to the other?

A That's correct.

Q Okay. All right.

The next piece -- thank you for that. The next piece that I want to get to is just clarifying certain terms, so that we have a common understanding as we discuss things further throughout the day.

So, the questions I ask you are asking about facts you learned while at PG&E. In particular, please ensure your answers include the knowledge and information you have because of your time and experience, especially as Director of Gas Operations Compliance programs. Do you understand?

A Understood.

Q All right. So to start with substance, I will ask about some terminology so we come to a common understanding. The term -- are you familiar with the term locating and marking?

A Yes.

Q And what does the term mean to you in the context of PG&E's natural gas system?

A Locating our gas electric fiberoptics facilities at a customer's or third-party's request.

Q And the marking part of it, what

does that part mean?

A Actually putting paint on the ground to signify or indicate where our facilities are.

Q So, if I use the terms or you use the terms or Franky or Dennis use the terms locating and marking for purposes of this Examination Under Oath, you'll understand that term to be defined in the way that you just mentioned?

A Understood. Yes.

Q Okay. And when I ask questions today about locating and marking, I'm specifically asking about matters related to PG&E's natural gas system, not the electric or any other Locate and Mark, any other utilities, just the natural gas system. Do you understand that?

A Understood.

Q What is the term used to describe someone who goes out on behalf of PG&E and locates and marks its underground equipment within an identified excavation area?

A Locate and Mark representative.

Q Yeah. Are you familiar with the term locator?

A Yes.

Q Would you use the same term Locate

and Mark representative or locator, would you understand those terms to mean the same thing?

A Yes.

Q Okay. And in the context of locating and marking -- excuse me, could you explain what the term "ticket" means?

A Of course. It's a request that comes in through USA North into our Earthnet system and we assign it to a locator or Locate and Mark personnel to execute that ticket.

Q And if I refer to the term "ticket" in addition to the definition you just gave, I mean the term to generally be defined as all PG&E tickets for the locating and marking of underground natural gas infrastructure, including all services providing them. Do you understand if I use the term that way, will you understand the term "ticket" to mean that?

A Yes.

Q Okay. Okay. Are you familiar with California Government Code Section 4216?

A Yes.

Q And can you briefly describe your understanding of what that requirement says with regards to tickets?

A That tickets should be located within a 48-hour window and contacts should be made, again, in general -- this is because I don't have it in front of me, but in general, that we should make every effort to contact the excavators to ensure that we are in alignment with the work area, delineation, when they're going to start their job, et cetera, making contact and giving them our contact information in case they have questions.

Q And the 48-hour window that you were referring to, is that within 48 hours of when PG&E would receive a call from an excavator?

A That is correct.

Q And that call would be through 8-1-1?

A That is correct.

Q Okay. And the 48 hours would be excluding weekends and holidays that you referred -- that 48-hour window would exclude weekends and holidays; is that right?

A That is correct.

Q And the other part that you mentioned, if there's a mutually-agreeable later time that is mutually agreeable to both the operator and the excavator, then you could locate -- the locator could come and locate and mark at that later time that is mutually agreeable. Does that sound right to you?

A That is correct.

Q Okay. All right. If an excavator notified PG&E of proposed excavation work to start within the two working days we just identified, the 48 hours, or later as specified in Government Code 4216, and let's say that PG&E wanted to establish a later time, later than that 48-hour period, are you with me on that so far? Do you understand that?

A Yes.

Q Okay. Would PG&E need to reach the excavator and communicate with them if it wanted to locate and mark at a later time than what is required by 4216?

A I'm not sure I understand your question.

Q Let me rephrase. I appreciate that. Let's give a hypothetical. You have -- an excavator calls in and says, "I need a locator to come out within 48 hours", 48 hours excluding weekends and holidays, and PG&E it turns out in this case cannot send a locator within the 48-hour period, in order to locate and mark per the excavator's request, what would PG&E need to do in order to change the time at which the locator could come out to a later time than 48 hours?]

A If we are unable to meet the 48-hour commitment, we would then have to renegotiate that start time of that particular project with the contractor in that hypothetical situation.

Q Understood. Thank you. And by renegotiating the start time with the contractor, what would that entail?

A A conversation either by phone or in person depending on the scope of the actual project. Sometimes the projects are 6 blocks, 12 blocks, 20 blocks versus one service or one section of main. And we would have that discussion on the job site where we talk about when do you plan to start? What types of equipment are you using? When do you think you'll be done? How far ahead do you want us to stay of you? That's the kind of conversation we would have, again, either by phone or in person.

We prefer in person. That's what the instructions were when I was there. In person is always better because you can understand exactly what the job entails, but there are times where contractors are out of the state that are handling these tickets, because we don't typically get the tickets from the people who are actually doing the work. It's usually an office space person that calls those in.

Q I think I'm gleaning by this that you would reach -- again, continuing with this hypothetical -- renegotiating a start time would require someone at PG&E to reach someone on behalf of the excavator and agree to change the start time of when the -- and by "start time," I mean when the locator would come out and do the locating and marking.

Am I understanding that right?

A That is correct in that hypothetical. More often than not, the contractor either may not be ready for us to do the locate and mark or may want us to start at a different section of the project and it's outside of the boundaries of the ticket and they have to re-delineate, et cetera.

Q Okay. Thank you. Are you familiar with the term "late ticket"?

A I am familiar with that term.

Q What does that term mean in the

context of locating and marking in the context we just discussed?

A A late ticket indicates that we missed a 48-hour window either not by meeting that 48-hour period with that contractor or customer or that we did not renegotiate the start time and document that either in Earthnet or on the ticket itself in the folder with the contractor.

Q A couple of other questions just about terminology. What different types of services -- I think you mentioned USA North already as an example, but what different types of service created tickets for PG&E during your time as director of gas operations compliance programs?

A I don't understand the question.

Q Let me ask it this way: USA North, was their role to provide -- to create tickets for PG&E?

A No. They didn't create tickets. They accepted the calls from the contractor, and then that -- then from the USA North came into a system called Earthnet. That's what we used to manage -- do ticket management.

Q That's what I'm after. Thank you. So USA North would receive the calls, and then the ticket data that was then provided by USA North, it was received from the excavators. USA North would gather the ticket data and provide it to Earthnet. Is that accurate?

A It interfaced with Earthnet to document that ticket. That's correct.

Q And Earthnet provided a -- did Earthnet contain an entire universe of PG&E's ticket data?

A I'm not an Earthnet expert, but to my knowledge, every ticket that came into us that we had accountability for should have been in Earthnet. That is correct.

Q Are you familiar with the term "positive response"?

A I am.

Q In your experience, what does positive response mean?

A It means we were able to contact a person by phone or in person to have the same discussion related to the work that needs to be done and ensure we are on the same page with the contractor.

Q Are you familiar with PG&E's procedures related to locating and marking?

A In general, yes.

Q And what do PG&E procedures related to locating and marking mean to you in general -- very general terms, high level terms?

A The procedure is outlined as prescribed in 4216. It's -- if we get contacted, our job is to go out and locate it within 48 hours, make sure the delineations are clear with white paint with USA down, make sure our marks are clear and make sure that we have a positive contact with that contractor.

Q Will you understand what you just described if I refer to -- or you refer to PG&E's procedures relating to locating and marking, will you understand that term to be defined in the way that you just described?

A I will understand it's not all-inclusive. Certainly there is a damage prevention handbook that we have readily available. Hopefully you have a copy of that. I think all of our procedures are in there or most of them along with our work procedure manual for Locate and Mark. So I won't represent everything that's in both those documents, but in general, that's what my understanding is.

Q I wouldn't expect you to remember everything in the document without having it in front of you and referring to it. So thank you. I appreciate the clarification. That's helpful.

All right. Substance. So with that understanding, it was just a set of terms to cover -- I may, as we go through -- periodically I ask for clarification of one term or another in addition to what we just described but just so we have a common understanding.

I want to ask you now if there were, to your knowledge -- and I'm asking specifically about your role as Director of Gas Operations Compliance Programs when I ask these questions. So will you understand that context for this set of questions?

A Yes.

Q Has achieving zero late tickets ever been a goal in the Locate and Mark Department?

A Yes. It's the law.

Q When you say "it's the law," you're saying it's required by Government Code Section 4216?

A That's correct.

Q Was achieving zero late tickets a goal in the Locate and Mark Department before you became director of gas operations compliance?

A I can't attest to that.

Q What about when you came on as the director of gas compliance -- excuse me -- director of gas operations compliance? Do you know if it was in place to have a goal of zero late tickets as you were coming on in that role?

A It was in place in my performance expectations. So it was part of the managers and supervisors and Locate and Mark personnel's expectations as well when I came onboard. I can only speak for my time.

Q Understood. Did you do anything in your role as director of gas operations compliance programs to require zero late tickets in the Locate and Mark Department?

A I don't understand the question.

Q Let's ask it this way: Did you communicate with anyone else within PG&E that zero late tickets in locating and marking was a requirement?

A Yes.

Q I think I'm going ask you generally to elaborate on that. So did you provide those communications in meetings to your staff generally? Can you describe the communications you had around that point?

A Along with zero late tickets, we

also talked about work procedural adherence. We also talked about note-taking. When I say "we," I mean my staff, myself, my managers, my Locate and Mark personnel. We had weekly conference calls to evaluate the work, the quality of the work, the accuracy of the work.

We had weekly discussions around investigating if a mistake was made, if we missed something. We had those conversations weekly as well. Each individual supervisor had their own set of discussions with the team around there's an identified gap in training, there's an identified gap in understanding what the code actually says or meant.

There were curriculum discussions around, Hey, we may need more training on the Vivax 9000 versus the hard-tap unit that we would typically use, which is the older models of Vivax. So there were plenty of discussions that we had around Locate and Mark, building it into a professional organization. That was my main goal when I started.

Q A couple of terms. You used the term "Vivax 9000." What does that mean?

A Vivax is the tool or locating

instrument that we utilize today -- or when I was there to do the actual locating of the gas facilities in this EUO.

Q I follow. Okay. The gas facilities that we've been talking about in the EUO?

A That's correct.

Q Yeah, I follow. Okay. Would it be accurate to say that the PG&E employees under your direction, that each one understood you had identified -- you had communicated with them a goal of zero late tickets?

A I'm sorry. Ask the question again.

Q Would it be accurate to say that the PG&E employees under your direction received communications from you to have zero late tickets as a goal?

A As an expectation, yes.

Q As an expectation, not a goal?

A That is correct.

Q Did you do that in writing? Did you communicate in writing with them?

A No.

Q Verbally?

A Verbally in team meetings, in helping review the quality of the ticket reviews that we would do as much as possible. Absolutely.

Q Okay. In your role as director of gas operations compliance programs, did you ever give -- I'm sorry. Did you ever receive instructions to have zero late tickets?

A I received it as a performance goal as the director of the department that was very well-known that that was a goal that was assigned to me, yes.

Q So as a performance goal, is that part of your performance evaluation?

A Yes.

Q And was there any financial incentives linked with your achievement of that goal?

A No.

Q But it was used to evaluate your performance?

A Absolutely. Along with 50 other goals.

Q So in terms of -- was your achievement of the 50 goals linked to any financial incentives?

A It's part of my evaluation and performance as a director. My achievement of those goals or not achieving those goals played a part in my full evaluation as a director of the department. Yes.

Q Did -- was your full evaluation as

director of gas compliance -- I'm sorry -- gas operations compliance programs, the evaluation you just discussed, was that linked to any bonuses or financial incentives that you received for PG&E?

A No. No. There's a different component around leadership and leadership acumen and developing other leaders within your organization. I recall in this position I had corrosion control, aerial patrol, dig-in reduction damage prevention. I had 8 or 9 different groups. So this was just part and parcel of what my responsibilities entailed.

Q Understood. The performance goals, what were the consequences if you didn't achieve any of the performance goals?

A I didn't have any consequences per se. I wasn't going to be terminated, if that's what you're referring to, relative to not achieving those goals.

Q And any other consequences for not achieving any of the performance goals?

A No, not to my knowledge.

Q What about consequences for achieving the goals?

A We kept going. We continued to focus on those particular goals that we achieved, and we looked to be even better every year. So if we met the goal, we would look to set a stretch target to exceed that goal.

Q As director of gas operations compliance programs, did you identify consequences with your staff if any ticket or tickets became late?

A No.

Q As director of gas operations compliance programs, did you exert pressure on people to achieve a goal of zero late tickets?

A No. I will say I set clear expectations that that is -- that that's what we are required to do by 4216, and we should do everything within our power to meet that 48-hour window. That absolutely was communicated to everybody within the group and within PG&E.

Q Would anyone have received consequences for not achieving a goal of -- or an expectation -- excuse me -- of zero late tickets, anyone who worked under your supervision?

A Consequences negatively? No.

Q Did anyone within PG&E inform you of late tickets?

A Yes.

Q What was your reaction when you learned of people informing you of late tickets?

A It depends on the timeframe you're referring to. Is it when I first got there and everything was late? Is it when we started putting some controls in place? What are you referring to?

Q Let's walk through it. I think each data point is helpful. So could you start from the beginning when you first came onboard and then continue when you put controls in place, and maybe give us an idea of the timing, if you could, as well.

A Sure. I think around 2013 I got there in November into this position. We had a very difficult time with ticket management, executing tickets primarily because we didn't have dedicated resources to go and do Locate and Mark work. While we had difficulty executing the tickets, we were also doing a lot of advertising around 811.

So our ticket value was going from a few thousand a week to 20-, 15-, 18,000 a week. So it was clear to me we needed to professionalize that team, get that team trained up and get a dedicated team of supervisors and Locate and Mark personnel focused on this work. And that stated, I'd say, towards the beginning of 2014, that first quarter, that's when we really started hiring more Locate and Mark personnel.

We started looking at, hey -- weekly calls about how are we doing? We track ticket volume. We track ticket quality. We reported it to each other. When we were having difficulties, whether it was with contractors or our internal folks, we went and provided training. We provided the coaching. We created a line of progression around 2014/2015 that had a senior compliance rep is what it's called. But it's just a senior locator to help go out and coach the new Locate and Mark personnel.

Because we went from roughly 138 part-time locators to north of 240 full-time with a cadre of contractors also helping us just so that we can manage the value increase that we were seeing on a weekly basis. So we did put more boots on the ground. We did look at improving our training delivery and our training curriculum. We looked at putting metrics in place around quality, how many mismarks, how many late tickets, what were the causes of dig-ins. If there was a dig-in, how do we coach the team through it.

All of this happened through 2014 and 2015 going onto 2016. We had two dedicated superintendents or managers that all they did north and south, they had -- each had roughly 8 to 10 supervisors that reported to them. Their sole job was Locate and Mark. So they got a chance to really focus and hone and understand how to build that skill set as a superintendent manager and then each individual supervisor. We hired brand-new ones off the street that were -- had Locate and Mark experience, had infrastructure gas and electric utility installation experience.

We worked to deliver the damage prevention handbook training to folks. We worked at putting subcommittees together with the locators so that we could hear exactly from their perspective what was on their mind, what's bothering them, what are they struggling with. We would surface those issues. And each superintendent had the responsibility to get those issues addressed.

If it meant going back to our PG&E academy and redoing a section of the training, we would do that. If it meant field evaluations, we would do that. We pretty much, soup to nuts, rebuilt an organization from a part-time organization that was okay, I thought, to a more professionally executable operationally excellent organization that had clear accountability for all Locate and Mark activities. It couldn't point to anyone else other than me. Because I was the director of the group. And the team knew that they had that responsibility as part of their jobs.

Q Thank you. I think you use the term "boots on the ground," and I'll talk about it. It sounds like it may be 2014, '15 and into 2016 there was an increase in the number of maybe personnel. And by "personnel," I mean both PG&E employees and contractors who were doing the Locate and Mark work.

Am I gathering that point correctly?

A That is correct.

Q Did that -- did you maintain that staff level?

A Staff levels fluctuated. We had a very difficult time keeping people to stay in the roles in San Francisco, San Jose, Oakland. Parts of the peninsula, parts the Bay Area there's a high cost-of-living.

People typically hired in. And as fast as they can bid out to Stockton or Manteca, that's sort of what they did.

So our staff level fluctuated, which is why we leveraged contractors so much in certain parts of our territory.

Q Do you have an idea, in rough terms -- I'm not asking for specifics, and I'd put it in front of you if I had specifics. But I'm asking you to maybe approximate the staff that, maybe at its peek, in 2014, '15 or '16 regarding the Locate and Mark personnel.

A Roughly at our peak, we hit around 245, 250 full-time PG&E employees with a cadre of 25 to 30 contract locators -- locate mark personnel to help us in areas where we were really struggling to keep people in the job, specifically the peninsula, Cupertino, San Jose, et cetera.

Q Did the 245 to 250 locators include the cadre, or was the cadre in addition to the 245 or 250?

A If you're referring to the cadre as contractors?

Q Yes.

A That is absolutely on top of the 245 to 250.

Q I follow. Thank you.

Approximately at what point in time did you have the 245 or 250 plus the 30 or so contractors?

A Again, it fluctuated depending on the amount of churn and attrition that we were seeing in Locate and Mark. Again, you got to understand. These positions were -- if you did it right, nobody cared. If you did something wrong or you got it wrong, everybody cared quite a bit relative to late tickets or mismark or something.

So the pressure that a lot of these folks were under was pretty tremendous. So I can't give you an exact timeframe of when we were at 245, 250, but I know that was sort of the peak around 2015, 2016. And we were continuing to leverage contractors that did not just Locate and Mark but also standby work for us. Because as our volume of Locate and Mark tickets were going up, we still had a responsibility to stand by all of our transmission assets if they are digging within -- or excavating within 10 feet. So we needed to make sure that we could address that work stream as well.

Q What happened -- just to explore the term, I think you used the word "fluctuations." I just want to focus on that.

So is it accurate that the 250 or so employees -- I'll just round it up to 250. I know you said 245 to 250 or so. But just for reference -- plus the 30 or so contractors working on things including Locate and Mark issues, did that number decrease at a certain point in time?

A As I stated earlier, with people moving in and out of the organization as we hire them, as soon as they catch a bid and go out, yeah, that number fluctuated quite a bit. From the moment we stood the team up, we knew this was a risk for us. People want to work for PG&E, and this was a way to get in. But as all union positions have, you have the ability to bid out, if that's what you want to do.

And the amount of stress and the volume of work that probably some of the folks were under, it could take a toll on you. So some of the folks probably bid out at a higher clip in my organization probably than in any others.

Q Why would that be that -- let me clarify. Let me strike that.

So the -- yeah. As some folks

would have moved out of your organization, tough to replace them and as -- in -- as great a number as those that were leaving?

A Yes.

Q In your organization, was it tough to replace folks in as great a number as they were leaving? And I'm going to -- since you asked, I just want to be sure. Is that your understanding of the question that I asked as well?

A Yes.

Q And what was your answer to that?

A Yes.

Q If you were to look at the 250 or so employees plus the 30 contractors as a peak, if you were to look on a chart, what would you say -- what number approximately, not asking for exact. But approximately what number of employees and contractors, if you could give a general idea, would have been at the trough of the chart?]

A I don't understand the question.

Q So you've got, let's say 280 people working on Locate and Mark related matters up here. At the lowest point, during your time as Director of Gas Operations, how many employees and contractors would have been working on Locate and Mark issues?

A I don't want to speculate. That's a difficult question to answer. It fluctuates so much, again, because of the attrition and because of people bidding in-and-out, it could be -- it's a tough one. I don't want to speculate.

Q Okay. Do you have a general idea in terms of would it have been half that amount of people or a quarter or roughly-speaking three-quarters of the amount of the 280 or so individuals?

A No. If I had to pin a general sort of rule of thumb, it was probably 8 to 10 percent of turnover at any given time, is probably the closest that I can give you generally.

Q Okay. Meaning it would have been 8 to 10 percent less than the number at its peak that you just described. 8 to 10 percent less than 250 or so employees, plus the 30 or so contractors? That's correct?

A I follow.

Q Thank you. Let me ask you just for your -- given your professional experience as Director, in your opinion, was achieving zero late tickets a realistic expectation?

A Yes.

Q And in your opinion, did PG&E's Locate and Mark Department historically have enough resources to sufficiently respond to all late tickets?

A To all --

Q The late tickets?

A Yes.

Q Even when it lost staff at some of the off-peak staff times that we talked about?

A Yes. I mean there are always going to be fluctuations in staff. I think a professional Locate and Mark group should always know how to resource manage, resource share, meaning if we are lighter in certain parts of the territory, we'll move resources to where we are heavier. If we are heavier in certain territories, maybe we move to a 4/10, work 4 days, 10 hours a day, or maybe we move to a 12-hour day for a certain period of time. Construction reasons are pretty consistent. Typically our busy time is from April to October. That's when the heavy construction season takes place. We typically try to leverage a higher number of contractors during that period of time to make sure that we can, again, respond to not just the Locate and Mark requests but the standby requests, given the dangers with excavating around our transmission facilities. So I felt like we had the resources we need but was it a perfect situation every single week? No. It was a struggle. It was a battle for all of us.

Q Okay. One term that you use is standby. I'm going ask you to define that term for the record, if you could?

A Correct. So a standby request, any time a Locate and Mark request comes in through USA North from a contractor into our Earthnet system, if the delineated area is within a 10-foot sort of buffer zone of our gas transmission facilities, we are required by CFR 49192 to provide a standby, meaning someone to ensure that as they're excavating around our transmission facilities that they are doing it safely and they don't jeopardize or risk damaging that particular facility.

Q So, if there were a late ticket and someone was to move forward and start digging, it's -- I'm just trying to understand the term "standby." That wouldn't have been a standby-type of situation then?

A No.

Q Okay. So standby would mean -- excuse me -- if you had a late ticket and a locator didn't respond within the required time, then the excavator would be required to wait to dig?

A No. That's not what standby means.

Q Can you explain it again just so I understand? I don't think I'm totally understanding it.

A Okay. As an example, we're digging on Van Ness Avenue, which there is a lot of construction going on now. We have two 28-inch gas mains, which are transmission facilities which operate at above 60 pounds. If the contractor is going to be excavating within a 10-foot buffer zone of those specific transmission lines, it is required that we have personnel standing by to ensure that that excavation goes safely and that he or she understands the tolerance zone in which they can't break or buffer. Having a late ticket has nothing to do with that. A ticket could involve both transmission distribution, gas and electric and fiber, but from a late ticket perspective, I'm understanding you to just mean we have missed that 48-hour window and we didn't negotiate or phase or do anything to extend that ticket.

Q Right. Okay. So standby means a

buffer from a piece of PG&E equipment and it's identifying that so that digging doesn't happen within a certain distance or a certain buffer of the PG&E underground equipment. Am I getting that part right?

A I wouldn't call it a buffer. It is a requirement that they stay -- they're going to stay outside of a 10-foot tolerance zone, is the term I would prefer we use, the tolerance zone, because that will ensure that we are -- the opportunity to damage that transmission facility is greatly reduced. We try to eliminate it, which is why we have people standing on that job site when we know there is excavation around our transmission facilities.

Q Is the tolerance zone of 10-feet something that is prescribed in the PG&E manual?

A It's in our Damage Prevention Handbook. I don't have that in front of me but I believe it is in there. And it's also, again, CFR 49 part 192. I forget the specific section. But I believe it's referenced in there as well.

Q Let's clarify for the record. CFR part 192 is -- do you understand that to be Title 49 of the Code of Federal Regulations part 192?

A Yes.

Q Thank you. And there's a specific section in there that prescribes the tolerance zone that you're specifically referring to?

A That is correct. I just don't have the specific section to cite right now.

Q Understood. What if an excavator needed to excavate within the tolerance zone? What would PG&E do?

A We would be on the job site. We would have discussions and understand exactly what type of excavation that excavator wants to do and we would just ensure that that work got done safely and that our facilities were not damaged or we didn't jeopardize the safety of the neighborhood or the community that surrounded it.

Q Were you ever made aware of a dig-in that occurred by someone digging within the tolerance zone?

A There were a number of significant dig-ins in my four years as Director of Gas Compliance Programs that I was aware of. If there is a specific one that you have --

Q Not at the moment. I don't.

Can we go off the record a moment?

(Off the record.)

MR. GRUEN: Back on the record.

Q Okay. We talked a little bit about your performance goal related to locating and marking. Do you recall that?

A Yes.

Q Was your performance ever scored positively in terms of meeting that goal?

A Which goal are you referring to?

Q The goal of achieving zero late tickets?

A No.

Q Was your performance ever scored negatively in terms of meeting that goal?

A I scored myself "does not meet" because we did not meet the zero late ticket goal.

Q Did you add anything to that?

A Adding -- add what?

Q When you scored yourself "does not meet the goal of zero late tickets," what else, if anything, did you say in evaluating your own performance?

A There is a self-evaluation that we do during around performance management time and then your supervisor will look at it and evaluate your performance as well. That was one goal that I did not feel that we had met.

That then goes into my supervisor and then he would review it and we would have a discussion about that.

Q At what point in time did you evaluate yourself as not meeting the goal of zero late tickets?

A I don't know the specific year, but I don't think there was ever a time where we could say we had zero late tickets for an entire 365-day time frame. There were always situations where we had new locators or situations that come up and all it takes is one missed 48-hour and that goal is gone. So I don't think anyone, at least under my charge, really believed or really felt like we could honestly say there is zero late tickets for an entire 365-day year. We did have weeks. I think we had like a month or two going at one point, if I recall correctly, where we were on a pretty good clip, but there was no one who could say in the group 100 percent, of the million tickets that we did in 2016, for example, all one million of those were all done within a 48-hour time frame.

Q Yet you had the expectation to meet that goal?

A Absolutely. Because that is what

the Code requires. If we were to set a goal that says 10 percent of the tickets are okay to be late, I don't think that would be appropriate for PG&E or my team. A professional team should always have very high expectations for themselves relative to the work that they execute.

Q So when you said it's a realistic goal to achieve zero late tickets in your opinion, if I understood that correctly, you maintained that opinion even though you never achieved the goal?

A Absolutely. I was always of the mindset that if in fact we gave into the temptation of allowing ourselves to be okay with late tickets, to be okay with allowing a certain percentage or a certain number, I think that sends a bad message. That is not what a professional organization does. It is not what we should be about. It's against the Code. We want to always be compliant and we also want to be in compliance on purpose. In compliance is 100 percent of the time you hit that 48-hour window. Out of compliance means you miss and we fell short of on a number of occasions absolutely and the team and I we talked about that. I think for a lot of folks, they really believe that that should be a goal of ours in our organization. I'm not going to say a hundred percent of the team thought that was the right goal, but I think we all want to be compliant and in compliance with the Code. That's what our goal was.

Q Are you aware of other operators' efforts to achieve compliance with that goal of zero late tickets?

A I am not aware of it, no.

Q Are you aware of other gas operators who have had late tickets?

A I am personally not aware of that, no.

Q Okay. You talked about -- I think you mentioned others within PG&E who have disagreed about the goal of zero late tickets. Did anyone working for PG&E under your charge as Director ever tell you it is not possible to achieve the goal of zero late tickets?

A I don't recall anybody coming to me saying that, no.

Q Did any employees request more resources in order to achieve the goal of zero late tickets?

A Yes.

Q Did you ever grant such a request?

A Absolutely.

Q Did you ever deny such a request?

A No. Not that I recall.

Q Can you elaborate on the request what the request was and what your response was?

A Certainly. So when someone requests they need more bodies, for example, like San Francisco, where it's hard to keep people in place, we would go through a process of: Is it a short-term need? Just we have a bubble because of all the construction going on in San Francisco or is this a longer-term sort of need where we're going to have to hire on a permanent basis to have someone full time here? So if they're asking for five people, are all five people needed for 365 days or do you just need three for the bubble and then two maybe you need for the 365 days? So we certainly went through that discussion, that level of discussion with our resource management team. And we certainly looked at the volume of tickets. We looked at the capabilities and the skill set of the locators assigned to a specific area or division. We looked at how the supervisors were structuring the files that each employee had relative to more complex locating, if it involves sort of electric or underground facilities versus the simple services, and we looked at the quality of the locates that that team has been performing.

All of that is the discussion that we had as a leadership team as well as with the team that was requesting the resources and we made the appropriate decision, whether that means delivering additional contractor support in the short-term and then going through a process of interviewing and trying to hire locally for the longer term.

Q Okay. Let me ask you: I'm going to circulate something and see if we can maybe get this done before the break that we'll have shortly. So I'm handing you something entitled Safety and Enforcement Division Preliminary Investigation Locate and Mark exhibit. Do see that on the title?

A Yes.

Q And if you turn to the next page and take your time reviewing this. I know it's fairly small print but what we have done here is complied this through some discovery that we have done. Does that information look familiar to you?

A No.

Q It doesn't.

A It does not.

Q Okay. Let me walk you through it and see if any of this seems accurate to the best of your recollection.

So if you go to the second to last row, under -- well, there's data source twice as you see, but I mean to talk about the second reference to data source on the page. The first column where it says, "Late Tickets January 2012"; do you see that?

A Yes.

Q Okay. So, referencing "Late Tickets, January 2012 to February 2017, and the Index 10707-08_2012 - February 2017 Total Late - Division.xlsx"; do you see that box there?

A Yes.

Q Okay. Our understanding is that this is a count of late tickets broken down by year. So if you continue along that row, you see total late tickets, and then in 2012 you see 4,670 -- I'm sorry 4,623 and continuing on.

Does -- first of all, do you see where I'm pointing to on the table?

A Yes.

Q Does that count of late tickets

look accurate to you?

A I can't attest to the accuracy, because I wasn't there in 2012.

Q What about, let's see, 2013 through 2016? That was the time you were the Director if I'm remembering right; is that right?

A That's correct.

Q What about the accuracy of those years?

A Not having all the data in front of me, I can't attest to the accuracy of these numbers and how were they calculated? Did we go in and say, take out all the phase tickets? Did we take out all the negotiated tickets? What is actually in this calculation? I don't know.

Q Good set of questions. Okay.

A Did you also include -- not to interrupt you, but did we include internal PG&E tickets generated from our own internal crews or are these all third-party tickets? Those are just the questions that I don't have no appreciation for where this came from.

Q I appreciate the questions. Let me ask generally, I think you see on your version I circled in red a couple of rows and

I will not ask you about 2012, as you have indicated that is not part of when you were working on Locate and Mark issues and I appreciate that.

Do you have a sense of whether the -- what the count was of late tickets starting in 2013 and whether the number of late tickets decreased, the total number of late tickets decreased through the rest of your time as Director?

A In general, we saw a trend of late tickets trending down, yes. That was driven primarily by, again, dedicated resources, improved training, adherence to the Damage Prevention Handbook and the new training curriculum, dedicated supervisors and managers that managed this work and executed it every day. So, yes, we did start seeing the trend go in a positive direction meaning less late tickets.

Q Okay. What about -- excuse me. What about the -- if you go back to the first column on this document, and it's the -- I think it's the 5th box under "Data Source" entitled "Index 11436-01_Locate and Mark Annual Spend 2012 through 2017.xlsx." Do you see that?

A Are you talking the overall result

or the Gas Operations?

Q Right in the same spot that I am. I'm talking about the Gas Operations one.

A I see it then.

Q And the cost category moving along that row is expense. Do you see that?

A Yes.

Q And "Program" as "Damage Prevention." Do you see that?

A Yes.

Q And MWC Description, in that column it says G&E. I think it's meant to be PG&E, T&D Locate and Mark. Do you see a reference there?

A Yes.

Q And I notice that starting in 2013 we've got the number 54,396,000. It looks like that is the number identified. Do you see that there?

A Yes.

Q Okay. Does that number appear to be approximately accurate -- an accurate number of the approximate amount that was spent on locating and marking in 2013?

A Again, not having all the budget numbers in front of me for what the total program spent, it looks to be accurate.

Q Okay. It looks to be accurate

without having all the extra information. But it's -- understanding that you're giving a general answer without having all the information in front of you, I appreciate the answer. Okay.

I thought you were going to say you weren't sure, but you said it looks to be accurate, which I appreciate.

Moving on to the 2014 column on that row, where it says approximately the annual spend there being 45,871,000, roughly-speaking, does that look to be accurate to you?

A Looks to be accurate.

Q Moving onto the 2015 column, 48,459,000, does that look roughly to be accurate as well?

A Looks to be accurate.

Q And in the 2016 column the annual spend there of 39,242,000, does that also appear accurate, roughly-speaking?

A Looks to be accurate.

Q Okay. So it's not a -- I wouldn't ask this as a perfect trend, but it looks as if there's, generally-speaking, comparing these columns to one another, a slight decrease in the spending on each year on Locate and Mark. Would you agree with that?

A Not necessarily, because within that operating expense budget, we also pay for our standby resources. So this is a combination of Locate and Mark activities, our standby activities that we have, that we capture in this expense budget. So depending on how many units we were doing from a Locate and Mark perspective to how many tickets or tags we got from a standby, it could be a combination of anything. So, again, not having the full-budget picture, it's hard for me to give you a good answer.

Q Okay. So standby activities would be included in the Locate and Mark annual spend budget that was provided here?

A That is correct. That is part of the Damage Prevention Program. So, yes, it would be included in this particular spend category.

Q I see. Okay. Do you have a rough idea of how much of the annual spend standby activities would make up for each of these years?

A No. No. No, I wouldn't. It would be pure speculation.

Q Okay. Are there any other -- other than locating and marking, within the Locate and Mark annual spend, are there any other non Locate and Mark items that make up this row?

A To my knowledge, no. But not having those budget items in front of me, it would be hard for me to say a hundred percent accurate, no. I would have to pull the major work category. That is what MWC stands for that is associated with the Damage Prevention Program and we could go through those line-by-line to see that.

Q I'm sorry.

A Major work category is where it says MWC Description.

Q I'm just showing the witness --

A MWC Description. That is Major Work Category Description.

Q Okay. Yes. And so remind me, so your point about MWC Description?

A What I'm referring to there could be other items. Again, I don't have them in front of me that could be part of the major work category description that could be included in this expense category relative to Locate and Mark and standby that, again, I said, no, it may not be anything, but not having everything in front of me from an items perspective, it's hard for me to give you a hundred percent accurate answer. So it looks like it's standby and Locate and Mark but it could be other items within here.

Q Okay. It's interesting that it's called Locate and Mark annual spend and not Locate and Mark and standby and other items annual spend.

A Join the club.

Q Okay. Why don't we take a break.

(Break.)]

MR. GRUEN: Back on the record, please.

Q Okay. So we were looking at the Safety Enforcement Division preliminary investigation Locate and Mark exhibit, and before the record -- excuse me -- before the break, we were talking about row 4 on this spreadsheet, the annual spend for Gas Operations.

Do you recall that, Mr. Dickson?

A Yes.

Q I understand your point that Locate and Mark annual spend budget includes non-Locate and Mark activities as well as Locate and Mark activities. I have that part right, don't I?

A That's correct.

Q So let me ask you generally: Do you recall the annual spend budget on just Locate and Mark activities from 2013 to 2016?

A No.

Q Do you have a rough idea of what it was?

A No.

Q Do you have a rough understanding of whether it would have increased or decreased through those years?

A Roughly, I know we went up and down dependent on the number of resources and the volume of tickets that we had to -- to do. I do remember some midyear cycles where we were running over because the volume was projected to be more or forecasted to be more than what was budgeted. And we had those discussions where money within the Gas Operations business was moved to sort of bolster or support Locate and Mark work. I do recall that in general.

Q Now, you said that -- I'm sorry. That was an increase that you -- in the spend -- the annual spend that you noted?

A Correct. If, in fact, there was a situation where our budget was lower than what our forecasted workload was to be, we would certainly have those discussions at, again, a Gas Operations or a senior officer level discussion. And if necessary, we would then infuse more dollars into the Locate and

Mark or Damage Prevention Program so that we could make sure we can execute the work.

Q Did you ever see a decrease in the annual spend on Locate and Mark -- on Locate and Mark items?

A Yes.

Q Between 2013 and 2016?

A Yes. Relative to becoming more efficient, not doing that work part-time, being able to execute the work on a more efficient productive basis, yes. I have seen a slight reduction or reduce, again, from a productivity target-setting prospective.

Q In percentage terms, do you have an idea of how much that reduction was?

A No.

Q Do you have a rough understanding of it? Let's just use general terms. Was there a reduction -- I see here on this -- the exhibit -- and let me ask just for the record it be marked as Exhibit 2 just so we have a reference. I'll hand the court reporter a copy.

(Exhibit No. 2 was marked for identification.)

MR. GRUEN: Q I see here on Exhibit 2 the Safety & Enforcement Division Preliminary Investigation Locate and Mark Exhibit we've been talking about. That -- the same row we're referring to, the annual spend row for Gas Operations, it looks like there was a -- from 2013 to 2016 -- 2013 it's shown as 2.27 percent of the total budget allocation.

Does that look right to you?

A It depends on what percentage of total budget allocation are we referring to. Is it just gas transmission distribution operations? Is it all of Gas Operations, which is at the senior executive level? What -- it depends -- again, not having the background or all the documents in front me, it's hard for me to give you an exact answer. So I don't mean to be not answering the question, but it's just difficult.

Q I hear you. We don't have enough information here I think I'm gleaning from this. What questions would you ask in order to flesh out the overall percentage of annual spend just so we can better inform ourselves in order to ask PG&E. What questions would you recommend we ask in order to figure out the percentage of annual spend on only Locate and Mark issues as a total of the spend on Gas Operations as a whole?

A Just specifically that question, could you ferret out specific Locate and Mark activities and the percentage of that spend versus all of Gas Operations.

Q Do you have an idea from 2013 to 2016 what that percentage would show? Would it show an increase year over year or a decrease year over year?

A It would be pure speculation on my part to answer that.

Q Okay. Okay. Understood. What other metrics would you suggest we ask in order to understand how much is spent annually, how much was spent annually -- excuse me -- on Locate and Mark issues?

A Something as simple as what's our unit costs, so our dollars per ticket by location. I think that would be something fairly easy to get at, number of tickets per locator. That would probably be something -- again, we used to track and measure that quite often, number of mismarks per 10,000 tickets. That will give you a flavor for some of the quality of the work that we do. Number of dig-ins per 10,000 tickets. Again, those are all metrics that when I was there we tracked and monitored quite closely.

Q In terms of some of those metrics, can you give us an idea -- let's do mismarks per 1,000 tickets, I think you said. How --

did I get that right?

A It was 10,000.

Q Excuse me. 10,000.

A Mm-hmm.

Q Thank you. Mismarks per 10,000 tickets. How did you see that number change during your time as director?

A Generally, the trend was positive, meaning less is more. I thought we got much better at documenting not just what we did from an execution of Locate and Mark activities, meaning putting paint on the ground, but our accuracy and quality of those locates improved dramatically, which I think also led to more open lines of communication with that contractor if they came across something they were unfamiliar with, like a deactivated facility that may not be marked or an unmarked stub of some sort that we may not have had access to from the maps that we had.

I think the key to damage prevention in general is communicating as clearly and as often as possible and having that relationship, having the requirement of not just a positive contact but leaving your contact information with the contractor so that they feel like they have an avenue to contact you if something comes up. I think that all helped drive the number of mismarks and dig-ins in a more positive trending direction.

Q Meaning the dig-ins and the mismarks per 10,000 both went down?

A That is accurate.

Q And that would be true year over year from 2013 through 2016?

A I can't say for sure. But generally, what I recall is, yes, that trend definitely trended down, which is a positive thing. But I would encourage you to grab those records if you could.

Q Were you aware that PG&E's quality management team -- actually, let me back up.

When I refer to the term "PG&E's quality management team," do you understand what I mean by that?

A No.

Q Ah. Okay. Maybe you could help me then. Was there a team that looked at quality management and quality assurance of PG&E's Locate and Mark ticket data?

A There was a team Jennifer Burrows led. She was quality assurance, not quality management. And she did go through and do document review, document evaluations relative to Locate and Mark activities.

Q So what term would you use to describe the team that Ms. Burrows led, if she did, in fact, lead a team?

A Quality assurance.

Q So it was called the quality assurance?

A Quality assurance, not quality management. Quality management, in my mind, refers to both quality control as well as quality assurance.

Q I follow. Okay. And what does quality assurance mean to you?

A It is ensuring that as we document -- what we do that -- that we are following the correct procedures, protocols, how we document the work that we did, how we notated a file or notated a ticket with contacts to what the contractors either said or didn't say from a positive contact perspective. It's really to ensure that before we file that away that all of the I's are dotted and the T's are crossed so that, again, from a compliance perspective we can really be comfortable and confident that, A, we are identifying training opportunities but B, we are actually documenting the records, because they are records, in the appropriate manner.

Q So if I use the term "quality assurance" moving forward, will you understand it to mean what you just described?

A Correct.

Q Thank you. Were you aware that PG&E's quality assurance team found multiple instances where locators changed the status of a ticket in order to stop them from showing up as late in Earthnet?

A No.

Q Did you ever hear anyone state it was not an acceptable practice to move tickets into different statuses in order to stop them from becoming late?

A Yes.

Q Who did you hear state that to you?

A I forget the manager that worked for Jennifer Burrows, but she had a manager on her team that every month we would get a readout of the quality assurance findings. One of the findings, as I recall, was there was notations and tickets that were, in their minds, again, deemed to be moving or tolling a ticket so that it does not show up as late or come across as late in our Earthnet system.

I remember discussions around it

was difficult to sort of get into the minds of a locator and predict their motives behind what they are doing. If my assumption is positive intent, I am assuming that they understand what our requirements are. I'm assuming when they sign a document and said, "We've trained them on what the appropriate protocols are" that they are following those.

What Jennifer's group was pointing out was probably an instance where there were questions that, yeah, "Hey, why did you toll this particular ticket or why did you extend it or phase it?" And those questions were things that our supervisor would follow up with a specific employee on to sort of glean, hey, what was going on here? This raised a question or an issue, and we need more information about it. That's what I recall.

Q Just a clarification. I think you mentioned the terms that you learned there were instances where certain PG&E -- certain people who work for PG&E changed tickets so that they would not show up as late.

Did I get that part right?

A In her report -- in the quality assurance reporting, she noted in her report, yes, there were instances where we feel, as a quality assurance team, they may have changed something to not show up late. I did not personally believe that my team purposely did anything that would toll or do anything that would be going against our procedure -- our work procedure that was in the damage prevention handbook.

But if the quality assurance team believed that and that's what they documented in our monthly reviews, those were items that we, as a leadership team, would follow up on. So the supervisor and superintendent would go an have that discussion with the locator, and we would take whatever actions we needed to take. Again, whether it was a training gap -- if it was a late ticket, it would get corrected. If it was a locator error -- all of those things, we followed up on that.

Q Did you pass on the PG&E quality assurance team's findings to other PG&E -- other PG&E managers?

A When you say "pass on," what do you mean?

Q Communicate.

A Communicate. So that quality assurance review every month was in the meeting with my supervisor and his direct report team. We all had a monthly meeting where we focused on compliance, and that month -- within that monthly meeting, Jennifer Burrows and her team would come and share her observations. So all that information was very public.

Q Did you see -- in your communications with your manager about the observations of the PG&E quality assurance team, did your manager take any actions in response to that?

A The action was, "Joel, you need to understand what happened, make sure we have controls to identify and ensure it doesn't happen again." If there is something -- if there's a gap within our procedure, that was typically the direction that I got. Did he personally get involved with going and meeting with an employee that may have had a question that the QA team put out? To my knowledge, no. That was squarely on my shoulders to manage.

Q I follow. Okay. Did you hear -- after you got word of the QA team identifying this, making this observation to you and after you took some of the steps of training, or what have you, did the QA team continue to observe this, make these observations?

A In a monthly reporting format, I'm not sure of that. I know on a couple of occasions they mention it in our monthly meeting, but I don't remember them mentioning it at every single monthly meeting that we had. Again, I was there four years. It wasn't a common theme that they would surface. It wasn't a -- as I thought about it and reflected on the performance of the team, it wasn't an item that gave me pause or major concern just from a compliance or ethical perspective. So I was very comfortable that it was a moment in time or a specific item that we addressed as a leadership team and felt comfortable it was addressed appropriately.

Q Did you state to anyone in PG&E that it was not an acceptable practices -- excuse me. Let me restate.

Did you state to anyone that it was not an acceptable practice to move late tickets into different statuses in order to stop them from becoming late?

A I'm sure I did. I don't know the specific time, but I'm sure that's part of the conversation I've had with my team on many occasions.

Q Were you aware that people were moving tickets -- late tickets into different statuses in order to stop them from becoming late?

A I was aware of an instance or two, but it was not multiple people doing it. And the ones that I recall being aware of, one was a contractor we moved off the property and then another it was a training issue with a newer Locate and Mark person who really didn't have a good understanding of what the protocol was. So, to me, that's a training gap that we identified thanks to the QA team.

Q All right. Were you informed by the PG&E quality assurance team -- I heard you use the term "QA team" as short for that. So if I use QA, will you understand that to mean quality assurance?

A Yes.

Q Were you ever told by PG&E's QA team that late tickets were a problem in every PG&E division?

A No.

Q Were there daily, weekly and monthly reports about late tickets in every PG&E division?

A Weekly and monthly reporting, yes. I don't recall daily, no.

Q So would you -- are you familiar with QA data for employees with regards to late tickets?

A I've seen reports that reference QA data for employees' late tickets, yes -- I've seen reports of QA data labeled reports for late tickets for certain employees, yes -- actually, for all my employees who had late tickets.

Q So you saw which employees had late tickets?

A Yes.

Q Did you communicate with any of them?

A Probably one or two. I mostly communicated through their leadership team, their supervisor, their superintendent. If I was in an area just doing field visits and felt like I recall a specific employee, I would certainly engage that employee and learn as much as I could about how we could better help him. But I don't purposely mean getting in the car and going to see a specific employee that may have had a late ticket, no.

Q Yeah. And I think this is just helpful for me to understand the chain of command. I get that there would be and were several layers of supervisors between you and the employees who work under your supervisors. So am I understanding that correctly?

A Yes. But ultimately, the buck stops with me. So if there's misbehavior, if there's things that aren't going right, there's no other place we need to look other than me.

Q Okay. Did you observe a pattern -- any patterns of late tickets for employees under a given supervisor?

A No.

Q Under a -- I think the term is "superintendent"?

A Correct. Superintendent. No.

Q What communications would you have with a superintendent or a supervisor who you observed their staff to have QA data that's showing late tickets?

A So what we tried to do was get in front of what the issue was relative to a particular supervisor or an employee. And so we would -- we would talk about what happened so that we fully understood the picture of what happened. We would talk about do you understand what the procedure calls for? Do you need any support there? We would actually send out someone from the academy or someone from our work procedure team to go out and help them with their instrument calibration or help them with their instruments. Again, we would try to identify what the issue is.

My conversations were always really to try to understand how I could help. I knew that work was really difficult, and I knew that that is a stressful environment to work under and work in given the volume that we were seeing. So I was very sensitive to that, but at the end of the day, zero is the number. That's what we are legally and required by code to adhere to. And that was our goal. So any opportunity that I had to engage the team to fully understand what happened and why and can we put some controls in place to help us, I certainly did that.

Q Did you count if late tickets ever differed from those of PG&E's quality assurance team?

A To my knowledge, no.

Q So you weren't aware that PG&E's Quality Assurance Team found late tickets in Earthnet that your late ticket counts did not find?

A Again, this was some time ago. To my knowledge, absolutely not. Relative to how late tickets are counted, are we including first-party tickets, second-party tickets or only third-party tickets? Are we including all tickets that were phased, meaning it was a multiblock project and it only counts as one ticket, do you include that? So it just depends on how QA -- or counting those tickets and how we were counting those tickets. If there was a discrepancy -- and I'm not saying there weren't -- it was probably in what we counted and what we didn't count, for sure.

Q Yeah. And I appreciate all the buckets you just described to maybe describe different kinds of late tickets. Just to clarify, I'm really asking about the whole universe of late tickets at this point. So for a second, third-party, phased, other late tickets, for whatever reason, I'm using the term very generally at this point.

So just this clarification, would you give the same answer with that clarification about the discrepancies between your counts and the quality assurance team's counts?

A Yes. Could there have been a discrepancy? Yes. But there was not a consistent discrepancy on the way we counted tickets versus the way QA counted tickets.

Q Okay. Did you receive findings

regarding tickets from PG&E's quality assurance team?

A Define "findings."

Q Let me ask it differently. So what information regarding tickets did you receive from PG&E's quality assurance team?

A We received both data and graphs delineating what they categorized as late tickets, again, during our monthly compliance meetings.

Q And what did those -- what did the information that the quality assurance team provided you in those meetings provide?

A It provided numbers and ticket numbers, so total of tickets that they categorized as late with ticket numbers. That information was then moved over to the compliance manager, Donnie Jue, as well as the other Locate and Mark superintendents, and we would go through the process of figuring out what happened.

Q Loud and clear on ticket numbers. When you say "numbers too," were there counts of numbers of late tickets as well as the ticket numbers themselves?

A Yes.

Q Were you aware that PG&E's quality assurance team had a metric for counting late tickets?

A Specific to their department or for the company or Gas Operations in general?

Q Any of the above.

A I am not aware that they had a metric for late tickets specific to the QA department.

Q What about for Gas Operations in general?

A No, I'm not aware that they kept the number of late tickets for the Gas Operations Department. We were the only ones that reported out on this on a monthly basis from a ticket count, late ticket perspective, to my knowledge.

Q Were you aware that PG&E's quality assurance team identified a systemic concern with late tickets?

A No. Can I ask a clarifying question?

Q Absolutely.

A In which years are you referring to? Is it just 2013 to '16, or is it from 1990s?

Q Good. I appreciate the question. We're talking about the time that you were director. So 2013 through 2016.

A Thank you.

Q And that's for all of these questions unless I specify otherwise.

A Perfect. Thank you.

Q And so with that understanding, were your answers accurate?

A They were accurate, yeah.]

Q Okay. Good. Are you familiar with the term structured risk assessment methodology?

A No.

Q Okay. Did PG&E's quality assurance team provide any sort of information related to the risk -- assessing risk associated with late tickets?

A To my knowledge, no. What they provided was strictly data and reporting.

Q Did they report information regarding risk?

A To my knowledge, no.

Q Okay. Were you -- was one of your roles as Director, and I'm going to ask about the term process owner, if you will, of Locate and Mark. Are you familiar with that term?

A Yes.

Q What does that term mean?

A Process owner for Locate and Mark is simply the sort of one-stop shop for all things related to Locate Mark regarding work flow, budget management, budget center accountability, work execution resourcing. I mean, it's what I did anyway. They just put a different title on it as we started moving into this lean management space.

Q Lean management?

A Lean management, which is part of this effort we're currently going through to make sure we are leaning out areas of inefficiency. A process owner is the person who then pulls in if there is an engineering or regulatory issue associated with Locate and Mark, work practice issue, work methods, tooling. It's just a one-stop owner of all things related to Locate and Mark. That is what a process owner is.

Q Thank you. Are you familiar with the term slicer report in the context of locating and marking?

A No. But that doesn't mean I hadn't seen a report. And someone may have made that term up, but I'm not familiar with slicer report.

Q Okay. You talked about a report that identified weekly information related to locating and marking from the Quality Assurance team. Did I get that right that you received weekly reports from the Quality Assurance team?

A No. I got weekly reports from my own [redacted] [redacted], who prepared weekly and monthly reports by supervisor, by superintendent on the performance of the Locate and Mark organization.

Q And [redacted] provided a source of ticket information to you that was the same, based on the same information or different information than the Quality Assurance team?

A The only information I got from the QA team was in the monthly compliance review with my manager and his direct reports. The weekly and pretty much the data that we drove our business with came from [redacted] [redacted] [redacted], who pulled the information, met with the team, went through late ticket reporting, went through dig-in reporting, went through each of those reports so that on our weekly calls, because we did have weekly calls as an organization, people would be informed as to either their performance and activities and action they needed to take moving into the next week.

Q Did [redacted], to your knowledge, communicate with the Quality Assurance team prior to giving you weekly reports?

A That I'm not sure about. She may have had some insights into part of Jennifer Burrows' team, because they were invited to our all-hands meetings that we would have. Like Jennifer Burrows and maybe one of her supervisors would come and present their findings to the full Locate and Mark team and [redacted] may have had some interactions with them but by in large [redacted] was our data source as it relates to sort of the quality of it of metric reporting in Locate and Mark.

Q And by quality of metric reporting, in Locate and Mark, let me just clarify that. Is the quality of metric reporting, was there an understood metric that [redacted] used in order to provide the weekly Locate and Mark reports to you?

A No. What I mean by quality of Locate and Mark reporting is you report on the number of dig-ins, the number of tickets, perhaps the slicer data you were referring to. She gave the health dashboard of the Locate and Mark organization. In my mind, that perhaps is a little different than what the QA organization looked at which is more documentation-focused and less about how we're executing other quality control piece we have in the field. That is how I understood their roles to be different and I gleaned and took different reports from each group to sort of weave and sew into: How do we continue to make sure we're getting better as an overall organization and not missing anything?

Q Okay. Did [redacted] tell you how she counted late tickets?

A Did she tell me how she counted late tickets? No.

Q Do you know if she used -- what would have been her data source in order to provide you with late ticket data?

A Stephen Walker, who is our Earthnet administrator, he would then send her -- I would imagine send her information. I didn't know if she had access into Earthnet to pull it herself. I believe she did but I'm not a hundred percent sure. But the two of them would have that information, that data out of Earthnet. That is what she would include in her weekly reporting.

Q Okay. So she would have gotten the

information from Earthnet in order to count late tickets?

A Correct. Either from Stephen directly or in Earthnet herself directly. There was a one-stop shop relative to Earthnet in my organization. That is really with Stephen Walker. He was the guy who was the most trained in it. He was the guy who was the most proficient at maneuvering in it. He understood how to set sort of warnings, so about hey this ticket was going to be late in six hours versus this ticket is about to be late and how to categorize things. Stephen Walker was the guy who I turned to when I had questions regarding Earthnet.

Q Did [redacted] or Stephen report patterns in late tickets to you?

A Stephen would report that there would be a pattern in a particular location if he sees that within the Earthnet system because he is in it every single day.

[redacted], I believe, I don't recall her reporting patterns or anything relative to late tickets. I think it was simply a data point for her that she put in her weekly and monthly dashboard for the supervisors and the rest of the leadership team to sort of use.

Q Okay. What sort of patterns, if any, would Stephen Walker communicate to you with regards to late tickets from Earthnet?

A He would communicate mostly if it's location specific, if it's locator-specific and sort of his thinking as to why the ticket actually went late. Did they miss it? Did they not close it out and actually did the work and didn't close it out? That is a lot of what he would share with me because he could see in Earthnet they actually had been to the job site but they didn't click something to say it's completed so that it could toll. So in a lot of instances, it was they just didn't close it out or he had called these guys and send them an e-mail or sent them a text the night before to get in there before 6:00 a.m. to go get that ticket done and nobody answered the phone. "Joel, I need you to know because you're going to be on the 7:30 call with the other leadership team members." So these series of sort of situations may come up. So I do recall him sharing that information with me.

Q Did you notice a particular locator having a pattern of late tickets?

A No. A specific locator? No.

Q Do you notice some other pattern

related to other things yourself?

A I noticed a pattern of us self-inflicting late tickets or wounds on ourselves by forgetting to close out a ticket after we had done it or forgetting to document in the notes that, yes, you made positive contact, you met with the contractor, you guys came up with a different time frame because either he wants to start at a later date or you're at the end of your day and you can't get to it by the end of your day. So I do remember those patterns where we were just sort of shooting ourselves in the foot.

Q Aside from that, I see your point about not closing out tickets properly. I see what you're saying there. What about other patterns, other than not closing tickets or the self-inflicted tickets or wounds that you talked about? Any other kinds of patterns related the late tickets that you noticed?

A I would say that during the busy times, August-September, we just have an abundance of tickets in a specific area and couldn't get resources there fast enough to get all of those tickets done within a particular window of time when some of those tickets were due. It wasn't often, but did it happen? It absolutely happened. At one clip, we were running about 26, 27,000 tickets a week. That in and of itself is enough work for an entire department to actually have to go after and get after. And there were times where it was just so busy that I do remember there being some occasions where we couldn't get to everything.

Q What was your reaction when that happened?

A So figuring out why. Is it just the volume? Is it the location because they're spread out? Did we have people off? Was it vacation, resource issue? Or was it strictly it's just too much work for that particular group at the head count number that we had and maybe we need to take a step back and reevaluate that? There was never a perfect answer all the time because each situation was really different.

For example, this project on Van Ness, that had one full-time FTE assigned to it. All this person did was that job. Well, he decided to take a couple of turns and wanted to extend and maybe do something over and above what they initially thought. Well, then you have to add another two or three locators to it to make sure we're staying ahead of where these folks need to be. This is a major City project. The last thing we want to do be seen as doing is holding up a City project.

So those situations, I wouldn't say they were normal, or normal course, but they did happen just by the nature of how many tickets we would have in a specific area.

MR. GRUEN: Off the record for a second.

(Off the record.)

MR. GRUEN: All right. Back on the record.

Q We understood from PG&E's Quality Assurance Team that they requested to be part of a dig-in incident investigation and review USA tickets to determine the cause of the dig-in in order to improve the overall process and possibly identify if the practice of moving USA tickets into different statuses had contributed to the dig-in.

Are you aware of this request made by PG&E's Quality Assurance team?

A No.

Q Okay. Do you think it will improve the Locate and Mark process if the Quality Assurance team gets involved with this dig-in investigation?

A When you refer to dig-in investigation, could you be more specific as to what organization you are referring to?

Q I think I meant PG&E in general relating to natural gas tickets, but dig-ins for PG&E's -- related to PG&E's natural gas tickets.

Perhaps we're talking past each other here. I think we may be. So when you ask organization, maybe you can give me an understanding of what organizations might be meaningful to you.

A Exactly. So within the damage prevention team that I have responsibility for we had a group called the DIRT team, Dig-in Reduction Team, which had a -- 18 dedicated investigators. They went out and they did dig-in investigations relative to third-parties, took pictures, documented, wrote reports.

We also had within PG&E a third-party investigation team that investigate damages to PG&E facilities by third parties. And they do their own separate major investigations related to like the Fresno transmission pipeline or the Bakersfield major pipeline. So there are a couple of 2, 3, different organizations within the company that really focus on investigation causality, as well as liability.

Q I follow. Okay. So, maybe we can go through each one. And so, maybe can you add to that a little bit in terms of the perspective that each one offers on dig-ins when they're investigating them?

A Sure. So relative to the DIRT Team, the Dig-in Reduction Team, their sole purpose is to coach, mentor, teach third-party contractors the proper excavation habits and routines they should go through. They're also the interface that helps us with that sort of third-party contracting, the associations. They lead the investigations as far as who's at fault, was there paint on the ground indicating that the lines were marked? Was there a USA ticket? They do all of that background investigative work.

The other organization third-party claims investigates claims that are brought against the company. So let's say a third-party contractor said, "Hey Joel, your guys mismarked" or "Hey Joel, your guys didn't do something right." That group then also does an investigation or could potentially do an investigation and they're not with us in Gas Operations. They're a separate organization. Does that make sense?

Q It does. Could you say their name again?

A They're third-party claims and they're part of our law department under what used to be under Ken Lee and Mark Sweeney. I don't know who they're under right now. But that's all claims that come into the company regardless of gas or electric. That is everything. They would do investigations associated with that. The reason I mention them is they could overlap into some gas and electric events that DIRT investigators investigate simply because of the exposure or maybe they have a perspective they want to bring to the investigation.

Q Okay. So they would give a perspective to the DIRT team?

A Correct. The DIRT investigator.

Q The DIRT investigator. Can you elaborate on -- so I think I'm trying to understand how the overlap would happen or the investigation. Would you have the -- sorry. It slipped my mind. The team that worked for the law department. What was their name again?

A Third-party claims.

Q Third-party claims?

A Yeah, investigation.

Q So third-party claims would offer their perspective to the DIRT team on -- related to dig-ins and would that be a regular occurrence?

A No. I wouldn't say it's a regular occurrence, but on large dig-ins like Fresno where you have a lot of sort of legal wrangling going on, it's not surprising that you would have both the DIRT team investigator, as well as in parallel the third-party claims investigator working together to make sure we ferret out all of the facts of what happened so that we can make decisions based on a full factual investigation and analysis.

So not to confuse it, but, you know, there are times where they're in parallel. There are times where they work together. It just depends on the type of incident that we would have.

Q I follow. When you refer to Fresno, you were talking about, oh, gee, the facts slipped my mind. But was it 2014 or something like that, there was a rupture in Fresno?

A Something like that, correct, an agriculture field and big explosion, yes. That would be a situation where we would have both our DIRT team as well as our third-party investigation team as well as someone from law. They would all be working together to sort of figure out what happened.

Q Okay. Was that more of the -- Fresno was the large, that was dig-in related I believe, wasn't it?

A Correct.

Q So that one is an example where you had all hands on deck, if you will, for purposes of doing a dig-in investigation?

A Correct.

Q Okay. And the hands on deck were working with each other and communicating with each other to do their investigation together; is that right?

A Correct. Or in parallel if they're looking at different aspects of an investigation.

Q In terms of the dig-ins that maybe didn't have such a result as what happened in Fresno, would the kind of discussion that you're talking about between the third-party claims team and the dig-in reduction team, would those types of interactions happen on the lesser types of dig-ins as well?

A No. Those would primarily be investigated and handled by the DIRT Team investigator and figure out what happened, why the dig-in occurred and our third-party billing group would then go about either billing the contractor or something else.

Q Okay. I think I understand the context better now.

Let's -- I think let's focus on the dig-in reduction team and their investigations. Do you think it would improve the Locate and Mark process if the Quality Assurance Team gets involved with the investigations done by the dig-in reduction team?

A It wouldn't hurt.

Q Does the dig-in reduction team do more investigations on dig-ins than the third-party claims team does?

A In general, yes.

Q What's the trigger for a third-party claims team?

A If someone is filing a claim against us for something they are accusing us of doing, PG&E.

Q So the third-party claims dig-ins -- let me restate it. The third-party claims dig-in investigations would be a subset of the dig-in reduction team, dig-in investigations?

A In a nutshell, yes. That's a good way to phrase it.

Q Okay. Thank you.

Do you think it would improve the Locate and Mark process if the Quality Assurance team gets involved with the third-party claims dig-in investigation?

A I couldn't answer that.

Q Why is that?

A I don't work in the law department with third-party claims. I'm not -- I don't know all of their protocols. I know very little about what they do, really just their interactions with the DIRT and the damage prevention team that I had. It would be hard for me to say that would be helpful or not. I just don't have enough information.

Q I see. Okay. Does PG&E have a metric to report late USA tickets?

A Yes.

Q And to track those USA late tickets?

A Yes.

Q And you're familiar with the metric?

A Yes.

Q Can you describe how the metric tracks the late USA tickets?

A Pulls right out of Earthnet the report that comes out, the report that comes out. Those tickets that are identified that miss the 48-hour window, those are the tickets that are counted late and that is what we track. That is what we measure.

Q Is this a metric to be used to measure the performance of the locators and their supervisors?

A Part of their performance, yes. We also have performance expectations around coaching work execution, identifying areas of where they're doing really well, and how do we get more of our locators to perform at a certain level that we may have a certain group of locators performing. So it's part of what they're measured on but not all of what they're measured on.

Q Do you see any deficiency with the metric?

A I have been away from it for a while, but I did not at the time. I was very confident that what is in Earthnet is what we used and that was the best information that we had at the time. And I had a lot of confidence in that data that came out of Earthnet.

Q And I think you answered this before in a different context but I'm going to ask it here. Are you aware that PG&E's Quality Assurance team proposed a different metric to track and report late USA tickets?

A No.

MR. GRUEN: I think -- off the record, please.

(Off the record.)

(Whereupon, at the hour of 12:01 p.m., a recess was taken until 1:10 p.m.)]

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AFTERNOON SESSION - 1:10 P.M.

* * * * *

MR. GRUEN: Can we go on the record, please?

Q Okay. We're back for this afternoon and let's see. I think we were talking about performance metrics before lunch. Just that was our last line of questioning before lunch. Do you recall that?

A Yes, sir.

Q Okay. I think let's actually switch topics.

We talked earlier about government Code Section 4216. Do you recall us talking about that this morning?

A Yes.

Q And we discussed the requirements, the 48-hour requirement and the mutual agreement, in order to not meet that requirement. Just pointing these out to refresh your recollection. Do you recall us talking about those things this morning?

A Yes.

Q And I think we established this, but let me just make sure. In order to reach -- if PG&E cannot locate and mark within the required amount of time provided by 4216, we talked about the mutual agreement has to happen between PG&E and the excavator by actually reaching and communicating with the excavator; is that right?

A That's correct.

Q All right. So with that background, in your role as Director at the time we were talking about 2013 through 2016 of Gas Operations and Compliance Programs, and I'm just using the term Director for short. You understand when I use the term Director, it refers to your time then?

A Yes.

Q Okay. In your role as Director, were you ever aware of anyone working for PG&E taking certain actions not allowed under Government Code 4216?

A No.

Q Were you aware in your role as Director of anyone working for PG&E taking certain actions not allowed under PGE's own procedures related to Locate and Mark in order to avoid a ticket from becoming late?

A No.

Q Had you seen the practice in PG&E of three attempts to reach an excavator who opened a ticket before closing that ticket?

A I don't understand your question. Could you rephrase, please?

Q Yeah. I didn't word it well. I appreciate that. So let me state it in a hypothetical format.

Let's say that a ticket gets opened by an excavator.

A Tickets are not opened by excavators. They're called in. Then they come into our Earthnet system and we assign them to a locator.

Q I think you mentioned that this morning so I appreciate the correction.

Let's say that an excavator calls in a ticket?

A Correct.

Q Correct parlance. Okay. So an excavator calls in a ticket and then it's a 48-hour working hour requirement for PG&E to send a locator to respond. Do you understand that part?

A Yes.

Q And let's say that PG&E decides in fact that they do have to respond in Locate and Mark. Do you understand that as well?

A We have to respond whether we want to or not. I just want to make sure that we are real clear about that that 4216 is pretty clear. Whether we want to do it or not, we have to respond in that 48-hour window.

Q Are there instances where PG&E does not have to actually go out to the site in order to locate and mark?

A The only one of few instances where we may not have to go physically out to the site is if we have no facilities in the area where the excavation is going to take place.

Q I suppose I was making that assumption in identifying the word responding, where PG&E would have to respond, meaning I was assuming that PG&E had identified facilities in this question in this hypothetical. Does that make sense?

A Yes.

Q So let's continue on. In assuming that all of that has happened and PG&E realizes it will not be able to send a locator out to do the locating and marking within the 48-hour required time period in this instance. Do you have that in mind?

A Yes.

Q Okay. And PG&E then tries three separate times to reach the excavator who called in the ticket. Do you have that in mind as well?]

A Yes.

Q Okay. In that instance, are you aware of PG&E after the third attempt to reach the excavator but being unsuccessful in each of the three instances where a ticket was closed?

A I am not aware of that. I know in general we tried three times. There are situations where we try even more depending on the location and the activity in the location. If it's in an [redacted] [redacted], we're going to get out there no matter what. Even if we are beyond the 48 hours, that work is critical. There are critical facilities there. Are there occasions where that may occur? There probably are occasions. But our mandate, our job is to get out there and locate the facilities, and we work really hard at doing that.

Q Why do you say that there are occasions where that may happen?

A Again, in this hypothetical, there are times where -- traffic conditions, equipment failure. A locator could have 15 tickets to go do at the end of the day because he may have had training in the middle. I mean, it could be a number of different things that may delay that response. We try to avoid those at all costs. That's why we have specific supervisors assigned specific areas to balance the workload and spread it out to the others. But can I honestly say 100 percent of the time that's never happened? No. That would be an inaccurate statement.

Q Just to clarify, I think I realize the answer I got. My question was meant -- I thought that you had answered that it may happen sometimes where the hypothetical I described -- three tries to reach an excavator and each unsuccessful led to a closed ticket, but I think I misunderstood your answer.

A Yes. You did.

Q Okay. So that -- to your point, that is -- you're not aware of it happening, and you don't -- in fact, I think you're saying you don't think that's ever happened?

A I do not have personal knowledge of any locator closing a ticket after three attempts to connect or make positive contact with an excavator. My struggles with the hypotheticals you're proposing is it predisposes some information that there are a lot of variables that comes into these hypotheticals. And that's what I'm struggling with. I'm trying to be specific with my answers, but the hypotheticals are becoming problematic for me because we're getting into territory that makes me a bit uncomfortable if I don't have all the information to give you a full answer.

Q What factors am I predisposing?

A Just coming up with the hypotheticals about allowing things to go past 48 hours. It just -- in my mind, our job is to do it within 48 hours. If it went passed 48 hours, it wasn't by design. It's not on purpose. It was a factor that happened, and maybe it was a mistake. Maybe it was training. Maybe it was something else. But the hypotheticals, they are becoming problematic for me because that's not what we teach.

We teach and we coach and we mentor our people to always meet the 48-hour commitment. There are no excuses. There are no if, ands or butts about it. I just want to make sure that's clear in this instance.

Q I think so. I want to be clear too. When you say they are problematic, it means -- I think the problem is that it's assuming certain facts that you're not either comfortable with or familiar with?

A Attesting to. That's exactly it.

Q All right. I think this next question will clarify that too for the record. So you had not seen the practice of PG&E attempting to reach but not actually reaching an excavator three times before renegotiating a new start time on a given ticket?

A I believe your question was: Have I personally witnessed a locator --

Q Mm-hmm?

A -- attempting to reach a contractor three times and then closing out a ticket? My answer was no. That -- I never personally witnessed that.

Q Maybe -- so maybe it is a slight change to the question to your point. Have you seen the practice in PG&E attempting to reach but not actually reaching an excavator three times before renegotiating a new start time on that ticket. Let me ask it that way and ask for your answer.

A Sure. So there was never a number. Our practice is -- we call until we can't contact anybody. If we can't contact anybody, we try to get out to the site. And note, I said "try" because there is times where street closures and things occur and you just can't get out there. There's no work to be done out there, but our practice is to secure contact -- positive contact with the contractor every single time. That's what I know, our known practice. That's what I taught, and that's what I coach.

Q So you haven't seen any practice of trying to reach but not actually reaching an excavator three times before renegotiating a new start time?

A That was not a common practice while I was there. Had it happened in all of PG&E, if that's what your question is, I have no personal knowledge that that was something that occurred within PG&E outside of my time in compliance.

Q I'm going to drill down a little bit here. When you say "not a common practice," I want to be sure that you have seen the practice then?

A I have not seen the practice. I've seen it brought up in QA reports. That would come up as a finding in a QA or a sort of item of interest, but I wouldn't call that a practice, a common practice or something that was always done by every single locator under my charge.

Q How often had you seen that

information reported of instances like what we've just asked you about?

A Periodically -- I can't say it was on a regular monthly basis. I can say every now and again that would probably come up, but it's not something that was -- I felt was a -- was problematic for our team.

Q Why is that?

A Because I didn't see -- it wasn't a systemic issue. It wasn't something that every region -- every division that I was seeing that come up, whether it's in the QA work or the work that the supervisor was doing, going behind locators doing QC behind their work. That wasn't something that surfaced itself in our dashboards. So that's why my position is and continues to be that's not something that I saw happen on a regular occurring basis.

Q If you were to estimate approximately how many times you saw it happen, what would be your estimation?

A I couldn't give you an estimate. I could -- on a monthly report -- yeah, that's just -- I would be just guessing.

Q Just for context, I mean, are we talking maybe a handful of times or dozens of times or hundreds of times? What's the -- in the ballpark?

A Contextual, I would have a handful of times. It wasn't dozens and it wasn't hundreds, but it was some -- you know, again, we were churning through a lot of different locators. I'm sure there was some of that that went on.

Q Have you seen or heard of PG&E leaving a voicemail for an excavator on a ticket?

A Yes.

Q Did you instruct anyone to leave a voicemail for excavators who called in tickets?

A No.

Q What was your reaction when you heard of PG&E leaving a voicemail for an excavator on a ticket?

A I don't understand the question. When you say "reaction," reaction to the individual? Reaction to the report? Be more specific.

Q What did you do when you learned of PG&E leaving a voicemail for an excavator on a ticket? And did you take any actions in response to that from a management point of view in order to address that?

A If I felt that it was becoming more

habitual, meaning 10 out of 100 tickets, 30 out of 100 tickets, we're all leaving a bunch of voicemails instead of making personal contacts, that would be a trend, a data point that I would want to explore. I probably would have engaged a supervisor, asked their input, "Hey, do you know what's going on?" More importantly, I would have worked with that superintendent to put more boots on the ground from a QC perspective to make sure that there are -- our practices -- work practices and procedures are being followed and wherever possible we are making personal contact with the excavator. There are times where voicemails have to be left. I understand that, but it should not be a regular practice on our part.

Q Did you observe anyone working for PG&E who reestablished a start time on a ticket without first receiving agreement from the contractor who created that ticket?

A I have not personally seen that, no.

Q Did you hear of that?

A I've not -- no, I didn't hear of that either. No.

Q So you did not instruct anyone to reestablish a start time on a ticket without first receiving agreement from the contractor who created that ticket?

A No.

Q Had any PG&E employees communicated with you that locators were falsifying tickets by renegotiating a start time on a ticket without first receiving agreement from the excavator to do so?

A No.

Q Had anyone working for PG&E communicated with you that locators were falsifying tickets by renegotiating the start time on a ticket without first receiving agreement from the excavator to do so?

A There was an occasion or two where the QA group came in and made an observation that they thought a couple locators may be trying to beat the system a bit and extending tickets to make sure that those tickets don't go passed the 48 hours. I can't think of a handful or 10 or 25 of those occasions, but I do remember a couple occasions where that allegation was made that then was investigated by the supervisor and the superintendent.

It was also then went back over and reviewed by the QA department, and we took -- we took the necessary action. I don't have a specific instance or occurrence that I can recall right now. But I know we were pretty good at following through and following up on items that we felt merited it.

Q Yeah. So you mentioned -- I think just now, just to clarify, the PG&E people who communicated with you were from the QA team in this case?

A Relative to our people falsifying documents or allegations of falsification?

Q Yes.

A Typically it would be the QA team that would find that in their reviews if they have a question about that or it would be an allegation that a supervisor in their QC reviews of the work that they would find. And that's how it would become elevated to me. I wasn't specifically out looking for this with locators. Again, there's a few layers beneath me where those folks were the ones really charged with ferreting out any of that kind of behavior.

Q Which individuals communicated with you -- I think you mentioned alleged. I'll say it the same way -- alleged falsification of tickets?

A I don't remember the exact person. Like I said, I'm pointing to QA and QA reports or QA reviews. I do recall on a couple of occasions that came up, and my team addressed it. I don't remember the specific incident, but I know there was a couple of occasions where a little bit of that came up.

Q Were the allegations factually based?

A As it relates to what QA said, in their minds, it was. I don't have the investigation report or the report of what sort of happened in investigating that. So I can't tell you did it all shake out to be factual, but at that moment, QA at that time they felt very strongly that that probably was what was a direct result of what they found.

Q Was there a particular time that you recall regarding -- it sounds like -- I think I'm hearing that there was a particular point in time where you remember QA presenting the alleged falsification.

Can you recall the approximate time when that happened?

A No. I'm not putting forth a particular time. What I'm suggesting is in general, roughly, I'm sure there were a couple, two, three occasions where those allegations came about. What I'm advising you about my response and my actions, I think that's where you were going with the earlier question was, is to investigate that fully, find out what factually happened and then address it in a -- weather it's in a union positive discipline perspective and PD'g the employee or if it's a supervisor, you know, going through a discussion regarding what the supervisor's actions were.

Q So I wanted to step back for these three -- the several incidents. And you are right. I was asking about the investigation. That's exactly what I was asking. But I'm going to switch a little bit in the questions on this. So the times that we were -- that I was asking about -- let me back up.

There were several incidents where you recall that -- the identification of falsified documents?

A No. I didn't say several. I said two or three.

Q Two or three?

A A couple during my tenure of three-and-a-half, four years there.

Q Better said. I'll try to be precise with my wording because I appreciate -- I'll try and capture what you're saying correctly. So I appreciate your correction.

So there were two or three, several instances where you had heard about an alleged falsification of late tickets or alleged falsification of tickets so that they would not become late. Am I capturing that right?

A No. What I'm trying to put forth is there were a couple of occasions where there were allegations that an employee may have extended a ticket without making positive contact personally as per the -- within the 48 hours. I do recall two or three instances out of the millions of tickets that we reviewed where that allegation came up.

And like everything else, their allegations, we investigate them, and I don't have the report in front of me. I don't know what the findings were. But certainly you have access to that, and you can determine where that ended up.

Q I'm concerned we don't. And let me be specific. Perhaps you can help us understand in which instance -- how would we identify the investigations that occurred where there were falsified -- alleged falsified -- excuse me -- alleged falsified tickets?

A So your question -- your line of questioning leads me to think that there's some QA report or some document that you've already reviewed that connotates that someplace or notates that someplace. My position is -- because I felt like your question was has that ever happened, and in my mind, there were a couple, two, three occasions in the four years that I've been there. Do I have specifics on that? I really don't. It was a long time ago. Do I know specific reports that was done on that? No.

But did we have protocols to investigate? Absolutely. And those protocols should have generated a report. That said, here are the findings. QA would have been a part of that. And so Ms. Burrows would be the appropriate person -- if you haven't spoken to her, she would be the appropriate person to get that information from.

Q Okay. Can you talk more about the procedure that was followed in order to address the falsified tickets?

A Sure. So if we have an allegation of that, we first -- the first step is for us to contact the supervisor. And by "we," it's the superintendent. The superintendent's charged with managing a group. That superintendent would contact that supervisor, "Hey, here's what we're hearing. Hey, let's set some time up and review sort of a history, and I'll do a sample size of review and let's sort of figure out what happened, if there's any fact to this or if there's any legs to what this allegation is. Could be the particular employee may have skipped a step and may have not wanted to share that step. Could be the employee either missed a step and just outright missed it. We really don't know until an investigation is done.

That superintendent, supervisor will work through that investigation, and then that information is shared with the employee that the allegation is made against, again, not in a punitive way because we don't know if their motives or intent is to try to defraud but more about, "Hey, did you know you may have missed this step? And here's the damage prevention handbook or work procedure that outlines and prescribes exactly what it is that you missed."

So we would go through that, and then we would pay attention to are we seeing this from a trending perspective by that same employee. If we do see a trend, then we then start to address that particular employees' performance. We ask for -- they ask for things like training records, training performance, tool calibration records.

We then look at, again, another sample size of his work. Did he come from an outside area? Who was his mentor and trainer? We balance all of that. And if we feel like the employee can be trained to do it properly, we then retrain them. We send them through a retraining. Sometimes we pull them out of the field and send them back to school. That's an extreme case. Very extreme cases we don't let them do any more Locate and Mark. I don't know if that's happened in my tenure, but that's a very extreme case where we just -- you know what? You can't do that until you can satisfy our thinking around your capabilities in executing this particular work.

So it's a pretty exhaustive investigation. But it's something that's really done at the supervisor, superintendent level. What gets shared with me is the outcome. So I get the outcome. Here's what we found. Here's what's real. Here's what's not. And here's what we're doing about it to prevent it from happening again.

Q As part of the outcome that gets shared with you, would the -- whether the alleged falsification was, in fact -- in fact, a falsification?

A Correct.

Q And did you find that some of the alleged falsifications were, in fact, falsifications as part of those outcomes?

A No. Not the ones -- I don't recall many of them, but the couple that I saw, they were honest mistakes that an employee may have made or omitted a step and not wanting to call themselves out, didn't report anything or didn't say that, "Hey, I made that error" and it came up in a QA review or QC review process. That's why we have those things in place.

In my time, Darryl, I have not felt like there were nefarious motives by any of the employees under our charge. I felt like -- again, could be wrong if records suggest different. These guys really wanted to try to do it right. And they work really hard at doing it right. Were there times where they have made mistakes? I think so. I think what we needed to do -- our focus was creating an environment where they felt okay with sharing what mistake you made so that we can fix it going forward. Because we can't fix what we don't know, and that was a lot of what I tried to bring to the team. If you don't tell us what's broken, there's really very little we can do to help.

Q Let's go back to the discussion about how it comes. In each instance where there was an alleged falsified ticket, would you receive the outcome from the investigation?

A Verbally, yes. I think record-wise what was documented usually stayed at the supervisor level. Just as far as the outcome and corrective actions that were taken, the supervisor would then manage and address that.

Q Would you receive some of the outcomes in writing?

A Not unless it was an outcome or investigation driven by QA or regulatory affairs by a request coming from you. I would most likely receive those sorts of outcomes about what was actually found.

Q Okay. Most likely receive the sorts of outcomes about what was found. So I think I'm hearing that when there was an alleged falsification you would get a verbal report in all instances from your superintendents, and the superintendents would receive the written outcome?

A They would either be a part of the written outcome or they would be informed verbally by the supervisor as to what actions they took. Again, this is more about correcting a behavior and less about finding guilt or fault necessarily, because I think when you take that approach you end up driving people underground. And they don't want to really report what's really happening on the ground.

The struggles that we've seen -- let me back up. We also encourage the use of our compliance and ethics hotline. So employees that feel there are something amiss and they are not being heard either by me or by their leadership team, they are -- call the compliance and ethics hotline, which has a separate investigation that would go on. I would typically not see that especially if it's made by an employee outside of my organization. That would be driven by our compliance and ethics team, outside counsel, the whole investigative chain.

Q Okay. Would you see the results of

an investigation that resulted from a report to the ethics hotline?

A If it involved an employee of mine doing something wrong and it was found, again, typically, I would receive that finalized report. My supervisor would receive it, then I would receive it. Yes.

Q Did you receive any such reports?

A To my recollection, no. If there are reports that are generated, I don't have a specific recollection I received a specific report on one of my employees purposely falsifying Locate and Mark records.

Q Let me just take out the word "purposely." What about any falsification, whether it was purposeful or accidental? Did you receive any such reports of any sort of falsification records from the ethics hotline?

A As I sit here today, I don't have any recollection of receiving any report on any allegations of falsifying records.

Q Is -- do you know if the ethics hotline has any sort of log or list that identifies the reports that come into it?

A I do not know that. Julie Kane is our chief compliance Ethics and Compliance officer. She would have the protocol on that or a member of her team.

Q I know I'll get asked this if I don't ask it now. How do you spell Julie Kane's name?

A J-U-L-I-E. Kane is K-A-N-E.

Q I want to unpack a term that I think we've used without actually defining and see if I have it right. Renegotiating a start time on a ticket, what does that term mean to you?

A Renegotiating a start time is making contact with a contractor and coming to an agreed upon start time that may be different than what he initially -- he or she initially called in to USA.

Q So when we've used that term throughout this examination under oath, that is your understanding of what that term means, right?

A That is correct.]

Q Thank you. Were there any PG&E tickets that would have become late if not for the practice of renegotiating a start time without first receiving agreement from the contractor who called in the ticket?

A Not that I am aware of.

Q Okay. Did you receive any communications about that?

A To my knowledge, no.

Q Had you ever observed the practice of altering the start time on a ticket without notification to the excavator?

A I have never personally observed anyone altering a ticket without notifying the contractor first.

Q Have you heard of that practice from any -- excuse me. Had you heard of that practice from any of your staff in your role as Director?

A No.

Q The investigations that resulted from falsification or alleged falsification of tickets, what would those investigations be called?

A Investigations.

Q Okay. I'm asking because if we wanted to flag that in a data request to PG&E, I'm trying to get at what term we would use so they would know what we are referring to. How can we ask a data request that flags that term so that we're understood by PG&E?

A Typically the investigations were headed or titled with the employee name. So if you have a specific employee's name, I would imagine that would be a flag where we could -- you could probably look that up. We didn't have a tin-plated, photocopied investigation sheet. Typically the investigations involved, as I stated earlier, lists the questions and reviews and coaching and things like that. But there was no formal document that we submitted or we tracked or we filled out.

Q Okay. What if we didn't have an employee's name but wanted to ask generally for investigations into allegedly falsified late tickets? How would we ask for that?

A I don't know if you -- I'm not sure. What I can share with you is that if there is a specific region, area division where you feel like there perhaps may be this allegation, there were very specific supervisors, managers assigned, employees assigned. I would imagine that would be the best way for you to really get at the information you're looking for.

Q Okay. And how about the outcomes of the investigations? How would we identify that in a request to PG&E so that the company would understand what we were asking for?

A It would really just be their performance evaluations or investigations relative to certain employees. Union employees typically have what's called log sheets where we would go through a coaching and counseling discussion as to formalized document because of the contractual obligation we have around positive discipline we would use with them. Management employees is a little bit different. Typically it's documented either through an e-mail or documented just verbally and a discussion that you would have with an employee relative to performance around or an investigation of outcome.

MR. GRUEN: Let's go off the record just a second.

(Off the record.)

MR. GRUEN: All right. Back on the record.

Q Which employees -- do you recall which employees were associated with the alleged falsification of late tickets?

A No. By name, I'm assuming you mean. No.

Q Is there another way we could identify them?

A To my knowledge, no. There are employees who have moved on, some out of PG&E, some in different positions in PG&E. So unless there is a report, if you have a specific allegation that the team can -- you research to sort of locate that employee, I don't know what else we could do.

Q What about supervisors or superintendents under whom the employees worked? Are there particular superintendents or supervisors who you recall who oversaw the employees who were responsible for the alleged falsification of late tickets?

A No, not to my knowledge. We've had probably four different superintendents, a myriad of 25, 30 different supervisors. I don't have a specific recollection on a specific area or territory assigned on this alleged misbehavior so it would be hard for me to pinpoint it. But there is Jeff Carroll. Jeff Carroll was one of my original superintendents. And then there was a Katherin Mack. She used to be a superintendent there. Perhaps they may have a clearer insight into that question. They were a bit closer to it than I was. Or I would say Donnie Jue, because Donnie Jue also did a lot of the investigations from a compliance and ethics perspective on behalf of Gas Operation.

Q Understood. Thank you.

A Donnie Jue is J-u-e.

Q Okay. I want to ask you a little

bit about the term phasing in the context of tickets. Are you familiar with the term phasing?

A Yes.

Q What does that term mean to you?

A Phasing is when you get a ticket that represents multi blocks or multi different sites in a multiple-block area.

Q And that's in the context of locating and marking, right?

A That's correct.

Q Okay. What are the reasons a ticket would need to be phased?

A The primary reason is the contractor's not going to start on the entire six-block area, for example. They're going to start at a specific portion of the ticket and they really would like to have us locate and mark that particular area first. As I said earlier, there could be transmission, gas and electric, distribution gas and electric, as well as fiber. It could be quite a large number of assets that we would need to locate and we could not do that entire six-block period of time within a 48-hour window. So usually we work with the contractor and say, "We want to go at your pace and we'll mark or we'll locate and mark all of the facilities to stay ahead of you so as to not slow your job down."

Q Thank you. What's the -- is there a threshold or a trigger by which someone decides that the project -- excuse me. Strike it. Is there a threshold or a trigger by which someone decides that a ticket needs to be phased?

A The only threshold, to my knowledge, is the locator's discussion with the contractor that would indicate they would like to start at a specific area of the ticket and they run into a problem. Let's say they find some infrastructure that should not have been there and that extends the time that they're going to spend on that one area where we would have to come back out and refreshen or remark that same area. It could be weeks or months in some cases and we would have to again work with the contractor to make sure we're staying out ahead of them so that we're not slowing their project down, but it's really a locator's call, again in conjunction and discussion with that contractor.

Where we can, we do try to complete the entire ticket, if possible. We typically don't want to phase tickets, but where it's necessary, we absolutely do do that to phase tickets for -- to ensure again that we can be precise in our locate and mark efforts.

Q I think I'm hearing. It's almost a judgment call as to whether to phase a ticket or not?

A I would say that's accurate.

Q Okay. At what point would a ticket be phased in the ticket process?

A Typically it's upon first engagement with the contractor. You walk the job, which is in the Damage Prevention Handbook. You walk the job with the contractor to get an understanding of the work that is going to be going on. You get a visual inspection of all the facilities that's around you and the facilities you're going to be accountable for. You match the visual with the GIS laid maps that we have to make sure you sort of count the number of assets on the map versus what's on the ground and then a decision is made at that time whether or not we could fulfill that entire six-block ticket or he is going to be here for the first 30 days and we'll just focus on this area.

Q Okay. Are there any instances where a ticket was phased after that initial point in time?

A To my knowledge, no, but could there be? I would imagine that could happen. But I have never been made aware that we're phasing tickets after we have had a discussion with the contractor that may be contrary.

Let met back up. I'm assuming your question is that we're phasing tickets contrary to what the contractor is asking us for, to locate. So if I'm incorrect in that assumption, let me know.

Q Yeah. Let me clarify. It's a good point.

Let's assume that we're talking about that PG&E and the contractor or excavator are on the same page about the area that needs to be located and marked. Does that clear up the question?

A Yes.

Q Okay. And then based on having the same understanding of the area to be located and marked, at what point does PG&E -- I think I can cut through some of this. So, everybody is on the same page about the area to be located and marked. And then, do your answers -- with that understanding, would your answers about phasing be the same as what I just asked?

A Could you read back my answer?

(Question read back by reporter.)

MR. DICKSON: It does not change my answer.

MR. GRUEN: Q Great. Okay. Okay. So a decision has been made about whether to phase or not. Assume that we're at that point in the process. And I think I understood that after a decision -- let's say the decision is not to phase. And I think you said that you're not aware of any phasing that has happened later on in that instance; is that right?

A It depends on what you mean by phasing later on. My understanding of your question is: Do we phase things after we have our discussion with the contractor? My answer was no. It's not something that we do. But I want to be clear, the locator can go into the system. They have a tablet and they can phase it at the beginning of a job, in the middle of a job or at the end of the job; phase relative to documenting the agreed-upon sort of time that they're going to phase the ticket over. Do you understand what I'm saying?

Q Not exactly.

A So, it's not -- when they have the initial discussion with the contractor, they don't just drop everything all the time and go to the truck and phase that ticket at that moment. They may enter the information that they're doing at the end of the day. That is my point.

Q Okay.

A I just want to be sure we're clear about that.

Q Thank you. That's helpful. Yeah.

Okay. So they may make a decision at some point through the day, maybe the end of the day about whether to phase or not and if they decide to phase how to phase, correct?

A In conjunction with the contractor on the job site.

Q On the job site. I follow you.

A Yes, sir.

Q Okay. While you were Director of Gas Operations Compliance Programs, were there any non-phased tickets that were decided to not be phased that would have become late if they had not been turned into a phased ticket?

A I'm not personally aware of that, no.

Q And that wasn't ever communicated to you as a practice?

A No.

Q Okay. Are you aware of any locator using -- actually, let me back up.

Are you familiar with the term "inclement weather" as a response used in the context of tickets?

A I'm aware of inclement weather in response to being unable to put paint on the ground because of rain, yes, if that's what you're referring to.

Q It is indeed, yes. That is right. With that understanding in mind, do you know of any locator who used inclement weather as a reason for not putting paint on the ground without reaching out to the excavator as well?

A No. I have no personal knowledge of that.

Q Okay. Are you familiar with the term Bishop Ranch? I think it describes one of the PG&E locations where there were -- well, it's one of the PG&E locations. Are you familiar with that term?

A Yes.

Q Was there a room set up in Bishop Ranch where PG&E employees met in order to address late tickets in 2015 or 2016?

A If I understand your question, a dedicated room where they met?

Q Yes.

A No. There were many rooms that we used to have discussions relative to Locate and Mark work, but was there a dedicated room where we only discuss late tickets? No. There were a bunch of conference rooms just to sort of get you situated, lots of conference rooms all over that building. And Bishop Ranch is two buildings, Building Y and Building Z and there are multi floors.

Q So the multiple rooms, I appreciate that. Were there a number of efforts -- I think I'm just trying to identify a room or maybe I should just use Bishop Ranch for context. Was there an effort to address late tickets at Bishop Ranch, the Bishop Ranch, one of the buildings in 2015 or 2016?

A An effort different than the everyday work we were doing to address it? To my knowledge, no.

Q Okay. Have you heard the term either a war room or a huddle room identified?

A I have heard of both.

Q What do those terms mean to you in

the context of Bishop Ranch?

A Huddle room is simply a conference room where people can meet and talk, not necessarily just my team, but anybody in the building. The war room as a room we set up to go after or target the third-party billing backlog. We called it a war room. It was probably bad terminology. I think that was a previous employee who sort of donned it that, but it's just a conference room where there was a focused effort to bring some clerical staff in to address a huge backlog of damage bills that we had to get out to contractors for billing purposes. There was no war, active war or anything going on in there.

Q I follow and I wasn't going to ask if there was. That wasn't the point of the question. But I appreciate the clarification.

A Okay.

Q Yeah. I understood the term war room is more of a room for meeting or strategizing, if you will.

A Sure. It's a huddle room, conference room, war room. It's a room that people use to meet in. That's the best terminology I can use.

Q Fair enough. And one more time.

Just the purpose of this was for backlog billing was the term you said?

A Reducing the backlog bills for third-party damages; people that damaged our facilities, there was a -- one of the purposes of that room was to sort of collect all the files and folders and pictures and documents to support our claim against a particular contractor that may have damaged our pipes or damaged the coding or something, damage to our facilities. And so we would then -- that room, one of the meetings that was held in there was a third-party billing sort of invoice room, a production room where they were just banging out and tracking what got paid, what got billed. That was one of the purposes of it. It was simply a conference room. They met in another room, another huddle room as well, not necessarily only that particular room.

Q Okay. In terms of backlog bills for third-party damage, that is helpful. Was there a relationship between that effort and the identification of late tickets?

A No. Two totally different things.

Q Okay. So there weren't any third-party damages because a ticket wasn't -- because a ticket was late?

A We wouldn't be meeting about that in that particular room if that was -- if that's where you're going. That is not a dedicated room only to deal with address late tickets. If we were having an investigative discussion, certainly we would meet there or another huddle room, whatever space is open. If there was an issue relative to the dashboard, wanted to review it with the team, we would certainly meet there as well.

Q Okay. So no room -- maybe room is the wrong room, just an effort, a concentrated effort to address late tickets in 2015 or 2016?

A From the moment I got there in 2013, I had a very focused effort to reduce and/or eliminate late tickets. That was a mission that I took on as the Director of the group because that was not being compliant, having a bunch of late tickets. So from the moment I got there to the moment I left, that was a focus of mine. Did I have meetings in many of those huddle rooms relative to that? I absolutely did. Did the team have strategy meetings on that? When I say the team, the managers, supervisors, some of the senior locators? Yeah, probably. We were all very focused on being in compliance with 4216.

That is part and parcel of our responsibility and we took that obligation very seriously.

Q Okay. All right. Let me move on. Thank you for that. I appreciate it.

Are you familiar with the term Super Gas Ops or SGO report?

A There were multiple -- I'm familiar with the term Super Gas Ops. That's an initiative Vince Gaeto, G-a-e-t-o, led on behalf of Jesus Soto, S-o-t-o, our Senior Vice President in, again, looking at how we can be more efficient in doing or work every day, executing our work, doing the right work at the right time with the right resource. So that is what SGO, Super Gas Ops, that is what that effort was focused at.

Q Okay. Was there an SGO report that had -- strike that. Was there a portion of an SGO report that focused on late tickets?

A So, because I was the Director of Compliance, I had my own Tier Huddle Dashboard. That is what it was called. It was called the Compliance Tier 3 Dashboard. Late tickets was a component of the dashboard that was put together for Locate and Mark and standby. I had one for corrosion control as well. So, late tickets was a component of that, along with many of the other metrics that we have already discussed today. There was a resource mix, contractor mix on there. There was quality QA scores. There were a bunch of different metrics that were part and parcel of that Tier 3 huddle board. And just to be clear, there is a Tier 2, which is for the managers, which is Jeff Carroll probably had, and a Tier 1 which is for the supervisors. They may have used a subset of mine or a different one of mine, but it's all the same thing. It's all tracking all the same information.

Q And I think I heard this, but Tier 3 -- so Tier 3 is the largest huddle board that would look at the realm of issues you talked about. Tier 2 would be a subset of Tier 3?

A I wouldn't say it's the largest because you have Tier 4, which is the officer dashboard and they look at the entire T&D Operations business. Mine is Tier 3. I will probably have a number of them. But Jeff and the other superintendent, they can just use mine and more than likely they probably did instead of creating their own. And then the supervisors probably used a subset of that or they used that. I can't tell you specifically what was in the Tier 1 or Tier 2 because I never really saw it. I only looked at the Tier 3 dashboard.

Q I follow. Okay. So, and can you describe the relationship between the Tier 3 dashboard and the SGO report?

A They're one in the same, if I'm not mistaken.

Q Uh-huh.

A Vince Gaeto had a dashboard similar to mine. I fed into the SGO dashboard, if I'm talking about the report that you're referring to because there are different names for it. But Jesus saw probably a huge SGO report of all of the work streams of all of the initiatives that Vince Gaeto put together on Jesus' behalf. I was only a part of what probably this SGO report that you're talking about. I was only a part of probably that report.]

Q Mm-hmm. What were the findings of the SGO report relative to locating and marking?

A It's a weekly report. Those findings probably changed every day and every week. I haven't seen the report in probably several months. So I don't know what the findings were at any specific moment in time. I don't have a specific recollection. It's just, again, another opportunity for us to gain some transparency and visibility into how our business was operating.

Q I follow. Okay. I missed -- I think you may have identified it. I missed that this is a weekly report rather than just one.

A That's correct.

Q I follow that. Okay. Who presented the SGO report to you?

A So I presented to my supervisor in Tier 4. The managers presented it to me in my Tier 3 and so on. The supervisors presented it to their managers in their Tier 2 or Tier 1 huddles.

Q Did any of the weekly SGO reports identify the need for additional manpower to get work done related to locating and marking?

A I'm sure some reports reflected that.

Q Do you recall any of them?

A Specifically, no. I don't recall a specific weekly report over a two-year period that said that, but I'm sure some report said that. Because, again, remember our volume changed over the time. And depending on the snapshot that report is taking, you may have a gap in resources relative to the volume of tickets that you're seeing. So that would not be unusual.

Q Do you recall in other settings the identification of the need for additional manpower to get work done related to locating and marking?

A Resources in manpower were things that we talked about pretty much weekly. So it wouldn't be unusual for us to have that discussion in a Tier 3 or Tier 2 huddle. It wouldn't be unusual for us to have it on a non-tier report day to have that discussion, again, because the resources fluctuated so dramatically.

MR. GRUEN: Can we go off the record for a second.

(Off the record.)

MR. GRUEN: Q Back on the record.

I want to just ask a little bit about -- I'm just going to tag it as a war room. I know that may not be the best terminology but just to flag what we were talking about before -- you recall our conversation around that term, right?

A Yes. The war room as a conference room or huddle room?

Q Conference room or huddle room.

Exactly. I only flag that term to just clarify if there was any sort of special event that was planned during your tenure out of the ordinary to address late tickets.

A To my knowledge, no. Because we dealt with late tickets, or we worked on late tickets every day. It wasn't a special event, special meeting that was called. Relative to that room you talked about, it only seats four people. So it's not a large room. It's -- I guess where I want you to have an appreciation for the size -- it's half the size of this room. And so that's just to give you an appreciation of -- there's no special meetings that could occur in there.

Q Yeah. Okay. Now that we're on the same page about the war room, let's take it out of the question. So anywhere was there a special event that occurred during your tenure -- something out of the ordinary with the idea of addressing late tickets?

A No. No special meeting. No special gathering. Every week we talked about this. So were there meetings where we had discussions in multiple conference rooms at Bishop Ranch? There absolutely was. But I wouldn't call it or signify anything as being more special than the other. It's a daily grind for us to get in front of keeping tickets from going late. So every day we did have a discussion around it either by phone or in a meeting.

Q Understood. Let me go back and clarify. I thought a little bit more about it, and I wanted to clarify about the falsification of tickets. And we've used the term "alleged." I just tried to understand what that means. So who would have alleged that there was a falsification of late tickets?

A Relative to what we discussed earlier, it would have to be someone from the QA team is what I would imagine you're speaking of unless you have some different information. Those are the people who are looking at our records. Those are the people who are monitoring what we do. They have the field folks. I think they have a small group of field QA kind of people that physically go out and do field checks and field validation on sort of the locate and mark work and some of our workers, so, again, Jennifer Burrows and their team. My assumption is that's who you're referring to.

Q I'm trying to understand what the

basis would have been, factual or otherwise, for alleging that late tickets or that tickets, in general, were falsified. So was a basis -- or a basis for alleging that tickets were falsified shared with you?

A I don't understand the question.

Q Why -- I think I'm trying to get at why the tickets were allegedly falsified and not falsified?

A I think what -- again, this is just my perspective. I think QA's job is to find anomalies, to find discrepancies, to find things that don't look right or appear to follow the protocols as they are prescribed in our work procedure and by code. And so when they find those, they have to evaluate on their own, through their own training their own skill set whether or not, hey, was that an accident? Does it look like the guy, in conjunction with the field evaluations that we're doing, this person may have sort of falsified a document? Again, I'm assuming that's what you're referring to. And that would be the situation that would come up, at least in my mind, as to sort of how an allegation or an accusation would probably be made or could be made.

Q Okay. Okay. All right. What if

we told you that we understood that someone had communicated with you voicing their concerns about PG&E as a safe company? Would that appear accurate to you?

A There was one person who made that statement once to me, and he's no longer an employee with the company.

Q Who made the statement to you?

A It was David Appelbaum.

Q And what did he say?

A He said he didn't feel like we were a safe company because we combined both damage prevention, the DIRT team, Locate and Mark all in one organization under one leader. Specifically, he didn't like his team being folded under me, which was an organizational change that occurred. He disagreed with it. He shared that perspective with myself. And the feedback that I remember giving David was very specific around, "Hey, I think this is the right thing to do, having all moving parts of our full, entire damage division program under one roof, one mission, one vision, one set of leaders moving in the same direction. To me, that's a good place to be."

So we just disagreed, but he was very steadfast with believing what he believed. He's got every right to believe what he wanted but doesn't make it right because that's his opinion.

Q What was your response? What did you say to him in response to what he told you in voicing his opinion about the safety --

A Exactly what I just told you.

Q Okay. Let me -- just for the record, let me just get the question out, and then -- I think I hear your answer -- but just so we're on the same page.

So your response to David Appelbaum when he voiced his opinion about the safety of PG&E was that he's entitled to his opinion but there should be one leadership and one vision? And I think there was more, but did I get that part right?

A No.

Q Okay. Please.

A Okay.

Q Please -- you're the one who knows this. So what was the conversation, if you don't mind repeating it --

A I don't. So my conversation with David Appelbaum was he expressed to me he did not feel like it was a good idea to put Locate and Mark and the DIRT team -- the public awareness team, the third-party billing team, public safety team all under one organization. He felt as though there needed to be some distance between Locate and Mark and his DIRT investigators. At the time, they reported to him.

His rationale was really thinking about, "Hey, our job is to go find you doing things wrong. Our job is to go and find you guilty or liable of not following procedures." And I shared with David, "That's not what your job is. Your job is to coach, teach and mentor." When we see mistakes, our job isn't to hammer people over the head. Your job both internally and externally is to be the educator of what 811 is, what safe excavation is. Our job is to outreach, teach, train and mentor. Our job is not to be the cops. We're not supposed to be running around with lights and sirens and pulling badges on people.

So it was a five-minute discussion. But I said, "You're entitled to your opinion. I know you feel this way, but that decision has been made. I am here. You are part of this team, and I expect us to move as one organization under one vision, which is to go coach, teach and mentor both internally and externally." And that's what I recall of that conversation.

Q Okay. And you mention that David Appelbaum is no longer with the company. Can you elaborate on that? What happened?

A David was terminated, I believe, a year or so ago. I don't know exactly when, but he was relieved of his duties a year or so ago.

Q Okay. Why was he relieved of his duties?

A I'd be way more comfortable you asking the law department that, because it's a personnel issue, decision as a management team we made. And so I'm not really comfortable providing you with any specifics around his separation.

Q Okay. Let's get a couple of questions on the record. If that's your answer, I understand, but I want to have the record reflect what this is -- what the questions are.

Did -- were you part of the decision to relieve David Appelbaum of his duties?

A I was part of a conversation with my supervisor on would I support separating David Appelbaum from the company for the specific actions or behaviors that we had seen, yes.

Q And did you support the act of terminating David?

A Yes, I supported that.

Q Who made the decision to terminate David Appelbaum?

A That was a decision made by myself, Jon Higgins, Jesus Soto, S-O-T-O. Higgins, H-I-G-G-I-N-S.

Q Did the decision to relieve David Appelbaum of his duties have anything to do with his views about the safety of PG&E?

A None whatsoever. Not one iota did that decision play into, or his discussion or his opinion, into our decision to move in a different direction with David.

Q What if someone -- strike that.

Have you been involved in decisions to terminate employees before?

A Yes. I have.

Q And PG&E has a procedure by which to follow in order to terminate employees?

A Yes. We do.

Q And is there a difference between terminating an employee and laying them off?

A I'm not an HR specialist, but yeah, I think their -- no. Well, I can't answer the question. I'm not an HR professional, so I don't -- I can't answer it.

Q I hear you. Have you laid off PG&E employees before?

A No. I've only put them -- I've terminated and I've placed employees in a 45-day pool to allow them to find another job. I don't know if we call that -- if that's what you're referring to as laying off.

Q What's that term called? Putting them into -- maybe that's the term that's used -- is the putting them into a 45 --

A A redeployment pool.

Q A redeployment pool. And what happens after the 45-day period?

A Their job has either been eliminated or we reorganized the department to where their job has become unnecessary. And after that 45-day pool, they are -- if they don't find a job within PG&E, then they are severed from the company, in essence. But, again, you need to talk with our HR folks to get the specifics behind how all that works. I am not a professional when it comes to that.

Q Okay. Having terminated employees before, what are the steps in the PG&E

procedure to follow in order to terminate someone?

A There is a procedure. I don't have it in front of me. So I'd be way more comfortable if you allow me to get that or secure that on your own, and I'm happy to walk you through it. But it's pretty prescriptive, people you need to speak to and sort of documentation you have to have, but I don't have it in front of me. So it's hard for me to give you the full context.

Q That's a reasonable answer. I appreciate that. I can imagine it's a fairly detailed manual and procedure that's prescribed.

In the case of David Appelbaum, was the termination procedure followed prior to his termination?

A To my knowledge, absolutely. Again, I'd reference you to our HR and legal department to make that judgment on your own.

Q Okay. All right. Did you communicate with the HR department about the procedures in order to terminate David Appelbaum?

A When you say "communicate to the HR department," can you tell me -- rephrase that question.

Q Did you speak to anyone in HR about the termination of David Appelbaum?

A Yes.

Q Who did you speak to?

A Well, there were a number of folks involved, but primarily it was Terri Winnie, W-I-N-N-I-E. Terri with an I. And she was the HR Director supporting Gas Business Operations.

Q Thank you. Have any other employees, to your knowledge -- this is in your role as Director -- any other employees identified safety concerns to you during your time as Director?

A Could you be more specific related to safety -- safety concerns. What are you referring to?

Q Regarding locating and mark issues?

A Safety issues? No. Vehicle issues, driving issues, weather issues related to safety? Of course. I'm the department head, and I hear lots of that. But relative to what we do from a Locate and Mark execution perspective, safety concerns or safety issues about our work product? No.

Q Why did David Appelbaum voice his opinion about the safety of PG&E to you?

A You'd have to ask David Appelbaum.

I don't know.

Q He didn't explain to you why?

A No. This is during the time where we were -- I was meeting with all the new employees. So this was during a conversation where I'm welcoming him to the group and welcome to the leadership team. He shared his opinion about what he felt about the organizational change.

Q He volunteered it?

A Yes.

Q Did anyone tell you prior to his volunteering his opinion that he had an opinion regarding the concerns -- safety concerns with PG&E?

A No. There was nothing specific. There was always rumors because David Appelbaum also shared with me he felt like he -- he didn't want to be part of the team, but he also asked me to consider making him a senior manager and putting Locate and Mark underneath him along with DIRT. So it seems on the one hand, he didn't like when it was all reporting to me, but if I made him a senior manager, he was perfectly fine with it -- with having Locate and Mark and the dig-in reduction team report in the organization.

So I find that a little odd. It was a little inconsistent, at least in my mind, from a values perspective, an integrity and character perspective. So I was a bit troubled by that, and I shared that with him.

Q Was anyone else present when David had voiced his concerns about the safety of PG&E to you?

A With me? No. Just David and I.

Q Just you and David?

A Yes.

Q Okay. I follow. After David told you about his safety concerns with the company, did you share that conversation with anyone else?

A The specific conversation? No, I don't believe I did. I know we had a performance discussion relative to David. I spoke with [redacted], who was the [redacted] [redacted]. Because we were going through calibrations and performance ranking and managing. So I remember speaking to [redacted] about some of the concerns I had, but it was not specific to that statement of his -- it was part and parcel of sort of what I'm seeing with David from a leadership perspective and some of the gaps and opportunities that I thought perhaps we may need to point out so that he can work on those. But there was no -- I didn't go to anybody right after he made that statement and say, "Hey, this is what this guy told me."

Q I think you gave some context of the question -- of the statement, but I want to be sure I understand it fully. What was the context of the meeting that you and David had where he voiced the safety concerns of PG&E?]

A It was, again, any time I take a new team over, I always want to meet with the group. I meet with everybody individually. And, again, hear what their concerns are, share with them my perspective directionally where we're going, try to answer questions, sort of quell some of the concern people typically have with change because everybody handles change very differently. It was simply us, the two of us sitting down talking in a conference room, not a war room, but just at little conference room, outer room. I think the conversation was 15 or 20 minutes, but it was my opportunity to sort of share with David expectations about where we're going, you know, why I felt it was a good idea for the decision to be made to bring everything under the compliance program's umbrella and where I felt he was going to be of the biggest usefulness to us.

So it was just a context setting, expectation setting, 20-minute discussion. That's it.

Q Was this one of your first meetings with David?

A Yes. Since he reported to me, it was one of my first meetings with him.

Q Okay. Do you remember approximately the date?

A No. No, I don't. It was within the first month of us working together, with him reporting to me.

Q How long was it in your estimation between when you had that conversation and when David Appelbaum was terminated?

A I couldn't -- I would say several months for sure.

MR. GRUEN: Let's go off the record for a moment.

(Off the record.)

MR. GRUEN: Okay. Back on the record.

Mr. Dickson, thank you very much for your time and your insights today. We appreciate you taking time to be here. We know you're required to be here, but we still very much appreciate your willingness to answer our -- almost all of our questions. And so to the extent that there are questions that could not be answered, like the personnel one, today we'll clarify that. If we need to ask you back, we may do that for further clarification, but at this point, I think for the day, for purposes of today, we have what we needed to get. Thank you very much for your time and insight.

MR. DICKSON: You're welcome.

MR. GRUEN: Off the record.

(Off the record.)

(Whereupon, at the hour of 3:04 p.m., this matter having been concluded the EUO then adjourned.)

* * * * *

BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE
STATE OF CALIFORNIA

IN THE MATTER OF THE INVESTIGATION PERTAINING TO PG&E'S POLE MAINTENANCE PRACTICES.)

CERTIFICATION OF TRANSCRIPT OF PROCEEDING

I, Doris Huaman, Certified Shorthand Reporter No. 10538, in and for the State of California do hereby certify:

That, prior to being examined, JOEL DICKSON, the witness named in the foregoing examination under oath, was by me duly sworn to testify the truth, the whole truth, and nothing but the truth;

That said examination under oath was taken by subpoena at the time and place therein set forth;

And that the pages of this transcript reported by me comprise a full, true and correct transcript of the testimony given by the witness on November 7, 2017.

I further certify that I have no interest in the events of the matter or the outcome of the proceeding.

EXECUTED this 7th day of November, 2018.

____
Doris Huaman
CSR No. 10538

BEFORE THE PUBLIC UTILITIES COMMISSION

OF THE

STATE OF CALIFORNIA

IN THE MATTER OF THE INVESTIGATION)
PERTAINING TO PG&E'S POLE)
MAINTENANCE PRACTICES.)

CERTIFICATION OF TRANSCRIPT OF PROCEEDING

I, Carol A. Mendez, Certified Shorthand Reporter No. 4330, in and for the State of California do hereby certify:

That, prior to being examined, JOEL DICKSON, the witness named in the foregoing examination under oath, was by me duly sworn to testify the truth, the whole truth, and nothing but the truth;

That said examination under oath was taken by subpoena at the time and place therein set forth;

And that the pages of this transcript reported by me comprise a full, true and correct transcript of the testimony given by the witness on November 7, 2018.

I further certify that I have no interest in the events of the matter or the outcome of the proceeding.

EXECUTED this 7th day of November, 2018.

____
Carol A. Mendez
CSR No. 4330

ATTACHMENT 34

Exhibit: 9
CPUC Proceeding: EUO
Witness: Jesus Soto
Date: March 1, 2018

Karly Powers, CSR No. 13991
Reporting Section, California Public Utilities Commission

From:	Carroll, Jeffery
To:	Burrows, Jennifer
CC:	Abercrombie, Shonda
Sent:	12/20/2016 8:41:15 AM
Subject:	Re: L&M late tix

Jennifer:

Thanks for the call. I just talked to Joel and he is good. He is concerned that Vince and his slides did not portray it properly.

Thanks for the quick response -- feel better.

Jeff
Sent from my iPhone

> On Dec 20, 2016, at 8:21 AM, Carroll, Jeffery <JLC5@pge.com> wrote:
>
> Jennifer:
>
> Just got this text from Joel:
>
> I'm w Vince and he's sharing in rcc we have 36 late tix QA found that we aren't tracking? Please contact jenifer burrows and figure out what happened. If the moss is in our data collection or we simply missed reporting these tix. I don't have to tell u 2 this is a high priority item in rcc
>
>
> Can you please enlighten us?
>
> Jeff
> Sent from my iPhone

ATTACHMENT 35

BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE
STATE OF CALIFORNIA

PRE-FORMAL INQUIRY INTO PG&E'S LOCATE AND MARK PRACTICES AND PROCEDURES.

EXAMINATION UNDER OATH OF JESUS SOTO

REPORTER'S TRANSCRIPT
San Francisco, California
March 1, 2018
Pages 1 - 180
Volume - 1

Reported by: Karly Powers, CSR No. 13991
Andrea Ross, CSR No. 7896
Shannon M. Ross, CSR No. 8916

PUBLIC UTILITIES COMMISSION, STATE OF CALIFORNIA
SAN FRANCISCO, CALIFORNIA

BEFORE THE PUBLIC UTILITIES COMMISSION

OF THE
STATE OF CALIFORNIA

PRE-FORMAL INQUIRY INTO PG&E'S
LOCATE AND MARK PRACTICES AND
PROCEDURES.

Appearances:
(Examination Under Oath, March 1, 2018)

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BE IT REMEMBERED THAT, by subpoena, and on Thursday, March 1, 2018, commencing at the hour of 10:00 a.m. thereof, at the offices of the CALIFORNIA PUBLIC UTILITIES COMMISSION, 505 Van Ness Avenue, Room 4300, San Francisco, California 94102, before KARLY N. POWERS, CSR No. 13991, Andrea Ross, CSR No. 7896, and Shannon M. Ross, CSR No. 8916 personally appeared

JESUS SOTO,

called as a witness herein, who, being first duly sworn, was thereupon examined and interrogated as hereinafter set forth.

* * * * *

MR. GRUEN: If we could go on the record, please. And if the court reporters would do the swearing or affirmation, please.

JESUS SOTO, called as a witness, testified as follows:

THE WITNESS: I do.

MR. GRUEN: Great. Thank you.

Let's see. If we could go around the room -- my name is Darryl Gruen, and I am Counsel for the Safety and Enforcement Division of the California Public Utilities Commission.

And if each person in the room could please state their names and titles just as I have done, would you please start?

THE WITNESS: My name is Jesus Soto, Senior Vice President.

MR. VALLEJO: Alejandro Vallejo, V-a-l-l-e-j-o, I am the Senior Director for PG&E, appearing as Counsel for PG&E.

MR. BRUNO: I'm Kenneth Bruno. I'm Program Manager, Safety and Enforcement Division, California Public Utilities Commission.

Mr. CHAN: I'm Wai Yai Chan, Senior Utility Engineer for Safety and Enforcement Division, California public utilities commission.

EXAMINATION

BY MR. GRUEN:

Q Great. And, as I mentioned, I'm Darryl Gruen.

And let me explain a little bit; just as a matter of introduction, about the examination under oath. Let me explain what that is and what we're using it for.

So, an examination under oath is just like a deposition, except that there is no underlying proceeding. But we do not know yet where we're going to go with what we learn from this examination under oath at the moment, but we can use this information later on in any formal proceeding if the Safety Enforcement Division choses to do so.

Mr. Soto, do you understand that?

A I do.

Q Okay. When I ask questions, it is important that you provide truthful and complete answers to them. Please answer my questions directly. And if you have not understood because I have not articulated it well or because I have poorly phrased it, please ask me to repeat it or just say you did not understand the question. Please do not speculate or guess about what the question is.

Do you understand that?

A I do.

Q Okay. And did your Counsel, or did you, receive a subpoena for you to appear today?

A I didn't receive it.

Q Okay.

MR. GRUEN: Mr. Vallejo, do you recall receiving a subpoena?

MR. VALLEJO: Yes, we did.

MR. GRUEN: Okay. And I have a copy here. And I'll show it to you, and I want to check with you and see if this appears to be an accurate copy of what we served upon you.

MR. VALLEJO: Yes, this looks familiar.

MR. GRUEN: It looks familiar? That's great.

Okay. So, with that, I'll hand this to the court reporter as the first exhibit.

(Exhibit No. 1 was marked for identification.)

MR. GRUEN: And regarding the subpoena, just a few words -- background.

Mr. Soto, you're here under compulsion of witness fees. The Safety Enforcement Division of the Commission has a statutory authority to issue the subpoena to compel the attendance of employees to testify and to produce documents as part of our supervisorial authority over utilities, such as PG&E. This means you're not here voluntarily, and the information you provide us is not voluntary. You are answering questions because we are requiring it.

Q Do you understand this?

A I do.

Q Okay. Do you have any questions about what this means?

A I don't.

Q Okay. Has anyone spoken with you about the topics identified in the subpoena today?

A Yes.

Q And regarding these conversations, has anyone talked with you about the examination under oath you are doing today?

A I asked Alex this morning, is this a deposition? Or is this an interview? And Mr. Vallejo informed me this was an examination under oath.

Q Okay. Thank you.

And did he say anything else to you?

MR. VALLEJO: I want to make sure we don't get into privileged communications. Happy to have him answer procedural questions, but not substantive ones.

MR. GRUEN: Okay. Well, I will ask this and see how it goes.

Q Has anyone coached or advised you, generally, about goals to achieve in coming here today?

A No.

Q Okay. Okay.

Mr. Soto, can you please describe your background and experience working for PG&E?

A I joined PG&E on or about May 29th of 2012.

Q Mm-hm.

A I joined the organization as Senior Vice President of Transmission Operations. My role has expanded over time to now be over essentially all of the operating functions within the gas organization.

Q Okay. And could you please highlight your safety experience, as well as experience related to locating and marking during your tenure for PG&E?

A May I expand on before PG&E? Or do you want me to stick to PG&E?

Q Please. If you would like to expand on before PG&E, that would be helpful.

A So, before I joined PG&E, I worked almost 20 years for the El Paso Energy Corporation which was the holding company for a number of interstate pipeline companies -- interstate pipeline, large diameter, high pressure, transmission-type systems. In joining the El Paso organization, I joined as a project engineer, progressed to being a project manager, had the ability to work both domestic and international building pipeline systems and power plants.

In addition, had experience with the company -- El Paso company did a telecommunications -- had a telecommunications company. I was also

Director of Operations for what we called our Southeast Division which was pipeline operations in Mississippi, Alabama, Georgia, and some small laterals that went into South Carolina and Florida. I had the operational responsibility for both employee safety and the safety, reliability, and compliance of our pipeline systems within the Southeast Division. It was Tennessee Gas Pipeline and Southern Natural Gas Company.

Went on to become Chief Engineer for the company, responsible for all of the project execution for El Paso Natural Gas, Southern Natural Gas, Tennessee Gas Pipeline, Colorado Interstate Gas, and for a portion of time, the A & R pipeline system.

Also, went on to become the Vice President of Operations Services. That was the role that I had prior to joining PG&E. As Vice President of Operation Services, I had the responsibility to provide technical support to all of our operating divisions, technical support around pipeline systems, compression systems, storage systems, measurement systems, our compliance programs, our aviation function.

Joined PG&E over Transmission Operations, which was PG&E's business as categorized -- you can categorize it into three components: Transmission, storage, and distribution. When I joined PG&E in 2012, I had the operating responsibility for our transmission and storage systems, all of the project execution.

So in terms of safety experience, on the public -- on the employee safety, as a leader of any of the roles that I've lead, it’s a responsibility to ensure that our employees finish each task injury- and incident-free. So all of the programs are around whether it’s training or ensuring they have the tools to finish their job injury- and incident-free.

Shifting on to public safety -- which is ensuring the integrity of our pipeline systems. At El Paso, probably my most meaningful role was as director of -- as Vice President of Operations Services had the -- one of the programs that we led was to do the risk analysis, risk assessment of our interstate pipeline systems, and also lead the pipeline inspection -- the piggable and pipeline inspection programs.

El Paso Natural Gas had a very similar incident to PG&E in that there was a pipeline that failed near Carlsbad that killed 12 people. And similar to PG&E, that incident was investigated by the NTSB, produced a number of recommendations. One of those outcomes as a result of that incident was the program -- the company, El Paso, made a decision to shift the method of assessment for the El Paso pipeline companies to an inline inspection based method of assessment; so, leading all of the efforts to prioritize our pipeline systems, what was going to be made piggable when. And as part of that, I reported to our Nuclear and Operations Safety Committee within the El Paso organization.

Within PG&E, public safety related, I've lead the efforts to make our systems piggable, install automatic or remote control valves, increase the distribution, the visibility of our system through SCADA, handled leadership for our distribution main replacement programs, lead the efforts to drive technology within the organization, specifically, the Picarro technology for survey equipment, the construction of a new gas control center, the construction of innovation center in Dublin, the construction of a gas safety academy in Winters...

Q Okay. I just want to be sure that you're finished answering.

A Sure. I mean, I could spend four hours, depending on where you want to go on this.

Q I'm sure you can. And I appreciate your willingness to share the experience. And that's very helpful. And I appreciate you giving us a high-level overview. That was the level that we were looking for.

Let me just -- if I can -- related to locating and marking, just the safety responsibilities -- and I recognize, if I heard you correctly, you identified safety responsibilities both, if I could say, within the company for employees, as well as safety for the public?

A Mm-hm.

Q I heard that distinction that you drew. Could you take that lens and apply it to locating and marking? And describe your experience as it relates to locating and marking.

A Sure. The locating and marking is a subset of damage prevention.]

And when I joined PG&E, I read a lot about the organization. At that point in time, the NTSB report had already been published. There was blue-ribbon-panel type of a report that had been produced. I have a lot of friends in the industry. So I did research on PG&E to the best that I could after joining the organization.

I expected gaps within the organization. The gaps were larger than I expected them to be. One of the programs was around our damage prevention program. A couple of notable items were -- we identified -- we produced an analysis around the companies or contractors that had the highest number of dig-ins within our system and used the term "repeat offenders."

We used that analysis to then set up what would be the equivalent of a listening tour where we scheduled meetings with these companies. I did not attend all of the meetings, but I attended at least two of them.

The feedback that we received -- initially these meetings were -- because we scheduled them with the principal owner of the leadership of the companies, they didn't know what to make out of the meeting. They asked do we need to bring our attorneys?

And, you know, our response was, no, we want to have a dialogue, and we want to listen, and we want to ask, why are you hitting our infrastructure?

And I will tell you, as part of those discussions, they provided us with substantial feedback in terms of how we were responding to their needs, the accuracy of our markings, the difficulty in them accessing our employees.

For me, those were enough to really understand that this program, you know, needed substantial help. I would categorize those gaps as through the people lens, through the training, through the tools.

So if I could expand, we -- if I were to write a narrative today around our damage prevention efforts, it would be -- we have done every year have made substantial efforts to improve all of those dimensions.

We've added people to the organization, we completely revised the training that our employees were -- are receiving, we've completely changed the tools that they were using, we enhanced the caliber, the accuracy of our drawings, and GIS systems.

We worked with the call center USA North to substantially improve in a couple of areas; one, they are now -- this is recent news -- open 24/7. They now have bilingual capabilities, we now have a dedicated queue for homeowners, and we have substantially decreased the wait time when people call in to request a -- file an 811.

Q It sounds like this is quite a bit there and that is very helpful. Again, these are meant to be high-level questions.

So, certainly, if you -- if it occurs to you that there's more to say on this topic on what you're doing, we might welcome that in addition or outside of the EUO, but I want to just signal to you that there's quite a bit we want to cover today.

Your questions are very helpful and if it's acceptable to you -- I don't want to cut you off. That's a good answer. That's a helpful answer. We appreciate that.

A I want to make sure I'm responsive and there's a number of paths I can go through, so we'll continue the dialogue.

Q Yes. Yes. I appreciate that and I see that your answers have been responsive thus far, so thank you.

Okay. Maybe if I could just specify just a couple of suggestions that may help hone some of the answers so that we're talking a bit more specifically. I wonder if that might not help us.

And the questions specifically that

I ask you today are about facts that you've learned while at PG&E, during your time at PG&E. And in particular, if you please ensure that your answers include the knowledge and information you have because of your time and experiences as Senior Vice President of Gas Operations while at PG&E. Do you understand that?

A Yes.

Q Maybe just so that we have a common understanding, too, I'll ask you a few questions about terminology just so I'm following you on the definitions that you'd use. And if you don't understand a term or whatnot, we'll see if we can work through it to come to a common understanding that you find acceptable.

A Okay.

Q So the first term I'd ask you, are you familiar with the term "locating and marking"?

A I am.

Q What does that term mean to you in the context of PG&E's natural gas system?

A The term "locating and marking" is the response to an entity, whether it's a homeowner or contractor requesting or proceeding to want to conduct some excavation, calling 811. That goes to USA North. We get a feed from USA North regarding that proposed excavation.

Whether it's us or any other utility owners within this delineated space, it's identified by the entity that's going to be conducting excavation, go out, locate our facilities using tools, and then marking the location of those facilities if found.

If not found, then delineating that we were not able to find and proceed to request they conduct an excavation. That's how I would describe the locating and marking process.

Q Okay. Great.

So moving forward, when I use the terms "locating and marking" for purposes of this Examination Under Oath, you'll understand that term to be defined in the way you just described?

A Yes.

Q When I ask questions today about locating and marking, I'm specifically asking about matters related to PG&E's natural gas system unless I specifically say otherwise. Do you understand?

A I understand.

Q What is the term used to describe

someone who goes out on behalf of PG&E and locates and marks its underground equipment within an identified excavation area?

A Would you please repeat the question.

Q Sure. Maybe just to identify the term. The term locator --

A I'm familiar with the locator, locate and mark technician.

Q Yes. Would I be describing it accurately to say that's someone that goes out on behalf of PG&E and locates and marks its underground equipment within an excavation area?

A Yes.

Q Could you explain for the record in the context of locating and marking, what the term "ticket" means.

A The ticket is the instrument that is generated by the call center. In our case it's USA North that serves as a notification for a proposed excavation.

Q So if I use the term "ticket" today in addition to the definition you just gave, I mean the term to generally be defined as all PG&E tickets for the locating and marking of underground natural gas infrastructure, including all services used to provide that locating mark. Do you understand that?

A Can you repeat that?

Q Sure. I mean the term "ticket" in addition to what you just described, just defined, to generally be defined to encompass all PG&E tickets. Do you understand that part?

A Encompass all PG&E locate and mark tickets.

Q Correct.

A Yes.

Q Yes. And then again just for clarity, it's specifically referring to PG&E's underground natural gas infrastructure?

A Yes.

Q And it's including the services necessary to provide those locating and marking services in order to handle the tickets, if you will?

A Yeah. My confusion is I don't understand services as it relates to a ticket.

Q Got it.

Locating and marking. For example, the act of a locator going out to locate and mark to respond to the ticket if necessary?

A Yes. Okay. Got it.

Q So we're on the same page it sounds like in terms of that definition.

A I believe so.

Q Good.

So just with regards to tickets, let me identify a requirement as I have read it here. There's section of the Government Code of California, which I understand provides requirements with regards to tickets. I want to ask you if you're familiar with this requirement. If you're not, I understand, but we'll see.

So the description -- and this is California Government Code Section 4216. Part of it says, "any operator of a

> subsurface installation who receives timely notification of any proposed excavation work in accordance with another section shall within two working days of that notification, excluding weekends or holidays, or before the start of the excavation work, whichever is later, or at a time mutually agreeable to the operator and the excavator locate and mark the approximate location."

That's a piece of the requirement,

and I've eliminated Part 1, some of the excerpts that reference another part of the requirement, just in order to simplify what its saying, but are you generally familiar with that requirement as I've identified?

A Yes. I'm generally familiar with that requirement. I don't know how that requirement has changed, if at all, as a result of changes to 4216.]

Q Yes, and I appreciate you mentioning that. So this, as I read it in the -- this requirement was in place prior to 2017. My understanding is -- and I want to see if this comports with yours -- is that the requirement has changed slightly so that if an excavator calls to report -- calls 811 to request a locate and mark, that an operator such as PG&E, after the date of the call, would have two full working days in order to respond and do the locate and mark unless there's a mutually agreeable time between the excavator and the locator to arrange for a different date.

Does that sound like it's an accurate --

A I don't -- again, I don't understand the specific nuances that have changed as a result of the enhancements made to 4216.

Q Okay. But you get the general idea --

A I generally understanding the -- I generally accept the definition and the context for what you've put forward.

Q That's helpful.

A Yeah.

Q Thank you. So with that concept in mind, if an excavator notified PG&E of proposed excavation work to start within the required time, within -- let's say an excavator calls PG&E on Wednesday and says, hey, I'd like you to come out and locate and mark an area where I'd like to dig and PG&E couldn't come out within the time that's required, PG&E would need to contact the excavation and arrange for a mutually agreeable time so that it could come out at a later point in time to do the locate and mark; is that right?

A That's my general understanding, yes.

Q Are you familiar with the term late ticket?

A I'm generally familiar with the term late ticket.

Q Can you share your understanding in

the context of locating and marking what that term means.

A My understanding of the term late ticket is as the operator not being able to respond within the construct of the time limit or prior to that individual starting their excavation.

Q That's helpful. Thank you. Are you familiar with the term positive response?

A I'm generally familiar with the term positive response, yes.

Q In your experience, what does that term mean?

A My understanding of the term positive response is a communication between the operator and the excavator in terms of reaching some sort of agreement and/or understanding of when either excavation is going to be started or the operator such as PG&E is going to be at a respective location.

Q So if I use the terms we've just discussed and that we've defined and I think come to an understanding, you'll understand as we use them today to be defined in the ways that you've discussed and which I've asked about?

A Yes.

Q As we go through, there may be some

other terms that come up. If there are, I will do my best to ask for clarification about definitions.

A Okay.

Q So I think with this, if we could go off the record for a moment.

(Off the record.)

MR. GRUEN: So if the transcripts could be sealed at this point. I will do my best to identify when they don't need to be, if in fact they don't need to be.

(Whereupon, the following material was placed under seal by direction of Mr. Gruen:)

MR. GRUEN: Q This is another exhibit, and if I could share this -- let's see how many copies I have. I think I have enough to share this with both of you.

A Thank you.

Q Sure. I have one extra, then we'll share one with the court reporter momentarily. So the first thing I'd just ask is, Mr. Soto, do you recognize this as a PG&E data response that's dated April 19, 2017, that's provided to myself of the Safety Enforcement Division?

A Yes.

Q Okay. And PG&E, if you look at the

subject line of the first page, I'll help walk you through it. I know there are a number of pages. PG&E has described this as their response in the subject on the top of the first page.

Their response to the Safety Enforcement Division data request, locate and mark data request number two, do you see that?

A I do.

Q Okay. And turning to page nine of the data request here, it's on the lower right-hand corner. Take your time and if you'd let me know when you're there.

A I'm on page nine.

Q Okay. It shows toward the top of the page there, if you look at where it says "Response 10707.08."

A I see it.

Q And there, do you see where it says "PG&E has prepared a yearly breakdown of late tickets for each division 2012 to February 2017. See attachment, quote, 'Index 10707-8_2012-Feb 2017 total late-' -- that's a long dash -- 'division.xlsx'"?

Do you see where it describes that?

A Yes.

Q That's really just meant to be a

marker for what I'm about to show you.

A Okay.

Q If you'd turn to the last page of the exhibit.

A It's not numbered, but is this the last page you're referring to?

Q Yes, exactly. I'll identify it for the record. I'll walk through it with you. Yeah, indeed. Thank you. So on the page that you just held up and showed me, do you see at the top in orange "Reference to late tickets January 2012-February 2016" with the same marking or identification marker that we just read on page nine?

Does that appear to match?

A It does match. I believe the last page, though, is more specific in terms of January 2012; whereas, page nine also is 2012.

Q Good. I appreciate that. It is indeed more specific. I see your point. And then the Feb 2017, that part of it appears to be -- to match?

A That's correct.

Q So do you agree that this exhibit shows PG&E's yearly breakdown of late tickets for each division that it provided Safety Enforcement Division on April 19, 2017?

A This exhibit here is in response to the data request.

Q I'll represent to you that it is indeed. So, given that, that this attachment is to the data request, does this appear to show the late ticket counts that PG&E provided in this data request?

A Yes.

Q I'm looking at the bottom row of this page where, if you see under the column entitled "Division" and if you look at the bottom of that column, it has the word "Total"?

A I see it.

Q And moving to the right where if you move to the cell next to the word "Total," under the column that's entitled "2012" in blue, does that show that the late ticket count shown here is 4,623?

A The total for the year 2012 on this sheet shows, 4,623, correct.

Q Correct. And can you continue to the right moving column by column to show for 2013, 2014, 2015, 2016, and so on what you see in terms of the late ticket count totals.

A Okay. The total for 2013 is 13,547; the total for 2014 is 13,391; the total for 2015 is 3,385; and the total for

2016 is 44.

Q Great. If you could keep that open.

A Okay.

Q I appreciate you indulging us for that exercise. It's a rote reading exercise, but there's a bigger purpose in asking that so we'll get there.

MR. VALLEJO: Can I just ask a clarifying question?

MR. GRUEN: Absolutely.

MR. VALLEJO: Had you seen this data response before today?

THE WITNESS: No, I have not seen this data response, nor did I participate in compiling it.

MR. GRUEN: Q Okay. If you could keep the last page open that we just read from and if I could provide you with another document for comparison purposes. Bear with me just a moment. There are two copies there. There's one for each of you.

Are you familiar with the reports that have the title "Gas Operations BPR Keys to Success"?

A I am, yes.

Q What does BPR stand for?

A BPR stands for business plan

review.

Q Thank you. If I refer to these reports in shorthand as Keys Report, would you understand that reference?

A Yes.

Q What is the purpose of a Keys Report?

A The Keys Report is a compilation of status reports that is produced monthly to compliment gathering of the key leaders within the gas operations organization that come together in a Keys To Success meeting. It's held monthly, typically dedicated the whole day, but it's a six- to seven-hour type meeting.

Q Okay. Are Keys Reports -- so that meeting -- generally speaking, can you describe the levels and titles of -- is it a PG&E-only meeting?

A It is a PG&E meeting. From time to time, we do have guests that come in. Given that it's a meeting of all of the -- the intent is all of the director level and above leaders with key support groups that support the gas organization from HR, finance, communications, legal, all of the support. So it's a leadership that comes together once a month.]

Q Okay. And are the reports prepared in advance of the meeting?

A The reports are prepared in advance of the meeting, yes.

Q And how are the reports used in that meeting?

A So the keys to success meeting has -- the focus has shifted more so from -- it is not a page-turn of the reports.

Q Okay.

A It's a referenced documentation that gets provided. The keys to success meeting is agenda-driven.

Q Okay.

A There is an agenda item where we typically provide a business update. We do also provide a BPR update. A BPR update is the status of our key metrics as they get reviewed with the senior leadership team within PG&E. This is referenced documentation. It's intended to provide -- ask the process owners, functional owners, to provide an update on their key programs.

Q And, Mr. Soto, you mentioned process owners. Are you one of the process owners related to the keys report?

A I am not.

Q Okay. In terms of the meeting, are

the results of the meeting that discussed the keys reports reported on to PG&E's board of directors?

A The -- I'm going to glance at this.

Q Sure. And I'll tell you, those are only excerpts. It’s not the entire report as you're looking, so please.

A Sure. So this format is not what would get reported to PG&E's board of directors.

Q Okay.

A A BPR metric for gas operations would be the dig-in rate, as an example. And that would be a metric on the gas operations business plan review reports.

Q Okay.

A And that is a metric that would get reviewed on a monthly basis. A subset of the business plan review metrics are considered a STIP metrics.

Q Can you explain --

A Yeah. STIP, S-T-I-P.

Q Is that an acronym?

A It is an acronym. It stands for "Short Term Incentive Plan."

Q Okay.

A So as the -- on an annual basis, the compensation program for eligible employees has two components, a short-term incentive plan, STIP, and a long-term incentive plan component, LTIP. There are some metrics that make up the short-term incentive plan compensation.

So there would be a subset of the business plan review metrics that would be owned by gas. So the dig-in rate, as an example, is a STIP metric. So that gets reviewed -- it's identified as a STIP metric and gets reviewed with senior leadership on a monthly basis. And those metrics get reviewed with a subset of the board.

Q Okay. Thank you.

And LTIP would stand -- if STIP is short-term incentive program, the "L" in LTIP is long-term incentive program?

A Long-term; correct.

Q Okay. I follow.

And you mentioned dig-in rate is one of the metrics that's reported to a subset of the board, as I understand it?

A Yes.

Q What other -- in the context of the locating and marking, what other metrics are linked to STIP and LTIP?

A I believe that's the only one.

Q Okay.

Off the record for a moment.

(Off the record.)

MR. GRUEN: If we could go back on the record. Okay.

Mr. Bruno, do you have anything that you would like the ask?

MR. BRUNO: Yes. Thank you, Darryl.

EXAMINATION

BY MR. BRUNO:

Q Mr. Soto, I would like to follow up on a few things. So, you mentioned 811 earlier as a call center.

Do you know how 811 was established?

A Yes. I used USA North as a call center.

Q USA North? Okay.

And what is that relationship between USA North and 811?

A The relationship between USA North is the regional call center. USA North is the regional call center for Northern California. It is complementary to the dig -- I don't know the name of the Southern entity. It has a geographical boundary that processes the 811 tickets to the representative utility owners within that geographical area.

Q Thank you, Mr. Soto.

And what is the purpose of calling in a ticket?

A The purpose of calling in a ticket is to request the respective utility owners to come and locate and mark their respective facilities before the entity that is going to conduct an excavation takes place.

Q Are you familiar with the term "risk," meaning, probability of failure and consequence of failure?

A I'm familiar with the term "risk" as a product of the likelihood of failure times the consequence of failure.

Q Yes, sir.

And what about threat? What does that word mean to you as it relates to damage prevention?

A Sure. (Long pause.)

The term threat to me, I associate it most with the B318-A's framework for pipeline systems where there's respective threats that pipeline systems need to consider: Time-dependent threats, timed independent threats, construction and manufacturing-type threats.

In the term of damage prevention, there's the universe of random threats as a result of third parties that proceed to conduct excavations in or around our pipeline facilities. A specific threat would be an entity that conducts an excavation without notification or providing notice to the company, allowing that entity to locate and mark a facility.

Q Thank you, Mr. Soto.

When a threat is identified, what does PG&E do as to mitigate a threat, generally?

A That's a very broad question.

Q Let me rephrase that question.

Is third-party damage a treat to pipeline systems?

A Yes.

Q What is the mitigation measures to mitigate a third-party damage threat?

A There's a -- the mitigation measures that come to mind are having a public awareness program that provides an element of awareness to contractors, home owners, key stakeholders that, you know, could come in contact with facilities.

There's a patrolling element to managing the third-party dig-in program where through aerial patrolling, continuing surveillance, we're able to monitor excavating facilities that may be excavating around our facilities. There's an element of having pipeline markers that delineate where respective facilities are, not meant to be the exact location of facilities, but in general proximity of facilities with the overt "Call 811 before you excavate" type decals.

There's workshops that get conducted with farmers, contractors, all around. There's an educational dimension. So those are some of the key mitigation measures that take place in addition to locating and marking facilities in response to 811 tickets.

Q Yes, sir. Thank you.

So would it be fair to say that locating and marking is a mitigation to the threat of third-party dig-in?

A Yes.

Q And who are the stakeholders for an effective 811 locate and mark process?

A The stakeholders that come to mind are the call center, in this case, USA North. It’s the operator of the facilities that responds to that locate and mark. It’s the contractor, home owner, or entity that is going to be conducting the excavation. And it’s also the regulator. And it’s also the legislative entity that puts forward the laws and exemptions associated with the excavation process.

Q Great. Thank you, sir.

And, if I may, what is PG&E's -- as the operator in that process you just described, what is their responsibility?

A The process that -- our responsibility -- I'll start with the call center. We are on the board of USA North. We are the largest entity. In terms of the funding mechanism for USA North, It's on a per-ticket basis.

And as part of our focus for USA North is to drive 24/7 operations, which was just recently enacted, was to drive bilingual staff to significantly reduce the hold time so that people call and don't get discouraged to enable electronic means of entering tickets.

When it comes to contractors, it’s having contractors and other excavators -- having specific public awareness workshops with them, to have follow-up sessions with those entities in terms of "How are we doing?"

With home owners, it’s to educate,

to have awareness campaigns that promote 811, and promote them calling 811.

With the regulator, it’s to ensure that there's effective procedures in place, that we view this as a shared responsibility.

As it comes to the legislators and laws, it’s to promote changes to the laws commensurate with other sates and other best practices, specifically, around enforcement and eliminating of exemptions.

Q Yes, sir. Thank you.

Mr. Soto, you mentioned PG&E is a member of USA North; is that correct? Is that accurate?

A Yes.

Q Is that also the same as Common Ground Alliance?

A It is not.

Q Could you describe your understanding of Common Ground Alliance?

A Sure. So I'm on the Board of Directors for the Common Ground Alliance. I'm actually Vice Chair of the Common Ground Alliance. Common Ground Alliance is a national organization that has specific stakeholders.

PHMSA is a member of the Common Ground Alliance. It represents 16 key stakeholders that include oil operators, gas operators, natural gas distribution operators, equipment operators, railroads, government agencies. It’s an organization that was the driving force behind establishing 811. But Common Ground Alliance is not the same as USA North.

Q Yes, sir. Understand. Thank you, Mr. Soto. I would like to skip, now, back to my question on PG&E's responsibility in effect of locate and mark process.

So, if I may, a home owner, farmer, they call in a ticket. What is PG&E's specific responsibility as it relates to mitigating the threat of a third-party dig-in?

A Yeah. The responsibility of PG&E to mitigate a third-party dig-in as it relates to home owners and farmers, as I understand the question, it starts with public awareness to mitigated a dig-in. It starts with the obligation of PG&E to have an understanding with home owners and farmers of the desire to call 811 so that as the operator, we go out and locate and mark our facilities.

My understanding of the exemptions in California is that homeowners are not required to call 811. It has to deal with exemptions. And so it is a -- from a responsibility perspective, it doesn't preclude us from driving awareness campaigns and educating home owners and -- you know, because we take, as part of our responsibility, that there is a dig-in that occurs, a damage to infrastructure, which then occurs -- leads to an unplanned release of gas.

It impacts -- has the potential to impact the homeowner. It that has potential to impact adjacent home owners and/or the general public. It has the potential to impact our employees as we respond to that dig-in. It has the potential to impact fire responders, police responders that respond to an event.

So we view that responsibility -- it starts with public awareness so that people -- entities call, whether it’s farmers or the general public, followed by locating and marking our facilities.

Q Thank you, Mr. Soto. And I would just like to narrow this.

Specifically, when somebody calls 811, what is PG&E's responsibility? What are their procedures to do in that step?

A I think simply stated is to respond to that request for locating and marking our facility.

Q In your opinion, sir, is that an important step?

A Yes.

Q And do you believe that an effective locate and mark program is important for safety?

A So there are many dimensions that come into safety. Locating and marking a facility is one dimension. When we go back on the record, I think I've articulated all of the components that lead to an effective damage prevention program.

Q Are you familiar with the statics of when somebody calls in a ticket, and it is located and marked as it relates to the is that statistics that Common Ground Alliance puts out? Do you recall what that success rate is for safety?

A I don't recall the exact number. But I'm generally familiar with the statistics that Common Ground Alliance publishes. I think they're often cited and come out of the DIRT reports that the Common Ground Alliance produces.

Q Yes, sir. If I said the number was

99 percent, would that sound familiar?

A It would sound familiar, yes.

Q So, in other words, when a ticket is called in and it is located and marked, there is less than one percent -- a one-percent hit rate, if you will?

A Yeah. When a ticket is called, it gives the operator the opportunity to locate and mark a facility. And if proper excavation procedures are followed, it gives that high of a chance.

Q Yes, sir. Earlier, you mentioned dig-in rate.

Do you know how that is calculated?

A I do?

Q Could you please elaborate on how that is calculated?

A Sure. Dig-in rate is the numerator is number of damages caused on a facilities divided by 1,000 tickets with -- normalized by thousands of tickets.

Q Thank you, Mr. Soto.

And "damages," meaning a hit?

A The definition that we use is by the American Gas Association, the AGA definition. I can't recite to you the exact definition. But it is around damages to a facility, may or may not result in an actual release of gas. But it’s a damage that leads to a need for a repair of that facility.

Q Okay. And -- but it is in terms of tickets, 1,000 tickets?

A Yes, it's normalized by 1,000 tickets.

Q Does it matter if PG&E responds to each and every ticket?

A It matters that PG&E respond to tickets. The -- there's an inherent incentive to respond to tickets; due to the nature that if you don't respond to tickets, it could lead to damage for not locating and marking a facility.

Q So would it be fair to stay that not responding to a ticket increases a risk of an incident?

A It could, yes.

Q Thank you, sir.

MR. GRUEN: Okay.

EXAMINATION

BY MR. GRUEN:

Q Just a couple of clarifications of terms that were in the answers.

I think you mentioned B31.8A?

A B31.8S.

Q Would that be referring to American Society of Mechanical Engineer standards --

A Yes.

Q -- to date?

A Yes.

Q Okay. And DIRT is -- you mentioned -- is that the Dig-in Reduction Team?

A No.

Q Is there another --

A No. DIRT is a term that is established within the Common Ground Alliance.

Q Okay.

A I don't know what it stands for. We use the term "DIRT" within PG&E, specific to a group that we've established that was focused on damage reductions. So we use the term that CGA uses around DiRT, and applied it to the team that we've established to be the DIRT team.

Q Okay. Do you have an understanding of what -- I appreciate you not defining or not spelling out the term DIRT from the Common Ground Alliance's perspective. But what does it mean from Common Ground Alliance's perspective?

A The -- within the Common Ground Alliance, there is a work product that gets published -- I believe it’s on an annual basis. And it is the DIRT report that provides summaries of damage experienced by entities. And it’s -- the feed for that is members of the Common Ground Alliance provide a submittal -- it’s in a structured way -- they leverage that submittal to then to produce a report.

Q So the data -- a clarification question about the feed-in. The data that's fed in and leveraged, is that dig-in data from various operators?

A Yes.

Q Okay. Thank you.

So would the DIRT Report provided by Common Ground Alliance provide a comprehensive picture of dig-ins from operators who provide a feed in to it?

A I don't know. The most important metric for us is the benchmarking information that is provided by the American Gas Association. Specifically, it’s the dig-in rate. And why that's important is due to the nature of it being benchmark-able, and that the operators that are members of the American Gas Association have a common understanding of what is reported, not reported, so that you have parody and you're measuring the same thing. And you can compare yourself in a competent way to other gas operators.

Q Okay. So, if I'm following -- maybe if I use the shorthand, that the DIRT Report from Common Ground Alliance is almost a benchmark or baseline that could be used for operators to compare themselves to? No?

A I don't -- I can't articulate to you the contents of the DIRT Report.

Q Okay.

A What I can articulate to you is the benchmark around dig-ins as provided by the American Gas Association and as used by PG&E for comparative purposes around the dig-ins that are being experienced by PG&E relative to others in the industry.

Q Okay. Thank you.]

A Yes.

Q Continuing on with the exhibits that I shared with you, and if you'll recall, we were talking a little bit about the Keys Report, and there's an excerpt of it in front of you with the title.

We were just talking a little bit about the purpose of the Keys Report, and you were answering if you recall. And I wanted to clarify, just in terms of the report, are there management decisions that are made as a result of the information provided by the

Keys Reports?

A There could be. One of the management actions that could be as a result of either a written update that gets provided, or a verbal update that gets provided as part of Keys, or if there's an Ask for Help as part of the Keys, one of the tools that we have is a Special Attention Review form.

Special Attention Review, the acronym for it is SAR. That's a discretionary management tool that we have when we need to bring attention, focus, to an issue, and the intent of a SAR is if there is an item that needs focus, that we bring resources to bear, not business as usual, but very targeted focus to ensure that we understand the problem and take action commensurate with the problem that's been identified.

Q Okay. Thank you.

And turning, to the exhibit that you have in front of you, we already identified the cover page of the Keys Report; do you recall that?

A I recall this page. Yes.

Q Yes. Just for purposes of refreshing memory. And we only printed excerpts of the report - I think I mentioned earlier - and I would like to show a few of them to you. So if you turn to the page that is shown, I believe it has a page number 220 at the bottom.

A Sure.

Q On the right-hand, bottom-right corner.

A Okay.

Q Maybe this will help with the exercise, what I'm trying to do here is to just see if the numbers at the bottom of the Keys Report that you see there match the numbers provided at the bottom of the last page that you correctly just pointed to, which is the last page we identified that is of the April 19th, 2017, PG&E Data Response.

So if you see, for example, on page 220, the column 2014, at the bottom there's a total 13,391 tickets; do you see that?

A I do.

Q Does that match the total at the bottom of the Data Response page for 2014?

A It does.

Q Same question for 2015. On the page 220 of the Keys Report, do you see the 3,385 total there under the 2015 column?

A I do.

Q Does that match the 2015 total in the PG&E Data Response for 2015?

A Yes, it does.

Q Does it appear to you that both of these documents are counting PG&E's annual late tickets for those particular years?

A Yes.

Q Okay. So would it be fair to say that the source of the documents for the PG&E Data Response would come from Keys Reports that I've identified to you here? Does that seem, like, reasonable to you?

A Can you repeat the question?

Q Sure.

I'm just noting that the PG&E Data Responses from 2017, April, but the Keys Report itself, this one has on the cover page marked "January 2016." So I'm just noting the dates that PG&E seemed to keep the same information that they gave to Safety and Enforcement Division in 2017.

So what I'm getting at is, if the 2016 January report was the source of the information that PG&E provided the Safety Enforcement Division in April of 2017?

A I don't know if this was the source, but the numbers do match.

Q Okay. Okay.

Similar question for January 2017. I'll hand out another exhibit.

A Want me to give this exhibit back to you?

Q Yes, please.

A So this was a subset of this exhibit.

Q Correct. I'll put that back together. Thank you for noting that, and so this was the last page here. I'll do it in front of you and your counsel here. So this was how I believe I handed the Data Response to you. You see that?

A Yes.

Q Okay. Great. That's the Keys Report. And if I can take back counsel's copy as well.

MR. VALLEJO: Sure.

MR. GRUEN: Q So what I'll do -- actually, I'm sorry. I'll leave this document with you, but I'll hand the January 2016 Keys Report as an exhibit to the Court Reporter. I'm just noting this all for the record, and if that could be marked as the next exhibit.

(Exhibit No. 2 was marked for identification.)

MR. VALLEJO: Do you mind if we're

going to stay on the data, I'll keep a copy.

MR. GRUEN: You certainly may. I appreciate that.

I've handed a copy of the January 2017 Keys Report to you as well, and your counsel, and you see the cover page is "Gas Operations BPR Keys to Success, January 2017"; do you see that?

A I do.

Q And that appears to be the January 2017 cover page of the January 2017 Keys Report?

A Yes.

Q So it's really the same questions. It's a similar set of questions.

If you turn to page 140 this time, and I think it's the third page of this document if that's helpful.

A Yes.

Q Very good.

And just for the record Mr. Soto just held up page 140 of the January 2017 Keys Report excerpt that I noted.

So looking to the -- do you see the table there on that page?

A I see the table on page 140. Yes.

Q Yes. Great.

And to the right of the table it

identifies "late tickets 2016."

A I see it.

Q A 2016 column.

And at the bottom of that column, it appears that the total number of late tickets for 2016 was 44?

A That's correct. I see it.

Q And that number matches the number at the end of the April 2017 PG&E Data Response for 2016 for total number of late tickets; does it not?

A It does match. Yes.

Q Great. I note that at the top of page 140, it says that the -- I'll read it:

> "The table below shows YTD, December 2016 locate and mark tickets worked, and late tickets compared to the same period in 2015. Late tickets for all divisions have dramatically decreased. Systemwide, there were 44 late tickets in 2016 compared to 3,385 in 2015, a decrease of 99 percent."

Do you see that?

A I do.

Q All right. So we've identified, I think, and correct me if I've misstated this, but I think that we've shown here that there's a match between what's shown in the Keys Report total late ticket counts and the 20- -- the April 2017 Data Response late ticket counts for late 2014, 2015, and 2016.

Does that sound accurate to you?

A Yes.

Q Would you accept, subject to check, that for 2012 and 2013, the Keys Reports total late ticket counts match what's provided in the April 2017 Data Response as well as in terms of those columns that you see in front of you?

A Yeah. I don't know if they do or not.

MR. GRUEN: Okay. Okay. That's all I have on this; so if I could get those back.

I'll identify the April 19, 2017 PG&E Data Response as Exhibit 3 and hand it to the court reporter.

(Exhibit No. 3 was marked for identification.)

MR. GRUEN: The January 2017 Keys Report, titled Gas Operations BPR Keys to Success January 2017 as Exhibit 4 and hand that to the court reporter.

(Exhibit No. 4 was marked for identification.)

MR. GRUEN: Moving on, I'm handing you

another exhibit. And I just handed to Mr. Soto and Mr. Vallejo -- I'll ask questions. I handed you another exhibit.

Q Mr. Soto, on the first page of this exhibit, do you recognize this as a PG&E response to a Safety Enforcement Division Data Request dated February 6th, 2018 when the request date was made?

A I see that, yes.

Q And the date that PG&E sent the data response is identified just to the right there, as February 23rd, 2018.

A I see it, yes.

MR. GRUEN: Just for the record, I think we're on Exhibit 5. And so if we could identify as Exhibit 5, this exhibit -- this data response rather.

Q And just to clarify, Mr. Soto, just under the box, there's a question No. 117180.01; do you see that?

A I do.

Q And at the top of the box, it's entitled "PG&E Data Request No. 11718"; do you see that?

A I don't.

Q Just close to the top.

A Yes. I see it.

Q I'm just asking for identification

purposes for Exhibit 5.

And if we could turn to page 2 of the exhibit, it's both page 2 and marked at the bottom as page 2.

Starting on the fifth line down, if I could just read starting there. Do you see starting at the end of that line, I suppose the fourth line at the end: "PG&E expects that its current estimates" -- do you see that?

A I do.

Q So if I could read that: "It

> expects that its current estimates of 44,794 late tickets out of 760,177 total tickets were received in 2012; do you see that?

A I do.

Q What I'm asking here is, this appears to be a change in PG&E's late ticket counts compared to the April 2017 data request I showed you earlier. Would you agree with that?

A Would you mind giving me the previous exhibit that I saw that had the table.

Q Not at all. So I'm handing over Exhibit 3. So comparing Exhibit 5 with Exhibit 3, would you agree that Exhibit 5, what we've just read is changing the late ticket counts compared to what is provided in Exhibit 3?

A Yes.

Q And just to go through that, if we read along together on Exhibit 5, we have 51,272 late tickets in 2013; does that look right?

A Yes.

Q That's out of the total number identified of 671,015 total tickets in 2013; is that right?

A That's correct.

Q Moving on, 47,589 late tickets in 2014; does that look right?

A Yes.

Q Compared to 702,275 total tickets in 2014; correct?

A Correct.

Q And 61,114 late tickets in 2015; does at that look right?

A Yes.

Q Compared to 820,455 total tickets in 2015?

A Correct.

Q And in 2016, 55,666 late tickets; does that look right?

A Yes.

Q Compared to 898,120 total tickets; does that also look right?

A Correct.

Q So comparing now the April 2017, if I could refer to them as -- correct. You're pointing at them with your right hand, and I believe that's correct.

Comparing April 2017 old counts, if you will -- would you accept my characterization to call them "old counts"? The April 2017 counts, I'll refer to them as "old counts," if you understand what I mean.

A I do understand.

Q Okay.

With the new counts that you're touching with your left hand - correct - in Exhibit 5, the old late ticket count shows 4,623 late tickets in 2012. While the new late ticket count shows 44,794 late tickets in 2012; does that look correct?

A That's correct.

Q And so that would be an increase of approximately 40,000 late tickets in 2012?

A Yes.

Q And the old ticket -- the old count showed 13,547 tickets, late tickets in 2013; while the new late ticket count showed 51,272 late tickets in 2013; is that correct?

A That's correct.

Q And that's an increase of, approximately, 37,000 late tickets in 2013?

A Correct.

Q And the old count showed 13,391 late tickets in 2014. While the new late ticket count shows 47,589 tickets in 2014; does that look accurate?

A Yes.

Q And that's an increase of approximately 34,000 late tickets counted in 2014?

A That's correct.

Q In 2015, the old count shows 3,385 late tickets and the new count, the update, showed the late ticket count to be 61,114 for 2015; is that correct?

A That's correct.

Q And that's an increase of approximately 57,000 late tickets counted in 2015?

A That's correct.

Q And in 2016, the old count shows 44 late tickets, and the new count shows 56,666 late tickets; is that correct?

A That's correct.

Q An increase of more than 56,000 late tickets counted in 2016?

A Correct.

Q Do you see this --

A -- increase in how much, you say?

Q An increase of more than 56,000 late tickets in 2016?

A It's not an increase of 56. I mean, the universe here is -- it's an increase of 55,000 plus, not an increase of 56,000. The whole universe is less -- 55 -- 56 is less than 66,000.

Q Correct. I appreciate the clarification. What I'm getting at is, if the new count show 56,666 --

A No. The new count is 55,666.

Q Indeed. I misread that. Thank you for correcting that. I appreciate the clarification. I misspoke. Let just clarify for the record. Thank you for pointing that out. Indeed.

I think what you are referring to is Exhibit 5, the February 23rd, 2018. PG&E Data Response SED shows 55,666 late tickets in 2016, not 56,666 in 2016, and I think you corrected me for the record, and I appreciate that. Does that look correct to you?

A Yes.

Q Thank you.

So then comparing the 55,666 late

tickets in the new response for 2016 to the 44 tickets for 2016, the 44 late tickets for 2016, in the old response, that's an increase of approximately 55,000 late tickets counted in 2016.

Did I restate that correctly?

A Yes.

Q Thank you for the correction. I appreciate that.

Do you see this as a trend of undercounting late tickets from 2012 to 2016?

A I see this as a revision to what was previously provided.

Q Okay. And a revision over four consecutive years?

A Correct.

Q Okay. Do you know if the revision, if this revision would be applicable to earlier years, earlier than 2012?

A I don't know.

Q What about an undercounting; would there be a similar undercounting in 2017?

A I don't know.

Q Do you have reason to believe that PG&E undercounted tickets prior to 2012?

A I don't know.

Q Do you know who would know the answer to that question?

A I joined PG&E in May, May 29, or so 2012, I could go back to an org chart, and from that org chart, determine who was responsible for these types of programs and these type of reports.

Q Okay. Same questions for 2017: Do you have reason to believe that PG&E undercounted its tickets in 2017?

A I've not seen any revised figures for 2017.

Q And I should just say for the record, I think I said was "undercounted tickets" and what I meant to say was undercounted late tickets for 2017.

Did you understand my question?

A I did understand the question, and I have not seen any comparison or data regarding 2017.

Q Okay. I appreciate that.

Of those late tickets that were not counted between 2012 and 2017 in the -- now I'm talking about tickets that were identified in April 2017 Data Response - correct - and you're pointing to it, I see.

So you understand what I'm referring to?

A Yes.

Q Of those late tickets that were not

counted between 2012 and - let's say - 2016 because I did really describe tickets up to that year, were any of them not correctly counted because of rescheduled start times without mutual agreement from the excavator?

A I don't know the basis for the revisions.

Q Why did PG&E provide updated late ticket counts to SED for the years 2012 and this time I will use 2017 because that's what provided. Why did PG&E provide updated late ticket counts to SED for the years 2012 to 2017 as of last week?

A I don't know.

Q What method did PG&E use to change their late ticket counts to the numbers they provided to SED on February 23, 2018?

A I don't know.

Q Why hasn't PG&E used the method to provide the late ticket -- well, let me ask it this way. Would you think that there's a different way of counting late tickets in the new Data Response compared to the way of counting the late tickets in the old Data Response?

A Yeah, my assumption is there's criteria being used for the two data sets, but I don't know what that criteria is.

MR. VALLEJO: If I could just ask the same clarifying question as to the last Data Response. Have you seen this Data Response before?

THE WITNESS: No.

MR. VALLEJO: I was referring to Exhibit 5.

MR. GRUEN: Understood.

MR. VALLEJO: Thank you.

MR. GRUEN: Q Are you familiar with the method PG&E used to count late tickets as shown in the Keys Reports.

A I am not.

Q Are you familiar generally with PG&E's method for counting late tickets?

A I am not familiar with the criteria that was used, what the values were to determine the numbers. I'm not.

Q Do you know who is?

A I would start with the entity that would produce the Keys Report. Would be under leadership of Joel Dixon. He would be the, you know, the person that I would -- he would be the Keys attendee along with the operating officer. Most recently it would be Mel Christopher, John Higgins, and my expectation would be Joel would be familiar with how it would get processed.

Q Since counsel mentions this is the first time you've seen this, are you surprised to see the discrepancy in the numbers?

A I am.

Q Why?

A Because the figures that I was tracking associated with late tickets would have come from both the Keys Report and the report-outs that would be given as part of our daily ops call. So they were not within this universe of numbers.

Q And those calls would have been real time during the years when the tickets were actually reported in the Keys Report?

A The daily ops call has been for several years. We stood it up in the 2012 time period. I don't know when we started introducing a report out from the locate and mark group as part of that daily ops call.

I don't think we had daily updates within the 12, 13, 14, time period. That would have been a recent addition, if you will, to the report-outs that would take place on the daily ops call.

Q In light of the change in numbers that we discussed from the old to the new, and, yes, and I see pointing to the new number counts that SED received last week; am I stating that correctly?

You're pointing to the new number counts?

A Yes.

Q Do you recall me reading earlier the description of the drop in late tickets from 2015 to 2016?

A Yes, sir.

Q I think you have in front of you the numbers. I don't have in it front of me, but could you read the numbers?

A I read you the numbers that came from the last page of what I believe was Exhibit 4.

Q For clarification that was the April 2017 Data Response?

A That is correct.

Q Thank you.

A As I understand your question, you want me to read the annual number, the total figures for each of the years?

Q Just 2015 and 2016.

A So the annual total for 2015 is 3,385; the annual number for 2016 is 44.

Q Just circling back. So handing back the January 2017 Keys Report exhibit with the cover page, if you turn to page 140 again and you see there in 2015 and 2016 it shows the same numbers of late ticket counts; so for 2015, 3,385 and 2016 down to 44?

A I see this. Correct.

Q And at the top it describes that as a decrease of 99 percent?

A At the bottom, the table describes it as a decrease of 99 percent.

Q Correct. I see what you're pointing to. That's under the column marked "percent change"?

A Correct.

Q And also I see at the top, the piece that I was referring to as well, the sentence that says: "Late tickets for all

> divisions have dramatically decreased. Systemwide there were 44 late tickets in 2016 compared to 3,385 in 2015, a decrease of 99 percent."

Do you see that?]

A I do.

Q Does that surprise you to see that number?

A No.

Q Okay. So it surprises you to see a change from the old count to the new count but not a change to see from 3,385 a 99 percent decrease to 44 late tickets in 2016? Am I understanding that correct?

A That's correct. I'm not surprised given the level of effort and level of focus that we had on this program.

As I articulated earlier, every single year I can point to very specific actions that we have taken around our damage prevention program, those efforts were on increasing the number of employees, making contractors available to compliment when we had spikes, producing -- completely changing the training for our employees, providing them with the most appropriate tools that they needed, with the functionality, with the maps that we had, the enhanced tablets that we were providing to our employees.

All of those collective efforts would convey to me that decreasing from 3,385 tickets to 44 was not a surprise.

Q Okay. What does PG&E use late ticket counts for?

A I focused on dig-in rate as part of my management review and whether it was at Keys or BPR. The late ticket dimension for me would be something that I would glean from a daily ops call and I would use that information to then ask what help do we need in order to be responsive to late tickets.

Q Okay. So in terms of help that you would need to be responsive to late tickets, what kind of help would that be?

A Sure. It would be in many dimensions. One is seek to understand what the driver was for any late ticket. Is it that we didn't have the personnel available, was it that we had an unplanned event, was it that we needed qualified electrical worker support, was it that we were needing more contract resources.

To me, the late ticket would be a prompt for me to ask what help do we need in the organization.

Q So if you were to see an increase in late tickets, it would be a prompt to -- would it be fair to say it would be a prompt to allocate more resources to locating and marking?

A Yeah. Again, my focus -- the more visible metric for me was dig-in rate. I believe in 2012 we may have had for some months dig-in rates as high as four and a half. I think if you were to compare each on an annual basis significant decrease in dig-in rate year over year to last year being in the 1.9 type of results.

So that would be, to me, a more visible metric that I would very much have my focus and attention on. The notion of a late ticket would come to me from either a report out in the daily ops call or feedback from our contractors, as an example, that we were not being responsive or responding to late tickets.

I'll share with you that one of the entities that we worked very hard and closely with is an organization by the acronym of UCON which stands for United Contractors.

Q Okay.

A It's within probably 400 type of contractors that are members of UCON. That was one of the forums that we also leveraged to seek feedback from our damage prevention program. Most recently as of two or three weeks ago I reached out to their president and simply asked how are we doing, and responded with, you know, significant improvement, we're going to have a discussion -- we're trying to set up a meeting here in a couple of weeks.

But to me, all of those would be examples of prompts that I would use that would be late-ticket related.

Q Understood. Thank you, Mr. Soto.

In terms of the prompt, the prompts that you discussed and particularly dig-ins, I'll follow you on the dig-ins point. What relationship, if any, do you see between late tickets and dig-ins?

A So if you point to the same Keys Report --

Q Yes.

A -- on page 141.

Q Just for clarification, are you looking at the January 2016 one?

A I'm looking at the January 2017 --

Q Yes --

A -- Keys Report.

Q -- I follow you, okay.

A There's a graph that shows the at-fault dig-ins by error type and there's four categories?

Q Yes.

A Locator error, mapping error, wire, other error. Based on this, there is nothing that jumps out at me that would speak to the -- for this time period of '15 or '16 that would be associated with late tickets.

Q Okay. This was based on the old counts of late tickets; is that correct?

A The Keys Report of January 2017 would have used the data set as part of, I believe it was Exhibit 4, that had had late tickets from January 2012 to February 2017.

Q Thank you. Using the new ticket counts that we discussed earlier, do you expect that late ticket counts, as they were reported to us last week, would play a different factor in the PG&E at-fault gas dig-ins by error type that you just describe?

A In all of the -- again, the communications that I've had with UCON and others, there was nothing that was pointing out to me that would indicate that we had a large volume of late tickets. It was not showing up in reports. It was not showing up as the leading causes or the error types associated with the dig-ins.

Q So if I'm understanding right, UCON would not, and I assume does not, have the late ticket count information that was provided to SED last week?

A No, UCON would not have, nor would we provide late ticket counts to UCON.

Q Okay.

A But where it's relevant and does come into play is as we experience a dig-in, we investigate the dig-in by our DIRT team. And if we find, if we determine the causation whether it was caused by us or a third party, then that triggers a collection period or collection mechanism.

There was nothing that was pointing to me that the late tickets, whether it was this data set in what we are referring to as the old ticket count or the ticket count in the transmittal of February of 2018, would have been the cause of dig-ins.

Q Okay, thank you. If I could collect them back and this time I will do my best not to reuse them so that we don't have to go through the exercise, but thank you. You've both been very cooperative in terms of these tickets.

A That is part of that.

Q Yes.

A And I think these are stand-alone exhibits.

Q Understood. I think -- I believe that the only one left to give to the court reporter is this one that you've used so I'm referring to what I believe is Exhibit 5. This is the PG&E Data Response to Safety Enforcement Division entitled "Data request Index Number 11718." Do you see that?

A I do.

Q And that's the data response date sent identified as February 23, 2018. Do you see that?

A I do.

Q And I'd ask that that be marked as Exhibit 5. I'm handing that to the court reporter.

(Exhibit No. 5 was marked for identification.)

MR. GRUEN: Q Thank you, Mr. Soto.

A You're welcome.

Q We've been talking about it, I think, a little bit is my understanding, but I'm going to ask this slightly differently. First let me ask, would you agree with me that in light of the information you've just seen comparing tickets that PG&E has undercounted its late tickets from 2012 to 2016?

A Yeah, the information that was provided in the February data response is different than what was in previous transmittals that highlight a delta or a difference in the number of late tickets.

Q And the difference in each case was --

A Higher.

Q Higher for the new count?

A That is correct.

Q So if I use the term undercount to

describe what we just discussed, would you accept that characterization?

A Yes.

Q Thank you.

A Well, I'm going to revise that.

Q Go ahead.

A I don't know what the -- it is a difference, it is a different count that is undisputable. What I don't know is what the filters, what the criteria is that is yielding the revised data set, but it is higher than the previous one.

Q Okay, understood. Maybe just -- I'm searching -- the reason I'm ask is I'm searching for a parlance that we can use to discuss this concept easily. It doesn't matter to me so much just as long as we have a common understanding. I can use the term different count if you want.

A A revised ticket count.

Q Revised ticket count, very good.

A Revised late ticket count.

Q Revised late ticket count, okay. I'll do my best to stick to that term. And if you could, if possible, or if counsel wants to correct me, I'll welcome it. Revised ticket count it is.

What safety consequences do you see

resulting from PG&E's revised ticket counts between 2012 and 2017?

A I'm not aware of a -- I'm not aware that the revised ticket counts led to more dig-ins. I would welcome that information. I would -- I don't know if an analysis is underway or not to specifically ask did any of these tickets yield to an actual dig-in.

Absent that correlation, there was no dig-in that occurred, but I welcome an analysis that tells me different.

EXAMINATION

BY MR. BRUNO:

Q Mr. Soto, is that to say if your dig-in rate is reasonable, in your mind that late tickets don't matter?

A That's not what I said, Mr. Bruno.

Q I didn't say that's what you said. I'm just saying is that along those lines of thinking? In other words, you just described a process where the late ticket is identified, if they did not result in a dig-in, you would be -- and help me if you will -- what did you say about that?

A Yeah, well, why don't we ask the court reporter to recite what I just said. My response was in reference to safety so why don't we all get on the same page and --

Q Excuse me, Mr. Soto, let me rephrase. Are you concerned with the revised late ticket count?

A I am.

Q Absent any of those late tickets resulting in a dig-in, are you concerned with them?

A I am concerned with the revised ticket counts, yes.

Q Would you also look at your dig-in rate during that same time period?

A I look at the dig-in rate quite often.

Q So if you are --

A Let me finish.

Q Yes, sir.

A I look at the dig-in rate again as number of dig-ins normalized by number of tickets received whether you respond to them or not. That's the denominator. The denominator of dig-in rate is number of tickets whether you respond to them or not. That is my understanding.

Q So my understanding is you would welcome analysis if any of these late tickets resulted in a dig?

A Yes, that's what I said.

Q My understanding is also that you'd

look at the dig-in rate as an indicator for your purposes of damage prevention?

A Yes.

Q Are you concerned with late tickets that do not result in a dig-in?

A I am concerned with responding to all tickets. That's how I view as part of our responsibility. What I don't know and cannot articulate to you is whether either of the two data sets of late tickets resulted in actual dig-ins.

Q Thank you, Mr. Soto.

EXAMINATION

BY MR. GRUEN:

Q Okay. What other safety consequences do you see resulting, if any, from PG&E undercounting the number of late tickets it had between -- I'm sorry, strike that. I want to use the right terminology and I'll do my best as I said.

What safety consequences do you see resulting from PG&E using a revised ticket count of the number of late tickets it had between 2012 and 2017?

A Can you repeat the question.

Q Sure. What safety consequences, if any, do you see resulting from PG&E using a revised late ticket count between 2012 and

2017?

A I'm not aware of any safety consequences, specifically as dig-in or dig-in rate as a result of either of those data sets of late tickets.

Q Okay. I'll ask the question slightly differently.

A Sure.

Q But it's a very similar question. I recognize there is a lot to it, but let me -- and please ask me to repeat it if you don't understand. I want to be sure we get this correct.

What safety consequences, if any in your opinion, could result from PG&E having a revised late ticket count between 2012 and 2017?

A Sure. The potential consequences are that if an operator does not respond timely to a request for a locate and mark is that an excavator could proceed to excavate without facilities being identified. The potential safety consequences could also be that an excavator could cease to call a call center.

Q Okay. Anything else that you want to add?

A Those are the two that come to

mind.

Q Okay, understood. What about PG&E following the requirement for tickets that we discussed at the outset this morning. Would it be possible that PG&E would not be properly counting the number of times it did not follow the ticket locating and marking requirements?

A Would it be possible for PG&E to not be following the requirements of locating and marking? Yes.

Q Would you expect that that would be the case in this instance?

A Given the large volume in the revised data set, that could be a possibility.

Q In light of the revised ticket counts that SED received last week, could Safety and Enforcement Division have identified violations of the locating and marking requirements for any of these newly identified late tickets from 2012 to 2017 before PG&E disclosed late ticket count, the new late ticket count or, excuse me, revised late ticket count?

A I'll leave it up to SED to determine what was given when, what information was provided to SED as part of audits that take place within either programs and/or audits of specific locations and divisions.

I don't know if any of this information was previously provided, not provided, looked at, I don't know.

Q I appreciate your point. Let's assume for the sake of discussion that the data response that we received last week that I showed to you earlier is the first time that Safety and Enforcement Division has received the revised ticket counts. Do you have that in mind?

A That's the assumption?

Q That's the assumption.

A Okay.

Q That is indeed an assumption. Let's assume that's the case for this set of questions. If that is in fact true, could an enforcer or regulator in the position of Safety and Enforcement Division have identified those late tickets from 2012 to 2017 before PG&E disclosed them?

A Whether PG&E disclosed them or if found by SED through their respective reviews, I think the outcome is similar. What I mean by that is if you looked at history and you looked at items that PG&E has self-reported, I go back to 2012 when we missed conducting a leak survey on certain maps in Contra Costa County, the outcome of that was a fine of $16.8 million to incidents where PG&E has found reviews of information yielding to notice of proposed violation or violation.

So my point being whether we disclose it as PG&E or if found by SED through reviews or audits, I've not seen a difference in approach in terms of providing a mechanism for SED to provide either a fine or a notice of violation.

Q I hear you. I hear that you have not seen that SED would have provided a fine or did provide a fine or notice of violation. I think that's what I'm hearing.

A I think the question, as I understand it, is would this provide SED with a path to generate a violation or a fine. My point being whether if found by SED or transmitted by PG&E, if we look at history, my perspective is there is no difference whether identified by PG&E -- whether a nonconformant is identified by PG&E through a self-report process or a nonconformant is identified by SED through an operational review or audit, both of those instances could lead to a notice of violation and/or a fine.]

Q Let's stick with the assumption that we had at the outset, that the 2017 -- excuse me -- that last week's data responses showing that the revised ticket counts were not known, were not provided to SED prior?

Could you see an instance in which an SED audit could have discovered them?

A My perspective is that it could have. I've not participated in the audit process. I've not been in the room when different programs are reviewed.

What I do know is that we often provide self-reports as part of either the audit process or outside of the audit process. They -- so I don't know what SED would look at as part of each of the reviews either at an operational level, whether it's a division or a district, or at a programmatic level.

Q Let’s assume further -- I'm listening to this is, and I'm hearing you. I'm just trying to go through each point that you mentioned of potentially how SED might have discovered this information. And so I've asked about the audit. And then I'm going to self-report next. That's where I'm going here.

A Okay.

Q I want you to see how I'm kind of approaching it.

And the self-report, if we stay with the assumption that PG&E has not, prior to last week, disclosed these revised ticket counts, then it would follow that the self-reports would not have used information that was the basis for these revised ticket counts; correct?

A Yes. I don't know what the trigger was for the revised data set. I don't know what the criteria that was used. So I don't know what prompted the revision.

Q Okay.

A What I do know is that we have we have put a lot of focus and effort to understand our on-time ticket performance. And I don't know what filters have been removed, what filters have been added --

Q Okay.

A -- what criteria has been established to produce this revised data set.

Q Okay.

MR. GRUEN: Let's go off the record for just a moment.

(Off the record.)

(Whereupon, at the hour of 12:18, a recess was taken until 1:15 p.m.)

* * * * *

AFTERNOON SESSION - 1:15 P.M.

* * * * *

MR. GRUEN: Let's go back on the record.

EXAMINATION (resumed)

BY MR. GRUEN:

Q Mr. Soto, before lunch we had asked you about -- I think I recall you mentioned you were surprised to see the new ticket counts is I described them.

Is that the first time that you've seen those ticket counts?

A Yeah. This is the first time that I've seen this analysis that was put forward as part of the data response in February.

Q Okay. Were you -- prior to today, have you been aware that PG&E has been revising its late ticket counts?

A I was aware that we were reviewing whether the submittal that we had provided earlier to SED, or your office and through the SAR process, I was made aware that we were reviewing whether that was accurate or not.

Q Okay.

A What I'm not -- what I can't tell you is the specific numbers, whether those were -- may have been presented to me in the past through another analysis. But I don't recall them.

Q Okay. Were you -- did you have an idea about the approximate delta between --

A I did not have an appreciation for the delta, the difference. I did not.

Q Okay. And just for the record, to clarify, when we talk about delta, we're talking about the difference between the old ticket counts from April of 2017 that SED received, and the new ticket counts that SED received from PG&E last week?

A Yes. The revised ticket counts; correct.

Q Thank you. The revised ticket counts. I'll try to use that again. Thank you. I appreciate that.

Okay. Let me ask you about a different set of questions just about changing information on the ticket. To your knowledge, have any employees or personnel, including contractors for PG&E -- so anyone working for PG&E doing locating or marking.

Do you have that in mind?

A Yes.

Q Okay. Anyone falling into that category, have they changed information on a ticket so that it would not become late, to your knowledge?

A Have I -- I'm not familiar with people that have changed -- that have come to me that have changed information, if that's what you're question is.

Q Okay. It is. And thank you. I'll ask another one related to it I appreciate that.

Has anyone communicated with you that employees or contractors for PG&E doing locating and marking, changed information on tickets so that it would not show up as late?

A I'm not aware of employees or contractors changing information.

Q Okay.

A What I am aware is through our QA process, where the QA team identified instances of where the ticket was noted to be on time. But based on their review, they felt that ticket was not on time.

Q I appreciate that. Okay. I see your point.

And that was part of the QA process you said?

A Yes.

Q Is that Quality Assurance?

A Yes.

Q And is there a QA team?

A Yes.

Q And who's on the QA team?

A QA employees.

Q Fair answer. I asked the question.

A I can't tell you the names of the employees that are -- your question is what are the names of employees that are on the QA team. I don't know all of the employees --

Q Okay. Let me say, I ask the question with perhaps not the best appreciation of the number of employees who have to report to you. I imagine it's quite large. So I get why you wouldn't -- why someone and anyone in your shoes wouldn't know the names of all the QA numbers. So maybe I can ask this and help hone the question. I'll do my best.

A Okay.

Q Do you recall anyone, QA team or otherwise, who reported to you about -- actually, let me back up and make sure I understand the situation you described first.

A Sure.

Q And then I'll ask. I just want to make sure I get it.

A Okay.

Q So the QA team reported that there

were some tickets that did not show up as late or were not recorded as late but, in fact, were late?

A The QA team provided me examples -- second quarter, mid-summer of 2016 -- of a handful of tickets where based on their review, the -- in their assessment, that ticket should have been counted as late. But it was a ticket that was showing up as being on time.

Q Okay. Got it.

Go ahead. Did you want to add to that?

A No, that's what I wanted to put in context.

Q Okay. Thank you.

And you said -- I think I got it, but you said that was Spring of 2016? Second quarter of 2016?

A Yeah. I recall it being second quarter to Summer of 2016.

Q Okay. Thank you.

To the best of your recollection, how many tickets did the QA team report of those instances? How many such late tickets?

A The examples that they would have provided to me would have been five-ish. It was just a representation of what they were observing or had observed as part of their assessment.

Q Okay. Yeah.

And I think you're eluding to this -- and just to clarify, this would not have been the QA team counting all of the tickets in order to provide you with a complete count --

A Correct.

Q -- of these instance, but rather a small sample -- result of their sampling efforts perhaps?

A That's correct; yes.

Q Okay. I follow.

Do you recall who shared that information?

A If memory serves me right, it was Jennifer Burrows who was manager, I believe, of the organization. And, likely, Vince Whitmire.

Q Okay.

A I think so.

Q I wouldn't be able to spell his name, and I know I'll get asked. To the best of your knowledge, do you know the spelling of Mr. Whitmire's last name?

A To the best of my knowledge, W-h-i-t-m-i-r-e. Happy to look it up.

Q No. If we need to, we can ask your staff. We appreciate you trying. It just gives us a starting point.

A Mm-hm.

Q Okay. So of the tickets that the QA team reported to you, do you know if any of them had their due dates rescheduled without mutual agreement from the excavator?

A I don't know if they were of that nature.

Q Okay.

A What they were showing me was examples of where, based on their assessment of when a ticket was received, ticket was completed, and based on some of the notations, their assessment was this should not be counted as an on-time-type ticket.

Q Yes.

A What I don't understand, or recall the nuances of, was whether that was a renegotiated ticket or not.

Q Okay. Would those tickets that were just -- that you just described, have been part of the late ticket counts in the Keys reports for 2016?

A My recollection is that those would -- hence, why they were bring presented as examples -- was that those were tickets that were being counted as on time. But should not have been continued on time.

What I don't know is based on those observations have QA found, that that triggered a revision, now, to the number of late tickets for 2016.

Q Okay.

A I.e., QA found it and now, because based on their assessment, it’s late, did that trigger an update in the respective months or that calendar year? I don't know.

Q Okay. Do you recall any discussions or communications regarding the method for counting late tickets in light of what the QA team identified to you?

A If memory serves me right, I believe the discussion centered around tickets that were either phased or renegotiated. Those, I believe, seemed to be the theme of the examples that were shared with me.

Q Okay. And do you recall any communication around -- related to the idea of the method or way of counting late tickets related to the conversation that you just described?

A No.

Q Was there any -- well, let me just

ask you this.

A Mm-hm.

Q What was your reaction when you heard that discussion?

A Yeah. I was intrigued by what QA had observed. What I didn't know was, is this system-type issue? Is this a training issue with the locator? Is this regional? Is this extent -- I didn't have an appreciation for extent of condition. Based on their examples, you know, I committed to them to following up.

Q Mm-hm.

A I went to the Vice President of Operations at the time, John Higgins, and asked him specifically to meet with the QA team. And I didn't want to share -- I didn't want to misrepresent what the QA team had shared with me. So I asked him to have the QA team walk him through the very same examples that had been shared with me.

Q Okay. And did you talk with him about what he heard from the QA team?

A I did not.

Q Okay. Why not?

A I have an officer that is in charge of the operations organization. It was not something that I was shocked or stunned.

Q Okay.

A It was in the spirit of -- you know, we ask our employees to -- we can't fix what we don't know, be transparent in terms of what they find. Through e-mail and/or my town halls, I get a lot of -- whether it’s trucks or training or tools or union issues or -- the gamont of things that come my way are substantial. So I have to rely on those that are part of my team to have the appropriate, you know, follow-up. And if there's deficiencies or gaps, to come back with a status and then move to "How do we fix it?"

Q Yes. I appreciate that. Okay.

I think I'm hearing that maybe these questions, if we chose to ask them, are better directed towards John Higgins?

A If you want to know -- if your question is "What actions were taken by John and or others as a result of my meeting with the QA team and the examples that were shared with me" --

Q Yeah.

A Those questions are best answered by others.

Q Okay. Okay. Maybe I'll try and wrap up with another question or two.

But, to your knowledge, was any action taken in response to the information that the QA team presented?

A I don't recall me having any follow-up discussions with John or others as a result of that information. I just -- I don't recall a meeting. I don't recall a hallway discussion. I just don't have recollection of how that was closed out.

Q Okay. Okay. Were you ever advised or informed that there was not enough staff power to avoid having late tickets?

A I was advised of the staff deficiencies in several dimensions. One dimension was having employees to respond to locate and mark tickets. I was advised of the turn that we had within the organization.

I was advised of the need for additional qualified electrical workers to support as part of the locate and mark process. And I was advised of our need to bring in contract-type recourses to address those gaps, whether it be turn, ticket volume, or gaps in staffing as a result of people moving in, moving out of the locate and mark organization.

Q Okay.

A And we took -- I felt we took the

appropriate action to be responsive --

Q Yeah.

A -- to all of those needs.

I can point to the staff that was added to that organization. I can point to the discussions that were held with the electric organization around qualified electrical worker support. I can point to discussions that we had with the IBEW, which is a union that represents our field technicians around exploring, pay premiums, and/or constraints around employees once they took a position, being in that position for a period of time before moving to a different part of the organization or a different location.

Q You mentioned the word "turn," and I want to just understand what that word means.

A Sure.

Q Was that -- was there turnover in terms of hiring people to help address late tickets and then losing some people from the company?

A Yes. So we have turn in the organization which is equivalent to turnover.

Q Yes.

A A driver for turnover is that -- an

employee at a certain -- whether level or classification makes the same wage, whether that employee works in San Francisco or works in Fresno, there is no wage differential within the gas organization. Working at PG&E is a very desire able role. We often have, when we post externally, hundreds if not thousands of applicants. And employees strive to, what they call, "get in."

It’s not uncommon to have employees that work in San Francisco or the Peninsula, but actually reside in Sacramento. And they will take a position if that's their -- where the position exist, if that's where the cost of living is highest. And then it’s not uncommon that, as soon as there's an opportunity, for those employees to find a path back to where they reside or a lower cost area, that they go back to that location.

It’s been represented to me by our HR organization that for every vacancy we have, the multiplication effect is as high as seven times. So that creates constant turn or turnover in the organization. And it’s been represented to me that a contributing component of that is, among several things, the cost of living and housing in some of these higher cost areas.

Q I follow. Okay. Thank you. And so -- let me get back to the questions regarding changing information on tickets that I asked you about.

Do you recall me asking questions related to that just after lunch at the beginning?

A Yes.

Q Okay. So are you familiar with the term "phasing" in the context of tickets?

A I'm generally familiar with the concept of phasing of a locate and mark ticket, yes.

Q Okay. And just at a very brief level --

A My understanding of phasing a ticket is a situation where an excavator -- as an example, a sewer contractor is going to be doing work and provides the location of that work to be Mission Street from point A to point B, multiple blocks, multiple miles. And the phasing of that ticket is to then break that into several areas so as the process can keep up with the head of the work to identify facilities.

Tickets have a shelf life. Tickets also -- the process of locating and marking, you have paint that you use. And you want to make sure that those -- not only that they are accurate, but they stay visible to the excavator. So the phasing concept is, it allows you to break up a lengthy area that's been called in into a subset and phase that ticket.

Q Thank you. So the subset that you just discussed, would that -- would different subsets be located and marked on different days, perhaps?

A My understanding is that they could. Based on the examples that have been shared with me is very lengthy segments where it takes time to mark it, whether it’s a day or multiple days. So it would then get divided -- and the contractor, generally, does not work along that entire space. He has an approach.

But, clearly, if the contractor would say, "I need it all because I want to have multiple crews working at that location," then that would trigger a different type of response. We would have to respond to it with multiple crews or people to be able to keep up.

Q Yes, I see what you mean. Okay.

And is there a criteria for

determining whether to phase a ticket?

A I'm not familiar with the criteria that we use, either with PG&E or within the industry.

Q Okay. So would -- in your mind, would it be a judgment call as to whether to phase a ticket or not?

A I don't know.

Q Okay. Okay. Were you ever informed of tickets being incorrectly phased so that the due date for locating and marking would be rescheduled?

A I can't point to that specific example that you shared with that criteria.

Q Okay.

A What I do recall, is in my meeting with the QA team, either phasing or renegotiated tickets were examples of what they shared we me. I don't recall if they were both or one of those two types of examples.

Q Okay. And just to clarify the kind of example on the phase ticket, can you say more about why those tickets were -- shared with you and what the point of sharing them -- I guess it was really what the point of sharing them with you?

A Yeah. The point of -- my

understanding of the point of sharing it with me was to provide me with specific examples of when we say either renegotiated or phased, depending on the example we're trying to put forward, is show me an actual ticket, bring show and tell, and point to fields and/or text that help me understand.

You know, I learn by seeing. I understand by seeing. So I'm a very hands-on, tangible. So I wanted to see examples of -- it’s not content that I touch as part of my standard work.

Q Right.

A So someone comes to me and says, you know, I want to show you an example of a late ticket or face ticket, so bring it with you, because I want to see it.

Q Yeah. Yeah. So -- excuse me.

Okay. The phase ticket idea, I guess -- I think I'm hearing -- I may wrap up on this on the phase ticket part.

The phase tickets, just in terms of phasing certain parts, or phasing a ticket so that it wouldn't show up as late, that's not something you're familiar with or have had anyone report to you either examples or just tell you, basically, about?

A I don't remember the categories of

the types of tickets that were shared with me by QA, whether they were phased or renegotiated-type tickets. I just don't remember the specifics of that.

Q Okay.]

To your knowledge, different set of questions, I'll move on from phasing now?

A Okay.

Q To your knowledge, had anyone or had it been reported to you that someone in PG&E, anyone in PG&E, I'm not focusing on a particular person.

A Sure.

Q Anyone in PG&E practiced or called an excavator multiple times and closed a ticket out because no response came back from the excavator rather than going out to locate?

A I don't remember specific examples, but I do remember a discussion on that being a category of why a ticket could be late.

Q Okay.

A Or on time.

Q Or on time, okay. Regarding the late ticket part that you described, when you say category, can you give some context around how that category was shared with you.

A Yeah. What I seem to recall is if

there is a -- well, the specific example that I recall around not responding to a ticket on time as an example, was last year -- so I try to participate in the daily op call every single day. That's a very valuable 30-minute report op for me. I remember Joel reporting out of a challenge in keeping up with tickets.

I don't remember the specific question that I asked him as part of the daily op calls, but he did provide me with an e-mail later in the day where -- trying to put in context his comments and he used the term I believe it was around inclement weather I believe it was around. So that may have been a category as to why we were not responding within the 48 hours of a window.

So it's my understanding there could be several categories that are used as a result of not responding to that ticket entirely within 48 hours. What I can't tell you is what's the subset, what's the menu look like of all those different categories.

Q Okay. But it sounds like the way you're describing it this is almost maybe a database or some sort of -- some sort of set, electronic set of data that categorizes reasons why tickets are late.

A I don't know if it's a database or it's a term --

Q Yeah.

A -- that is used that is entered as a field. I can't tell you whether it's a drop-down menu in the ticket system that we refer to as Earth.

Q Uh-huh.

A I don't know if it's a drop-down menu on the tablet, I don't know if it's just a generally accepted term that is used. I'm not familiar with the mechanics of the process.

Q I follow. To your knowledge, had anyone in PG&E instructed others to close out a ticket after calling an excavator more than once rather than locating it?

A I'm not familiar with that instruction, no.

Q Let me switch topics. This is a different set of questions. I think earlier we were talking about you mentioned dig-ins and I'd like to maybe ask you a little bit about some questions relating -- some questions about the potential relationship, if there is one if you think, between late tickets and dig-ins.

A Okay. So dig-ins is the

numerator --

Q Yes.

A -- is my understanding.

Q Yes; please.

A Dig-ins is the numerator. Tickets received is the denominator by thousand tickets. I did not see any indication whatsoever that not responding to tickets or late tickets were a driver for dig-ins.

The dig-in rate, as we compared it year over year, continued to drop. And as we investigate and categorize the dig-in, the cause of the dig-in, late tickets were not the category that I saw or was conveyed to me as the basis for the dig-in.

Q Okay. Does that reflect your judgment that late tickets are not a basis for a dig-in? Is that your thinking as well?

A My understanding and the reports that were presented to me as part of Keys, which we observed earlier.

Q Yes.

A The dig-ins are investigated or the cause and drivers for dig-ins is determined, and on the reports that I received there's nothing that was pointing out to me that late -- not responding to tickets at all or responding to tickets late were the cause of the dig-ins that we were experiencing.

Q Okay. I'm going to circulate an exhibit here. Correct me if I'm wrong, but I believe this is Exhibit Number 6.

(Reporter clarification.)

MR. GRUEN: Q I have a copy for both counsel and Mr. Soto. Mr. Soto, do you see that this is an e-mail from -- let me back up and clarify. You mentioned Joel earlier in a response. Were you referring to Joel Dickson.

A I was, yes, Joel Dickson.

Q Did Mr. Dickson provide you with any insight about relationships between late tickets and dig-ins?

A I don't recall any, no.

Q With that, I'd like to run this down. I recognize that you may not have seen this e-mail before.

A That is correct, I've not seen this e-mail.

Q But you see that it's dated March 4, 2016. It's from Mr. Dickson to Jeffrey Carroll. Do you see that?

A I do.

Q The subject is entitled "RE Bullet Points for Fairfield dig-in."

A That's the subject, correct.

Q Do you know Mr. Carroll?

A I know Jeff Carroll, yes.

Q Let me back up. What is Mr. Dickson's professional relationship to you?

A Mr. Dickson was a director within the gas organization. He was already in a director role. I seem to recall he was already in a director role when I joined with the organization in 2012.

Q Okay.

A He had a responsibility for I think emergency preparedness, response initially, and through reorganizations, he led our compliance programs. Joel never reported to me directly, no.

Q Who did he report to?

A So over time --

Q Let me --

A So Joel was a director in the organization.

Q Yeah.

A Our reporting structure is directors generally report to either a senior director.

Q Yes.

A Or directly to an officer.

Q Okay.

A Whether it be a VP or an SVP.

Q Okay.

A In my recollection of reporting history from Joel, he reported to either a senior director or an officer --

Q Okay.

A -- throughout his tenure within gas operations. So Mr. Joel Dickson is no longer within gas operations today. He now leads the fleet organization.

Q Yes. And when he was director of gas operations, did he communicate with you?

A Well, I had exposure to Joel certainly as part of the Keys To Success meeting --

Q Yes.

A -- on a monthly basis.

Q Okay.

A And then other than that, it would have been issue driven.

Q Okay.

A Or some of our other governances meetings, whether they be gas safety council or something to that effect.

Q Okay. That's helpful, thank you.

A Okay.

Q And Mr. Carroll as well, so you are familiar with Mr. Carroll?

A I know Mr. Jeff Carroll, yes.

Q And Mr. Carroll would have been working for Mr. Dickson when Mr. Dickson was director of gas operations; would that be accurate?

A So Mr. Jeff Carroll reported to Joel as part of Joel's leadership of the compliance programs locate and mark. I don't know if Jeff Carroll also reported to Joel when Joel had the emergency preparedness and response team. I just don't remember.

Q That's helpful. Thank you. If I could direct your attention to the e-mail that we were referencing, so Exhibit 6, and looking at the e-mail from Mr. Carroll to Mr. Dickson about not the first one, but this is, I believe, a thread. It's maybe a third of the way down the page. It's dated March 3, 2016, at 5:06 p.m. Do you see that?

A March 3rd, yes, this is an exchange from Jeff Carroll to Joel Dickson, 5:06 p.m., March 3rd.

Q Correct.

A I see it.

Q Good. You see Mr. Carroll stating in the bulk of that e-mail "I have reviewed and there is nothing factually wrong with the points. There are some alleged conversations and perhaps some discrepancy of notes viewed on an iPhone versus a tablet, but these are issues that we need to resolve separately and do not alter the facts below." Do you see that?

A I do.

Q So turning to toward the bottom of that page from an e-mail from Mr. Jorge Gil-Blanco to Mr. Carroll, do you see that?

A Yes.

Q Dated 3:39 p.m. on March 3rd, so we're working backwards now as we go further down the e-mail thread. Are you familiar with Mr. Gil-Blanco?

A I am.

Q He worked as well on the gas operations team?

A Yes.

Q It says, "Eric Kurtz contacted my investigator and asked him to provide him with a bullet-point e-mail regarding the Fairfield dig-in so he could address it on the morning call below." Do you see that?

A I do.

Q If you turn the page over, I'd like to just go through this briefly in which it seems that this is an e-mail from [redacted] [redacted] to Jorge Gil-Blanco. Do you know [redacted]?

A I do not.

Q On the subject matter it says, "Bullet points for Fairfield dig-in." I'm inferring from that that this is the original e-mail that started the thread if you will.

A Fair assumption.

Q Thank you. So at the beginning we see at the top it says "On February 26, 2016, at 11:44 hours [redacted] Rader Excavating called in for a USA ticket," and it provides the number. It says that USA ticket number was assigned to this request. Do you see that?

A I do.

Q If you will indulge me, this is --

A Yes.

Q -- a little bit funny, but in his ticket -- the next bullet says, "In this ticket, the area to be marked and located was called for as follows, 'E/SI/O, Pennsylvania Avenue from Dana Drive to Gateway Boulevard, EXT 20 feet E,' I assume that means east, 'into prop,' I assume that means property 'for ent dist' and I assume that means 'entire distance.'"

Do you see that?

A I see it. I don't know what it

means.

Q Would you agree that it looks as if they're marking and locating a ticket in Fairfield? They're talking about locating and marking a ticket in Fairfield where Pennsylvania Avenue and Dana Drive intersect?

A It does not explicitly call out Fairfield. As I read it, it's basically Pennsylvania Avenue from Dana to Gateway Boulevard, but it doesn't reference Fairfield.

Q I think you're right. That particular bullet does not. Where I'm getting Fairfield from is just the subject, the heading.

A Okay.

Q So would you think that it was a fair inference that this is describing something in Fairfield given the heading?

A Well, it could, but, again, if you're asking me what does it read, it reads what it reads.

Q Understood. Okay. Let's see if I can move a little bit faster. February 29, 2016, the next bullet, "PG&E L&M [redacted] [redacted] made an entry into this USA ticket showing that this ticket was located and marked being cleared for excavation to start as of March 2nd."

It had also listed that the area was premarked. Do you see that?

A I do.

Q On February 29th, "A positive response was sent to Rader Excavating, clearing them for excavation within the above-noted and delineated are requested." Do you see that?

A I do.

Q On March 2, 2016, "[redacted] made a follow-up USA ticket request. The notes on this request are 'Cust sees no evidence of markings, PLS cantact,' I assume that's a typo, 'cantact [redacted] at' -- and he gives a phone number -- 'with ETA to mark site or give clearance ASAP.'"

A I see that.

Q Okay. And following up on March 2, 2016, "[redacted] contacted [redacted] about why the area between B. Gale Wilson Boulevard and Gateway Boulevard on Pennsylvania Avenue had no markings. [redacted] told [redacted] that he had, 'messed up' and not marked out this area. [redacted] told [redacted] that he would come out the next morning and get this area located and marked." Do you see that?

A I see it, yes.

Q What does that mean to you?

A What this means to me is that a gentleman, [redacted], called [redacted] inquiring about a specific location. The specific location is B. Gale Wilson and Gateway Boulevard.

I don't know whether that's a subset of Pennsylvania Avenue from Dana to Gateway, but it specifically calls out that and asking why that location had not been marked. The response as captured here is that he had messed up and not marked out this area and they'd be there the next morning to get this area located and marked.

Q I appreciate that. But on the bullet that we read that says "A positive response was sent to Rader Excavating," and I'm looking at the 4th bullet again just for recollection on February 29th, a positive response was sent clearing them for excavation within the above-noted and delineated area.

So doesn't that mean that this was representing to the excavator that in fact the site had been located and marked?

A This to me would represent that the area as captured in the ticket from Pennsylvania to Gateway was cleared for excavation.

Q In order to clear it for excavation, as shown in the third bullet, [redacted] made an entry into the USA ticket showing that the ticket was located and marked being cleared for excavation.

So there was an entry put in that in fact the ticket had been located and marked; isn't that right?

A Again, the text speaks for itself.

Q Okay.

A Yeah.

Q Let's continue on. Continuing with the next bullet, March 3, 2016, "When [redacted] went to get in his truck, he saw he had a flat tire. He then called PG&E L&M [redacted] [redacted] and asked him to respond to the location to perform the locate and mark for this area." Do you see that?

A I do.

Q And the following one, March 3rd, "While [redacted] was doing a locate and mark for underground PG&E utilities in the area, a Rader employee was using a backhoe within the delineated USA ticket area and struck a two-inch plastic gas main causing the release of gas from the line."

Do you see that?

A I do.

Q The next bullet, "Upon talking to both [redacted] and [redacted], both told me that neither of them had updated the USA ticket that had been cleared for excavation to show that the excavation should not take place until the area between B. Gale Wilson and Gateway was located and marked.

"Neither [redacted] or [redacted] told/informed anyone from Rader not to dig/excavate until the area in question was located and marked. [redacted] of Rader Excavating also confirmed this."

Do you see that?

A I do.

Q Let me tell you my understanding and I want to see if you agree. This shows that, as described here, the locator and marker went out, excuse me, made an entry that he had located and marked when in fact he had not, had given a positive response that he had located and marked and got a response from the excavator saying "I don't see any locating and marking out here," and that the locator then said "I messed up, sorry, tried to take care of it," found out that he couldn't because of his flat tire, asked another locator to go out and do it who also didn't handle it because he was working on PG&E work.

Neither of them went out there and didn't correct the positive response, and then the excavator took matters into his own hands, excavated, hit the two-inch gas main and gas escaped so there was a dig-in as a result. PG&E was late in this case.

Does that characterization seem accurate so far to you?

A Generally I follow the thought process. What I don't know and can't determine from this is what was actually marked out if anything. I can't determine that.

Q Fair point, and I haven't read you the rest. I think your indication is an excellent segue to that so let's get to the last point then or the second to the last bullet point, excuse me, which I read to say, "[redacted] told me that his crew had in fact pot-holed the area nearest the north most delineation near Gateway at Pennsylvania where an old yellow paint marking was to try and see if in fact there was a gas line there.

"This yellow paint marking showed a gas line running in an east/west direction.

On pot-holing in this area, they located a 'gas valve.' Rader then began to excavate with a backhoe approximately eight feet south of the line they believed was showing to run east/west of the location. While using a backhoe to excavate and area," I think that's a typo for "an area for a vault, they struck and damaged a two-inch plastic gas main belonging to PG&E that was running in a north/south direction."

My understanding of this, and I want to see if you think this is accurate, my understanding is that the excavator looked at some old paint that he deemed to be a mark on the ground, saw it running east and west, inferred from that that there was a gas line or a valve or some sort of equipment running east and west.

He dug south of that thinking he was clear and ended up hitting something doing a dig-in. Does that seem accurate to you?

A Yeah, I mean based on what I read, I think it's inferring that there was a conversation here where [redacted] conveyed that his crew had pot-holed the nearest area, nearest the north most delineation. It references Gateway and Pennsylvania.

Q Yes.

A Again, I don't know if there's a subset of Pennsylvania Avenue from Dana. I just -- just based off of text --

Q Yes.

A -- and I don't have a reference to a map that would help --

Q Yes.

A -- whether this was a delineated space or not. I can't tell from this within this geographical area what was marked, if anything, so it's difficult for me to contextualize and visualize all the things that could be happening at this location.

Q I get your point about the mapping and that it's difficult without a map to see the orientation. We haven't given you one. I struggled with that too, frankly, so I get your point.

Let me ask you this: In terms of the timing here, we've established, I think, that the locator didn't come out on time and gave a positive response to suggest to the excavator that he could go ahead and the excavator went ahead and actually tried to figure out where the underground infrastructure was and he tried to move forward and had a dig-in; isn't that correct?

A What I have established in this logic is that the locator, [redacted], made an entry into this ticket, that the ticket was located. I don't know what he located, if anything, as part of his entry. We can establish also that [redacted] called, that he saw no evidence of markings to a specific location, we can establish that [redacted] told [redacted] that he messed up.

I don't know what that means, whether he did go, went to the wrong location, went to the wrong area, said he messed up and not marked out this area. I don't know what this area means.]

Q You don't know. So when you're saying that he messed up and not marked out this area, I guess I'd call your attention to the next sentence: It says, "[redacted] told [redacted] that he would come out the next morning and get this area located and marked?"

That doesn't mean to you that he didn't locate it and mark it in the -- he didn't locate and mark the area at the outset when he said he had?

A What this indicates to me is that [redacted] contacted [redacted] about why the area again Gale Wilson Boulevard and Gateway Boulevard on Pennsylvania Avenue had no markings. That's what that tells me.

Q And it tells you after there was a positive response; isn't that correct?

So that the customer sees no evidence of locating of markings on March 2nd; that's the line that you're looking at? March 2nd 2016?

A Yeah. The area that I was reading?

Q Yes.

A Sixth bullet.

Q Yeah. No. I follow you. I'm clarifying.

So March 2nd -- the fifth bullet we get: March 2nd. He sees no evidence of markings.

And then the fourth bullet on February 29th, a positive response was sent to Rader, clearing them for excavation; right?

A Within the area noted and delineated area requested.

Q Right. Right.

So the positive response we've established is I think I understand earlier is PG&E as the operator telling the excavator that in case there's any locating and marking to be done, they've done it; isn't that right?

A I don't know what positive response means in this context here. What I can read here is the entry on bullet No. 3 stating that this USA ticket was located and marked, being cleared for excavation to start on March 2nd at 800 hours.

Q Okay. Would you expect that they -- that by clearing the excavation to start as of March 2nd that PG&E would have told the excavator that it was okay to get started with excavation on March 2nd?

A Yes.

Q And on March 2nd, going to the sixth bullet, the excavator contacted the locator asking why there were no markings; isn't that right?

A That's what this says correct.

Q Okay. So the excavator indicated -- I'm sorry. The locator indicated that there were -- that the locating and marking had been done.

A No. That's not what it says. It says [redacted] told -- that he had messed up and not marked out this area. What I don't know is what "this area" means.

Q I follow you.

I think what I'm trying to get at is an overview. I mean, in the context of this being a dig-in, and the ticket number that was identified on the first bullet of this request, wouldn't you expect that this area would be generally referred to the area that the excavator had identified and requested to be marked?

A Yes. And in response to this ticket, the area is, as noted in the ticket, Pennsylvania Avenue from Dana Drive to Gateway Boulevard. That's what the ticket calls for. What I'm not able to follow is part of the exchange is that the ongoing conversation starts referencing a different location, which could be a subset of this location here. It doesn't use the same cross streets; follow me?

Q I understand the words, but I'm struggling with why that concept would follow because we've got -- we've established that the reason for subsets is phasing; right?

A It could, yes. But if there's different cross streets -- what this says is Pennsylvania Avenue from Dana Drive to Gateway Boulevard, that's the geographical area, as I interpret this, and the subset in question --

Q Yeah. Maybe, Mr. Soto, I want to try and see if I can cut this short and see if we can get a common point of understanding established here.

A Sure.

Q Which is, would you accept that this description shows at a bare minimum a late ticket that was not properly reported resulting in a dig-in?

A I think a finer point so that we can move on, is that this shows a ticket that was not -- could have not been responsive to the area that was in the locate ticket that resulted in dig-in.

Q The only word I'm struggling with in your answer is "could have." It was a late ticket, which could have been in the locate and mark area and could have resulted in a dig-in; is that what I heard?

A Again, I'm struggling with --

Q I hear you.

A -- with making either a speculation or inferring text onto a visual map.

Q Right.

A I'm struggling with following geographical area of where the -- what the ticket calls for.

Q Okay.

A I'm struggling with the specific area that is [redacted] is calling out, whether it's a cross street or a subset or even an entirely different area. I just -- I don't --

Q Okay.

A I'm struggling.

Q There's a lot of pieces here, and I get that. Okay. Well, let's go with your statement. And let me just say it, because I know it's on the record but I want to be sure I've got it so that I can use it and move forward.

In this case I think you said, given your struggles - and I hear what you're saying - given your struggles that this could be late locate and mark ticket that was not properly recorded and resulted in a late dig-in. Did I understand that correctly?

A Yes. I'll go back to whatever I said here today.

Q I think in good faith, that's what you said. I might be mistaken, but that's my best guess.

A Thank you.

MR. GRUEN: Can we go off the record for a second.

(Off the record.)

MR. GRUEN: Back on the record.

THE REPORTER:

ANSWER: "I think a finer point so that we can move on is that this shows a ticket that was not -- could have not been responsive to the area that was in the locate ticket that resulted in dig-in."

THE WITNESS: I think we have also established I'm not locator, that language.

MR. GRUEN: Let's call this Exhibit 6.

(Exhibit No. 6 was marked for identification.)

MR. GRUEN: Q Email from Joel Dickson to Jeffery Carroll dated March 4th, 2016, entitled "RE: BULLET POINTS FOR FAIRFIELD dig-in."

Does that look right to you?

A Yes, it is. Thank you.

(Exhibit No. 7 was marked for identification.)

MR. GRUEN: I have another Exhibit, Exhibit 7.

Q And, Mr. Soto, identify this email. Do you see that this is from JLC5@pge.com to Jeffrey Carroll, dated July 8th, 2014, with the subject "Forward CPUC Audit - L&M in SF division"; do you see that?

A Yes.

Q If you would -- do you know who "JLC5" is?

A I don't, but I can look it up.

Q It's okay. It's a PG&E employee apparently.

A Yes, that is a -- well, it's a PG&E email, JLC5@pge.com, but I don't know who that person is.

Q Maybe it does show.

A Maybe it says Jeff sent from my iphone.

Q I wonder if that's Jeffery Carroll, if he sent an email to himself.

Off the record, please.

MR. VALLEJO: Can we go off the record.

MR. GRUEN: Off the record.

(Off the record.)

MR. GRUEN: Q While we were off the record, Mr. Soto checked and confirmed that JLC5@pge.com is Jeffrey Carrolls' email address; is that right.

A That's correct.

Q Moving to the third paragraph at the bottom that begins "after lunch," do you see that?

A I do.

Q And talks about, it says there,

"After lunch, they asked to give a

specific time frame of tickets across several folders. They were requesting the March 2014 time frame, which is when the Jones Street dig-in occurred, you will recall that this dig-in that occurred where we failed to mark within the 48-hour requirement."

Do you see that?

A I do.

Q Does this appear to be describing a dig-in related to a late ticket?

A The language says "you will recall this is a dig-in that occurred where we failed to mark within the 48-hour requirement."

Q Correct.

So would you understand that to mean that it's a dig-in related to a late ticket?

A I generally accept that. My reluctance to deem it late --

Q Yes.

A I seem to recall a -- I don't know if it was in 4216 or in the code, that "late" was defined as -- this is my recollection.

Q Okay.

A Either 48 hours, or a time when the

locator or the excavator was going to start, which could be beyond 48-hour time period.

Q Okay.

A I could be way off base in terms of whether -- so that's why I'm not -- I'm not accepting 48 hours of rigid boundary.

Q Okay.

A I seem to recall a definition of "late" that included a dimension of time when the locate -- not the locate -- the excavator was going to start construction, which could be beyond the 48 hours. So, like, maybe if we could clarify how "late" was defined --

Q Understood.

A -- in 4216, we could apply it to this.

Q Understood.

I think maybe just to capture it. My understanding is here that if an excavator and locator mutually agreed to go beyond the 48-hour requirement, that the ticket would not be late? Does that comport with your understanding?

A No. I think that's one element of it.

Q Yes. I'm not describing the whole requirement.

A It would be helpful to me --

Q Yes.

A -- if for this discussion around "late," if we could reference what the definition of "late" was to put in context for me the dimension of whether -- let's just say, for example, an excavator calls in a ticket on Monday.

Q Okay.

A But says that he's going to start work on Friday.

Q Okay.

A How many days does that operator have before the ticket is deemed late under that scenario.

Q That's helpful.

So in that case, wouldn't that be an exception to the 48-hour requirement?

A If that's the logic, if it's commensurate with what I remember, it would be.

Q Sure.

I think I agree with you. I think in that scenario if an excavator calls in and says on Monday, I don't want to excavate until Friday, PG&E has till Friday. Then PG&E would have till Friday. The 48-hour requirement would not apply in that instance; does at that sound right to you?

A That's my recollection.

Q I think that's my understanding as well.

I guess I would ask that you whether you think that situation applies here however?

A I don't know.

Q Well, the reason I ask is because it says, "You'll recall that this was a dig-in that occurred where we failed to mark within the 48-hour requirement."

Does that suggest to you that in this case, there was, in fact, a 48-hour requirement to locate and mark?

A Well, it speaks directly to this 48-hour requirement but I don't know the context for when this excavation was going to start?

Q So, you don't accept that this would be a dig-in resulting from a late ticket, is what I think I'm hearing?

A Yeah. I don't know if this was actually -- it is clear that we did not, according to this text, we did not respond within 48 hours. What I don't know is whether this was a late ticket under the definition of 4216.

Q Why don't you know that?

A Because I don't know when the start time for this excavation was going to be and whether this was beyond the 48 hours. Going back to the example of, it was called in on Monday, specifies a construction excavation to take place on Friday. We can respond by - what is it - Tuesday, Wednesday?

Q Yeah. I understand your point.

So you're saying that in this instance you're unclear whether the excavator called on Monday and said, I don't need to dig -- I don't need to excavate until Friday and so PG&E would have been on time potentially in that case?

A Potentially. It's very clear this is a dig-in where it occurred we failed to mark within the 48-hour requirement.

Q Do you think that they would have mentioned something about the 48-hour requirement if, in fact, the excavator had called on Monday and said, You don't need to come excavate until Friday?

A I don't know if we were measuring in terms of on time performance meaning strictly within 48 hours independent of when construction was going to start. I don't know what the context is, but what is clear is the -- as it states, this is a dig-in that occurred where we failed to mark within the 48-hour requirement.

Q Mr. Soto, perhaps Mr. Chan can do some follow-ups with perhaps a bit more knowledge. I'll defer to him.

EXAMINATION

BY MR. CHAN:

Q I was a state investigator for this incident because this was CPUC reportable because there was news media coverage.

A Okay.

Q And to your point whether dig-in -- whether PG&E failed the 48-hour requirement or failed to mark before the start date, so their excavator called in and stated that work would begin on March 3rd, and then the digging occurred on March 6th. So -- and based on my investigation of PG&E's report, there were no mark until the time that it was hit, which is March 6th, and the ticket was called in on February 27th; so it was past the 48-hour as well as their start date of the excavation, so that's why I want to ask you this, and, hopefully, clarify the point we were trying to figure out.

MR. GRUEN: Thank you.

You don't have anything else, Mr. Chan?

MR. CHAN: No. Thank you.

EXAMINATION

BY MR. GRUEN:

Q

MR. GRUEN: Q So with that understanding, Mr. Soto, would you accept as true that this was an example of a late ticket.

A Yes. Based on the investigation that SED conducted.

Q That resulted in the dig-in?

A Yes.

Q Thank you.

And given that understanding in this case a late ticket -- a late ticket resulting in a dig-in and putting that in the context of the revised ticket count -- I'm getting the term right.

A Uh-huh.

Q -- would that raise a concern for you that the revised ticket count could be correlate to other dig-ins?

A Yeah. So the revised ticket count, whether it's the initial ticket count or revised ticket count, that's all the subset of tickets. If you look at the dig-ins --

Q Yes.

A -- those dig-ins occurred under

either of the two scenarios. As the data that's been presented to me on the cause of the dig-ins. Whether it was in response to the old ticket count or the revised ticket count, the number of dig-ins didn't change.

As I look at the information that was presented to me on the causes of those dig-ins. Late tickets was not the driver that was presented to me. And I think the Keys to Success material, produces a chart as to the causes of the at-fault dig-ins. Failure to respond on time for a late ticket is not one of those drivers.

Q In light of the revised ticket counts that SED received last week that we've discussed, do you have concerns that late tickets as a driver of dig-ins that, perhaps, that's not accurate?

A I don't have a concern until I see the -- again, going back to dig-ins, if we evaluate every dig-in and it comes to light that the cause of those dig-ins was a failure to respond on time, then it changes my perspective, but at this point whether it's a sample of one or the data that's been presented to me via the keys, whether it's the old ticket count or the new ticket count, it doesn't change the number of dig-ins.

Q Do you -- in light of the late ticket count, do you want to know if late tickets are a reason for a greater number of the dig-ins that happened?

A So I want to know if late tickets are a driver for dig-ins. I want to know that. Dig-in rate has substantially decreased over time and as part of my leadership role, it is incumbent on me to understand what the drivers of the dig-ins are so that I can move to action, whether it's through tools, training, procedures, people to understand what's driving dig-ins so as to minimize.

Q Mr. Soto, I think I understand the gist of your point to me and that dig-ins have dropped and the use of the term "driver," I get it, but what I'm trying to understand is whether the dig-ins dropped or not, in light of this increase in late tickets that was reported to us through the revised ticket count, could there be -- are you concerned that the number of late tickets are a reason for a greater number of the existing dig-ins than PG&E had initially thought?

A Yeah. Again, I don't know how many times I need to explain this.

Q Maybe I'm missing it.

A I'll try to do it again.

Q Please do.

A So my focus was on dig-in rate, and to this date continues to be dig-in rate, and dig-in rate is the number of dig-ins divided by thousand tickets whether you respond to them on time or not. My understanding is it's tickets received. Clearly, you're motivated to respond to those tickets because as we established when you do respond, locate, and mark, the chances of a dig-in occurring substantially reduce.

Nothing has been put in front of me through my management reviews, through my leadership teams, that would concern me that late tickets is a driver for the dig-ins that we have experienced.

In fact, dig-in rate has dropped substantially and the causes of those dig-ins have not pointed to failure to respond on time or late tickets.

Q Okay. I'll ask for just one other clarification. And term "driver," I think it may help us, but I'm concerned we're talking past each other, and I don't want to.

The term "driver," maybe you could just explain what you mean by that?

A Sure. I think it would be best to go to a previous exhibit.

Q Sure.

A That categorized the at fault or the basis for the categories for PG&E at fault dig-ins.

Q Yeah. I know what you're talking about.]

A And I think there's 4 or 5 categories in that chart.

Q I'm handing -- this is -- I think -- correct me if I'm wrong, I think you're referring to the January 2017 Keys report?

A That is correct.

So, to me, a driver would be synonymous with the categories on the bar chart on page 141, which are locator error, wire error, or other error.

Q Yeah. No, I'm clear?

A That's what I refer to as driver.

Q Okay. Very good thank you.

A All right.

Q Okay. Let’s go to another exhibit.

A May I give this back?

Q Oh, yes. Thank you. Thank you, Mr. Soto.

Off the record for a moment.

(Off the record.)

MR. GRUEN: Back on the record please.

Q Mr. Soto, just a couple of clarifications. I appreciate you unpacking driver. I'm just going to try to explore this one other way. Is there a concern given the increase of late tickets, or the increase -- let me ask it this way. Strike the discussion about late tickets.

If a locator does not respond by the required date, the date at which she or he is required to locate and mark, is there a concern that the excavator will begin excavating without having a prior locating mark?

A Yes, that is a concern.

Q And does that concern relate to dig-ins?

A Yeah. The concern is that the excavator would start work that could lead to a dig-in, whether it’s our facilities or any other facilities that were not located and marked.

Q Okay. Thank you. Okay.

I'm going to distribute another exhibit. And I'll share this.

MR. GRUEN: I believe are we are on Exhibit 8; correct?

THE REPORTER: This is Exhibit 8.

MR. GRUEN: Q And to describe this exhibit, email from Joel Dickson to Katherine Mack, dated January 11th, 2016, with the subject heading, "RE: Operating Review Deck - Updated."

A Yes.

Q Okay. And do you see about halfway down where it says on January 11, 2016, at 11:25 a.m.?

A 11:25?

Q Joel Dickson?

A I see an 11:05. 11:25. Okay. Thank you.

Q It was a bit hidden on the page. Underneath that, it says, "I would like to understand the data issue..."

Do you see that?

A Yes.

Q Okay. So I'll read that for the record.

> "I would like the understand the data issue with late tickets? Why did earlier versions show one and [redacted] found 7? Can we trust the other data used in this deck? Should we take another shot at validating this data?"

Do you see that?

A I do.

Q Does that raise a question to you that Mr. Dickson was seeing late tickets that were not properly counted in January of 2016?

A I can't speculate what he was thinking or asking. He's asking around a data issue with late tickets. He's asking why there's an earlier version that shows one and [redacted] found seven. Can we trust other data used in this deck? So I don't know what operating deck he's talking about.

Q Okay.

A So, I don't know.

Q Understood. Continuing on furtherer down the -- actually, if we turn to the second page of this exhibit.

A Okay.

Q Where it it’s time stamped on December 20th, 2016, at 8:21 a.m.

Do you see that?

A Yeah.

Q Where Jeffery Carroll wrote,

"Jennifer: Just got this text from Joel. And it says, 'I'm with Vince and he's here sharing in rcc. We have 36 late tickets QA found that we aren't tracking?"

Do you see that?

A I do.

Q Does this raise a concern that

there were late tickets that were not being tracked in January 2016 -- excuse me -- December 2016?

A I view this as an appropriate question that is being asked when there is a data discrepancy. It’s, "Hey, I see this number. I'm seeing another number. What's the delta?"

Q And what would the --

A Okay.

Q Sorry I didn't mean to interrupt. Go ahead.

A What's the difference? Any time I see two different data sets is it --

Q Okay.

A -- an error? Is it an update? I don't want it for anything more than just the question being asked around data.

Q What would the discrepancy be here that would you would infer?

A Okay. Let's see. (Reading document to self.)

So this would infer a QA report. And it would then infer that we aren't tracking, meaning the locating and marking organization. So what is it about the QA tickets that are being, considered to be late versus what the locate and mark organization is tracking. That's what I would infer from this exchange.

Q Thank you. If I could collect those?

A Sure.

Q That's helpful.

MR. VALLEJO: Just one clarification for the record.

MR. GRUEN: Yes.

MR. VALLEJO: This is one exhibit, but they don't continue. The bates number on the first pages ends in 118, and the bates number on the second page ends in 006. So I just want to make sure -- I'm okay leaving it as one exhibit. I just want to make sure that we understand -- they appear to be non-consecutive emails.

MR. GRUEN: Point well taken. And if we find out that they are consecutive, we will clarify. Thank you for the clarification.

MR. VALLEJO: Sure.

MR. GRUEN: Yeah. Good. Thank you.

And, Mr. Soto, I will hand your copy to the court reporter.

THE WITNESS: Do you want to use this exhibit? That's the one we were talking about right?

MR. GRUEN: Yes. But since I asked you about this as well --

THE WITNESS: Can we just label them different exhibits?

MR. GRUEN: We can if you want to. So let's label the exhibit from --

(Crosstalk.)

MR. VALLEJO: Might be easier to use the bates number. Up to you.

MR. GRUEN: I'll add it January 19th, 2016, dated, subject RE: Operating Review Deck - Updated. And the bates number is PGE-LM-CPUC_00000118. And that is Exhibit 8.

(Exhibit No. 8 was marked for identification.)

MR. GRUEN: And then the next one from Jeffery Carroll to Jennifer Burrows dated December the 20th, 2016, RE: L&M late tix. PGE-LM-CPUC_00000006. And that is Exhibit 9.

(Exhibit No. 9 was marked for identification.)

MR. GRUEN: Q Do those both look accurate to you, Mr. Soto?

A Yes. Could I just finish reading that email?

Q Absolutely. Off the record.

(Off the record.)

MR. GRUEN: Back on the record.

Mr. Soto, this is a separate -- different line of questions.

A Okay.

Q Yeah. Have you evaluated anyone's job performance at your current role at PG&E?

A I have.

Q And did you -- have you evaluated performance of anyone who -- who has locate and mark duties?

A I have not evaluated performance of the jobs where the primary role is locating and mark duties.

Q Okay. But you have evaluated PG&E personnel who part of their job was locating and mark duties?

A In the -- yes. The context for that is --

Q Okay.

A The officer that reports to me that has -- the Vice President of Operations has a number of functions and processes that he leads, which includes patrolling, leak survey, leak repair, gas odor response, customer appointments, corrosion programs, locate and mark. There's a whole universe of roles and responsibilities. So locate and mark would be a subset of that officer's responsibility.

Q I understand. Here's what I'm asking. So I'm trying to get at goals or metrics in a performance evaluation related to locating and marking.

A The goal or metric that I would use for where locating and marking would come into play would be around dig-in rate reduction.

Q Okay.

A And whether we achieved our desired instate from a goal perspective.

Q Yes.

A That's a performance metric, not only for the organization, but a metric that I would use to evaluate the performance of the respective officer in charge of field operations.

Q Okay. To your knowledge and based on your experience, what sorts of criteria were used to evaluate locate and mark performance? Is it strictly dig-ins? Or more?

A Well, let me reflect on that.

It would be dig-in rate, in some periods we may have had installing of certain number of pipeline markers, so there may have been a performance metric around pipeline markers. We have a program which we will be completing this year which we call our Community Pipeline Safety Initiative, which is to --

Q Yeah.

A -- clear non-compatible vegetation, structures, that are within our pipeline easement.

Q Okay.

A Install pipeline markers. I view pipeline markers as a dimension to managing dig-ins, the whole damage prevention.

Q Okay.

A That would be another one. Public awareness may have come in in the past.

Q Yes.

A In terms of, I recall, I don't know -- it’s -- 1162 comes into play. Mr. Bruno may correct me in terms of whether it’s public awareness criteria. But having an effective public awareness campaign --

Q Yeah.

A -- may also be a performance dimension that I've used in the past.

Q Okay. What about any performance criteria to achieve a goal of zero late tickets?

A I have not used that as a performance criteria.

Q Do you know of your subordinates who have used that in order to evaluate the performance of others?

A I'm not aware if that was used or not of any of my direct reports.

Q Do you know if there were any bonuses or other incentives that were in any way related to the achievement of the goal of zero late tickets?

A I'm not aware of any financial performance associated with zero late tickets.

Q Okay. And let me ask you, you did say that you're not aware of evaluating of the zero late tickets. So it would follow you're not aware of goals or bonuses related, but let me ask more broadly.

A Mm-hm.

Q Any insensitive that were related generally to the reporting of tickets?

A No.

Q No. Okay. Not to your knowledge?

A Not to my knowledge, no.

Q Okay. Can you point us to who would be aware of -- if -- let me backup.

Who can we talk to who would know more about financial incentives or bonuses?

A Yeah. So I can tell you that there

is nothing that I'm aware of in the Short-Term Incentive Plan that has any reference to tickets or ticket reporting. So that would not be a company-type of an incentive-type program. I'm not aware of any program that was established within my direct reports that would use tickets -- late tickets as a performance dimension and/or financial recognition metric.

Q Okay. What about on the Long-Term Incentive Program site?

A I'm not aware of any ticket dimension associated with the Long-Term Incentive Plan program.

Q Okay. Or any evaluation of reporting of tickets or late tickets associated with the LTIP?

A Yeah. I'm not aware of any.

Q Okay. Understood.

Let’s go off the record for just a moment.

(Off the record.)

MR. GRUEN: Back on the record.

EXAMINATION

BY MR. CHAN:

Q Hello, Mr. Soto, are you familiar generally with PG&E's locate and mark budget?

A Locate and mark budget. I'm

familiar that locate and mark has a budget. I couldn't tell you what the financial value is of the locate and mark program.

Q Did you take any role in deciding the locate and mark budget?

A I take a role in reviewing budgets for the gas organization. I take a role from reviewing approvals for increasing budgets through our governance process. What I don't do is meet department by department to review departmental budgets.

Q And the overall gas organization budget would include locate and mark --

A The overall gas budget includes a locate and mark budget, yes.

Q And who provides you those budget information for you to review?

A So the budget process entails consolidation of programs, projects, that gets compiled by our financial management group. That financial management group then, you know, presents those for my review. And it’s an iterative process that compares and contrasts budgets relative to targets that get established by corporate and allows us to then compare and contrast against those targets, understand specific drivers for either volume or work that is being performed. So that process is iterative over a period of time.

Q So you mentioned part of the group is financial management group?

A Mm-hm.

Q What about the personnel in the locate and mark department? What's the contribution to the budget?

A I don't know how the specific locate and mark ticket -- locate and mark personnel play a role in that. Generally, the budgets get compiled by -- it’s a role-up process. So supervisor to manager, manager to a director, director and forward. And the expectation is that as that grounds-up budget gets established, that it accounts for regional priorities, regional programs that are taking place as a result of the investment planning process that defines the work that is needing to be performed in that geographical area.

Q Okay. Thank you.

In the process for you to approve a budget, would any personnel give you advice on whether something is abnormal or sort of asking you to approve certain things?

Would anyone give you advice on whether this budget number looks accurate or looks acceptable?

A Yes.

Q And was there any time that involved the locate and mark budget?

A My recollection of the locate and mark budget was that we increased that budget as a result of increase in ticket volume. We increased budgets associated deployment of technology, tools, training. So based on my recollection, there were appropriate drivers and reasons for the increases that we made to either budgets or programs associated with the locate and mark process.

Q Thank you. And I think you already touched base on this, but let me ask this in another way.

Based upon your experiences as an officer for PG&E, what factors have been considered when deciding on PG&E's annual locate and mark budget for a given year? I think you mentioned about volume of ticket and training. Can you add to that, or if there's anything more?

A Sure. The appropriate items to consider would be ticket volume, would be any specific training that we were going to be implementing, any tools that are going to be deployed to that organization, any specific technology that would be implemented. Those would all be factors to consider as part of establishing a budget for an organization.

Q Would the count of late tickets from recent prior years be a factor in deciding PG&E's upcoming annual locate and mark budget?

A I'm not aware that late tickets were an input into deciding budgets.

Q Mm-hm.

A My understanding was that the total tickets was the factor that was being used.

Q What about dig-in rate? Was it a factor at all?

A I don't remember dig-in rate being an input into the financial process.]

I remember total volume being a driver for number of people. I remember the population density or the environment. There's a number of tickets that we expect people to respond to that has an element of geographical differences.

Responding to a ticket in San Francisco is different than responding to a ticket in Vacaville so there's geographical nuances. Those all would be examples of inputs that would be considered as part of establishing a budget.

Q What about taking rate of late ticket, would that be a factor in your consideration of approving a budget or not? Would you consider those when you have to decide whether you want to approve that budget?

A I don't remember ever using dig-in rate or late tickets as an input to approving a budget. Where dig-in rate came into play was as we were establishing targets that we wanted to achieve as part of improving the dig-in rate.

And in that example, we would evaluate what our previous annual performance was on a dig-in rate. We would evaluate where the AGA benchmark would be, and then we would assume a percentage decrease to achieve that AGA benchmark. Our goal has been to achieve [redacted] as measured by the AGA benchmark.

And to give you a feel for where that is, I believe that's in the 1.84. Range so if we ended 2017 in 1.9 range, then we would expect that this calendar year setting the target to achieve [redacted], whatever percentage reduction that occurs to, would be a metric that we would strive for within the organization.

Q So I understand that if the benchmarking is lower than your recent year or previous year taking rate, you would try to set up a budget that can target or --

A No.

Q Or would that be a factor in approving the budget at all?

A No. I'm not aware that dig-in rate was used as a financial budget input.

Q Correct. I understand that. When you consider approving a budget or not, was that a factor that you consider?

A Again, dig-in rate or dig-in decrease was -- I don't recall that ever being ever a budget input. The input that we evaluated were ticket volume, expected increase in ticket volume, because it's a math exercise.

If the volume is increasing from X to Y and we suspect in these general locations and we have a productivity factor associated with responding to those by regional area, then what's the increase in tickets and how many people do we need to be able to respond to that.

So it's more of a function of total volume than as an input to dig-in rate.

Q So you mentioned about

productivity; right?

A Uh-huh.

Q If seeing their late ticket number, wouldn't that correlate to productivity if you have more on-time tickets? That mean they are more productive; right? If you have more late ticket, that mean they are not as productive; right?

A So there's a number of things that go into productivity factors. It's what do you consider to be wrench time, what do you consider to be -- is training considered to be productivity time or not? So there's a number of dimensions that are used to establish productivity capacity factors for respective employees. Not all employees have the same level of time off. Not all employees have the same level of training that is required.

So all of those are elements that are established to come up with a productivity capacity factor. So going back to total volume of tickets that are expected, because we don't respond to all tickets that are received. There are some tickets that get cleared as a result of that ticket not being in the geographical area of the boundaries that we've established for our facilities.

So through the Earth process and the buffers that you create for your infrastructure, locate and mark comes in and it's a certain footage or a certain way, then that could get cleared without somebody going out to that location. So it's simply volume is an input into the decision making process.

Q Let me back up and ask these questions. Excluding all other elements contribute to evaluating a locator's productivity, if locator has more late ticket, would it bring his or her productivity down?

A Yeah, I'm not familiar with how that gets calculated at the locator level. I don't understand how the productivity -- I'm not familiar with the calculation that gets done for each locator and how volume-based tickets, renegotiated tickets, come into that whole dimension.

Q Let me put it this way: In your opinion, if there's more late ticket, does that indicate that more staff is needed?

A Yeah, what I would look at is hours that are being worked by locators, overtime would be a dimension that we would use. I would look for if tickets are not being responded to, I'm speculating that if I was in that role, I would ask what's the reason. Is it because that is a relatively new locator versus an experienced locator? They both have different experience factors.

An experienced locator could have a faster processing time. Not all tickets are the same. If they involve electrical facilities, it's a different kettle of fish. If it's in a populated environment, nonpopulated environment, so there's many dimensions that are taken into consideration as part of productivity.

Q Understood. Generally speaking, how does annual spending in a given program one year affect the budget for the next year?

A Annual spending in a given year is a data point. It's important to ask how the next year's program is taken into consideration, any regional variability.

An example, if you're doing leak survey type programs that are based on a three-year cycle and you do one-year leak survey in the north and the following year you're going to do leak survey in the south, you would ask the question, you know, what adjustments do we need to make to the northern budget to account for a program that is shifting to another part of the system.

If we're doing distribution replacement programs, those have regional variabilities as well. So it's not a budget in calendar year 2016 equals budget in calendar year 2017 plus inflation and/or adjustment in wages.

It is very much an exercise that we have to account for any workload or work type variability between different geographies.

Q I appreciate your example of the patrolling example that you brought up. How about for --

A Patrolling?

Q You mentioned that if you patrol north -- or you may have mentioned leak survey.

A Leak survey.

Q I appreciate that, leak survey example. What about for locating and marking? Is there similar logic apply to that in terms of deciding the budget for next year?

A Other than if we had intelligence in terms of where ticket volume would be growing, if we saw an expansion in residential construction as an example, that would lead to certain metropolitan areas, you know, where you could see some geographical nuances that you would have to take into consideration.

I'm sharing these as -- I won't do the math for the locate and mark program. I'm not in the weeds of how many tickets, what's my locator, level of experience here within the 20 people or 15 people and are they contractors, not contractors, so because of that, here's my budget. I can't speak to that.

Q And based on your experience as an approving budget, was late ticket at any time one of your consideration for approving or not of the budget?

A I don't recall using late tickets as an input to any financial decisions.

MR. GRUEN: Let's go off the record for a second.

(Off the record.)

EXAMINATION

BY MR. BRUNO:

Q Mr. Soto, I'm gleaning two very important metrics from today listening to you, one is ticket volume and the other is dig-in rate; is that correct?

A Of the two, I would say dig-in rate is a very important metric to me, yes.

Q I'm also hearing that late ticket count is not -- wasn't on your radar.

A Yeah, but the late ticket count was not something that was a red flag to me.

Q Does anyone look at the late ticket count? Does anyone worry about that metric?

A I definitely paid attention when the late ticket count -- late tickets were mentioned as part of the daily ops call, and I think earlier I pointed to an example of where Joel mentioned -- followed up in the spirit of what help do we need. So it was a prompt that we would look for. If it was mentioned to us by contractors, UCON, as an example, or if it would have been identified as one of the drivers for tickets.

Q Thank you, Mr. Soto. Did anyone come to you and report a discrepancy in the late ticket count?

A The discrepancy that I referenced when the QA team was not a specific discrepancy in the late ticket count, it was more so of examples of tickets that they, as part of their process, had identified that we had counted to be on time, but, based on their evaluation, those tickets, according to their assessment, should not have been counted as on time.

That was not then put in context in terms of total late tickets because it was just a handful of examples.

Q Thank you, Mr. Soto. Who brought that QA item to your attention if you recall?

A I remember meeting with I think it was Jennifer Burrows and Vince Whitmeyer that walked me through the examples. I don't know if anybody was in the room or not, but I seem to recall both Jennifer and Vince as the ones that walked me through the examples.

Q Is that particular metric, late tickets, is that discussed in any officer level regular meetings?

A It was not a metric that we had established or tracked -- I shouldn't say tracked. It was not a metric that we overtly discussed in any of my governance meetings. What we did discuss was QA findings and late or locate and mark was one of many programs that QA is focused on.

So if they go out and conduct a post leak survey and they come across as finding a ratable leak that was not previously identified by our production leak survey team, those would be examples of what QA would find.

If there was a repair that was

conducted and the QA team, through their process, in some cases including re-excavation of the area, identified discrepancies between our procedure or those would all be examples that would be identified by the QA organizations.

So I say that to put in context that the QA team looks at a lot of different work categories and a lot of different work programs. I would get visibility into the QA type findings, either through our risk and compliance committee or through our quality process improvement council meeting where we get a view into how are we doing from a QA perspective.

Q Yes, sir, thank you. To your knowledge, Mr. Soto, were any employees under pressure not to have late tickets?

A I did not have direct knowledge, but what I will tell you is through the AGA peer-to-peer review that was conducted, the feedback that I got was that the locate and mark job was a stressful job and there was a perspective from the locate and mark organization that the only time we paid attention to them was whenever there was an at-fault locate as opposed to the work that they did.

So actually we've had the privilege to ring the closing bell of the New York Stock Exchange on two occasions. We did it last year or we actually invited CGA, Common Ground Alliance Leadership, and other call centers and we invited members of our locate and mark team to show our appreciation for the work that they did.

So if you go back to the two instances where we've been on the locate -- on the New York Stock Exchange ringing the closing bell, you'll see members of our locate and mark team wearing their vest and their hard hats. But it was -- that's what I learned to appreciate as part of the update that I got on the AGA peer-to-peer.

Q Yes, sir, thank you. To your knowledge, has there been any allegation of falsification of late tickets?

A Not to my knowledge. What I will tell you is that any of those, had it been identified to me, unlike any other allegation of similar nature, we would have acted swiftly and if either Code of Conduct or any of those would have been substantiated, we would have moved to termination.

Q Mr. Soto, you mentioned Mr. Dickson moving groups. Do you have any details on why that occurred?

A Yes. Mr. Dickson was promoted last year.

Q I see.

A He went from director to a senior director role over the transportation services function.

Q Who did Mr. Dickson report to directly?

A Mr. Dixon -- while he was in gas?

Q Yes, sir.

A So Mr. Dickson had been in the gas organization when I joined the company, and I believe that he over his tenure at one point reported to Roland Trevino as he led the emergency preparedness and response function. I know he reported to Mr. John Higgins as he was leading the locate and mark functions, the damage prevention functions.

And then John Higgins went on to take a -- he's our chief safety officer now and I promoted Mr. Mel Christopher into vice president of operations. For a short period of time Mr. Dickson reported to Mr. Christopher.]

Q Thank you, sir.

Mr. Soto, to your knowledge, since you've been with Pacific Gas and Electric were late tickets always counted as a metric?

A The reports show that we kept track of late tickets. I don't recall late tickets being a performance metric. Again, the performance metric that really drove the organization was the dig-in rate, of which the numerator is dig-ins and the denominator is total tickets, whether you respond to them or not.

Q Yes, sir.

And, Mr. Soto, who do you report to?

A I report to Mr. Nick Stavropoulos who is currently our president and chief operating officer of PG&E.

Q Yes, sir. Do you recall any conversations with Mr. Stavropoulos where you discussed late tickets?

A I don't recall that being an explicit conversation with Mr. Stavropoulos. What I do recall is conversation around, you know, dig-in rate. What I will also tell you, Mr. Bruno, is that over the compendium of 2012 to now, given the number of effort and the focus that we have on damage prevention going back to conversations with our contractors where the repeat offenders as we categorize them and the listening tours that we had, I likely would have shared the sentiment of our contractors in terms of how they viewed, you know, PG&E responsiveness, caliber of our people, the quality of our barks, the not able to have points of contact, the discussions we had with UCON.

So those are very likely -- I'm sure I had those discussions and I'm sure that our reference to him, what the sentiment was from, but I never went to Mr. Stavropoulos to say, hey, we have late ticket problem. That was not a red flag that I ever raised to him because it was not a red flag that was ever raised to me.

Q That's all I have. Thank you.

EXAMINATION

BY MR. GRUEN:

Q I have one more line. I see we have a little bit of time. Mr. Soto, have you ever been part of a PG&E decision to terminate an employee?

A I have, yes.

Q Is there a procedure for terminating someone at PG&E?

A So there is a -- terminations can come about through many instances. The most common type of termination or driver, if you will, could be where allegation is raised, either directly or indirectly or through our compliance and ethics hotline.

We then engage our HR organization, our compliance and ethics organization. In some cases we engage a third party to then conduct an investigation.

As a result of that investigation, if the allegations are substantiated -- and there could be, you know, Code of Conduct type violations, there could be violations of our Keys to Life, which are more safety-related.

Examples of Keys to Life violation would be employees working in an excavation without proper shoring as an example where we can substantiate they knew about it and, despite them knowing about it, they still did it. So all of those then get taken into context.

Between the business and HR and our labor relations, there's a recommendation that will come forward, the requests, if we're going to terminate, I would say likely in all scenarios they come to me for my approval for termination. I will reply to proceed with the termination based on the facts that have been presented to me.

Q Okay. Asking a high level of this

next question, just a brief answer if you can. According to PG&E procedure, what steps must be followed to terminate an employee?

A I can't speak to a specific procedure, specific steps.

Q Okay.

A What I can point to is if there is an allegation that is raised, if that allegation is substantiated, if that allegation is Code of Conduct, Keys to Life and there's an element of severity associated with that termination, then we'll make the decision to terminate.

Q Okay. And I think I'm understanding Keys to Life or Code of Conduct, these would be perhaps related to things in which an employee did something in violation of either an ethical or safety requirement or procedure at PG&E. Am I following this?

A Yes. A Code of Conduct is an established work product --

Q Yeah.

A -- where we expect our employees to abide by. Keys to Life are more safety related.

Q Okay.

A A Code of Conduct violation, there

is an element of severity if you will. As an example, we have Code of Conduct associated with gifts.

If an employee receives an invitation to a basketball game and he's expected to provide a notification and receive approval if it exceeds, I believe, it's a hundred dollars or something to that nature, but if the employee -- if it was 110 and, you know, he didn't report it, then likely we would not terminate that employee.

Q Right.

A But if there is a nature of Code of Conduct violation associated with retaliation or with sexual harassment or any of those, I mean those are examples that you would then lead to Code of Conduct violation likely to termination.

Q Okay. During your tenure at PG&E, have you learned of anyone expressing safety-related concerns about PG&E?

A Not directly to me.

Q Have you heard others pass on to you?

A So there's a -- we have a corrective action program, CAP, and they're -- so let me put this in context because it's -- I do a lot of employee outreach. I go and meet with employees.

An employee can use a term of "I don't think this is safe." When you proceed to understand, he may be -- he's more than likely telling you this work could entail more risk to which you can manage risk as opposed to it being unsafe.

An example, because we deal with this in the winter, my experience, I'm very much an inline inspection advocate. To me it's the best method of assessment of pipelines. I want to run tools. I don't want to run them year-round.

As soon as conditions allow for me to run that tool, I want to run it. As we get into the winter and you look at our gas system planning organization, they start having concerns that if we have a tool that gets stuck to which we then have to cut out, that that could lead to a risk of an outage because we don't have flow, you know, through that system.

So at one point they categorized us as running inline inspection tools in the winter as unsafe. What they were really trying to tell me was that if the tool gets stuck, it could lead to an outage, but I'm taking on more risk as opposed to it being an unsafe condition.

Q Okay. I appreciate it.

A I just want to put in context when employees have come to me with the connotation of a safety, it's very much seek-to-understand. Is it really a safety-related condition.

Q Okay.

A Or is it the fact that we're just taking on more risk, which is still within our risk tolerance to which we can mitigate.

Q Okay. Let me be specific.

A Okay.

Q Did you know Mr. David Applebaum during your tenure at PG&E?

A I did.

Q What was your professional relationship to Mr. Applebaum?

A I knew Mr. Applebaum when he worked PHMSA.

Q Okay.

A I was an advocate of hiring Mr. Applebaum. I thought he had good ideas. He was really instrumental in us setting up our Gold Shovel program. Unfortunately we terminated Mr. Applebaum as a result of allegations that were substantiated due to retaliation and allegations around Code of

Conduct with employees, including female employees.

So if you ask me about what I think about Mr. Applebaum today --

Q I'm not.

A Okay.

Q I'm asking specifically what I think I'm gleaning from your answer that you played a role in the decision to terminate Mr. Applebaum. Am I getting that part right?

A I did. I did play role in the decision to terminate Mr. Applebaum as a result of the allegations around retaliation that were substantiated.

Q Okay.

A And Code of Conduct related violations.

Q Okay. Did you learn of Mr. Applebaum expressing any concerns about whether PG&E was behaving as a safe company?

A Mr. Applebaum did not come to me to raise any red flags.

Q Okay.

A If you need to stop me if I'm going off track here, but Mr. Applebaum has I guess sued PG&E. And as a result of his claim, he has made number of allegations.

Q Okay. Did you hear of anyone --

did anyone of your staff report to you that Mr. Applebaum had expressed concerns with PG&E behaving as a safe company?

A I don't recall Mr. Applebaum coming to me or Mr. Applebaum going to anyone that would have come to me. I included Mr. Applebaum in the closing ceremony of the New York Stock Exchange when we did it, well, not the most recent time but subsequent to that.

Q Okay. Okay. Was PG&E procedure followed in the termination of Mr. Applebaum?

A I will tell you Mr. Applebaum's termination was vetted by the key stakeholders, include HR, legal, our compliance and ethics office, the officer responsible for the program John Higgins, and myself.

Q When you say "vetted," does that mean the procedure for terminating a PG&E employee was followed?

A The decision making process for terminating an employee, yes.

Q Okay. So I think I want to clarify and I think I understand this, but just to be sure, to your knowledge, did Mr. Applebaum's views about safety, any views that he expressed, in anyway factor into the decision to terminate him?

A No. Our decision to terminate Mr. Applebaum was clearly documented in the substantiation of the allegations that were raised which were investigated by a third party, substantiated. That was the basis for Mr. Applebaum's termination. That was confirmed retaliation.

Q Okay.

A And Code of Conduct violations regarding his conduct with his employees.

Q Okay. Thank you, Mr. Soto.

MR. GRUEN: That's all I have.

Anyone else?

(No response.)

MR. GRUEN: Q With that, if we could -- I actually just wanted to thank you on the record for your appearance today. You're required to be here by subpoena but we appreciate your answering the questions directly. We know it's been a whole day. So we appreciate your time and answers.

A I appreciate the opportunity to put things in context to be able to convey to you how I run this business and answer any questions that you may have relative to our program.

Q Great.

And thank you as well, Mr. Vallejo.

A Thank you.

MR. GRUEN: Off the record, please.]

(Whereupon, at the hour of 3:58 p.m. this matter having been concluded at San Francisco, California, the Commission then adjourned.)

* * * * *

BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE
STATE OF CALIFORNIA

PRE-FORMAL INQUIRY INTO PG&E'S LOCATE AND MARK PRACTICES AND PROCEDURES.	))))))

CERTIFICATION OF TRANSCRIPT OF PROCEEDING

I, Karly Powers, Certified Shorthand Reporter No. 13991, in and for the State of California do hereby certify:

That, prior to being examined, JESUS SOTO, the witness named in the foregoing examination under oath, was by me duly sworn to testify the truth, the whole truth, and nothing but the truth;

That said examination under oath was taken by subpoena at the time and place therein set forth;

And that the pages of this transcript reported by me comprise a full, true and correct transcript of the testimony given by the witness on March 1, 2018.

I further certify that I have no interest in the events of the matter or the outcome of the proceeding.

EXECUTED this 1st day of March, 2018.

____
Karly Powers
CSR No. 13991

BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE
STATE OF CALIFORNIA

PRE-FORMAL INQUIRY INTO PG&E'S LOCATE AND MARK PRACTICES AND PROCEDURES.

CERTIFICATION OF TRANSCRIPT OF PROCEEDING

I, Andrea Ross, Certified Shorthand Reporter No. 7896, in and for the State of California do hereby certify:

That, prior to being examined, JESUS SOTO, the witness named in the foregoing examination under oath, was by me duly sworn to testify the truth, the whole truth, and nothing but the truth;

That said examination under oath was taken by subpoena at the time and place therein set forth;

And that the pages of this transcript reported by me comprise a full, true and correct transcript of the testimony given by the witness on March 1, 2018.

I further certify that I have no interest in the events of the matter or the outcome of the proceeding.

EXECUTED this 1st day of March, 2018.

____
Andrea Ross
CSR No. 7896

BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE
STATE OF CALIFORNIA

PRE-FORMAL INQUIRY INTO PG&E'S LOCATE AND MARK PRACTICES AND PROCEDURES.)

CERTIFICATION OF TRANSCRIPT OF PROCEEDING

I, Shannon M. Ross, Certified Shorthand Reporter No. 8916, in and for the State of California do hereby certify:

That, prior to being examined, JESUS SOTO, the witness named in the foregoing examination under oath, was by me duly sworn to testify the truth, the whole truth, and nothing but the truth;

That said examination under oath was taken by subpoena at the time and place therein set forth;

And that the pages of this transcript reported by me comprise a full, true and correct transcript of the testimony given by the witness on March 1, 2018.

I further certify that I have no interest in the events of the matter or the outcome of the proceeding.

EXECUTED this 1st day of March, 2018.

____
Shannon M. Ross
CSR No. 8916

ATTACHMENT 36

Performance Management	2015 Performance Appraisal
Report Date:	12/06/2017
Manager	John Charles Higgins
Employee	Joel Lamarr Dickson

Performance Appraisal Overview

1. OVERALL GOALS

	Employee	Employee Comments	Manager	Manager Comments
Midyear Rating	Target	On target mid year to meet all goals	Target	Joel has effectively overseen many moving pieces around our compliance programs. He has driven unit cost improvements on several work types, including locating and corrosion. Joel has improved our overall compliance programs by establishing clear metrics. He continues to work to build his team, and has put his managers in place at this time. His team continues to struggle to maintain appropriate staffing levels to effectively execute the work. Joel needs to drive the locating work to a place where the backlog is zero. We also need to see improvement in our overall compliance program through improved QC efforts, including completion of the compliance desk rollout.
Yearend Rating			Exceeds Target	Joel and team delivered improvement in several areas during 2015. First, they drove further reduction in our damage prevention ratio. That was coupled with a reduction in overdue locates as well as a reduction in at-fault dig ins. Further, the team drove a reduction in minutes/locate and

				minutes/standby. Overall, solid results despite significant employee churn. Joel's team drove substantial improvements in our corrosion inspection program. Employee and supervisor training improved, as did operation results. Despite poor audit results of historical records, current-day programs benefitted from the establishment of accurate aging reports, "clean" operational data and improved visibility through the use of aging reports. The aging reports were used to drive substantial improvement in the aging of work, eliminating emergency or "flyup" tasks. From a pipeline patrol standpoint, the patrol program began to move from an external function to an internal one, with a base now established at Bishop Ranch. From a compliance standpoint, compliance aging reports were developed, and compliance desk personnel were staffed, trained and put into use. Overall, positive progress on many fronts.
1.1. Safe				

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	Employee	Employee Comments	Manager	Manager Comments
Midyear Rating				
Yearend Rating				

1.2. Reliable

	Employee	Employee Comments	Manager	Manager Comments
Midyear Rating				
Yearend Rating				

1.3. Affordable

	Employee	Employee Comments	Manager	Manager Comments
Midyear Rating				
Yearend Rating				

1.5. People

	Employee	Employee Comments	Manager	Manager Comments
Midyear Rating				
Yearend Rating				

1.6. Other

	Employee	Employee Comments	Manager	Manager Comments
Midyear Rating				
Yearend Rating				

2. OVERALL COMPETENCIES

	Employee	Employee Comments	Manager	Manager Comments
Midyear Rating	Successful	Continuing to exemplify competencies at each engagement opportunity and through continued development of my leadership team	Successful	Joel provides his team with clear instructions; he effectively communicates for understanding. Joel also takes accountability for the results of his group. He also actively manages employee

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				performance. Joel has furthered our diversity efforts by effectively recruiting a broad array of candidates into our organization. As areas of opportunity, Joel could further involve employees at all levels in identifying and solving issues. Joel could also improve his proactive sharing of issues, including timely updates and information.
Yearend Rating			Successful	Joel communicates for understanding, effectively, with his team. His instructions and expectations are clear. He holds frequent check in meetings, that are data-driven, in order to ensure improvement in results. Joel has worked to 'soften his approach' when dealing with his leadership team. He has developed some of his leaders skills through careful collaboration, support and guidance. His approach has driven results, and his teams' confidence has grown.

2.1. Competencies

	Employee	Employee Comments	Manager	Manager Comments
Midyear Rating				
Yearend Rating				

. Leadership Competencies

	Employee	Employee Comments	Manager	Manager Comments
Midyear Rating				

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Yearend Rating				

ADDITIONAL RATINGS				
	Employee	Employee Comments	Manager	Manager Comments
Midyear Rating				
Yearend Rating				

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Performance Appraisal Detailed Report

1.1.1 1.1.1

Goal Description:
Description:
Reinforce Gas Safety Excellence principles through the scheduling and execution of work and maintain PASS 55/ISO 5001 certification
Implement programs and legislation to reduce 1st, 2nd and 3rd party dig-ins
Metrics:
- "PASS 55 / ISO 5001 Re-certification
- As builts mapped performance
- Gas Dig-Ins Reduction
- Reduction of mismarks

	Employee	Employee Comments	Manager	Manager Comments
Yearend Rating			Below Target	Joel's team had a challenging year from a personal safety perspective, incurring an increase in LWD's from the previous year. From a process safety or system safety perspective, the improvements noted in the summary improved overall system safety.

Performance Management	2015 Performance Appraisal
Report Date:	12/06/2017
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1.1.2 1.1.2

Goal Description:
Description:
Improve emergency responsiveness through field resources optimization and increased partnerships with Emergency Response agencies within our communities.
Proactively engage our first responders and communities to increase the effectiveness of PG&E#s Public Awareness Programs (RP 1162)
Metrics
- Shut In The Gas Time: (svcs & mains)
- Avg Emergency Response Time
- "Expansion of Off hour shifts in 6 Divisions by 6-30-15 "
- Implementation of "Code MuRRI" with Emerg Response Agencies in 3 addtl metropolitan areas
- Public Awareness Programs (RP 1162)

	Employee	**Employee Comments**	**Manager**	**Manager Comments**
Yearend Rating			Target	Joel's team supported efforts to improve our response times for IR and SITG.

1.1.3 1.1.3

Goal Description:
Description:
Integrate process safety into work execution using effective job site process hazard analysis
Metrics
- # PHAs completed

	Employee	**Employee Comments**	**Manager**	**Manager Comments**
Yearend Rating			Target	Joel's team supported our process safety efforts through the support of SGO and compliance desk.

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1.1.4 1.1.4

Goal Description:
escription:
Promote the use of CAP within operations and insure timely and effective resolution of items identified
Reinforce "Safety 1st" culture at all levels of the organization and support initiatives that promote an injury and incident free work environment.
Metrics
- % On time CAP Item Completion
- % Increase in CAP submittals vs 2014
- % employees participating in CAP
- LWD Rate SPMVIs
- 90% Smith System Training & 90% BST Workshop Participation
- 99% required safety training completed by 12-31
- Safety Observations

	Employee	**Employee Comments**	**Manager**	**Manager Comments**
Yearend Rating			Target	Joel's team was the recipient of many CAP items, and effectively managed them.

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1.2.1 2.1.1

Goal Description:
Description:
Partner with F&RM and T&D Construction to develop high quality work plans that meet our safety, and system reliability, schedule and budget targets.
Perform compliance work on gas assets in accordance with work procedures and eliminate over-pressurization events
Metrics:
- Leak Backlog: Grade 2/2+ Backlog (rolling 12 mth average)
- Avg time Svc Leak Repair
- Avg Time Main Leak Repair
- Distribution Scada % Visibility
- Large Over-pressurization events

	Employee	**Employee Comments**	**Manager**	**Manager Comments**
Yearend Rating			Exceeds Target	Despite significant changes in workload during the year, Joel's team onboarded additional staff to address the unanticipated spike. This workload spike was at a record level for both locating work as well as standby work.

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1.2.2 2.1.2

Goal Description:
Description:
Complete rollout of order review and closure process, eliminating completed paperwork quality issues to reduce NOV#s
Partner with Process and Quality Excellence (PQE) teams to modify QA and QC processes to support reduction in NOVs
Metrics:
- Internal Records Review Finding rate per record/attribute reviewed
- Compliance Plan (Path to Green)
- Compliance review process established in all divisions
by 6-30-15
- Quality Index:
  - L&M - # defects/100 tickets (2015 Target = 2.2)

	Employee	**Employee Comments**	**Manager**	**Manager Comments**
Yearend Rating			Target	Joel's team took an active leadership role in improving the SGO process from a paperwork review perspective.

1.3.1 Enter Goal Title

Goal Description:
Description:
Successfully lead and expand Super Crew and SGO process improvements
Metrics:
- Expand SGO to 4 additional Divisions in 2015
- SGO Metrics Met
- Deployment of 2nd Supercrew by 3-1-15
- Super Crew Leak Repair
- Super Crew Pipe Replacement
- Capital & Expense budgets met

	Employee	**Employee Comments**	**Manager**	**Manager Comments**
Yearend Rating			Target	See above results.

1.4 Customer

Performance Management	2015 Performance Appraisal
Report Date:	12/06/2017
Manager	John Charles Higgins
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1.4.1 4.1.1

Description:
Provide Gas leadership support on DLT teams to present One PG&E to our communities.
File 2017 General Rate Case (GRC) application prior to September 1, 2015
Rebuild trust through meeting regulatory and other outside commitments and by exceeding customer expectations.
Metrics:
- JD Power Residential and Business Surveys (Gas Field Service)
- % Customer Commitments Met (GSR Appointments)
- NB/WRO Commitments Met

	Employee	**Employee Comments**	**Manager**	**Manager Comments**
Yearend Rating			Target	Joel's team supported our rate case filing, and helped rebuild trust by driving significant improvements in our damage prevention process.

1.5.1 5.1.1

Goal Description:
Description:
Promote employee engagement and reinforce Co/Union partnerships through the successful implementation of new technology, work processes and procedures
Provide high quality training to all employees and provide effective performance feedback
Metrics:
- Employee Development Plans for leaders
- LOP Implementation 12-31-15
- Clerical Assessment recommendations implemented by 12-31-15
- Premier Survey Action Plan
- Mandated compliance training completed by 12-1-15
- FLS leadership development program
- Enhanced Compliance Training for New Supervisors

	Employee	**Employee Comments**	**Manager**	**Manager Comments**
Yearend Rating				

Performance Management	2015 Performance Appraisal
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2.1.1 Puts Safety First

	Employee	Employee Comments	Manager	Manager Comments
Yearend Rating			Successful	

2.1.2 Communicating for Understanding

	Employee	Employee Comments	Manager	Manager Comments
Yearend Rating			Successful	

2.1.3 Takes Actions To Better Serve Customers

	Employee	Employee Comments	Manager	Manager Comments
Yearend Rating			Successful	

2.1.4 Takes Accountability For Results

	Employee	Employee Comments	Manager	Manager Comments
Yearend Rating			Successful	

2.1.5 Acts With Integrity and Respects Others

	Employee	Employee Comments	Manager	Manager Comments
Yearend Rating			Successful	

2.1.6 Furthers Diversity and Inclusion

	Employee	Employee Comments	Manager	Manager Comments
Yearend Rating			Successful	Joel has built a strong leadership team by providing clear guidance and regular feedback. Joel has worked hard to develop his approach to supporting his team in a balanced, professional manner. Joel can further improve by continuing to demonstrate his compassionate leadership / servant leadership style.

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2.1.7 Develops Functional Expertise

	Employee	Employee Comments	Manager	Manager Comments
Yearend Rating			Successful	Joel is always willing to take on a new challenge, and educate himself around the key metrics and goals. He can drive an initiative through careful planning and execution.

ATTACHMENT 37

Date: June 5, 2018

California Gas Incident Breakdown (2008-2017)

Cause of Incident	**Number**	**%**	**Employee Fatalities**	**Non-Employee Fatalities**	**Injured Employees**	**Non-Employees Injured**
Construction Defect	15	0.03%	0	0	0	0
Customer Facilities	217	0.45%	0	4	0	5
Earth Movement	12	0.02%	0	0	1	0
Electric facilities	25	0.05%	0	0	0	0
Equipment Malfunction	24	0.05%	0	0	0	0
External Corrosion	33	0.07%	0	0	0	0
Fire/Explosion	90	0.19%	0	2	2	1
Heavy Rains/Flood	7	0.01%	0	0	0	0
Hit with hand tool	4	0.01%	0	0	0	0
Incorrect Operation	17	0.04%	0	0	4	1
Internal Corrosion	1	0.00%	0	0	0	0
Lightening as a source of electricity induced damage to facilities.	1	0.00%	0	0	0	0
Material Failure	41	0.08%	0	0	0	2
Miscellaneous/Other	310	0.64%	0	3	3	2
Not Available	49	0.10%	0	1	0	2
Operator excavation damage	833	1.72%	0	0	0	0
Previous Damage	6	0.01%	0	0	0	0
Stress Corrosion Cracking	1	0.00%	0	0	0	0
Third party excavation damage	46106	95.28%	0	2	1	27
Unknown	22	0.05%	0	8	0	51
Vandalism	18	0.04%	0	0	0	0
Vehicle	554	1.14%	0	4	0	10
Weld Failure	5	0.01%	0	0	0	0
Grand Total	**48391**	**100.00%**	**0**	**24**	**11**	**101**

ATTACHMENT 38

NOTICE: This report is required by 49 CFR Part 191. Failure to report can result in a civil penalty not to exceed 100,000 for each violation for each day that such violation persists except that the maximum civil penalty shall not exceed $1,000,000 as provided in 49 USC 60122.		OMB NO: 2137-0522 EXPIRATION DATE: 02/28/2014
U.S Department of Transportation Pipeline and Hazardous Materials Safety Administration	**Original Report Date:**	12/08/2014
	No.	20140111- 15978
		-- (DOT Use Only)

INCIDENT REPORT - GAS DISTRIBUTION SYSTEM

A federal agency may not conduct or sponsor, and a person is not required to respond to, nor shall a person be subject to a penalty for failure to comply with a collection of information subject to the requirements of the Paperwork Reduction Act unless that collection of information displays a current valid OMB Control Number. The OMB Control Number for this information collection is 2137-0522. Public reporting for this collection of information is estimated to be approximately 10 hours per response, including the time for reviewing instructions, gathering the data needed, and completing and reviewing the collection of information. All responses to this collection of information are mandatory. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden to: Information Collection Clearance Officer, PHMSA, Office of Pipeline Safety (PHP-30) 1200 New Jersey Avenue, SE, Washington, D.C. 20590.

INSTRUCTIONS

Important: *Please read the separate instructions for completing this form before you begin. They clarify the information requested and provide specific examples. If you do not have a copy of the instructions, you can obtain one from the PHMSA Pipeline Safety Community Web Page at http://www.phmsa.dot.gov/pipeline.*

PART A - KEY REPORT INFORMATION

	Original:	**Supplemental:**	**Final:**
Report Type: *(select all that apply)*	**Yes**		**Yes**

Last Revision Date	
1. Operator's OPS-issued Operator Identification Number (OPID):	15007
2. Name of Operator	PACIFIC GAS & ELECTRIC CO
3. Address of Operator:	
3a. Street Address	77 BEALE STREET
3b. City	SAN FRANCISCO
3c. State	California
3d. Zip Code	94107
4. Local time *(24-hr clock)* and date of the Incident:	11/07/2014 11:14
5. Location of Incident:	
5a. Street Address or location description	1 S. Market Street
5b. City	San Jose
5c. County or Parish	Santa Clara
5d. State:	California
5e. Zip Code:	95113
5f. Latitude:	37.334882
Longitude:	-121.892209
6. National Response Center Report Number:	1100473
7. Local time *(24-hr clock)* and date of initial telephonic report to the National Response Center:	11/07/2014 00:00
8. Incident resulted from:	Unintentional release of gas
9. Gas released:	Natural Gas
- Other Gas Released Name:	
10. Estimated volume of gas released - Thousand Cubic Feet (MCF):	1,228.00
11. Were there fatalities?	No
- If Yes, specify the number in each category:	
11a. Operator employees	
11b. Contractor employees working for the Operator	
11c. Non-Operator emergency responders	
11d. Workers working on the right-of-way, but NOT associated with this Operator	
11e. General public	
11f. Total fatalities (sum of above)	
12. Were there injuries requiring inpatient hospitalization?	No
- If Yes, specify the number in each category:	
12a. Operator employees	
12b. Contractor employees working for the Operator	
12c. Non-Operator emergency responders	
12d. Workers working on the right-of-way, but NOT associated with this Operator	
12e. General public	
12f. Total injuries (sum of above)	
13. Was the pipeline/facility shut down due to the incident?	Yes
- If No, Explain:	

- If Yes, complete Questions 13a and 13b: *(use local time, 24-hr clock)*	
13a. Local time and date of shutdown:	11/07/2014 17:02
13b. Local time pipeline/facility restarted:	11/08/2014 09:00
- Still shut down? (* Supplemental Report Required)	
14. Did the gas ignite?	No
15. Did the gas explode?	No
16. Number of general public evacuated:	
17. Time sequence *(use local time, 24-hour clock)*:	
17a. Local time operator identified Incident:	11/07/2014 11:14
17b. Local time operator resources arrived on site:	11/07/2014 11:31

PART B - ADDITIONAL LOCATION INFORMATION

1. Was the Incident on Federal land?	No
2. Location of Incident	Public property
3. Area of Incident:	Underground
Specify:	Exposed due to excavation
If Other, Describe:	
Depth of Cover:	63
4. Did Incident occur in a crossing?	No
- If Yes, specify type below:	
- If Bridge crossing –	
Cased/ Uncased:	
- If Railroad crossing –	
Cased/ Uncased/ Bored/drilled	
- If Road crossing –	
Cased/ Uncased/ Bored/drilled	
- If Water crossing –	
Cased/ Uncased	
Name of body of water (If commonly known):	
Approx. water depth (ft):	

PART C - ADDITIONAL FACILITY INFORMATION

1. Indicate the type of pipeline system:	Natural Gas Distribution, privately owned
- If Other, specify:	
2. Part of system involved in Incident:	Main
- If Other, specify:	
2a. Year "Part of system involved in Incident" was installed:	1988
Unknown?	
3. When "Main" or "Service" is selected as the "Part of system involved in Incident" (from PART C, Question 2), provide the following:	
3a. Nominal diameter of pipe (in):	2
3b. Pipe specification (e.g., API 5L, ASTM D2513):	TR-418 PL
Unknown?	
3c. Pipe manufacturer:	
Unknown?	Yes
3d. Year of manufacture:	1987
Unknown?	
4. Material involved in Incident:	Plastic
- If Other, specify:	
4a. If Steel, Specify seam type:	
None/Unknown?	
4b. If Steel, Specify wall thickness *(inches)*:	
Unknown?	
4c. If Plastic, Specify type:	Polyethylene (PE)
- If Other, describe:	
4d. If Plastic, Specify Standard Dimension Ratio (SDR):	
Or wall thickness:	
Unknown?	Yes
4e. If Polyethylene (PE) is selected as the type of plastic in Part C, Question 4.c:	
- Specify PE Pipe Material Designation Code (i.e. 2406, 3408, etc.)	
Unknown?	Yes
5. Type of release involved :	Other
- If Mechanical Puncture - Specify Approx size:	
Approx. size: in. (axial):	
in. (circumferential):	
- If Leak - Select Type:	
- If Other, Describe:	

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- If Rupture - Select Orientation:	
- If Other, Describe:	
Approx. size: (widest opening):	
(length circumferentially or axially):	
- If Other - Describe:	the 2-inch plastic main was separated at the coupling

PART D - ADDITIONAL CONSEQUENCE INFORMATION

1. Class Location of Incident :	Class 4 Location
2. Estimated Property Damage :	
2a. Estimated cost of public and non-Operator private property damage	$ 0
2b. Estimated cost of Operator's property damage & repairs	$ 105,000
2c. Estimated cost of Operator's emergency response	$ 0
2d. Estimated other costs	$ 0
- Describe:	
2e. Total estimated property damage (sum of above)	$ 105,000

Cost of Gas Released

2f. Estimated cost of gas released	$ 4,640
3. Estimated number of customers out of service:	
3a. Commercial entities	40
3b. Industrial entities	0
3c. Residences	0

PART E - ADDITIONAL OPERATING INFORMATION

1. Estimated pressure at the point and time of the Incident (psig):	55.00
2. Normal operating pressure at the point and time of the Incident (psig):	55.00
3. Maximum Allowable Operating Pressure (MAOP) at the point and time of the Incident (psig):	60.00
4. Describe the pressure on the system relating to the Incident:	Pressure did not exceed MAOP
5. Was a Supervisory Control and Data Acquisition (SCADA) based system in place on the pipeline or facility involved in the Incident?	No
- If Yes:	
5a. Was it operating at the time of the Incident?	
5b. Was it fully functional at the time of the Incident?	
5c. Did SCADA-based information (such as alarm(s), alert(s), event(s), and/or volume or pack calculations) assist with the detection of the Incident?	
5d. Did SCADA-based information (such as alarm(s), alert(s), event(s), and/or volume calculations) assist with the confirmation of the Incident?	
6. How was the Incident initially identified for the Operator?	Notification from Emergency Responder
6a. If "Controller", "Local Operating Personnel, including contractors", "Air Patrol", or "Ground Patrol by Operator or its contractor" is selected in Question 6, specify the following:	
- If Other, Specify:	
7. Was an investigation initiated into whether or not the controller(s) or control room issues were the cause of or a contributing factor to the Incident?	No, the Operator did not find that an investigation of the controller(s) actions or control room issues was necessary due to: (provide an explanation for why the Operator did not investigate)
- If No, the operator did not find that an investigation of the controller(s) actions or control room issues was necessary due to: (*provide an explanation for why the operator did not investigate*)	third-party dig-in
- If Yes, Specify investigation result(s) *(select all that apply)*:	
- Investigation reviewed work schedule rotations, continuous hours of service (while working for the Operator), and other factors associated with fatigue	
- Investigation did NOT review work schedule rotations, continuous hours of service (while working for the Operator), and other factors associated with fatigue	
- Provide an explanation for why not:	
- Investigation identified no control room issues	
- Investigation identified no controller issues	
- Investigation identified incorrect controller action or controller error	
- Investigation identified that fatigue may have affected the controller(s) involved or impacted the involved controller(s) response	
- Investigation identified incorrect procedures	
- Investigation identified incorrect control room equipment operation	

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- Investigation identified maintenance activities that affected control room operations, procedures, and/or controller response	
- Investigation identified areas other than those above	
Describe:	

PART F - DRUG & ALCOHOL TESTING INFORMATION

1. As a result of this Incident, were any Operator employees tested under the post-accident drug and alcohol testing requirements of DOT's Drug & Alcohol Testing regulations?	No
- If Yes:	
1a. Specify how many were tested:	
1b. Specify how many failed:	
2. As a result of this Incident, were any Operator contractor employees tested under the post-accident drug and alcohol testing requirements of DOT's Drug & Alcohol Testing regulations?	No
- If Yes:	
2a. Specify how many were tested:	
2b. Specify how many failed:	

PART G - CAUSE INFORMATION

Select only one box from PART G in shaded column on left representing the Apparent Cause of the Incident, and answer the questions on the right. Describe secondary, contributing, or root causes of the Incident in the narrative (PART H).

Apparent Cause:	G3 - Excavation Damage

G1 - Corrosion Failure – only one **sub-cause** can be picked from shaded left-hand column

Corrosion Failure Sub-Cause:	
- If External Corrosion:	
1. Results of visual examination:	
- If Other, Specify:	
2. Type of corrosion:	
- Galvanic	
- Atmospheric	
- Stray Current	
- Microbiological	
- Selective Seam	
- Other	
- If Other, Describe:	
3. The type(s) of corrosion selected in Question 2 is based on the following:	
- Field examination	
- Determined by metallurgical analysis	
- Other	
- If Other, Describe:	
4. Was the failed item buried under the ground?	
- If Yes:	
4a. Was failed item considered to be under cathodic protection at the time of the incident?	
- If Yes, Year protection started:	
4b. Was shielding, tenting, or disbonding of coating evident at the point of the incident?	
4c. Has one or more Cathodic Protection Survey been conducted at the point of the incident?	
If "Yes, CP Annual Survey" – Most recent year conducted:	
If "Yes, Close Interval Survey" – Most recent year conducted:	
If "Yes, Other CP Survey" – Most recent year conducted:	
- If No:	
4d. Was the failed item externally coated or painted?	
5. Was there observable damage to the coating or paint in the vicinity of the corrosion?	
6. Pipeline coating type, if steel pipe is involved:	
- If Other, Describe:	
- If Internal Corrosion:	
7. Results of visual examination:	
- If Other, Describe:	
8. Cause of corrosion *(select all that apply)*:	
- Corrosive Commodity	

- Water drop-out/Acid	
- Microbiological	
- Erosion	
- Other	
- If Other, Specify:	
9. The cause(s) of corrosion selected in Question 8 is based on the following: *(select all that apply)*:	
- Field examination	
- Determined by metallurgical analysis	
- Other	
- If Other, Describe:	
10. Location of corrosion *(select all that apply)*:	
- Low point in pipe	
- Elbow	
- Drop-out	
- Other	
- If Other, Describe:	
11. Was the gas/fluid treated with corrosion inhibitor or biocides?	
12. Were any liquids found in the distribution system where the Incident occurred?	
Complete the following if any Corrosion Failure sub-cause is selected AND the "Part of system involved in incident" (from PART C, Question 2) is Main, Service, or Service Riser.	
13. Date of the most recent Leak Survey conducted	
14. Has one or more pressure test been conducted since original construction at the point of the Incident?	
- If Yes:	
Most recent year tested:	
Test pressure:	
G2 – Natural Force Damage – only one **sub-cause** can be picked from shaded left-handed column	
Natural Force Damage – Sub-Cause:	
- If Earth Movement, NOT due to Heavy Rains/Floods:	
1. Specify:	
- If Other, Specify:	
- If Heavy Rains/Floods:	
2. Specify:	
- If Other, Specify:	
- If Lightning:	
3. Specify:	
- If Temperature:	
4. Specify:	
- If Other, Specify:	
- If High Winds:	
- Other Natural Force Damage:	
5. Describe:	
Complete the following if any Natural Force Damage sub-cause is selected.	
6. Were the natural forces causing the Incident generated in conjunction with an extreme weather event?	
6.a If Yes, specify *(select all that apply)*:	
- Hurricane	
- Tropical Storm	
- Tornado	
- Other	
- If Other, Specify:	
G3 – Excavation Damage – only one **sub-cause** can be picked from shaded left-hand column	
Excavation Damage – Sub-Cause:	Excavation Damage by Third Party
- If Excavation Damage by Operator (First Party):	
- If Excavation Damage by Operator's Contractor (Second Party):	
- If Excavation Damage by Third Party:	
- If Previous Damage due to Excavation Activity:	

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Complete the following ONLY IF the "Part of system involved in Incident" (from Part C, Question 2) is Main, Service, or Service Riser.	
1. Date of the most recent Leak Survey conducted	
2. Has one or more pressure test been conducted since original construction at the point of the Incident?	
- If Yes:	
Most recent year tested:	
Test pressure:	
Complete the following if Excavation Damage by Third Party is selected.	
3. Did the operator get prior notification of the excavation activity?	Yes
3a. If Yes, Notification received from: *(select all that apply)*:	
- One-Call System	Yes
- Excavator	
- Contractor	
- Landowner	
Complete the following mandatory CGA-DIRT Program questions if any Excavation Damage sub-cause is selected.	
4. Do you want PHMSA to upload the following information to CGA-DIRT (www.cga-dirt.com)?	Yes
5. Right-of-Way where event occurred *(select all that apply)*:	
- Public	Yes
- If Public, Specify:	City Street
- Private	
- If Private, Specify:	
- Pipeline Property/Easement	
- Power/Transmission Line	
- Railroad	
- Dedicated Public Utility Easement	
- Federal Land	
- Data not collected	
- Unknown/Other	
6. Type of excavator :	Contractor
7. Type of excavation equipment :	Backhoe/Trackhoe
8. Type of work performed :	Sewer (Sanitary/Storm)
9. Was the One-Call Center notified?	Yes
9a. If Yes, specify ticket number:	459722
9b. If this is a State where more than a single One-Call Center exists, list the name of the One-Call Center notified:	USAN
10. Type of Locator:	Utility Owner
11. Were facility locate marks visible in the area of excavation?	Unknown/Other
12. Were facilities marked correctly?	Unknown/Other
13. Did the damage cause an interruption in service?	Yes
13a. If Yes, specify duration of the interruption:	16
14. Description of the CGA-DIRT Root Cause *(select only the one predominant first level CGA-DIRT Root Cause and then, where available as a choice, the one predominant second level CGA-DIRT Root Cause as well)*:	
- Root Cause Description:	Excavation Practices Not Sufficient
- If One-Call Notification Practices Not Sufficient, specify:	
- If Locating Practices Not Sufficient, specify:	
- If Excavation Practices Not Sufficient, specify:	Excavation practices not sufficient (other)
- If Other/None of the Above (explain), specify:	third party proceeded to excavate before PG&E coordinated the locate and mark
G4 - Other Outside Force Damage - only one **sub-cause** can be selected from the shaded left-hand column	
Other Outside Force Damage – Sub-Cause:	
- If Nearby Industrial, Man-made, or Other Fire/Explosion as Primary Cause of Incident:	
- If Damage by Car, Truck, or Other Motorized Vehicle/Equipment NOT Engaged in Excavation:	
1. Vehicle/Equipment operated by:	
- If Damage by Boats, Barges, Drilling Rigs, or Other Maritime Equipment or Vessels Set Adrift or Which Have Otherwise Lost Their Mooring:	
2. Select one or more of the following IF an extreme weather event was a factor:	
- Hurricane	
- Tropical Storm	
- Tornado	
- Heavy Rains/Flood	

- Other	
- If Other, Specify:	
- If Routine or Normal Fishing or Other Maritime Activity NOT Engaged in Excavation:	
- If Electrical Arcing from Other Equipment or Facility:	
- If Previous Mechanical Damage NOT Related to Excavation:	
Complete the following ONLY IF the "Part of system involved in Incident" (from Part C, Question 2) is Main, Service, or Service Riser.	
3. Date of the most recent Leak Survey conducted:	
4. Has one or more pressure test been conducted since original construction at the point of the Incident?	
- If Yes:	
Most recent year tested:	
Test pressure (psig):	
- If Intentional Damage:	
5. Specify:	
- If Other, Specify:	
- If Other Outside Force Damage:	
6. Describe:	
G5 - Material Failure of Pipe or Weld - only one **sub-cause** can be selected from the shaded left-hand column	
Material Failure of Pipe or Weld – Sub-Cause:	
- If Body of Pipe:	
1. Specify:	
- If Other, Describe:	
- If Butt Weld:	
2. Specify:	
- If Other, Describe:	
- If Fillet Weld:	
3. Specify:	
- If Other, Describe:	
- If Pipe Seam:	
4. Specify:	
- If Other, Describe:	
- If Threaded Metallic Pipe:	
- If Mechanical Fitting:	
5. Specify the mechanical fitting involved:	
- If Other, Describe:	
6. Specify the type of mechanical fitting:	
- If Other, Describe:	
7. Manufacturer:	
8. Year manufactured:	
9. Year Installed:	
10. Other attributes:	
11. Specify the two materials being joined:	
11a. First material being jointed:	
- Steel	
- Cast/Wrought Iron	
- Ductile Iron	
- Copper	
- Plastic	
- Unknown	
- Other	
- If Other, Specify:	
11b. If Plastic, specify:	
- If Other Plastic, specify:	
11c. Second material being joined:	
- Steel	
- Cast/Wrought Iron	
- Ductile Iron	
- Copper	
- Plastic	

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- Unknown	
- Other	
- If Other, Specify:	
11d. If Plastic, specify:	
- If Other Plastic, Specify:	
12. If used on plastic pipe, did the fitting – as designed by the manufacturer – include restraint?	
12a. If Yes, specify:	
- If Compression Fitting:	
13. Fitting type:	
14. Manufacturer:	
15. Year manufactured:	
16. Year installed:	
17. Other attributes:	
18. Specify the two materials being joined:	
18a. First material being joined:	
- Steel	
- Cast/Wrought Iron	
- Ductile Iron	
- Copper	
- Plastic	
- Unknown	
- Other	
- If Other, specify:	
18b. If Plastic, specify:	
- If Other Plastic, specify:	
18c. Second material being joined:	
- Steel	
- Cast/Wrought Iron	
- Ductile Iron	
- Copper	
- Plastic	
- Unknown	
- Other	
If Other, specify:	
18d. If Plastic, specify:	
- Other Plastic, specify:	
- If Fusion Joint:	
19. Specify:	
- If Other, Specify:	
20. Year installed:	
21. Other attributes:	
22. Specify the two materials being joined:	
22a. First material being joined:	
- If Other, Specify:	
22b. Second material being joined:	
- If Other, Specify:	
- If Other Pipe, Weld, or Joint Failure:	
23. Describe:	
Complete the following if any Pipe, Weld, or Joint Failure sub-cause is selected.	
24. Additional Factors (*select all that apply*):	
- Dent	
- Gouge	
- Pipe Bend	
- Arc Burn	
- Crack	
- Lack of Fusion	
- Lamination	
- Buckle	
- Wrinkle	
- Misalignment	
- Burnt Steel	
- Other	
25. Was the Incident a result of:	
- Construction defect	
Specify:	
- Material defect	

Specify:	
- If Other, Specify:	
- Design defect	
- Previous damage	
26. Has one or more pressure test been conducted since original construction at the point of the Incident?	
- If Yes:	
Most recent year tested:	
Test pressure:	
G6 - Equipment Failure - only one **sub-cause** can be selected from the shaded left-hand column	
Equipment Failure – Sub-Cause:	
- If Malfunction of Control/Relief Equipment:	
1. Specify:	
- Control Valve	
- Instrumentation	
- SCADA	
- Communications	
- Block Valve	
- Check Valve	
- Relief Valve	
- Power Failure	
- Stopple/Control Fitting	
- Pressure Regulator	
- Other	
- If Other, Specify:	
- If Threaded Connection Failure:	
2. Specify:	
- If Other, Specify:	
- If Non-threaded Connection Failure:	
3. Specify:	
- If Other, Specify:	
- If Valve:	
4. Specify:	
- If Other, Specify:	
4a. Valve type:	
4b. Manufactured by:	
4c. Year manufactured:	
- If Other Equipment Failure:	
5. Describe:	
G7 - Incorrect Operation - only one **sub-cause** can be selected from the shaded left-hand column	
Incorrect Operation Sub-Cause:	
- If Damage by Operator or Operator's Contractor NOT Related to Excavation and NOT due to Motorized Vehicle/Equipment Damage:	
- If Valve Left or Placed in Wrong Position, but NOT Resulting in an Overpressure:	
- If Pipeline or Equipment Overpressured:	
- If Equipment Not Installed Properly:	
- If Wrong Equipment Specified or Installed:	
- If "Other Incorrect Operation:	
1. Describe:	
Complete the following if any Incorrect Operation sub-cause is selected.	
2. Was this Incident related to: (select all that apply)	
- Inadequate procedure	
- No procedure established	
- Failure to follow procedure	
- Other	
- If Other, Describe:	
3. What category type was the activity that caused the Incident:	
4. Was the task(s) that led to the Incident identified as a covered task in your	

Operator Qualification Program?	
4a. If Yes, were the individuals performing the task(s) qualified for the task(s)?	

G8 - Other Incident Cause - only one **sub-cause** can be selected from the shaded left-hand column

Other Incident Cause – Sub-Cause:	
- If Miscellaneous:	
1. Describe:	
- If Unknown:	
2. Specify:	

PART H - NARRATIVE DESCRIPTION OF THE INCIDENT

At 1114 hours PG&E was notified of a third party dig-in at 1 South Market Street in San Jose. A third party (GM Engineering) struck a 2-inch plastic distribution main (near a 3-way tee, which branches off a 4-inch plastic distribution main) with a backhoe, causing an unintentional release of natural gas. The third party called USA (No. 459722) on 11/3/2014. PG&E received the normal notice on 11/03/2014 (11:25:55 AM). In response to the ticket, PG&E attempted to make contact with the excavator before locating and marking its facilities. PG&E left a message for the excavator on 11/5/2014 but did not receive a response from the excavator to coordinate the locate and mark prior to the excavation. (As is customary for large excavation projects, PG&E communicates with the excavators to phase the marking of PG&E facilities to ensure markings remain visible in the excavation area.) A PG&E Gas Service Representative (GSR) arrived on scene at 1131 hours. PG&E Repair Crew arrived at approximately 1140 hours. Gas was completely shut in at 1702 hours by closing 10 distribution main valves and isolating approximately 4 blocks of the gas distribution system and 40 customers. PG&E initially planned to safely squeeze the 2-inch diameter plastic pipe at a location away from the periphery of the dig-in location. Upon further evaluation it was determined that digging and squeezing the line would take a substantial amount of time due to the depth exceeding 5 feet and the need to install shoring to complete this work. Once PG&E estimated the total time required for the shut-in, PG&E decided to look for an alternative that included closing valves in the surrounding area that could potentially cause more customer outages. PG&E determined that closing valves was the fastest and safest method and chose to close nearby valves for shutting in gas flow. Repair Crew replaced the 4x4x2-inch tee and the damaged 2-inch distribution main. About 2,500 people were evacuated from office buildings on a two-block area of Market and First and San Pedro streets. Santa Clara Street was closed between First and San Pedro streets, according to the Valley Transportation Authority. Bus Lines 22, 522, 68, 17, 168, and 181 were rerouted, VTA officials said. Several San Francisco Bay Area news stations were observed on scene (i.e., KTVU, NBC Bay Area). This incident was reported to the CPUC and DOT due to the estimated damages expected to exceed $50,000 and major media observed on scene.

File Full Name Note: The users have to sign in to view the attachment if there is no current user session.

PART I - PREPARER AND AUTHORIZED SIGNATURE

Preparer's Name	Wini Chen
Preparer's Title	Program Manager
Preparer's Telephone Number	925-328-5798
Preparer's E-mail Address	wcce@pge.com
Preparer's Facsimile Number	
Authorized Signature	
Authorize Signature's Name	Larry Deniston
Authorized Signature's Title	Manager of Gas Operations Regulatory Compliance
Authorized Signature Telephone Number	925-328-5756
Authorized Signature's Email Address	LCD1@pge.com
Date	12/08/2014

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ATTACHMENT 39

Chan, Wai-Yin

From:	[redacted]
Sent:	Friday, June 09, 2017 5:03 PM
To:	Chan, Wai-Yin; Khatri, Sikandar
Cc:	Lee, Dennis M.; Richmond, Susie
Subject:	[Index 10895] RE: Damage Prevention Program Data Request - Index 9623 supp01
Attachments:	Index 10707-08 Supp02_Response.pdf

Franky,

Please see below for the response to your data request.

QUESTION 10895.01: PG&E provided attachment "Index 9623-03_2014-June 2016 On-Time or Late Ticket Count.xlsx" that shows the counts of on-time and late tickets from 2014 to June 2016. Please explain how PG&E distinguish or identify on-time and late tickets for the counts in the report. In another word, how did PG&E query for the on-time and late tickets?
RESPONSE 10895.01: PG&E defines a "late USA ticket" as a ticket not responded to by the date and time the ticket is due. PG&E Procedure TD-5811P-102, "Determining Scope of Locate", requires that tickets must be responded to within two working days, excluding weekends and holidays or by the start date of the excavation, whichever is greater.[1] The on-time ticket counts were calculated as the difference between total tickets worked and late tickets.

The January – June 2016 late ticket counts provided in attachment *"Index 9623-03_2014-June 2016 On-Time or Late Ticket Count.xlsx"* were queried from IRTHnet using the "Past Due Ticket Listing" function, which reports tickets that have been responded to past the date and time the ticket is due. For late ticket data prior to January 2016, PG&E utilized the Organizational Reporting Initiative (ORI), which is a repository for portions of IRTHnet data and SAP data.[2] Both ORI and the IRTHnet "Past Due Ticket Listing" report late tickets using the late ticket criteria defined above.

Note, PG&E recently submitted additional late ticket data, which has been collected by PG&E's Quality Management (QM) organization, to supplement the late ticket data previously provided to SED. As indicated in PG&E's supplemental response (Index 10707-08 Supp02), PG&E's QM organization identified "field late" tickets, which were not included in the original late ticket reports. These "field late" tickets would be identified as on-time in IRTHnet, but would have been a late ticket if processed correctly per PG&E procedures. Please see attachment *"Index 10707-08 Supp02_Response.pdf"* for a copy of the response containing the supplement late ticket data, delivered to Darryl Gruen (Legal Division, on behalf of SED) on June 6, 2017.

QUESTION 10895.02: I have attached an USA ticket as an example. Please see the attached "USA 459722_CONF". Using PG&E's query for the on-time and late ticket, does this ticket fall into the category of on-time because it was responded (10:21:05AM) before the "work begins" time (11:30:00AM)?
RESPONSE 10895.02: The USA ticket indicates PG&E submitted a positive response, "No Response From Excavator", on 11/05/2014 at 10:20:00 AM, prior to the work start date of 11/05/2014 at 11:30 AM, therefore, this ticket would not be considered late in IRTHnet.

---

[1] See PG&E Response 10516.01 (delivered to SED on February 8, 2017).
[2] See PG&E Response 10707.08 (delivered to SED on April 19, 2017).

Thank you,

[redacted]

Office: [redacted]
Cell: [redacted]
[redacted]

From: Chan, Wai-Yin [mailto:Wai-Yin.Chan@cpuc.ca.gov]
Sent: Tuesday, May 23, 2017 10:49 AM
To: Khatri, Sikandar
Cc: Lee, Dennis M.; Richmond, Susie
Subject: RE: Damage Prevention Program Data Request - Index 9623 supp01

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Hi [redacted],

I have some follow up questions regarding the data request response below.

1. PG&E provided attachment “Index 9623-03_2014-June 2016 On-Time or Late Ticket Count.xlsx” that shows the counts of on-time and late tickets from 2014 to June 2016. Please explain how PG&E distinguish or identify on-time and late tickets for the counts in the report. In another word, how did PG&E query for the on-time and late tickets?
2. I have attached an USA ticket as an example. Please see the attached “USA 459722_CONF”. Using PG&E’s query for the on-time and late ticket, does this ticket fall into the category of on-time because it was responded (10:21:05AM) before the “work begins” time (11:30:00AM)?

Please provide a response by COB 6/9/2017

Sincerely,

Wai-Yin (Franky) Chan
GSRB|SED|CPUC
Office (415) 703-2482
Cell (415) 471-4306
Fax (415) 703-2625

From: [redacted]
Sent: Wednesday, September 28, 2016 8:04 AM
To: Khatri, Sikandar
Cc: Lee, Dennis M.; Richmond, Susie; [redacted]
Subject: RE: Damage Prevention Program Data Request - Index 9623 supp01

Sikandar,

Please see below for the supplemental data request response for Index 9623 and attached accompanying documents.

QUESTION 9623.03: Starting from January 2013 till this date, for each month please provide the number of USA tickets that were:

a) completed within two working days (upon receipt of notification) as outlined in California Government Code 4216

b) completed after two working days of the receipt of notification but before the start of the excavation work still satisfying the requirements of California Government Code 4216

c) completed within an mutually agreed rescheduled time (which does not meet requirements as in (a) and (b)above) with positive confirmation from the contractor

d) completed late (not meeting requirements as in (a) and (b) above) without positively agreed and confirmed rescheduled time with the contractor

e) never completed

f) cancelled

RESPONSE 9623.03 Supp01:

a) PG&E tracks the number of tickets completed on-time (positive response within 48 hours or by the scheduled excavation date) and tickets completed late. Tickets completed before the start of the excavation (whether before or after 48 hours of the receipt of notification) are captured as an on-time ticket and not tracked separately than those responded to within 48 hours.

   Please see attachment *"Index 9623-03_2014-June 2016 On-Time or Late Ticket Count.xlsx"* for the January 2014 to June 2016 on-time and late ticket counts. PG&E does not have the 2013 on-time and late ticket counts readily available and will provide this information in a further supplemental response. Please note that PG&E does not have monthly breakdowns of this data readily available.

b) See PG&E Response 9623.03 Supp01 (a).

c) The mutually agreed rescheduled date is currently documented in the comments of the USA ticket and is not captured in a separate field in irthNet. As such, PG&E does not track the number of instances this occurs.

d) Refer to PG&E Responses 9623.03 Supp01 (a) and (c); as such, PG&E does not track the number of instances this occurs.

e) Not applicable; PG&E responds to all locate and mark requests received. In circumstances where multiple tickets are received for the same job (such as when gas transmission and gas distribution tickets are received for the same job), PG&E may address both tickets under one registration code. In such circumstances, it is possible that a ticket may expire if PG&E does not simultaneously close out all associated tickets in irthNet, once the work is complete.

f) Please see the table below for number of cancelled tickets from January 2013 to June 2016. Please note that PG&E does not have monthly breakdowns of this data readily available.

Year	Total Tickets Cancelled
January - June 2016	83,550
2015	83,860
2014	96,590
2013	51,758

QUESTION 9623.04: The number of PG&E locators during each month who performed the mark and locate tasks starting January 2013 till this date

RESPONSE 9623.04 Supp01: PG&E's Locate and Mark organization formed in 2014, prior to which locate and mark tasks were the responsibility of the local Division. The employees were primarily Fieldpersons, a construction classification, and performed multiple tasks in addition to locate and mark.
There were approximately 120 personnel that performed locate and mark tasks in 2013. Please see the table below for the number of PG&E personnel who performed locate & mark tasks January 2014 through June 2016:

January 2014 – June 2016 Locate & Mark Head Count

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2014[1]	97	97	119	128	117	126	128	127	130	133	130	134
2015[2]	139	139	135	139	138	145	149	178	181	189	195	194
2016[3]	241	240	233	244	254	234	N/A					

[1] No contracted Locate and Mark personnel in 2014.

[2] PG&E does not have the monthly distribution of contracted personnel; however, records indicate there were 57 contracted Locate & Mark personnel in 2015 in addition to the personnel count above.

[3] Monthly totals include contracted personnel.

QUESTION 9623.05: For each locator, average daily and also monthly load (for each month) during the period starting from January 2013 till this date. For each month, please also include the number of the tickets that were completed by each locator within two working days or before the start of excavation (as outlined in California Government Code 4216), please see (3)(i)(a) and (b) above

RESPONSE 9623.05 Supp01: Please see attachment *"Index 9623-05_2013-June 2016 Completed Tickets.xlsx"* for total worked tickets by Division, by month, from January 2013 and June 2016. Note that total worked tickets also include tickets that are closed out without a field visit (via verification using maps or a conversation with the excavator).

Please note that PG&E does not track workload by individual locator since workload can vary widely based on a multitude of factors, including but not limited to the geographic area, experience of the personnel, turnover rate, and the nature of the work.

QUESTION 9623.06: The minimum and maximum number of tickets completed by each locator on a particular day during the period January 2013 till this date

RESPONSE 9623.06 Supp01: Please see PG&E Response 9623.05 Supp01.

Thank you,

[redacted]
Office: [redacted]
Cell: [redacted]
[redacted]

From: [redacted]
Sent: Friday, September 23, 2016 11:21 AM
To: Khatri, Sikandar
Cc: Lee, Dennis M.; Richmond, Susie; [redacted]
Subject: RE: Damage Prevention Program Data Request - Index 9623

Sikandar,

We'll follow-up with the team for the remaining information below.

Thank you,

[redacted]

[redacted]
Office: [redacted]
Cell: [redacted]
[redacted]

From: Khatri, Sikandar [mailto:sikandar.khatri@cpuc.ca.gov]
Sent: Friday, September 23, 2016 10:34 AM
To: [redacted]
Cc: Lee, Dennis M.; Richmond, Susie; [redacted]
Subject: RE: Damage Prevention Program Data Request - Index 9623

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Good morning [redacted],

We have not received any further information since your last email. Please provide the remaining information latest by Tuesday, September 27, 2016.

Thanks

Sikandar

From: [redacted]
Sent: Wednesday, August 10, 2016 5:25 PM
To: Khatri, Sikandar
Cc: Bruno, Kenneth; Lee, Dennis M.; Richmond, Susie
Subject: RE: Damage Prevention Program Data Request - Index 9623

Sikandar,

Please see below for the response to your data request. The accompanying documents will be submitted through the file transfer website.

PG&E is providing this response pursuant to Public Utilities Code §583 because this response and/or the attached documents contain information that should remain confidential and not be subject to public disclosure as it contains one or more of the following: critical infrastructure information that is not normally provided to the general public, the dissemination of which poses public safety risks (pursuant to the Critical Infrastructures Information Act of 2002, 6 U.S.C. §§131-134); sensitive personal information pertaining to PG&E employees; or commercially sensitive/proprietary information. This information is highlighted yellow below.

QUESTION 9623.02: In addition, what measures (processes and procedures) are in place to avoid hitting the assets mentioned above in (1) during excavation by:

a) PG&E crews

b) PG&E hired contractors, and

c) Other third party contractors and individuals

RESPONSE 9623.02: The following lists the key measures PG&E has in place to avoid excavation damage to its gas facilities:

a) PG&E Crews

- PG&E Procedure TD-4412P-05 (Excavation Procedures for Damage Prevention) prescribes step-by-step instructions for preventing damage to PG&E underground facilities. See attachment *"9623-02_TD-4412P-05_Excavation Procedures for Damage Prevention.pdf."*
- PG&E ProceduresTD-4412P-05 and TD-5811P-301(Performing a Standby) require 1) continuous observation by a dedicated qualified standby person when excavation occurs near a critical or high-priority facility (specific distances and excavation methods requiring standby are specified in TD-5811P-105-JA04), and 2) communication with excavator after confirming accuracy of locate markings and identifying known fitting locations and potential unknown fittings. See attachments *"9623-02_TD-5811P-301_Performing A Standby_CONF.pdf"* and "*9623-02_TD-5811P-105-JA04_Indentifying Need for Site Visit-Field Meet-Standby.pdf.*"
- PG&E uses the 811 One Call System throughout its service territory (facilitated by Underground Service Alert (USA)) to respond to excavators' requests to begin an excavation using IrthNet© and Utilisphere©, as well as a tech-down process (if need be). This information is found in TD-5811M (Locate and Mark Handbook). See attachment *"9623-02_TD-5811M - Locate and Mark Handbook_CONF.pdf"* for a copy of the handbook.
- PG&E Procedure TD-5811P-103 (Identifying the Proper Location) includes direction for what facilities to locate and how to get a locating signal on them, as well as for identifying Abnormal Operating Conditions (AOCs). See attachment *"9623-02_TD-5811P-103_Identifying Proper Location_CONF.pdf."*
- PG&E Procedure TD-5811P-104 (Proper Markings) includes direction for what markings to use to identify PG&E facilities. See attachment *"9623-02_TD-5811P-104_Proper Markings.pdf."*
- PG&E Procedure TD-5811P-106 (Locating and Marking at Distribution Regulator Facilities) includes direction for locating and marking at distribution regulator facilities, where SCADA equipment, SCADA sense and data lines, and regulator control sense lines may be present. See attachment *"9623-02_TD-5881P-106_LM at Dist Reg Facilities_CONF.pdf."*

b) PG&E's Hired Contractors

  - PG&E's contractors are provided PG&E guidance documents and are required to follow PG&E standards and procedures for damage prevention as part of the scope of their work. Refer to PG&E Response 9623.02.a) for details.
  - In addition, beginning January 1, 2016, PG&E only contracts with excavation companies who have become Gold Shovel Standard certified. The Gold Shovel Program is a PG&E program designed to protect PG&E's underground gas and electric infrastructure by monitoring and evaluating excavation-related tasks performed by third parties. The Gold Shovel Standard ensures that PG&E's contractors adhere to the safest excavation standards. To become Gold Shovel certified, contractors and other third parties must comply with new PG&E standards and procedures, be reviewed and approved by a designated PG&E committee and agree to monitoring and evaluations throughout the work performed. See attachment *"9623-02_TD-5805P-02_Gold Shovel Standard.pdf."*

c) Other Third Party Contractors and Individuals

- PG&E interacts with third party contractors through a variety of methods, including responding to USA tickets; performing Field Meets and Standbys at excavation sites when required through the USA process; and the Damage Prevention Awareness Program. PG&E Standard TD-5805S (Damage Prevention Awareness Programs) defines requirements and responsibilities for damage prevention awareness programs at PG&E, which aims to reduce dig-ins by educating homeowners and contractors to use safe excavation practices in compliance with California Government Code (CGC) 4216 and the 811 One Call System, "Call Before You Dig". See attachment "*9623-02_TD-5805S_Damage Prevention Awareness Programs.pdf.*"
- PG&E Standard RMP-12 (Pipeline Public Awareness program) was developed by PG&E to enhance public safety and environmental protection through regular communications with these stakeholders, including the affected public, emergency officials, public officials, and excavators; see attachment *"9623-02_RMP-12_Pipeline Public Awareness Program_v11.pdf."*

- PG&E's 811 Ambassador Program exists to provide a response mechanism for PG&E employees who observe unsafe excavation by a third party and wish to take corrective action. It starts with awareness and education of 811 "Call before You Dig" and developing the ability to recognize key indicators that safe excavation practices are not being followed on a job site. This program equips people with the resources to intercept those who are practicing unsafe excavation, thus making them 811 Ambassadors. See attachment "*9623-02_TD-5805P-03_811 Ambassador Program.pdf.*"

Thank you,

[redacted]
Office: [redacted]
Cell: [redacted]
[redacted]

From: CPUCGASrequest
Sent: Monday, July 11, 2016 2:23 PM
To: GT&D GE Regulatory Support & Analysis
Subject: FW: Damage Prevention Program Data Request - Index 9623

From: Khatri, Sikandar
Sent: Monday, July 11, 2016 2:22:52 PM (UTC-08:00) Pacific Time (US & Canada)
To: Richmond, Susie; CPUCGASrequest
Cc: Lee, Dennis M.; Bruno, Kenneth
Subject: RE: Damage Prevention Program Data Request - Index 9623

This is an EXTERNAL EMAIL. Stop and think before clicking links or opening attachments.
****

Good afternoon Susie,

Is there any update on our data request?

Thanks

Sikandar

From: Khatri, Sikandar
Sent: Tuesday, July 05, 2016 12:45 PM
To: 'Richmond, Susie'
Cc: Lee, Dennis M.; Bruno, Kenneth
Subject: RE: Damage Prevention Program Data Request - Index 9623

Good afternoon Susie,

We are looking forward to receive the requested information.

Thanks

Sikandar

From: Richmond, Susie [mailto:GSR8@pge.com]
Sent: Wednesday, June 08, 2016 3:11 PM
To: Khatri, Sikandar
Subject: Damage Prevention Program Data Request - Index 9623

Sikandar,

Your issue had been logged as Index 9623. Please allow 10 business days for data response.

Susie Richmond
Manager, Gas Operations Regulatory Compliance & Risk Analysis
6111 Bollinger Canyon Road, 4th floor, #4440E
San Ramon, CA 94583
925-328-5776 (office)
925-786-0267 (cell)

From: Khatri, Sikandar [mailto:sikandar.khatri@cpuc.ca.gov]
Sent: Wednesday, June 08, 2016 2:37 PM
To: Richmond, Susie
Cc: Bruno, Kenneth; Lee, Dennis M.; CPUCGASrequest
Subject: Data Request

Good morning Susie,

Gas Safety and Reliability Branch (GSRB) at CPUC is intending to review some aspects of Damage Prevention Program of PG&E and other relevant information. We will appreciate if you can please provide the following latest by **June 30, 2016**:

(1) We understand that PG&E has been collecting information on its gas assets system-wide and developing Pipeline Feature List (PFL). It will be helpful to know that how much information is available on the assets taking off from transmission lines (such as, valve extensions, studs, Ts, nipples etc.), and with what certainty?

(2) In addition, what measures (processes and procedures) are in place to avoid hitting the assets mentioned above in (1) during excavation by:

   (a) PG&E crews

   (b) PG&E hired contractors, and

   (c) Other third party contractors and individuals

(3) We are also interested to know about handling of USA tickets at PG&E, specially late and extended tickets. In this regard, please provide the following:

   (i) Starting from January 2013 till this date, for each month please provide the number of USA tickets that were:

(a) completed within two working days (upon receipt of notification) as outlined in California Government Code 4216

(b) completed after two working days of the receipt of notification but before the start of the excavation work still satisfying the requirements of California Government Code 4216

(c) completed within an mutually agreed rescheduled time (which does not meet requirements as in (a) and (b)above) with positive confirmation from the contractor

(d) completed late (not meeting requirements as in (a) and (b) above) without positively agreed and confirmed rescheduled time with the contractor

(e) never completed

(f) cancelled

(ii) The number of PG&E locators during each month who performed the mark and locate tasks starting January 2013 till this date

(iii)For each locator, average daily and also monthly load (for each month) during the period starting from January 2013 till this date. For each month, please also include the number of the tickets that were completed by each locator within two working days or before the start of excavation (as outlined in California Government Code 4216), please see (3)(i)(a) and (b) above

(iv)The minimum and maximum number of tickets completed by each locator on a particular day during the period January 2013 till this date

Thanks

Sincerely,

Sikandar Khatri, Ph.D., P.E.
Senior Utilities Engineer (Specialist)
SED/GSRB
California Public Utilities Commission
505 Van Ness Avenue
San Francisco, CA 94102
Phone: 415-703-2565
Fax: 415-703-2625

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[1] See PG&E Response 10516.01 (delivered to SED on February 8, 2017).
[2] See PG&E Response 10707.08 (delivered to SED on April 19, 2017).

ATTACHMENT 40

PACIFIC GAS AND ELECTRIC COMPANY

Gas Operations Data Response

PG&E Data Request Index No.:	10516		
Request Date:	01-24-2017	Date Sent:	02-07-2017
Requesting Party:	GOST-CPUC SED/CPSD		
External Requester:	Sikandar Khatri	PG&E Contact:	Mike Bradley

PG&E's responses to following SED data requests are intended to comply with the Instructions provided on January 24, 2017. PG&E has no objection to SED's instructions that restate Commission Rules of Practice and Procedure, such as the duty of candor, since PG&E is required to follow such rules regardless of such instructions. Also, please note that PG&E has not Bates-labeled or indexed the attachments to its responses below, as the attachments are not voluminous, but has instead labeled each attachment with the applicable Index/Attachment Number. Per the Instructions, PG&E has provided the name of the person(s) answering each request, their title, the name and title of the person to whom they report, and contact information.

Question	Responded By	Title	Contact	Direct Supervisor	Title
1-2	Simon van Oosten	Supervisor, Gas Methods and Procedures	SXVX@pge.com	Lenny Caldwell	Manager, Gas Methods & Procedures
	Jeff Carroll	Superintendent, Gas T&D Locate and Mark	JLC5@pge.com	Joel Dickson	Director, Gas T&D Ops Compliance
3-5	Jeff Carroll	Superintendent, Gas T&D Locate and Mark	JLC5@pge.com	Joel Dickson	Director, Gas T&D Ops Compliance
6	[redacted]	[redacted]	[redacted]	Susie Richmond	Manager, Gas Operations Compliance & Risk

QUESTION 10516.01: How does PG&E define a "late USA ticket"? How does PG&E define a "renegotiated ticket"? Please describe the process for renegotiating a USA start time.

Please provide a copy of PG&E's policy, procedure, standard practice or other internal document that shows the definitions requested in question 1.

RESPONSE 10516.01: PG&E defines a "late USA ticket" as a ticket not responded to by the date and time the ticket is due. PG&E Procedure TD-5811P-102, "Determining Scope of Locate", requires that tickets must be responded to within two working days, excluding weekends and holidays or by the start date of the excavation, whichever is greater. Please see pages 3 and 5 of attachment *"Index 10516-01_TD-5811P-102.pdf."*

PG&E defines a "renegotiated ticket" as a ticket where the locator and the excavator mutually agree on a new start date and time to complete a ticket because of relevant issues not related to the excavation size (as that would be included in the phased ticket process). Please refer to the following attachments for the PG&E procedures that describe the process for renegotiating a USA ticket:

- Pages 5 and 6 of PG&E Procedure TD-5811P-102,"Determining Scope of Locate" (attachment *"Index 10516-01_TD-5811P-102.pdf")*
- Pages 3, 4 and 5 of PG&E Procedure TD-5811P-105, "Responding to a Ticket" (attachment *"Index 10516-01_TD-5811P-105.pdf")*
- Page 6 of PG&E Job Aid TD-5811P-105-JA01, "Choosing the Correct Utilisphere™ Response" (attachment *"Index 10516-01_TD-5811P-105-JA01.pdf"*)

QUESTION 10516.02: Does PG&E have a policy, procedure, standard practice or other internal document that sets forth the process for renegotiating a USA start time? If so, please provide them, and reference the applicable page numbers.

RESPONSE 10516.02: Please see Response 10516.01.

QUESTION 10516.03: Please state how many USA tickets were renegotiated for the period 2013-2016, as defined in response to question 1?

RESPONSE 10516.03: Please see the table below for the number of renegotiated tickets between 2013 and 2016:

Year	Number of Renegotiated Tickets*
2013	11,744
2014	23,471
2015	36,441
2016	29,760
* Renegotiated ticket counts are based on the renegotiated ticket exports from IrthNet provided in Response 10516.04.	

QUESTION 10516.04: Please provide a spreadsheet that lists all of the actual late and renegotiated ticket numbers for the period 2013-2016. Please title the columns of the spreadsheet as follows:

a) USA ticket number

b) Date initial ticket was issued.

c) Deadline of initial ticket.

d) Ticket was late.

e) Ticket was renegotiated.

f) If ticket was renegotiated, date of renegotiation.

g) For tickets that were both late and renegotiated, circumstances that justified renegotiation.

h) The name and contact information for the excavator/contractor and how he/she was contacted for renegotiated time?

i) Whether the excavator/contractor agreed to renegotiated time or not?

RESPONSE 10516.04:

2013 – 2016 Late Tickets

As previously indicated in PG&E Response 10279.01 (delivered on November 16, 2016), prior to 2016, PG&E captured late ticket counts for reporting purposes only and did not generate reports with the associated USA ticket information. Also, as previously noted in Response 10279.01Supp01 (delivered on November 18, 2016), starting in January 2016, PG&E began using IrthNet to query late ticket data. It was also in January 2016 that PG&E began archiving late ticket data. Prior to 2016, PG&E was only recording the total number of late tickets, using a system other than IrthNet. Unlike IrthNet, this system does not house USA ticket details; therefore, PG&E cannot correlate the 2013-2015 late ticket totals reported in Response 9623.03 to their respective USA tickets.

Additionally, as demonstrated at the December 1, 2016, meeting with SED, IrthNet (the current tool used to query late tickets) is limited to the past 60 days and cannot be used to query the late tickets associated with the 2013-2015 totals previously reported. For these reasons, PG&E is unable to provide the requested ticket details for late tickets prior to 2016 without conducting a manual review of every USA ticket received from 2013-2015.

Please see attachment *"Index 10516-04_2016 Late Tickets.xlsx"* for the 2016 late tickets and note the following:

a) See column A, "USA Ticket Number", for the USA ticket number

b) See column C, "Date Initial Ticket Was Issued", for the date the initial ticket was received

c) See column D, “Deadline of Initial Ticket”, for the initial work start date submitted by the excavator

d) All tickets identified in this attachment are considered to be late tickets.

e) As indicated in PG&E Response 10279.01, the Past Due Ticket Listing in IrthNet, which PG&E uses to query late tickets, does not generate reports with the full USA ticket response details. Whether a late ticket was renegotiated and details of the negotiation are not included in the Past Due Ticket Listing; however, PG&E compared the 2016 late ticket data to the 2016 renegotiated tickets and identified ten tickets that were considered both late and renegotiated.

   Please see Column H, “Ticket Was Renegotiated”, for the ten tickets identified in 2016 as meeting both criteria. As previously indicated, PG&E does not have the 2013-2015 late ticket data available and therefore cannot not do the comparison for these years.

f) Please see response 10516.04 (e).

g) Please see response 10516.04 (e).

h) Please see response 10516.04 (e).

i) Please see response 10516.04 (e).

2013 – 2016 Renegotiated Tickets

Please see attachment *“Index 10516-04_2013-2016 Renegotiated Tickets.xlsx”* for the 2013-2016 renegotiated tickets and note the following:

a) See column A, “USA Ticket Number”, for the USA ticket number

b) See column B, “Date Initial Ticket Was Issued”, for the date the initial ticket was received

c) See column C, “Deadline of Initial Ticket”, for the initial work start date submitted by the excavator

d) The report generated from IrthNet does not indicate whether a renegotiated ticket is also considered a late ticket; however, as indicated above, PG&E has compared the 2016 late tickets to the 2016 renegotiated tickets and identified ten tickets that met both criteria (see *“Index 10516-04_2016 Late Tickets.xlsx”*).

e) All tickets listed in the attachment are considered to be renegotiated tickets

f) Currently, PG&E is unable to generate reports from IrthNet that include the renegotiated start time; however, PG&E is working on adding this functionality into IrthNet’s reporting.

g) The details of the circumstances that justified a renegotiated start time are documented in the USA Ticket and currently cannot be generated into a report from IrthNet.

h) See columns D and G-J (labeled “Excavator Name”, “Contact Name”, “Contact Phone”, “Contact Fax”, “Contact Email”), for the excavator’s name and contact information. The method of contact used to renegotiate a new start time is documented in the USA Ticket and currently cannot be generated into a report from IrthNet.

i) Whether the excavator agreed to the renegotiated time is documented in the USA Ticket and currently cannot to be generated into a report from IrthNet.

PG&E is gathering the details associated with the renegotiated start times for the ten USA tickets identified as both late and renegotiated in 2016 and will provide as soon as possible.

QUESTION 10516.05: On December 1, 2016, we requested the names and contact information (and whether they still work for PG&E or not) of all “locate and mark supervisors” for the period 2014-2016. Through PG&E’s email to SED staff dated December 22, 2016, PG&E provided only names and contact information of the current supervisors and mentioned that other required information will follow. Please provide this information by the deadline above and include the same information for the year 2013.

RESPONSE 10516.05: Please see PG&E Response 10370.021 Supp02 delivered on January 27, 2017, for the list of Locate and Mark Supervisors between 2014 and 2016. Please note that the Locate and Mark organization formed in 2014; prior to this time locate and mark functions were embedded into the division organizations and there was not a specific classification of personnel dedicated only to locate and mark tasks. Similarly, there was not a formal Locate and Mark supervisor role established prior to the Locate and Mark organization forming; therefore, PG&E is not able to readily identify the names of the 2013 supervisors. PG&E is working on gathering the best available information for the supervisors who oversaw the personnel that performed locate and mark tasks in 2013 and will provide this information as soon as possible.

QUESTION 10516.06: In addition, Staff from the Gas Safety and Reliability Branch at CPUC would like to visit PG&E during 2nd /3rd week of February 2017, and will need access to the databases of USA tickets, including IrthNet and all others, in order to look at the ticket records. The visit may take up to a week. Please confirm the availability for both weeks, and we will let you know the dates. Please have Subject Matter Experts (SMEs) available for the visit, including:

a) Those familiar with running the databases;

b) Those responsible for running the damage prevention program (including mark and locate program) to answer the queries, if any.

RESPONSE 10516.06: PG&E has confirmed the dates of February 13, 2017, and February 17, 2017, for the SED’s visit to PG&E’s office located at 6111 Bollinger Canyon Road, San Ramon, CA 94583.

ATTACHMENT 41

Index 10516.04: 2016 Past Due Tickets

File Name:*"Index 10516-04_2016 Past Due Tickets.xlsx"*

(a) USA ticket number	Division	(b) Date Initial Ticket Was Issued	(c) Deadline of Initial Ticket	Locate Time*	Past Due
002543	East Bay	01/04/2016 02:52 PM	01/07/2016 12:08 AM	01/07/2016 06:21 AM	6 h, 13 m
006928	Diablo	01/07/2016 09:40 AM	01/12/2016 07:00 AM	01/12/2016 07:26 AM	26 m
555378	Diablo	02/03/2016 04:58 PM	02/05/2016 05:00 PM	02/08/2016 07:49 AM	14 h, 49 m
555383	Diablo	02/03/2016 04:58 PM	02/05/2016 05:00 PM	02/08/2016 07:47 AM	14 h, 47 m
022494	San Francisco	04/06/2016 04:08 PM	04/08/2016 04:15 PM	04/08/2016 05:13 PM	58 m
101792	East Bay	04/06/2016 02:24 PM	04/08/2016 02:30 PM	04/08/2016 03:05 PM	35 m
159407	North Bay	03/31/2016 12:11 PM	04/05/2016 07:00 AM	04/05/2016 07:07 AM	7 m
170617	East Bay	04/06/2016 01:51 PM	04/08/2016 02:00 PM	04/08/2016 03:11 PM	1 h, 11 m
W612600220	North Bay	05/07/2016 08:58 AM	05/09/2016 09:00 AM	05/09/2016 09:06 AM	6 m
196664	East Bay	04/20/2016 09:30 AM	05/04/2016 06:00 AM	05/04/2016 06:35 AM	35 m
W612000213	Kern	04/29/2016 08:21 AM	05/03/2016 08:30 AM	05/03/2016 12:12 PM	3 h, 42 m
W612701048	Diablo	05/08/2016 12:56 PM	05/10/2016 01:00 PM	05/10/2016 01:53 PM	53 m
W613001671	DeAnza	05/09/2016 03:33 PM	05/11/2016 03:45 PM	05/11/2016 04:38 PM	53 m
X613000622	Diablo	05/09/2016 10:55 AM	05/11/2016 11:00 PM	05/12/2016 07:08 AM	8 h, 8 m
W615501548	Sacramento	06/03/2016 02:54 PM	06/07/2016 03:00 PM	06/07/2016 03:05 PM	5 m
W615501624	Sacramento	06/03/2016 03:19 PM	06/07/2016 07:00 PM	06/07/2016 11:33 PM	4 h, 33 m
X616500261	Mission	06/15/2016 12:52 PM	06/17/2016 12:52 PM	06/17/2016 01:07 PM	15 m
W616801158	North Bay	06/16/2016 12:29 PM	06/20/2016 12:45 PM	06/20/2016 01:04 PM	19 m
W617601241	Sonoma	06/24/2016 01:42 PM	06/28/2016 02:00 PM	06/28/2016 02:19 PM	19 m
X617900383	San Jose	06/27/2016 10:51 AM	06/29/2016 10:45 AM	06/29/2016 02:49 PM	4 h, 4 m
X619300133	Mission	07/11/2016 08:06 AM	07/13/2016 08:15 AM	07/13/2016 08:45 AM	30 m
W620100144	San Francisco	07/19/2016 07:51 AM	07/21/2016 08:00 AM	07/21/2016 08:56 AM	56 m
W620100149	San Francisco	07/19/2016 07:54 AM	07/21/2016 08:00 AM	07/21/2016 08:10 AM	10 m
W620400872	Sierra	07/22/2016 11:29 AM	07/26/2016 11:45 AM	07/26/2016 01:49 PM	2 h, 4 m
W620901544	San Francisco	07/27/2016 03:01 PM	07/29/2016 03:15 PM	07/29/2016 03:17 PM	2 m
W621000103	East Bay	07/28/2016 07:46 AM	08/01/2016 08:00 AM	08/16/2016 03:31 PM	367 h, 31 m
X620900688	East Bay	07/27/2016 04:03 PM	08/01/2016 03:45 PM	08/03/2016 08:06 AM	15 h, 7 m
W621500915	East Bay	08/02/2016 12:41 PM	08/04/2016 01:00 PM	08/04/2016 01:32 PM	32 m
X622300518	North Bay	08/10/2016 11:06 AM	08/12/2016 11:15 AM	08/12/2016 11:34 AM	19 m

X622400863	North Bay	08/11/2016 12:11 PM	08/15/2016 12:15 PM	08/15/2016 03:27 PM	3 h, 12 m
X622400892	North Bay	08/11/2016 12:27 PM	08/15/2016 12:30 PM	08/15/2016 01:12 PM	42 m
W622901006	San Francisco	08/16/2016 12:44 PM	08/18/2016 01:00 PM	08/18/2016 01:13 PM	13 m
X623900408	North Bay	08/26/2016 11:30 AM	08/30/2016 11:30 AM	08/30/2016 11:33 AM	3 m
W627100722	Sierra	09/27/2016 11:06 AM	09/29/2016 11:15 AM	09/29/2016 11:21 AM	6 m
A62740280	Los Padres	09/30/2016 09:31 AM	10/04/2016 09:26 AM	10/04/2016 09:32 AM	6 m
X627400756	North Bay	09/30/2016 03:26 PM	10/10/2016 06:30 AM	10/10/2016 06:43 AM	13 m
W629801404	East Bay	10/24/2016 02:28 PM	10/26/2016 02:45 PM	10/26/2016 03:19 PM	34 m
W629801443	East Bay	10/24/2016 02:41 PM	10/26/2016 02:45 PM	10/26/2016 03:20 PM	35 m
X630100436	DeAnza	10/27/2016 10:27 AM	11/01/2016 10:45 AM	11/01/2016 10:49 AM	4 m
W631300997	Diablo	11/08/2016 12:57 PM	11/11/2016 08:00 AM	11/11/2016 10:20 AM	2 h, 20 m
W632701671	San Jose	11/22/2016 04:08 PM	11/28/2016 04:15 PM	11/28/2016 04:40 PM	25 m
W634100410	Diablo	12/06/2016 09:14 AM	12/12/2016 09:00 AM	12/12/2016 09:45 AM	45 m
W634100673	Diablo	12/06/2016 10:50 AM	12/12/2016 09:00 AM	12/12/2016 09:07 AM	7 m
X634800382	DeAnza	12/13/2016 10:58 AM	12/15/2016 11:00 AM	12/15/2016 11:36 AM	36 m

** Response Times are presented in Pacific Time.*

Locator/Folder	(e) Ticket Was Renegotiated
[redacted]	No
[redacted]	No
[redacted]	No
[redacted]	No
Matsu, Vincent	No
[redacted]	No
[redacted]	No
[redacted]	No
[redacted]	No
[redacted]	No
[redacted]	No
[redacted]	No
[redacted]	No
[redacted]	Yes
[redacted]	No
[redacted]	No
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[redacted]	Yes

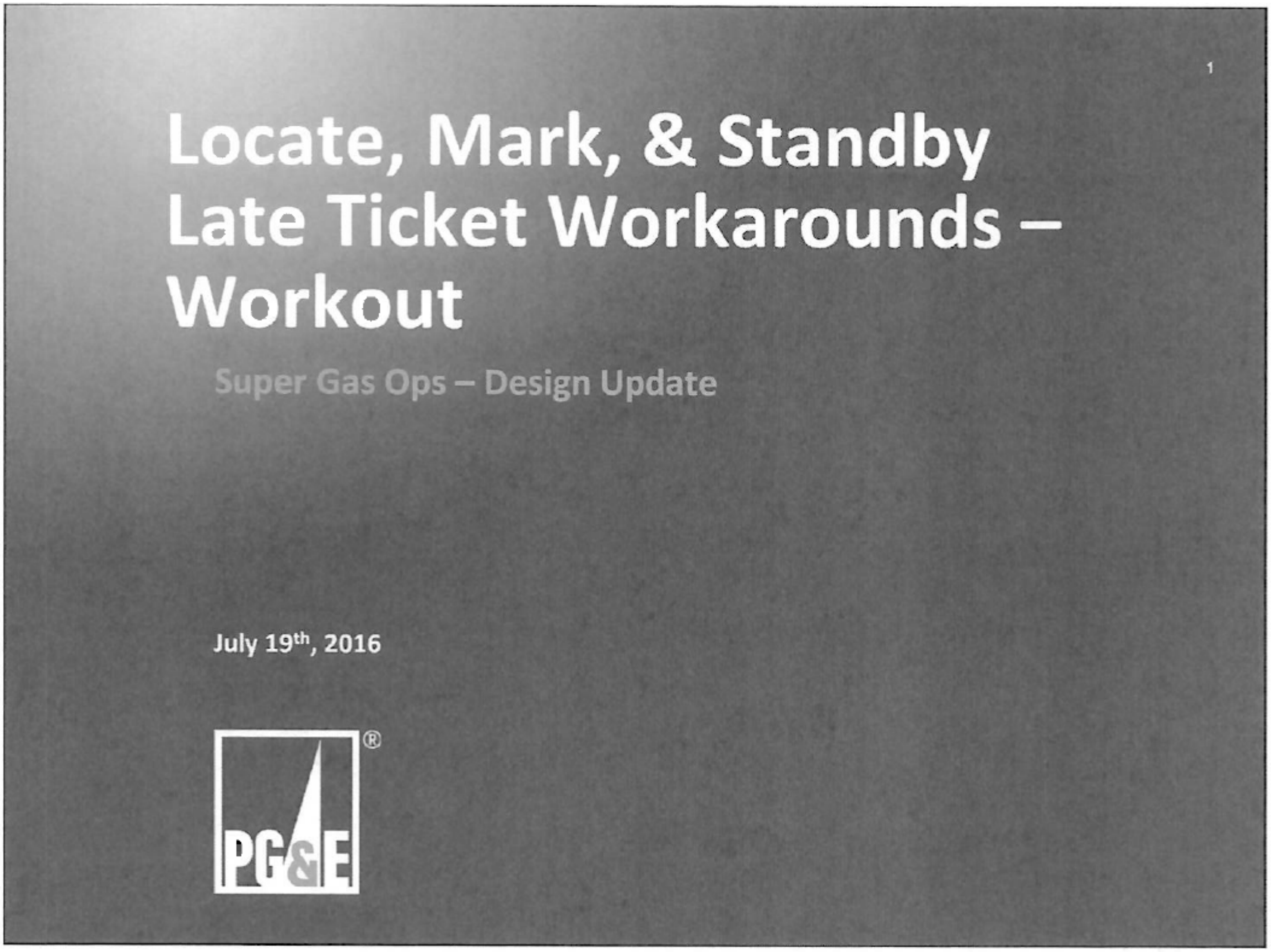
[redacted]	Yes
[redacted]	No
[redacted]	Yes
[redacted]	No
[redacted]	No
[redacted]	No
[redacted]	Yes
[redacted]	No
[redacted]	No
[redacted]	Yes
[redacted]	No
[redacted]	Yes
[redacted]	No
[redacted]	No
[redacted]	No

ATTACHMENT 42

From: [redacted]
To: Mack, Katherin L
Sent: 7/19/2016 8:04:57 AM
Subject:
Attachments: Locate and Mark Workout.pptx

This is an EXTERNAL EMAIL. Stop and think before clicking links or opening attachments.
****

[redacted]

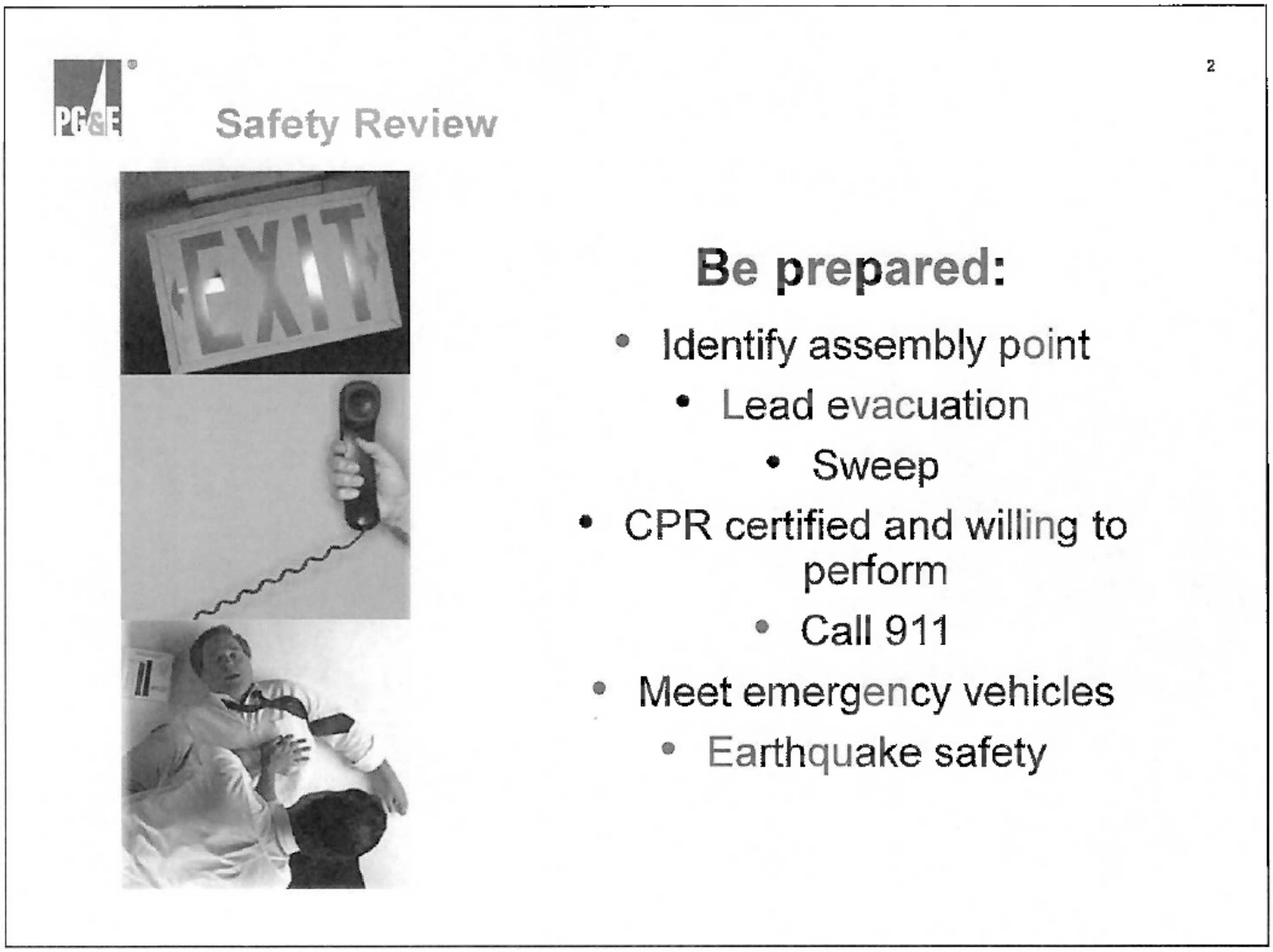


Locate, Mark, & Standby Late Ticket Workarounds – Workout

Super Gas Ops – Design Update

July 19th, 2016

PG&E®



Safety Review

Be prepared:

- Identify assembly point
- Lead evacuation
- Sweep
- CPR certified and willing to perform
- Call 911
- Meet emergency vehicles
- Earthquake safety

TODAY'S GOAL

The Problem

- *Locators avoiding late tickets by:*
  - *Stating: "site visit/field meet required" in comments, with no customer contact*
  - *Stating: "Due date negotiated to …" with no valid customer contact*
  - *"No response from excavator" with no valid customer contact*
  - *Inappropriate use of "Phased Tickets"*
- *This has been noted in end-of-day reports, QC reports, Schedule D Risk Assessment, and PUC customer complaints*

Objective

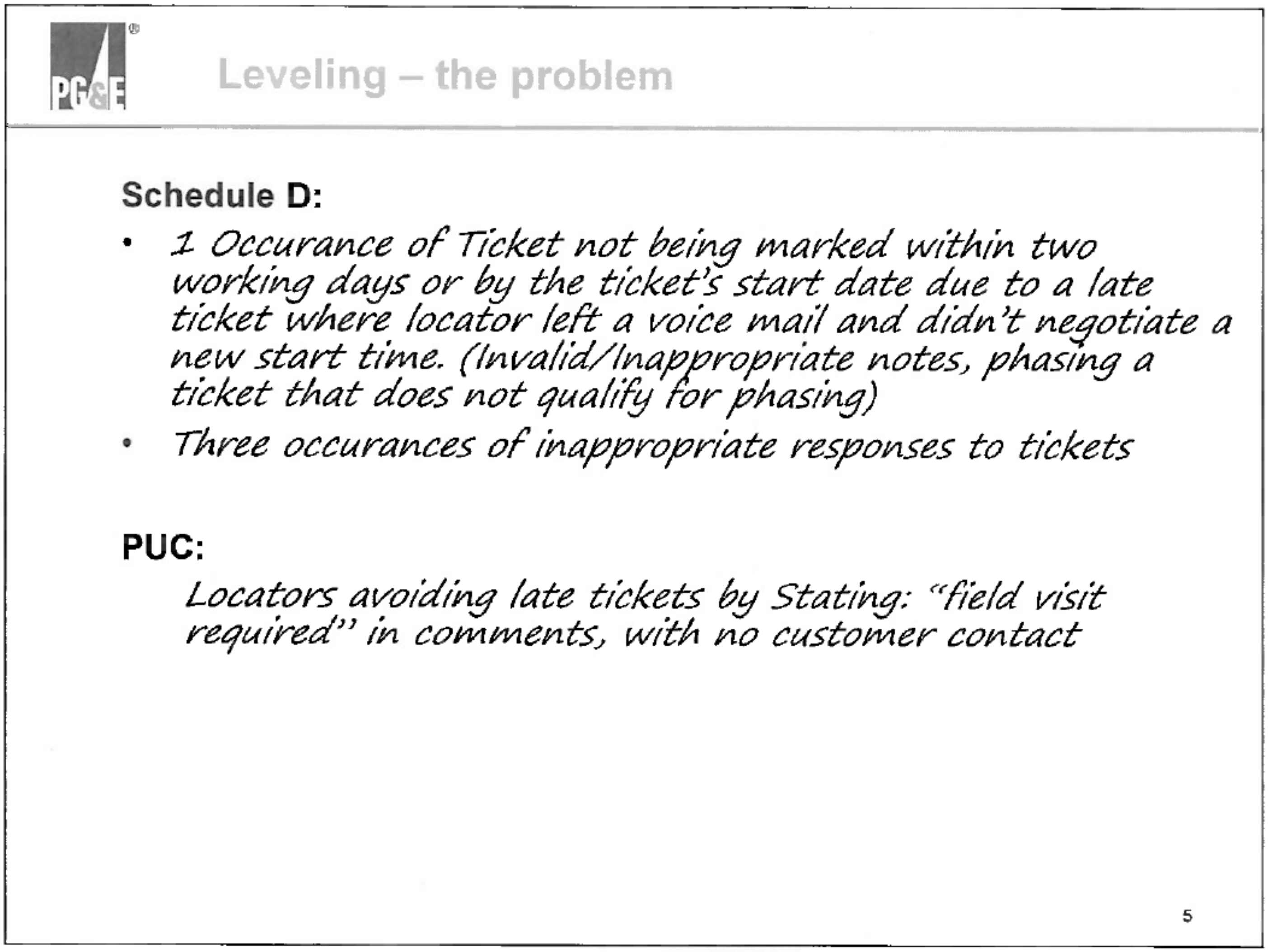
To better understand the problem, determine root causes, and correct the problem.

The challenge:

- *By the end of today, propose solutions and implementation plans for the solutions*

Agenda

	Start	Duration
Safety and Introductions	8:00 AM	0:05
Challenge	8:05 AM	0:10
Leveling	8:15 AM	1:00
Break	9:15 AM	0:15
Root Cause	9:30 AM	0:30
Propose Solutions	10:00 AM	0:30
Lunch	10:30 AM	0:45
Team Select Solutions	11:15 AM	0:50
Plan for each solution	12:05 PM	0:30
Break	12:35 PM	0:10
Internal briefing on Solutions/Plan	12:45 PM	0:45
Approvals	1:30 PM	0:30
Closing	2:00 PM	0:00
Done	2:00 PM	



Leveling – the problem

Schedule D:

- *1 Occurance of Ticket not being marked within two working days or by the ticket's start date due to a late ticket where locator left a voice mail and didn't negotiate a new start time. (Invalid/Inappropriate notes, phasing a ticket that does not qualify for phasing)*
- *Three occurances of inappropriate responses to tickets*

PUC:

Locators avoiding late tickets by Stating: "field visit required" in comments, with no customer contact

Leveling – Visibility of gaming

Easy to see reviewing tickets

- *Pattern different in different divisions*
- *Sort by last response*
- *Comments incomplete*
- *Phased ticket at single address residential*
- *Post dated remark*
- *Forced renegotiated date for standby where we are not available for 3 weeks*

Leveling – Impact of the problem

Dig-ins due to late tickets:

Excavators get frustrated with delays and dig after 48 hours.

Ticket expires, never marked, no remark required

PUC complaints:

The PUC has stated that they have received complaints from excavators/homeowners about not being able to dig within 48 hours

False submissions?

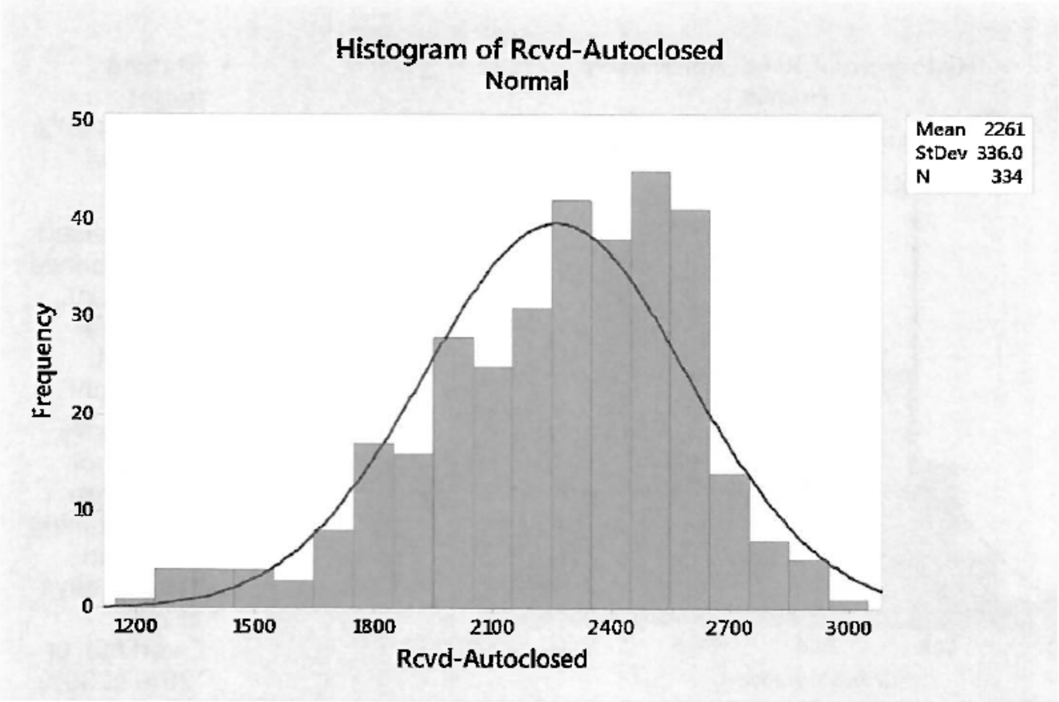
Delayed Contractor Compensation:

PG&E is liable for compensation for contractor delays

Bad internal processes

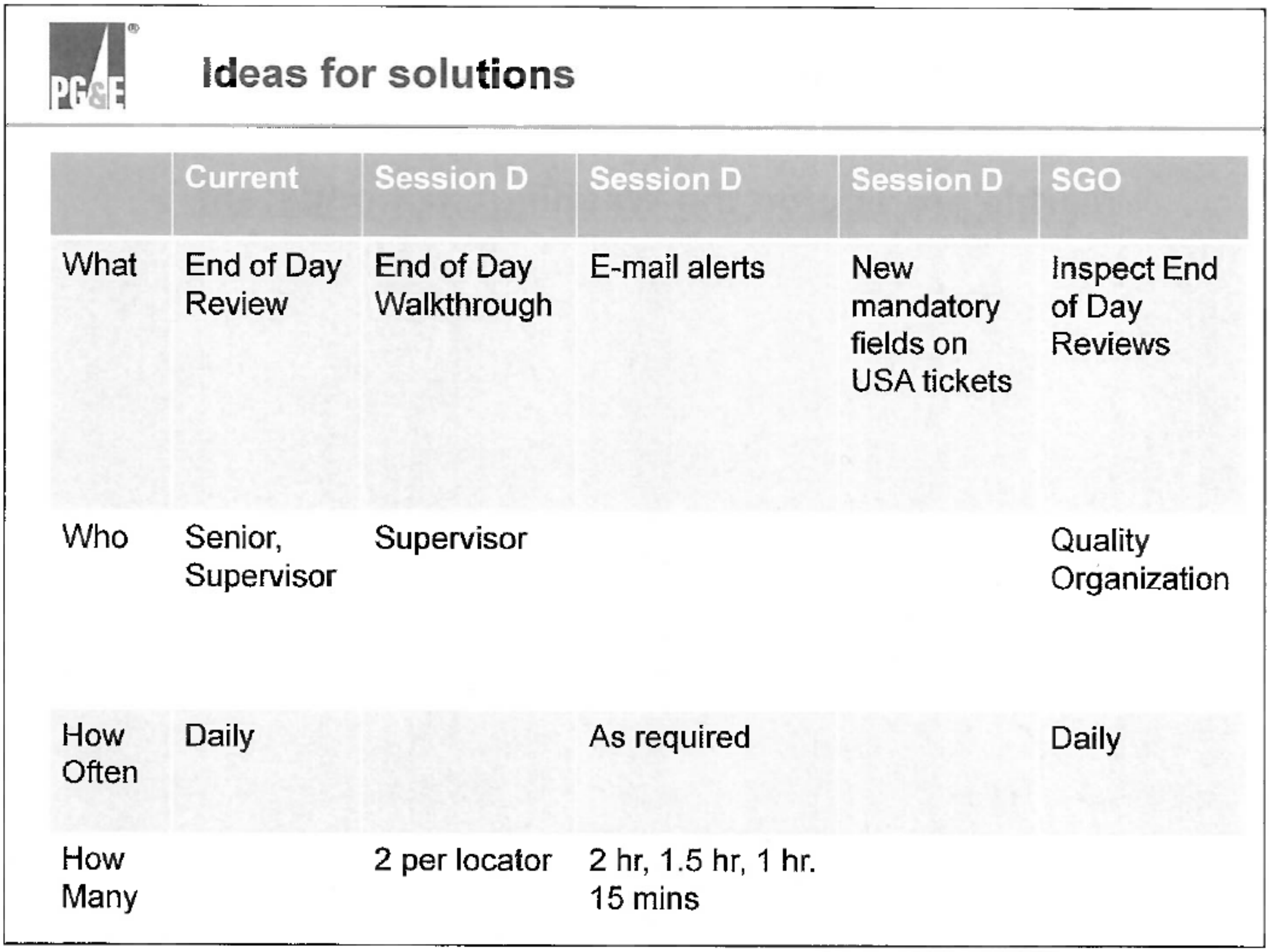
We can't fix what we can't see

[redacted]


Histogram of Rcvd-Autoclosed
Normal

- Saturday and Sunday tickets counted on Monday
- Holidays and weekend days removed
- Average 14.7 tickets per locator @225 locators

[redacted]



Ideas for solutions

	Current	Session D	Session D	Session D	SGO
What	End of Day Review	End of Day Walkthrough	E-mail alerts	New mandatory fields on USA tickets	Inspect End of Day Reviews
Who	Senior, Supervisor	Supervisor			Quality Organization
How Often	Daily		As required		Daily
How Many		2 per locator	2 hr, 1.5 hr, 1 hr. 15 mins		

Root Cause – the 5 Whys (example)

Marble eroding on the Washington Monument

Root Cause – the 5 Whys (example)

Marble eroding on the Washington Monument

Starling Waste eroding the marble

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Starlings roost in the eaves at night

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Sprinklers used to keep them away

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Sprinklers used to keep them away

Groundkeepers changed the sprinkler times

Root Cause – the 5 Whys (example)

Marble eroding on the Washington Monument

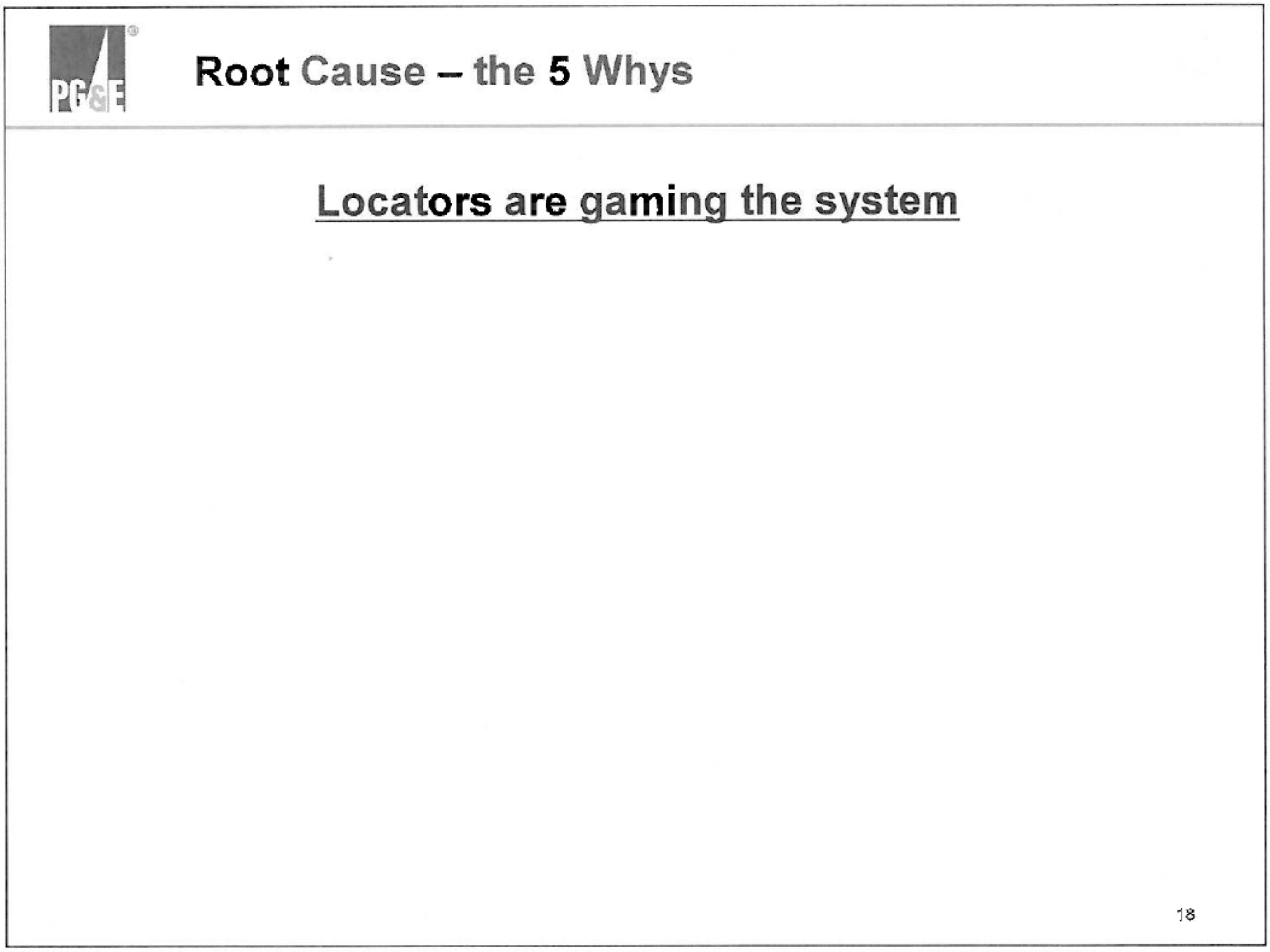
Starling Waste eroding the marble

Starlings roost in the eaves at night

Sprinklers used to keep them away

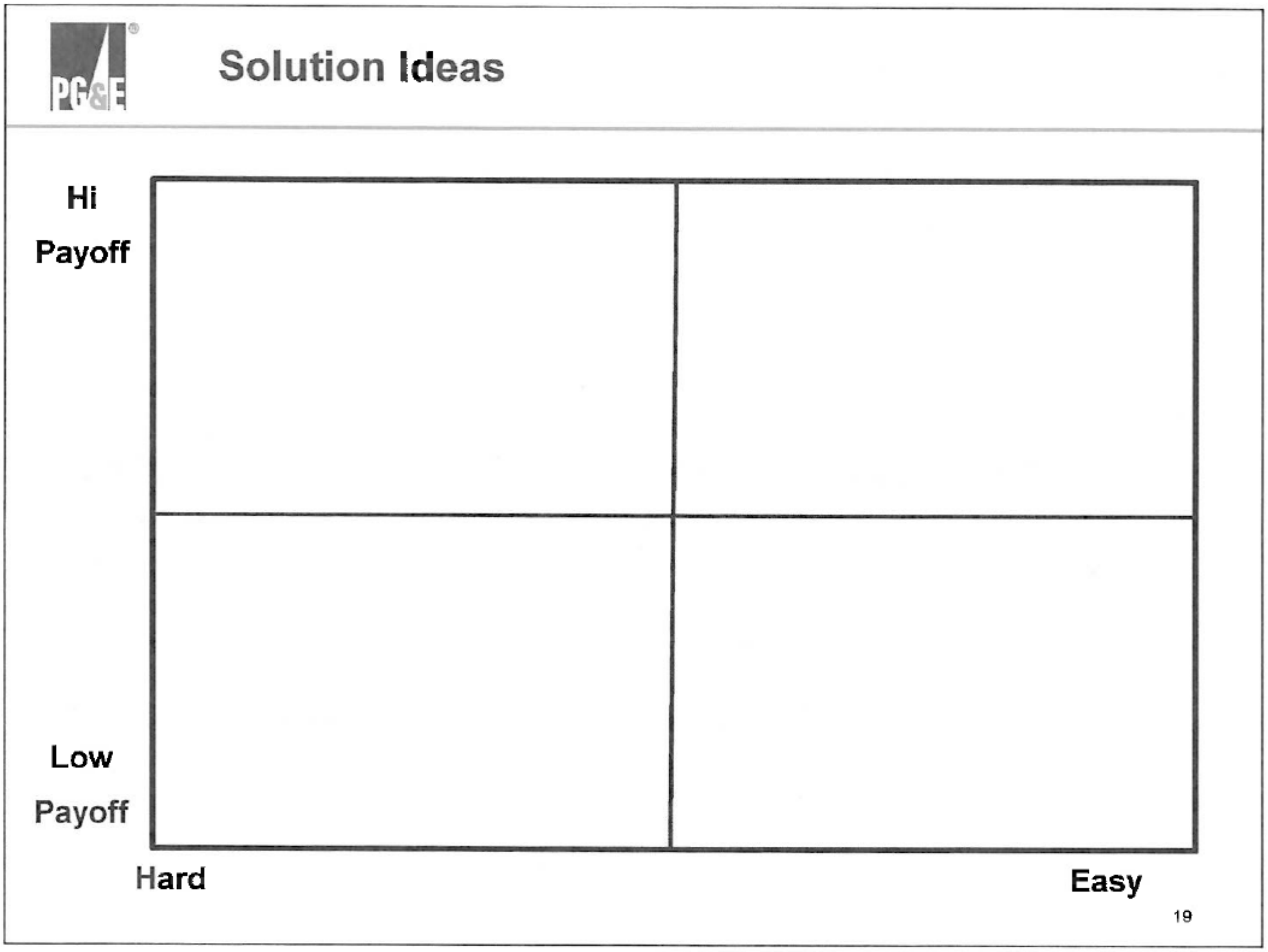
Groundkeepers changed the sprinkler times

National Park Service directive on sprinkler hours



Root Cause – the 5 Whys

<u>Locators are gaming the system</u>



Solution Ideas

Hi

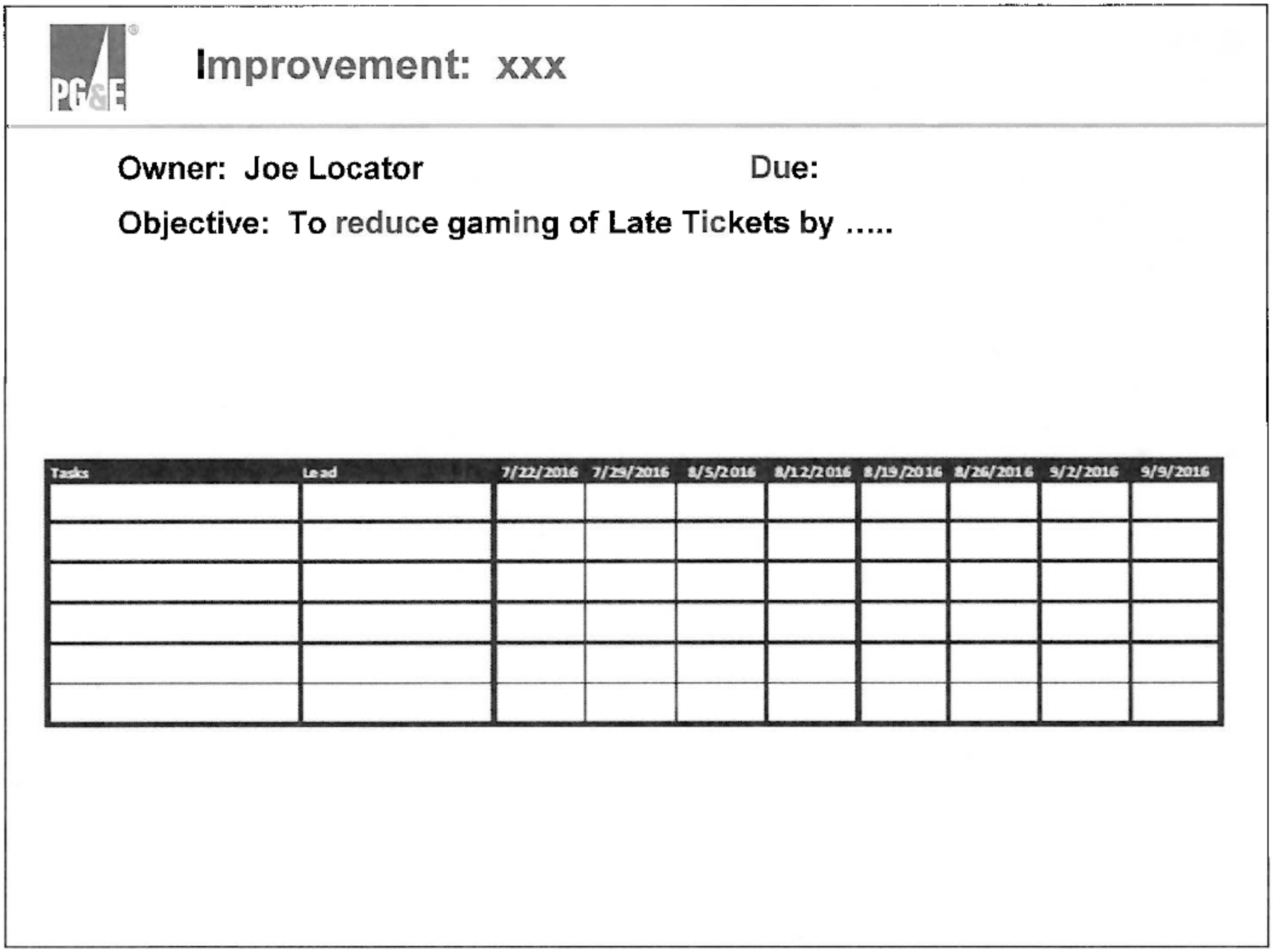
Payoff

Low

Payoff

Hard

Easy

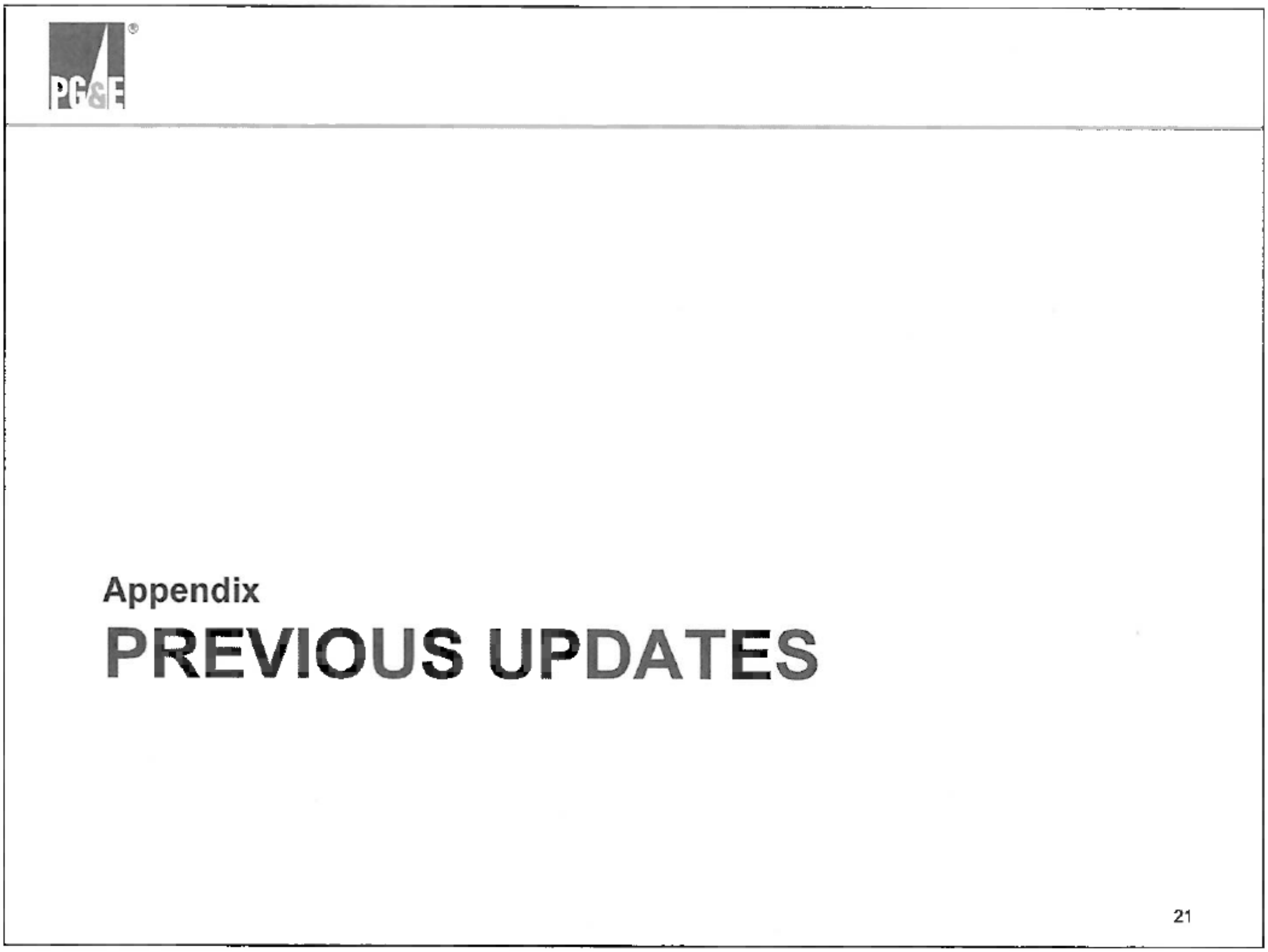


Improvement: xxx

Owner: Joe Locator **Due:**

Objective: To reduce gaming of Late Tickets by .....

Tasks	Lead	7/22/2016	7/29/2016	8/5/2016	8/12/2016	8/19/2016	8/26/2016	9/2/2016	9/9/2016

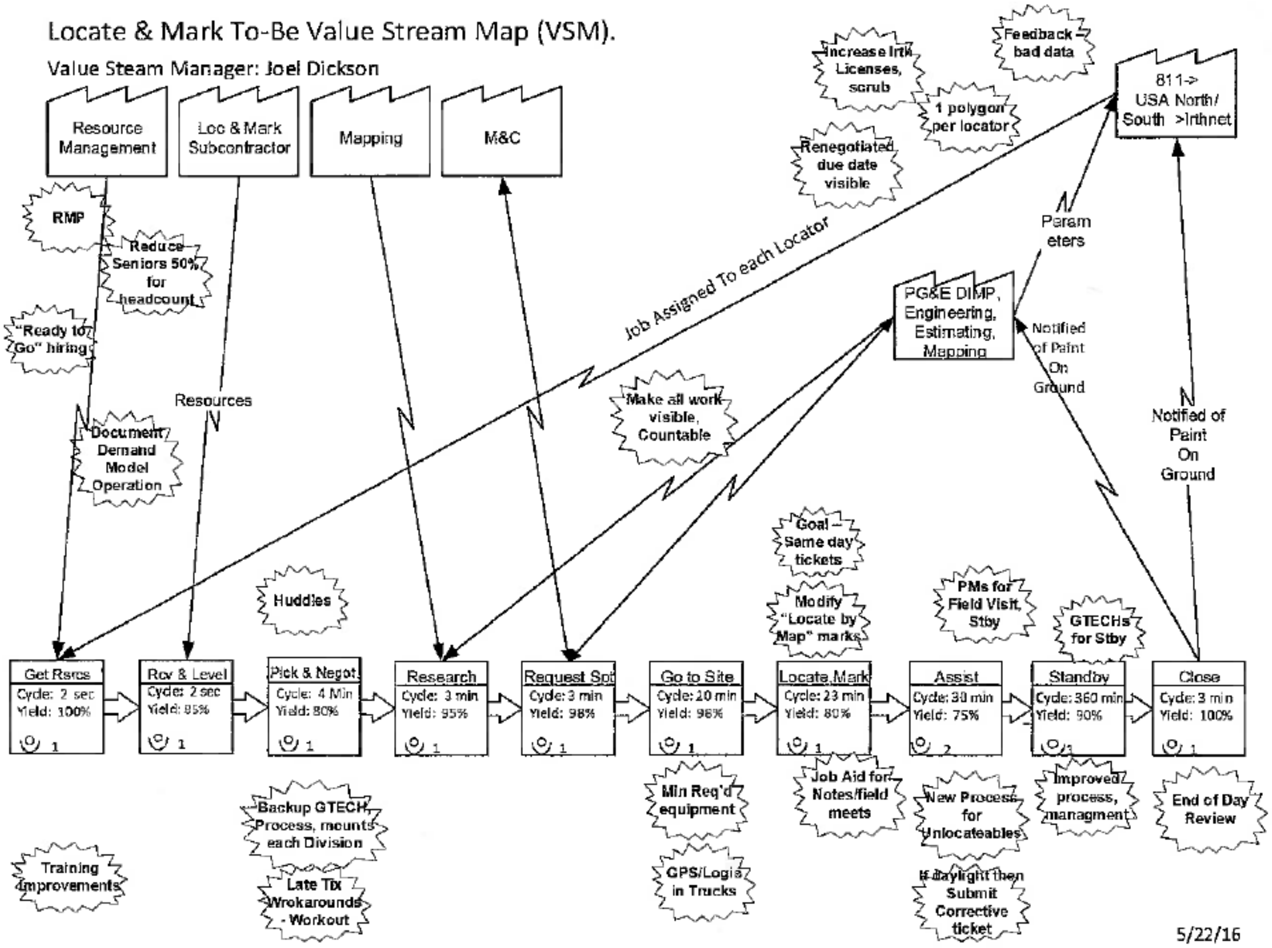


Appendix

PREVIOUS UPDATES

Locate & Mark To-Be Value Stream Map (VSM).

Value Steam Manager: Joel Dickson



Resource Management

Loc & Mark Subcontractor

Mapping

M&C

811-> USA North/ South >Irthnet

PG&E DIMP, Engineering, Estimating, Mapping

Job Assigned To each Locator

Resources

Param eters

Notified of Paint On Ground

Notified of Paint On Ground

RMP

Reduce Seniors 50% for headcount

"Ready to Go" hiring

Document Demand Model Operation

Increase Irth Licenses, scrub

Feedback – bad data

1 polygon per locator

Renegotiated due date visible

Make all work visible, Countable

Huddles

Goal – Same day tickets

Modify "Locate by Map" marks

PMs for Field Visit, Stby

GTECHs for Stby

Get Rsrcs
Cycle: 2 sec
Yield: 100%
1

Rcv & Level
Cycle: 2 sec
Yield: 85%
1

Pick & Negot
Cycle: 4 Min
Yield: 80%
1

Research
Cycle: 3 min
Yield: 95%
1

Request Spt
Cycle: 3 min
Yield: 98%
1

Go to Site
Cycle: 10 min
Yield: 96%
1

Locate,Mark
Cycle: 23 min
Yield: 80%
1

Assist
Cycle: 30 min
Yield: 75%
2

Standby
Cycle: 360 min
Yield: 90%
1

Close
Cycle: 3 min
Yield: 100%
1

Backup GTECH, Process, mounts each Division

Late Tix Wrokarounds - Workout

Training Improvements

Min Req'd equipment

GPS/Logis in Trucks

Job Aid for Notes/field meets

New Process for Unlocateables

If daylight then Submit Corrective ticket

Improved process, managment

End of Day Review

5/22/16

Leveling – Does staffing adequately reflect:

- *Hidden work*
  - *Inside jobs (not on tickets)*
  - *Break-in work*
- *Lack of productivity for Locators with less than 18 months experience*
- *Day-to-day variation in incoming tickets (staffed for average monthly load)*

Locate, Mark, and Standby Overall Status Ⓖ

Current Activities

- Staff and coordinate improvements led by extended team members
- Reduce hurdles for improvement implementation

Process Improvement Areas

- 24 Improvements approved -- see later slide

Completed Activities

- To-Be Design Workshop completed
- Possible improvements defined and prioritized
- Final list of improvements approved, further defining scope

Artifacts Complete or In Progress

- Improvement plan
- Resource Management Plan
- Huddle boards
- Pilot Plan
- Documentation of to-Be Process

● Complete ○ On-target ○ Minor Variance ● Requires Management Support

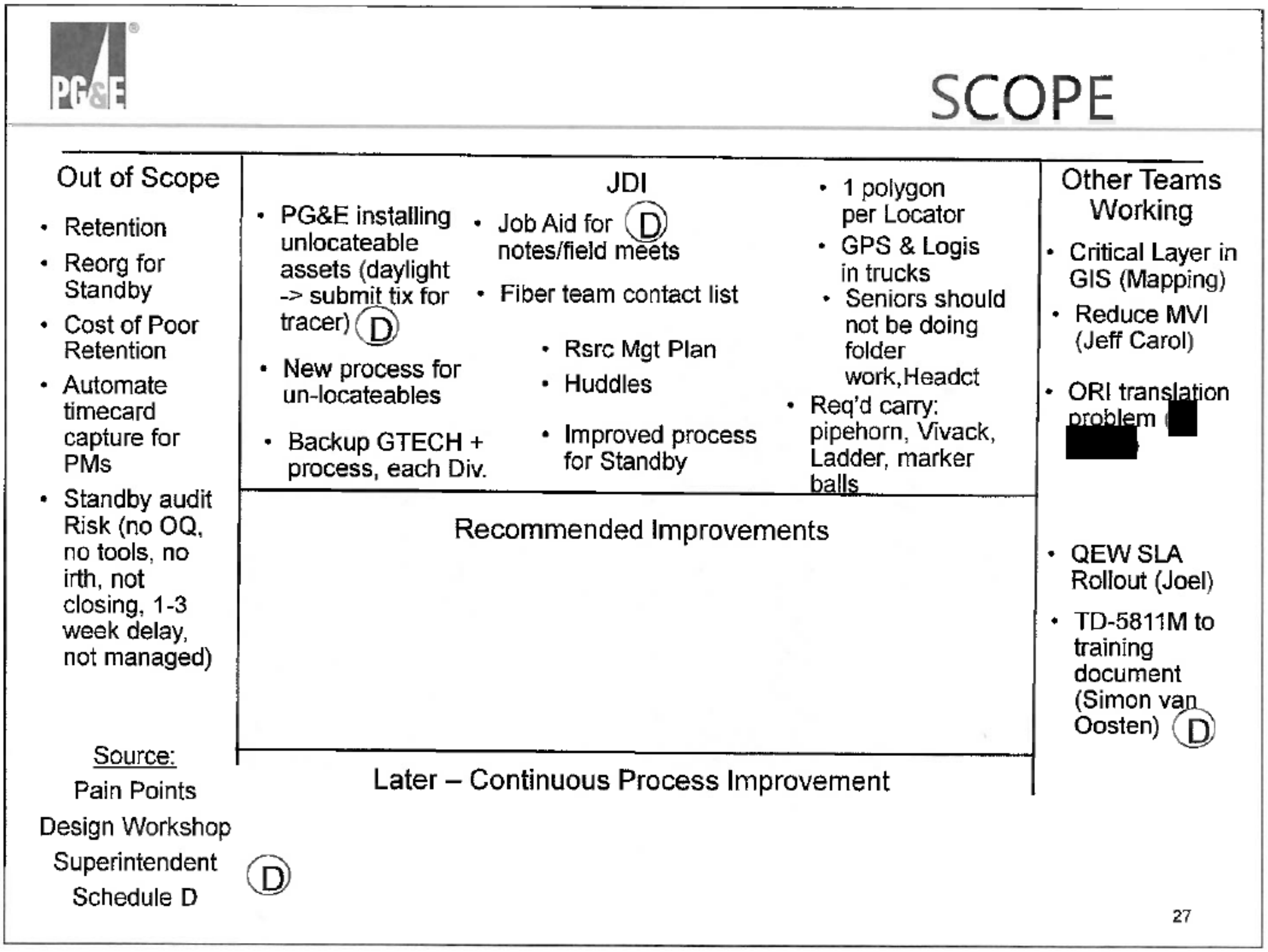
SCOPE

Work performed to Locate and Mark underground utilities within 48 hours of request

Out of Scope: ***Field work, Software changes to commercial packages (SAP, Ventyx)*** ***Retention, Work being performed by other teams.*** ***Stndby Organization***	***On the Fence:***
In Scope: *811 calls, G4E requests, M&C requests.Huddles, RMP, Make all work visible, Demand Model, irth license/defects, folder polygons, Hiring process, job aids, Same day tickets. Standby process.*	

NEXT STEPS & TIME TABLE

Next Steps	Time Table
• Start GSO Tasks: Data Clean, Huddle Architecture, Stakeholders,	May
• Identify Gaps in VSM, compare to pain points, Root Cause, Evaluate improvement ideas, Scope what can be done w/in schedule	May
• To-Be Design Workshop	End of May
• Develop Improvements • Pilot Design Workshop	June - July
• Pilot 1	August
• Pilot 2	Sept



SCOPE

Out of Scope

- Retention
- Reorg for Standby
- Cost of Poor Retention
- Automate timecard capture for PMs
- Standby audit Risk (no OQ, no tools, no irth, not closing, 1-3 week delay, not managed)

JDI

- PG&E installing unlocateable assets (daylight -> submit tix for tracer) Ⓓ
- New process for un-locateables
- Backup GTECH + process, each Div.
- Job Aid for Ⓓ notes/field meets
- Fiber team contact list
  - Rsrc Mgt Plan
  - Huddles
  - Improved process for Standby
- 1 polygon per Locator
- GPS & Logis in trucks
- Seniors should not be doing folder work,Headct
- Req'd carry: pipehorn, Vivack, Ladder, marker balls

Other Teams Working

- Critical Layer in GIS (Mapping)
- Reduce MVI (Jeff Carol)
- ORI translation problem ([redacted]
- QEW SLA Rollout (Joel)
- TD-5811M to training document (Simon van Oosten) Ⓓ

Recommended Improvements

Later – Continuous Process Improvement

Source:

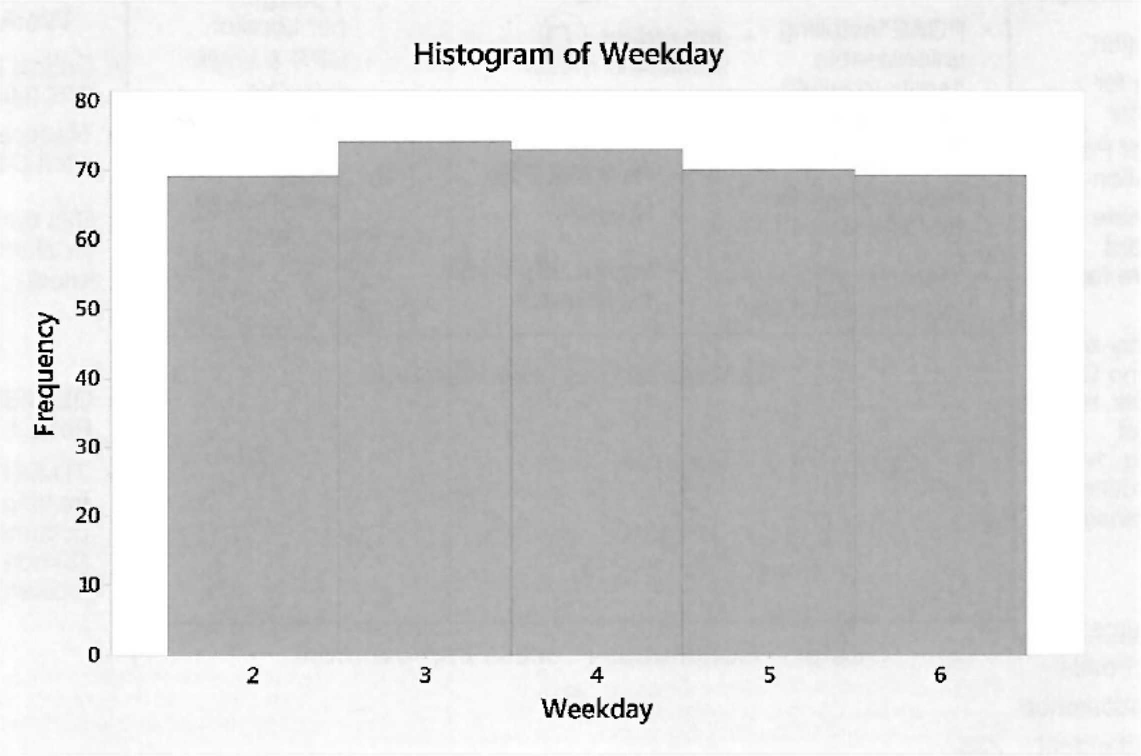
Pain Points

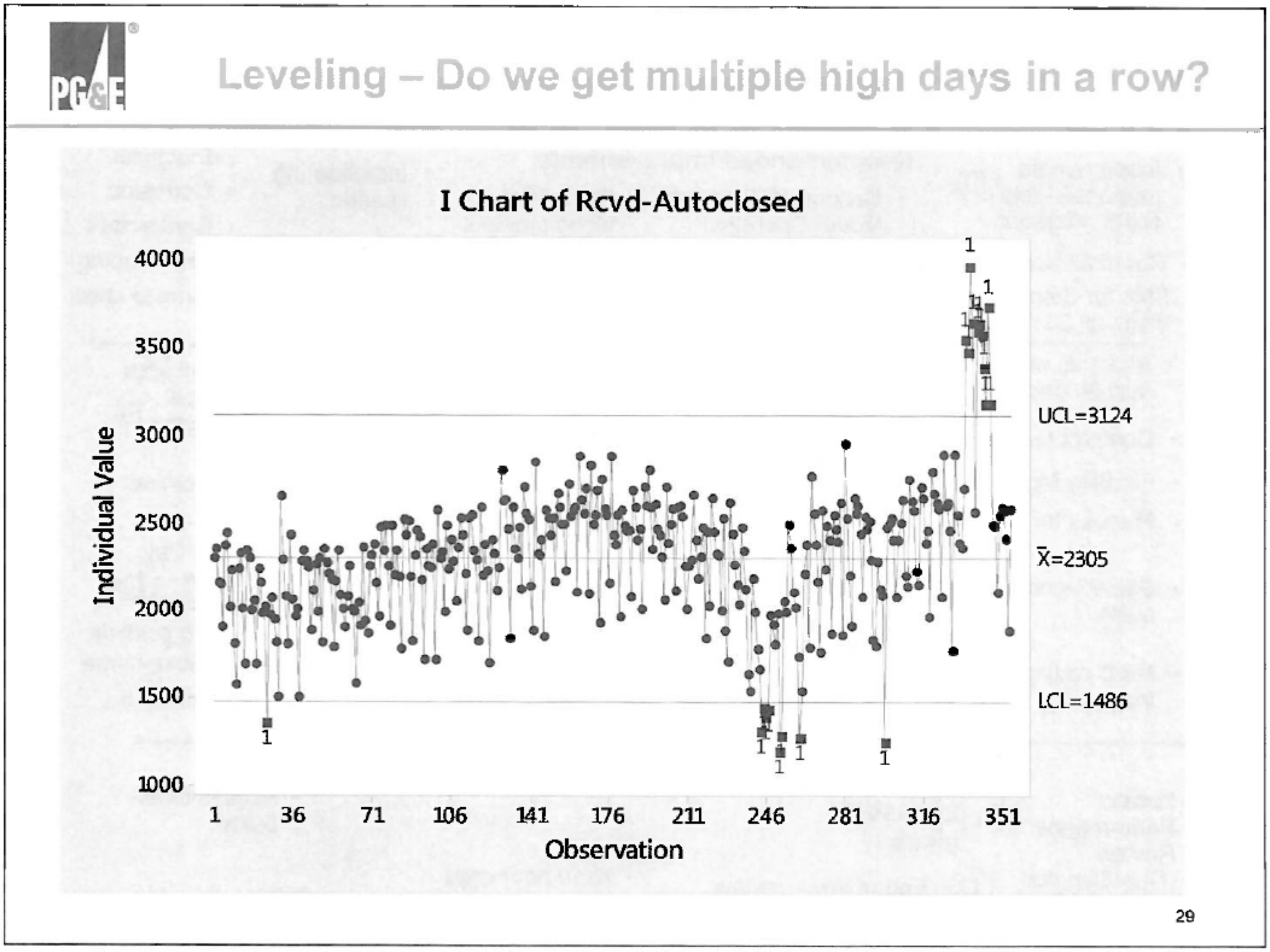
Design Workshop

Superintendent Ⓓ

Schedule D

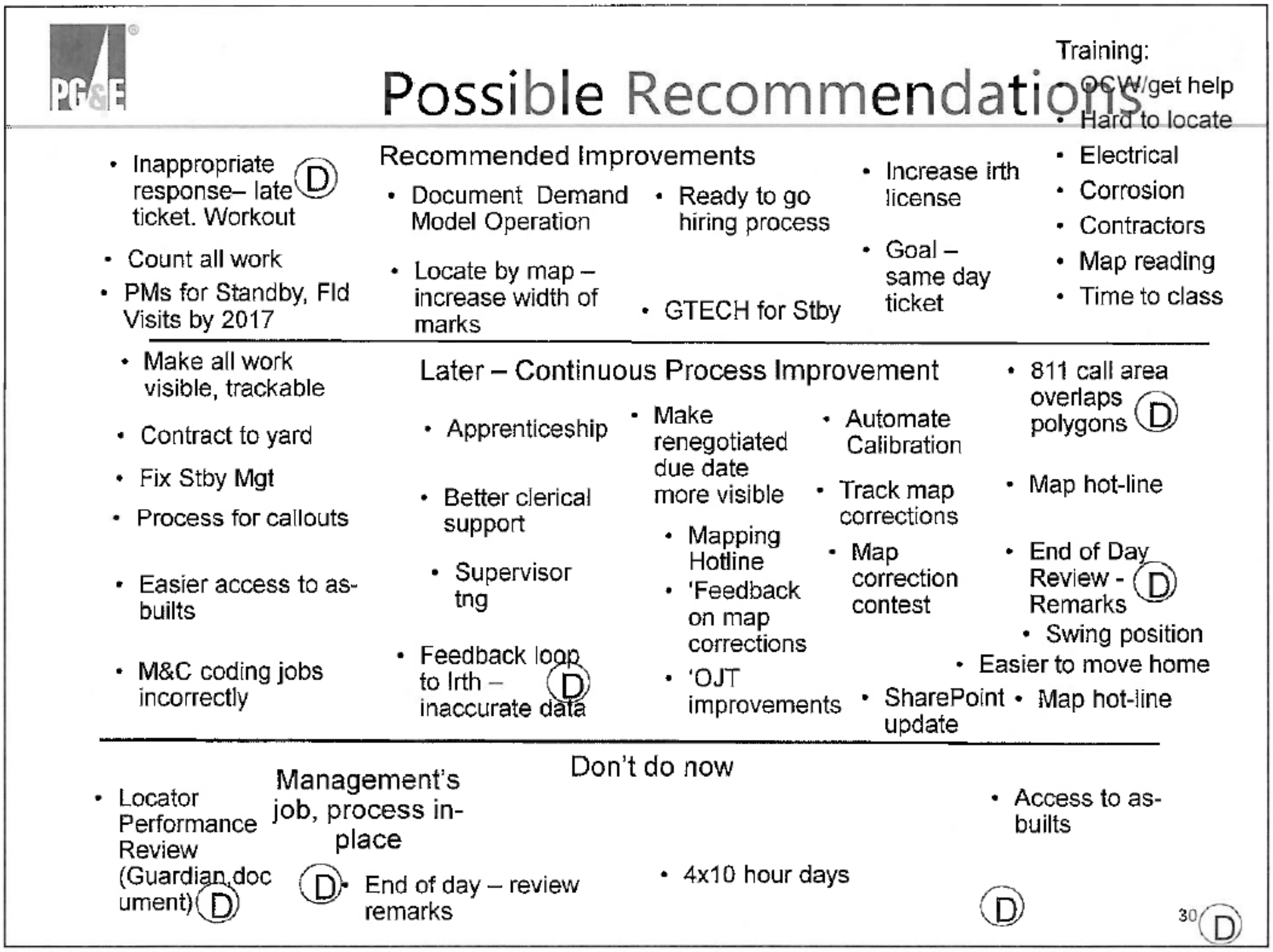
Leveling – Day-of-Week does not seem to have a large impact





Leveling – Do we get multiple high days in a row?

I Chart of Rcvd-Autoclosed



Possible Recommendations

Training:
- OCW/get help
- Hard to locate
- Electrical
- Corrosion
- Contractors
- Map reading
- Time to class

- Inappropriate response– late ticket. Workout Ⓓ
- Count all work
- PMs for Standby, Fld Visits by 2017

Recommended Improvements

- Document Demand Model Operation
- Locate by map – increase width of marks
- Ready to go hiring process
- GTECH for Stby
- Increase irth license
- Goal – same day ticket

- Make all work visible, trackable
- Contract to yard
- Fix Stby Mgt
- Process for callouts
- Easier access to as-builts
- M&C coding jobs incorrectly

Later – Continuous Process Improvement

- Apprenticeship
- Better clerical support
- Supervisor tng
- Feedback loop to Irth – inaccurate data Ⓓ
- Make renegotiated due date more visible
- Mapping Hotline
- 'Feedback on map corrections
- 'OJT improvements
- Automate Calibration
- Track map corrections
- Map correction contest
- SharePoint update
- 811 call area overlaps polygons Ⓓ
- Map hot-line
- End of Day Review - Remarks Ⓓ
- Swing position
- Easier to move home
- Map hot-line

Don't do now

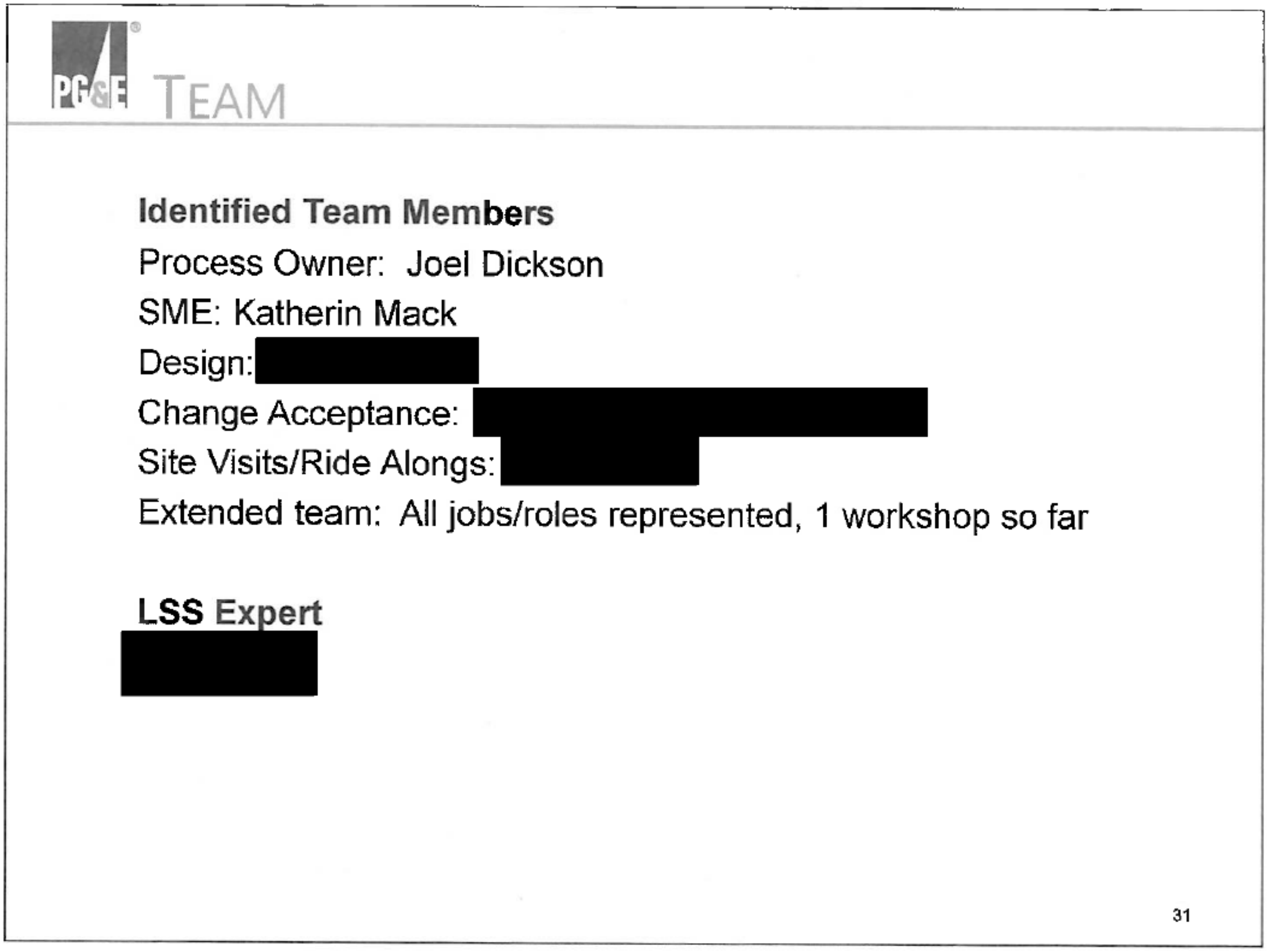
- Locator Performance Review (Guardian document) Ⓓ

Management's job, process in-place Ⓓ

- End of day – review remarks
- 4x10 hour days
- Access to as-builts

Ⓓ

30 Ⓓ



TEAM

Identified Team Members

Process Owner: Joel Dickson

SME: Katherin Mack

Design: [redacted]

Change Acceptance: [redacted]

Site Visits/Ride Alongs: [redacted]

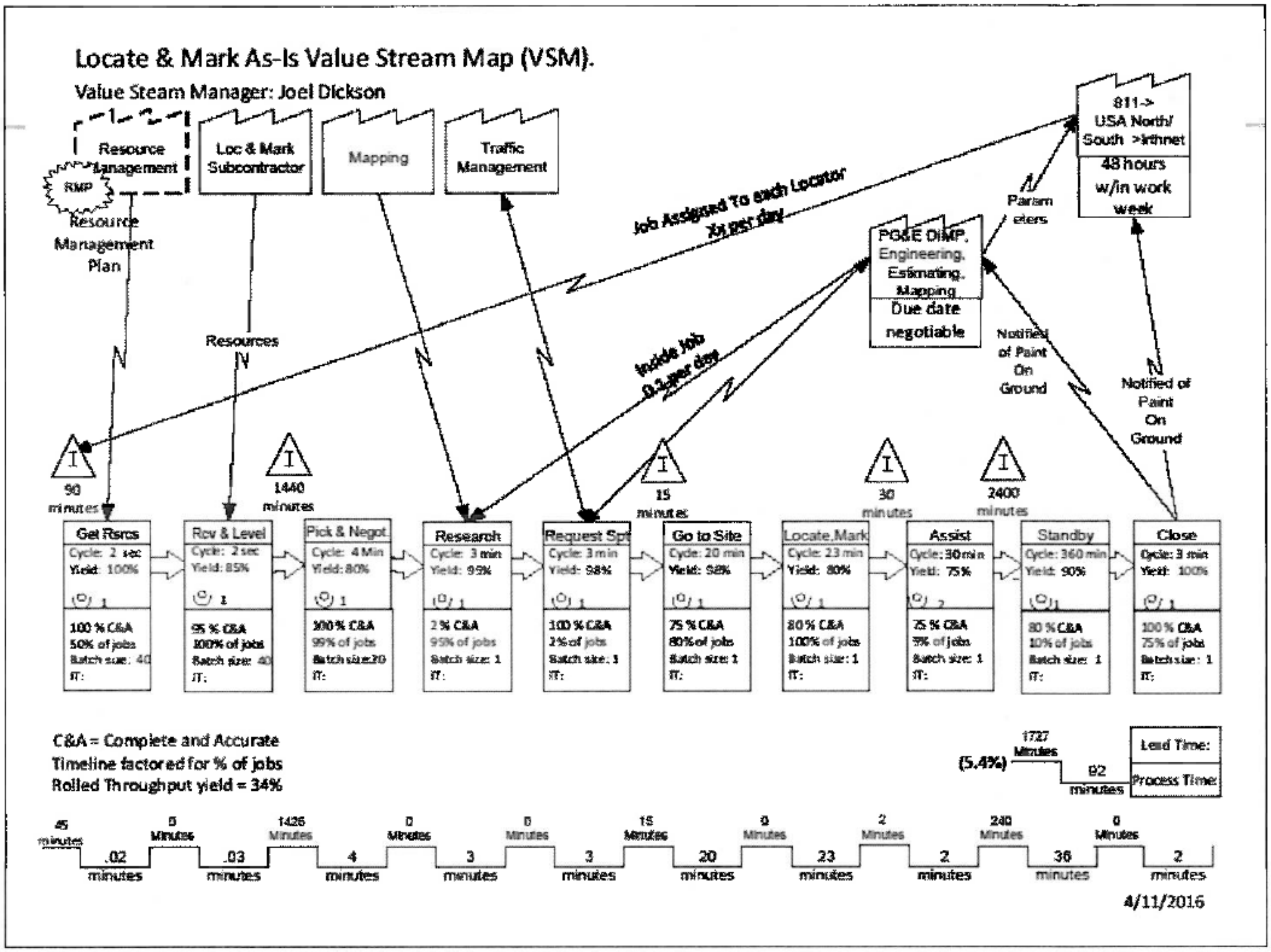
Extended team: All jobs/roles represented, 1 workshop so far

LSS Expert

[redacted]

Locate & Mark As-Is Value Stream Map (VSM).

Value Steam Manager: Joel Dickson

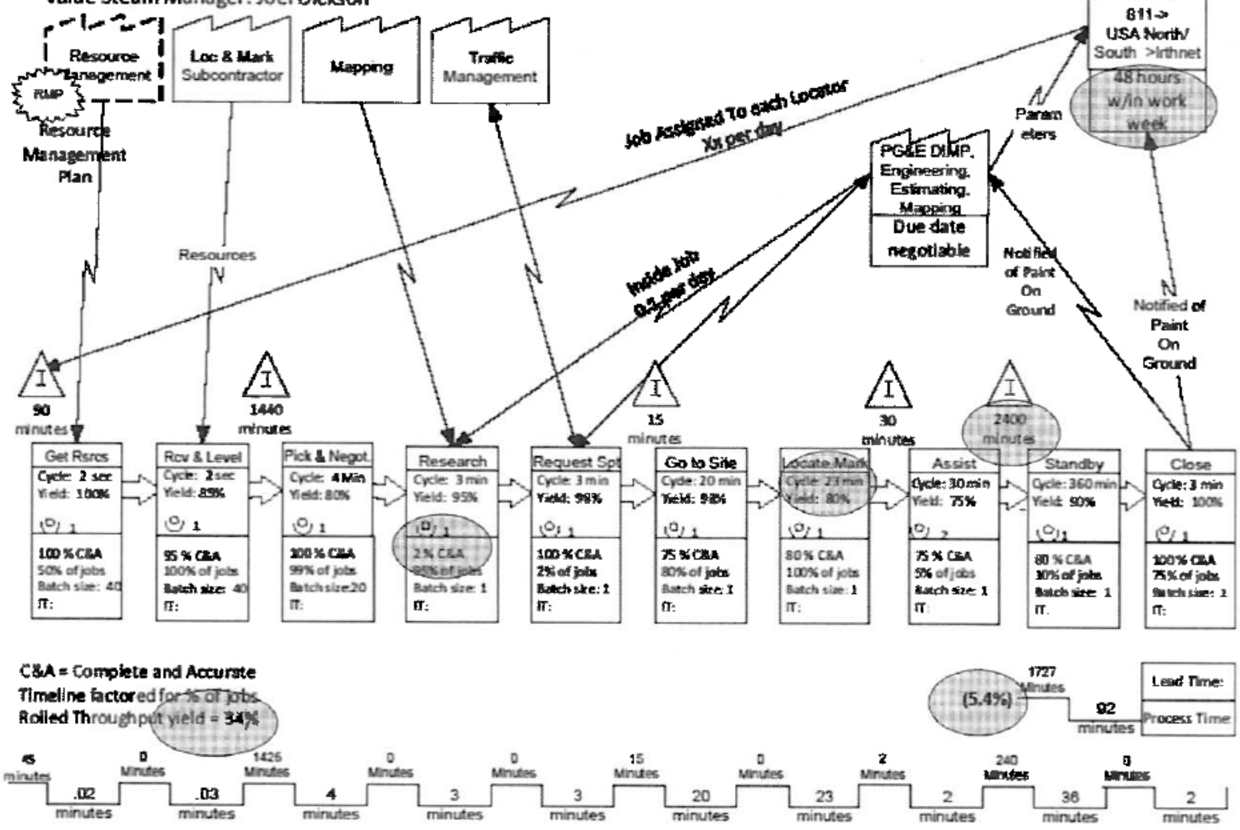


C&A = Complete and Accurate
Timeline factored for % of jobs
Rolled Throughput yield = 34%

4/11/2016

Locate & Mark As-Is Value Stream Map (VSM).

Value Stream Manager: Joel Dickson



C&A = Complete and Accurate
Timeline factored for % of jobs
Rolled Throughput yield = 34%

4/11/2016

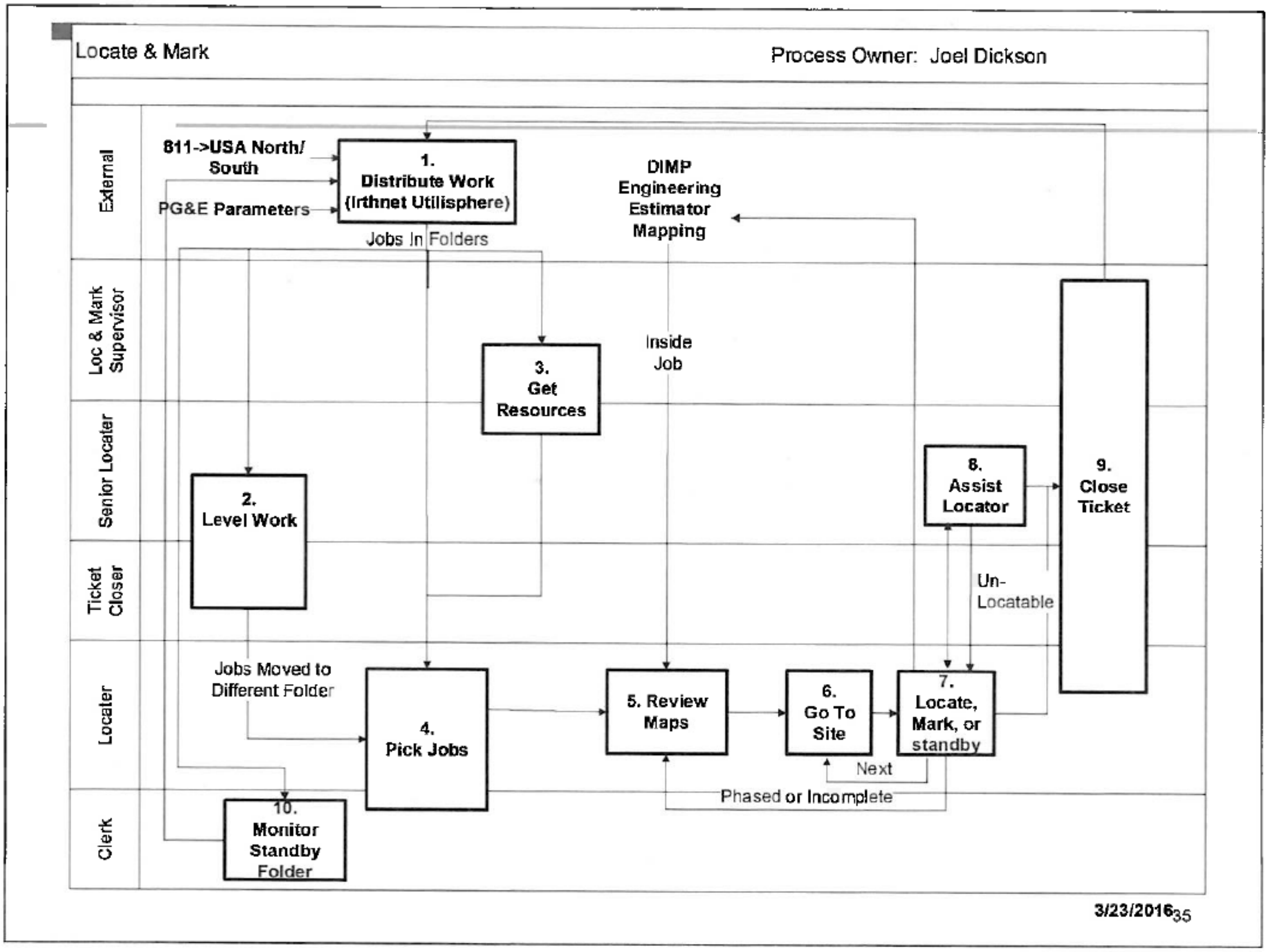
Pain Points/Possible Solutions

Pain

1) Understaffed
2) Retention
3) Time/Workload/Pressure
4) Mapping
5) GPS in Trucks

Possible Solutions

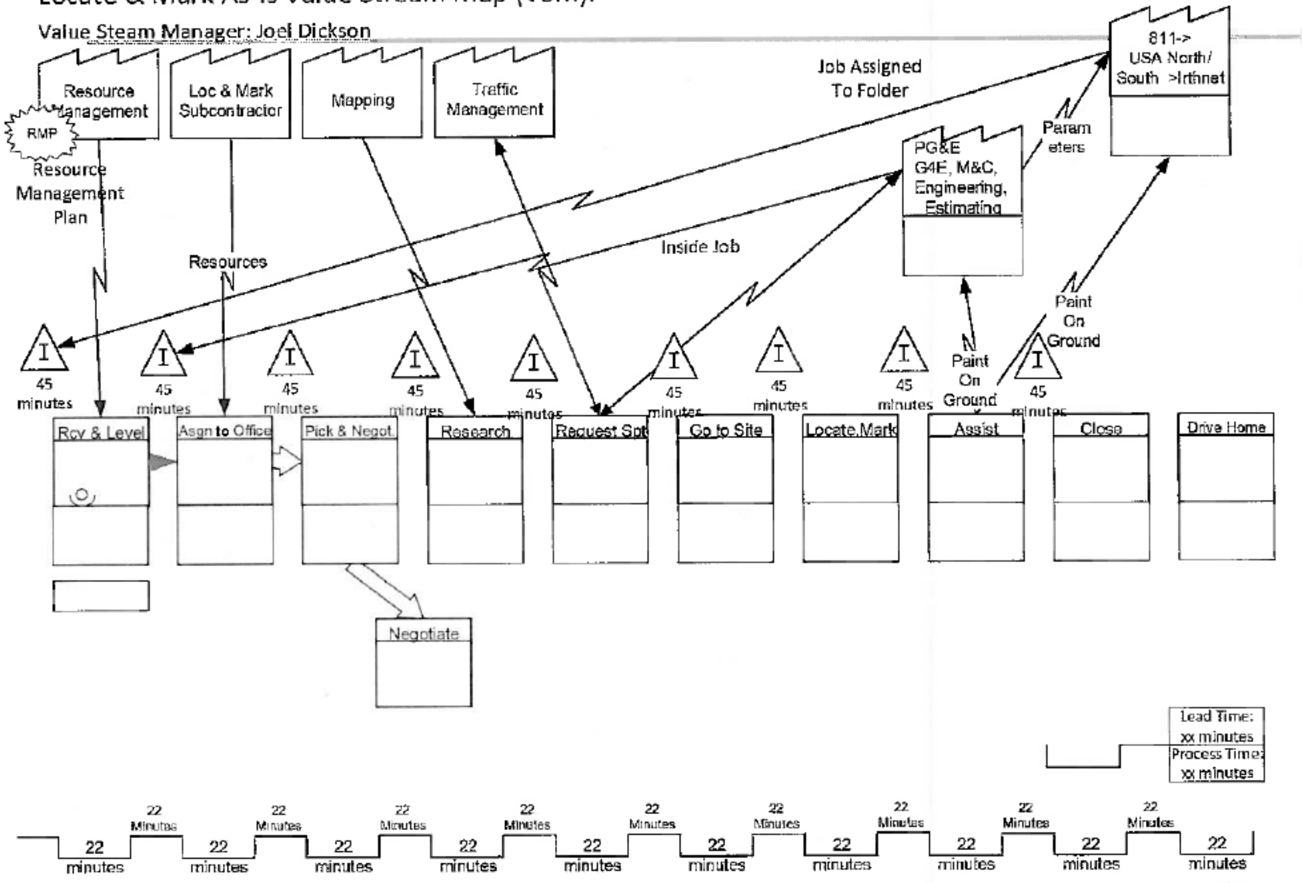
40 ideas brainstormed


Locate & Mark
Process Owner: Joel Dickson
External
Loc & Mark Supervisor
Senior Locater
Ticket Closer
Locater
Clerk
811->USA North/ South
PG&E Parameters
1. Distribute Work (Irthnet Utilisphere)
Jobs In Folders
DIMP Engineering Estimator Mapping
Inside Job
2. Level Work
3. Get Resources
4. Pick Jobs
Jobs Moved to Different Folder
5. Review Maps
6. Go To Site
7. Locate, Mark, or standby
8. Assist Locator
9. Close Ticket
10. Monitor Standby Folder
Un-Locatable
Next
Phased or Incomplete
3/23/2016
35

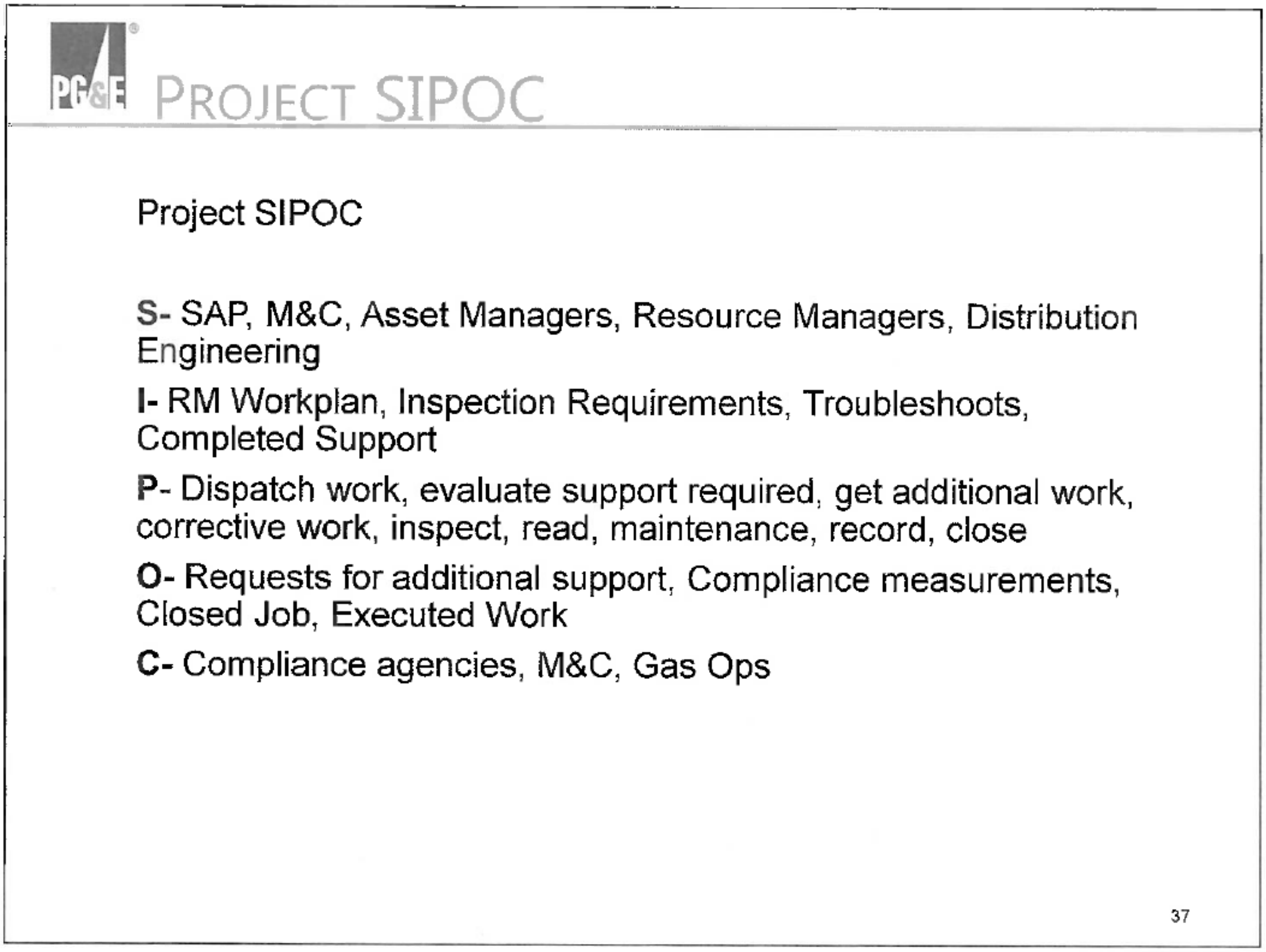
[redacted]®

Locate & Mark As-Is Value Stream Map (VSM).

Value Steam Manager: Joel Dickson



3/21/2016
36



Project SIPOC

Project SIPOC

S- SAP, M&C, Asset Managers, Resource Managers, Distribution Engineering

I- RM Workplan, Inspection Requirements, Troubleshoots, Completed Support

P- Dispatch work, evaluate support required, get additional work, corrective work, inspect, read, maintenance, record, close

O- Requests for additional support, Compliance measurements, Closed Job, Executed Work

C- Compliance agencies, M&C, Gas Ops

Leveling – Are we staffed for "no lates?"

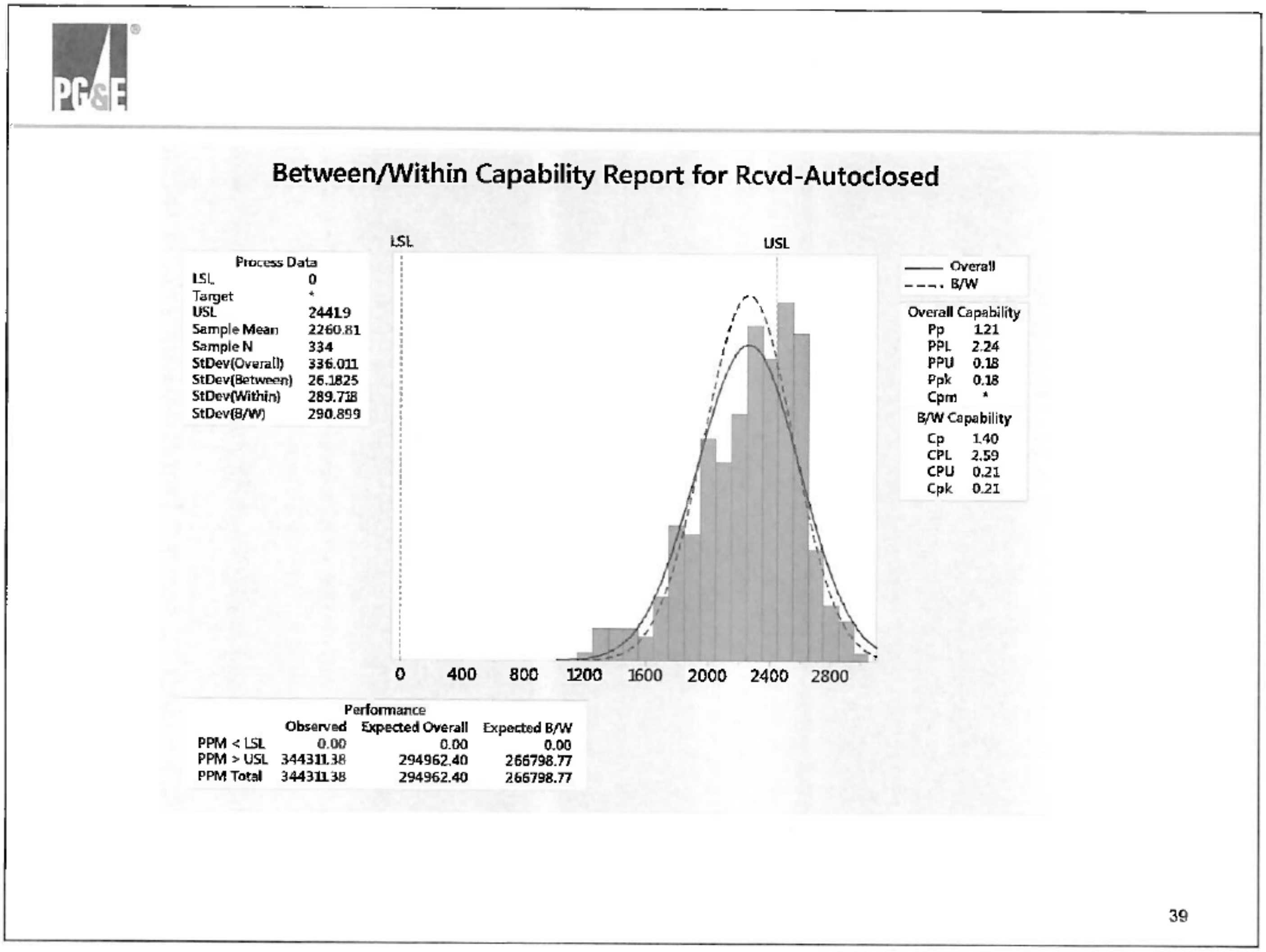
sum	818329	tickets/17 months
average	2305.2	tickets per workday
Locators	215	
tix/loc/day	11	
max tix in day	3968	
tix/day/loc	18	

snapshot survey each Supv:

- # authorized Locators including SRs
- # of SRs assigned
- # of assigned locators
- months experience since OQ for each Locator/Sr Locator up to 18 months
- # of OQ'ed Locators (including SRs)

May-16	
average	3010
OQ'ed Locators	190
tix/day/loc	16

- *Incomplete data – survey Supervisors. Data above*



Between/Within Capability Report for Rcvd-Autoclosed

Process Data	
LSL	0
Target	*
USL	2441.9
Sample Mean	2260.81
Sample N	334
StDev(Overall)	336.011
StDev(Between)	26.1825
StDev(Within)	289.718
StDev(B/W)	290.899

Overall Capability	
Pp	1.21
PPL	2.24
PPU	0.18
Ppk	0.18
Cpm	*

B/W Capability	
Cp	1.40
CPL	2.59
CPU	0.21
Cpk	0.21

Performance

	Observed	Expected Overall	Expected B/W
PPM < LSL	0.00	0.00	0.00
PPM > USL	344311.38	294962.40	266798.77
PPM Total	344311.38	294962.40	266798.77

ATTACHMENT 43

From:
To: [redacted]
CC: Abercrombie, Shonda; Chapman, Ian; Coakley, Michael; Clark, Gary; Amate, Troy A.; Soto, Johnny
Sent:
Subject: RE: CAP #7037225

[redacted]

You have two Superintendent contacts with Shonda and myself. Specifically, [redacted] is my area. However, there is a Locate & Mark supervisor in [redacted] Johnny Soto, that would be your first point of contact. I have cc'd him above.

Johnny will reach out to you and address any specific concerns that you have with Locate & Mark in [redacted]

From: [redacted]
Sent: Wednesday, October 12, 2016 5:28 PM
To: Carroll, Jeffery
Cc: Abercrombie, Shonda; Chapman, Ian; Coakley, Michael; Clark, Gary; Amate, Troy A.
Subject: RE: CAP #7037225

Jeff,

I appreciate the timely response. We have had several issues over the years with Locate and Mark [redacted] I often call in USA's to have the entire street and property marked, the locator will arrive, see us have one side of the street lined out and only decide to mark that side. I have also had tickets that took multiple calls and emergency remarks just to get someone out to mark the location. Probably our largest frustration has been in the Fremont, San Leandro and Hayward area where the thought by one particular employee is that GC can mark their own utilities. It is very frustrating showing up to a site when we are scheduled to begin and can't because of our own people not completing a task in a timely matter.

Now that I have two points of contact, I hope you both do not mind I address any issues moving forward regarding L&M directly with you.

Thanks again,

[redacted]

From: Carroll, Jeffery
Sent: Wednesday, October 12, 2016 5:09 PM
To: [redacted]
Cc: Abercrombie, Shonda; Chapman, Ian; Coakley, Michael
Subject: CAP #7037225

[redacted]

I have been responsible for Locate & Mark since January, 2014. We have added over 100 Locaters and increased contracting during that time frame. Shonda Abercrombie now is responsible for the South and I am North. We have eliminated Late tickets across our system. Please give us specific, actionable locations and ticket numbers so that we may address any concerns you may have. Please let us know where you are experiencing the problems so we can fix them.

I can assure you, we have resolved these issues throughout the system.

Thanks,

Jeff Carroll
Locate & Mark Superintendent North
PG&E Gas Operations T&D Compliance Programs
Office: (925) 270-2335
Cell: (925) 786-8231

10/04/2016 15:39:22 [redacted]
Locate and Mark department systemwide is severely understaffed. Every project GC constructs is not marked in a timely matter and often not marked until a remark call and follow up is requested. This greatly increases cost and risk for safety, this has been an ongoing problem that has consistently become worse. This needs to be addressed immediately as it poses a safety concern and halts production. Bottom line is contractors projects should not take priority over internal projects, we need our projects marked at a minimum of 48 hours from call in.
10/05/2016 13:19:47 PST [redacted]
Risk Rationale: Low 4.A.2

ATTACHMENT 44

PG&E Gas Operations
Keys to Success

July 2012

The will to win, the desire to succeed,
the urge to reach your full potential…
these are the keys that will unlock the door
to excellence.

Confucius

PG&E Gas Operations - - "Keys to Success"

Thursday, July 19, 2012
8:00 a.m. to 4:00 p.m.
San Ramon Valley Conference Center

AGENDA

Time	**Topic**	**Lead**
8:00 – 8:30	**Continental Breakfast**	All
8:30 – 8:45	**Safety Moment**	[redacted]
8:45 – 9:15	**Business Update**	Stavropoulos
9:15 – 10:15	**Safety Update**	Various
10:15 – 10:30	**Break**	
10:30 – 10:45	**Financial Update - Actuals**	[redacted]
10:45 – 11:00	**S1 Update**	[redacted]
11:00 – Noon	**In the Spotlight** - Alaska Air Debrief - Six Sigma Leak Survey Process - Data Quality	 Yura [redacted] [redacted]
12:00 – 12:45	**Lunch**	
12:45 – 1:00	**What do you see?**	[redacted]
1:00 – 4:00	**Process Updates**	Various

PG&E Gas Operations - - "Keys to Success"

Report Book Index

				R,A,G - STATUS			
Tab	**Category**	**Sub Tab**	**Business Report**	**Results**	**Initiatives**	**Key Process?**	**Owner**
1	**Safety**						
		A	Personal Safety (incl Brad Bass Report)			Yes	Lorene Harden
		B	Process Safety			Yes	[redacted]
		C	Damage Prevention			Yes	Christine Cowsert-Chapman
		D	Emergency Prep / Public Awareness			Yes	Joel Dickson
		E	Customer Service / Emergency Response			Yes	Ruben Ramirez
			Immediate Response Times				Ruben Ramirez
			Mean Time to Emergency Shut down				[redacted]
		F	Customer Satisfaction				Ruben Ramirez
2	**YTD Performance**						
		A	Financials				[redacted]
		B	Gas Scorecard				[redacted]
3	**People Processes**						
		A	Workforce Engagement			Yes	Jodie Kubota
		B	Training			Yes	[redacted]
		C	Facilities			Yes	[redacted]
4	**Asset Support**						
		A	Data/Asset Knowledge Mgt			Yes	[redacted]
			Mapping				[redacted]
			MAOP Validation				[redacted]
			Mariner (T)				[redacted]
			Pathfinder (D)				Sumeet Singh
		B	Integrity			Yes	Roland Trevino
			DIMP				Christine Cowsert-Chapman
			TIMP				Roland Trevino
		C	Risk Register				[redacted]
5	**Planning Processes**						
		A	Mandated Programs			Yes	[redacted]
		B	Investment Planning			Yes	[redacted]
			Distribution				[redacted]
			Transmission				[redacted]
		C	Resource Mgt			Yes	[redacted]
		D	Public Works Coord			Yes	[redacted]
6	**Execution Processes**						
		A	Leak Management			Yes	[redacted]
		B	Project Management			Yes	[redacted]
			PSEP				[redacted]
		C	Materials Management			Yes	Karen Roth
		D	Excavation Technology			Yes	Bob Suehiro
			Distribution				Bob Suehiro
			Transmission				Pierre Bigras
		E	Fleet			Yes	Ross Leverett
		F	I&R			Yes	[redacted]
		G	Quality (incl Internal Audit)			Yes	[redacted]
		H	System Ops & Control			Yes	Mel Christopher
			Control Room				Mel Christopher
			Gas System Planning				[redacted]
			Wholesale Marketing				[redacted]
		I	Dispatch & Scheduling				Rich Yamaguchi
		J	ROW Mgmt / GT General Maintenance				Mike Falk
7	**Continuous Improvement**						
		A	PAS 55				[redacted]
		B	Employee Diversity & Inclusion				[redacted]
		C	Supplier Diversity				[redacted]
		D	R&D				[redacted]

PG&E Gas Operations - - "Keys to Success"

Report Book Index

				R,A,G - STATUS			
Tab	**Category**	**Sub Tab**	**Business Report**	**Results**	**Initiatives**	**Key Process?**	**Owner**
8	**Business Partners & Other**						
		A	IT				[redacted]
		B	Local Government Relations Update				[redacted]
		C	Regulatory Relations Update				[redacted]
		D	Corporate Communications				[redacted]
		E	Human Resources				[redacted]
		F	New Business / WRO				[redacted]
		G	Sourcing Update				[redacted]
		H	Environmental				[redacted]
		I	ATS				[redacted]
		J	EPC Reports				[redacted]
9	**Market Outlook**		NA Gas Market Overview				[redacted]
10	**Functional Reports**	**A**	Executive PCC & Headcount				Nick Stavropoulos
		B	Data/Asset Knowledge Mgmt PCC & Headcount				Sumeet Singh
		C	Standards and Policies PCC & Heaccount				Jane Yura
		D	Public Safety & IM PCC& Headcount				Roland Trevino
		E	Project Engineering & Design PCC & Headcount				[redacted]
		F	Investment Planning PCC & Headcount				[redacted]
		G	Transmission PCC & Headcount				Kirk Johnson
		H	Distribution PCC & Headcount				Kevin Knapp
		I	Gas System Operations PCC & Headcount				Mel Christopher

Personal Safety Report – YTD June 2012 Results

Results	🟡	YTD: On track for both MVI and LWD performance
Initiative Status	🟡	Making good progress on all initiatives, except for Contractor Safety

I. Goal / Objective

Reduce employee injuries in the workplace and improve overall safety performance of gas operations.

II. Results

1.0 Scorecard Safety Metric

1.1 June

I. Improve Public & Employee Safety	Month Results		
	Actual	**Plan**	**Variance**
G. Employee Safety			
1. OSHA Recordable Rate	3.713	N/A	N/A
2. Lost Work Day Case Rate	0.614	0.333	.281
3. Preventable Motor Vehicle Incident Rate	1.310	2.102	(0.792)

Changes from last month

Four MVI's for the month of June and two new LWD cases.

1.2 YTD

I. Improve Public & Employee Safety	YTD Results		
	Actual	**Plan**	**Variance**
G. Employee Safety			
1. OSHA Recordable Rate	2.798	N/A	N/A
2. Lost Work Day Case Rate	0.274	0.231	(0.043)
3. Preventable Motor Vehicle Incident Rate	1.610	2.102	(0.492)

Forecast for end of the year

LWD rate trend is exceeding the rate for the same time period last year and outlook is "red" by year end.

MVI rate trend is below the rate for the same time period as last year and outlook is to be "Green" by year- end.

II. Results (cont.)

PG&E Employee Serious Incidents/LWD cases – June

Date of Incident	Line of Business	Department	Incident Narrative	Status
6/14/2012	Gas Operations	Project Engineering	Employee traveling to a jobsite was struck by a vehicle as they attempted to cross the tracks in their rental car.	Attorney Client privilege

PG&E Employee Serious Incidents/LWD cases – May

Date of Incident	Line of Business	Department	Incident Narrative	Status
5/9/2012	Gas Operations	M&C Gas Central Coast	Employee injured left knee while backfilling a hole.	Employee had surgery on his knee and is expected to return to work on 8/13/12.
5/10/2012	Gas Operations	Gas Transmission	Employee fell off ladder while trying to get binders off of a cabinet causing the break of her radius bone in her right forearm.	Employee is currently out of her cast and awaiting physical therapy.

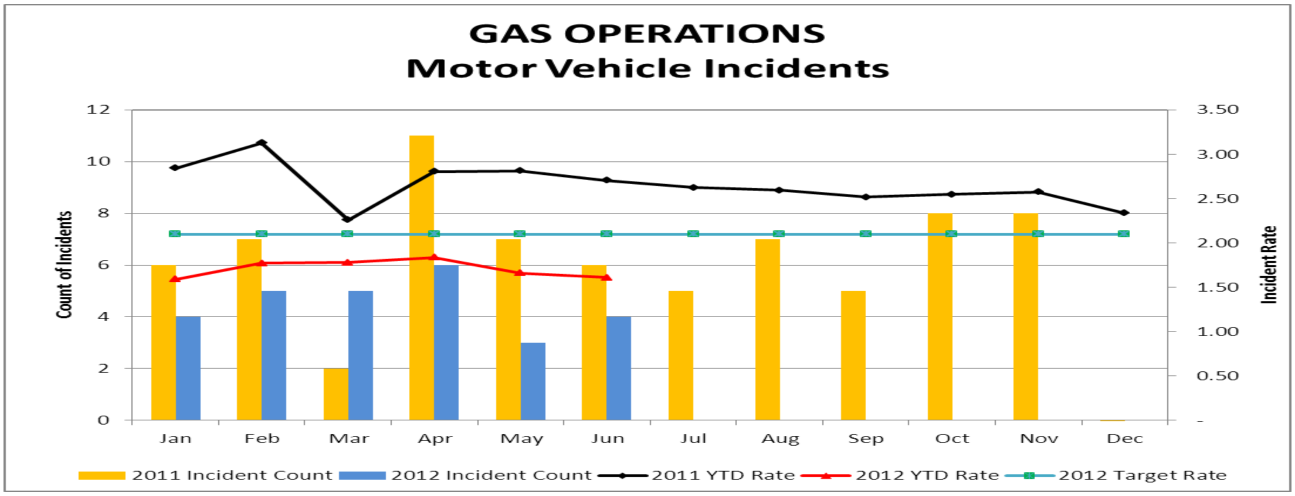
PG&E Employee Serious Incidents/LWD cases – March

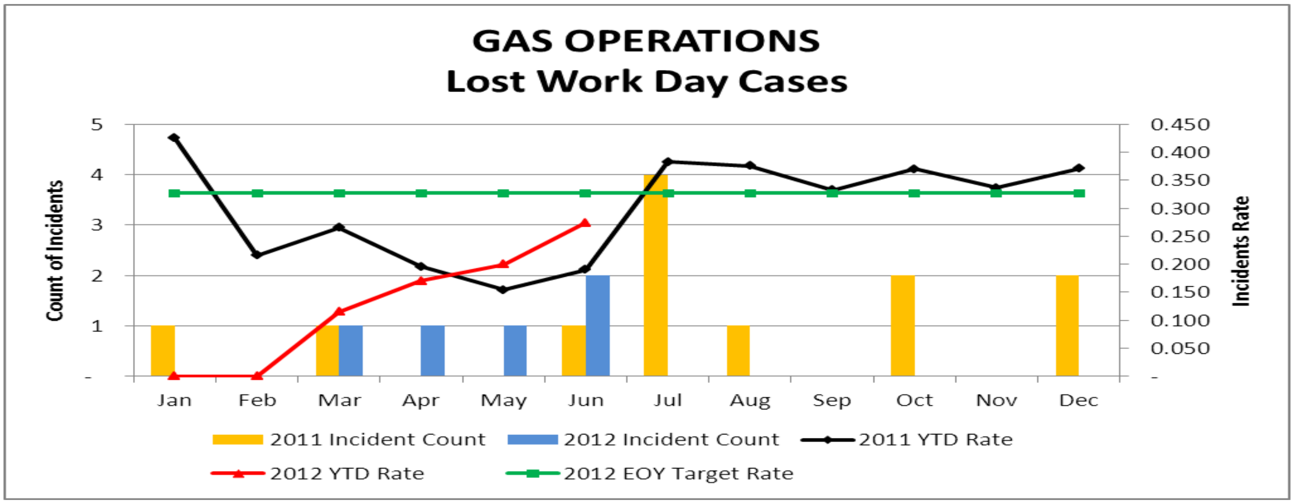
Date of Incident	Line of Business	Department	Incident Narrative	Status
3/23/2012	Gas Operations	General Construction	Utility Worker sustained serious injury to pelvis area while prospecting under a transmission gas main to locate a drip line.	The employee is undergoing physical therapy and will meet with a specialist in August to see if any additional treatment (surgery) is needed.
3/9/2012	Gas Operations	Gas Field Service	GSR sustained a serious injury to his left hand while removing pipe wrap from a vertical riser with a hand knife.	Employee returned to work and is still performing light duty work.

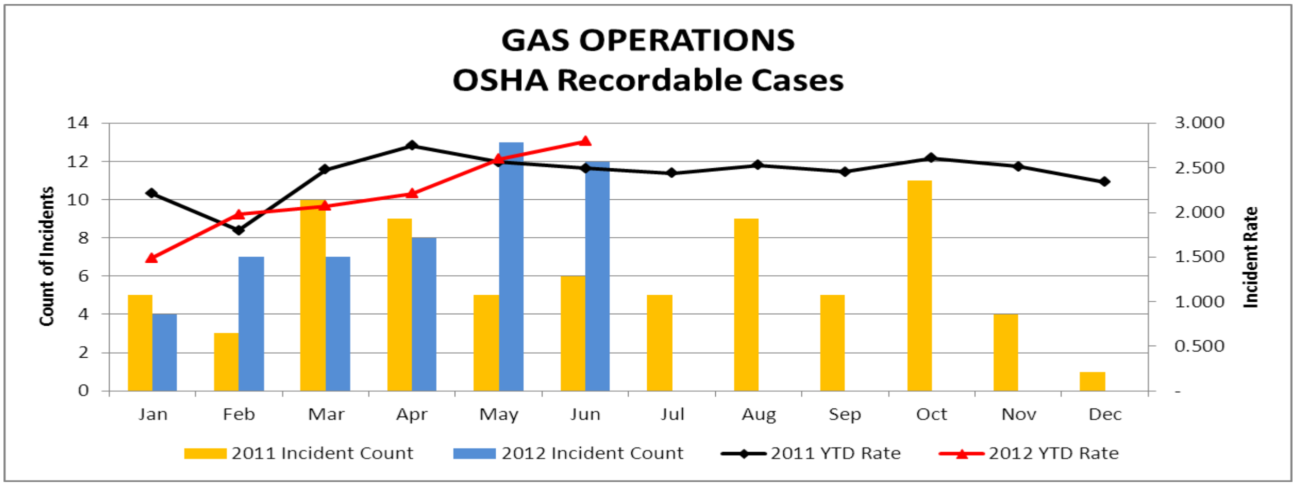
PG&E Employee Serious Incidents/LWD cases – February

Date of Incident	Line of Business	Department	Incident Narrative	Status
2/29/2012	Gas Operations	Gas Transmission	Crew Foreman sustained an injury to his ankle when his left foot slipped into an excavation causing him to twist his ankle.	Employee was released back to full duty on 7/9/12.

II. Results (cont.)

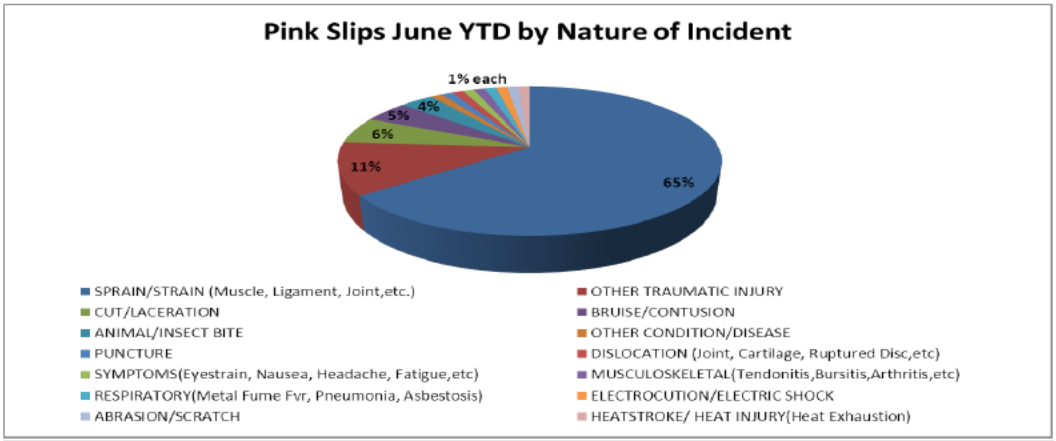




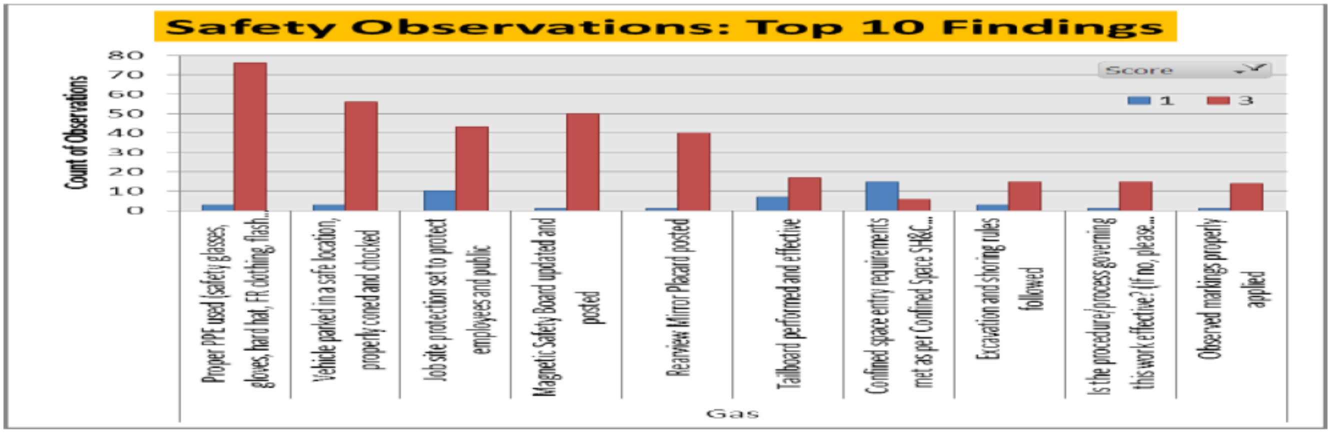


II. Results (cont.)

Safety Trending



Note: 65% of pink slips are related to sprains and strains



SAFETY OBSERVATIONS JUNE YTD				
	Score			
Observer Dept	1	3	#N/A	Grand Total
Gas M&C Bay Area	8	101	1291	1400
Gas M&C Central Valley	26	60	1064	1150
Gas M&C Central Coast	20	51	1028	1099
Gas Transmission	3	52	945	1000
Gas M&C Northern	1	43	751	795
Gas M&C GC Bay Area	3	29	586	618
Gas M&C GC Northern	1	27	582	610
Gas M&C GC Central Valley		10	322	332
Gas M&C GC Central Coast	2	23	256	281
Grand Total	**64**	**396**	**6825**	**7285**

Definitions/Findings

1) **Score 1**: It should be considered best practice or simply exceptional performance that should be recognized. Comments are requested
2) **Score 3**: Expectation is not fully met, needs improvement. Comments shall be entered
3) **N/A:** Grade 1 or 2 with no comments
4) From ~1,300 observations graded 1, only 64 had comments
5) From ~400 observations graded 3, majority of findings are PPE related

NOTE: 7285 safety observations have been completed with coaching opportunities in safety "basics" to include; PPE, vehicles properly parked and chocked, jobsite protection and magnetic signs updated – Focus area going forward.

Personal Safety Report – YTD June 2012 Results

II. Results (cont.)

Contractor Serious Incidents – June

Date of Incident	Line of Business	Department	Incident Narrative	Status
NO serious incidents for PG&E contractors have occurred since 6/13/2012.				
06/13/2012	Gas Operations	PSEP Contractor (Michels)	Steel traffic plate fell into an excavation severing a ½ inch plastic gas service and causing damage to multiple vehicles.	No injuries. Ensure that all personnel (including leadership) are competent in excavation safety and adequately trained.

Contractor Serious Incidents – May

Date of Incident	Line of Business	Department	Incident Narrative	Status
5/10/2012	Gas Operations	PSEP Contractor (Snelson)	Side boom tractor was moving pipe and lost traction under right side causing it to roll backwards and land on welding truck. No injuries.	The injuries were first-aid only and the operator was released to full duty back on the job site the next day.

Contractor Serious Incidents – March

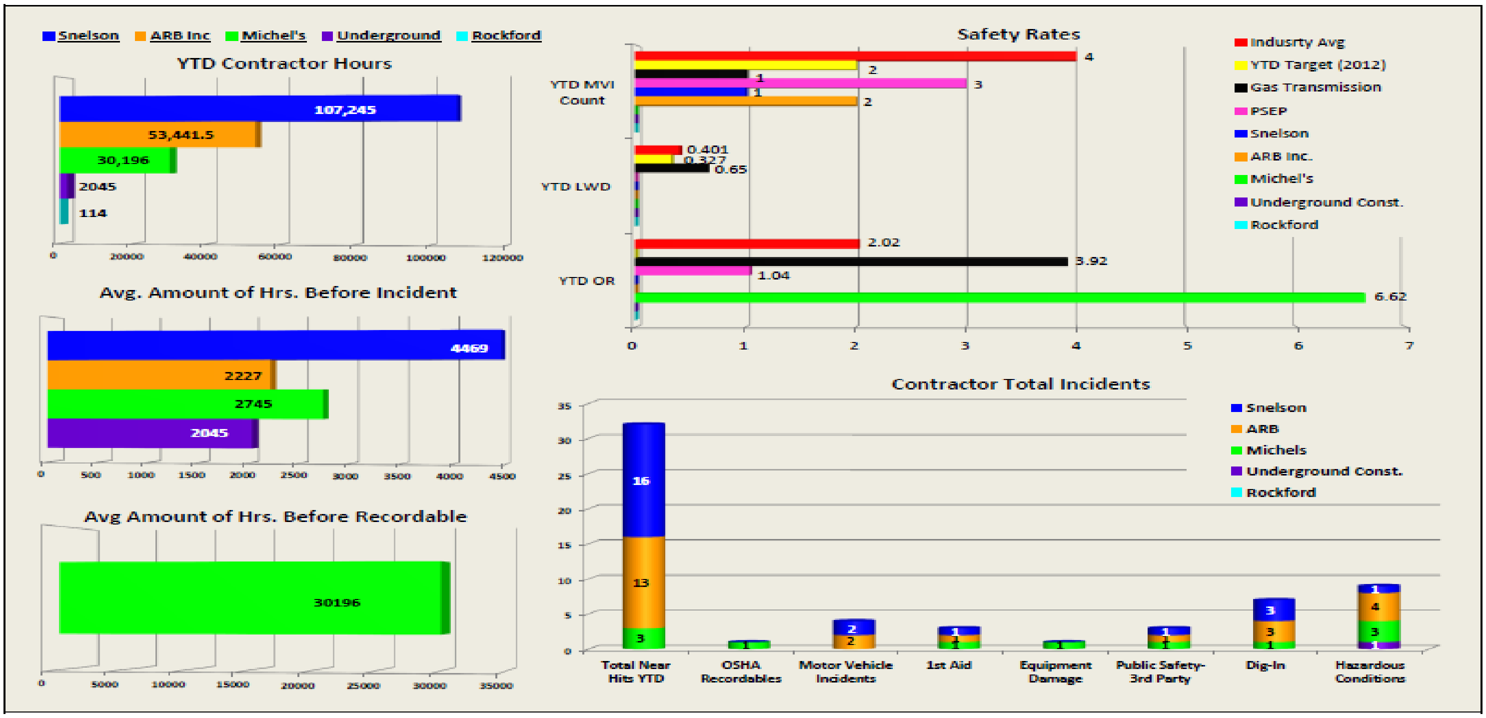
Date of Incident	Line of Business	Department	Incident Narrative	Status
03/05/2012	Gas Operations	Gas Transmission	Contractor hit a 6" Gas Transmission blow line during hydro test preparations. Damage occurred during the installation of sheet piles used for shoring. Line was dented on the northeast side and scratched on the northwest side.	No injuries. All stand-by personnel to review standby work procedures. PG&E and contractors will be required to utilize Excavation Plan checklist to ensure excavation safety compliance.

II. Results (cont.)

Contractor Safety

PSEP/Large GT project (pipeline replacement, station work)

JUNE 2012 *YTD SAFETY PERFORMANCE REPORTCARD*



GC work to include copper services, meter protection and PRP work

Main GC Contractors - 2012 spend (in millions)

Vendor	$ (June 15 YTD)	Man Hrs YTD (June 15 YTD)	OSHA	LWD	MVI
ARB Inc	$48.4M	305,820	2	0	1
Underground Construction	$9.5M	73,178	0	0	1
West Valley Construction	$828K	456,815	0	0	0
Vulcan	66K	1,835	0	0	0

III. Observations / Analysis

Observations

- Two new lost work day cases since last report out 30 days prior.
    - Employee injured left knee while backfilling a hole.
    - Employee was driving to a job site and was hit by a train as the rental car was crossing train tracks.
- LWD case rate is trending to be "red" by year end—common thread is inattention and hazard identification. Provide additional communication to focus on task at hand through mid- year safety meetings, weekly calls, tailboards and observations.
- MVI performance continues to trend positively with a 30% improvement over last year's performance.
- OSHAs have shown an uptick in June (10 new OSHA's reported since last report out) —performance continues to slip to a 2.99 OSHA recordable frequency rate.
- Approximately 50% of OSHAs are also related to strains and sprains. (27 of the 53 are sprains and strains)
- 65% of the pink slips are for strains and sprains—tasking the Grass roots teams with new approaches to address strains and sprains.
- Worksite observations showing opportunities in the "basic" safety arena—PPE, vehicle properly parked and chocked, job site protection and magnetic safety board updated.
- Contractor safety is remaining level—one additional OSHA since last month for ARB.

Summary of Performance by Organization – See specific data on pages 14 & 15

- GC has improved their MVI performance with no additional incidents since April. Team has taken specific measures with new hires.
- Specifically, Field Services has had an increase in OSHAs by 140% since last month with the majority due to strains and sprains. Several actions are being taken to address this issue (see below)
- For the most part, the region maintenance & construction organizations are on track for "green" in their LWD and MVI safety performance by year end. CVR is trending negatively with a 5.65 OSHA recordable rate with 3 of 5 injuries related to strains and sprains.
- Gas transmission has had one MVI, one LWD and 6 OSHA recordables. Will want to keep a steady focus as the OSHA recordable rate is approaching 4.

III. Observations / Analysis (con't)

Key Accomplishments

- Gas Operations continues to lead the Grass Roots efforts for the company—have held two enterprise wide (Customer Care, Power Gen, Shared Services, Gas and Electric Operations) meeting on June 5 and June 29, where the team is drafting a charter, "roles and responsibilities", training requirements, team structure for company-wide implementation. Draft is close to being finalized. Team is also addressing communication (how to connect to the LOBs), leadership commitment and a "how to" guide for start-up grass roots teams for implementation by year end.
- Training the grass roots trainers for new "video" Ergonomics training has been completed. Now trainers are rolling out the training to all M&C to be completed by July 31.
- GC is gaining traction with the newly created motto of "What could go wrong?" Have samples created of posters/banners. GC has had no incidents in the month of June.
- Field Service has taken proactive measures to address ergonomic issue. Have trained 7 GR leads to perform ergo assessments and have rolled out a mandatory tailboard/stand down focus on actions to address ergonomic issues. Held GR summit on 6/28/2012 with focus on personal accountability, proper ergonomics and peer to peer observations.
- On the horizon…team has met and developed agenda for Grass Roots Summit (GC, M&C, GT, FS) is being slated for September.
- Began a pilot in Northern Region M&C for Peer to Peer observations modeled after Bay Region—Team will monitor for 1-2 quarters with rollout to Central Valley Region and Central Coast Region 2012-2013.
- Yard Committee pilot established in Cupertino to address cross functional safety issues—addressing the re-striping of the yard (3 years in waiting) by year end.
- Gas Transmission is a making some large strides relative to contractor safety. Hosting monthly scorecard meetings with contractors to discuss performance—have turned ARB performance around.
- Performing 8 hour training of all new inspectors hired—performing training for ~ 20 inspectors per week for a total of 300 inspectors.

Opportunity and Challenges

- ~7,300 Worksite observations have been completed YTD, but is it providing the insight needed. Team established to revise expectations and review documents/comments.
- 65% of the pink slips are for strains and sprains. Employees have performed more hours of work (accelerated leak) this year as compared to last year and this is potentially impacting safety performance.
- Challenging newly formed Ergo team to different ways of thinking for ergonomics—"looking" at Move Smart (recommended by UPI)
- "Change the Safety climate" initiative is having difficulty gaining momentum as the efforts are reliant on local leadership—M&C Supt and GT Supt are bringing team together to garner ideas.
- GC and PSEP are working independently on their contractor safety. Conference call slated for July 12 to set foundation for Gas Ops for upcoming meeting with [redacted] to focus on contractor safety.
- Benchmarking trip for grass roots has been delayed due to an issue identified with IBEW participation in Grass Roots employee membership/selection. Meeting being scheduled with [redacted] in late July to review GR company-initiative.
- Some push GR to have more monetary recognition—looking at alternative methods for recognition.

IV. Process Improvement Initiatives

Initiative Overview – Safety Initiative Plan		
Exec. Sponsor	**Nick Stavropoulos/Kevin Knapp**	
Process Owner	**Lorene Harden**	
Initiative Description	Through key Safety initiatives, create a safe work environment in Gas Operations. Goals are as follows: • Enhance employee engagement in safety • reduce employee injuries • reduce motor vehicle incidents • set expectations for contractors performing work for PG&E.	
Initiative Strategy	**People**	All employees in the organization are sharing a common goal to improve safety. Each employee will have personal accountability to themselves and their teams to raise safety issues and to follow proper work procedures and practices.
	Process	Consistent implementation of processes can play a key role to improved safety, communication and performance. The Gas Operations Safety Initiative plan components establish a blueprint for obtaining these goals: • 4 key initiatives have been identified • Key roles have been established and filled to evaluate and identify best practices • These initiatives will ensure consistency in processes used to improve and communicate safety results. The areas for process implementation include but are not limited to the Grass Roots teams, prevention and management of incidents including the use of hazard identification, notification/incident investigation including follow through on corrective actions, Work observations performed, etc.
	Technology	Fully utilize the tool committee to continue to identify and implement tools that will improve ergonomics.

IV. Process Improvement Initiatives (cont.)

Key Initiatives

Initiative Category	Initiative Name	Status
Foundational	1. Bolster and leverage Grass Roots teams	🟩
Foundational	2. Improve the overall safety climate of Gas Operations	🟩
Foundational	3. Implement actions to prevent and manage incidents	🟩
Risk Management	4. Implement Contractor Safety Tracking	🟨

Initiative Schedule and Status

<table>
<tr><th>Initiative</th><th colspan="2">1. Bolster and leverage Grass Roots teams</th></tr>
<tr><td>Team Members</td><td colspan="2">Lorene Harden, Kelly Ball, [redacted], Tim Maclean, [redacted]</td></tr>
<tr><td>Scope</td><td colspan="2">A. Perform Self-Assessment and Employee Assessment survey of existing GRST
B. Analyze the findings from assessment to determine best practices and improvement areas.
C. Develop Communication Plan for all of Gas Operations.</td></tr>
<tr><td>Benefits (Soft)</td><td colspan="2">Grass Roots teams are employee led. This level of engagement can have a direct impact on Employee Engagement performance.</td></tr>
<tr><td>Costs</td><td colspan="2">A. Training costs associated with GR facilitation.
B. Costs due to loss of productivity from employees performing additional GR functions.</td></tr>
<tr><td>Milestone</td><td>Target Completion Date</td><td>Comments</td></tr>
<tr><td>Perform Assessment of existing GRST efforts and analyze the findings to determine best practices and improvement areas.</td><td>Completed</td><td>Assessment of 3500 surveys received system wide form employees supported by GRST.</td></tr>
<tr><td>Create a clear model of GRST to include structure, membership and objectives.</td><td>6/30/12</td><td>Held two enterprise wide (Customer Care, Power Gen, Shared Services, Gas and Electric Operations) meeting on June 5 and June 29. Team is drafting a charter, "roles and responsibilities", training requirements, team membership/structure. Draft is close to being finalized. Team is addressing communication (how to connect to the LOBs), leadership commitment and a "how to" guide for start-up grass roots teams for implementation by year end.</td></tr>
<tr><td>Rollout GRST implementation Plan.</td><td>9/30/2012</td><td>Two levels of implementation, newly formed teams and existing teams.</td></tr>
</table>

Personal Safety Report – YTD June 2012 Results

IV. Process Improvement Initiatives (cont.)

Initiative Schedule and Status		
Initiative	**2. Improve the overall safety climate of Gas Operations**	
Team Members	**Kelly Ball, Jody Garcia, [redacted], Tim Maclean, [redacted]**	
Scope	**Implement strategies to improve the overall safety climate of gas operations**	
Benefits	**Positive impact to employee morale, employee performance (i.e. productivity and quality) and premier survey results.**	
Costs	**Short term loss of productivity from employees performing additional employee engagement activities.**	
Milestone	**Target Completion Date**	**Comments**
Understand current safety climate. Analyze data from OSHA Executive Summary (BST), premier survey data and internal GR safety assessment.	Completed	Used report and analysis as the basis for safety climate discussions.
Communication plan to share and emphasize success stories	7/1/12	Multi-tiered approach. Weekly Safety Review (newsletter), Weekly Leadership conference call, Bi-monthly video and Share Point development and enhancement. Weekly call and newsletter being enhanced for better impact. [redacted] working on first video for debut in September.
Local initiatives to foster and improve safety climate at region/division level	Ongoing	[redacted] are leading this initiative. Examples include: Superintendent Challenge, "Fish to Frying Pan", "What could go Wrong?"
Rewards and Recognition	12/31/2012	VP Grass Roots Team is re-visiting current program
New Employee/Transfer Safety	3rd Quarter	[redacted] are developing safety pyramid/expectations for supervisors/GR members to communicate to new employees.

IV. Process Improvement Initiatives (cont.)

Initiative Schedule and Status		
Initiative	**3. Implement Actions to prevent and manage incidents**	
Team Members	**Augie Ledesma, [redacted], Jon Little, Randy Uda, Ron Huggins and associated GR members.**	
Scope	**Implement actions to prevent and manage incidents**	
Benefits	**A. Consistency of reporting incidents in Gas Operations.** **B. Cost savings by reducing incidents.**	
Costs	**TBD**	
Milestone	**Target Completion Date**	**Comments**
Worksite Observations	**6/30/12**	Augie Ledesma leading lead team to revise expectations for worksite observations and provide supervisor training to perform a more robust observation. Has held two meetings to review current findings.
Peer to Peer Observations	3rd Qtr	[redacted] leading team to make recommendation and begin implementation to Division M&C. Pilot rolled out June 11 in Northern Region.
Notification/Incident Investigation Process	3rd Qtr	Jon Little is hosting team meeting to gain learnings from serious incident investigation and to better to support supervisor. Is also connected to the lead from SE&HS for enterprise wide team.
Tool and Ergo Team	**ongoing**	Teams are established. Tool Committee is more mature and Ergo team is in early stages of development.

IV. Process Improvement Initiatives (cont.)

Initiative Schedule and Status		
Initiative	**4. Implement Contractor Safety Tracking**	
Team Members	**Pierre Bigras, Cameron Rowland, [redacted], Bob Suehiro, [redacted], Lorene Harden**	
Scope	**Develop contractor safety performance expectations into all sourcing decisions. Ensure the expectation is the same level of PG&E employees.**	
Benefits	**Improved public and employee perception**	
Costs	**Minimal costs in developing tracking systems**	
Milestone	**Target Completion Date**	**Comments**
Finalize Team Members	TBD	Hosting conference call on July 12 with team to set foundation for Gas Ops to be prepared for upcoming meeting with [redacted] to focus on contractor safety company-wide.
Develop tracking of safety for all significant vendors	TBD	Have developed tracking for key contractors used in PSEP and GC. GT has made substantial progress with scorecard tracking/communication. Established site specific safety plans and 8 hour training session for inspectors.

Discussion Items

[redacted] is leading an enterprise wide team to evaluate and ensure contractor safety. Want to partner with Sourcing on any initiatives gas ops to ensure they do not impact overall procurement plan for sourcing. [redacted] has meeting set for July 17, to discuss a plan to incorporate Electric and Gas to have a more unified plan.

V. Supporting Documentation

Grass Roots Employee Assessment for Gas Operations – Report #3
Monthly will feature a new report

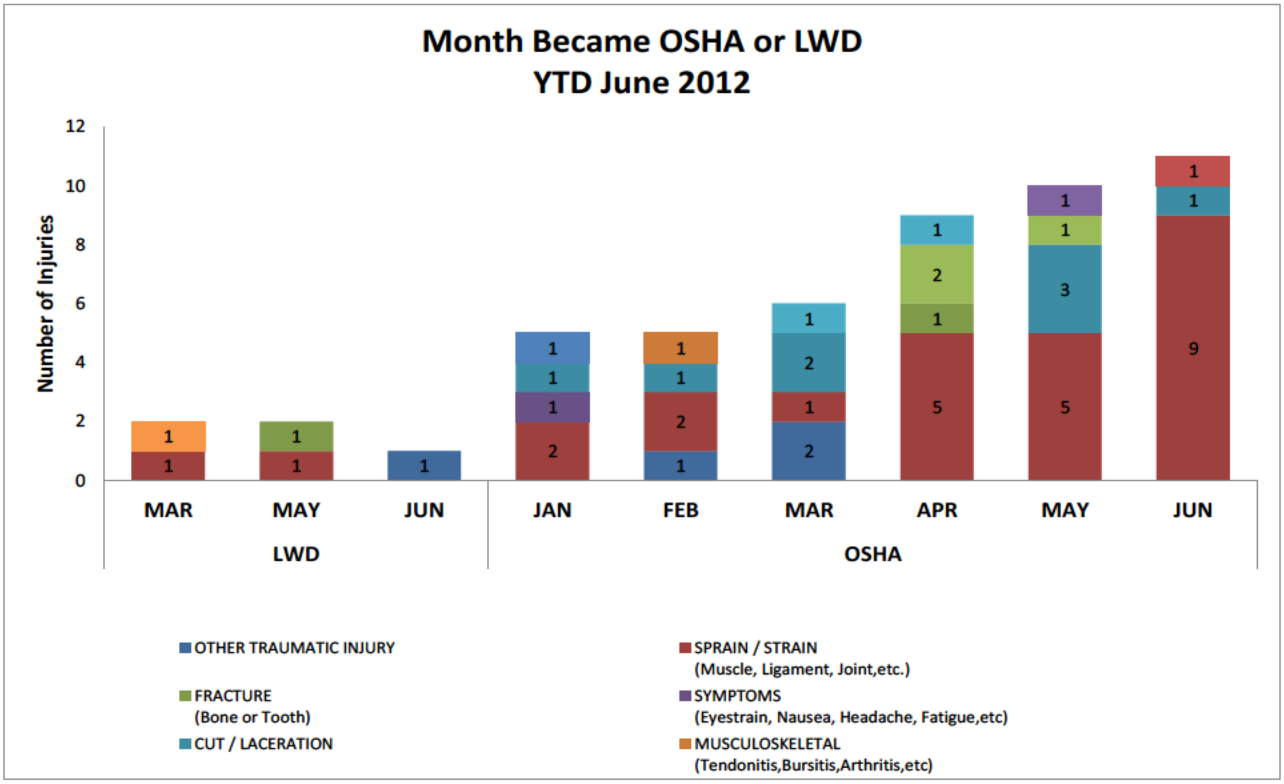
GRST Performance according to Gas M&C Team (includes GC, Construction and Field Services)

Answer Options	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	Rating Average	Response Count
Employees in my workgroup support the Grass Roots	76	219	100	17	13	3.77	425
Employees in my workgroup respect the Grass Roots	75	200	111	26	13	3.70	425
My Supervisor supports the Grass Roots Safety Team	170	185	49	8	11	4.17	423
We See and Hear from our Grass Root Safety Team	73	175	111	43	21	3.56	423
Employees in my workgroup freely share near hits	66	171	130	34	24	3.52	425
The Grass Roots Safety Team listens and acts on	83	200	98	26	16	3.73	423
Safety Issues are addressed and communicated	118	223	61	13	9	4.01	424

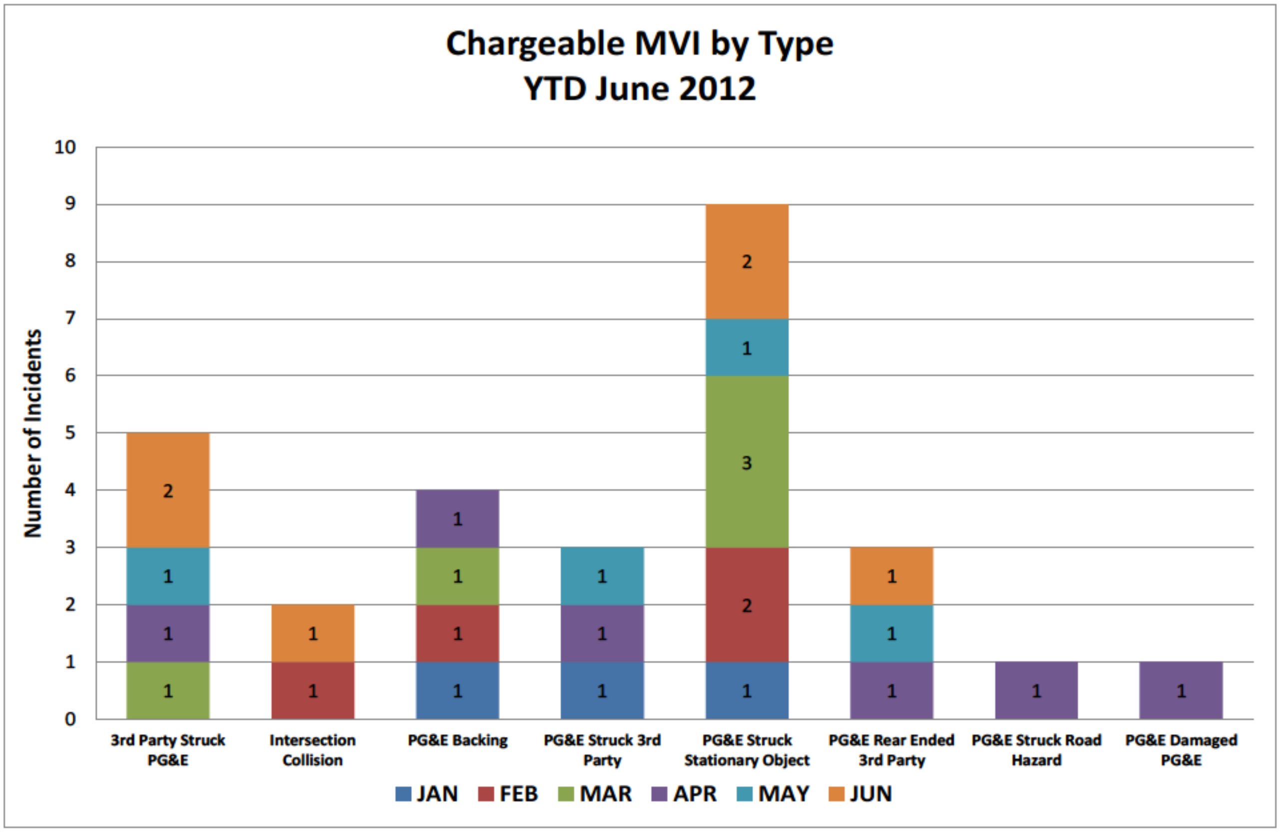
M&C Gas (GC, Construction, FS and GT) Survey Response by Region: Evaluated responses for the lowest performing approval rating, ***“Employees in my workgroup freely share near hits”***

Note: Average of 36% does not share near hits. Reason – disciplinary action (60%)

V. Supporting Documentation (cont.)

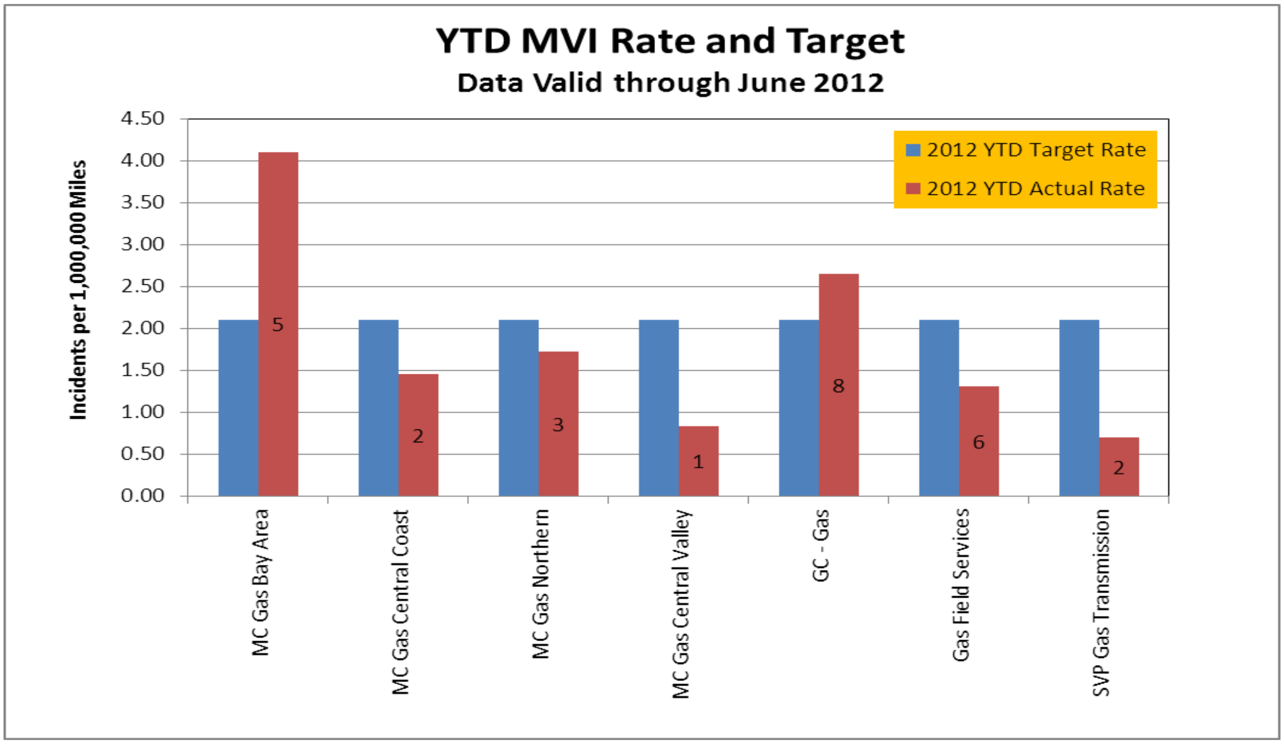


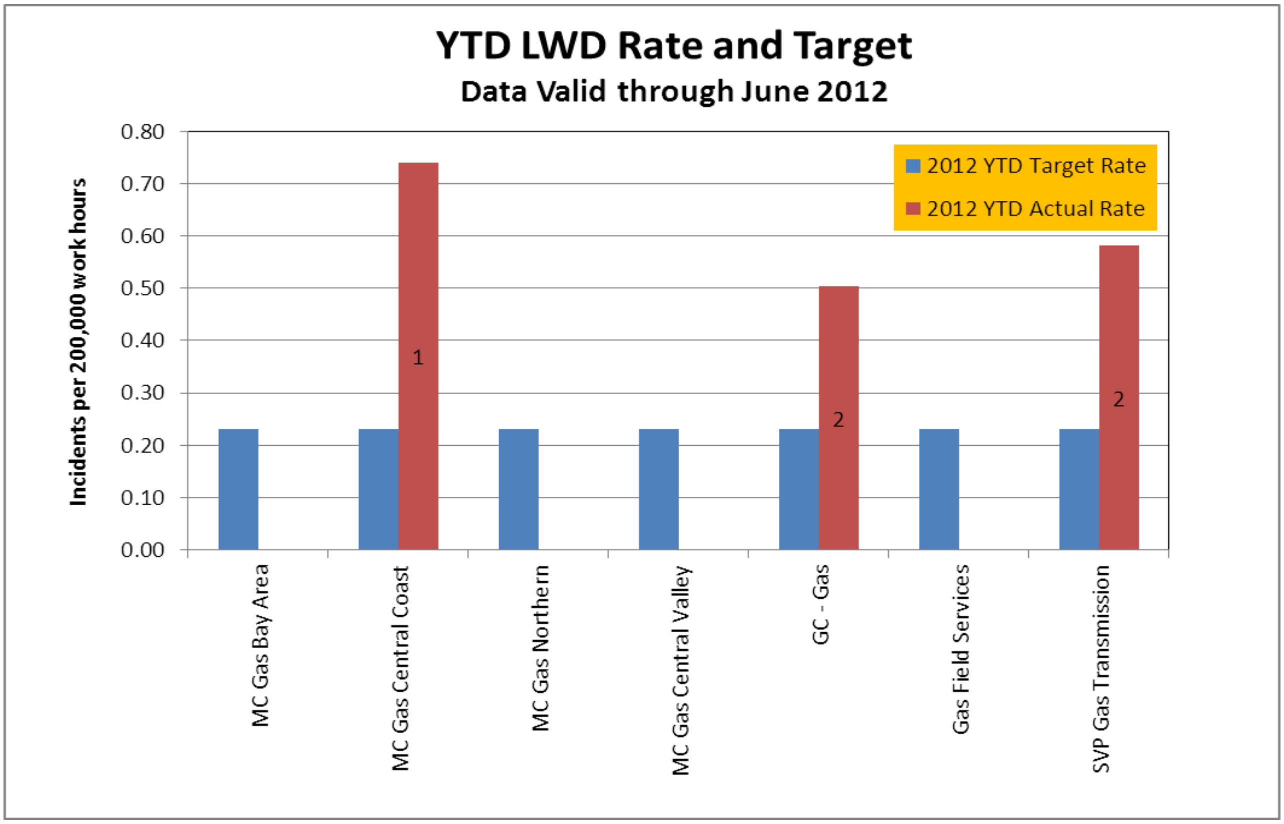
Month Became OSHA or LWD
YTD June 2012



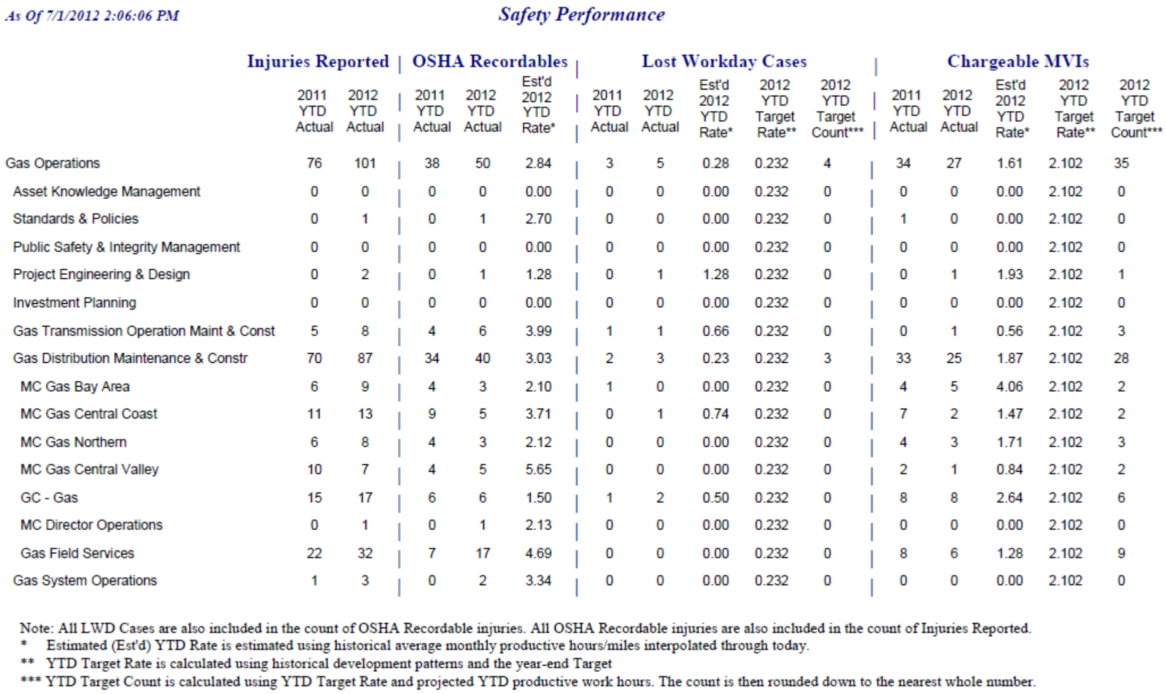
Chargeable MVI by Type
YTD June 2012

V. Supporting Documentation (cont.)





V. Supporting Documentation (cont.)



As Of 7/1/2012 2:06:06 PM

Safety Performance

	Injuries Reported		OSHA Recordables			Lost Workday Cases					Chargeable MVIs				
	2011 YTD Actual	2012 YTD Actual	2011 YTD Actual	2012 YTD Actual	Est'd 2012 YTD Rate*	2011 YTD Actual	2012 YTD Actual	Est'd 2012 YTD Rate*	2012 YTD Target Rate**	2012 YTD Target Count***	2011 YTD Actual	2012 YTD Actual	Est'd 2012 YTD Rate*	2012 YTD Target Rate**	2012 YTD Target Count***
Gas Operations	76	101	38	50	2.84	3	5	0.28	0.232	4	34	27	1.61	2.102	35
Asset Knowledge Management	0	0	0	0	0.00	0	0	0.00	0.232	0	0	0	0.00	2.102	0
Standards & Policies	0	1	0	1	2.70	0	0	0.00	0.232	0	1	0	0.00	2.102	0
Public Safety & Integrity Management	0	0	0	0	0.00	0	0	0.00	0.232	0	0	0	0.00	2.102	0
Project Engineering & Design	0	2	0	1	1.28	0	1	1.28	0.232	0	0	1	1.93	2.102	1
Investment Planning	0	0	0	0	0.00	0	0	0.00	0.232	0	0	0	0.00	2.102	0
Gas Transmission Operation Maint & Const	5	8	4	6	3.99	1	1	0.66	0.232	0	0	1	0.56	2.102	3
Gas Distribution Maintenance & Constr	70	87	34	40	3.03	2	3	0.23	0.232	3	33	25	1.87	2.102	28
MC Gas Bay Area	6	9	4	3	2.10	1	0	0.00	0.232	0	4	5	4.06	2.102	2
MC Gas Central Coast	11	13	9	5	3.71	0	1	0.74	0.232	0	7	2	1.47	2.102	2
MC Gas Northern	6	8	4	3	2.12	0	0	0.00	0.232	0	4	3	1.71	2.102	3
MC Gas Central Valley	10	7	4	5	5.65	0	0	0.00	0.232	0	2	1	0.84	2.102	2
GC - Gas	15	17	6	6	1.50	1	2	0.50	0.232	0	8	8	2.64	2.102	6
MC Director Operations	0	1	0	1	2.13	0	0	0.00	0.232	0	0	0	0.00	2.102	0
Gas Field Services	22	32	7	17	4.69	0	0	0.00	0.232	0	8	6	1.28	2.102	9
Gas System Operations	1	3	0	2	3.34	0	0	0.00	0.232	0	0	0	0.00	2.102	0

Note: All LWD Cases are also included in the count of OSHA Recordable injuries. All OSHA Recordable injuries are also included in the count of Injuries Reported.

* Estimated (Est'd) YTD Rate is estimated using historical average monthly productive hours/miles interpolated through today.

** YTD Target Rate is calculated using historical development patterns and the year-end Target

*** YTD Target Count is calculated using YTD Target Rate and projected YTD productive work hours. The count is then rounded down to the nearest whole number.

GC: Red for MVI rate. Trend for GC has changed direction positively for the month of June. There have been no new incidents for the months of May and June. GC recognized negative trend for LWDs, MVIs and OSHAs (5 incidents, but rate is green).

GC continues with the two actions below. The "What could go wrong?" theme is continuing to progress—posters and communication pieces are underway. The updates below are working and are the same course as identified in April.

For MVI's—the team is addressing MVI's by having all new hire employees will attend Smith Driving Training, all new Class A drivers will attend hands on Defensive Driver Training using a class A vehicle and a GR safety lead and/or will perform a ride along with each new driver and identify any training gaps.

For OSHA's—Team has brainstormed and came up with catch phrase "What could go wrong"? The idea is to stop and ask ourselves "What Could Go Wrong" before starting a task or job. The recommendation is to have Crew Leaders ask the important question during tailboards and have the crew involved in the dialog. What might impact public and employee safety? Are we prepared for "What Could Go Wrong"? It is another way of identifying safety hazards and controlling the hazards.

Field Service: OSHA rate in June has increased from 3.4 to 4.8. For June there is 1 OSHA as compared to 6 for May. To address the OSHA increase the Leadership and Grass Roots members developed a mandatory tailboard to be delivered to all GSRs the week of June 4, 2012. The tailboard included the contributing factors to the increase (lack of early reporting when it comes to soreness, use of worn down or improper tools, use of tools to transport tools, etc.) and several actions (use of 24/7 nurse, peer to peer observations, proper positioning, etc.). The tailboard was well received.

In addition, FS is training 7 employees in industrial ergonomic assessments. They completed ergonomic rollout.

Held GR summit on 6/28/2012 and focused on personal accountability, proper ergo and peer to peer.

Transmission: Two additional OSHAs for June. Trending is showing some need for working in difficult terrain (steep inclines and heavy vegetation) Grass Roots lead was extremely active this month seeking opportunities with Distribution Damage Prevention Supervisors for proactive measures relative to Leak Survey. Incidents include 6 total – 2 poison oak, 2 ankle (twisted ankle and swelling after working on incline), falling from ladder and wrist from repetition closing valves): fall from a ladder, case of poison oak and employee who returned from LTD and had an OSHA. Safety messages are being re-enforced with monthly safety call with all employees, weekly/daily tailboards, supervisor observations and the recent completion of Tri-annual safety training.

Project Engineering: One OSHA and One LWD related to this incident.

Gas Distribution M&C: Overall, there have been 87 injuries reported, with 55 being from Division Construction and GC. The other 32 injuries are from Field Services. The OSHA rate has increased from 2.841 to 2.994.

In 2012, the amount of OT and work completed is significantly more than last year at this time, and the impact has been additional strains and sprains. The discussions on the weekly conference calls are focused on worksite observations and identifying body ergonomics issues. Be sure to have employees are staying hydrated, taking mini breaks and asking for help and if having certain weekend with no POT to ensure employees are getting rest.

Next steps to identify those employees with multiple injuries and high OT to see if any trends exist that can be mitigated.

Have also challenged the Ergo team to looking for a new opportunity to have employees focus on “moving smart” when performing work. They have included [redacted] from UPI at next meeting.

Process Safety Report - July 2012 for June/July Results

Results	🟢	Three projects as described below are underway and a fourth is ready to present to the Process Governance Committee as an idea ready to tackle. The Process Hazard Analysis (PHA) for the McDonald Island Rebuild project has been completed.
Initiative Status	🟢	Process Safety elements have been embedded in the Standards and Policy management framework for reviewing, revising and issuing guidance documents such as standards and work procedures. Also investigating incorporating Process Safety elements in the company-wide Guidance Document Analysis for new documents. Working committee to implement PHA and Pre Start-up Safety Review (PSSR) program will convene in late July.

I. Goal / Objective

Process Safety is the measures, systems and policies which protect people and the environment by reducing the likelihood of low probability, high consequence events. Everyone throughout the organization understands the concept of Process Safety, recognizes and applies it in everything that they do. Intent is to move the organization from “Inadequate” to “Advanced/Leading” by end of 2014.

Goal is to have four projects at the “idea ready to tackle” stage before the end of the second quarter and one project at the “idea ready to implement” stage.

2012 goal is to demonstrate the value of P.S. by completing several projects that have value to front line employees and supervisors. Intent is to start to introduce Process Safety to the broader management team using these examples beginning in the third quarter.

II. Results

A two day Process Hazard Analysis (PHA) was completed for the McDonald Island Rebuild project. Representatives from gas operations, maintenance, construction, engineering, project management and safety participated. Several improvements to reduce risks were identified including the addition of instrumentation, control logic and alarms for upset conditions and the installation of physical locking devices to ensure safety instrumentation is not inadvertently locked out. The team also identified a relief valve that had the potential of introducing air into a methane environment potentially resulting in a hazardous atmosphere. The project team will also be developing a Pre Start-up Safety Review (PSSR) for November’s planned commissioning.

PSSR and PHA best practices from National Grid, El Paso and TransCanada were reviewed as potential models for Gas Ops. A working committee to develop the Gas Ops standard will be convened in late July to begin development. Goal is to complete development by end of third quarter.

The Codes and Standards team developing the overall management framework for creating, revising , issuing and communicating codes and standards completed their work. The team was trained on the elements of process safety and included key process safety elements in the new framework.

The project team working on potentially asbestos containing wrap is behind schedule but meeting weekly. The team has determined that air monitoring during field activities that involve asbestos wrap is required to accurately determine potential levels of exposure. PPE and training requirements will vary depending on the exposure. The team is working with PSEP to determine testing locations and dates.

Key Initiatives

Initiative Category	Initiative Name	Status
Process	1. Projects to Demonstrate P.S. Value	🟩
Process	2. Embed P.S. in Codes and Standards Management	🟩
Process	3. Pilot Pre Start-Up Safety Review and Hazard Analysis	🟩
People	4. Training	🟩
Governance	5. Develop governance document	🟨

III. Observations / Analysis

While project ideas from employees will always be welcome and encouraged, the focus will be on determining how to identify and prioritize low frequency, high consequence risk events from the risk registry, issues identified from the implementation of PAS 55 and actual events. This will provide a systematic approach to selecting risks to assess and mitigate.

For the PSSR and PHA elements, the focus will be on completing development of the PSSR and PHA programs in the third quarter. A working committee will begin its work in July with the goal of having the program largely in place by the end of the third quarter.

The potentially containing asbestos wrap team is behind schedule but meeting weekly. The team has determined the only way to accurately know the potential exposure and resulting PPE and training needs is to conduct air monitoring in the field. This will extend the time before the committee can make recommendations. The team is working with PSEP to identify planned work where air samples can be taken. The goal is to complete the testing in July but it is likely to extend into August.

Three projects have been approved by the governance committee. A fourth was ready for approval at the June meeting but was not presented to allow all the existing work within Gas Ops to be prioritized before starting new projects.

IV. Process Improvement Initiatives

Initiative Overview – Process Safety		
Exec. Sponsor	**Jane Yura**	
Process Owner	[redacted]	
Initiative Description	Instituting measures, systems and policies to protect people/environment and reduce the chance of low probability, high consequence incidents.	
Initiative Strategy	**People**	Everyone throughout the organization understands the concept of Process Safety and recognizes and applies it in everything they do. Significant training is required to embed this mindset in all parts of the organization.
	Process	Process Safety factors are considered independent of compliance. Specific business issues will be tackled to demonstrate the value of Process Safety. The issues selected will be those that demonstrate value to front line employees and supervisors. The Codes and Standards team building the guidance document management system will be introduced to Process Safety and review the draft management system to ensure key Process Safety elements are included. A large capital project (McDonald Island platform re-build) will include the development of a Pre Start-up Safety Review (PSSR) and process hazard analysis (PHA) as part of the project development, engineering and construction.
	Technology	

Initiative Schedule and Status	
Initiative	**1. Elimination of Over-pressure Events**
Team Members	**Mel Christopher, Jane Yura,** [redacted] [redacted]**, Lance Johnson,** [redacted] [redacted] **and others**
Scope	**Take action to eliminate over-pressure events on the transmission and distribution**

	systems.	
Benefits	**Benefits include ensuring reliable service to our customers, reduction in CPUC reportable events and time spent investigating/correcting over-pressure events.**	
Costs	**TBD**	
Milestone	**Target Completion Date**	**Comments**
Review of 2011 over-pressure events.	Completed	Although data quality was poor, review indicates a significant portion of events would have been prevented with lower regulation and over-pressure protection setpoints.
Issued bulletin as an interim measure directing lower setpoints to be evaluated as part of other work such as capital work.	Completed	Completed in April. Hasn't been widely utilized.
Distribution Engineers & Planning to assess implementing lower setpoints on the Low Pressure (L.P.) system.	Completed	Forty of fifty systems have had their setpoints reduced. This was completed June 20. Ten systems already had lower setpoints and no additional reductions were made. Additional assessment will have to be conducted for winter operations.
System Planning to assess impact of implementing lower setpoints on transmission system.	Completed	Initial study was completed June 1. Additional work from the initial results being performed.
Create small team to quickly assess over-pressure events and communicate findings.	June 1	We were behind schedule and then this was put on hold pending development of the new "strike team" plan.
QA/QC to visit field locations to determine actions to reduce number of events.	June 1	Field interviews have been completed. Report out to be completed July 20.
L.P. Equipment Review – Diaphragms and Springs	June 1	Measurement and Control Engineering to investigate to ensure correct equipment is installed. Need to confirm current status.
Install sulfur filters	Sept 1	Sulfur in supply lines accounts for a small percent of the events. Sulfur filters were installed at 223 regulation stations with 207 commissioned as of June 27. The remaining filters are planned to be commissioned before September 1.
Liquids entering the system.	TBD	Liquids account for a small percent of the events. A program was begun in 2008 to prevent liquids from entering the system. All major interconnects, except Lodi Storage, have filter-separators installed. Negotiations with Lodi are in progress but no agreement has been reached.

Develop "Action Required After an over-pressure Event" guidance document.	June 15	Development underway. Would provide clear roles and responsibilities after an event occurs.

Discussion Items
Need to integrate and coordinate efforts with new "strike team" approach to address these events.

Initiative Schedule and Status		
Initiative	**2. Proper Storage of Flammable Gas Cylinders**	
Team Members	**Kevin Souza, Tim MacLean**	
Scope	**Gas Operations uses various flammable, compressed gases including methane and others for maintenance and construction activities. The gases are typically stored in metal cylinders. Although there are OSHA and other standards for storing these types of material, it is unclear how effective and safe the storage of these materials is currently.**	
Benefits	**Potential benefits include strengthening public and employee safety by reducing the likelihood of a low frequency, high consequence fire or explosion and reducing the severity of any fire or explosion that may occur.**	
Costs	**Incidental**	
Milestone	**Target Completion Date**	**Comments**
Approval by Governance Committee as Idea Ready to Tackle	Completed	Approved at first committee meeting at end of March.
Project team selected	Completed	Completed in April.

Field review of representative yards for storage practices	Completed	Forty-three storage locations were visited.
Development of Corrective Action Plan, approval by Governance Committee as Idea Ready to Tackle	Completed	Governance Committee approved in May.
Completion of Corrective Action Plan	September 1	Corrective actions are scheduled to be complete by September 1. Annual reviews will be on-going beginning in 2013.

Discussion Items
Field visits indicate that in general cylinders are properly stored. Action plan includes continued periodic reviews to ensure good performance, updating Code of Safe Practices to provide clearer storage instructions, installation of "No Smoking" signs and making the link to MSDS on the web easier to find.

Initiative Schedule and Status		
Initiative	**3. Identification, handling and documenting potentially asbestos containing wrap**	
Team Members	[redacted], **Jon Little,** [redacted], **Tim Maclean**	
Scope	**The transmission and distribution systems contain piping with wrap that contains asbestos. Typically this pipe was installed before 1972. There are procedures in place to manage wrap although there is a lack of clarity about some aspects.**	
Benefits	**Potential benefits include better clarity and consistency for maintenance and construction crews on assessing and managing pipeline wrap.**	
Costs	**TBD**	
Milestone	**Target Completion Date**	**Comments**
Approval by Governance Committee as Idea Ready to Tackle	Completed	Approved at first committee meeting at end of March.
Project team selected	Completed	Completed in April.
Gap analysis of current standards, work procedures, practices and training.	May	Committee has met several times and is "peeling the onion". Analysis will extend to August. Field air monitoring testing is required to determine the potential exposure while working with asbestos containing wrap.

Development of Corrective Action Plan	June	
Approval by Governance Committee as Idea Ready to Tackle	July	

Discussion Items
More difficult issue then initially thought. Have increased team meetings to weekly to make consistent progress on this issue. Initial steps will likely include field testing to determine the levels, if any, of asbestos exposure.

Initiative Schedule and Status

Initiative	**4. Incorporate P.S. in Codes and Standards Management**	
Team Members	**Karen Roth,** [redacted]	
Scope	**The Codes and Standards group is developing the process for managing (creating, revising, approving, communicating) gas guidance documents. This initiative will provide P.S. training to the team and ensure P.S. elements are embedded in the process.**	
Benefits	**The benefits include a robust process that includes key elements such as workforce involvement, stakeholder outreach and compliance to standards.**	
Costs	**TBD**	
Milestone	**Target Completion Date**	**Comments**
P.S. training	Completed	
Team evaluates key P.S. elements for inclusion in process.	Completed	
Management framework completed including incorporation of P.S. concepts.	Completed	
In addition to overall framework, include "Process Safety" checkpoint.	September 1	Will revise Guidance Document Analysis (GDA) document to include process safety elements. Risk and Audit which owns the enterprise wide GDA has expressed interest in including process safety elements in the enterprise wide document.

New framework communicated to stakeholders	June	Communication plan in development. Will be presented on July 23.

Discussion Items

Initiative Schedule and Status		
Initiative	**5. Pilot Pre Start-Up Safety Review and Hazard Analysis**	
Team Members	[redacted]	
Scope	**McDonald Island is undergoing a major rebuild of Whiskey Slough platform in 2012 and 2013. As part of this project, a Pre Start-up Safety Review (PSSR) and hazard analysis will be conducted.**	
Benefits	**A PSSR and hazard analysis ensures the risks are understood. A PSS[redacted] includes an evaluation of potential issues such as have operating procedures been updated, has training been provided and are current drawings on site.**	
Costs	**TBD**	
Milestone	**Target Completion Date**	**Comments**
P.S. training	Completed	Attendees to the training will include project manager, project engineers and the consulting firm hired to provide EPC support.
Project team determines scope of PSSR and hazard analysis for Phase 1 (2012)	Completed	Construction of Phase 1 begins in July. The PSSR is starting later than ideal and scope may be adjusted accordingly.
Project team determines roles and responsibilities for PSSR and hazard analysis.	Completed	
Completion of PSSR and hazard analysis for Phase 1	Nov 1	The Process Hazard Analysis was completed in June.

Discussion Items
The original intent was to take the lessons learned and incorporate PSSR and hazard analysis as part of future projects in 2013. Construction on this project will not be completed until October of this year. Waiting until the pilot is complete would make it difficult to incorporate these concepts in 2013 projects as design, etc. will already be underway. Revised plan is to develop these elements in 3rd quarter of 2012.

Initiative Schedule and Status

Initiative	**6. Training**	
Team Members	[redacted]	
Scope	**Provide training to stakeholders start to embed P.S. mindset in Gas Operations**	
Benefits	**A full understanding of P.S. will enable the benefits of P.S. to be attained.**	
Costs	**TBD**	
Milestone	**Target Completion Date**	**Comments**
Provide three day Fundamentals of Process Safety to stakeholders.	Completed	Stakeholders including the core team attended the American Society of Mechanical Engineers (ASME) Fundamentals of Process Safety in February.
Codes and Standards Team attends P.S. introduction.	Completed	Codes and Standards team attended P.S. introduction as part of Initiative #4 above.
McDonald Island Project Team attends P.S. introduction	Completed	McDonald Island project team attended P.S. introduction as part of Initiative #5 above.
Additional stakeholders attend P.S. introduction	Completed	Stakeholders including Work Implementation and Asset Knowledge attended two hour overview.
Additional training	3rd/4th Qtr.	Provided as needed.

Process Safety Report - July 2012 for June/July Results

Discussion Items

Initiative Schedule and Status		
Initiative	**7. Governance Document**	
Team Members	[redacted]	
Scope	**Develop governance document for Process Safety.**	
Benefits	**Governance provides consistency and clarity on how P.S. is managed.**	
Costs	**TBD**	
Milestone	**Target Completion Date**	**Comments**
Develop draft document for review.	Complete	Draft document reviewed by J Yura.
Develop stronger specifics on project management.	Sept 1	
Develop detailed PSSR and hazard analysis sections.	Sept 30	Includes reviewing best practices from others (National Grid, El Paso, TransCanada, Chevron, DCC)
Final document complete.	July 1	Original document was due July 1. Above additions will extend completion.

Discussion Items
Need to strengthen draft to provide more clarity on using P.S. to assess issues and projects. This will extend development passed July 1. New target including this component is September 30.

V. Supporting Information

Damage Prevention Report - July 2012 for June Results

Results	🔴	Two of three metrics off track YTD; in process of determining root causes
Initiative Status	🟡	Most projects started and slightly off track; all but one should correct by EOY

I. Goal / Objective

Reduce damage to PG&E's underground facilities and associated costs through public awareness; effective locating, marking, and monitoring of facilities; and timely follow up and billing of at-fault excavators.

II. Results

Damage Prevention	Month Results			YTD Results			Full Year		
	Actual	Plan	Var	Actual	Plan	Var	Forecast	Plan	Var
Dig-In Rate per 1,000 USA Tags	4.26	3.01	-1.25	3.52	3.01	-0.51	3.11	3.01	-0.10
At-fault Dig-ins per 1,000 USA Tags	0.38	0.16	-0.22	0.33	0.16	-0.17	0.31	0.16	-0.15
Locate and Mark Requests Completed On Time	98.7%	99.2%	0.5%	98.9%	99.2%	0.3%	99.2%	99.2%	0.0%

Damage Prevention Report - July 2012 for June Results

Financials YTD June 2012

Distribution	Locate and Mark Order Cost (*in thousand dollars*)							Locate and Mark Unit Cost Performance					
Division/Region	**June Actual**	**June Forecast (Cycle)**	**June Variance (Cycle)**	**YTD Actual**	**YTD Forecast (Cycle)**	**YTD Variance (Cycle)**	**Annual Target (CY1)**	**Curr Month Actual Units**	**Curr Month Actual Unit Cost**	**YTD Actual Units**	**YTD Actual Unit Cost**	**Target Units**	**Target Unit Cost**
Diablo	$ 79	$ 125	$ 46	$ 717	$ 723	$ 7	$ 1,376	21	$3,752	6,151	$117	14,476	$95
East Bay	$ 213	$ 144	-$ 69	$ 1,030	$ 882	-$ 147	$ 1,679	1,639	$130	8,929	$115	17,663	$95
North Bay	$ 153	$ 101	-$ 52	$ 798	$ 671	-$ 128	$ 1,289	23	$6,653	5,293	$151	12,915	$100
San Francisco	$ 299	$ 289	-$ 11	$ 1,679	$ 1,659	-$ 20	$ 3,248	850	$352	4,899	$343	10,248	$317
Bay Area Region	**$ 744**	**$ 659**	**$ (85)**	**$ 4,224**	**$ 3,936**	**$ (288)**	**$ 7,593**	**2,533**	**$ 294**	**25,272**	**$ 167**	**55,302**	**$ 137**
Central Coast	$ 91	$ 106	$ 15	$ 436	$ 476	$ 40	$ 1,051	1	$90,836	4,888	$89	11,058	$95
De Anza	$ 86	$ 125	$ 40	$ 555	$ 609	$ 54	$ 1,261	1,497	$57	7,317	$76	13,262	$95
Los Padres	$ 134	$ 118	-$ 16	$ 790	$ 747	-$ 43	$ 1,184	1,094	$122	6,389	$124	13,588	$87
Mission	$ 158	$ 125	-$ 32	$ 806	$ 747	-$ 59	$ 1,414		X	5,508	$146	13,731	$103
Peninsula	$ 117	$ 125	$ 8	$ 667	$ 674	$ 7	$ 1,405	1,563	$75	7,940	$84	14,780	$95
San Jose	$ 200	$ 180	-$ 20	$ 963	$ 940	-$ 23	$ 1,850		X	6,988	$138	16,674	$111
Central Coast Regior	**$ 785**	**$ 779**	**$ (6)**	**$ 4,217**	**$ 4,194**	**$ (24)**	**$ 8,166**	**4,155**	**$ 189**	**39,030**	**$ 108**	**83,093**	**$ 98**
Fresno	$ 118	$ 135	$ 17	$ 705	$ 732	$ 27	$ 1,291	1,730	$68	9,461	$75	19,402	$67
Kern	$ 138	$ 166	$ 28	$ 693	$ 741	$ 48	$ 1,632		X	15,584	$44	34,331	$48
Stockton	$ 105	$ 128	$ 23	$ 585	$ 627	$ 42	$ 1,108	1,759	$60	8,742	$67	16,653	$67
Yosemite	$ 150	$ 189	$ 38	$ 767	$ 853	$ 86	$ 1,550	2,212	$68	12,234	$63	23,285	$67
Central Valley Regior	**$ 511**	**$ 618**	**$ 107**	**$ 2,751**	**$ 2,953**	**$ 202**	**$ 5,582**	**5,701**	**$ 90**	**46,021**	**$ 60**	**93,671**	**$ 60**
Humboldt	$ 107	$ 75	-$ 32	$ 473	$ 412	-$ 61	$ 706	371	$290	1,968	$241	6,197	$114
North Valley	$ 109	$ 106	-$ 3	$ 510	$ 496	-$ 14	$ 969	1,236	$88	6,195	$82	11,113	$87
Sacramento	$ 343	$ 337	-$ 6	$ 1,475	$ 1,454	-$ 21	$ 3,153		X	20,429	$72	47,375	$67
Sierra	$ 135	$ 141	$ 6	$ 684	$ 684	$ 0	$ 1,395	1,707	$79	8,832	$77	16,002	$87
Sonoma	$ 115	$ 115	-$ 1	$ 566	$ 558	-$ 8	$ 1,118	1,580	$73	7,346	$77	10,858	$103
Northern Region	**$ 809**	**$ 774**	**$ (35)**	**$ 3,708**	**$ 3,604**	**$ (104)**	**$ 7,341**	**4,894**	**$ 165**	**44,770**	**$ 83**	**91,545**	**$ 80**
System	**$ 2,849**	**$ 2,830**	**$ (19)**	**$ 14,899**	**$ 14,686**	**$ (213)**	**$ 28,682**	**17,283**	**$ 165**	**155,093**	**$ 96**	**323,611**	**$ 89**

Transmission	Locate and Mark Order Cost (*in thousand dollars*)						
Line of Business	**June Actual**	**June Forecast (Cycle)**	**June Variance (Cycle)**	**YTD Actual**	**YTD Forecast (Cycle)**	**YTD Variance (Cycle)**	**Annual Target (CY1)**
Bloop	$ 19	$ 27	$ 9	$ 87	$ 104	$ 17	$ 278
Gas Gathering	$ 11	$ 13	$ 3	$ 30	$ 41	$ 11	$ 166
Line 300	$ 37	$ 35	-$ 2	$ 215	$ 208	-$ 7	$ 390
Line 400	$ 16	$ 20	$ 4	$ 97	$ 105	$ 8	$ 229
Local Transmission	$ 106	$ 136	$ 30	$ 533	$ 606	$ 73	$ 1,106
Total	**$ 189**	**$ 232**	**$ 44**	**$ 962**	**$ 1,064**	**$ 102**	**$ 2,168**

MAT: DFA for Mark and Locate

Source: SAP Financials

Damage Prevention Report - July 2012 for June Results

System Damages YTD June 2012

****Dig-ins will be converted to 1st, 2nd, and 3rd party in future reports**

	Bay Area Region					Central Coast Region							Central Valley Region					Northern Region							
	Diablo	East Bay	North Bay	San Francisco	Total	Central Coast	De Anza	Los Padres	Mission	Peninsula	San Jose	Total	Fresno	Kern	Stockton	Yosemite	Total	North Coast	North Valley	Sacramento	Sierra	Total	GT	Total Gas Ops*	YTD System**
Ticket Counts (Tickets Received)																									
YTD June 2012	13,219	13,220	7,158	6,266	39863	8,341	8,730	6,552	8,713	9,592	11,536	53464	11,879	21,778	10,300	13,602	57559	9,553	7,982	27,880	9,925	55,340	5,898	212,124	215,892
YTD June 2011	12,766	11,428	10,934	7,373	42501	7,348	8,027	7,505	10,916	12,486	10,652	56934	14,818	30,787	11,508	16,687	73800	18,465	9,906	33,807	12,346	74524	6876	254,635	259,023
% Change	4%	16%	-35%	-15%	-6%	14%	9%	-13%	-20%	-23%	8%	-6.1%	-20%	-29%	-10%	-18%	-22%	-48%	-19%	-18%	-20%	-26%	-14%	-17%	-17%
June 2012	2,249	2,349	900	1,249	6,747	1,510	1,898	1,066	1,432	1,908	1,962	9,776	1,723	3,249	1,906	2,271	9,149	1,868	1,354	4,659	1,754	9,635	1,021	36,328	36,881
June 2011	2,584	1,832	1,925	1,303	7,644	1,278	1,293	1,445	1,870	2,044	1,858	9,788	2,600	4,130	2,075	3,080	11,885	4,361	1,639	5,943	2,427	14,370	1,215	44,902	50,229
% Change	-13%	28%	-53%	-4%	-12%	18%	47%	-26%	-23%	-7%	6%	0%	-34%	-21%	-8%	-26%	-23%	-57%	-17%	-22%	-28%	-33%	-16%	-19%	-27%
Late Tickets																									
YTD June 2012	87	68	28	63	246	6	71	246	44	36	163	566	44	349	94	112	599	102	120	105	59	386	341	2,138	2355
YTD June 2011	479	105	447	126	1157	44	70	253	303	274	229	1173	55	125	212	75	467	655	20	209	67	951	56	3,804	3916
% Change	-82%	-35%	-94%	-50%	-79%	-86%	1%	-3%	-85%	-87%	-29%	-52%	-20%	179%	-56%	49%	28%	-84%	500%	-50%	-12%	-59%	509%	-44%	-40%
June 2012	10	9	5	15	39	2	5	71	13	3	69	163	5	39	28	22	94	32	42	12	3	89	62	447	462
June 2011	298	46	320	58	722	19	21	19	146	222	119	546	25	41	25	27	118	28	24	146	25	223	255	1,864	1920
% Change	-97%	-80%	-98%	-74%	-95%	-89%	-76%	274%	-91%	-99%	-42%	-70%	-80%	-39%	8%	-19%	-20%	14%	75%	-92%	-88%	-60%	-76%	-76%	-76%
Dig-Ins																									
Target/Goal 2012	**3.01**	**3.01**	**3.01**	**3.01**	**3.01**	**3.01**	**3.01**	**3.01**	**3.01**	**3.01**	**3.01**	**3.01**	**3.01**	**3.01**	**3.01**	**3.01**	**3.01**	**3.01**	**3.01**	**3.01**	**3.01**	**3.01**	**3.01**	**3.01**	**3.01**
RAG Status 2012	**Red**	**Red**	**Red**	**Red**	**Red**	**Red**	**Red**	**Green**	**Red**	**Red**	**Amber**	**Red**	**Red**	**Green**	**Red**	**Red**	**Amber**	**Red**	**Green**	**Green**	**Green**	**Amber**	**Green**	**Red**	**Red**
YTD June 2012 - Dig-ins/1000 Tags	3.71	5.90	4.47	7.34	5.14	5.28	3.89	1.22	4.02	4.48	3.03	3.72	4.29	1.10	3.98	5.00	3.20	4.61	2.26	2.91	2.92	3.11	0.00	3.58	3.52
YTD June 2011 - Dig-ins/1000 Tags	3.60	5.43	5.85	5.15	4.94	7.76	3.36	0.67	3.39	4.97	3.76	4.00	3.71	1.01	4.69	4.19	2.85	2.65	2.42	2.99	2.43	2.74	0.00	3.35	3.29
% Change	3%	9%	-24%	42%	4%	-32%	16%	83%	19%	-10%	-19%	-7%	16%	9%	-15%	19%	12%	74%	-7%	-3%	20%	14%	0%	7%	7%
YTD June 2012	49	78	32	46	205	44	34	8	35	43	35	199	51	24	41	68	184	44	18	81	29	172	0	760	760
YTD June 2011	46	62	64	38	210	57	27	5	37	62	40	228	55	31	54	70	210	49	24	101	30	204	0	852	852
% Change	7%	26%	-50%	21%	-2%	-23%	26%	60%	-5%	-31%	-13%	-13%	-7%	-23%	-24%	-3%	-12%	-10%	-25%	-20%	-3%	-16%	0%	-11%	-11%
June 2012	7	12	2	5	26	10	8	1	10	15	12	56	9	3	9	12	33	12	4	18	8	42	0	157	157
June 2011	7	19	6	6	38	15	2	1	7	11	8	44	6	12	12	9	39	10	6	33	6	55	0	176	176
% Change	0%	-37%	-67%	-17%	-32%	-33%	300%	0%	43%	36%	50%	27%	50%	-75%	-25%	33%	-15%	-15%	20%	-33%	-45%	-24%	0%	-11%	-11%
At-Fault Dig-Ins																									
Target/Goal (Rate) 2012	**0.16**	**0.16**	**0.16**	**0.16**	**0.16**	**0.16**	**0.16**	**0.16**	**0.16**	**0.16**	**0.16**	**0.16**	**0.16**	**0.16**	**0.16**	**0.16**	**0.16**	**0.16**	**0.16**	**0.16**	**0.16**	**0.16**	**0.16**	**0.16**	**0.16**
RAG Status 2012	**Green**	**Red**	**Red**	**Red**	**Red**	**Red**	**Red**	**Green**	**Red**	**Red**	**Red**	**Red**	**Red**	**Green**	**Red**	**Red**	**Red**	**Green**	**Red**	**Green**	**Red**	**Red**	**Green**	**Red**	**Red**
YTD June 2012 - At-Fault Dig-ins/1000 Tags	0.08	0.91	0.98	0.32	0.55	0.60	0.46	0.15	0.34	0.21	0.26	0.34	0.51	0.05	0.58	0.44	0.33	0.10	0.50	0.14	0.30	0.22	0.00	0.33	0.33
YTD June 2011 - At-Fault Dig-ins/1000 Tags	0.00	0.00	0.55	0.54	0.24	0.14	0.12	0.00	0.18	0.24	0.00	0.12	0.47	0.03	0.09	0.12	0.15	0.00	0.10	0.15	0.08	0.49	0.00	0.14	0.14
Target/Goal YE (Number) 2012***	**4**	**3**	**3**	**3**	**13**	**3**	**3**	**0**	**3**	**4**	**3**	**16**	**6**	**6**	**5**	**6**	**23**	**6**	**4**	**9**	**5**	**24**	**1**	**77**	**89**
YTD June 2012	1	12	7	2	22	5	4	1	3	2	3	18	6	1	6	6	19	1	4	4	3	12	0	71	71
YTD June 2011	0	0	6	4	10	1	1	0	2	3	0	7	7	1	1	2	11	0	1	5	1	7	0	35	35
% Change	0%	0%	17%	-50%	120%	0%	300%	0%	50%	-33%	0%	157%	-14%	0%	0%	200%	73%	0%	0%	-20%	0%	71%	0%	103%	103%
June 2012	0	2	0	0	2	1	0	0	1	2	1	5	0	0	3	0	3	0	2	1	1	4	0	14	14
June 2011	0	0	1	0	1	0	0	0	0	2	0	2	1	0	1	0	2	0	1	1	1	3	0	8	8
% Change	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	150%	0%	0%	0%	0%	50%	50%	0%	0%	0%	0%	0%	75%	75%
At Faults that were Mismarked																									
YTD June 2012	1	12	1	6	20	2	4	0	1	1	2	10	4	1	3	4	12	0	3	4	0	7	0	49	49
YTD June 2011	0	0	6	4	10	1	2	0	2	3	0	8	7	1	1	2	11	3	1	5	1	10	0	39	39
% Change	0%	0%	-83%	50%	100%	0%	100%	0%	-50%	-67%	0%	25%	-43%	0%	0%	100%	9%	9%	-100%	0%	-20%	-30%	0%	26%	26%
June 2012	0	2	0	0	2	0	0	0	0	1	1	2	0	0	1	0	1	0	2	1	0	3	0	8	8
June 2011	0	0	1	0	1	0	0	0	0	2	0	2	0	0	1	0	1	0	1	1	1	3	0	7	7
% Change	0%	0%	-100%	0%	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	14%	14%

** Regional Totals exclude ET, FB and dig-ins by PGE to 3P*

*** System Totals include ET and FB*

****Target Goal (Number) for At-Fault does not include GC Gas, GC Elec and Div Elec in the Region Count but will be included in the System Count*

Source: CCD and ORI reports

Damage Prevention Report - July 2012 for June Results

Billing and Claims

Dig-In Claims 1/1/2010 to present

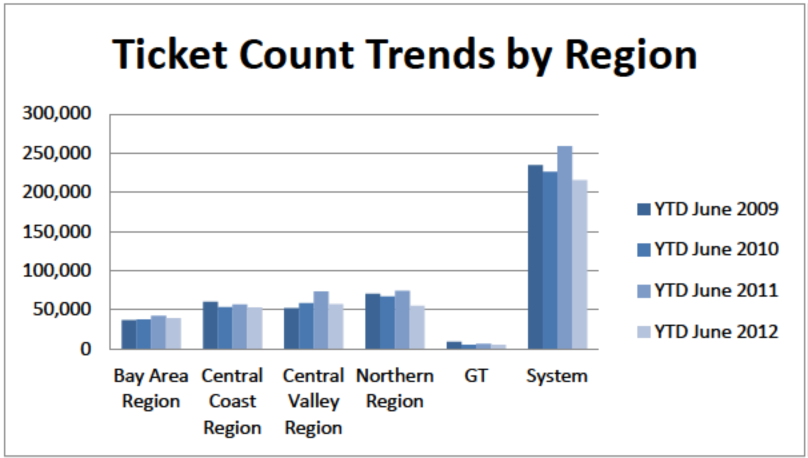
Claim Status Desc	Count of Dig-Ins	Billed	Amount Paid	Written Off Amount	Pending	% Write Off vs Billed	% Collected vs Billed
Arrangement (NECU)	154	$501,551.48	$109,835.67	$14,335.22	$377,380.59	2.86%	21.90%
Closed	2584	$7,544,026.82	$4,857,280.80	$2,655,076.91	$31,669.11	35.19%	64.39%
Collection	502	$3,726,784.61	$48,932.66	$4,083.87	$3,673,768.08	0.11%	1.31%
Judgment- Referred To Collect(NECU)	18	$51,115.54	$200.00	$50,915.54	$0.00	99.61%	0.39%
Legal Pending (NECU)	14	$164,037.66	$0.00	$14,348.66	$149,689.00	8.75%	0.00%
NOD Pending (NECU)	148	$691,096.09	$178,043.47	$454,736.78	$58,315.84	65.80%	25.76%
Grand Total	**3420**	**$12,678,612.20**	**$5,194,292.60**	**$3,193,496.98**	**$4,290,822.62**	**25.19%**	**40.97%**

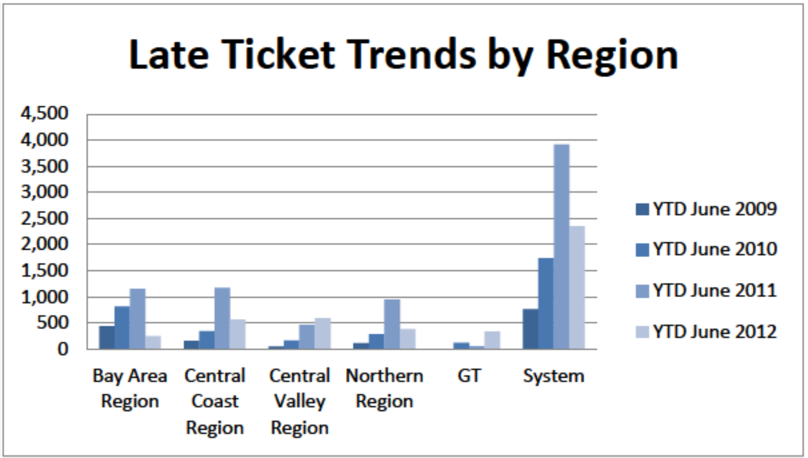
Damage Prevention Report - July 2012 for June Results

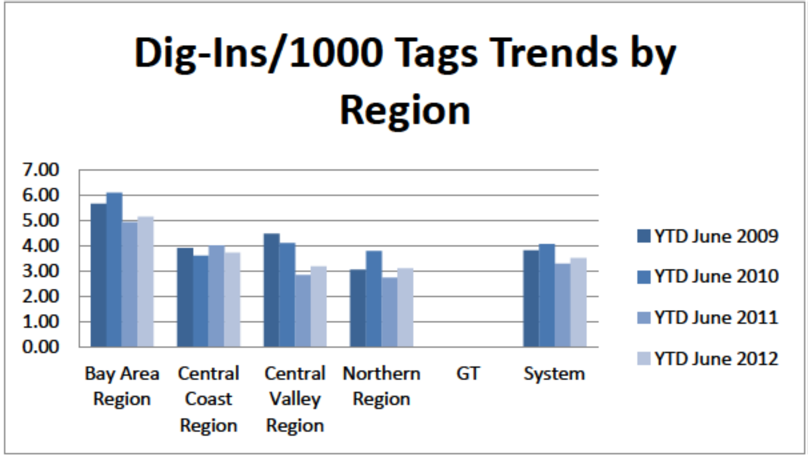
Write Off Reason Desc	Count of Dig-Ins	Billed	Written Off Amount	Pending
Bankruptcy	9	$31,563.48	$28,155.98	$3,157.50
Billed in Error	40	$234,628.68	$229,088.06	-$624.60
Cannot Locate	6	$40,794.43	$10,528.07	$29,224.54
Cannot Prove Liability	91	$422,659.85	$459,341.86	-$36,682.01
Collection Attempts Unsuccessful	341	$880,923.91	$780,131.89	$65,967.15
Compromise	704	$3,028,042.54	$674,009.55	$11,644.01
Deceased	1	$4,870.59	$4,870.59	$0.00
Delayed Bill	1	$323.72	$323.72	$0.00
Government Statute Expired	2	$3,304.37	$3,304.37	$0.00
Insurance Policy Limit	2	$20,574.05	$11,498.09	$0.00
Lack of Internal Support	31	$330,353.43	$330,352.76	$0.67
Mis-marked	53	$158,657.50	$165,768.53	-$7,111.03
Not Cost Effective	49	$37,087.87	$36,737.87	$0.00
Not Marked	52	$187,438.39	$166,815.68	$20,622.71
Other	30	$109,422.81	$105,709.39	$0.00
Out of Business	5	$16,926.83	$19,651.74	-$3,324.91
Per LO / SH&C	5	$9,408.89	$9,408.89	$0.00
Statute Expired	7	$28,793.79	$11,120.03	$12,674.12
Unable to Determine Resp. Party	13	$30,022.85	$30,022.85	$0.00
Uncollectible	2	$3,368.30	$3,368.30	$0.00
Write Off Policy/under$500&over 6 mnth	6	$2,308.94	$2,308.94	$0.00
(blank)	1970	$7,097,136.98	$110,979.82	$4,195,274.47
Grand Total	**3420**	**$12,678,612.20**	**$3,193,496.98**	**$4,290,822.62**

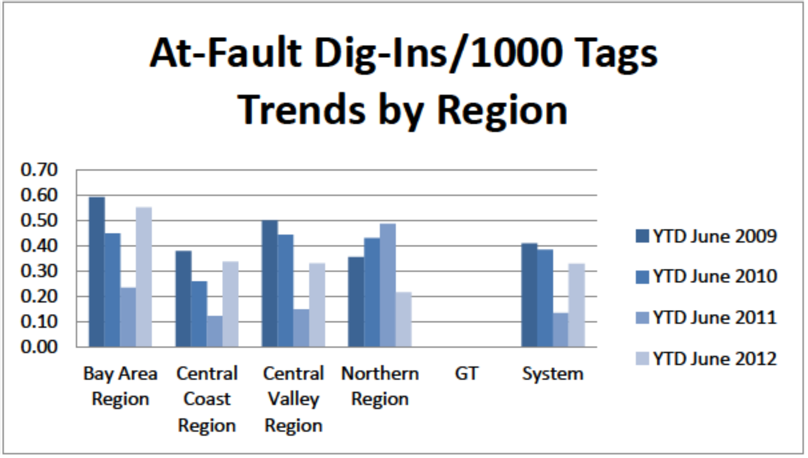
Damage Prevention Report - July 2012 for June Results

Trend Data


Ticket Count Trends by Region


Late Ticket Trends by Region


Dig-Ins/1000 Tags Trends by Region


At-Fault Dig-Ins/1000 Tags Trends by Region

Footnotes:

1) 2009 and 2010 Dig-In and At-Fault numbers include all dig-ins including PG&E to 3rd Party; 2011 and 2012 Dig-In and At-Fault numbers exclude PG&E to 3rd Party
2) System Totals include GT, ET, and FB

Damage Prevention Report - July 2012 for June Results

III. Observations / Analysis

Category		Discussion of Current Status
Locate and Mark	# of Tickets	• 17% decrease in tickets worked system wide compared to last year
	Late Locates	• Significant increase in late locates over last year in Central Valley Region and GT
Dig-Ins	Overall	• Dig-ins/1000 tags up 7% from last year's performance • Working on outreach and repeat offender programs to reduce dig-ins from excavators not calling USA
	At-Fault	• Significant increase in at-fault dig-ins over last year (65 minimum YTD vs. 35 last year YTD) • 6 dig-ins awaiting further information to determine at-fault status • Performed additional root cause analysis (included in Supporting Information section)

IV. Process Improvement Initiatives

Initiative Overview – Damage Prevention Process		
Exec. Sponsor	**Roland Trevino**	
Process Owner	**Christine Cowsert Chapman**	
Initiative Description	Managing all Underground Service Alert notifications and mark out facilities for gas transmission and distribution. Providing oversight when work is being done in close proximity to company facilities (works with Legal, 811, and Patrolling).	
Initiative Strategy	People	Locating function managed by a system wide organization or process for both gas and electric.
	Process	Complete transparency between actual in house costs and realistic out sourced costs to drive competitive pricing. More awareness and focus on actual damage causation. Robust process for identifying third party work that could pose risk to pipeline integrity, and provide field oversight of all work determined to be risky.

Damage Prevention Report - July 2012 for June Results

	Technology	Acquire and utilize more advanced and efficient mobile reporting systems, software that allows gas services cards to be stored and accessed electronically.

Key Initiatives

Initiative Category	Initiative Name	Status
Public Awareness	1. Additional Excavator Outreach	🟨
Repeat Offenders	2. Legislation Implementing Penalties for One Call Law	▨
Repeat Offenders	3. Develop Repeat Offender Process	🟩
Locate and Mark	4. Locate and Mark Process Improvements	🟨
Locate and Mark	5. Locate and Mark Tools and Equipment	🟥
Locate and Market	6. Upgrade Ticket Retrieval Information System	🟨

Initiative Schedule and Status

Initiative	**1. Additional Excavator Outreach**	
Team Members	**Christine Cowsert Chapman, Joel Dickson,** [redacted]	
Scope	**A. Develop and implement advertising campaign** **B. Develop and send additional print materials** **C. Conduct additional outreach via the Public Safety team**	
Benefits (Soft)	**Increased effectiveness of Public Awareness program via additional methods of communication with primary audiences.**	
Costs	**TBD – minimal**	
Milestone	**Target Completion Date**	**Comments**
Plan for advertising campaign from Community Relations	Completed	Received initial plan from [redacted]
Develop additional print communications for distribution	July 15	First draft of letter to customers within pipeline ROW complete, currently being reviewed to incorporate additional Public Awareness messaging.
Develop plan for excavator outreach via Public Safety	July 31	First discussion held week of May 21st. Discussion to continue as part of repeat offender program.

Distribute print communications to customers/excavators	July 31	Scope of customers to be contacted needs to be developed. Bill insert scheduled for October.
Implementation of advertising campaign	August 11	Radio advertising began airing week of June 11. National 811 campaign to air during Olympics.

Description	Accountability	2012	2013	2014	2015	2016
Costs	DIMP	TBD				
Specific Benefit, Expense Savings						

Discussion Items
Additional print materials are being developed to support the needs of the patrol/encroachment work underway, as well as improve the effectiveness of PG&E's communications to customers along the transmission pipeline ROWs. **Additional outreach to excavators will be discussed as part of the repeat offender program effort.**

Initiative Schedule and Status		
Initiative	**2. Legislation Implementing Penalties for One Call Law**	
Team Members	[redacted] **Roland Trevino, Christine Cowsert Chapman, Joel Dickson**	
Scope	**Work with Governmental Relations to provide comments and participate in process of implementing AB-1514 regarding fines for repeat offenders of the one call law.**	
Benefits (soft)	**Reduced damages to PG&E's system as a result of increased fines.**	
Costs	**None**	
Milestone	**Target Completion Date**	**Comments**
Provide Comments on Proposed Language	Completed	Provided comments to [redacted] in April.
Bill Tabled	May 2012	Bill not going to vote this year.

Description	Accountability	2012	2013	2014	2015	2016
Costs	N/A					
Specific Benefit, Expense Savings	TBD					

Damage Prevention Report - July 2012 for June Results

Discussion Items
Provided comments on language, but bill will not make it for a vote this year. No further action or changes expected in 2012.

Initiative Schedule and Status		
Initiative	**3. Develop Repeat Offenders Process**	
Team Members	**Christine Cowsert Chapman, Maria Arquines, Billing, NECU**	
Scope	**Develop progressive process for addressing repeat offenders of the one call law.**	
Benefits	**Reduced costs associated with damage to PG&E's facilities by repeat offenders due to increased awareness.**	
Costs	**TBD**	
Milestone	**Target Completion Date**	**Comments**
Develop Plan	Complete	Held meeting with legal, claims, and billing. Plan developed for kicking off committee.
Hold Kickoff Meeting	July 31	Committee members identified, first meeting to be held in July.

Description	Accountability	2012	2013	2014	2015	2016
Costs	DIMP	TBD				
Specific Benefit, Expense Savings	TBD					

Discussion Items
Process for handling repeat offenders has begun and plan has been developed. First committee meeting will be held in July to kick off process. In addition, a separate committee has been established to address the claims backlog.

Initiative Schedule and Status	
Initiative	**4. Locate and Mark Process Improvements**
Team Members	**Chris Mcgowan, [redacted] Mobile Team**
Scope	**Develop and implement improved processes for Locate and Mark, including standards, procedures, and implementation of technology.**
Benefits	**Improvement of work performance due to better standards and work procedures; improved effectiveness at L&M based on use of new technology**

Costs	**TBD**	
Milestone	**Target Completion Date**	**Comments**
Implementation of Utility Procedure TD-4412P-03, "Marking and Locating PG&E Underground Facilities"	Completed	Procedure rolled out in March of 2012.
Mobile Platform – Phase 1	June 30	Preliminary rollout of tablets has not yet taken place.
Mobile Platform – Phase 2	Sept 30	Second phase of tablet rollout.

Description	Accountability	2012	2013	2014	2015	2016
Costs	Asset Knowledge Mgmt	TBD				
Specific Benefit, Expense Savings	TBD					

Discussion Items
Impact of switch in tablet technology on target dates unclear at this time.

Initiative Schedule and Status

Initiative	**5. Locate and Mark Tools and Equipment**	
Team Members	**Chris Mcgowan, Lenny Caldwell, Christine Adams**	
Scope	**Evaluation of two new tools for use in locating unlocateable facilities (acoustic locators and locating tape), and continued rollout of new Vivax locating tools.**	
Benefits	**Improved safety related to locating facilities that were previously unlocateable.**	
Costs	**$50,000 unlocateable tools, $2 million Vivax tools.**	
Milestone	**Target Completion Date**	**Comments**
Purchase Tools for Pilot	Completed	Purchased two acoustic locators and multiple locating tape to test in North Bay.
Complete pilot for unlocateable tools	June 30	Pilot remains underway, but taking longer than initially anticipated.
Determine next steps for	August 31	Based on results of pilot, determine if PG&E should move forward

unlocateable tools		with purchasing the tools.
Complete rollout of Vivax tools	Sept 30	Scheduled to complete rollout of 75 additional Vivax tools with mobile rollout; some pushback from the field on new equipment that needs to be evaluated.

Description	Accountability	2012	2013	2014	2015	2016
Costs	DIMP/Capital Tools	$2.05 million				
Specific Benefit, Expense Savings	TBD					

Discussion Items
Feedback on Vivax tools has been mixed. Additional conversation will be had before additional 75 units are purchased to be rolled out in the field. Resources to support rollout are limited (resource gaps in Methods and Procedures and Standards).

Initiative Schedule and Status		
Initiative	**6. Upgrade Ticket Retrieval Information System**	
Team Members	**Chris Mcgowan**	
Scope	**Improve capabilities of IRTHnet for scheduling and reporting.**	
Benefits	**Improved effectiveness of software.**	
Costs	**$267,000**	
Milestone	**Target Completion Date**	**Comments**
Software Requirements to Vendor	Completed	Outlined additional customizations needed.
Changes to system available for testing	Sept 30	
Changes to system go live	Oct 31	

Description	Accountability	2012	2013	2014	2015	2016
Costs	DIMP	$267,000				
Specific Benefit, Expense Savings	TBD					

Discussion Items

Upgrades to include "negotiate new start time" information, standby and field meet tracking, new or revised default values, additional map search capabilities.

V. Supporting Information

In June, the Damage Prevention team conducted a high level root cause analysis of the YTD at-fault dig-ins. Nearly 80% of the at-faults YTD were related to mismarks, as shown below. In drilling into the causes of the mismarks further, two main drivers were identified: lack of locating wire and mapping error.

Event Number	(All)

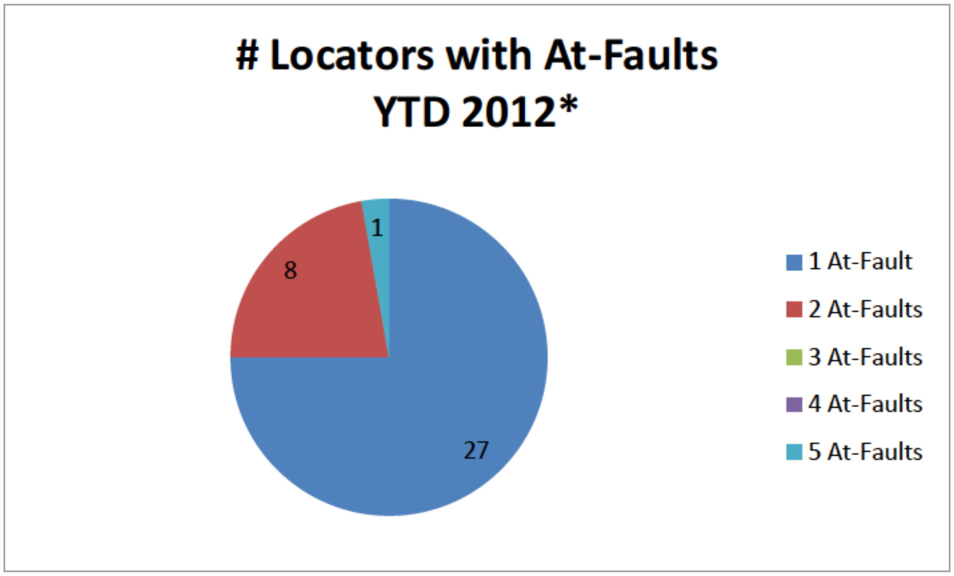
Count of count					
Event Type Desc	**root cause**	**Valid USA #? Desc**	**Facilities marked accurately? Desc**	**At Fault Status**	**Total**
Dig In to PG&E Underground	Mismarked	Yes	No	Yes	45
	Unknown	Yes	(blank)	Yes	1
		(blank)	(blank)	Yes	6
			(blank)	Yes	1
PG&E Dig In To PG&E	Bad excavation practice	No	(blank)	Yes	1
		Yes	(blank)	Yes	3
	Unknown	(blank)		Yes	1
Grand Total					**58**

Mismarked	
No Locating Wires	7
Mapping Error	9
Missed Facilities	1
Signal Interference	1

We are currently addressing the concerns around unlocateable facilities by piloting instruments that would allow our locators to find facilities with no locating wire. Results from these pilots should be available next month.

The concerns around mapping error appear to be driven by unmapped offsets and inaccurate measurements on maps. Further research is required to better understand this issue to determine what actions can be taken to resolve the key drivers associated with mapping errors. We intend to begin tracking mapping errors as a subset of the at-fault dig-in metric.

In addition to the root cause analysis, we also looked at the locators responsible for the at-fault dig-ins. Of the 36 locators who have had an at-fault this year, nine have had more than one, and one locator has had five year to date. We are working with Work Procedure Error team and local leadership to ensure a plan is in place to address this issue.



*Note: includes only gas at-faults; data not available for electric at-faults

Emergency Preparedness – YTD June 2012 Results

Results	🟡	Emergency Preparedness Overall Performance
Initiative Status	🟡	EP Initiative leads identified; GERP effectiveness and integration throughout Gas Ops continues to be critical path highest priority

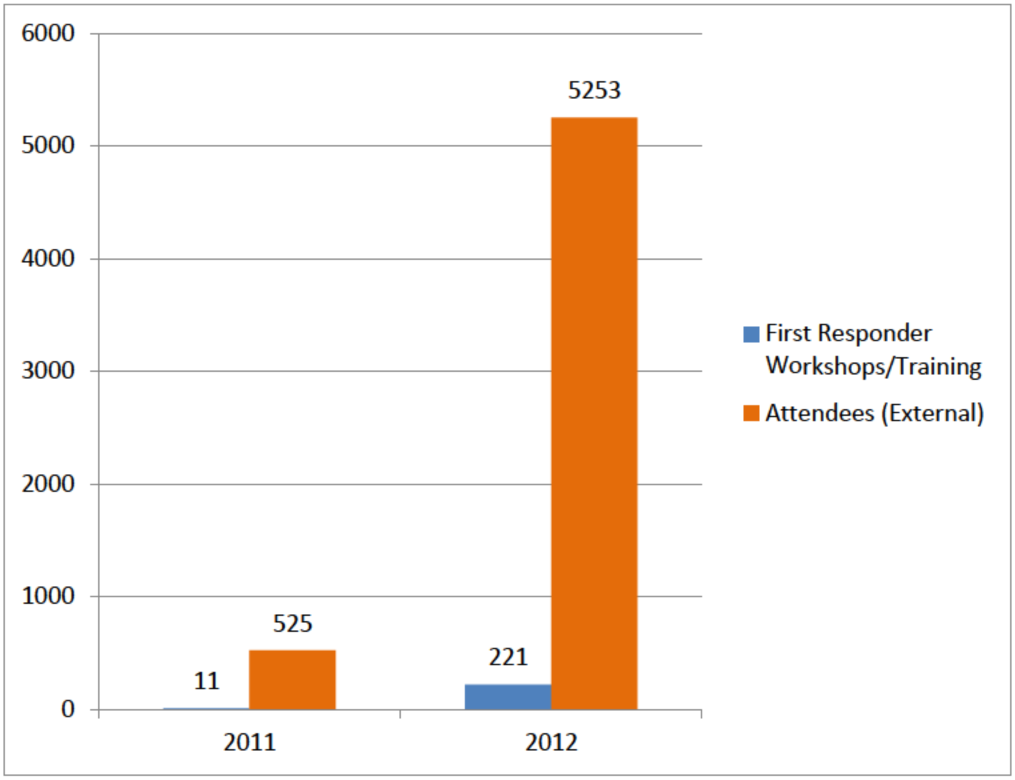
I. Goal / Objective

Emergency Preparedness involves crafting processes, procedures, controls and practices that support our emergency response efforts to any gas related event involving our natural gas pipeline system. Our primary objective will be to elevate the Gas Emergency Response Plan (GERP) knowledge and application throughout Gas Operations to enhance our ability to coordinate externally with our public safety first responder populace.

II. Results

First Responder Workshops & Attendance 2011 vs 2012
(As of July 1, 2012)

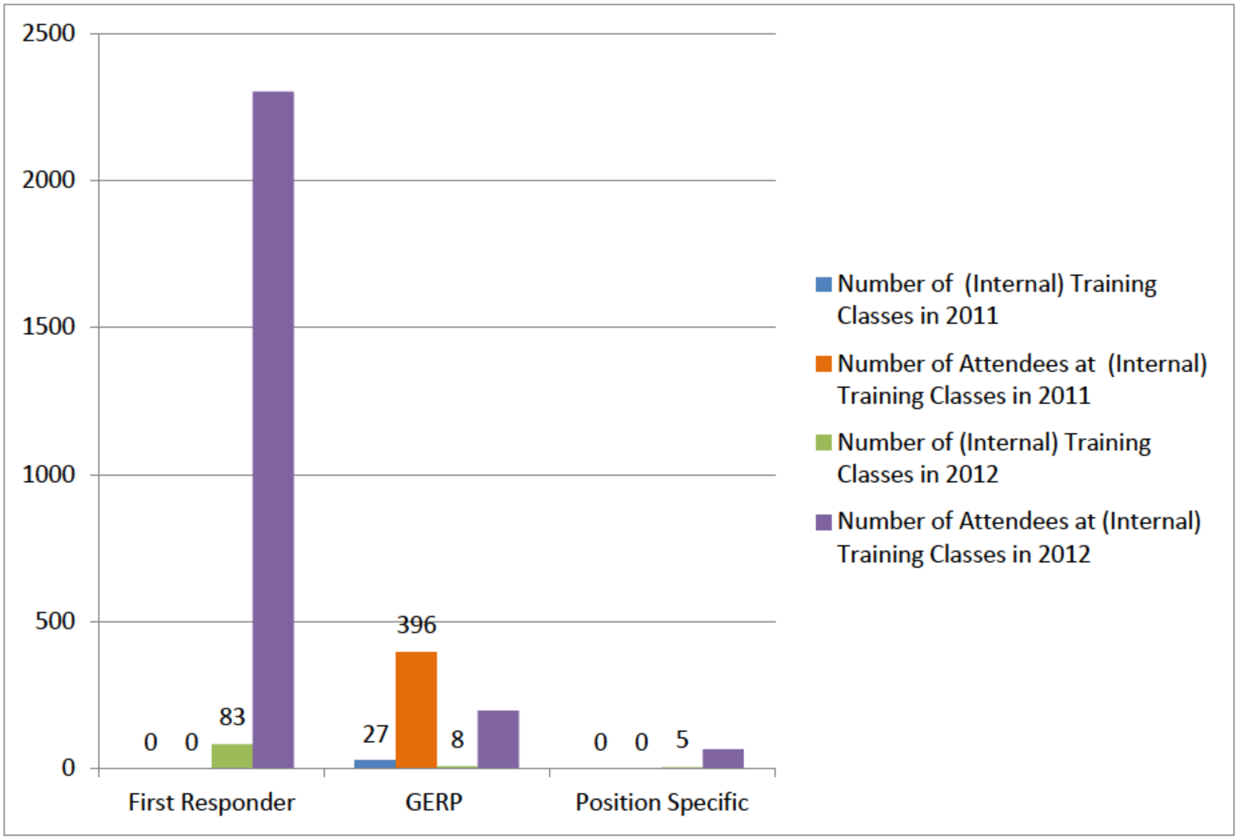
	2011	2012
First Responder Workshops/Training	11	221
Attendees (External)	525	5253



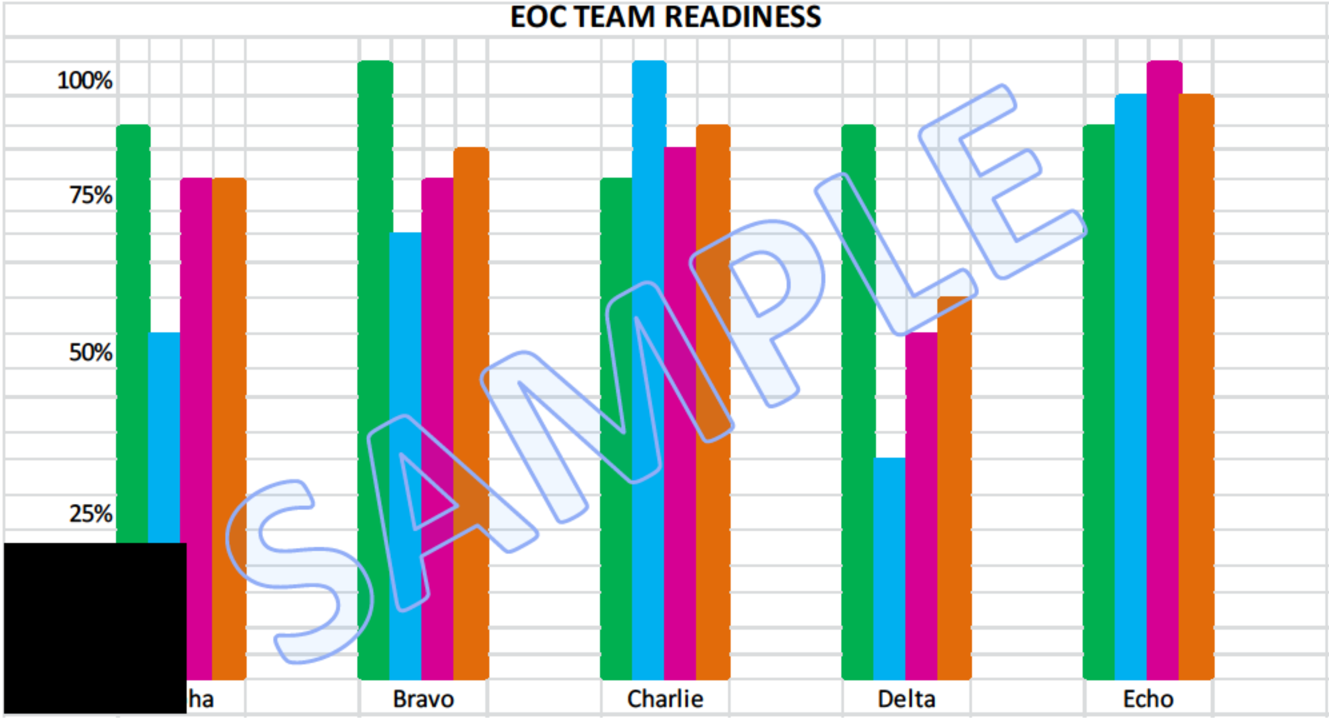
Emergency Preparedness – YTD June 2012 Results

Internal Training Conducted & Attendance 2011 vs 2012

	Number of (Internal) Training Classes in 2011	Number of Attendees at (Internal) Training Classes in 2011	Number of (Internal) Training Classes in 2012	Number of Attendees at (Internal) Training Classes in 2012
First Responder	0	0	83	2301
GERP	27	396	8	198
Position Specific (EOC)	0	0	5	66



Emergency Preparedness – YTD June 2012 Results



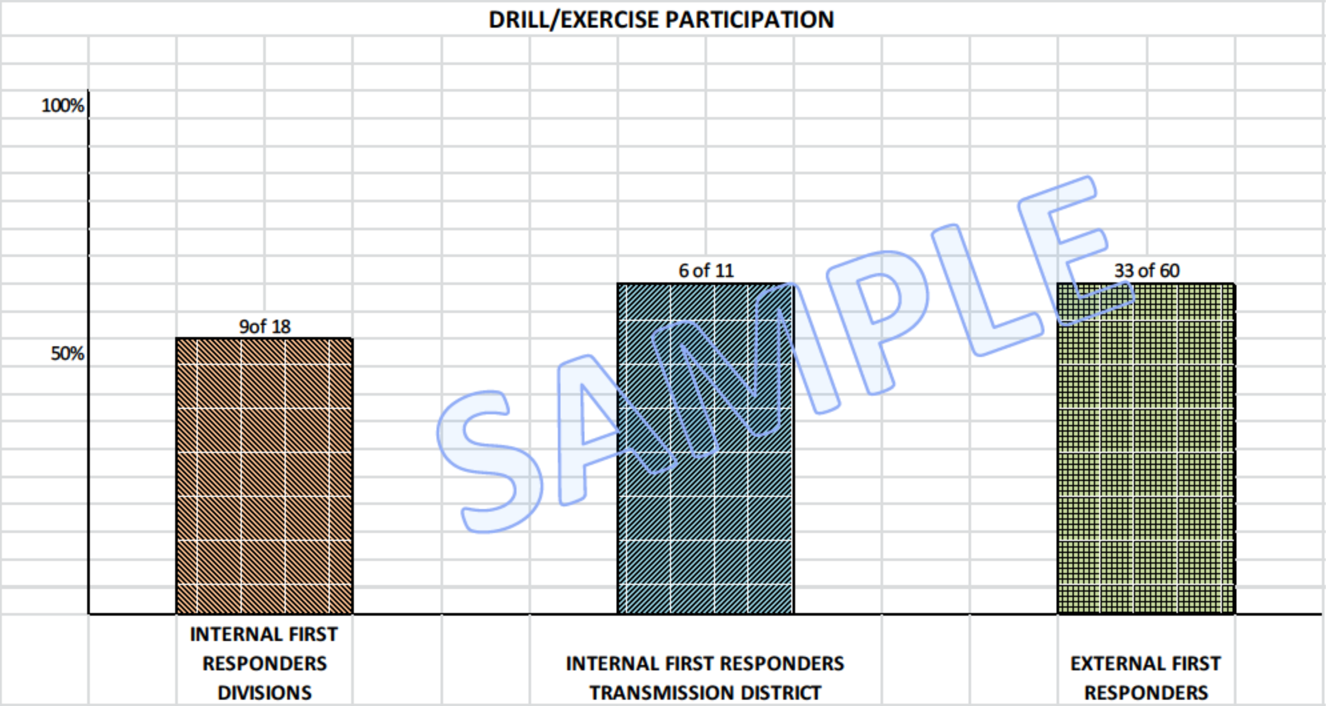
[redacted]

EXAMPLE ONLY - METRIC UNDER DEVELOPMENT

LEGEND

🟩 Spot Drill Participation
🟦 Availability of GERP
🟪 Completion of ICS training
🟧 Overall Readiness

Emergency Preparedness – YTD June 2012 Results



EXAMPLE ONLY - METRIC UNDER DEVELOPMENT

III. Observations / Analysis

Observations:

- GERP knowledge limited throughout Gas Ops as observed through discussions, exercise and tabletops
- Awareness of Mobile Command Vehicle deployment process has increased
- ~800 of 1682 external first responders have registered for GT Web Portal access rights
- Public Awareness Program and accompanying activities requires further role clarification
- Technology enhancements will increase accessibility and visibility to GERP, training records (Mobile App)

Key June Accomplishments:

- Completed retirement/repurpose of Gas Restoration Center
- Deployed new 5 EOC Team (concept) rotation
- Delivered/Completed 5 internal training workshops (EOC position, EOC operation, ICS Principles, GERP refresher)
- Coordinated 2 external FD field exercises and completed "hot wash" critiques
- Completed GT web portal phase 2 delivery (GERP view ability, redesigned home page, Sr. PSS contact info added, feedback section for users)
- Completed 318 pipeline safety workshops for first responders which reached ~5,200
- SLA with Community Affairs secured

July Objectives:

- Complete requirement discussion for learning management and customer relationship tool
- Complete design for GERP mobile app and define beta testing requirements
- Complete draft of corrective action metric suite for internal/external
- Complete design of 5 minute tailboard on GERP (pilot will be with FS)
- Continue efforts to personally meet/reach out to impacted groups on EP improvements efforts
- Deliver scenario /drills for Gas Ops (5 total) in 2012; set goal for 2013 and beyond
- Solidify GERP updates for version 2 launch 8/12 (mutual aid, district specifics)

IV. Process Improvement Initiatives

Initiative Overview	
Sponsor	Roland Trevino
Team Leads	Joel Dickson
Initiative Description	Instituting processes, procedures, practices and controls that support emergency response

Emergency Preparedness – YTD June 2012 Results

Initiative Strategy	Drive business understanding/integration of GERP as core to our ability to ensure safe reliable gas delivery by delivery of actionable tools and resources. • Test knowledge of plan by multiple exercise opportunities • Design relevant drills and exercise scenarios for lob • Ensure effectiveness of plan is measured with corrective actions documented and closed out • Integrate technology within EP as additional tool for use during incidents • Fully developed partnerships with external emergency first responder agencies

Key Initiatives		
Initiative Category	**Initiative Name**	**Status**
People	GERP knowledge and effectiveness	🟨
	Investigate joint training facility (CalEMA, SMUD, Sacto FD)	🟨
Process	Define/deliver GERP training in gas ops	🟨
	Define EP metric suite	🟥
	Sub team identified for public awareness	🟨
Technology	LMS tool	🟨
	CRM Tool	🟨
	GT web portal enhancement and tracking capability	🟨

Emergency Preparedness – YTD June 2012 Results

Initiative Schedule and Status		
Initiative	GERP knowledge and Integration into Gas Ops	
Team Members	[redacted] (lead) – Field Services , M&C, GTM&C	
Scope	Focus on first line supervisors to shape content/timing/content	
Benefits (Soft)	Increased ownership and knowledge of GERP application	
Costs	Minimal costs associated with initiative; EP process team to create document(s)	
Milestone	**Target Completion Date**	**Comments**
Template/content discussion	**6/20/12**	[redacted] to hold focus groups within FS; bring findings back to EP team
5 minute tailboards delivered	**7/30/12**	EP tech writer to partner with GW to deliver tailboards

Description	**Accountability**	**2012**	**2013**	**2014**	**2015**	**2016**
Costs						
Specific Benefit, Expense Savings						

Discussion Items
We will pilot 5 minute tailboard content of GERP within field services initially to gauge level of detail required to ensure comfort with delivery. GW will provide EP process team with feedback from FS first line supervisors on what's working and what's not.

Emergency Preparedness – YTD June 2012 Results

Initiative Schedule and Status		
Initiative	Joint Training Facility	
Team Members	Joel Dickson lead (process team)	
Scope	Investigate opportunity to partner with external agency in building a combination fire service gas/electric training facility in Mather Ca.	
Benefits	Enhancement to training, partnership and coordination with external first responders	
Costs	tbd	
Milestone	**Target Completion Date**	**Comments**
Initial Conference call	**3/2012**	Introduction of concept; meet potential parties
Site Visit/Design review	**6/2012**	CUEA Exec Director coordinating dates for site visit

Description	Accountability	2012	2013	2014	2015	2016

Discussion Items

Initiative is still vague as it relates to our participation/commitment to potential project. [redacted] inquired as to my and [redacted] interest level back in March 2012. Since the initial conference call there has been no additional information shared on drawings, design or financial commitment required from us. As more information and plausibility of project becomes clearer we will have better information to make decisions. 6,120 site visits rescheduled by CAL EMA. Awaiting new date/time for site visit and review of plans.

Emergency Preparedness – YTD June 2012 Results

Initiative Schedule and Status		
Initiative	Define/Deliver GERP overview to operations (gas control, distribution control and dispatch)	
Team Members	[redacted] (EP process team)	
Scope	Integration/Awareness of GERP within control room environment	
Benefits	Common understanding of plan application during pipeline events	
Costs	tbd	
Milestone	**Target Completion Date**	**Comments**
Assess current gaps/awareness	**8/30/12**	Validate current application and controls for knowledge transfer
Create exercise scenario	**9/26/12**	Design exercise involving dispatch, dist/trans control
Tabletop exercise	**11/15/12**	Walk through potential scenario to test communication process

Description	Accountability	2012	2013	2014	2015	2016
Costs						
Specific Benefit, Expense Savings						

Discussion Items

Control room activity and understanding of GERP critical path to efficiently manage through events. Frequent testing of plan knowledge, communication channels are essential to getting a clear assessment in capabilities. We are getting a goal of 5 exercises/drills within Gas Ops to test knowledge.

Emergency Preparedness – YTD June 2012 Results

Initiative Schedule and Status		
Initiative	Define going forward EP metric Suite	
Team Members	Mike Falk (EP process team)	
Scope	Design metric for corrective action items found during "hot wash" reviews	
Benefits	Creation of traceable compliance/process gaps to closure	
Costs	tbd	
Milestone	**Target Completion Date**	**Comments**
Initial CA draft	**6/20/12**	Draft of corrective action graphical depiction
Refine CA metric	**8/28/12**	Beta testing for data source/repeatability QA

Description	Accountability	2012	2013	2014	2015	2016
Costs						
Specific Benefit, Expense Savings						

Discussion Items
In parallel with working through corrective actions metric we will set up some conference calls with a few industry peers to see what preparedness activities they currently track. Currently TransCanada, Spectra and Ameren are viewed as companies with mature training, gap and metric analytics in place.

Emergency Preparedness – YTD June 2012 Results

Initiative Schedule and Status		
Initiative	Public Awareness Program Enhancements	
Team Members	[redacted] Christine Cowsert, Joel Dickson, Manager Damage prevention, PA working team	
Scope	Enhance PA program capabilities, delivery and effectiveness	
Benefits	Increased pipeline safety information sharing with customers/first responders	
Costs	tbd	
Milestone	**Target Completion Date**	**Comments**
Meet with sub team lead	**8/28/12**	Christine, myself Mgr DP set expectations
Sub team defines strategy	**10/26/12**	Define what priorities/costs associated
Create report out mechanism	**12/23/12**	Status reporting quarterly, monthly, annually
PA audit reporting structure	**2/25/13**	Tracking of audit findings report published

Description	**Accountability**	**2012**	**2013**	**2014**	**2015**	**2016**
Costs						
Specific Benefit, Expense Savings						

Discussion Items

Critical path for PA program will be to elevate activities and outcomes of current activities to gas ops organization. Establishing a clear and concise strategy on program focus, deliverable dates and ongoing activities will help ensure program effectiveness.

Emergency Preparedness – YTD June 2012 Results

Initiative Schedule and Status		
Initiative	Learning Management Tool (LMS)	
Team Members	Joel Dickson (lead), [redacted] Jeff Carroll, [redacted]	
Scope	Define requirements for employee training records repository and profiles	
Benefits	Tracking capability for internal/external training requirements	
Costs	Tbd	
Milestone	**Target Completion Date**	**Comments**
Define requirements	**3/15/13**	Document requirements of tool
Discuss current capability	**4/1/13**	Meet with learning services to assess current capability

Description	Accountability	2012	2013	2014	2015	2016
Costs						
Specific Benefit, Expense Savings						

Discussion Items

Determine if requirements can be phased in at different intervals based upon financial commitment. Can we build LMS to be compatible and integrate with existing SAP platform?

Emergency Preparedness – YTD June 2012 Results

Initiative Schedule and Status		
Initiative	Customer Relationship Management Tool (CRM)	
Team Members	[redacted] Joel Dickson, [redacted]	
Scope	Deploy tool that allows internal interactions with external parties to be documented and commitments tracked. Additionally, this tool should allow external partners to schedule training, request a meeting and track commitments	
Benefits	Provides visibility to our teams as we engage similar groups in our day to day jobs	
Costs	tbd	
Milestone	**Target Completion Date**	**Comments**
Define requirements for EP	**8/30/12**	Determine what needs are we trying to address
Meet w/ DPW process team	**9/30/12**	Communication/Change Management Plan
Training/Workshops	**11/30/12**	Training/Workshops for Key Stakeholders
Training Workshops	**2/2013**	Training/Workshops for Secondary Users

Description	Accountability	2012	2013	2014	2015	2016
Costs						
Specific Benefit, Expense Savings						

Discussion Items
[redacted] is lead for this initiative as DPW Process owner. We have met and discussed the need for a comprehensive CRM tool for both processes and agreed we should move forward together. We will need to document requirements for both processes and schedule a working meeting with the IT team ([redacted]) to determine next steps.

Emergency Preparedness – YTD June 2012 Results

Initiative Schedule and Status		
Initiative	GT Web Portal Enhancement	
Team Members	[redacted] Jeff Carroll, [redacted]	
Scope	Enhance portal accessibility and traceability of end users	
Benefits	Enhancement of end users experience and application of data sharing	
Costs	~$100,000 (primarily IT labor, data refresh of first responders)	
Milestone	**Target Completion Date**	**Comments**
SLA with IT Map refresh	**3/2012**	60 day refresh of map data required
Create GT portal metric	**9/30/12**	Define what tracking capability we need

Description	Accountability	2012	2013	2014	2015	2016
Costs						
Specific Benefit, Expense Savings						

Discussion Items

Short term solution for data sharing of GT assets moving forward is solid. GT portal continues to perform as designed and has not created any blackout delays. Long term solution being discussed with Southern California Gas Company EP staff and Pipeline Watch Consultant. There is a national effort moving forward sponsored by PRCI to provide pipeline data (as we are currently doing) to additional participants from a secured website. We are in the early stages of understanding what the capabilities are for this effort and how we could integrate our efforts. So Cal Gas is currently the primary partner using this technology with the consultant (presentation at AGA covered pipeline data and public awareness inducements).

V. Supporting Information

*Data compiled manually, looking to create a more streamlined methodology to track/record information used for KTS report.

Shutting in Gas - July 2012 for June Results

Initiative Status	●	All process improvements on track. 2011 data to establish current performance by 3/31 in 2012 has been deemed inaccurate. No accurate data available at this time.

I. Goal / Objective

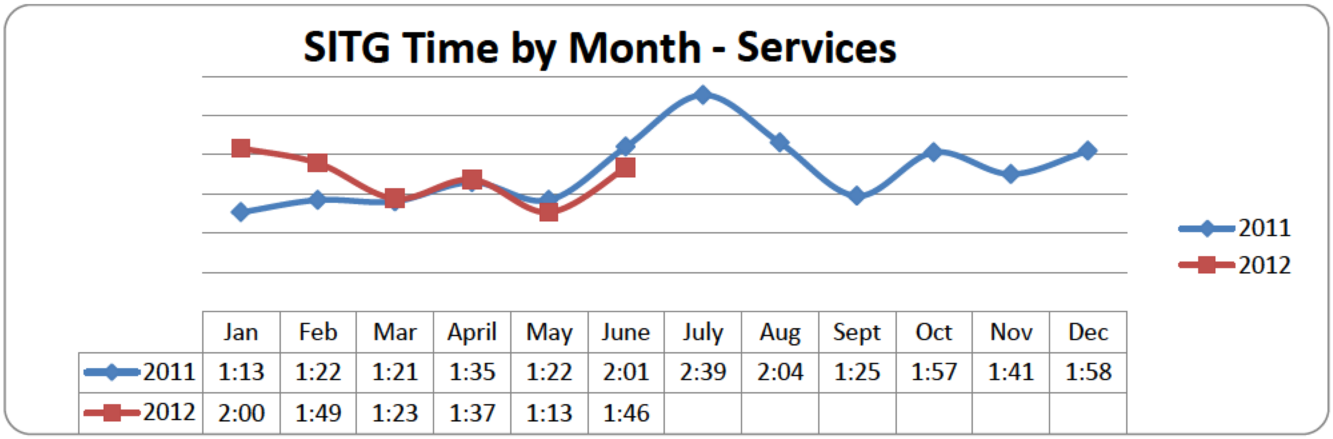
Shutting in Gas: Determine the time it takes PG&E from first being notified of blowing gas to control the line. Implement process improvements to reduce that time by 20% in 2013 and increase public safety. Determine 1st quartile performance by benchmarking with top utilities to set long term goal for PG&E performance.

II. Results

Make Safe	2011 YTD June	2012 Units YTD	2011 Time June YTD	2012 Time YTD
Service	574	587	1:08	1:24
Main	62	82	2:40	3:29
Total (Mains & Services)	636	669	2:04	2:27

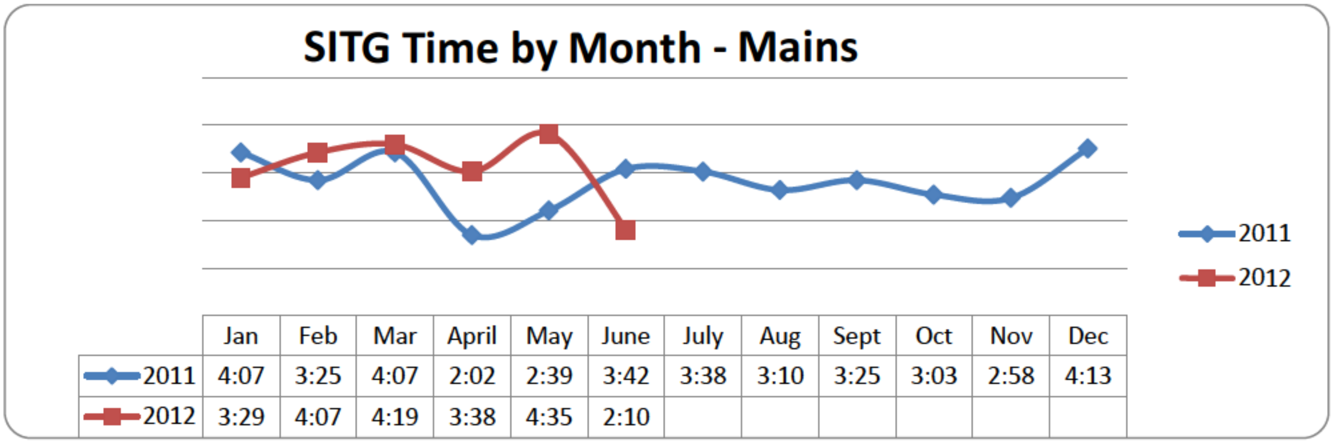
Discussion Items

Volume of blowing gas is based on volume with reasonable time to shut in listed in IGIS (i.e. negative times, under 20 min, etc. were manually removed). Although volume is going up in 2012, it could rather be the accuracy of shut-in times is going up rather than volume.

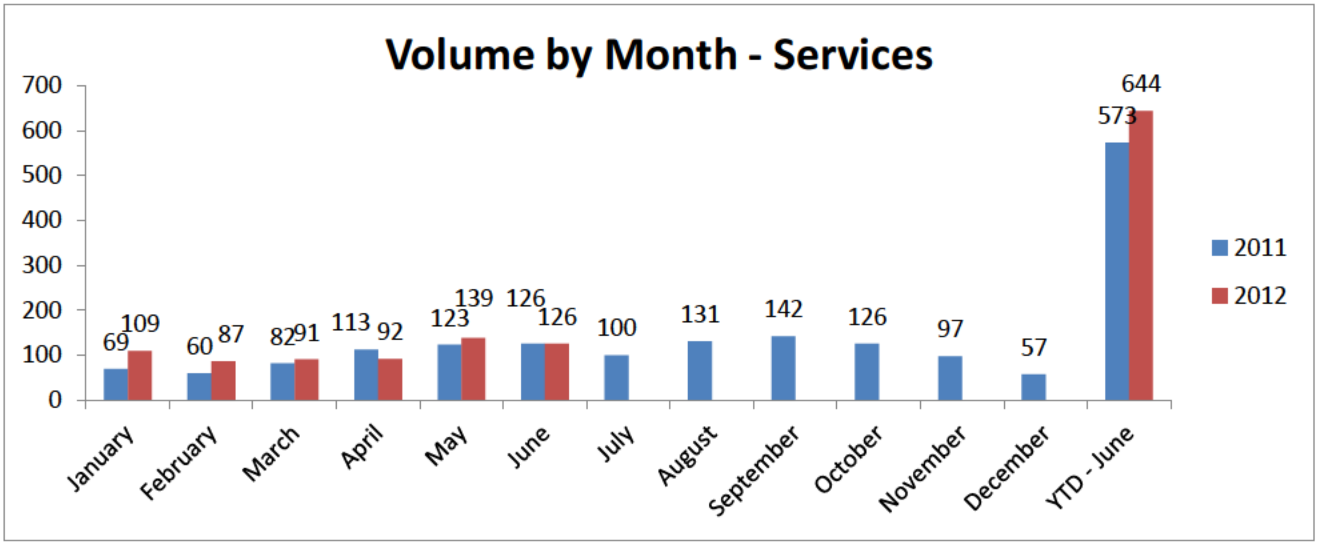


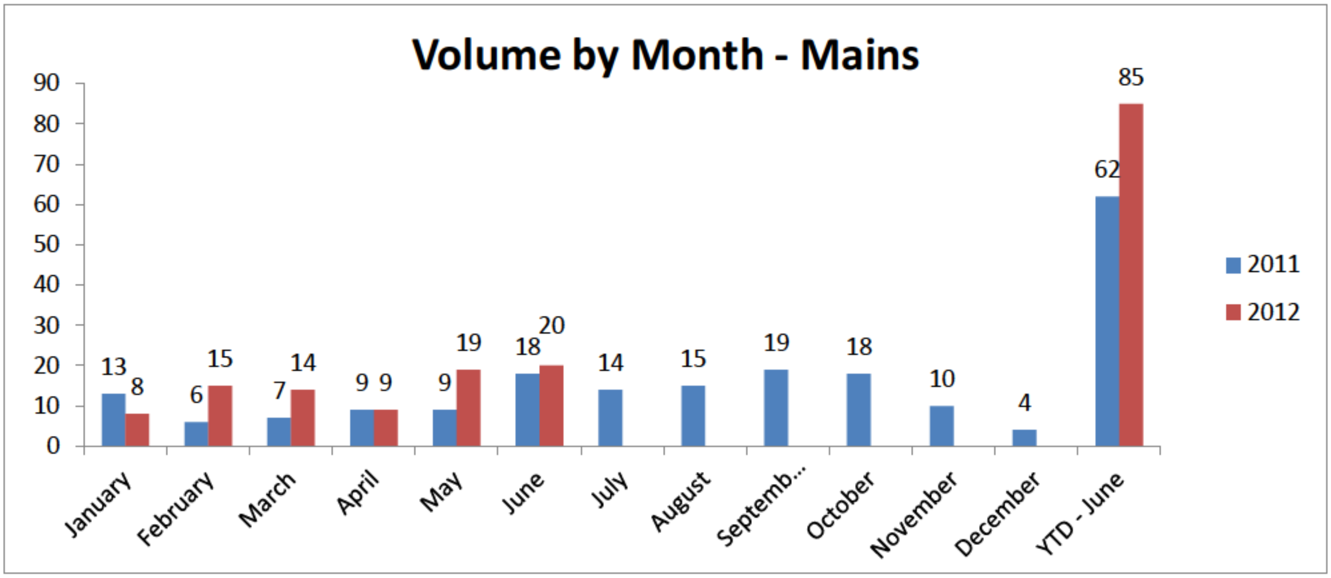
	Jan	Feb	Mar	April	May	June	July	Aug	Sept	Oct	Nov	Dec
2011	1:13	1:22	1:21	1:35	1:22	2:01	2:39	2:04	1:25	1:57	1:41	1:58
2012	2:00	1:49	1:23	1:37	1:13	1:46						

Shutting in Gas - July 2012 for June Results



	Jan	Feb	Mar	April	May	June	July	Aug	Sept	Oct	Nov	Dec
2011	4:07	3:25	4:07	2:02	2:39	3:42	3:38	3:10	3:25	3:03	2:58	4:13
2012	3:29	4:07	4:19	3:38	4:35	2:10						





Shutting in Gas - July 2012 for June Results

III. Observations / Analysis

Initial Observations:

- Past years data is very suspect. Data is recorded and collected from 3 sources.
- Accurate metric reporting still needs to be finalized.
- Not all GSR's are equipped with Squeezers and trained on the process of when to use them.
- Delay on dispatching a crew until first responder is on site and requests a crew.
- Pre-Determined squeeze point committee is not working with the Zone Valve team and Gas Control team to determine next steps. Also looking to benchmark with other utilities and add bargaining unit involvement to analyze shifts and potential shift changes for gas crews.
- Lack of consistent truck take-home practices
- Crew blending and resource sharing opportunities are not maximized when appropriate.

Key June Accomplishments:

- SOS results have been received. Reviewing for benchmarking opportunities.
- Dispatch established as data entry owner for OMT. Process in place for unreported times to be captured and entered by Dispatch. Report of missing times rolling out live week of 7/2. Conference calls held 6/29 with all Superintendents and Managers covering roles and responsibilities around this report.
- Benchmarking appointment made with Southwest Gas for July 26th.

July Objectives:

- Secure 2 additional benchmarking appointments to be completed by August 30th.
- Establish Triage Calls utilizing San Francisco event analysis communication format.
- Distribute finalized SITG KTS Wallet Cards to all M&C and Field Service employees.
- Call-Out procedures job aide for Supervisors distributed within M&C.
- Develop tailboard around best practice of sending Foreman to job site while continuing to assemble crew. Partner with GSR to shut in gas or release GSR to respond to IR's.
- Best practice list shared throughout M&C of tools and procedures for shutting in gas.

Shutting in Gas - July 2012 for June Results

IV. Process Improvement Initiatives

Initiative Overview	
Sponsor	Kevin Knapp
Team Leads	[redacted] / Frank Malcria
Team Members	[redacted], Gordon Fehlman, Tim Bellinghausen, Tim Arterberry, Frank Malcria, Rick Salaz, Kevin Salazar, [redacted], Jimmy Morales, [redacted], [redacted], Donnie Jue, Steve Ripple, [redacted]
Initiative Description	Providing <u>safe</u>, consistent, predictable, efficient and affordable service to all customers and constituents.
Initiative Strategy	• Determine PG&E's performance in 2011 of time taken to shut in gas from first being notified. • Implement action items to prepare for a 20% reduction in such time for 2013. • Benchmark with top Utilities for 1st quartile performance time and process improvement opportunities for PG&E to reach 1st quartile.

Shutting in Gas - July 2012 for June Results

Initiative Schedule and Status		
Initiative	**Metric Reporting and Establishing Target**	
Team Members	[redacted] **Donnie Jue, Jimmy Morales, BU Engagement**	
Scope	**A. Establish baseline for shutting in gas during 2011.** **B. Enhance current reporting procedures to ensure accuracy of 2012 times reported for when PG&E is first notified of blowing gas to the time the gas is shut in.**	
Benefits	**Increase public safety by reducing the time it takes to shut-in blowing gas.**	
Milestone	**Target Completion Date**	**Comments**
Determine Time for 2011	**March 2012**	Time has been determined to shut in gas from when PG&E is first notified, however the data is not completely accurate. Times are incorrect and many events are missing times all together.
Educate Crews & GSR's of responsibility to report times.	**April 2012**	Tailboard developed and shared with all GSR's by 4/30. Tailboard for M&C was first communicated with all Supervisors & Crews in 4th quarter 2011. Re-shared with Supervisors in 1st quarter 2012 and all Crews in the beginning of 2nd quarter, 2012, to be tailboarded by 4/30.
Benchmark 1st Quartile Utilities	**August 2012**	SOS Results by end of June (delay by AGA with conferences). Benchmarking complete by end of August. Bargaining Unit to accompany.
Enhancement of Current Reporting Process	**August 2012**	OMT enhancements have been completed with a new required field of Gas Shut In Time. Reports have been developed to determine when key fields are missing. Next steps:1) finish testing accuracy of daily reports 2)educate Supervisors on daily report of missing data in OMT and what action is necessary 3) train M&C Clerical and Field Service Clerical on how to enter missing data in OMT.

Discussion Items

Shutting in Gas - July 2012 for June Results

Initiative Schedule and Status		
Initiative	**Work Practices & Procedures**	
Team Members	[redacted], **Jimmy Morales, Frank Malcria,** [redacted], **Tim Bellinghausen,** [redacted]	
Scope	**Enhance current policies and procedures for maximum utilization of current training and tools.**	
Benefits		
Milestone	**Target Completion Date**	**Comments**
Equip all GSR's with long handled squeezers and ensure they are OQ'd to use them.	🟩 April 2012	All GSR's are equipped and OQ'd to use long handled squeezers. Tailboard completed with all GSR's to clarify the envelope of gas and encourage squeezing when safe and appropriate.
Dispatch GSR & Crew Simultaneously	🟩 April 2012	Dispatchers have now been trained when hearing key words when speaking with reporting emergency personnel such as "blowing" or "dig-in" that a crew should be dispatched at the same time as a GSR.
Explore cost vs. benefits for utilization of emergency response trailers and tools versus remote yard staging of key tools.	🟨 November 2012	Explore using Wells Cargo type trailers which are stocked and ready to be used in emergency situations. Although they may only be used 6-8 times a year, we believe the value will be in having the trailer stocked and managed by an employee to ensure it is ready for use.
Ensure M&C employees are equipped with the most updated squeezers for steel pipes.	🟩 September 2012	Request submitted for DIMP funding for 668,330, as capital funding is not available. Anticipating approval or denial by the end of June. If approved, order placed by the end of June. September for receiving and distributing tools.
Define procedures for squeezing and pre-determined locations and squeeze points using appropriate size vault.	🟩 September 2012	Pre-Determined Squeeze Point meeting held 2/23/12. Sub-Committee formed that will identify process bench marking with other utilities is being planned around squeezing steel and plastic. Bargaining Unit engagement forthcoming.

Discussion Items

Shutting in Gas - July 2012 for June Results

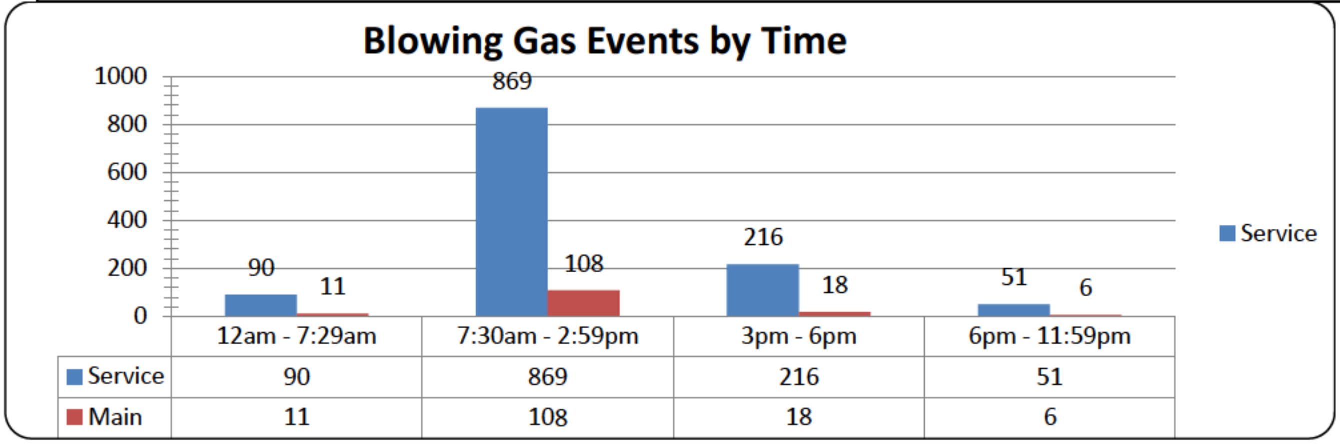
Initiative Schedule and Status

Initiative	**212 Call-Out**	
Team Members	**Rick Salaz,[redacted], Frank Malcria, Tim Bellinghausen, B/U Engagement**	
Scope	**Increase 212 call-out during non-core business hours / days.**	
Benefits	**Reduce response time to blowing gas events after core business hours / days.**	
Milestone	**Target Completion Date**	**Comments**
Partner with Scheduling Supervisor to post T300 locations weekly on SharePoint.	**August 2012**	
Establish system process when local 212 is exhausted and distribute to all M&C Supervisors.	**July 2012**	Process established using IR guidelines from Electric Call-Out procedures. PPT to be distributed week of 7/16.
Analyze shift coverage and potential shift changes. Explore benefits and best practices for truck take home.	**September 2012**	Major events have been analyzed by Month, Day, and Time of Day. Committee working on recommendations to M&C Directors by Division. Looking into small emergency response vehicle to be taken home according to 212.
Develop skill list of necessary training for potential resource sharing and crew blending.	**November 2012**	
Develop tailboard to share best practice of sending crew foreman to work with or release GSR while assembling full crew compliment.	**July 2012**	Tailboard under development by [redacted]. Due for review by Frank Malcria and Ruben Ramirez by 7/23, submittal planned by end of July for August tailboards.

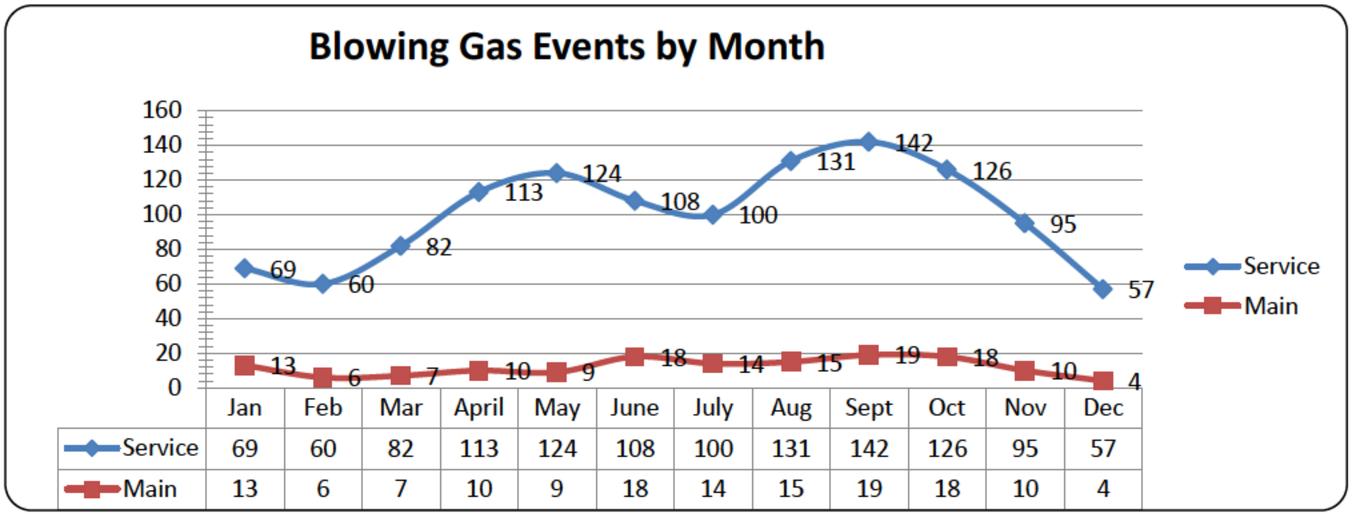
Discussion Items

Shutting in Gas - July 2012 for June Results

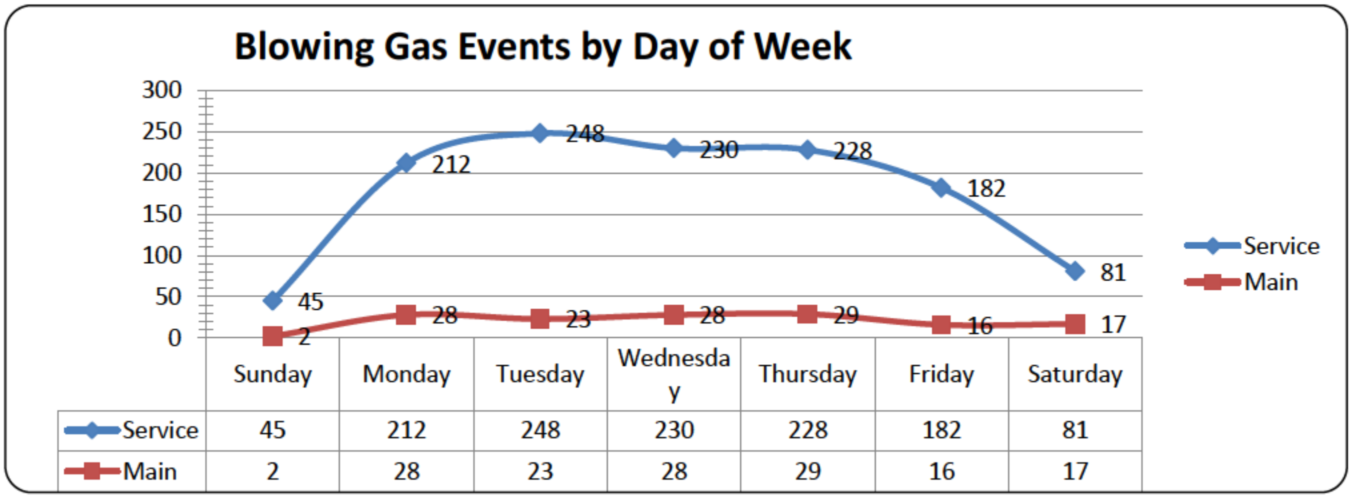
V. Supporting Information – 2011 Data Results


Blowing Gas Events by Time

	12am - 7:29am	7:30am - 2:59pm	3pm - 6pm	6pm - 11:59pm
Service	90	869	216	51
Main	11	108	18	6

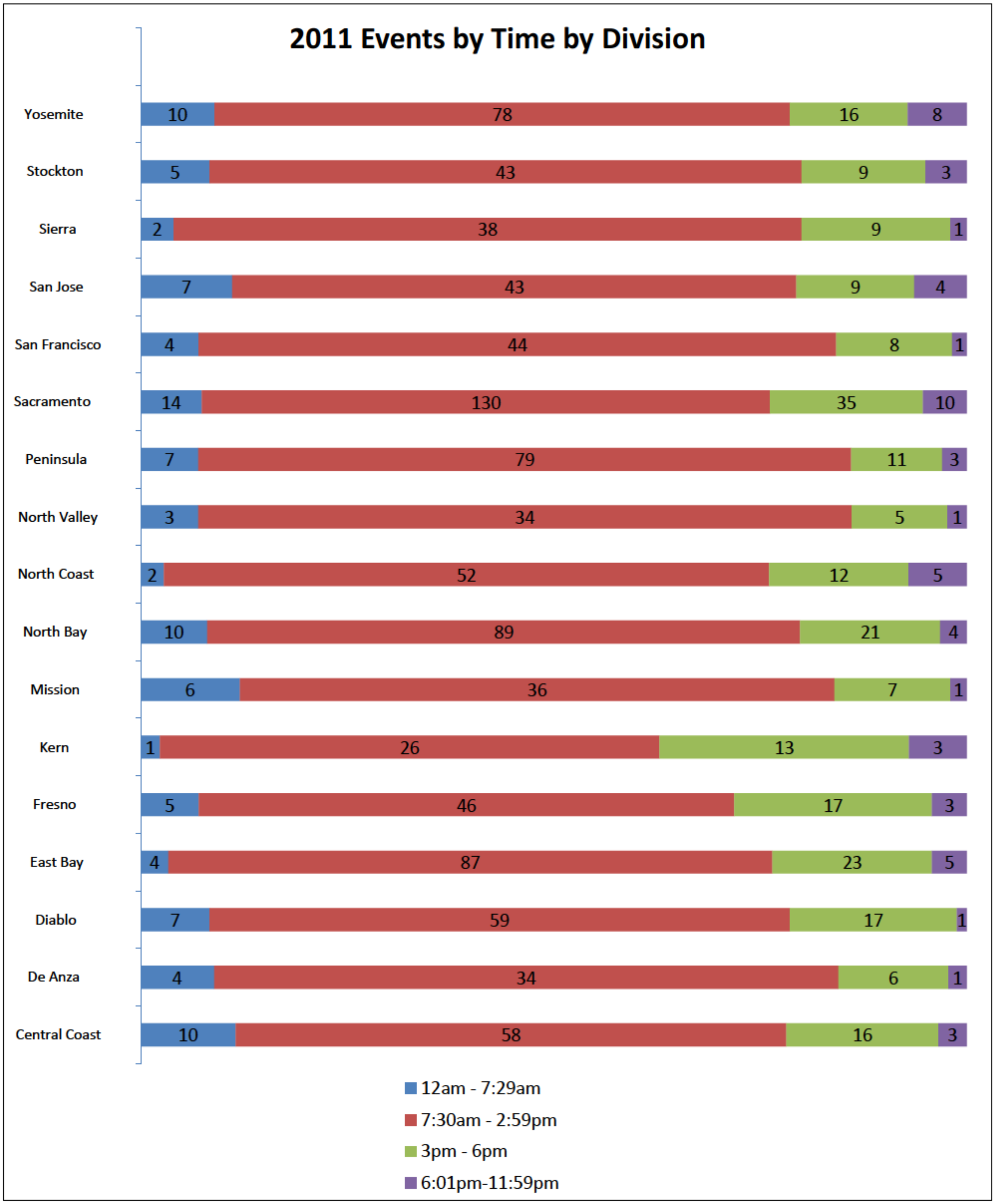

Blowing Gas Events by Month

	Jan	Feb	Mar	April	May	June	July	Aug	Sept	Oct	Nov	Dec
Service	69	60	82	113	124	108	100	131	142	126	95	57
Main	13	6	7	10	9	18	14	15	19	18	10	4

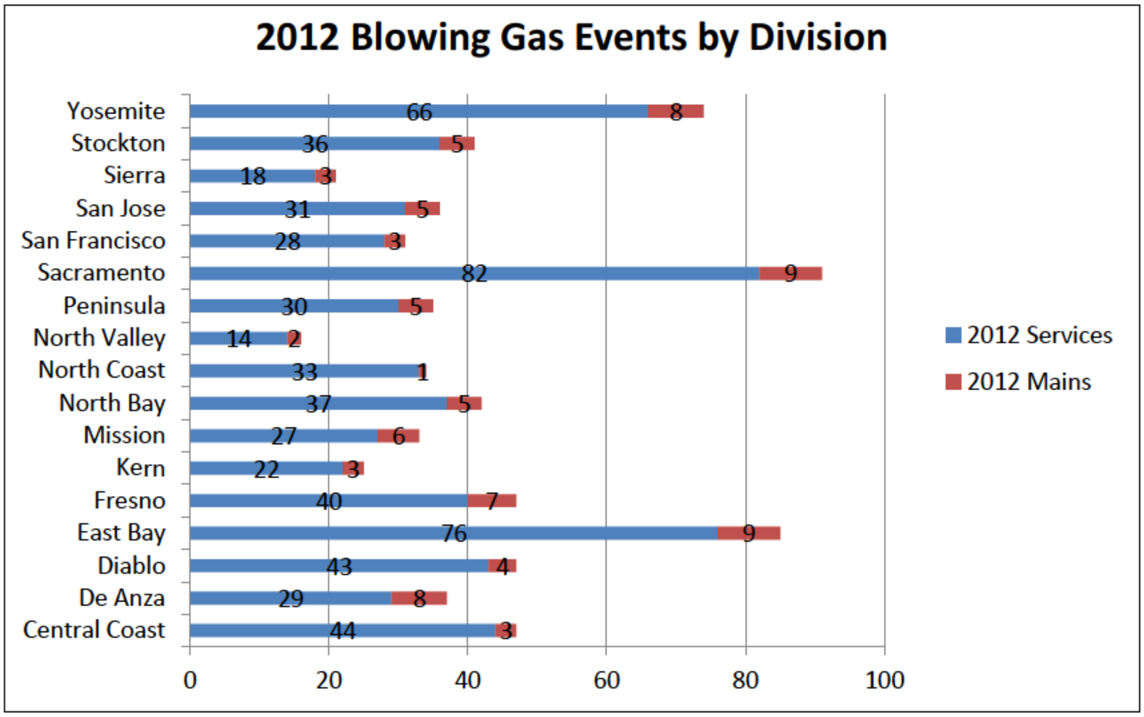

Blowing Gas Events by Day of Week

	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
Service	45	212	248	230	228	182	81
Main	2	28	23	28	29	16	17

Shutting in Gas - July 2012 for June Results



Shutting in Gas - July 2012 for June Results



Gas Emergency Response report - July 2012 for June Results

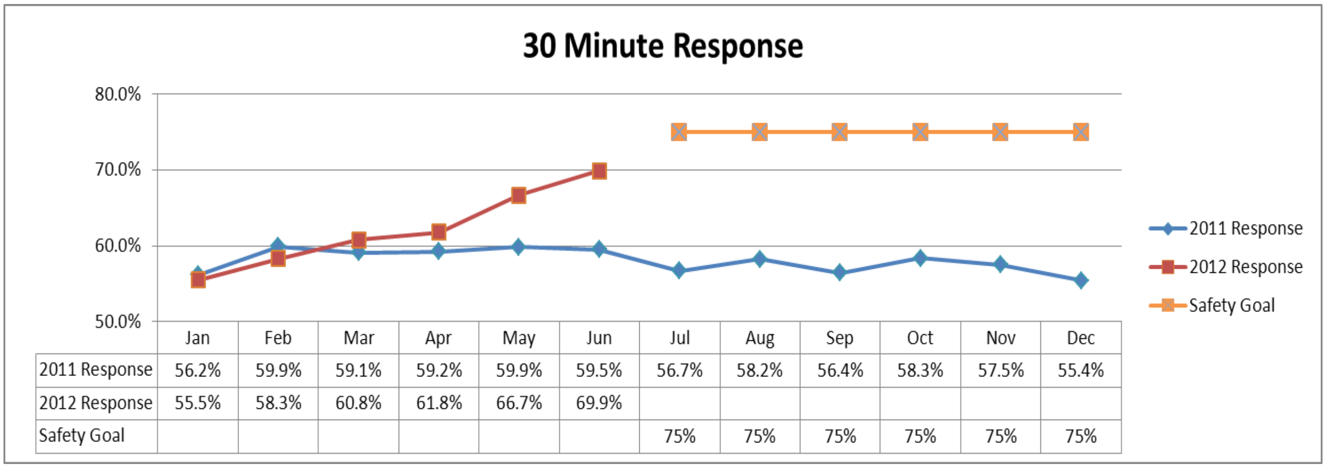
Results	●	June 2012 Results: 69.9% for 30 minute response; 98.8% for 60 minute response
Initiative Status	●	Initiatives on track; Peak Season workload will be challenging

I. Goal / Objective

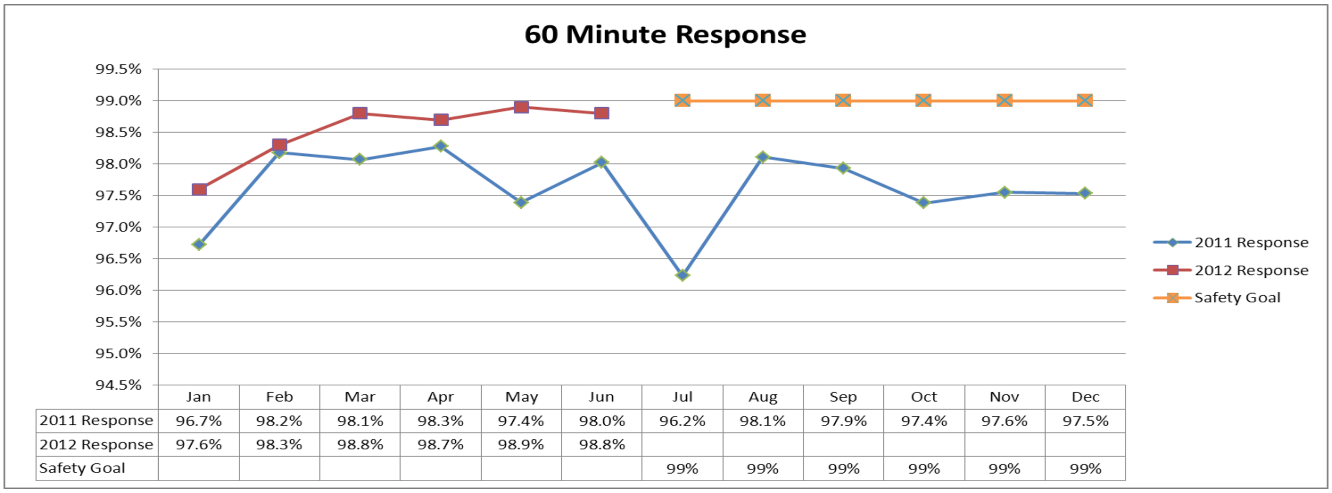
Gas Emergency Response: The percentage of time that a Gas Service Representative (GSR) is on site within one hour and within 30 minutes of receiving an immediate response gas emergency order into either the Contact Center or the Dispatch & Scheduling organization. Responding to 99% of gas emergency calls within 60 minutes, and 75% of gas emergency calls within 30 minutes would place PG&E in [redacted] of an industry peer group.

II. Results

I. Improve Public & Employee Safety	Month Results			YTD Results		
	Actual	Plan	Variance	Actual	Plan	Variance
A. Gas Emergency Response Performance						
1. % Response in 30 Minutes	69.9%	65.0%	4.9%	61.4%	65.0%	-3.6%
2. % Response in 60 Minutes	98.8%	98.3%	0.5%	98.5%	98.3%	0.2%

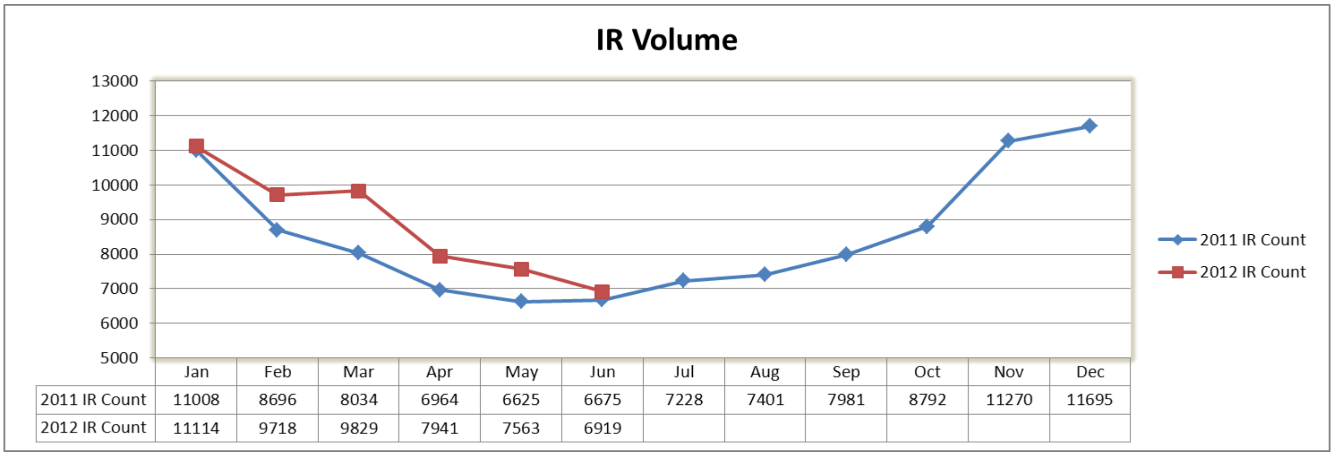


	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2011 Response	56.2%	59.9%	59.1%	59.2%	59.9%	59.5%	56.7%	58.2%	56.4%	58.3%	57.5%	55.4%
2012 Response	55.5%	58.3%	60.8%	61.8%	66.7%	69.9%						
Safety Goal							75%	75%	75%	75%	75%	75%

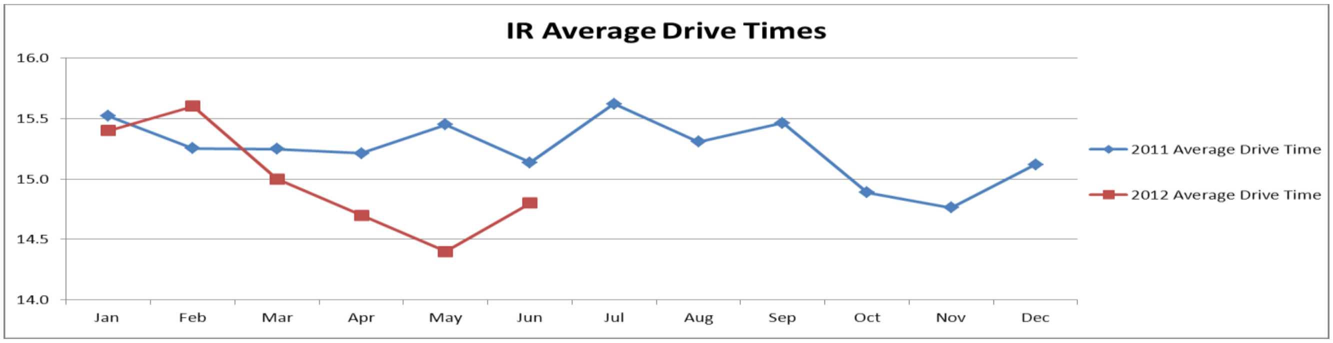


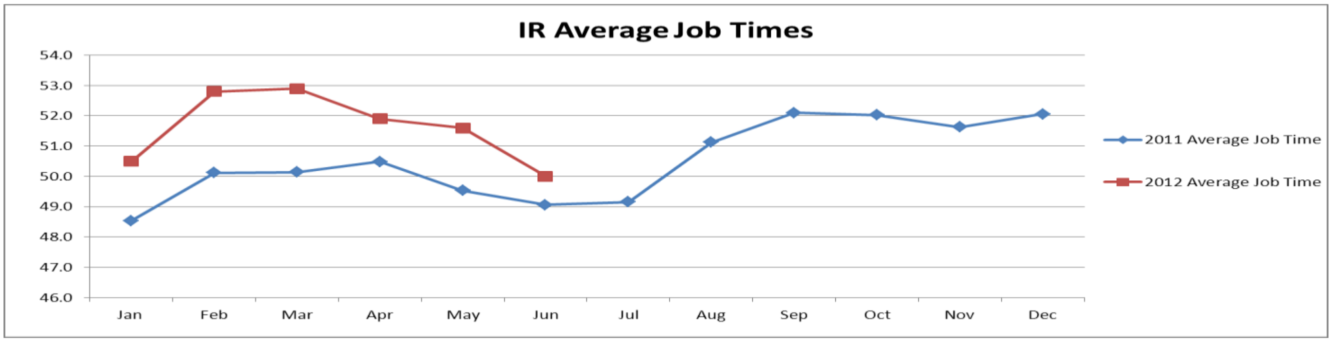
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2011 Response	96.7%	98.2%	98.1%	98.3%	97.4%	98.0%	96.2%	98.1%	97.9%	97.4%	97.6%	97.5%
2012 Response	97.6%	98.3%	98.8%	98.7%	98.9%	98.8%						
Safety Goal							99%	99%	99%	99%	99%	99%

Gas Emergency Response report - July 2012 for June Results

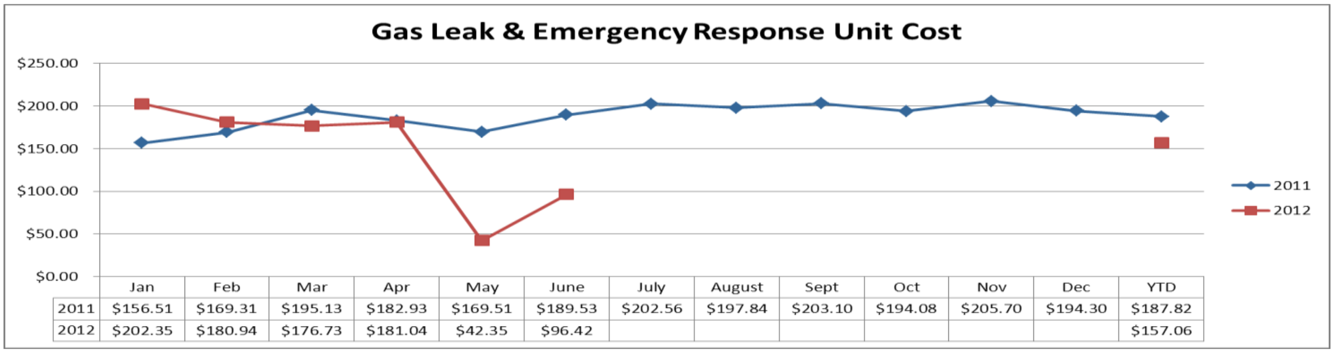

IR Volume

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2011 IR Count	11008	8696	8034	6964	6625	6675	7228	7401	7981	8792	11270	11695
2012 IR Count	11114	9718	9829	7941	7563	6919						


IR Average Drive Times


IR Average Job Times

Unit Cost for All Leak Orders; recent result abnormalities due to budget transfer within Field Service MWCs


Gas Leak & Emergency Response Unit Cost

	Jan	Feb	Mar	Apr	May	June	July	August	Sept	Oct	Nov	Dec	YTD
2011	$156.51	$169.31	$195.13	$182.93	$169.51	$189.53	$202.56	$197.84	$203.10	$194.08	$205.70	$194.30	$187.82
2012	$202.35	$180.94	$176.73	$181.04	$42.35	$96.42							$157.06

Gas Leaks and Emergencies – June 2012 Results

Financials YTD June 2012

Gas Leak & Emergency Service Orders (in thousand dollars)

DET Version (Without OPC Approved Spend)

Planning Order	DET Plan June	June Spend	June Var	DET Plan YTD	YTD Spend	YTD Var	DET Annual Target
Gas Leaks & Emergencies- Area 1	$237	$346	$ (109)	$1,936	$2,716	$ (780)	$4,167
Gas Leaks & Emergencies- Area 2	$478	$738	$ (260)	$3,423	$4,559	$ (1,136)	$7,150
Gas Leaks & Emergencies- Area 3	$255	$298	$ (42)	$2,161	$2,504	$ (343)	$4,471
Gas Leaks & Emergencies- Area 4	$195	$278	$ (84)	$1,529	$1,956	$ (427)	$3,234
Gas Leaks & Emergencies- Area 5	$305	$334	$ (29)	$2,134	$2,469	$ (336)	$4,448
Gas Leaks & Emergencies- Area 6	$412	$448	$ (36)	$3,001	$3,195	$ (193)	$6,145
Gas Leaks & Emergencies- Area 7	$171	$201	$ (30)	$1,310	$1,460	$ (150)	$2,708
Total	**$2,054**	**$2,643**	$ (590)	**$15,495**	**$18,859**	$ (3,365)	**$32,322**

CY1 Version (With OPC Approved Spend)

Area	CY1 Fcast June	June Spend	June Var	CY1 YTD Fcast	YTD Spend	YTD Var	CY1 Annual Target
Gas Leaks & Emergencies- Area 1	$ 211	$ 346	$ (135)	$ 2,426	$ 2,716	$ (290)	$ 4,425
Gas Leaks & Emergencies- Area 2	$ 457	$ 738	$ (280)	$ 4,019	$ 4,559	$ (540)	$ 7,584
Gas Leaks & Emergencies- Area 3	$ 260	$ 298	$ (38)	$ 2,399	$ 2,504	$ (105)	$ 4,748
Gas Leaks & Emergencies- Area 4	$ 191	$ 278	$ (88)	$ 1,773	$ 1,956	$ (183)	$ 3,434
Gas Leaks & Emergencies- Area 5	$ 300	$ 334	$ (34)	$ 2,446	$ 2,469	$ (23)	$ 4,723
Gas Leaks & Emergencies- Area 6	$ 430	$ 448	$ (18)	$ 3,233	$ 3,195	$ 38	$ 6,523
Gas Leaks & Emergencies- Area 7	$ 175	$ 201	$ (26)	$ 1,442	$ 1,460	$ (19)	$ 2,876
Total	**$ 2,024**	**$ 2,643**	$ (619)	**$ 17,738**	**$ 18,859**	$ (1,121)	**$ 34,312**

🟩 ≥ -3%
🟨 ≥ -6% and ≤ -3%
🟥 ≤ -6%

Data Source SAP Financials

Gas Emergency Response report - July 2012 for June Results

III. Observations / Analysis

Observations:

- 2012 YTD IR volume continues to outpace 2011 by 9.5%
- Make Safe process and concept continues to prove positive results.
- 60 Minute Response in June (98.8%) and YTD (98.5%) exceeded Q2 milestone of 98.3%.
- 30 Minute Response in June (69.9%) exceeded Q2 milestone of 65%.
- We continue to drive down the average response time to IRs:
  - 33.2 minutes in 2010
  - 30.5 minutes in 2011
  - 28.7 minutes in June 2012
  - 25.0 minutes in 1st week of July 2012

June Accomplishments:

- Successful roll-out of Make Safe to 9 additional medium to large headquarters
- Make Safe headquarters Week 1 average: 30 Minute 84.69%; 60 Minute 99.43%
- Identified and created new “IR Hawk” role in Dispatch Operations to monitor emergency orders.
- Established Daily IR strategy calls to rapidly identify workload/process issues and solutions
- Commenced pilot for improved GPS tracking (10 minute and/or >1 mile refresh)
- Completed implementation of LIEE contractor’s new safety procedures.
  - Preliminary results for Week 1 indicate an 84% reduction in LIEE-related IR orders.

July Objectives:

- Roll-out Make Safe process to additional headquarters
- Roll-out Make Safe process application to smaller headquarters
- Identify IR staffing opportunities in remote locations
- Continue to evaluate Make Safe process application for non-GSR employees in Gas Ops
- Identify and implement efficiency strategies in conjunction with Make Safe process
- Continue to define and pursue strategies to address Peak Season workload
- Partner with Cust Ops to implement Call Center PBX handling of after-hour LIEE contractor calls.
- Pursue full implementation of GPS refresh enhancement (targeted for July 15)

IV. Process Improvement Initiatives

Initiative Overview	
Sponsor	Nick Stavropoulos
Team Leads	Kevin Knapp/ Ruben Ramirez
Initiative Description	Providing safe, consistent, predictable, efficient and affordable service to all customers and constituents.
Initiative Strategy	Work to improve gas leak response processes, prioritize all other GSR work, and create a staffing/scheduling plan to ensure the following performance by Q3 & Q4 2012: •99% response to Immediate Response orders within 60 minutes •75% response to Immediate Response orders within 30 minutes Additionally, the team will review our Non-Immediate Response processes with the following objectives in mind: •Short Term (TBD) - Ensure accurate identification of Non-Immediate Response situations and improve average response time to 1 hour and 30 minutes •Long Term (TBD) - Eliminate Non-Immediate Response identification process and handle all customer leak complaint orders with same urgency.

Gas Emergency Response report - July 2012 for June Results

Key Initiatives

Initiative Category	Initiative Name	Status
People	Employee Engagement	🟩
	Onboarding GSR Resources	🟨
Process	Benchmarking	🟩
	Re-Prioritization of Work	🟨
	Workload and Staffing	🟨
	Make Safe Pilot	🟩
	Peak Season Workload	🟩
Technology	Technology Requests	🟩

Gas Emergency Response report - July 2012 for June Results

Initiative Schedule and Status

Initiative	**Employee Engagement**
Team Members	**[redacted] (Lead). FS, D&S and CCO leaders, plus bargaining unit GSRs, Dispatchers and Schedulers**
Scope	**A. Bargaining-unit employee input to identify barriers to effective emergency response and their participation in IR Process Improvement team.** **B. GSR Council established as sounding board for new proposals and feedback on recently implemented emergency response procedures.**
Benefits (Soft)	**Improved processes and ongoing employee input and ownership.**
Costs	

Milestone	**Target Completion Date**	**Comments**
Focus Groups conducted	Feb 2012	Three focus group sessions with CSRs, GSRs and Dispatchers conducted to identify barriers.
IR Process Improvement Team	Ongoing	Periodic meetings and conference calls of team and sub-teams.
GSR Council	Ongoing	Council comprised of GSRs from each of the 7 Service Areas. Purpose is to gather their feedback before and after process changes.

Description	**Accountability**	**2012**	**2013**	**2014**	**2015**	**2016**
Costs						
Specific Benefit, Expense Savings						

Discussion Items
Members of the GSR Council to be included on teams in pursuing strategies to address Peak Season workload. As strategies are identified, results will be reviewed with full GSR Council for feedback.

Gas Emergency Response report - July 2012 for June Results

Initiative Schedule and Status		
Initiative	**On-Boarding GSR Resources**	
Team Members	**Ruben Ramirez (Lead), [redacted] (Guidance and Support provided by Field Service, HR, and Learning Services leadership.**	
Scope	**Expedite placement and training for 40 new GSRs, plus GSRs lost through attrition.**	
Benefits	**Public safety and resources required to meet 30/60 Emergency Response goals**	
Costs		
Milestone	**Target Completion Date**	**Comments**
Plan for attrition and additional GSR needs	**Feb 2012**	Identified need for seven GSR Training session in 2012
GSR Training Sessions	**July 2012**	Seven sessions originally scheduled for 2012. Now working with Learning Services to add 8th session.
Job Bidding/Talent Connect Partnership	**Ongoing**	Weekly conference calls to track and monitor bid and URA processes to expedite award/selection processes. On track to fill new positions and those lost through attrition.

Description	**Accountability**	**2012**	**2013**	**2014**	**2015**	**2016**
Costs for 40 GSRs hired in 2012		$3.1M	$4.7M	$4.8M	$4.9M	$5.1M
Specific Benefit, Expense Savings						

Discussion Items

2012 attrition rate for GSRs is higher than anticipated, primarily due to new job opportunities in Customer Ops and Gas Ops. We have temporarily suspended lateral opportunities within Gas Ops to minimize leadership loss and the need to upgrade GSRs for leadership positions.

Working with Learning Services to add an additional GSR training session to account for attrition. However, delays in candidate selection process and candidate failures at the training sessions could result in less than the targeted 40 additional GSR in 2012.

Gas Emergency Response report - July 2012 for June Results

Initiative Schedule and Status		
Initiative	**Benchmarking**	
Team Members	[redacted], **Jimmy Morales, and Nalini Webster**	
Scope	**Identify benchmarking and best practices from top performing utilities**	
Benefits	**Create a standard procedure for visibility &oversight regarding major adjustments, deliverables, new projects & priorities of a certain dollar/impact threshold**	
Costs		
Milestone	**Target Completion Date**	**Comments**
AGA	Completed	Peer Utility survey completed via AGA for benchmarking and processes. May 2012 AGA conference attendance.
So Cal Gas Visit	May 2012	[redacted] participated in Mosaic-led visit. Gained insight into their Make Safe process which was incorporated into our pilot.
National Grid Visit	TBD	Explore visit to National grid

Description	Accountability	2012	2013	2014	2015	2016
Costs						
Specific Benefit, Expense Savings						

Discussion Items

Planned participation in August 2012 Emergency Response workshop hosted by Southwest Gas. Additionally, we are pursuing a July conference call with Indiana utility representatives (Vectren) to gain insight on their best practices for emergency response in rural areas.

Gas Emergency Response report - July 2012 for June Results

Initiative Schedule and Status		
Initiative	**Re-Prioritization of GSR Work**	
Team Members	**Ruben Ramirez (Lead),** [redacted] **Rich Yamaguchi,** [redacted] **et al.**	
Scope	**Identify work that can be moved to non-GSR classifications and change work processes to reduce impact on GSR resources.**	
Benefits	**Allows GSR to focus and be readily available for emergency response orders.**	
Costs	**TBD**	
Milestone	**Target Completion Date**	**Comments**
Billing Orders	Mar 2012	Cust Ops agreement to shift billing and credit related work away from GSRs.
Meter Maintenance	Ongoing	Agreement with Cust Ops to complete 2011 SMCs by 6/30/12 and pursue negotiations with Union for short and long term non-GSR options to complete this work.
CIP Dispatch Pilot	May 2012	Pilot on expanded CIP Dispatch hours for LIEE contractors. Low call volume…this process will NOT be implemented.
Valve Process for LIEE Contractors	June 2012	Develop and implement 3-step make safe process for LIEE contractors to use when they discover gas hazards: 1) shut off appliance valve; or 2) shut off service valve; or 3) stand by and secure life/property until GSR arrives.
Use of HVAC contractors for LIEE-related Programs	TBD	Negotiate with Union to allow LIEE contractors to use HVAC/plumbers to provide servicing for customer-owned gas appliances.

Description	**Accountability**	**2012**	**2013**	**2014**	**2015**	**2016**
Costs						
Specific Benefit, Expense Savings						

Discussion Items
Discussions with Union leadership are progressing in regard to short-term use of Title 300 employees for Scheduled Meter Changes. We are cautiously optimistic that an agreeable solution will be reached. Negotiations will be challenging for long-term meter maintenance options and the use of HVAC/plumber use for LIEE work. **Implementation of Valve process by LIEE contractors has proven successful.**

Gas Emergency Response report - July 2012 for June Results

Initiative Schedule and Status		
Initiative	**Work load and Staffing**	
Team Members	[redacted] **Ruben Ramirez**	
Scope	**Identify when and where emergency work hits and the resource and scheduling needs to respond within 30/60 goals**	
Benefits	**Identify and address work schedule gaps at each headquarters by day of week, time of day.**	
Costs		
Milestone	**Target Completion Date**	**Comments**
Historical Workload Data Gathering and Analysis	Completed	2011 emergency workload data compiled on District, Division and Area levels.
Schedule Change Recommendations	April 2012	Area by Area meetings with FS leadership to discuss and implement schedule changes for existing GSR shifts.
Placement of 40 new GSRs	April 2012	Identified the location and shifts of the 40 new GSRs that will be added in 2012.
GSR Call-Outs	2012	Negotiate with Union to improve GSR availability and accountability for responding to after-hour call-outs from home.

Description	Accountability	2012	2013	2014	2015	2016
Costs						
Specific Benefit, Expense Savings						

Discussion Items
Negotiations on call-outs will be challenging.

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Initiative Schedule and Status		
Initiative	**Make Safe Pilot**	
Team Members	[redacted], **Blaine Cobb**, [redacted]	
Scope	**Rapid-response GSR availability for emergency orders**	
Benefits	**Public safety and protection of life and property**	
Costs		
Milestone	**Target Completion Date**	**Comments**
GSR Feedback	April 2012	GSR Council feedback on proposed pilot
Complete & Evaluate Pilot	April 24th	4-week pilot in Fresno and Concord headquarters was successful
Make Safe Roll-Out	June 21st	Implement strategies in medium to large headquarters
Strategy Opportunities	July 2012	Explore application of Make Safe principles in small headquarters

Description	Accountability	2012	2013	2014	2015	2016
Costs						
Specific Benefit, Expense Savings						

Discussion Items

Initial implementation of Make Safe process has proven successful in improving emergency response. We now need to build more efficiencies into the process by introducing short-cycle work and right-sizing the Make Safe GSR staffing levels.

Gas Emergency Response report - July 2012 for June Results

Initiative Schedule and Status

Initiative	**Peak Season Workload**
Team Members	Core Team: [redacted] Ramirez, Ruben, Randy Lavering, Dave Acebo, Jimmy Morales, Rich Yamaguchi, [redacted], Blaine Cobb, Karlo Alaura, [redacted] Proactive Outreach to Customer Team includes: [redacted] Field Resource Utilization Team includes: Jodie Kubota, Mike Graham, Kevin Souza, Matt Moscato, [redacted]
Scope	**Incentives and processes to reduce customer demand for heater relights between October to December**
Benefits	**Allows GSR to focus and be readily available for emergency response orders.**

Milestone	**Target Date**	**Comments**
Initial Strategy/Planning session	April 16th	Preliminary discussions and reaching out to CES for possible incentives to reduce customer demand for GSR relight service.
Proactive Relights	July 2012	Proactive offer and incentives for early-season relights
Gas M&C Strategy Team	July 2012	Short Term: Leverage assistance from Construction to assist with relights, utilize M&C employees for expanded Make Safe process, reduce M&C need for GSR assistance i.e. tanking services, relights, stand-by, Recruit former GSR's that have transferred to other departments for seasonal relief
Customer Care Strategy Team	July 2012	Short Term: align proactive callout to coincide closer to seasonal relight, set customer expectations in advance regarding make safe process, analyze relight and develop dynamic scheduling process
Gas M&C Strategy Team	TBD	Long Term: Utilize Contractor assistance during peak season, redeploy Reserve Gas Service position to aid Field Service and M&C, develop employees outside of Gas M&C
Customer Care Strategy Team	TBD	Long Term: Provide Customer incentives (rebates) to seek pilot relight from contractors if scheduling widow is impacted

Description	Accountability	2012	2013	2014	2015	2016
Costs						
Specific Benefit, Expense Savings						

Discussion Items

Two teams have been established to address peak season workload… Proactive Outreach to Customers and Field Resource Utilization. A cross section of employees, including bargaining-unit, will identify and implement strategies to reduce demand for relight services and effectively handle the orders we do receive.

Gas Emergency Response report - July 2012 for June Results

Initiative Schedule and Status

Initiative	**Technology Requests**
Team Members	**Rich Yamaguchi (Lead), [redacted] Ruben Ramirez, Jimmy Morales**
Scope	**Technology solutions to improve response times to gas emergencies**
Benefits	**Public safety and rapid response to emergencies**
Costs	

Milestone	**Target Completion Date**	**Comments**
Middleware Fix	May 2012	Software changes to minimize delays from CC&B to FAS
ARCOS	Aug 2012	Automated system to expedite after-hour call-outs for emergency response (pilot).
Real-Time GPS	Aug 2012	Allows Dispatchers to identify closest GSR resource to respond to gas emergencies. IT to pursue AVL technology.
Bundle all Premise Tasks	Dec 2012	Associate all customer-generated, maintenance and compliance work to optimize single-visit completion opportunities. This will improve efficiencies and minimize customer inconvenience. Discussions with IT to begin in May 2012.
Emergency Response Management Program	TBD	Database to store and process IR historical data, plus root cause data for missed IRs. Would identify trends for resource scheduling purposes and performance data for employee feedback and coaching purposes. Awaiting IT prioritization decision.

Description	**Accountability**	**2012**	**2013**	**2014**	**2015**	**2016**
Costs						
Specific Benefit, Expense Savings						

Discussion Items

ARCOS
- **Pilot still on schedule for August-September test run in the Fresno and Diablo divisions**

Bundler
- **Project manager from IT has been assigned to initiative**
- **$1 million budget/scope has been identified (funding not secured as of yet)**
- **Working with IT to develop course of action and technology plan for accomplishing bundling of work from CC&B/AMP/IGIS**
- **Status is RED as no technology strategy/solution to accomplish objective has been identified by IT**

Critical need for Emergency Response Management tool.

Sponsor: Kevin Knapp
Owner: Ruben Ramirez

Gas Emergency Response report - July 2012 for June Results

V. Supporting Information

30 Minute Response by Area (RAG status for monitoring purposes only)

Area	Head Quarter	YTD			June		
		% in 30	Missed	Made in 30	% in 30	Missed	Made in 30
	Colma	60.169%	188	284	60.274%	58	88
	San Carlos	63.978%	259	460	68.670%	73	160
	San Francisco	62.651%	555	931	64.115%	150	268
Area 1	**Total**	**62.570%**	**1002**	**1675**	**64.743%**	**281**	**516**
	Antioch	66.265%	224	440	71.111%	65	160
	Concord	75.112%	167	504	84.821%	34	190
	Oakland	68.731%	409	899	70.218%	123	290
	Richmond	73.927%	249	706	78.477%	65	237
	Fmont/Lmore	63.621%	219	383	63.285%	76	131
	Hayward	60.225%	247	374	70.103%	58	136
Area 2		**68.575%**	**1515**	**3306**	**73.099%**	**421**	**1144**
	Monterey	58.741%	118	168	67.647%	22	46
	Salinas	61.631%	160	257	60.584%	54	83
	Santa Cruz	55.464%	216	269	52.288%	73	80
	Cupertino	67.276%	197	405	70.202%	59	139
	San Jose	66.799%	502	1010	70.743%	122	295
Area 3		**63.870%**	**1193**	**2109**	**66.084%**	**330**	**643**
	Fresno	76.067%	331	1052	88.279%	47	354
	Bakersfield	70.000%	345	805	77.286%	77	262
Area 4		**73.247%**	**679**	**1859**	**83.266%**	**124**	**617**
	Stockton	66.861%	397	801	70.303%	98	232
	Merced	53.361%	333	381	55.605%	99	124
	Modesto	61.518%	289	462	57.143%	102	136
Area 5		**61.735%**	**1019**	**1644**	**62.200%**	**299**	**492**
	North Valley	54.870%	278	338	54.598%	79	95
	Sacramento	64.626%	855	1562	68.835%	230	508
	Vacaville	58.370%	286	401	66.667%	71	142
	Roseville	63.793%	273	481	59.504%	98	144
Area 6		**62.181%**	**1692**	**2782**	**65.033%**	**478**	**889**
	San Rafael	65.409%	165	312	64.935%	54	100
	Eureka	55.627%	138	173	56.667%	39	51
	Napa/Vallejo	73.878%	128	362	72.121%	46	119
	Santa Rosa	62.668%	277	465	68.619%	75	164
Area 7		**64.950%**	**708**	**1312**	**66.975%**	**214**	**434**

60 Minute Response by Area (RAG status for monitoring purposes only)

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Area	Head Quarter	2012 YTD				June						
		% in 60	Total IR's	Missed IR's	Made IR's	% in 60	Total IR's	Missed IR's	Made Irs	Wrap-up>10	Avg Disp	Avg Time
	Colma	99.576%	472	2	470	100.000%	146	0	146	29	5.8	28
	San Carlos	98.748%	719	9	710	99.142%	233	2	231	31	4.8	26
	San Francisco	99.125%	1486	13	1473	99.282%	418	3	415	51	4.8	27
Area 1	Total	99.103%	2677	24	2653	99.373%	797	5	792	111	5.0	27
	Antioch	98.795%	664	8	656	97.778%	225	5	220	27	5.5	27
	Concord	98.957%	671	7	664	100.000%	224	0	224	7	4.4	24
	Oakland	99.006%	1308	13	1295	98.789%	413	5	408	59	6.1	27
	Richmond	99.581%	955	4	951	99.007%	302	3	299	39	5.3	26
	Frmont/Lmore	99.003%	602	6	596	97.585%	207	5	202	29	6.6	29
	Hayward	98.068%	621	12	609	100.000%	194	0	194	28	6.2	26
Area 2		98.963%	4821	50	4771	98.850%	1565	18	1547	189	5.7	26
	Monterey	99.650%	286	1	285	100.000%	68	0	68	6	7.5	27
	Salinas	98.082%	417	8	409	96.350%	137	5	132	17	6.5	30
	Santa Cruz	96.701%	485	16	469	95.425%	153	7	146	35	5.9	31
	Cupertino	98.837%	602	7	595	98.485%	198	3	195	16	5.8	27
	San Jose	98.876%	1512	17	1495	99.041%	417	4	413	59	5.8	28
Area 3		98.516%	3302	49	3253	98.047%	973	19	954	133	6.1	28
	Fresno	99.711%	1383	4	1379	99.751%	401	1	400	24	4.9	23
	Bakersfield	98.261%	1150	20	1130	99.115%	339	3	336	23	5.3	25
Area 4		98.936%	2538	27	2511	99.460%	741	4	737	47	5.1	24
	Stockton	99.332%	1198	8	1190	99.394%	330	2	328	42	5.3	26
	Merced	97.199%	714	20	694	98.655%	223	3	220	43	7.4	31
	Modesto	98.136%	751	14	737	99.160%	238	2	236	49	5.9	30
Area 5		98.423%	2663	42	2621	99.115%	791	7	784	134	6.1	29
	North Valley	96.429%	616	22	594	96.552%	174	6	168	21	7.9	31
	Sacramento	99.338%	2417	16	2401	99.187%	738	6	732	91	5.8	27
	Vacaville	98.399%	687	11	676	99.531%	213	1	212	28	5.6	28
	Roseville	98.674%	754	10	744	98.347%	242	4	238	37	5.2	29
Area 6		98.681%	4474	59	4415	98.756%	1367	17	1350	177	5.9	28
	San Rafael	98.952%	477	5	472	99.351%	154	1	153	20	5.3	28
	Eureka	98.392%	311	5	306	98.889%	90	1	89	12	5.9	31
	Napa/Vallejo	97.959%	490	10	480	95.758%	165	7	158	17	9.1	29
	Santa Rosa	98.518%	742	11	731	97.908%	239	5	234	25	4.8	28
Area 7		98.465%	2020	31	1989	97.840%	648	14	634	74	6.2	29

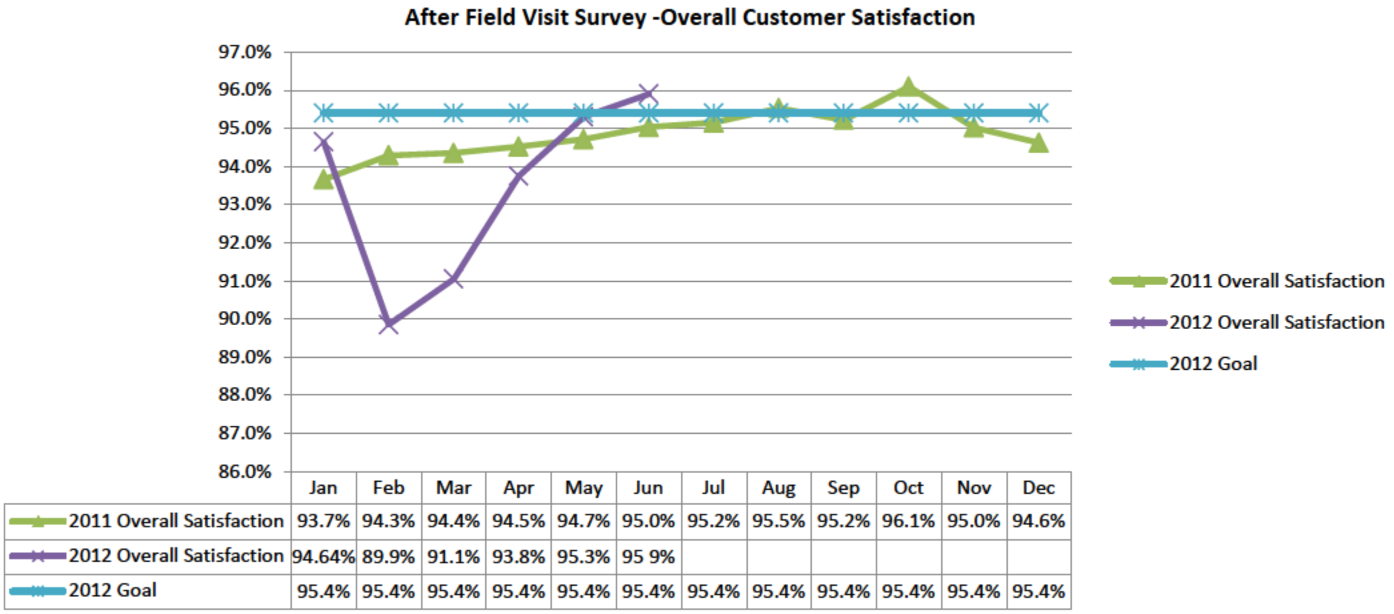
Results	🔴	June 2012 Results: Over-all Satisfaction 95.9%, YTD 93.3%
Initiative Status	🟡	Survey Revisions Implemented April,1; Process Team wasformed to identify and drive improvement

I. Goal / Objective

Customer Satisfaction: Customer satisfaction is measured by question 7 on our After Field Visit Survey: “Overall, how would you rate the quality of this service visit? Excellent, press 1. Very Good, press 2. Good, press 3. Fair, press 4. Poor, press 5”.

*To determine customer satisfaction “Excellent and Very Good” responses are combined and divided by total customer participation to the question. **“ (ex+vg) / total response=%”***

II. Results



	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2011 Overall Satisfaction	93.7%	94.3%	94.4%	94.5%	94.7%	95.0%	95.2%	95.5%	95.2%	96.1%	95.0%	94.6%
2012 Overall Satisfaction	94.64%	89.9%	91.1%	93.8%	95.3%	95 9%						
2012 Goal	95.4%	95.4%	95.4%	95.4%	95.4%	95.4%	95.4%	95.4%	95.4%	95.4%	95.4%	95.4%

III. Observations / Analysis

Observations/Actions:

- Overall Satisfaction for June improved to 95.9% and continues to trend upward
- Immediate Response Make Safe programs appear to be having a positive impact on customer Satisfaction results
- Changes made to the survey on 2/1/12, resulted in inadvertent negative responses

Challenges/Opportunities:

- Poor start at beginning of year will be hard to recover from
- IR metric could have negative impact to Customer Satisfaction; further analysis needed
- Need to identify reasons for failure to return to pre-February results. A focus group, including GSRs, was formed to identify gaps and drive improvement.

June Accomplishments:

- Reinforced need for Supervisors daily review of AFVS reports and customer follow-up with negative survey responses
- Finalized 5MM to support quality customer engagement

July Objectives:

- Incorporate Appliance Parts Replacement Program into Customer Satisfaction initiative
- Finalize distribution of 5MM and include training supplements
- Complete review of impacts on Customer Satisfaction in Immediate Response Make Safe areas
- EP Valving process implemented July 1st and should further reduce impacts to customers with scheduled appointments

IV. Process Improvement Initiatives

Initiative Overview	
	Nick Stavropoulos
	Kevin Knapp/[redacted]
	Maintain a high level of customer satisfaction while providing <u>safe</u>, consistent, predictable, efficient and affordable service to all customers and constituents.
	Improve YTD After Field Visit Survey " Over-all Customer Satisfaction" by EOY 2012: • 95.4% (Excellent + Very Good) / Total Responses Additionally, a process improvement team will be created to ensure survey results are reviewed, visible, and receive timely follow-up / actions by supervisors and team members.

Key Initiatives		
Initiative Category	**Initiative Name**	**Status**
Survey Analysis	Survey Review and Analysis	🟦
Employee Engagement	Focus Group / Process Improvement Team	🟩
Technology	Root Cause / Tracking Monthly Reports / Employee Performance	🟩
Process	Communications and Training	🟩

Initiative Schedule and Status		
Initiative	Survey Review and Analysis	
Team Members	[redacted], FS Managers, FS Supervisors	
Scope	Perform root cause analysis of poor responses on revised survey	
Benefits	Validate that survey was negatively impacted by revisions implemented in Feb	
Costs		
Milestone	**Target Completion Date**	**Comments**
Root Cause Analysis	March 4	Completed root cause analysis on revised survey, overwhelming customer. Overwhelmingly supervisors determined that the majority of customers that provided a negative response (approx. 88%) thought they rated us excellent, and many customers provided feedback that the response order led to confusion based on the response order of the preceding questions.
Survey Response Order Reverted	**April 1**	Over-all satisfaction responses returned to pre-February order
Supervisor Meeting	**May 5**	Met with Supervisors on May 5th reinforced expectations, solicited suggestions and agreed to create Process Improvement team
Make Safe Pilot Impacts	**July 30**	Initial review of data in the Make Safe Pilot Areas appears to show a positive impact from April to May Overall Satisfaction Score (Fresno 89% to 95.2%, Diablo 95.6% to 96%). As the Make Safe process has rolled out to additional areas we are similar impacts but further analysis will be required to determine impacts.

Discussion Items

Initiative Schedule and Status		
Initiative	Employee Engagement: Focus Group / Process Improvement Team	
Team Members	[redacted], **Blaine Cobb**, [redacted], **Mark Milioto, Steve Golden,** [redacted]	
Scope	**• Gain Supervisor and Bargaining unit employees insight and perspective** **• Drive ownership amongst team and supervisors**	
Benefits	**Improve processes, gain employee buy-in and drive ownership**	
Costs		
Milestone	**Target Completion Date**	**Comments**
Initial Team Meeting	**May 15**	This will be the initial team meeting to discuss roles and develop assignments
Focus Group / Process Improvement	**Ongoing**	Periodic meetings and conference calls of team
5MM Customer Satisfaction	**June 30**	Process Improvement Team developing 5 Minute meeting to reinforce importance of customer facing skills: Call Ahead, On-time, Work Performed /Completion, Documentation
Appliance Parts Replacement Program 5MM	**July 30**	Incorporate APRP into Customer Satisfaction initiative , this program has the ability to improve first visit resolution / work completion and overall satisfaction scores.

Discussion Items
Efforts to renew APRP with field employees are currently being developed and will be shared with GSR's once finalized

Initiative Schedule and Status		
Initiative	Technology: Root Cause / Tracking Monthly Reports / Employee Performance	
Team Members	[redacted] **Ruben Ramirez, IT member (TBD)**	
Scope	**Utilize technology to simplify reports and create root cause tracker**	
Benefits	**Easy to use technology for supervisors to help drive employee improvment**	
Costs		
Milestone		
Monthly / YTD Automated Reports	TBD	Reduce time spent creating manual reports, consistent and easy to use formatting
Root Cause Analysis Tracker	TBD	Root cause analysis tracking program, for documented follow-up with customers
RAG Employee Performance	TBD	Identify individual employee behaviors and training concerns
Recognition Report	TBD	Report to identify and reward employees on a quarterly basis

Description	Accountability	2012	2013	2014	2015	2016
Costs						
Specific Benefit, Expense Savings						

Discussion Items

Gas Operations – June CY1 2012

($000)	(l) YTD CY Fcst (Cycle)	(i) YTD Actual	(m=l-i) YTD Variance (Cycle)	(e) Jun CY Fcast (CY1)	(b) Jun Actual	(f=e-b) Jun Variance (Cycle)	CY Target (CY1)	ACT + Rmng CY Plan	Annual Plan (DET)	DET Variance to CY1 Target	EOY June Forecast	June Forecast Variance to CY1 Target
Gas Distribution												
Expense	153,678	153,906	-228	30,135	30,470	-334	311,626	311,858	283,523	-28,103	311,626	0
Capital	175,415	167,256	8,159	43,225	35,606	7,619	444,501	436,342	442,201	-2,301	444,501	0
DIMP	13,489	11,884	1,606	2,549	1,082	1,467	28,674	27,071	24,600	-4,074	28,674	0
Gas Transmission												
Expense	66,144	62,254	3,890	12,964	10,978	1,985	121,953	118,063	117,952	-4,001	121,953	0
Capital	115,494	106,559	8,936	24,913	25,129	-216	271,491	262,555	271,444	-46	271,491	0
TIMP	31,343	21,184	10,159	8,233	3,858	4,375	50,940	40,781	34,940	-16,000	50,940	0
GT Adder Projects	-3,456	-3,459	3	1	-1	2	-3,447	-3,450	500	3,947	-3,447	0
OBS - StanPac	1,006	899	107	153	-69	223	3,218	3,111	6,335	3,117	3,218	0
San Bruno IIC	**170,192**	**166,447**	**3,745**	**30,517**	**38,813**	**-8,296**	**366,582**	**362,839**	**406,000**	**43,243**	**362,757**	**3,826**
PSEP Capital	**118,011**	**56,912**	**61,100**	**44,394**	**12,279**	**32,115**	**384,000**	**322,900**	**384,000**	**-19,497**	**403,497**	**-19,497**
Total Expense	**$390,014**	**$382,607**	**$7,407**	**$73,616**	**$80,261**	**-$6,645**	**$800,161**	**$792,760**	**$807,475**	**7,314**	**$800,161**	0
Total Capital	**$405,465**	**$327,267**	**$78,198**	**$112,534**	**$73,013**	**$39,521**	**$1,096,544**	**$1,018,347**	**$1,098,145**	**1,601**	**$1,096,544**	0
Total Balancing Account	**$44,832**	**$33,067**	**$11,765**	**$10,782**	**$4,940**	**$5,843**	**$79,614**	**$67,852**	**$59,540**	**-20,074**	**$79,614**	0
Total Other Balance Sheet	**$1,006**	**$899**	**$107**	**$153**	**-$69**	**$223**	**$3,218**	**$3,111**	**$6,335**	**3,117**	**$3,218**	$0

Key Drivers: YTD CY1

- *GD Expense:* (-$0.2M) unfavorable small variances
- *GD Capital:* (+$8.2M) favorable variance driven by delayed ramp up on Gas Ops Headquarters Relocation and Gas Distribution Control Center
- *DIMP:* (+$1.6M) favorable variance driven by contractor delays on the Cross Bored Sewer project
- *GT Expense:* (+$3.9M) favorable variance primarily driven by lower than planned unforeseen Maintenance cost (+$2.7M), delayed hiring in System Operations (+$0.7M), and other small variances (+$0.5M)
- *GT Capital:* (+$8.9M) favorable variance primarily driven by slower than expected construction on various small L-300 and storage projects in Station Reliability (+$3.9M), earlier than planned credit for the Lodi Energy project (+$3.0M), and other small variances (+$2.0M)
- *TIMP:* (+$10.2M) favorable variance driven by delays on External Corrosion Direct Assessment (ECDA) projects (+$3.9M), delays on In-Line Inspection (ILI) work due to pig availability (+$2.9M), delays in starting casing mitigation work (+$2.3M), and other small variances (+$1.1M)
- *San Bruno IIC:* (+$3.7M) favorable variance primarily driven by fewer Hydrotests completed as records were found to clear testing requirements (+$10.2M) and suspension of the Video Assessment project pending decision to move forward (+$1.3M); partially offset by Customer Outreach & Government Relations support and timing for movement of PMO and contractor costs (-$5.5M), increased MAOP excavation and PFL Build/Engineering cost (-$2.2M), and other small variances (-$0.1M)
- *PSEP Capital:* (+$61.1M) favorable variance primarily driven by Pipe Replacement due to land acquisitions and material delays (+$43.3M), CNG / LNG equipment charged to a different MWC (+$8.6M), Valve Automation project delays (+$3.9M), delays on the planning and approval phases for portions of the Mariner project (+$1.8M), and other small variances (+$3.5M)

Key Drivers: ECS Forecast DET to CY1 Target

- *GD Expense:* (-$28.1M) unfavorable variance includes OPC Approved items and additional Bishop Ranch Lease Cost
- *GD Capital:* (-$2.3M) unfavorable variance mainly driven by additional tools and buildings requests
- *DIMP:* (-$4.1M) unfavorable variance mainly due to increased cross bore inspections and Risk Algorithm (RA) data collection
- *GT Expense:* (-$4.0M) unfavorable variance includes OPC Approved items
- *TIMP:* (-$16.0M) unfavorable variance mainly due to increase of incremental corrosion work and casing remediation; additional ILI and ECDA work as well as increased ECDA labor costs
- *GT Adders:* (+$3.9M) permanent favorable variance mainly driven by unplanned credit for returned funds on land purchase due to project deferral
- *Stanpac:* (+$3.1M) permanent favorable variance due to incorrect DET
- *San Bruno IIC:* (+$43.2M) favorable variance mainly driven by reduction in strength test mileage

Key Drivers: ECS Forecast June to CY1 Target

- *San Bruno IIC:* (+$3.8M) favorable variance mainly driven by reduction in strength test mileage
- *PSEP Capital:* (-$19.5M) unfavorable variance mainly driven by increased pipe replacement work

Note: Forecast based on data from July 12, 2012

Source: Day 5 Line of Business Summary

Gas Operations – June DET 2012

Expense

		June				June YTD			
		Actual (A)	Budget (B)	Varianc[redacted] (C)=(B)-(A)		Actual (D)	Budget (E)	Variance (F)=(E)-(D)	
1	**Operations Business Lines**								
2	**Electric Operations**	47.2	47.5	0.3	🟩	261.8	288.4	26.7	🟩
3	*Electric Distribution*	35.0	32.9	(2.1)	🟥	192.3	214.5	22.2	🟩
4	*Electric Transmission*	12.2	14.6	2.4	🟩	69.5	73.9	4.4	🟩
5	**Gas Operations**	41.4	32.4	(9.0)	🟥	216.2	195.2	(21.0)	🟥
6	*Gas Distribution*	30.5	22.2	(8.3)	🟥	153.9	135.4	(18.5)	🟥
7	*Gas Transmission*	11.0	10.3	(0.7)	🟥	62.3	59.8	(2.5)	🟨
8	**Customer Care**	27.9	30.2	2.3	🟩	174.4	180.2	5.8	🟩
9	**Energy Supply**	50.7	46.2	(4.5)	🟥	311.0	295.8	(15.2)	🟨
10	*Nuclear Generation*	31.5	26.7	(4.8)	🟥	194.5	182.7	(11.8)	🟥
11	*Power Generation*	15.3	15.3	0.0	🟩	93.6	88.9	(4.7)	🟨
12	*Energy Procurement*	3.9	4.2	0.3	🟩	22.8	24.2	1.4	🟩
13	**Total Operations Business Lines**	167.3	156.4	(10.9)	🟥	963.3	959.6	(3.7)	🟩
14	**Support Organizations:**								
15	**Information Technology**	24.4	21.5	(2.8)	🟥	118.2	117.4	(0.9)	🟩
16	*Information Technology*	22.0	19.2	(2.7)	🟥	108.2	101.8	(6.3)	🟥
17	*Technology Projects*	2.4	2.3	(0.1)	🟨	10.0	15.5	5.5	🟩
18	**Safety & Shared Services**	(9.9)	5.3	15.2	🟩	2.1	25.7	23.6	🟩
19	**Total Support Organizations**	14.5	26.8	12.4	🟩	120.4	143.1	22.7	🟩
20	**Corporate Services:**								
21	Office of the Chairman	(0.4)	0.9	1.3	🟩	1.3	2.8	1.5	🟩
22	Utility President	0.4	0.5	0.0	🟩	2.3	2.8	0.5	🟩
23	Corporate Affairs	14.0	10.5	(3.6)	🟥	38.6	40.5	1.9	🟩
24	Finance & Risk	5.7	6.5	0.8	🟩	34.5	36.4	1.9	🟩
25	General Counsel	4.8	5.8	1.0	🟩	29.0	33.9	4.9	🟩
26	Human Resources	5.6	6.2	0.6	🟩	34.3	31.3	(3.0)	🟥
27	Regulatory Relations	3.2	2.9	(0.3)	🟥	16.6	17.3	0.7	🟩
28	**Total Corporate Services**	33.4	33.3	(0.1)	🟩	156.6	164.9	8.3	🟩
29	**Separately Funded Projects & NRD**								
30	Fuel Cell	0.0	0.2	0.2	🟩	0.5	0.5	0.0	🟩
31	Photovoltaic (250 MV & VacaDixon)	0.1	0.3	0.1	🟩	0.6	1.3	0.7	🟩
32	New Revenue Development	0.4	1.1	0.7	🟩	7.2	6.4	(0.9)	🟥
33	Smart Meter Opt-Out Program	(0.6)	0.0	0.6	🟥	4.8	0.0	(4.8)	🟥
34	**Total Separately Funded Projects & NRD**	(0.1)	1.5	1.6	🟩	13.1	8.1	(5.0)	🟥
35	**Total (Pre-Tax)**	215.0	218.0	3.0	🟩	1,253.4	1,275.7	22.4	🟩
36	Contingency	0.0	11.5	11.5	🟩	0.0	34.9	34.9	🟩
37	**Total (Pre-Tax) Including Contingency**	215.0	229.5	14.5	🟩	1,253.4	1,310.7	57.3	🟩
38	Memo IIC - Natural gas pipeline matters (Pre-Tax)	48.1	48.0	(0.1)	🟩	229.9	210.9	(19.0)	🟥
39	**Total (Pre-Tax) Including Contingency and IIC**	263.1	277.5	14.4	🟩	1,483.3	1,521.6	38.3	🟩

🟩 ≥ -3% OR ≥ -$10M 🟨 > -6% and < -3% or >-$20M and <-$10M 🟥 ≤ -6% OR ≤ -$20M

Capital

			June				June YTD			
			Actual (A)	Budget (B)	Variance (C)=(B)-(A)		Actual (D)	Budget (E)	Variance (F)=(E)-(D)	
1	**Operations Business Lines:**	**Officer Owner:**								
2	**Electric Operations**		**190.0**	**196.9**	**6.9**	🟩	**1,112.7**	**1,158.0**	**45.3**	🟩
3	*Electric Distribution*	[redacted]	112.9	112.1	(0.8)	🟩	667.2	712.7	45.5	🟩
4	*Electric Transmission*	[redacted]	77.1	84.8	7.7	🟩	445.5	445.3	(0.2)	🟩
5	**Gas Operations**		**60.7**	**73.4**	**12.6**	🟩	**273.8**	**342.2**	**68.3**	🟩
6	*Gas Distribution*	Stavropoulos	35.6	46.4	10.8	🟩	167.3	213.9	46.6	🟩
7	*Gas Transmission*	Stavropoulos	25.1	27.0	1.9	🟩	106.6	128.3	21.7	🟩
8	**Customer Care**	[redacted]	**11.5**	**11.0**	**(0.4)**	🟨	**47.1**	**71.2**	**24.1**	🟩
9	**Energy Supply**		**40.2**	**41.1**	**0.9**	🟩	**249.4**	**283.5**	**34.2**	🟩
10	*Nuclear Generation*	[redacted]	18.7	22.5	3.8	🟩	132.4	159.7	27.3	🟩
11	*Power Generation*	[redacted]	21.5	18.5	(3.0)	🟥	116.7	123.5	6.9	🟩
12	*Energy Procurement*		0.0	0.1	0.1	🟩	0.3	0.3	0.0	🟩
13	**Total Operations Business Lines**		**302.3**	**322.3**	**20.0**	🟩	**1,683.0**	**1,855.0**	**172.0**	🟩
14	**Support Organizations:**									
15	**Information Technology**		**23.6**	**41.0**	**17.4**	🟩	**122.7**	**152.6**	**29.9**	🟩
16	*Information Technology*	[redacted]	12.7	26.1	13.4	🟩	61.7	75.5	13.9	🟩
17	*Technology Projects*	[redacted]	10.9	14.9	4.0	🟩	61.1	77.1	16.0	🟩
18	**Safety & Shared Services**	[redacted]	**21.3**	**15.7**	**(5.6)**	🟥	**75.9**	**79.7**	**3.7**	🟩
19	**Corporate Services**	[redacted]	**0.0**	**0.0**	**(0.0)**	🟩	**0.1**	**0.1**	**0.0**	🟩
20	**Total Support Organizations**		**45.0**	**56.8**	**11.8**	🟩	**198.8**	**232.4**	**33.6**	🟩
21	**Total Standard Rate Case**		**347.3**	**379.1**	**31.8**	🟩	**1,881.8**	**2,087.4**	**205.6**	🟩

🟩 ≥ -3% OR ≥ -$10M 🟨 > -6% and < -3% or >-$20M and <-$10M 🟥 ≤ -6% OR ≤ -$20M

Key Drivers - Expense:

- MTD is $9.0M over budget primarily due to field services gas leak and emergency response time improvement efforts, unfunded non-gradable meter leak repairs, the need to expand cathodic protection survey of Isolated Steel Services, more mark and locate requests than planned, and the acceleration and completion of more leak repairs than planned. The over run is partially offset by lower than planned meter protection unit costs and units completed.
- YTD is $21.0M over budget primarily due to the acceleration and completion of more leak repairs than planned, field services gas leak and emergency response time improvement efforts, unfunded non-gradable meter leak repairs, the need to expand cathodic protection survey of Isolated Steel Services, and more mark and locate requests than planned. The over run is partially offset by lower than planned meter protection unit costs and units completed.

Key Drivers - Capital:

- MTD is $12.6M under budget primarily due to slower than planned construction on various small L-300 and storage reliability projects, earlier material delays affecting the McDonald Island Whisky Slough rebuild project, a permitting delay affecting the Topock Suction project, credits received in Gas Transmission New Business, permitting delays and backlog of projects awaiting estimating in the Gas Pipeline Replacement Program, and various other project delays. The under runs are partially offset by expanded scope of the Bear Valley Spring class replacement project.
- YTD is $68.3M under budget primarily due to slower than planned construction on various small L-300 and storage reliability projects, earlier material delays affecting the McDonald Island Whisky Slough rebuild project, a permitting delay affecting the Topock Suction project, permitting and estimating delays in the Gas Pipeline Replacement Program, New Business/WRO projects coming in under budget, pending budget transfers for Gas Distribution IT projects, and various other project delays. The under runs are partially offset by higher than planned work execution on Gas Transmission New Business work, and expanded scope of the Bear Valley Spring class replacement project.

Source: G&A Risks & Opportunities

Gas Distribution Year-to-Date Unit Cost Expense June 2012

					Full Year (DET)	Full Year (CY1)	Unit Volume (UC010)			Annual CY1			Full Year (DET)	Full Year (CY1)	Total Cost (In Millions of Dollars)		
					A	B	C	D	E	F	G	H	I	J	K	L	M
	MWC	MAT	MAT Description	Units	2012 Planned Units	2012 Planned Units	Plan (CY1)	Actual	Variance (C-D)	Annual Unit Cost	Actual	Variance (F-G)	2012 Planned Dollars	2012 Planned Dollars	Plan (CY1)	Actual (BCA004)	Variance (K-L)
Unitized MATS																	
1	DF	DFA	Mark & Locate	USA Tags	314,999	323,611	170,107	167,067	3,040	89	89	(1) 🟩	28.2	28.7	14.7	14.9	**(0.2)** 🟩
2	FI	FIG	Maint-Corr-G Main Lk	Main Leaks Repaired	2,673	2,399	1,739	1,861	(122)	5,884	6,493	(609) 🟥	11.8	14.1	10.4	12.1	**(1.7)** 🟥
3	FI	F H	Maint-Corr_G_Svc Leak_AG	Svc Leak Repairs_AB	16,213	18,598	12,309	13,039	(730)	564	462	103 🟩	13.2	10.5	5.9	6.0	**(0.1)** 🟩
4	FI	F P	Maint-Corr_G_Svc Leak_BG	Svc Leak Repairs_BG	2	4,908	3,541	3,943	(402)	2,880	2,829	50 🟩	7.1	14.1	10.0	11.2	**(1.2)** 🟥
5	EX	EXB	MPP Protections	Locations	16,928	17,594	8,401	5,933	2,468	431	445	(14) 🟨	11.9	7.6	3.6	2.6	**1.0** 🟩
6	DE	DEA	Leak Survey	Services Surveyed	851,779	889,180	455,924	416,833	39,091	15	18	(3) 🟥	14.3	13.6	7.2	7.6	**(0.5)** 🟥
7	DG	DGE	G:Isolated Steel Svc Evaluatn	Isolated Services Tested fo CP	194,301	334,466	237,334	222,408	14,926	42	37	4 🟩	14.7	13.9	9.5	8.3	**1.2** 🟩
8	FH	FHB	Maint-Prev-G Reg Sta	Reg Sta runs inspected (A or B	4,409	4,333	2,198	2,155	43	1,410	1,392	18 🟩	6.1	6.1	3.2	3.0	**0.2** 🟩
9	DD	DDD	Pilot Relight	Service Tickets	7	235,520	59,119	80,492	(21,373)	111	122	(12) 🟥	26.3	26.1	10.1	9.8	**0.3** 🟩
10	DD	DDG	Gas Leaks & Emergencies	Service Tickets	7	184,027	74,473	100,969	(26,496)	186	187	(0) 🟩	29.9	34.3	17.7	18.9	**(1.1)** 🟥
11	DD	DDK	Gas Start	Service Tickets	7	80,498	22,985	34,283	(11,298)	162	175	(13) 🟥	13.1	13.1	6.0	6.0	**0.0** 🟩
12	DD	DDL	Gas Stop	Service Tickets	7	116,438	34,930	63,106	(28,176)	75	57	18 🟩	7.9	8.7	3.7	3.6	**0.2** 🟩
Non-unitized MATs																	
13	AB	#	Misc Expense										18.1	14.8	3.6	1.7	**1.8** 🟩
14	LK	#	G Dist WRO - Maintenance										4.4	4.4	3.2	3.2	**0.0** 🟩
			OTHER										104.7	102.9	45.1	45.0	**0.1** 🟩
	Total												**311.5**	**312.9**	**154.0**	**153.9**	**0.1** 🟩

Unit Volume based on UC010 Report from 7/10/2012
Total Cost based on BCA004 Report from 7/10/2012

🟥 Red >	6%
🟨 Amber >	3%
🟩 Green <=	3%
🟦 Unit Planning in Progress	

🟥 Red >	6%
🟨 Amber >	3%
🟩 Green <=	3%
🟦 Unit Planning in Progress	

🟥 Red >	6%
🟨 Amber >	3%
🟩 Green <=	3%
🟦 Unit Planning in Progress	

Issues:

- Units not all entered timely in SAP

Sources: Day 5 Line of Business Summary;
SAP BW UC010

Gas Transmission Year-to-Date Unit Cost Expense June 2012

					Full Year (DET)	Full Year (CY1)	Unit Volume (UC010)			Annual CY1				Full Year (DET)	Full Year (CY1)	Total Cost (In Millions of Dollars)			
					A	B	C	D	E	F	G	H		I	J	K	L	M	
	MWC	MAT	MAT Description	Units	2012 Planned Units	2012 Planned Units	Plan (CY1)	Actual	Variance (C-D)	Annual Unit Cost	Actual	Variance (F-G)		2012 Planned Dollars	2012 Planned Dollars	Plan (CY1)	Actual (BCA004)	Variance (K-L)	
Unitized MATS																			
1	KE	KE1	PSEP Pipe Pressure Test	PSEP Pipe Pressure Test (1)	139	149	14	-	14	4,241,747	-	4,241,747	🟦	153.1	136.3	58.2	53.2	5.1	🟩
2	KF	KF4	Records and MAOP Validation (1)	Records and MAOP Validation	3,400	3,400	1,897	2,271	(374)	36,970	32,087	4,883	🟩	125.7	125.9	70.7	72.9	(2.2)	🟨
Non-unitized MATs																			
3	CM	#	GT Operate System	GT Operate System										19.5	17.9	7.6	6.8	0.7	🟩
4	CX	#	GT Marketing/Sales/Strategy	GT Marketing/Sales/Strategy										7.7	7.4	3.5	3.4	0.0	🟩
5	BX	BX8	Other GSM&TS Expense Specific	Other GSM&TS Expense Specific										12.0	11.6	6.4	3.9	2.5	🟩
6	BX	BX4	GSM&TS Permits and Fees	GSM&TS Permits and Fees										5.1	5.0	2.6	2.3	0.3	🟩
7	BX	#	Maint Gas Transm System	Maint Gas Transm System										19.4	21.5	13.2	15.4	(2.2)	🟥
8	KF	KF1	CPUC	CPUC										19.2	23.7	14.3	12.8	1.6	🟩
9	KF	KF1	CPUC	CPUC										19.2	23.7	14.3	12.8	1.6	🟩
10	KE	KEX	PSEP Pipeline Other Expense	PSEP Pipeline Other Expense										12.2	15.9	11.3	16.8	(5.5)	🟥
11	KE	KEX	PSEP Pipeline Other Expense	PSEP Pipeline Other Expense										12.2	15.9	11.3	16.8	(5.5)	🟥
			OTHER											100.0	82.3	22.7	11.7	11.0	🟩
	Total													505.4	487.2	236.0	228.7	7.3	🟩

Unit Volume based on UC010 Report from 7/10/2012
Total Cost based on BCA004 Report from 7/10/2012

1) Includes all cost and miles completed

Red >	6%
Amber >	3%
Green <=	3%
Unit Planning in Progress	

Red >	6%
Amber >	3%
Green <=	3%
Unit Planning in Progress	

Red >	6%
Amber >	3%
Green <=	3%
Unit Planning in Progress	

Issues:
- Units not tracked in SAP; assessment in progress
- 3 week lag between hydrotest tie-in
- Reconciliations necessary between scorecard and unit cost report for hydrotest

Sources: Day 5 Line of Business Summary;
SAP BW UC010

Gas Distribution Year-to-Date Unit Cost Capital June 2012

					Full Year (DET)	Full Year (CY1)	Unit Volume (UC010)			Annual CY1				Full Year (DET)	Full Year (CY1)	Total Cost (In Millions of Dollars)			
					A	B	C	D	E	F	G	H		I	J	K	L	M	
	MWC	MAT	MAT Description	Units	2012 Planned Units	2012 Planned Units	Plan (CY1)	Actual	Variance (C-D)	Annual Unit Cost	Actual	Variance (F-G)		2012 Planned Dollars	2012 Planned Dollars	Plan (CY1)	Actual (BCA004)	Variance (K-L)	
Unitized MATS																			
1	14	14A	Pipeline Repl Pgm-Mains & Svcs	Feet of Main Installed	156,792	161,383	46,960	47,700	(740)	487	645	(157)	🟦	81.9	78.7	28.5	30.8	**(2.2)**	🟥
2	14	14B	Copper Service Replacements	Copper Service Re-Run	7,540	7,417	3,965	4,362	(397)	7,242	6,585	657	🟩	51.0	53.7	26.3	28.7	**(2.5)**	🟥
3	2K	2KA	Cust HPR Reg Sta Convert Main	# Reg Stations Abandon Only	1,136	1,129	326	255	71	35,014	82,852	(47,838)	🟦	41.0	39.5	18.6	21.1	**(2.5)**	🟥
4	14	14D	Plastic Pipe Replace_Main/Svc	Feet of Main Installed									🟦	36.6	36.1	9.8	5.2	**4.6**	🟩
5	50	50A	Impr Rel/ Dep - Gas Mains	Total Pipe Footage installed									🟦	22.6	20.8	8.7	7.8	**0.9**	🟩
6	50	50B	Impr Rel/Dep - Gas Services	# services replaced - dig in									🟦	11.3	13.4	4.0	3.7	**0.3**	🟩
Non-unitized MATs																			⬜
7	51	51e	WRO Relocate Mn & Svcs - G											39.7	37.0	11.7	11.9	**(0.2)**	🟩
8	78	#	Not assigned											41.2	37.3	9.6	2.4	**7.2**	🟩
9	29	29C	NB-G-Res Svc R16 Only											0.0	0.0	0.0	0.0	**0.0**	⬜
10	2F	#	Not assigned											0.0	0.0	0.0	0.0	**0.0**	⬜
			OTHER											138.1	127.9	58.2	55.6	**2.6**	🟩
Total														**463.5**	**444.5**	**175.4**	**167.3**	**8.2**	🟩

Unit Volume based on UC010 Report from 7/10/2012
Total Cost based on BCA004 Report from 7/10/2012

Red >	6%
Amber >	3%
Green <=	3%
[redacted]	

Red >	6%
Amber >	3%
Green <=	3%
[redacted]	🟦

Red >	6%
Amber >	3%
Green <=	3%
[redacted]	🟦

Issues:
- Units not all entered timely in SAP

Financial Details

Sources: Day 5 Line of Business Summary;
SAP BW UC010

Gas Transmission Year-to-Date Unit Cost Capital June 2012

					Full Year (DET)	Full Year (CY1)	Unit Volume (UC010)			Annual CY1			Full Year (DET)	Full Year (CY1)	Total Cost (In Millions of Dollars)			
					A	B	C	D	E	F	G	H	I	J	K	L	M	
	MWC	MAT	MAT Description	Units	2012 Planned Units	2012 Planned Units	Plan (CY1)	Actual	Variance (C-D)	Annual Unit Cost	Actual	Variance (F-G)	2012 Planned Dollars	2012 Planned Dollars	Plan (CY1)	Actual (BCA004)	Variance (K-L)	
Unitized MATS																		
1	2H	2H1	PSEP Pipe Replacement	PGE1/Not assigned	39	39	6	3	3	Long cycle MAT unit cost is not calculated on a YTD basis			269.9	228.0	71.1	27.7	**43.3**	🟩
2	75	75B	Pipeline Reliability / Safety	Total Pipe Footage installed									55.9	52.2	18.1	21.9	**(3.9)**	🟥
3	2H	2H3	PSEP Valve Automation	PGE1/Not assigned	46	46	25	24	1				41.1	39.6	11.6	7.7	**3.9**	🟩
4	2H	2H4	PSEP LI Pipeline Retrofit	PGE1/Not assigned	78	78	-	-	-				13.9	14.4	8.1	6.9	**1.2**	🟩
Non-unitized MATs																		
5	2H	2HX	PSEP Other Capital	PGE1/Not assigned									85.7	73.3	15.4	11.3	**4.1**	🟩
6	76	76C	Storage Reliability	PGE1/Not assigned									37.1	32.6	12.8	14.4	**(1.6)**	🟥
7	76	76A	L300 Station Reliability	PGE1/Not assigned									31.9	24.7	11.1	7.3	**3.8**	🟩
8	83	83A	Work Requested by Others	PGE1/Not assigned									7.6	6.1	5.3	5.2	**0.1**	🟩
9	98	98A	Pipeline Integrity Management	Total Pipe Footage installed									28.0	20.7	9.8	8.1	**1.8**	🟩
10	2H	2H2	PSEP Emergency Pipe Repl	PGE1/Not assigned									28.9	30.2	11.8	3.2	**8.6**	🟩
			OTHER										138.3	130.3	54.9	46.2	**8.7**	🟩
Total													**738.3**	**652.0**	**230.1**	**160.0**	**70.0**	🟩

Unit Volume based on UC010 Report from 7/10/2012
Total Cost based on BCA004 Report from 7/10/2012

🟥 Red >	6%
🟨 Amber >	3%
🟩 Green <=	3%
🟦 Unit Planning in Progress	

🟥 Red >	6%
🟨 Amber >	3%
🟩 Green <=	3%
🟦 Unit Planning in Progress	

🟥 Red >	6%
🟨 Amber >	3%
🟩 Green <=	3%
🟦 Unit Planning in Progress	

Issues:
- Units not tracked in SAP; assessment in progress
- 3 week lag between hydrotest tie-in
- Reconciliations necessary between scorecard and unit cost report for hydrotest

Sources: Day 5 Line of Business Summary;
SAP BW UC010

Gas Transmission Income Statement

Data as of 07/12/12

() indicates an unfavorable variance

(in millions of dollars except EPS amounts)

FOR DISCUSSION PURPOSES ONLY
UNOFFICIAL

		Month			Year to Date 2012				Annual Budget			
		Actual	Budget	Variance	Actual	Budget	Variance		Forecast	Budget	Variance	
1	**REVENUE**											
2	Transmission	42.0	41.2	0.8	256.4	241.7	14.7	C	510.7	494.5	16.2	A, C
3	Other Revenue Adjustments	1.7	(0.9)	2.6	(4.8)	(1.4)	(3.4)	D	(16.7)	(9.2)	(7.5)	B, D
4	Miscellaneous Revenue	0.0	0.0	0.0	0.1	0.0	0.1		0.1	0.0	0.1	
5	**Total Revenue (Sum of Lines 2, 3 and 4)**	43.7	40.3	3.4	251.7	240.4	11.3		494.0	485.3	8.7	
6	**OPERATING EXPENSES**											
7	Business Unit	11.0	10.3	(0.7)	62.3	59.8	(2.5)		122.0	118.0	(4.0)	
8	**Total Operating Expenses**	11.0	10.3	(0.7)	62.3	59.8	(2.5)		122.0	118.0	(4.0)	
9	**OTHER EXPENSES**											
10	Corporate Services	2.5	2.5	0.0	13.0	12.5	(0.5)		27.4	26.9	(0.5)	
11	Environmental	1.4	0.0	(1.4)	7.9	0.0	(7.9)		7.9	0.0	(7.9)	E
12	Depreciation	9.7	9.3	(0.4)	57.4	55.3	(2.2)		114.6	112.5	(2.2)	
13	AFUDC	(1.0)	(1.0)	(0.0)	(4.0)	(4.3)	(0.2)		(11.9)	(12.1)	(0.2)	
14	Interest and Bank Fees	4.6	4.5	(0.0)	27.1	26.9	(0.2)		54.9	54.3	(0.6)	
15	Property Taxes	1.9	1.9	0.0	11.6	11.2	(0.3)		23.2	22.9	0.0	
16	Corporate Items	3.6	2.6	(0.9)	25.4	13.9	(11.5)		38.9	27.1	(11.9)	F
17	**Other Expenses**	22.6	19.8	(2.8)	138.3	115.5	(22.8)		255.1	231.5	(23.6)	
18	Other Income/(Deductions)	(0.2)	0.0	0.2	0.5	0.0	0.0		0.4	0.00	(0.4)	
19	**Income before taxes**	**10.0**	**10.2**	**(0.2)**	**51.6**	**65.1**	**(13.5)**		**117.4**	**135.8**	**(18.4)**	
20	Operating Permanent Taxes	(0.3)	(0.1)	0.2	(1.5)	(1.2)	0.3		(2.7)	(2.4)	0.3	
21	Income Taxes	4.1	4.1	0.1	21.0	26.5	5.5		47.8	55.4	7.5	
22	**INCOME FROM OPERATIONS**	6.2	6.2	0.1	32.1	39.8	(7.7)		72.3	82.9	(10.6)	
23	Less Preferred Dividend	0.1	0.1	0.0	0.7	0.7	0.0		1.4	1.4	0.0	
24	**EARNINGS AVAILABLE FOR COMMON**	**$ 6.1**	**$ 6.0**	**$ 0.1**	**$ 31.5**	**$ 39.1**	**$ (7.7)**		**$ 70.9**	**$ 81.5**	**$ (10.6)**	
25	Outstanding Shares	427	423	3	421	418	2		421	422	(2)	
26	**EPS**	**$0.014**	**$0.014**	**$0.000**	**$0.075**	**$0.094**	**($0.019)**		**$0.169**	**$0.193**	**($0.024)**	
27	**ROE**								**7.5%**	**8.7%**		G
28	**RATEBASE**								**1,811**	**1,811**		H

Notes:

Does not include PSEP

A This row represents purely operational GT Revenues data only (BB, LT, Storage)

B This row contains adjustments for Balancing Accounts (Integrity Management, Cost of Energy, Revenue Sharing, Turlock Irrigation District)

C **Favorable variance is due to the following:**

Backbone:

1) Due to low gas prices, the gas demand is being met by customers transporting gas on the PG&E system rather than withdrawing gas from storage. Customers pay transportations fees when gas is injected into storage however they do not pay additional transportation fees when gas is withdrawn from storage. Despite the lack of customer withdrawals, customers are still expected to inject more gas into the storage system, thus maintaining favorability.

2) Higher Electric Generation (EG) demand due to the San Onofre Nuclear Generating Station outage as well as lack of rain, which has decreased hydro generation and increased gas-fired EG demand.

3) Higher Off-system revenue due to favorable price spreads, customers purchasing more transportation contracts and San Onofre Nuclear Generating Stations outage.

Local Transmission

1) Higher industrial demands due to the continued high refinery demand.

2) Higher Electric Generation (EG) demand due to the San Onofre Nuclear Generating Station outage as well as lack of rain, which has decreased hydro generation and increased gas-fired EG demand.

D The purpose of the Revenue Sharing Mechanism is to share over-collection of revenues with customers, net of a seed value imbedded in rates. Year-To-Date favorable backbone and local transmission activity caused the increase of revenues to be shared with customers, thus producing an unfavorable revenue sharing variance.

E Hinkley non-chromium remediation accrual for Q1. Does not include chromium remediation accruals classified as an IIC.

F Litigation and Third-Party claims. Information is privileged and confidential.

G ROE is calculated assuming a capital structure of 52% equity.

H Based on the Weighted Average Rate Base provided by the Financial Forecasting and Analysis Department.

Source: [redacted] & [redacted]
in Financial Analysis & Reporting

Gas Operations Finance Initiatives

Note: RAG status and action items not yet reviewed by Gas Operations

Initiative	Description	RAG	Accomplishments	RAG Action Items	Target Resolution Date	Owner
Roles and Responsibilities	Clarify financial responsibilities between BF and IP	🟨	- Continue to meet with IP to discuss roles and responsibilities by process	- Mapping close to report process for roles and efficiency changes	7/31/12	A. Beech
Planning/ Forecasting	Status of planning & forecasting accuracy/efficiency	🟨	- No specific initiatives in flight (roles and responsibilities need to be determined first)	- Continue roles/responsibilities mapping - Establish forecast source data consistency		[redacted]
Financial Reporting	Budget alignment with financial reporting and break down Gas Transmission MWCs to unit-driven work categories	🟨	- GT MWC / MAT design and timelines review with GT Leadership completed. Final workshop scheduled 7/13 (Station & Pipeline Engineering – Capital) - Budget Center Accountability (interim) implemented for June reporting	- Workshop outcome will result in final MWC / MAT redesign, identified units to track (manually / automated) and report against - Need budget accountability decisions in Gas Ops		[redacted]
Regulatory Support	Overland Audit on Gas Distribution (1998-2011)	🟩	- Completed OC questions, 390 – 393 and 406 – 408 by assigned deadline	- Respond to additional inquiries/follow-ups as needed		[redacted] A. Beech
Efficiency Opportunities	Identify savings opportunities	🟨	- Brainstorming session held to identify opportunities including: Headcount Fill Rate, Goods Receipts Processing, Order Setup/Management Process, Damage Claims Orders	- Continue working with Ops to identify savings and monitor progress	Q4'12	[redacted]
Cost Model Redesign	Work with several stakeholders to drive simplicity & transparency and improve cost management	🟩	- Gas Operations identified working team to provide input - Gathered input from working team	- Will present and request LOB SVP feedback and decision on implementation on 7/17		[redacted]
Integrated Planning (S-1/S-2)	Support Gas leadership by providing financial insights and analysis	🟩	- Finalized S-1 Financials - Held initial meetings on S-2 and set review calendar - Submitted initial S-2 data requests	- Continue working to ensure adequate touch points and review		A. Beech
Unit Cost Reporting	Provide visibility to work and unit cost drivers for major programs and moving unit cost information in SAP	🟨	- Identified MATs to unitize and track in SAP - Reporting all MATs for distribution expense - Conducted meetings with capital MAT owners - Defined units for 2H and KF ready to report in SAP	- Implement SAP tracking for capital MATs - Transmission MWC/MAT redesign in progress, once complete, unit tracking will be implemented – Sep/Oct - Resolve unit reporting inconsistencies in 2H, KE, and KF	10/31/12	[redacted]
PAS 55	Establish a different standard of excellence in asset risk management by focusing on each family of asset	🟩	- Performed initial analysis by reviewing current gas assets and mapping against the new proposed asset families - Met with Capital Accounting and Financial Application Support to determine feasibility of migrating POWERPLANT data (Asset Class) into SAP BW and alignment of Asset Class and Reg Cat to Asset Families. Confirm migration of POWERPLANT data into SAP is possible	- Continue to support initiative and transition orders to new asset families - Confirm with PAS 55 lead that POWERPLANT data migration to SAP BW is possible - Finance may seek funding from Gas Operations if required in 2012		[redacted]

June 2012

Impact of Capital Under Spend

Capital- Related Expenses
- Depreciation, AFUDC

Sourcing
- Supplier diversity, materials burdens

Tax Act Memorandum Account (TAMA)
- Capital Additions
- 2010 Tax Relief Act – bonus depreciation for long-lived assets placed in service
- Invest more capital to maintain the 2011 GRC authorized RR

Rule of thumb:
- $100M of underspent capital is about $23M of lost revenue (after "cushion")
- TAMA is only for incremental spend for which is not recoverable in a major rate case or a separately funded case

Gas Operations Capital Additions (Millions)

	CY1 Capital Budget	TAMA Additions FY Plan	TAMA Additions YTD Plan	TAMA Additions YTD Actual	Variance
Gas Distribution	445	292	109	96	(12)
Gas Transmission	271	217	70	35	(35)
Total	716	508	179	132	(47)

Data as of May 2012

General Rate Case
- 2012 actuals
- ~2x increase in capital spend from 2012 to 2014

Work Execution

Finance Education Topic

CY1 > CY2 > DET

		CY1																CY2								DET											
Deliverable	**Lead**	**April**				**May**				**June**				**July**				**August**				**September**				**October**				**November**				**December**			
PCC Planning	*Finance*	🟦	🟦	🟦	🟦													🟦	🟦	🟦	🟦					🟦	🟦	🟦	🟦								
PCC Headcount & Cost Governance	Investment Planning	🟦	🟦	🟦	🟦													🟦	🟦	🟦	🟦					🟦	🟦	🟦	🟦								
Pre-Planning Analysis	Business Finance	🟦																🟦								🟦											
System Planning	Business Finance		🟦	🟦															🟦	🟦							🟦	🟦									
Copy to PRJ / RES	Financial Application Support				🟦																🟦								🟦								
S-1	*Gas Ops / Finance*		🟥	🟥	🟥	🟥	🟥	🟥	🟥	🟥	🟥	🟥	🟥	🟥	🟥																						
S-2	*Gas Ops / Finance*																	🟧	🟧	🟧	🟧	🟧	🟧	🟧	🟧												
Order Planning	*Gas Ops / Finance*		🟪	🟪	🟪	🟪	🟪	🟪	🟪										🟪	🟪	🟪	🟪	🟪	🟪	🟪		🟪	🟪	🟪	🟪	🟪	🟪	🟪	🟪			
2013 Budget Letters	Financial Planning & Governance																										🟪										
Program Forecast Review	Investment Planning		🟪																🟪								🟪	🟪									
Target Setting	Investment Planning			🟪																🟪								🟪									
Detail Approved Targets	Program Managers				🟪	🟪															🟪	🟪							🟪	🟪							
Target and Plan Input	Business Finance / Detail Planners						🟪																🟪							🟪	🟪	🟪					
Target and Plan Validation	Business Finance / Investment Planning							🟪																🟪									🟪	🟪			
Resource Reconciliation	Business Finance / Gas Ops							🟪																🟪									🟪	🟪			
Copy to CY1 / CY2 / DET	Financial Application Support								🟪																🟪									🟪			

Investment Planning
- PCC Headcount & Cost Governance
- Program Forecast Consolidation & Review / Target Setting
- Detail Approved Targets
- Resource Reconciliation

Business Finance
- PCC Planning
- Target Input & Validation
- Plan Input & Validation
- Resource Reconciliation

Finance Education Topic

S-2 Process

Purpose

Translation of the S-1 strategic goals into a multi-year work and resource plan

Presentation and justification of the 2013 budget request, includes key deliverables:

- 2012-2015 expense and capital forecasts (2012 – 2015)
- 2013 prioritization of request (bottom 5% of request)
- 2012-2015 headcount, contract spend and labor spend
- Workforce strategy

Consistency in work and resource planning detail across the company

Cross-company prioritization

Key Dates (tentative - review meetings will be scheduled shortly)

July 9 – August 10: business owner refinement of forecasts (ongoing, with support from Business Finance and Investment Planning)

July 11 – Initial hi-level forecasts due to Integrated Planning team for corporate items and separately funded work

August 10 – Forecast sign-off from Jesus, Kirk, and Kevin

August 14 – Cross-LOB S-2 check-in / review

August 17 – Review S-2 with Nick and Direct Reports in our all-day business review meeting / Governance and Sanctioning

August 24 – S-2 Templates due to Integrated Planning team

September 3, 6 – Review of Gas S-2 with Nick and Direct Reports

September 10 – S-2 Presentations due to Integrated Planning team

September 20 – Nick and Direct Reports present plan to Senior Executive Leadership Team

Month **6**

	RAG Status reflects YTD status only	METRICS WITH GREEN STATUS ONLY		METRICS WITH RED / AMBER STATUS ONLY				
YTD RAG Status	**Metric Name**	**Actions to Maintain Green** What is the organization doing to ensure the metric remains green.	**Potential Risks** What could cause the metric to become red or amber?	**Why is metric not green?**	**Action(s) to get back to green**	**Month Metric Back to Green** If forecasted to remain red or amber through end of year, enter "Will not return to green for the remainder of the year".	**Metric Owner (EVP Direct Report in Charge)**	**Metric Reporter**
🟥	**Grade 2 Leak Repair (Tier 2)**	Leak repair performance is ahead of schedule and more challenging below ground work is in front of the team, which means that completion rates will slow in the next few months. However, the plan is for full completion of all grade 2 leaks relative to this effort to be worked by no later than October 31, 2012, with the strong possibility of completion prior to that date.	This metric has already successfully reached 95% of completion. Leak repair performance is more challenging as below ground work is in front of the team, which means that completion rates will slow in the next few months. ALR plan must be followed to help stay on the track.				Kevin Knapp	[redacted]
🟧	**Mean-time to Emergency Shutdown**			2011 data incomplete.	Working to establish accurate 2012 data and benchmark with top utilities on shutting in gas by 8/15/12		Kevin Knapp	[redacted]
#DIV/0!	**Gas Immediate Response (< 30 mins)**			The 30 minute metric is the most difficult to achieve on a YTD basis due to the slow start below target in the first 4 months of the year. May and June results are green for the month.	Leveraging the GSR Make Safe process and daily conference calls to drive improvements.		Kevin Knapp	Jimmy Morales
#DIV/0!	**Gas Immediate Response (< 60 mins)**	Established daily conference calls to monitor and adjust GSR resources as necessary. Also GSR Make Safe process is now in 10 locations and is producing positive results.	Metric could go red or amber if odorant issues arise that increase R calls that strain available resources.				Kevin Knapp	Jimmy Morales
🟥	**Leak Surveys (Tier 2) Completed - Transmission**			• Significant under-reporting in GT Districts -- only 17% utilizing EzTech Tablets. • EzTech Significantly under-reporting due to background errors in data pull. • Lag in Lasen inflow of Data for Aerial Survey. • New technology (e g. Samsung Tablet) not being used to its fullest potential – creating duplicated work due to the parallel continuance of legacy system causing inefficient work flow. • Resource constraints – high turnover rate to other duties, resource sharing (e.g. rechecks, locate & mark, repair pinpointing, etc.), special leak surveys. • Inclement weather.	• Roll out of Tablets to GT Districts. • EzTech background error in data pull has been identified and corrected. • Weekly EzTech Tablet and Web Enhancements coupled with system-wide weekly LS Surveyors/Supervisor calls to capture progress and feedback. • Use SharePoint Actuals moving forward -- even though there is slight lag in data update, it is the electronic auditable record and is a more accurate quality capture. (Note: SharePoint shows positive health 80% YTD Complete as of this month). • Hiring of 24 Contractors (RMS/Southern Cross) Dedicated to Leak Survey in Local Division territory. (Note: Does not include GT Districts) • Weekly Leak Survey Catch Up Plan Report and Course Correction Calls. • Field visits with hands-on training to LS Supervisors and Lead Mappers on how to use Front End Report/Tool(s) posted on SharePoint.	7/31/2012	Kevin Knapp	[redacted]

	RAG Status reflects YTD status only	METRICS WITH GREEN STATUS ONLY		METRICS WITH RED / AMBER STATUS ONLY				
YTD RAG Status	**Metric Name**	**Actions to Maintain Green** What is the organization doing to ensure the metric remains green.	**Potential Risks** What could cause the metric to become red or amber?	**Why is metric not green?**	**Action(s) to get back to green**	**Month Metric Back to Green** If forecasted to remain red or amber through end of year, enter "Will not return to green for the remainder of the year".	**Metric Owner (EVP Direct Report in Charge)**	**Metric Reporter**
🟥	**Leak Surveys (Tier 2) Completed - Distribution**			• EzTech Significantly under-reporting due to background errors in data pull. • Delay in obtaining Contractors. • New technology (e g. Samsung Tablet) not being used to its fullest potential – creating duplicated work due to the parallel continuance of legacy system causing inefficient work flow. • Resource constraints – high turnover rate to other duties, resource sharing (e.g. rechecks, locate & mark, repair pinpointing, etc.) , special leak surveys, new technology (e.g. DP-IR) increasing find rate. • Inclement weather.	• EzTech background error in data pull has been identified and corrected. • Weekly EzTech Tablet and Web Enhancements coupled with system-wide weekly LS Surveyors/Supervisor calls to capture progress and feedback. • Use SharePoint Actuals moving forward -- even though there is slight lag in data update, it is the electronic auditable record and is a mroe accurate quality capture. • Hiring of 24 Contractors (RMS/Southern Cross) Dedicated to Leak Survey in Local Division territory. (Note: Does not include GT Districts) • Weekly Leak Survey Catch Up Plan Report and Course Correction Calls. • Field visits with hands-on training to LS Supervisors and Lead Mappers on how to use Front End Report/Tool(s) posted on SharePoint.	7/31/2012	Kevin Knapp	[redacted]
🟥	**Main Replacement Cost per Foot**			Cost in San Francisco Division are higher than historical due to difficult construction situations that could not be predicted.	Excavation Technology team is assessing the metric and finding new procedure and technology to bring down cost. Continual monitoring of projects and scope with estimating, GC, and engineering will help lower unit cost.	Unknown	Kevin Knapp	[redacted]
🟩	**Service Replacement Cost per Service**	Continue current level of productivity and advanced planning will keep unit costs low.	If services are located in areas with tough terrain or difficult construction access.				Kevin Knapp	[redacted]
#DIV/0!	**After Field Visit Survey - Overall Satisfaction (Q5)**			Changes made to the Survey in February and March had an immediate and negative impact to the YTD results In June results exceed goal.	developed team to address AFVS impacts, including customer facing skills, technology improvements, and employee engagement teams.	without scrubbing Feb and March data returning metric to green will be difficult.	Kevin Knapp	[redacted]
🟧	**All Gas Officer & Director Positions Filled**			All Officer positions are filled, open positions are Director level positions some of which are the most technically demanding and therefore scarce in the market place.	Working on targeted search efforts with experts in the field to fill positions	Originally expected to be Green by September but may need to adjust expectations based on a recent reversal of a previous acceptance.	[redacted]	[redacted]
🟩	**Technical Training - Complete Benchmarking**	NA - Complete	NA - Complete				Jane Yura	[redacted]
🟩	**Technical Training - Build Improvement Plan**	NA - Complete	NA - Complete				Jane Yura	[redacted]
🟩	**Technical Training - Start Implementation**	Working to align standards and procedures development project plan with training priorities. Utilizing training committees as business sponsors to support the development of identified priorities.	Limited number of SMEs and procedures available to support some topics.				Jane Yura	[redacted]
🟩	**Quality Control (QC) Re-dig Program**			Have completed 1 of 4 milestones due in 2nd quarter. Supervisor in place, problems involved with posting specialist positions. Have intern in place working on developing electronic data gathering process, and 6 sigma team is working on developing scorecard.	Minimum of bi-weekly meetings of team to ensure past due milestones are brought current, with additional SME meetings to ensure development of program and processes. Daily calls to HR to ensure specialist jobs are posted to fill as soon as possible. Job descriptions created and jobs due to repost ASAP. These milestones in place along with milestones planned for 3rd quarter. With many other positions planned and or posted in system, pool of available candidates for specialist jobs will diminish.	Expect to return to green status by end of 3rd quarter. Have begun working on 3rd quarter milestones along with working on finalizing others.	Jane Yura	[redacted]
🟩	**Leak Survey Quality Metric**	Will continue to press on with reviews. Have completed over half of the planned surveys with no failed surveys to date. The more surveys completed without finding Grade 1 leak that "should have been found" the better the chance of the system reaching the goal.	There is currently one grade one leak finding that is scheduled for investigation. If it is deemed a failed survey, it will be the first of the year and will affect our status, but with the amount of surveys already completed YTD, we will still be Green.				Jane Yura	[redacted]

	RAG Status reflects YTD status only	METRICS WITH GREEN STATUS ONLY		METRICS WITH RED / AMBER STATUS ONLY				
YTD RAG Status	**Metric Name**	**Actions to Maintain Green** What is the organization doing to ensure the metric remains green.	**Potential Risks** What could cause the metric to become red or amber?	**Why is metric not green?**	**Action(s) to get back to green**	**Month Metric Back to Green** If forecasted to remain red or amber through end of year, enter "Will not return to green for the remainder of the year".	**Metric Owner (EVP Direct Report in Charge)**	**Metric Reporter**
🟥	**PSEP % Miles Strength Tested**	Increasing integration of strength test, pipeline replacement, and valve automation activities, particularly on construction contracting and system clearances. Successfully tested and communicated to all contractors an improved mercury cleaning protocol, that indicates potential to reduce cleaning runs.	Decreasing ability to change integrity management or PSEP test scope without impacting 2012 targets. Limited availability of District/Division T&R resources to provide required clearances.				Kirk Johnson	[redacted]
🟥	**PSEP % Miles Replaced**			Construction start delays, primarily affecting four projects; all have since started. Through June 25, Pipeline Replacement construction contracts totaling over 24 miles or approximately $70 million have been	Continuing to monitor design phase activities (survey, engineering, and permitting), competitiveness of fixed-cost bidding and build out of construction management and transmission planning (clearance)	Aug 2012 metrics.	Kirk Johnson	[redacted]
🟥	**PSEP % Valves Modified / Automated**	Commissioning of two valves at Diana station was delayed to July 2.	Completed commission at Diana stations July 2 and continuing to execute to valve upgrade/automation schedule.				Kirk Johnson	[redacted]
🟩	**PSEP % Miles Retrofitted for In Line Inspection**	All 2012 materials ordered and monitoring 2012 project schedule.	Delivery of 2012 materials and clearance timelines.				Kirk Johnson	[redacted]
🟥	**PSEP Strength Test Cost per Mile ($M) (YTD Only)**			Metric target includes costs but not miles associated with tests that are not-yet complete.	Continuing to execute integrated 2012 strength testing schedule.	Q4 2012	Kirk Johnson	[redacted]
🟥	**PSEP Strength Test Cost per Test Segment ($M) (YTD Only)**			Metric target includes costs but not miles associated with tests that are not-yet complete.	Continuing to execute integrated 2012 strength testing schedule.	Q4 2012	Kirk Johnson	[redacted]
🟩	**Gas Transmission O&M $ Spent per Pipeline Mile**	O&M spend/mile is green in June. More funding was made available for Hydro-Testing (IIC) and maintenance for 2012, the metric is expected that these additional costs will drive this metric into the Amber & Red in coming months.	Metric is likely to turn Amber or Red in the coming months as we execute on the additional resources (funds) made available in April.				Kirk Johnson	[redacted]
🟧	**Implement Gas Transmission Control Room Enhancements per NTSB**			Several key milestone dates still lagging. Resources have been slow to obtain.	Clearance Work Procedure revisions will be rolled out to Gas Ops during week of July 23. Consultants have been lined up to focus on SCADA assessment and Leak detection scoping process.	September	Mel Christopher	[redacted]
🟩	**Distribution Control Room**	Finalized floor plan and console design for the 16th floor Distribution Control Room. Getting quotes from vendors to order furniture and hardware.	Resources assemble/hire team for Gas Distribution. IT application and telecommunication resources.				Mel Christopher	[redacted]
🟩	**Gas Over-Pressure Event Frequency (OPF)**			For June had 2 transmission events (less than expected). Preliminary root cause: 2 work procedure failure.	Team formed to address root causes of overpressure events. Distribution team lowered all LP reg pressures. Planning evaluating impact of 5/20 policy on local and backbone transmission systems. Planning evaluating winter impacts of lowering LP regulator pressures.	Will not return to green for the remainder of the year	Mel Christopher	[redacted]
🟥	**Achieve Public Safety Awareness Requirements**			The number of dig-ins increased significantly as the summer excavation activity has increased. June was the highest number of dig-ins of any month in 2012.	We are in the process of developing web-based training and instructor-led training for Excavators, Contractors, and Agricultural workers. The course highlights the following areas: Abide by the "One Call Law," Follow CA State excavation guidelines, and Avoid "Dig-ins." This training will roll out during the		Roland Trevino	Jeff Carroll
🟩	**Robust Fire Department Training**	We have eight Public Safety Specialists dispersed geographically through PG&E's service territory.	If the presenter does not provide solid information, the audience may not grasp the content. We are working				Roland Trevino	Jeff Carroll

	RAG Status reflects YTD status only	METRICS WITH GREEN STATUS ONLY		METRICS WITH RED / AMBER STATUS ONLY				
YTD RAG Status	**Metric Name**	**Actions to Maintain Green** What is the organization doing to ensure the metric remains green.	**Potential Risks** What could cause the metric to become red or amber?	**Why is metric not green?**	**Action(s) to get back to green**	**Month Metric Back to Green** If forecasted to remain red or amber through end of year, enter "Will not return to green for the remainder of the year".	**Metric Owner (EVP Direct Report in Charge)**	**Metric Reporter**
🟥	**Dig-In Rate per 1,000 USA Tags**			The dig-in rate for June was 4 26 and YTD was 3.32, below the MTD and YTD target of 3.01. This was primarily due to the 3P Excavators that are not making a call to USA (811) before they dig, which accounted for 66% of the total dig-ins. The 3P Excavators that called USA but did not follow proper excavating procedures accounted for 25% of the total dig-ins and 9% were for PG&E At-faults.	PG&E is continuing to improve the processes on mark and locate by upgrading the retrieval ticket information system, providing new tools and locating equipment and most importantly reaching out and educating contractors and excavators on safe locating practices and promoting the "call 811 before you dig" program. PG&E's Public Awareness and Public Safety Program has a robust communication plan and strategies to educate contractors and homeowners about digging safely by sending materials, first and multiple offense letters and working actively with Communications Department on an on-going advertising campaign, which started airing the 2nd week of June. Also, PG&E has partnered with CARCGA to support the federal enforcement on damage prevention. PG&E has purchased 75 Vivax Loc Pro and releasing another 75 in Quarter 3 when the Android tablets are rolled out. The transition to a mobile platform is scheduled later this year. Phase 1 development is complete and ready to pilot. However, there are still negotiations on whether to support the system via Windows instead of Android, which can cause delay in deployment. PG&E is also evaluating two new locate and mark tools for unlocateable facilities such as the locating fish tape and acoustic locator. Pilot for this project should be completed later this year. In addition, PG&E's Public Awareness program is looking at offering training for excavators that damaged the facilities and offering incentives/awards for contractors who do not damage the facilities. A Repeat Offender Committee will also be formed	October, 2012	Roland Trevino	Maria Arquines
🟥	**At-fault Dig-ins**			The YTD At-Fault dig-in rate was .33, below the target of .16. The total count of at-fault dig-ins for June was 14, lower than last month's total. There are 6 at-faults that can potentially be cleared in the total of 71. The numbers are still subject to adjustments because until all investigations are complete, the dig-in is flagged initially as an at-fault dig-in and will be re-stated if found not an at-fault. Notices to M&L Supervisors were provided to determine and confirm if the dig-ins were an at-fault or not. Mismarks and missed facilities are major drivers of the at-faults. In addition, newly installed facilities that have not yet been mapped are also sometimes hit by 3rd parties.	A monthly supplemental report on At-fault dig-in by division is being submitted to inform field supervisors the importance of providing complete dig-in information in a timely manner. There are new locating tools that will be introduced this year that will be more capable of locating facilities it cannot currently locate. An updated standard (TD-4412P-03 Section 5.8) requires that any newly installed facilities be marked after work is complete to reduce the likelihood of dig-in incidents. The reduction in mapping backlog will also have a positive impact on this issue. In cases where PG&E hits its own facilities, a root cause analysis were being performed and regular calls are held in each region to review the findings. The QC and WPE teams are also investigating these incidents and the detailed findings are communicated to the M&L Supervisors. A Damage Prevention Core Team was formed to review recommended actions to assess if additional training requirements and equipment upgrades are needed. A meeting with L&M Supervisors was held on June 20 and discussed ways where At-faults can be significantly reduced as we found that recently qualified Locators needed extensive field training. An action plan is being developed to address this issue.	October, 2012	Roland Trevino	Maria Arquines

	RAG Status reflects YTD status only	**METRICS WITH GREEN STATUS ONLY**		**METRICS WITH RED / AMBER STATUS ONLY**				
YTD RAG Status	**Metric Name**	**Actions to Maintain Green** What is the organization doing to ensure the metric remains green.	**Potential Risks** What could cause the metric to become red or amber?	**Why is metric not green?**	**Action(s) to get back to green**	**Month Metric Back to Green** If forecasted to remain red or amber through end of year, enter "Will not return to green for the remainder of the year".	**Metric Owner (EVP Direct Report in Charge)**	**Metric Reporter**
🟧	**Mark & Locate Requests Completed on Time**			The Mark and Locate on Time percentage for the month of June was at 98.7% and YTD was at 98.9%, below the target of 99 2%. Although in Amber status, we are still continuing to make some improvements in training, introducing new mark and locate equipment and updating software applications to help locators work more efficiently and provide more information to help them do their locate jobs accurately and on time.	We are restructuring the "notification of new start time" process, which is still in development phases and has not yet been implemented into the ticket management program. The change is initiated to improve the process and integrity of the company. Currently, PG&E's locators have the ability to call and notify a new start time for a USA ticket with the excavator, which means the 48 hour clock for on-time performance on the USA ticket is reset. However, this option has been utilized without safeguards built into the system to ensure proper contact was made and a new start time was correctly established. We are currently working with IRTH solutions to create a customization that will require the locators to collect certain information when utilizing this option. This customization may result in added response time for tickets due to collecting additional information. We plan to roll out and pilot the customization to better understand its effects before implementing onto the entire system. This will help us better understand if it will disrupt the locators' work flow. Based on the results of the pilot, we also need to evaluate the impact on resources and determine if additional M&L resources will be needed in order to avoid an increase in late tickets system wide. In addition, the Damage Prevention process team will evaluate the need to track "negotiate new start time" tickets as a subset of the on time percentage to understand how often we are actually responding to USA tickets within the original 48 hour window. The process team will make a decision around this metric by the end of Q2. Also the current ORI reporting capabilities are not	October, 2012	Roland Trevino	Maria Arquines
🟩	**Total Leaks per Mile of Main and Services**	This metric is tracking only, due to 2012 being the first year of measurement. Lower is better.	The metric has trended higher in June since May by 1 53%. This is due to the increase in leak repair during 2012, in addition to nature of leak survey which will add to the backlog. Leak survey is at its highest service volumes during the summer months for Distribution -- primary contributor of leak volume (as Transmission is relatively minute in volume). We expect this trend to continue through the rest of the year. (Note: 2012 and 2013 have significantly more services scheduled than the 2011, 2014, 2015 cycle				Roland Trevino	[redacted]
Error	**Complete Baseline Multi-Year**						[redacted]	Investment Planning
Error	**Identify Financial Gaps from 2014 and Beyond Targets**						[redacted]	Investment Planning
Error	**Complete All Required and Identified Units of Work**						[redacted]	Investment Planning
🟩	**Gas Distribution Cost per Customer**			Timing: Higher cost for leak repair than initially planned at the beginning of year. Planned to be completed Jan-Dec. The work will be executed Jan-	Closely monitor units and unit cost to meet end of year target.	October	[redacted]	[redacted]
🟩	**Gas Asset Mapping**	The hiring and job closure rate this month are on track for year end goals. The slight uptick in the metric can be attributed to oldest job being completed just after the month's end. 1168 total jobs in queue (Last Month 1371) 765 >30 days (65%) (Last Month 1027) 120 >365 days (10 2 %) (Last Month 165) 975 Jobs closed-out in June increasing the cumulative to 3043					Sumeet Singh	[redacted]
🟥	**MAOP Validation (3,400 Non-HCA Miles Validated)**	Continue to focus on execution of plan and assess the performance of contract resources in terms of costs and quality to mitigate risk of resource burnout; high performing resources are promoted and additional resources are brought on board to replace underperforming contractors	Resource turnover due to burnout could impact scheduling and productivity.				Sumeet Singh	[redacted]

	RAG Status reflects YTD status only	METRICS WITH GREEN STATUS ONLY		METRICS WITH RED / AMBER STATUS ONLY				
YTD RAG Status	**Metric Name**	**Actions to Maintain Green** What is the organization doing to ensure the metric remains green.	**Potential Risks** What could cause the metric to become red or amber?	**Why is metric not green?**	**Action(s) to get back to green**	**Month Metric Back to Green** If forecasted to remain red or amber through end of year, enter "Will not return to green for the remainder of the year".	**Metric Owner (EVP Direct Report in Charge)**	**Metric Reporter**
🟩	**MAOP Validation Cost per Mile**	Continue to produce additional miles beyond target each month to reduce overall unit cost. Other cost saving actions include vendor cost reduction efforts underway through renegotiation of contract terms/structure and reducing number of project team members from high cost providers.	1. $1.9M accrual not booked in May. Costs were GR'd in June. Without this missed accrual, actual June cost should be slightly lower at $30.6k per mile. Either way, costs are significantly under June target of $37 2k per mile. 2. Resources may be dedicated to other, more urgent areas of the project depending on need. 3. Incorporation of longer PFL lengths for Non-HCA miles reduces the available backlog of work, but also requires longer duration lines to complete for full MAOP validation credit.				Sumeet Singh	[redacted]
#VALUE!	**GTAM Phase 1 Functionality**	New controls/process in place to ensure completeness of information for Leak Survey log file's header.	Accessibility to metric data through third party vendor				Sumeet Singh	[redacted]
🟩	**GTAM Phase 1 Earned Value**	Initiative leads and process owners will provide initiative dashboard updates weekly to capture milestone status, risks, and metric progress. Initiative dashboards will be presented at weekly PMO meetings and monthly Steering Committee and AKM Keys to Success meetings to facilitate proactive identification, escalation and resolution of potential issues and delays. As of this month - we have used Cycle1 numbers for Earned Value calculation as it's a true reflection of our current actuals and better aligned budget costs with efforts to deliver the milestones.	1) Potential SAP Resources constraint necessary to deliver SAP modifications and integration necessary to enable timely schedule and milestones completion of Corrective, Preventive, Documentum, GIS and other Mariner projects. 2) Need to determine the future for Android devices at PG&E and effect on Field Survey – Locate and Mark project 3) Review of Leak Survey Schedule Migration scope & schedule in light of issues related to data quality reporting requirements and development of tech down process 4) Timely finalization of mobile devices selection and commencing procurement process				Sumeet Singh	[redacted]

Gas Operations

Month
6

I. Improve Public & Employee Safety	Month Results		Apri	May		YTD Results		Apri	May		Full Year		Apri	May	
	Actual	Plan			Variance	Actual	Plan			Variance	Forecast	Plan			Variance
A. Gas Emergency Response Performance															
1. % Response in 30 Minutes	69.9%	65.0%	🟨	🟩	🟩 4.9%	61.4%	65.0%	🟨	🟨	🟨 -3.6%	75.0%	75.0%	🟩	🟩	🟩 0.0%
2. % Response in 60 Minutes	98.8%	98.3%	🟩	🟩	🟩 0.5%	98.5%	98.3%	🟩	🟩	🟩 0.2%	99.0%	99.0%	🟩	🟩	🟩 0.0%
B. Damage Prevention															
1. Dig-In Rate per 1,000 USA Tags	4.26	3.01	🟨	🟥	🟥 1.25	3.52	3.01	🟨	🟨	🟥 0.51	3.01	3.01	🟩	🟩	🟩 0.00
2. At-fault Dig-ins per 1,000 USA Tags	0.38	0.16	🟥	🟥	🟥 0.22	0.33	0.16	🟥	🟥	🟥 0.17	0.16	0.16	🟩	🟩	🟩 0.00
3. Mark & Locate Requests Completed on Time	98.70%	99.20%	🟨	🟩	🟥 -0.50%	98.90%	99.20%	🟩	🟩	🟨 -0.30%	99.20%	99.20%	🟩	🟩	🟩 0.00%
C. Over Pressurization															
1. Gas Over-Pressure Event Frequency (OPF)	2.00	4.00	🟥	🟥	🟩 (2.00)	49.00	30.00	🟥	🟥	🟥 19.00	61.00	42.00	🟥	🟥	🟥 19.00
D. Pipeline Safety Enhancement Plan															
1. PSEP: % Miles Strength Tested	8.62%	6.90%	🟩	🟩	🟩 1.72%	34.59%	29.50%	🟩	🟩	🟩 5.09%	100.00%	100.00%	🟩	🟩	🟩 0.00%
2. PSEP: % Miles Replaced	2.74%	5.00%	🟩	🟥	🟥 -2.26%	8.69%	16.00%	🟩	🟥	🟥 -7.31%	100.00%	100.00%	🟩	🟩	🟩 0.00%
3. PSEP: % Valves Modified / Automated	0.00%	8.00%	🟩	🟩	🟥 -8.00%	52.20%	52.00%	🟩	🟩	🟩 0.20%	100.00%	100.00%	🟩	🟩	🟩 0.00%
4. PSEP: % Miles Retrofitted for In Line Inspection	0.00%	0.00%	🟩	🟩	🟩 0.00%	0.00%	0.00%	🟩	🟩	🟩 0.00%	100.00%	100.00%	🟩	🟩	🟩 0.00%
E. Mariner (GTAM)															
1. Phase 1 Functionality [1]	TBD 8/1/12	TBD			N/A	TBD 8/1/12	TBD			N/A	TBD 8/1/12	TBD 8/1/12			N/A
2. Phase 1 Earned Value	YTD Metric	YTD Metric			N/A	1.27	1.00	🟩	🟩	🟩 0.27	1.00	1.00	🟩	🟩	🟩 0.00
F. Maximum Allowable Operating Pressure (MAOP) Validation															
1. % of Non-HCA Miles Validated (3,400)	12.40%	8.80%	🟩	🟩	🟩 3.60%	57.80%	48.00%	🟩	🟩	🟩 9.80%	100.00%	100.00%	🟩	🟩	🟩 0.00%
G. Employee Safety															
1. OSHA Recordable Rate	0.000	N/A			N/A	0.000	N/A			N/A	0.000	N/A			N/A
2. Lost Work Day Case Rate	0.000	0.333	🟥	🟩	🟩 (0.333)	0.000	0.231	🟨	🟩	🟩 (0.231)	0.000	0.327	🟩	🟥	🟩 (0.327)
3. Preventable Motor Vehicle Incident Rate	0.000	2.102	🟩	🟩	🟩 (2.102)	0.000	2.102	🟩	🟩	🟩 (2.102)	0.000	2.102	🟩	🟩	🟩 (2.102)

Notes

1. Tracking as Initiative. Developing historical data to allow targets to be set in 2013. Performance will be tracked vs. action plan and reported as a modified RAG status. "On Track" (green),"Behind"(amber),"Off Track" (red)

II. Improve the Reliability and Effectiveness of Gas Operations	Month Results		April	May		YTD Results		April	May		Full Year		April	May	
	Actual	Plan			Variance	Actual	Plan			Variance	Forecast	Plan			Variance
A. Gas Asset Mapping															
1. Gas Asset Mapping (YTD Results Only)	YTD Metric	YTD Metric			N/A	769	1,000	🟩	🟩	🟩 (231)	25	30	🟩	🟩	🟩 (5)
B. Emergency Response															
1. Mean-time to Emergency Shutdown [1]	Behind	On Track	🟨	🟨	🟨	Behind	On Track	🟨	🟨	🟨	On Track	TBD 12/31/12	🟩	🟩	🟩
C. Leak Repair Performance															
1. Grade 2 Leak Repair (Tier 2)	3.5%	10.4%	🟩	🟩	🟥 -6.8%	95.3%	43.3%	🟩	🟩	🟩 52.0%	100% by Oct 31	100% by Dec 31	🟩	🟩	🟩
2. Total Leaks per Miles of Main and Services [1]	0.86	N/A			N/A	0.86	N/A			N/A	TBD 12/31/12	TBD 12/31/12			N/A
D. Gas Control															
1. Implement Gas Transmission Control Room Enhancements per NT	Behind	On Track	🟨	🟨	🟨	Behind	On Track	🟨	🟨	🟨	On Track	On Track	🟩	🟩	🟩
2. Distribution Control Room [1]	On Track	On Track	🟩	🟩	🟩	On Track	On Track	🟩	🟩	🟩	Complete	On Track	🟩	🟩	🟩

III. Improve Customer Satisfaction	Month Results					YTD Results					Full Year				
	Actual	Plan	April	May	Variance	Actual	Plan	April	May	Variance	Forecast	Plan	April	May	Variance
A. Customer Satisfaction															
1. After Field Visit Survey - Overall Satisfaction (Q5)	95.90%	95.40%	🟥	🟨	0.50%	93.29%	95.40%	🟥	🟥	-2.11%	95.40%	95.40%	🟩	🟩	0.00%
B. Quality															
1. Quality Control (QC) Re-dig Program (2)	1.00	4.00	⬜	⬜	(3.00)	4.00	7.00	🟩	🟩	(3.00)	13.00	13.00	🟩	🟩	0.00
C. Public Safety Awareness															
1. Achieve Public Safety Awareness Requirements	63.00%	51.00%	🟩	🟩	12.00%	62.00%	51.00%	🟥	🟥	11.00%	51.00%	51.00%	🟩	🟩	0.00%
D. First Responders															
1. Robust Fire Department Training	100.50%	97.00%	⬜	⬜	0.03	100.50%	97.00%	⬜	⬜	0.03	97.00%	97.00%	🟩	🟩	0.00%
E. Leak Survey															
1. Quality Control (QC) QC Leak Survey	100.00%	100.00%	🟩	🟩	0.00%	100.00%	95.00%	🟩	🟩	5.00%	98.50%	98.50%	🟩	🟩	0.00%
2. Leak Surveys Completed															
a) Transmission - Miles	146.11	244.00	🟥	🟩	(97.89)	2,767.00	3,262.90	🟥	🟥	(495.90)	6,458	6,447	🟩	🟩	11
b) Distribution - Services	106,834	110,186	🟥	🟥	(3,352)	383,706	505,774	🟥	🟥	(122,068)	844,203	844,203	🟩	🟩	0

Notes
1. Tracking as Initiative. Developing historical data to allow targets to be set in 2013. Performance will be tracked vs. action plan and reported as a modified RAG status. "On Track" (green),"Behind"(amber),"Off Track" (red)
2. This is a quarterly metric. Month resu ts reflect Q2 data.

IV. Assure Affordable Prices for our Customers	Month Results					YTD Results					Full Year				
	Actual	Plan	April	May	Variance	Actual	Plan	April	May	Variance	Forecast	Plan	April	May	Variance
A. Complete All Required and Identified Units of Work [1]	On Track	On Track	🟩	🟩		On Track	On Track	🟩	🟩		Complete	On Track	🟩	🟩	
B. Distribution Pipeline															
1. Main Replacement Cost per Foot	$528	$480	🟩	🟩	$48	$527	$480	🟥	🟨	$47	$397	$480	🟩	🟩	($83)
2. Service Replacement Cost per Service	$8,610	$7,350	🟩	🟩	$1,260	$6,773	$7,350	🟩	🟩	($577)	$7,350	$7,350	🟩	🟩	$0
C. Transmission Pipeline															
1. PSEP: Strength Test Cost per Mile ($M) (YTD Results Only)	YTD Metric	YTD Metric	⬜	⬜	N/A	$1.39	$1.18	🟥	🟥	$0.21	$1.14	$1.14	🟩	🟩	$0.00
2. PSEP: Strength Test Cost per Test Segment ($M) (YTD Resul s Only)	YTD Metric	YTD Metric	⬜	⬜	N/A	$2.96	$2.07	🟥	🟥	$0.89	$2.24	$2.24	🟩	🟩	$0.00
3. MAOP Validation Cost per Mile	$35,054	$37,187	🟩	🟩	($2,133)	$31,282	$36,292	🟩	🟩	($5,010)	$33,127	$33,127	🟩	🟩	$0
D. Work Plan															
1. Complete Baseline Multi-Year [1]	On Track	On Track	🟩	🟩		On Track	On Track	🟩	🟩		Complete	On Track	🟩	🟩	
2. Identify Financial Gaps from 2014 and Beyond Targets [1]	On Track	On Track	🟩	🟩		On Track	On Track	🟩	🟩		Complete	On Track	🟩	🟩	

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V. Leadership Goals	Month Results					YTD Results					Full Year				
	Actual	Plan	Apr l	May	Variance	Actual	Plan	Apr l	May	Variance	Forecast	Plan	Apr l	May	Variance
A. Organization															
1. All Gas Officer & Director Positions Filled	Behind	On Track	🟨	🟨		Behind	On Track	🟨	🟨		Complete	Complete	🟩	🟩	
B. Technical Training															
1. Complete Benchmarking	Complete	Complete	🟩	🟩		Complete	Complete	🟩	🟩		Complete	Complete	🟩	🟩	
2. Build Improvement Plan	Complete	Complete	🟩	🟩		Complete	Complete	🟩	🟩		Complete	Complete	🟩	🟩	
3. Implementation	On Track	On Track	🟩	🟩		On Track	On Track	🟩	🟩		Complete	Complete	🟩	🟩	
C. Diversity															
1. Aspirational Hiring - Minority															
2. Aspirational Hiring - Female															
3. Supplier Diversity															

Notes
1. Tracking as Initiative. Developing historical data to a low targets to be set in 2013. Performance will be tracked vs. action plan and reported as a modified RAG status. "On Track" (green), "Behind" (amber), "Off Track" (red)

Month: June

STIP Metric: Leak Repair Performance

Description: The percentage of all grade 2 leaks found prior to January 1, 2012 repaired by December 31, 2012.

STIP Weight: 4%

2012 Performance Goals

	Does Not Meet	Meets	Exceeds
Target	90% BY Dec. 31	100% by Dec. 31	100% by Oct. 31
Payout	0.5	1.0	2.0

STIP Metric Owner: [redacted]

Executive Owner: Nick Stavropoulos

Objective: 2012 target (1.0) performance will mean that all grade 2 leaks found prior to January 1, 2012 will be repaired by December 31, 2012. Stretch (2.0) performance is 100 percent repaired by October 31, 2012.

PERFORMANCE

Results:

Month			YTD			2012 End of Year		
Actual	Target	Score	Actual	Target	Score	Forecast	Target	Score
3.5%	10.4%	1.648	95.3%	43.3%	2.000	100% by Oct 31	100% by Dec 31	2.000

Explanation: Leak Repair performance is ahead of schedule year to date. More challenging below ground work is in front of the team, which means that completion rates will slow in the next few months. However, the plan is for full completion of all grade 2 leaks relative to this effort to be worked by no later than October 31, 2012, with the strong possibility of completion prior to that date.

ACTIONS

	Milestone/Activity	Date	Owner
🟦	Quality Control ~ Done	April	[redacted]

	Milestone/Activity	Date	Owner
🟦	Re-Evaluation of Work Plans ~ Done	May	[redacted]

🟦 COMPLETE (Projects will remain on template for one month)
🟩 ON-TRACK
🟨 AT-RISK (Can be completed by EOY)
🟥 OFF-TRACK (At-risk of not completing by EOY)

Month: June

STIP Metric: Gas Emergency Response Performance (within 30 minutes)

Description: The percentage of time that a Gas Service Representative (GSR) is on site within one hour and within 30 minutes of receiving an immediate response gas emergency order (equally weighted). Excludes area odor complaints, duplicate and cancelled orders, and multiple calls on a multi-meter manifold.

STIP Weight: 2%

2012 Performance Goals

	Does Not Meet	Meets	Exceeds
Target	60.0 in 4th Quarter	75.0 in 4th Quarter	75.0 in 3rd & 4th Quarters
Payout	0.5	1.0	2.0

STIP Metric Owner: Ruben Ramirez

Executive Owner: Nick Stavropoulos

Objective: 2012 target (1.0) performance—to respond to gas emergency calls within 60 minutes 99 percent of the time, and within 30 minutes 75 percent of the time—would place PG&E in [redacted] of an industry peer group. Target performance will be measured on the average of [redacted]. Stretch (2.0) performance is achieving the same levels, but on the average of [redacted].

PERFORMANCE

Results:

Month			YTD			2012 End of Year		
Actual	Target	Score	Actual	Target	Score	Forecast	Target	Score
🟩 69.9%	65.0%	0.965	🟨 61.4%	65.0%	0.847	🟩 75.0%	75.0%	1.000

Explanation: June performance exceeded Q2 milestone of 65%. Recent implementation of Make Safe process is providing results >75%, which exceeds the year-end safety goal.

ACTIONS

	Milestone/Activity	Date	Owner
🟦	Workload and GSR Staffing Analysis	04/30/12	[redacted]
🟦	Benchmarking	05/30/12	[redacted]
🟦	Pilot Program for Make Safe tactics	05/18/12	[redacted]
🟩	Re-prioritize work for other LOB -Cust Care	07/30/12	[redacted]
🟦	Improve reliability of Middleware technology	06/01/12	[redacted]

	Milestone/Activity	Date	Owner
🟩	Improve Timeliness of GPS locations	08/30/12	[redacted]
🟨	Onboard Additional GSR - HR	09/30/12	R Ramirez
🟩	Peak Season Workload - Cust Care	08/31/12	[redacted]
🟩	Employee Engagement	12/31/12	[redacted]
🟩	ARCOS call-outs for GSRs & Bundle Tasks	12/31/2012	[redacted]

🟦 COMPLETE (Projects will remain on template for one month)
🟩 ON-TRACK
🟨 AT-RISK (Can be completed by EOY)
🟥 OFF-TRACK (At-risk of not completing by EOY)

Month: June

STIP Metric: Gas Emergency Response Performance (within 60 minutes)

Description: The percentage of time that a Gas Service Representative (GSR) is on site within one hour and within 30 minutes of receiving an immediate response gas emergency order (equally weighted). Excludes area odor complaints, duplicate and cancelled orders, and multiple calls on a multi-meter manifold.

2012 Performance Goals

	Does Not Meet	Meets	Exceeds
Target	98.0 in 4th Quarter	99.0 in 4th Quarter	99.0 in 3rd & 4th Quarters
Payout	0.5	1.0	2.0

STIP Weight: 2%

STIP Metric Owner: Ruben Ramirez

Executive Owner: Nick Stavropoulos

Objective: 2012 target (1.0) performance—to respond to gas emergency calls within 60 minutes 99 percent of the time, and within 30 minutes 75 percent of the time—would place PG&E in [redacted] of an industry peer group. Target performance will be measured on the average of [redacted]. Stretch (2.0) performance is achieving the same levels, but on the average of [redacted]

PERFORMANCE

Results:

Month			YTD			2012 End of Year		
Actual	Target	Score	Actual	Target	Score	Forecast	Target	Score
98.8%	98.3%	2.000	98.5%	98.3%	1.533	99.0%	99.0%	1.000

Explanation: June performance exceeded Q2 milestone of 98.3%. Recent implementation of Make Safe process is providing results >99%, which exceeds the year-end safety goal.

ACTIONS

	Milestone/Activity	Date	Owner
🟦	Workload and GSR Staffing Analysis	04/30/12	[redacted]
🟦	Benchmarking	05/30/12	[redacted]
🟦	Pilot Program for Make Safe tactics	05/18/12	[redacted]
🟩	Re-prioritize work for other LOB -Cust Care	07/30/12	[redacted]
🟦	Improve reliability of Middleware technology	06/01/12	[redacted]

	Milestone/Activity	Date	Owner
🟩	Improve Timeliness of GPS locations	08/30/12	[redacted]
🟨	Onboard Additional GSR - HR	09/30/12	R Ramirez
🟩	Peak Season Workload - Cust Care	08/31/12	[redacted]
🟩	Employee Engagement	12/31/12	[redacted]
🟩	ARCOS call-outs for GSRs & Bundle Tasks	12/31/2012	[redacted]

🟦 COMPLETE (Projects will remain on template for one month)
🟩 ON-TRACK
🟨 AT-RISK (Can be completed by EOY)
🟥 OFF-TRACK (At-risk of not completing by EOY)

Month: June

STIP Metric: **Gas Asset Mapping**

Description: The longest duration (in days) of open jobs at year-end pending update in the mapping systems for a respective gas project (installation or modification) that has been received and identified as a complete job package by mapping. Excludes distribution fast flow work and expense projects associated with annual project orders.

2012 Performance Goals

	Does Not Meet	Meets	Exceeds
Target	35	30	20
Payout	0.5	1.0	2.0

STIP Weight: 10%

STIP Metric Owner: Sumeet Singh

Executive Owner: Nick Stavropoulos

Objective: Achieving Target (1.0) performance means that no completed job package received by mapping will be pending entry into the gas mapping systems for longer than 30 days by December 31, 2012, with Stretch (2.0) performance being no longer than 20 days pending. Currently, there are jobs pending updates to the mapping system that exceed 30 days.

PERFORMANCE

Results:

Month		
Actual	Target	Score
YTD Metric	YTD Metric	1.611

*Monthly STIP score for YTD metrics reflects YTD STIP score

YTD		
Actual	Target	Score
769	1,000	1.611

2012 End of Year		
Forecast	Target	Score
25	30	1.500

Explanation: The hiring and job closure rate this month are on track for year end goals. The slight uptick in the metric can be attributed to oldest job being completed just after the month's end.

1168 total jobs in queue (Last Month 1371)

765 >30 days (65%) (Last Month 1027)

120 >365 days (10.2 %) (Last Month 165)

975 Jobs closed-out in June increasing the cumulative to 3043

ACTIONS

	Milestone/Activity	Date	Owner
🟦	Establish Resource Prioritization Plan in agreement w/ ESC (ESC rescheduled for 4/11/12) - DONE	04/11/12	[redacted]
🟦	Finalize posting of additional 25 ESC Mappers (All Vacancies and Hiring Hall) - DONE	5/1/2012	[redacted]

	Milestone/Activity	Date	Owner
🟩	Secure additional resources per finalized agreement to ensure sustainability	6/15/2012	[redacted]
🟩	GEMS Upgrade Rollout	10/15/2012	[redacted]

🟦 COMPLETE (Projects will remain on template for one month)

🟩 ON-TRACK

🟨 AT-RISK (Can be completed by EOY)

🟥 OFF-TRACK (At-risk of not completing by EOY)

Results	🟢	2011 Premier Survey Scores Met Goal
Initiative Status	🟢	Sharing Premier Survey Results, Employee Engagement Teams, Training Development, Executive VP Field Visits

I. Goal / Objective

Improve Employee Engagement Index (EEI) score 2% over 2011 to 70%. EEI is the average percent favorable responses to eight survey items and indicates the extent to which employees understand PG&E's vision, feel a sense of ownership for PG&E's success, and actively contribute to improve PG&E's performance. Research in other organizations has shown that employee engagement favorably influences customer satisfaction and the organization's financial performance.

II. Results – 2011 Premier Survey Employee Engagement Index Score

Organization	2011 EEI	2010 EEI	Response Rate
Executive VP, Gas Ops	68%	NA	74%
Gas Engineering and Ops	74%	NA	73%
VP M&C Gas	67%	64%	75%

Employee Group	2011 EEI	2010 EEI	Response Rate
Officer, PL3, PL2, PL1	74%	NA	83%
A&T	76%	NA	76%
BU (IBEW and ESC)	66%	NA	73%

Other Key Metrics and Performance Targets

Metric	Goal	Target Date	Last Period	Current Period
% adherence to development plan	TBD	TBD		
Recruitment success rate vs. plan	TBD	TBD		

III. Observations / Analysis

2010 scores are not available for all executive groups since they were newly created in 2011. Employees do not link their feedback from the 2010 survey to the work we did to address their concerns in 2011. We must continually remind them why we are working to improve fleet, our training program, technology, processes, procedures, etc.…

IV. Process Improvement Initiatives

Initiative Overview		
Exec. Sponsor	**Mel Christopher**	
Process Owner	**Jodie Kubota**	
Initiative Description	Develop and execute strategic plan to manage employee engagement activities in support of PG&E's Energized Employee value, recruit employees in a timely manner that have the necessary skills, and to develop those people over time.	
Initiative Strategy	People	All employees feel that the company cares about their development as well as their ideas and opinions. Organization understands the need for and is engaged in workforce planning and training.
	Process	Mechanisms in place to allow communication channels so that concerns may be expressed and addressed, particularly about safety and quality. Fully developed workforce planning process driven by needs as defined by demographics and future skill requirements.
	Technology	Current and proven technology, fleet and tools are in place.

Key Initiatives

Initiative Category	**Activities**	**Status**
Training and Development	Continue with *existing* training and development programs (ex: crew foreman workshops, new appliance training, engineering training rotation program, on-the-job training, clerical training, etc…)	🟩
	Identify and build new training and development programs (ex: new field employee training, distribution engineering boot camp for new hires, etc…).	🟩
	Develop and administer employee survey to identify areas of interest for career development.	🟨
Systems, Processes, and Policies; Communication	Seek employee input and feedback through Process Owner engagement teams.	🟩
	Provide regular communications about Process Owner activities and initiatives.	🟩
	Executive VP Field Visits	🟩
	Share 2011 Premier Survey Results	🟩

Teamwork, Customer Service, Meaningful Work	Targeted sharing of what's going on through Officer messages, tailboards, meetings, etc.... Link comments from the survey to activities.	🟩
	Provide job shadowing opportunities across organizations.	🟨

Initiative Schedule and Status		
Initiative	Gas M&C Process Update Communications	
Team Members	Jodie Kubota	
Scope	Develop summary of processes impacting Gas M&C.	
Benefits (Soft)	Provide update on each process to maintain employee engagement in efforts.	
Costs		
Milestone	**Target Completion Date**	**Comments**
Develop summary through June	July	Review June KTS templates and create easy to read summary. Draft is ready to be reviewed for final distribution.
Begin distribution	Aug	Still need to determine best way to share info either through one presentation or broken up into smaller messages sent in periodic intervals.

Initiative Schedule and Status		
Initiative	Crew Foreman Workshop	
Team Members	Jodie Kubota, [redacted] Dean Churchwell, Kevin P. Souza, [redacted], Al Martinez, [redacted], Jim Reeves, [redacted], John Costanza, [redacted]	
Scope	Develop M&C Crew Foreman Workshop Curriculum	
Benefits (Soft)	Provide business update and provide leadership training with Crew Foreman (T200 and T300)	
Costs	Estimated $600,000 (One full day of training for each crew foreman and their back-ups plus meeting room and travel expenses) About 450 people will attend.	
Milestone	**Target Completion Date**	**Comments**
Meet with engagement team	July	First meeting completed (6/11) – potential topics identified. Will schedule next meeting to review content for topics and identify presenters. Next meeting will be scheduled 7/20.

Finalize curriculum	October	
Hold workshops	Nov/Dec	Meetings scheduled for November 26, 27, 29, 30 and December 3 – 6. Locations TBD

Initiative Schedule and Status		
Initiative	Gas Ops Engagement Team	
Team Members	Jodie Kubota, [redacted], Gary Smith, [redacted] [redacted]	
Scope	Share engagement ideas to be implemented in 3rd quarter prior to next survey.	
Benefits (Soft)	Continue to address concerns identified in 2011 survey.	
Costs	**None – N/A**	
Milestone	**Target Completion Date**	**Comments**
Hold mid-year meeting with team	July	Meeting scheduled for 7/26

Initiative Schedule and Status		
Initiative	Associate Engineer Development Program	
Team Members	[redacted] Jodie Kubota, [redacted]	
Scope	Provide Associate Engineers with a depth and breadth of knowledge about PG&E's gas system.	
Benefits (Soft)	Create a pipeline of highly skilled engineers equipped to understand and meet future transmission and distribution challenges and needs.	
Costs	**None – N/A**	
Milestone	**Target Completion Date**	**Comments**
Hiring	🟦	Hiring 15 new Associate Engineers in August

Completed /Ongoing Activities	
Share 2011 Premier Survey	Gas Ops Engagement team created communication piece which was shared with all employees.
Supervisor Leadership Program	[redacted] Jodie Kubota coordinating supervisor participation for Gas Ops.
Team Effectiveness Workshop	Gas M&C GRST members who have not previously attended the workshop will attend this course. Team Effectiveness is a series of 3 workshops. Part 1 – Building the Team, Part 2-Communicating Effectively, Part 3 – Problem Solving and Accountability. About 25 attendees.
Engagement Calendar	Calendar is up and running
Recruiting Improvements	Working on a variety of solutions to improve process and improve pipeline for candidates. [redacted]
Manager Leadership Program	PG&E Academy developing MLP. Jodie Kubota Gas Ops representative. Reviewing design work to date and starting work on case studies to be used during the course.

Next Activities	
Succession Planning	Gas M&C for PL2's and below.
Officer Engagement Tracking	Begin field/employee visit tracking sheet similar to Nick's sheet for all Gas Ops officers.

V. Supporting Information

Executive Sponsor	Process	Process Owner	Engagement Teams	Mtg Schedule or Last Mtg
Sumeet Singh	Data/Asset Knowledge Mgt	[redacted]	[redacted], Jon Little, [redacted], Jimmy Morales, Jeff Carroll, [redacted] Lenny Caldwell, [redacted]	Weekly
	Training	[redacted]		6/27/12
Jane Yura	Process Safety	[redacted]	Core Team: [redacted] [redacted], Kevin P Souza, [redacted]	Bi-weekly
			Project Team [redacted], Jon Little, [redacted], Tim MacLean, [redacted]	
			Project Team 2: [redacted], Lance Johnson, [redacted]	6/14/12
			Project Team 3: [redacted] Kevin P Souza, Tim MacLean	Completed
	Quality	[redacted]	Quality Process Team: [redacted] Vince Whitmer, [redacted]	5/24/12
			QA LS/Mapping Assessment [redacted], Bob Stotler, [redacted]	6/6/12
			Re-Dig: [redacted] Lenny Caldwell, Erik Kurtz, [redacted]	5/31/12
	Materials Mgt	Karen Roth	Materials Mgt: Karen Roth, [redacted] Dean Churchwell, [redacted]	6/26/14
			Material Traceability: Karen Roth, [redacted]	6/26/14

Executive Sponsor	Process	Process Owner	Engagement Teams	Mtg Schedule or Last Mtg
Roland Trevino	Integrity	Dir, Trans Integrity		
	Emerg Prep/Public Awareness	Joel Dickson	Joel Dickson, Mike Falk, Steven Burks, Gary Smith, [redacted]	6/20/12
PE&D	Project Management	[redacted]	[redacted]	n/a
	Public Works Coord	[redacted]	[redacted] Jonathan Little, [redacted]	5/29/12
	I&R	Dir, Trans Eng & Design		
Investment Planning	Investment Planning	[redacted]		
	Resource Mgt	Dir, Resource Mgt		
	Mandated Programs	[redacted]	[redacted] Frances Yee	n/a
Kirk Johnson	Excavation Technology	Bob Suehiro	Bob Suehiro, Richard F Salaz, Jr., Shane Doong, [redacted] Lenny Caldwell, Matt Moscato, [redacted], Steven Fischer, [redacted]	6/28/12
			Welder Strategy: Bob Suehiro, [redacted], Pierre Bigras, Gary Clark, John Costanza, [redacted], Steven Fischer. Mike Graham [redacted], Ron Huggins, [redacted], Jim Pope, [redacted], Rick Salaz, [redacted], Ron Villa, Kevin Ward, [redacted]	
	Damage Prevention	Christine Cowsert-Chapman	Christine Cowsert-Chapman, Scott Farrell, Katherin Mack, Frank Charles, [redacted]	6/20/12
	Fleet	Ross Leverett	M&C Crew Truck: Ross Leverett, [redacted], Tim Bellinghausen, [redacted], Ross Leverett, John Ghigliazza, [redacted]	n/a
			FS Fleet: Ross Leverett, Rob Young, [redacted], Randy Uda, Fernando Gonzalez, [redacted] Ron Malone, [redacted], Mark Embree	5/31/12

Executive Sponsor	Process	Process Owner	Engagement Teams	Mtg Schedule or Last Mtg
Kevin Knapp	Personal Safety	Lorene Harden	Lorene Harden, [redacted], Kelly Ball, [redacted], Jody Garcia, [redacted], Ron Huggins, [redacted], Augie Ledesma, [redacted], John Little, Tim Maclean, [redacted], Albert Martinez, [redacted], Randy Uda, [redacted]	6/28/12
	Leak/Emergency Response	[redacted]	[redacted], Mike Graham, [redacted] Scott Farrell, Mike Raab, [redacted], Scott Farrell, [redacted], Dave Durham, [redacted]	n/a
	Customer Service	Ruben Ramirez	[redacted], Karlo Alaura, [redacted] Randy Uda, [redacted], Nalini Webster, [redacted]	6/25/12

Executive Sponsor	Process	Process Owner	Engagement Teams	Mtg Schedule or Last Mtg
Mel Christopher	System Ops & Control	Mel Christopher	Clearance: [redacted], Kevin Souza, , Donald Jones, [redacted], Darrell Feldman	n/a
			Gas Sys Planning: Mel Christopher, [redacted]	n/a
			Transmission Trainig Program: Met Christopher, [redacted]	n/a
	Workforce Engagement	Jodie Kubota	Premier Survey Communication: Jodie Kubota, [redacted], Gary Smith	
			Crew Foreman Workshop Committee: Jodie Kubota, [redacted] Dean Churchwell, John Costanza, Dave Davini, John Gaffney, Daniel Haak, Roy Kisner, [redacted], Al Martinez, [redacted], Jim Reeves, Kevin P. Souza, [redacted]	7/20/12
Nick Stavropoulos	Facilities	[redacted]		

Employee Engagement Tracking - Nick Stavropoulos

January 2012 - December 2012

Date	Event	Organization	Leader	Participants	Classification	Location
1/12	Supervisor Meeting	Central Coast Region M&C	Jodie Kubota	40	Mgt	SRVCC
1/12	I-105 Validation Dig	Bay Area Region GC	Rick Salaz	15	BU	Emeryville
1/26	Staff Meeting	Local Engineering (System)	[redacted]	20	Mgt	SRVCC
2/14	Supervisor Meeting	Field Services (System)	[redacted] / Ruben Ramirez	50	Mgt	SRVCC
2/14	Supervisor Meeting	Gas Resource Scheduling	[redacted] / Darrell Feldman	15	Mgt	SRVCC
2/14	Employee Safety Meeting	Bay Area Region GC	Bob Suehiro	250	BU	SRVCC
2/28	Supervisor Meeting	Gas Dist M&C (System)	Bill Hayes	180	Mgt	SRVCC
3/5	Leak Survey Deployment Kickoff	Bay Area Region	[redacted]	62	BU and Mgt	Oakport SC
3/6	Congratulations/Acknowledgement of MAOP Team completing the verification of over 2,000+ Miles	Asset Knowledge Mgt.	[redacted] Sumeet Singh		BU and Mgt	
3/15	Asset Knowledge Mgt.	Public Safety & Integrity Mgt.	Sumeet Singh	84	Mgt	SRVCC
3/19	All Hands Meeting	Standards & Policy	Jane Yura	50	Mgt	SRVCC
4/12	Employee Meeting	M&C and Gas Dispatch	Ross Leverett/ Bob Suehiro/Rich W. Yamaguchi	95	20 Mgt/ 75 BU	Fresno RMC
4/12	Employee Meeting	Field Services		23	2 Mgt/ 21 BU	Fresno-Clubhouse
4/16	Leak Survey Deployment Kickoff	Central Coast Region	Jodie Kubota	72	Mgt	SRVCC
6/5	2nd Qtr 2012 FLS's Meeting - Gas Transmission O&M Team	Gas TM&C	Mike Falk	30	Mgt	Walnut Creek - Shadeland's Art Center - 111 N. Wiget Lane, WC
7/9	Safety and Reliability Customer Education Campaign	Richmond Gas M&C	John Corona	30	BU and Mgt	Richmond

Technical Training Report - July 2012 for June Results

Results	🟢	2012 curriculum development and delivery priorities have been approved.
Initiative Status	🟡	2012 Prioritization of training requests is complete but final definition of 2012 activities is dependent on alignment with standards and procedures development. Ad hoc training due to corrective actions from audits and investigations continues to be incorporated to priorities.

I. Goal / Objective

Ensure that employees have the needed training, performance support, and feedback to perform as a competent, safe, and qualified gas operations workforce. Define and execute against a unified, agreed-upon set of priorities for business processes, training and evaluation.

II. Results

Provide needed technical training to all Gas Operations employees	Month Results			YTD Results			Full Year		
	Actual	Plan	Var	Actual	Plan	Var	Forecast	Plan	Var
Annual Training Priorities Approved	Pending standards and procedures alignment	On Track	🟨	On Track	On Track	🟩	On Track	On Track	🟩
Approved Work Plan vs. Break-in Projects (% courses added to work load as break-in)	Additional corrective actions are being identified	On Track	🟨	On Track	On Track	🟩	On Track	On Track	🟩
Courses Added vs. Cancelled	9 added 9 cancelled	0 added 0 cancelled	🟨	55 added 27 cancelled	0 added 0 cancelled	🟩	TBD	TBD	🟩
Training Development Costs Align to Planned Costs**	On Track	On Track	🟩	On Track	On Track	🟩	On Track	On Track	🟩
Training Development Times Align to Planned Durations**	On Track	On Track	🟩	On Track	On Track	🟩	On Track	On Track	🟩
Earned Value: To be reported in Q3									

Variance Explanation:

- While prioritization is complete, the final set of curriculum development projects is still under review pending final alignment with the work being done on standards and procedures.
- While courses added/cancelled target is 0, anything within 5% is considered normal for standard operations and remains green.

**Note: Quantitative data for these items will be combined and used to create the Earned Value metric.

RAG = Green = on track, yellow= variance of within 20% OR expected variance, red = variance of more than 20%

Technical Training Report - July 2012 for June Results

III. Observations/Analysis

Training

Metric	RAG status	Definitions/Results Discussion
Training Development Priorities	🟨	***Issue***: Training prioritization is complete but the scope of work may be limited by standards and procedures that must be developed first or in conjunction with the training. ***Mitigation***: All requests are being reviewed and Academy will make recommendations about how to facilitate the projects that need procedure development as well. ***Issue***: Ad hoc training continues to be requested as a result of as corrective actions from audits and investigations. ***Mitigation***: Communication to Gas Operations will include reminder that these must go through training request process. Standard and procedure will formalize this process.
Training Delivery	🟨	As classes with greater priority are added, others must be cancelled due to the limiting factors of facility and instructor capacity. Academy is hiring additional instructors as well as considering alternate delivery options including rotational instructors, alternate schedules (weekend, swing shift), and vendor training.
Curriculum Development	🟩	All in-flight curriculum development projects are on target and scheduled to meet their estimated time/costs.

IV. Process Improvement Initiatives

Key Initiatives

Initiative Name	Status
1. Centralizing Technical Training Governance	🟨
2. New Training Facility	🟨
3. Business Process Index	🟨
4. Incorporating Technology into Training	🟩
5. Instructor Identification and Development	🟥
6. 2012 Curriculum Development	🟩

Technical Training Report - July 2012 for June Results

Initiative Schedule and Status		
Initiative	**1. Centralizing Technical Training Governance**	
Team Members	[redacted], **Jon Little, Jimmy Morales,** [redacted] [redacted]**, Lenny Caldwell,** [redacted] [redacted] **Jeff Carroll**	
Scope	**Initiate and coordinate a process to establish and implement a unified training request process to prioritize, select and fund training development and delivery.**	
Milestone	**Target Completion Date**	**Comments**
Complete and agree to 2012 training development priorities	June 30	The priority of all training requests has been established but the final scope of each initiative is still dependent on alignment with the standards and procedures development plan. • Academy team is outlining what a phased approach would look like to complete what we can now and then make improvements as documents are finished into 2013. • Process team will review and approve these plans by the end of July. Expected return to green: July
Set and agree to metrics for 2012 priorities	June 30	Metrics for measuring training effectiveness for each initiative. • Develop and identify quality metrics for training effectiveness in Q3. • Pilot metrics in Q4 and Q1-2013. • Implement training effectiveness metrics in Q2-2013. Expected return to green: July
Complete and agree to 2013 training development priorities and metrics	September 30	Training requests that are not included for this year will be rolled into next year's prioritization.

Description	Accountability	2012	2013	2014	2015	2016
Unified set of training priorities aligns with Gas Operations priorities.						

Discussion Items
Other high business priorities continue to come in and may impact agreed-upon priorities (e.g. patrolling, new STPR OQ, and others)

Technical Training Report - July 2012 for June Results

Initiative Schedule and Status		
Initiative	**2. New Training Facility**	
Team Members	[redacted] **Lenny Caldwell, Jimmy Morales, Jon Little,** [redacted] [redacted]**, Jeff Carroll**	
Scope	**Design training facilities to reflect current needs for hands-on and applied learning, including a mobile training lab and remote training capabilities.**	
Milestone	**Target Completion Date**	**Comments**
Initiate Mobile Training Review (mobile trailer)	June 30	This initiative is to identify any mobile training solutions to serve as interim and supplemental training, in addition to the new facility. • Facility meetings scheduled for 7/3 and 7/16 to identify the next steps and move this forward. • New facility project manager to be identified on 7/3. Expected return to green: July
Initiate Remote Training Review/Strategy	June 30	This initiative is to identify any remote training solutions to serve as interim and supplemental training, in addition to the new facility. • Facility meetings scheduled for 7/3 and 7/16 to identify the next steps and move this forward. • New facility project manager to be identified on 7/3. Expected return to green: July
Develop a plan to identify partners.	July 31	Identify external agencies and vendors as potentials for strategic opportunities.
Presentation to EPC Committee	**TBD**	Project plan and timeline for 2012 to be determined in July meetings.

Description	**Accountability**	**2012**	**2013**	**2014**	**2015**	**2016**
Potential benefits from partnering with vendors include industry recognition, state-of-the art equipment, decreased costs, etc.	TBD					
Potential benefits from partnering with external agencies include better community relations and higher utilization of the facility.	TBD					
Total facility cost with staggered timeline: • 2012: Alignment with local stakeholders, looking for external partners • 2013: Permitting and design • 2014: Construction • 2015: Final construction / grand opening		$500k	$8.6M	$39.2M	$6.5M	

Discussion Items

Technical Training Report - July 2012 for June Results

Initiative Schedule and Status		
Initiative	**3. Business Process Index (BPI)**	
Team Members	[redacted]	
Scope	**Create an end-to-end BPI that identifies the roles, responsibilities, tasks, and training needed to accomplish the work of gas operations.**	
Milestone	**Target Completion Date**	**Comments**
Create role-based Line Of Progression map	April 30	• Validated with LOB SMEs to confirm information but Labor Relations is now updating with changes that have occurred. • Labor Relations specialist assigned to project will begin final review the week of 7/9. Expected return to green: July.
Create Gas training curriculum map	April 30	In final validation now that line of progression maps are complete and approved. Expected return to green: July.
Complete quality analysis of existing courses	Completed	
Document work procedures - 2 Work Areas	Completed	Expand the documentation of two work areas to get a comprehensive picture of the state of training related to tasks.
Create end-to-end view of business processes	June 30	Standards team has plan in progress and BPI team is standing by. Expected return to green: July
Complete standards and procedures integration into BPI	May 15	Meeting held on 6/15 and BPI work was shared with Standards team. Due to delay in contract and other factors, standards team work is not yet complete and content is not yet ready to link with BPI. Next step: Standards team to contact BPI when there is sufficient content to link the two documents. Expected return to green: August.
Align training planning with standards project plan	June 30	Project plan not received in time and alignment meeting delayed to 7/9 due to vacations. Expected return to green: July.
Establish method to communicate and maintain changes	**December 31**	This work has not yet started.

Description	**Accountability**	**2012**	**2013**	**2014**	**2015**	**2016**
Create visibility into the connections between guidance documents, OQs, and training.						
Identify gaps in training.						

Discussion Items

Technical Training Report - July 2012 for June Results

Initiative Schedule and Status

Initiative	**4. Getting Technology Into Training**	
Team Members	**Proposed:** [redacted]	
Scope	**Utilize technology to:** - **Provide better access to current resources** - **Develop more efficient resources and tools** - **Give employees mobile access to info** - **Enhance effectiveness of formal training**	
Milestone	**Target Completion Date**	**Comments**
Video production process	Complete	Build out of the process to be used by Academy to shoot and use videos in training
Improve web-based training (WBT) standards	June 2012	Revise Academy WBT tools and templates to promote more flexible, interactive content. New software release has delayed the updates to these standards. • Pilot with Articulate Storyline scheduled for 7/13 Expected return to green: July
AuthorIt course development	July 2012	Training development management software that facilitates creation and tracking of various topics
Interactive whiteboards in classrooms	July 2012	Provides capability to show multiple input formats including interactivity for use with computer, WBT, and 3D pieces. Implement as pilot in Field Services training and then implement elsewhere in San Ramon.
Video server	July 2012	Video server to store and serve up videos to the field. (Replacement for using YouTube). Identifying server location and security needed to support field delivery of videos.
Mobile Application server	July 2012	This work has not yet started. Identify and pilot the application server to store and serve applications to the field.
3D Simulations and Asset Models pilot	August 2012	Identify vendor and pilot training opportunity for three dimensional representations of reality for use in training and performance support in the field. First pilot is being performed with the visual weld inspection process.
Electronic Performance Support System (EPSS) pilot	September 2012	This work has not yet started. EPS web-based and/or mobile app based solution to provide field access to just-in-time information needs such as job aids, videos, procedures, etc.
Mobile Evaluation Application for qualifications	November 2012	Upgrade software to support extended testing/OQ requirements, delivery via mobile devices, and access when not connected to PG&E network.

Metrics that Matter SAP integration	**TBD**	This work has not yet started. MTM works with SAP to deliver key performance indicators and metrics for use in ROI and other analyses.
Mobile Application requirements/development	**On-going**	This work has not yet started. Create the process for developing and deploying mobile applications.
360 degree video conferencing phone systems	**December 2012**	This work has not yet started. Provides capability to do distance learning where attendees can see what is taking place in the classroom which extends the instructors ability to use more than just a computer for presentation. Will identify appropriate locations and pilot projects to test the effectiveness of the system.
Card reader class and OQ registration	**TBD (December 2012 target)**	This work has not yet started. RFI reader devices which attach to any computer, laptop, and some tablets to facilitate scanning of PG&E badges for registration of exams and courses.

Description	Accountability	2012	2013	2014	2015	2016
Costs will be identified on a per-initiative basis.						

Discussion Items

Technical Training Report - July 2012 for June Results

Initiative Schedule and Status

Initiative	**5.** Instructor Identification and Development	
Team Members	[redacted]	
Scope	**Create an instructor development program that includes:** • **Recruiting and hiring the best people for the positions** • **Continuous improvement of instructor delivery and technical skills** • **Retention incentives**	
Milestone	**Target Completion Date**	**Comments**
Identify opportunities for external curriculum	March 31	The vendor management position has been filled as of 6/4 and is: • Identifying current contracts for vendor training and confirming that MSAs exist through the end of the year. • Establishing course codes and contacts to manage the vendor requests through the Academy. Expected return to green: August.
Develop a best-in-class delivery model	March 31	The delivery manager for Gas Training does not begin in the new position until 7/9 and will begin this work. Expected return to green: September.
Develop career progression for trainers	June 30	In discussions with HR to re-examine the instructor role and progression. These discussions will be continued by the new delivery manager for Gas Training when he begins on 7/9. Expected return to green: September.
Update the trainer certification program	June 30	The delivery manager for Gas Training does not begin in the new position until 7/9 and will begin this work. Expected return to green: September.
Identify qualitative aspects that hinder delivery	**December 31**	The new delivery manager will start 7/9 and begin this work.

Description	**Accountability**	**2012**	**2013**	**2014**	**2015**	**2016**
TBD						

Discussion Items

Initiative Schedule and Status		
Initiative	6. 2012 Curriculum Development	
Team Members	[redacted]	
Scope	**Develop and implement curricula identified as 2012 priorities**	
Milestone	**Target Completion Date**	**Comments**
Implement new engineer program	November 30	Pilot tentatively scheduled for October, 2012.
Implement gas basics program	August 15	Pilot tentatively scheduled for July, 2012.
Implement control room management assessments	August 31	Pilot is ongoing as workbooks and assessments are completed.
Implement journeyman welding training	August 15	Pilot ready materials to be complete in July, 2012. No pilot scheduled at this time.
Implement initial utility worker program	August 31	Pilot scheduled for August, 2012.
Implement revised M&C Mechanic Apprenticeship	December 31	Year 1 of training is the goal for 2012. Additional phases of training will be developed in 2013.
Implement revised leak survey training	TBD	

Description	Accountability	2012	2013	2014	2015	2016
TBD						

Discussion Items
For more detailed information about each initiative, please see the supporting information. Additional items will be included once 2012 priorities are complete.

Keys to Success Meeting

Asset Knowledge Management

JULY 19, 2012

I. Goal / Objective

Perform the MAOP Validation of 3,400 miles of non-HCA pipelines to ensure the safety and compliance of our pipelines.

II. Results

Results	●	• MAOP Validation of PFL miles is exceeding the plan. • MAOP Validation of Shorts is behind schedule. • Shorts scope is expected to decrease by 2500+ shorts. • Project cost is exceeding the plan but financial improvement initiatives appear promising to underrun the total budget.

Production	**June Results**			**YTD Results**			**Full Year**		
	Actual	**Plan**	**Var**	**Actual**	**Plan**	**Var**	**Actual**	**Plan**	**Var**
Mainline (Miles)	422	300	122	1981	1632	349	-	3466	-
Shorts (Count)	124	508	(384)	571	2412	(1841)	-	5460	-

See Mainline Production Plots
See Shorts Production Plots
See Vendor Performance Metrics

2012 Latest Estimate - $ Millions									
Expense	**June YTD**			**JUL - DEC Forecast**			**Full Year Forecast**		
	Actual	Plan	Fav / (unfav)	Estimate	Plan	Fav / (unfav)	Estimate	Plan	Fav / (unfav)
MAOP	72.9	70.7	(2.2)	55.2	55.20	-	125.9	125.9	-

See Finance Plots

III. Observations / Analysis

Category	Discussion Topics	Mitigations
Production	• PFL Miles production is progressing well • PFL Shorts production needs improvement	• Shorts scope expected to decrease by 2500+ shorts due to HPR replacement work • Converted mainline vendor to shorts production (G2)
Financial Performance	• Financial Improvement Initiatives appear to be promising and may allow for the 2012 plan to be under run	• Executing on financial improvement initiatives • New contracts with PFL Build vendors are in process • High cost PFL Build Vendor has been released (URS) • Forecast of 2012 MAOP digs has decreased from 91 to 79
PFL Data Business Integration	• Presented "Find It Before It Finds Us" items to Integrity Management; scheduled monthly meeting to collaborate • Use of PFL data from the enhanced GIS is increasing • Compass is now live	• Continuing to involve the business in user groups to identify the most efficient means of sharing readily accessible PFL data
New Revenue Development	• Progressing forward with the MAOP Calculator patent. • Pricing sheet has been developed and there are interested buyers.	
Personnel	• Worker staffing is stable but it will be continually monitored as we approach the end of the project. Contractors may decide to exit a sun-setting project to acquire longer term work. In addition, PG&E personnel are beginning to show interest in other, longer-term jobs.	• Provided view of future work that may utilize existing staffing • Barbeque was held to celebrate production achievement and long-term staff was rewarded with gift certificates • Commenced to utilize select personnel from the Support Team on new initiatives

See Financial Improvement Initiatives
See "Find it Before it Finds Us" Initiatives

IV. Process Improvement Initiatives

Key Initiatives

Initiative Category	Initiative Name	Status
Governance	1. Optimize and Centralize Non-Destructive Examination digs	🟨
Foundational	2. Build Vendor Management	🟩
Foundational	3. Reduce Scanning Costs	🟦
New Revenue Development	4. MAOP Calculator	🟩
Asset Risk Management	5. Find it Before it Finds Us	🟩

Initiative Schedule and Status

Initiative	1. Optimize and Centralize Non-Destructive Examination (NDE) digs	
Owner	[redacted]	
Scope	A. Reduce overall number of required digs B. Reduce unit cost per dig C. Centralize the management of NDE digs to enhance efficiency	
Benefits (Soft)	Decrease in overall number of required digs; improved efficiency of NDE excavations throughout PG&E.	
Costs	None – N/A	
Milestone	**Target Completion Date**	**Comments**
Improve Dig Portal	Completed	Improvements have been made to the dig portal
Identify Accountable Organization	August	Organization (MAOP, Hydrotest, etc.) that will facilitate this program has yet to be identified.
Reduce MAOP Required Digs	August	Anticipated scope of MAOP digs has already decreased from 91 to 79.
Complete the Economic Analysis for the Dig Management Centralization	August	Complete the Economic Analysis for the Centralization of the dig management
Discussion Items		
The accountable organization for the Centralized Dig Program must be identified.		

Initiative Schedule and Status		
Initiative	2. Build Vendor Management	
Owner	[redacted]	
Scope	A. Scale down high-cost vendors and increase the number of resources at low-cost vendors. B. Maintain and improve Quality	
Benefits (Soft)	Decreased unit cost for PFL Build	
Costs	None – N/A	
Milestone	**Target Completion Date**	**Comments**
Ramp up Low Cost Vendors	On-Going	EN, C&C have been ramped up
Ramp down High Cost Vendors	On-Going	URS has been released
Discussion Items		
G2 has been converted to Shorts Production from Mainline production. Shorts scope reduction due to HPR Replacement program is being QC'd (expected to be a reduction of 2500+ named routes in GIS) See Vendor Performance Metrics		

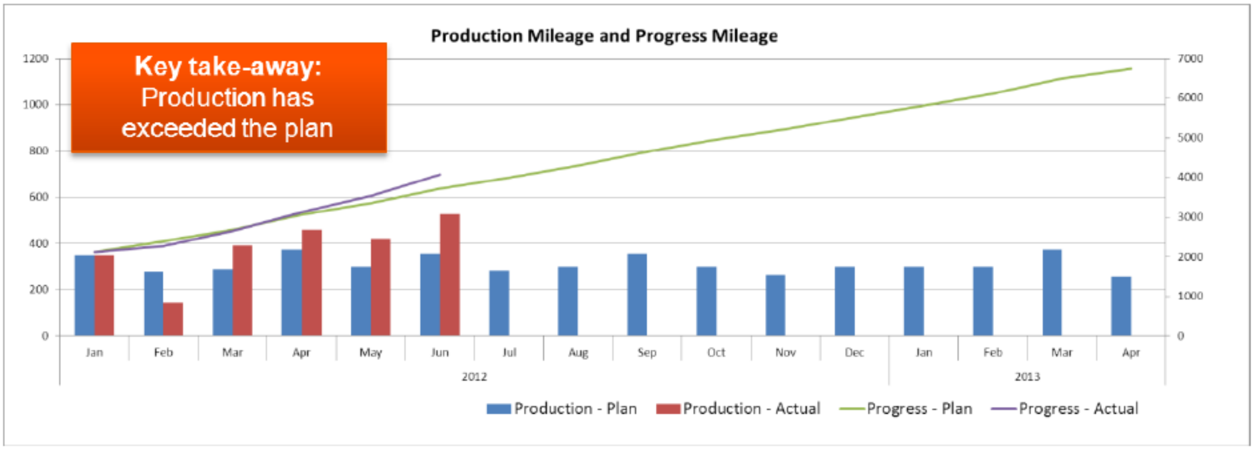
Initiative Schedule and Status		
Initiative	3. Reduce Scanning Costs	
Owner	[redacted]	
Scope	A. Switch Mobile Scanning vendor in order to reduce the unit costs for scanning	
Benefits (Soft)	Decreased unit cost for PFL Prep	
Costs	None – N/A	
Milestone	**Target Completion Date**	**Comments**
Switch scanning vendors	Complete	
Discussion Items		
Mobile scans are now performed by Advanced Resolutions		

Initiative Schedule and Status		
Initiative	4. MAOP Calculator	
Owner	[redacted]	
Scope	A. Develop and Patent the MAOP Calculator	
Benefits (Soft)	New Revenue	
Costs	None – N/A	
Milestone	**Target Completion Date**	**Comments**
Develop Pricing Sheet	Complete	
Patent	June	Provisional Patent application is in process
Sell Licenses	December	
Discussion Items		

Initiative Schedule and Status		
Initiative	5. Find it Before it Finds Us	
Owner	[redacted]	
Scope	Analyze PFL data for safety concerns and provide mitigation recommendations	
Benefits (Soft)	Mitigate safety risks and improve the accuracy of our asset data	
Costs	None – N/A	
Milestone	**Target Completion Date**	**Comments**
Develop list of search criteria	On-Going	
Develop list of occurrences	On-Going	
Provide recommendations to business	On-Going	
Discussion Items		
Met with Integrity Management and scheduled monthly check-in to ensure our teams are aligned. These efforts will be on-going for the duration of the MAOP project See "Find it Before it Finds Us" Initiatives		

I. Supporting Information

Mainline Production Plots



Key take-away:
Production has exceeded the plan

Figure 1: Mainline Production - June

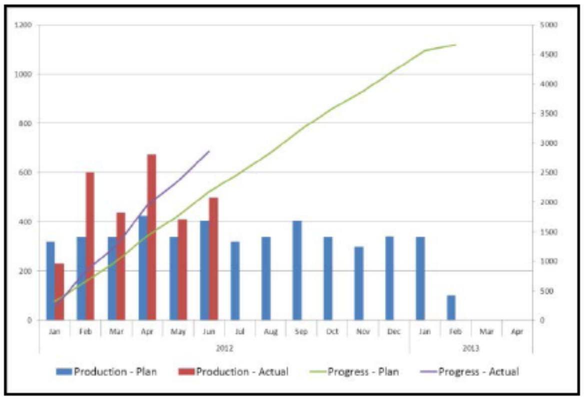


Figure 2: PFL Build Production - June

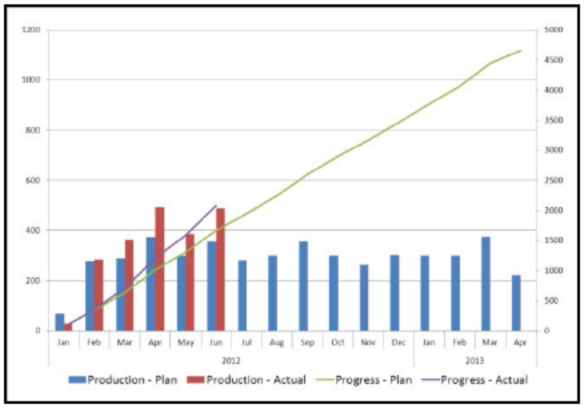


Figure 3: PFL QC Production – June

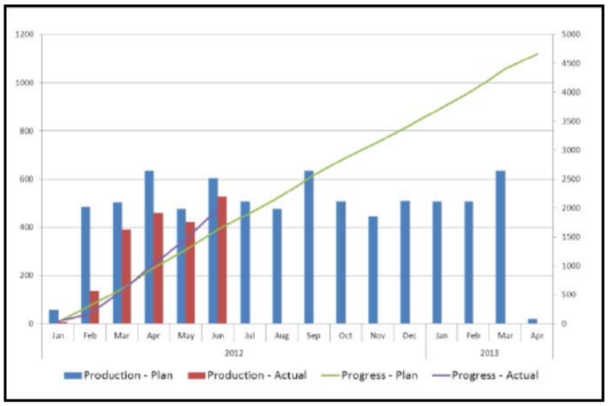


Figure 4: MAOP Validation Production - June

Shorts Production Plots

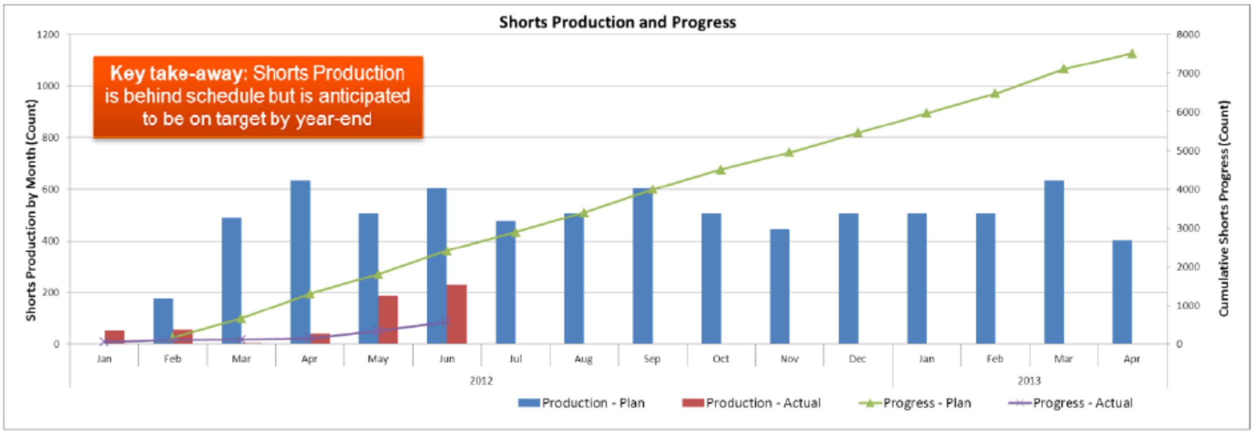
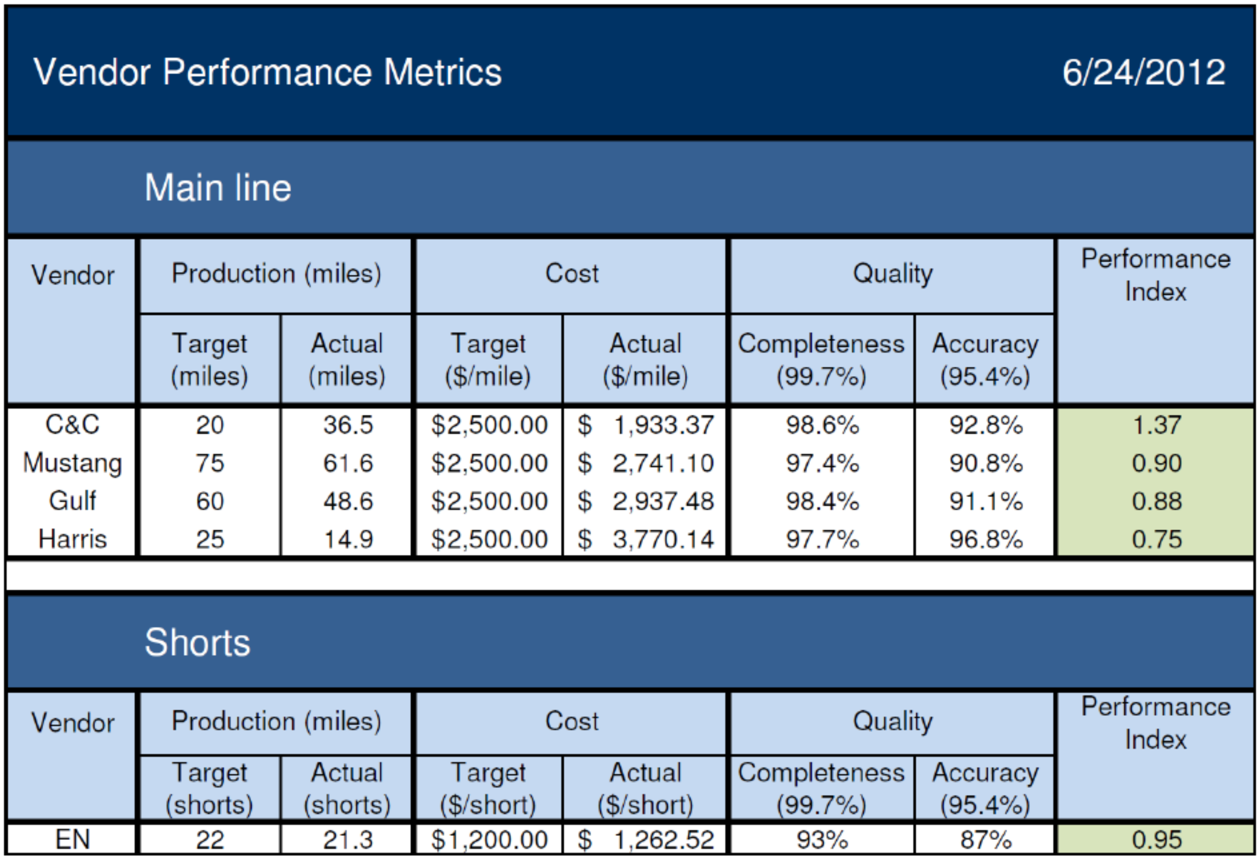


Figure 5: Shorts Production - June

Vendor Performance Metrics



Vendor Performance Metrics							6/24/2012
Main line							
Vendor	Production (miles)		Cost		Quality		Performance Index
	Target (miles)	Actual (miles)	Target ($/mile)	Actual ($/mile)	Completeness (99.7%)	Accuracy (95.4%)	
C&C	20	36.5	$2,500.00	$ 1,933.37	98.6%	92.8%	1.37
Mustang	75	61.6	$2,500.00	$ 2,741.10	97.4%	90.8%	0.90
Gulf	60	48.6	$2,500.00	$ 2,937.48	98.4%	91.1%	0.88
Harris	25	14.9	$2,500.00	$ 3,770.14	97.7%	96.8%	0.75
Shorts							
Vendor	Production (miles)		Cost		Quality		Performance Index
	Target (shorts)	Actual (shorts)	Target ($/short)	Actual ($/short)	Completeness (99.7%)	Accuracy (95.4%)	
EN	22	21.3	$1,200.00	$ 1,262.52	93%	87%	0.95

Figure 6: Vendor Performance Metrics

Finance Plots

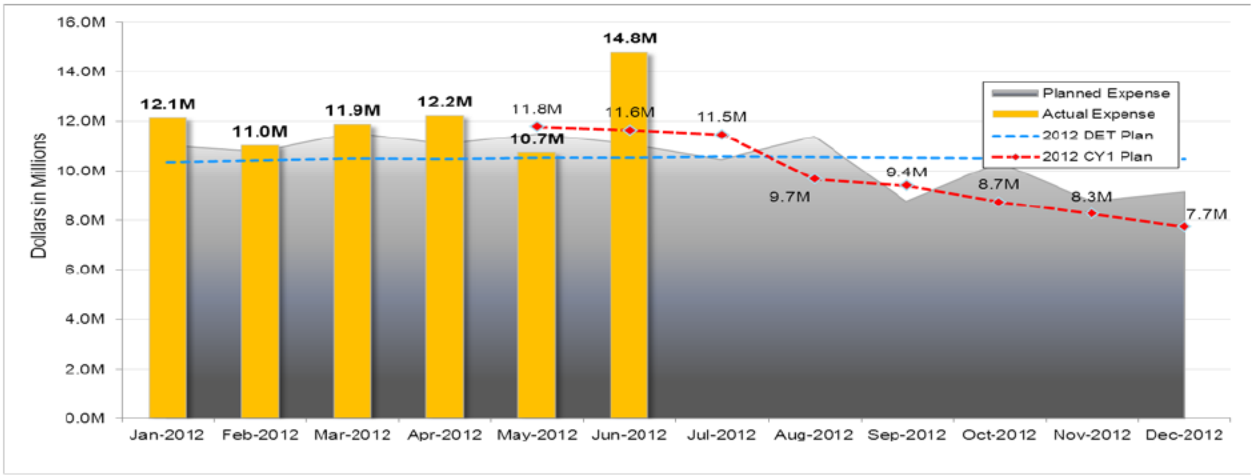


Figure 7: Finance Plots

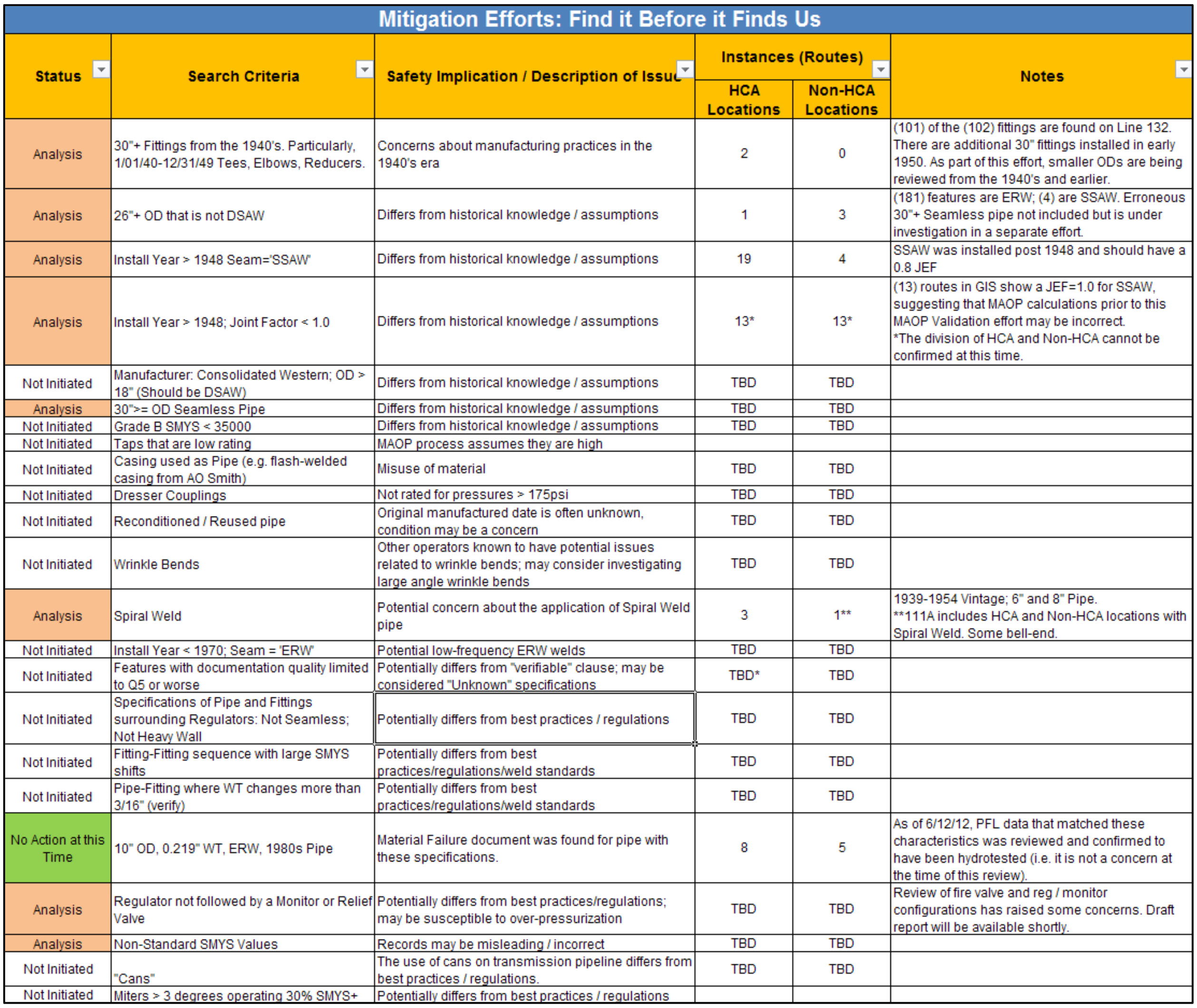
Financial Improvement Initiatives

MAOP Validation: Financial Improvement Initiatives

Initiative	Effective Date	Status Update		Description	Metric	Projected Savings by Year End	Owner
		RAG	Progress				
MAOP Validation: Centralize Non-Destructive Examination (NDE) Digs	8/1/2012	🟢	Accountable organization TBD; Improvements have been made to the MAOP Dig Portal; 2012 dig forecast has decreased from 91 to 79	**Baseline Info:** • 8% of 2011/2012 digs used 26% of all dig program funds. • 27% of all digs have been located in paved areas which have a unit cost that is $47,000 higher than soil digs. **Objectives:** • Reduce number of digs • Reduce unit cost per dig **Improvements:** • Centralize the dig program for all Gas Transmission NDEs. • Reduce number of discretionary digs and lower unit cost per dig by implementing a team to develop and coordinate NDEs. • Use statistical analysis to determine the minimum number of digs necessary to support the objectives of the Fitting Sampling Program, Reconditioned Pipe Resolution and discretionary confirmation (Tier 2) digs. • Reduce Mears overhead costs (NDE Contractor). • Develop contigency plans for potential high-cost digs.	Unit Cost per Dig	$500,000 (~5% of current dig unit cost)	[redacted]
PFL Build: Shift Production from high-cost to low-cost vendors	6/1/2012	🟢	Low-Cost vendors (EN, C&C) have been ramped up; URS released due to high cost. G2 converted to shorts; Impact to Shorts scope being QC'd	PFL Build Vendor performance was evaluated for gains in efficiency and scenario models were generated to determine the optimal configuration for savings and production. **Objective:** Scale down high-cost vendors and increase the number of resources at low-cost vendors. Replace high-cost resources with low-cost resources on site.Maintain and improve Quality. • Baseline: $4,450.00 per mile • Optimistic Target: $3,190.00 per mile • Pessimistic Target: $3,881.25 per mile **Current performance: $1900 - 3770/mile**	PFL Build Dollars / Mile	$1.2M - $4.4M	[redacted]
Records Collection: Reduce Scanning Costs	7/1/2012	🔵	Mobile scans are now performed by **Advanced Resolutions**	**Objective - Reduce Mobile Scanning Costs:** Switch mobile scanning vendors in order to reduce the mobile scanning costs. Requires negotiation with Celerity. The proposed vendor currently provides in-house scanning services at the Emeryville Operations; we are familiar with their quality and work product. ***An example of proposed savings:*** *In a recent invoice to set up 2 scanners ($500), travel 8 hours($360), labor 12 hours ($540), and make 122 copies(48.80), including taxes(8.5%), the total cost was $1452.95* *With the new rates the same job would cost $350 + $280 + $480 + $47.58 +$4.04 = $1161.62* *Savings = 20.1%, $291.33* *The total savings will vary from job to job depending on the number and size of drawings, travel time, and labor hours.* **Post-MAOP Validation Objective: Reduce Overall Scanning Costs:** Develop an RFP to solicit bids for future scanning activities: Possible timeline: • Write/submit RFP: May, June 2012 • Request bids be returned by August 2012 • Award bid October 2012 • Start with new vendor(s) January 2013	Cost per Scan Job	$36,000-$50,000 (2012 only)	[redacted]
New Revenue Development: Maop Calculator	9/1/2012	🟢	Pricing Sheet has been developed	**Objective:** Develop and patent the MAOP Calculator.	Units Sold	$100,000-$250,000	[redacted]

Figure 8: Finance Improvement Initiatives

“Find it Before it Finds Us” Initiatives



Mitigation Efforts: Find it Before it Finds Us

Status	Search Criteria	Safety Implication / Description of Issu	Instances (Routes)		Notes
			HCA Locations	Non-HCA Locations	
Analysis	30"+ Fittings from the 1940's. Particularly, 1/01/40-12/31/49 Tees, Elbows, Reducers.	Concerns about manufacturing practices in the 1940's era	2	0	(101) of the (102) fittings are found on Line 132. There are additional 30" fittings installed in early 1950. As part of this effort, smaller ODs are being reviewed from the 1940's and earlier.
Analysis	26"+ OD that is not DSAW	Differs from historical knowledge / assumptions	1	3	(181) features are ERW; (4) are SSAW. Erroneous 30"+ Seamless pipe not included but is under investigation in a separate effort.
Analysis	Install Year > 1948 Seam='SSAW'	Differs from historical knowledge / assumptions	19	4	SSAW was installed post 1948 and should have a 0.8 JEF
Analysis	Install Year > 1948; Joint Factor < 1.0	Differs from historical knowledge / assumptions	13*	13*	(13) routes in GIS show a JEF=1.0 for SSAW, suggesting that MAOP calculations prior to this MAOP Validation effort may be incorrect. *The division of HCA and Non-HCA cannot be confirmed at this time.
Not Initiated	Manufacturer: Consolidated Western; OD > 18" (Should be DSAW)	Differs from historical knowledge / assumptions	TBD	TBD	
Analysis	30">= OD Seamless Pipe	Differs from historical knowledge / assumptions	TBD	TBD	
Not Initiated	Grade B SMYS < 35000	Differs from historical knowledge / assumptions	TBD	TBD	
Not Initiated	Taps that are low rating	MAOP process assumes they are high			
Not Initiated	Casing used as Pipe (e.g. flash-welded casing from AO Smith)	Misuse of material	TBD	TBD	
Not Initiated	Dresser Couplings	Not rated for pressures > 175psi	TBD	TBD	
Not Initiated	Reconditioned / Reused pipe	Original manufactured date is often unknown, condition may be a concern	TBD	TBD	
Not Initiated	Wrinkle Bends	Other operators known to have potential issues related to wrinkle bends; may consider investigating large angle wrinkle bends	TBD	TBD	
Analysis	Spiral Weld	Potential concern about the application of Spiral Weld pipe	3	1**	1939-1954 Vintage; 6" and 8" Pipe. **111A includes HCA and Non-HCA locations with Spiral Weld. Some bell-end.
Not Initiated	Install Year < 1970; Seam = 'ERW'	Potential low-frequency ERW welds	TBD	TBD	
Not Initiated	Features with documentation quality limited to Q5 or worse	Potentially differs from "verifiable" clause; may be considered "Unknown" specifications	TBD*	TBD	
Not Initiated	Specifications of Pipe and Fittings surrounding Regulators: Not Seamless; Not Heavy Wall	Potentially differs from best practices / regulations	TBD	TBD	
Not Initiated	Fitting-Fitting sequence with large SMYS shifts	Potentially differs from best practices/regulations/weld standards	TBD	TBD	
Not Initiated	Pipe-Fitting where WT changes more than 3/16" (verify)	Potentially differs from best practices/regulations/weld standards	TBD	TBD	
No Action at this Time	10" OD, 0.219" WT, ERW, 1980s Pipe	Material Failure document was found for pipe with these specifications.	8	5	As of 6/12/12, PFL data that matched these characteristics was reviewed and confirmed to have been hydrotested (i.e. it is not a concern at the time of this review).
Analysis	Regulator not followed by a Monitor or Relief Valve	Potentially differs from best practices/regulations; may be susceptible to over-pressurization	TBD	TBD	Review of fire valve and reg / monitor configurations has raised some concerns. Draft report will be available shortly.
Analysis	Non-Standard SMYS Values	Records may be misleading / incorrect	TBD	TBD	
Not Initiated	"Cans"	The use of cans on transmission pipeline differs from best practices / regulations.	TBD	TBD	
Not Initiated	Miters > 3 degrees operating 30% SMYS+	Potentially differs from best practices / regulations			

Figure 9: Find it before it Finds Us

I. Goal / Objective

Ensure that optimum processes and technology are in place to accurately and reliably obtain gas transmission asset knowledge. This knowledge will allow the GT business to efficiently provide a safe and compliant Gas Operations system.

II. Results

Results	●	• Pipeline Centerline Survey effort has started but has yet to be funded • Other activities are progressing on schedule

Centerline Production	**June Results**			**YTD Results**			**Full Year**		
	Actual	**Plan**	**Var**	**Actual**	**Plan**	**Var**	**Actual**	**Plan**	**Var**
Mainline (Miles)	-	-	-	-	-	-	-	6766	-
Shorts (Count)	-	-	-	-	-	-	-	9466	-

2012 Latest Estimate - $ Millions

Expense	**June YTD**			**JUL - DEC Forecast**			**Full Year Forecast**		
	Actual	Plan	Fav / (unfav)	Estimate	Plan	Fav / (unfav)	Estimate	Plan	Fav / (unfav)
Centerline	-	-	-	-	-	-	-	-	-

III. Observations / Analysis

Initiative	Discussion Topics	Mitigations
Chain-of Custody for removed pipe	• This SAP enhancement is complete and in operation. Make-up training is being conducted • The data from past cut-outs will be loaded into SAP to enable reporting/traceability and to replace the off-line spreadsheets that have been used to capture this information in the past • Regulatory Compliance and Support has requested enhancements to this functionality. The design has been completed and needs to be coded. Additional proposed changes to manage the ATS process are being investigated.	IT is looking into the appropriate resources for the performance of this work.
MAOP Catalog Modernization	• Data collection sheets have been developed and data collection has commenced • SAP screen designs are complete • 086868, SCADA PTs, GIS data, and MAOP Validation results are being consolidated"	This solution continues to be socialized for the organization's understanding and to retrieve critical input
Pressure Reduction / Restoration in SAP	• Process design is complete • SAP screen designs are complete • Portal is being updated to track these more effectively	N/A
Feature Based Mapping	• Concept map has been developed • Working with IM ([redacted] to develop process	Proceeding with socialization of the concept
As-Built Data Acquisition	• Investigate what components may be available for use	Recently initiated
Pipeline Centerline Survey	• Business case was presented • Initiated pilot of Line 131	Funds to be approved

IV. Process Improvement Initiatives

Key Initiatives

Initiative Category	Initiative Name	Status
Asset Risk Management	1. Chain of Custody for Removed Pipe	🟩
Asset Risk Management	2. MAOP / MOP Catalog Modernization	🟩
Asset Risk Management	3. Pressure Reduction / Restoration in SAP	🟩
Asset Risk Management	4. Feature Based Mapping	🟨
Asset Risk Management	5. As-Built Data Acquisition	🟥
Asset Risk Management	6. Pipeline Centerline Survey	🟨

Initiative Schedule and Status

Initiative	1. Chain of Custody for Removed Pipe	
Owner	[redacted]	
Scope	Develop and implement a system that provides traceability of removed pipe components	
Benefits (Soft)	Improved Asset Management	
Milestone	**Target Completion Date**	**Comments**
Design Process	Complete	
Develop SAP technology	In-Progress	Updates being made per feedback from Regulatory Compliance and Support
Train Users	On-Going	Make-up training is being conducted
Discussion Items		

Initiative Schedule and Status		
Initiative	**2. MAOP / MOP Catalog Modernization**	
Owner	[redacted]	
Scope	Provide in real time, accessible and accurate information on the MAOP/MOP of the gas transmission system; this is the replacement of drawing 086868	
Benefits (Soft)	Improved accuracy of MAOP of Record; addresses issues identified in recent Audit	
Milestone	**Target Completion Date**	**Comments**
Consolidate MAOP Data	On-Target	Anticipated completion by July 11th
Develop System to House Data	On-Target	
Provide Training to Business	On-Target	
Discussion Items		
Consolidating 086868, MAOP Validation data, GIS Data and SCADA PT data.		

Initiative Schedule and Status		
Initiative	**3. Pressure Reduction / Restoration in SAP**	
Owner	[redacted]	
Scope	Provide in real time, accessible and accurate information on Pressure Reductions / Restorations	
Benefits (Soft)	Improved data reliability	
Milestone	**Target Completion Date**	**Comments**
Develop Functionality in SAP	On-Target	Design complete; development in progress
Develop Log in Portal	Complete	MAOP is currently tracking Pressure Reductions live in MAOP Portal
Discussion Items		

Initiative Schedule and Status		
Initiative	4. Feature Based Mapping	
Owner	[redacted]	
Scope	Develop the long-term process for mapping data into GIS at the feature level	
Benefits (Soft)		
Milestone	**Target Completion Date**	**Comments**
Concept Map Development	Complete	
Gather Requirements	Behind Schedule	[redacted] and [redacted] working on this
Develop Process	Behind Schedule	
Discussion Items		

Initiative Schedule and Status		
Initiative	5. As-Built Data Acquisition	
Owner	[redacted]	
Scope	Develop an As- Built data acquisition process and organization	
Benefits (Soft)		
Milestone	**Target Completion Date**	**Comments**
Gather Info from Vendors	On-target	Reviewed AyaWorks demo
Gather Requirements	Behind Schedule	
Develop Process	Behind Schedule	
Discussion Items		
Effort recently initiated		

Initiative Schedule and Status		
Initiative	**6. Pipeline Centerline Survey**	
Owner	[redacted]	
Scope	Gather Survey Grade GPS information utilizing foot survey crews	
Benefits (Soft)	Improve GIS alignment, identify maintenance issues	
Milestone	**Target Completion Date**	**Comments**
Acquire Funding	Behind Schedule	
Develop Process	On-Target	High level process has been developed, pilot on Line 131 is in progress
Develop Tracker	On-Target	Initial Portal has been developed and is under review
Perform Surveys	On-Target	Surveys have begun with pilot
Discussion Items		
Seven miles of Line 131 were surveyed successfully during the pilot of this initiative.		

Keys to Success Meeting

Asset Knowledge Management

JULY 19, 2012

Results		Overall Mariner work is on or nearly on schedule and spending is below plan.
Initiative Status	🟡	• Need to determine the future for Android devices at PG&E and effect on Field Survey – Locate and Mark project • Review of Leak Survey Schedule Migration scope & schedule in light of issues related to data quality reporting requirements and development of tech down process • Examining projects' forecasts to ensure appropriate funding for solution deployments beyond IT's usual Plan, Design, Develop, Test Cycle. • On going assessment of mobile and mobile applications • Implementing deployment quality review to ensure results are sustainable.

I. Goal / Objective

Consolidate gas transmission asset records and enhance business processes and capabilities for capturing and managing asset data into three primary enterprise systems, SAP, Geographic Information System (GIS), and Documentum beginning in January 2011 and completing in April 2015 at a total cost not to exceed $167 million (including contingency).

II. Results

Completed Initiatives	Month Results		YTD Results		Full Year	
	Actual	Plan	Actual	Plan	Actual	Plan
1. Leak Survey						
• Safety/Quality	0.6%	0.5%	0.6%	0.5%	0.6%	0.5%
• Adoption	167	185	167	185	167	185
• Productivity	13.3 per hour	14 per hour	13.3 per hour	14 per hour	13.3 per hour	14 per hour

$ in thousands

	June YTD				July-Dec Forecast			Full Year Forecast		
Capital	YTD Actual	YTD (CY1)	Fav/(unfav)		Estimate	Cycle 1	Fav/(unfav)	Estimate	Cycle 1	Fav/(unfav)
Independent Review and Detailed Planning	662	1,365	703		1,029	1,241	212	1,691	2,606	915
Corrective Maintenance-Mobile Leak Repair	1,933	2,668	734		4,509	6,083	1,574	6,442	8,750	2,308
Field Survey_ Leak Survey	964	777	(186)		0	930	930	964	1,708	744
Linear Referenced GIS, Sandbox installation, & SAP Integration	1,409	1,772	363		3,842	3,679	(163)	5,251	5,451	200
Integrity Management and Risk Analysis Software	0	0	0		2,721	2,721	0	2,721	2,721	0
Legacy Mapping Solution for Mobile	0	0	0		123	123	0	123	123	0
Preventive Maintenance - Production (Mobile Deployment)	1,019	1,184	165		5,156	6,064	907	6,175	7,248	1,072
Documentum Implementation & Integration	1,595	1,961	366		1,699	2,800	1,101	3,294	4,761	1,468
Field Survey_ Locate&Mark	1,198	1,079	(119)		528	1,314	786	1,726	2,393	667
Preventive Maintenance_ Corrosion	560	477	(84)		0	0	0	560	477	(84)
Preventive Maintenance_Valves and Regulators	1,757	1,503	(254)		0	0	0	1,757	1,503	(254)
Leak Survey Schedule Migration	1	138	138		450	453	3	451	591	140
Preventive Maintenance SAP			0		1,000		(1,000)	1,000	-	(1,000)
Mariner_Mobile Technology Roll Out	30	0	(30)		5,182	7,862	2,680	5,212	7,862	2,650
Total Capital	**11,128**	**12,925**	**1,798**		**26,240**	**33,269**	**7,029**	**37,367**	**46,194**	**8,827**
Expense	YTD Actual	Cycle 1	Fav/(unfav)		Estimate	Cycle 1	Fav/(unfav)	Estimate	Cycle 1	Fav/(unfav)
Independent Review and Detailed Planning	139	0	(139)		0	0	0	139	-	(139)
Mariner_Project&Portfolio Mgmt Tools-Gas	0	24	24		0	72	72	0	96	96
Mariner_iRise Training	87	86	(1)		0	0	0	87	86	(1)
Mariner_Next Gen Linear Ref GIS	1	0	(1)		0	0	0	1	-	(1)
Supply Chain Materials Traceability (Deployment)	0	29	29		58	171	113	58	200	142
Corrective Maintenance Doc&Data Conversion	1,311	863	(448)		1,349	928	(420)	2,659	1,791	(868)
Preventive Maintenance - Production (Mobile Deployment)	0	0	0		150	251	101	150	251	101
Independent Review and Detailed Planning	0	64	64		0	191	191	0	255	255
Field Survey_ Leak Survey	0	85	85		86	45	(42)	86	130	44
Field Survey_ Locate&Mark	0	47	47		130	84	(47)	130	131	1
Preventive Maintenance_T&R, Corrosion	440	587	147		1,102	1,102	(0)	1,542	1,688	146
Total Expense	**1,978**	**1,785**	**(193)**		**2,875**	**2,844**	**(31)**	**4,853**	**4,628**	**(225)**
Total	**13,105**	**14,710**	**1,605**	**0**	**29,115**	**36,113**	**6,998**	**42,221**	**50,822**	**8,602**

III. Observations / Analysis

MARINER

Category	Discussion of Latest Estimate (6 months actual results + 6 months forecast)	
Expense	**Point Forecast**	• **June YTD**: PMO expenses have been allocated to Capital projects • **End of year**: On track to meet budget
	Uncertainties	• **Savings Potential:** The expense budget is tight, data collection activities (PM and A-Form work) and change management work could increase the expense numbers slightly over plan
Capex	**Point Forecast**	• **June YTD**: Lower than planned spend for GIS and timing for IM software • **End of year:** Budget variance is driven by GIS "Sandbox" pilot approach vs. full implementation resulting in significantly less expenditures in 2012. This was offset by expediting mobile technology roll out.
	Uncertainties	• **Savings Potential:** Timing of IM software and mobile hardware procurement as well as timely completion of Mariner – Documentum project.

Process Improvement Initiatives

Program Overview - Mariner		
Exec. Sponsor	Nick Stavropoulos	
Process Owner	[redacted] Lorene Harden, Karen Roth, Ross Leverett	
Initiative Description	Consolidate gas transmission asset records and enhance business processes and capabilities for capturing and managing asset data in three primary enterprise systems, SAP, Geographic Information System (GIS), and Documentum, beginning in January 2011 and completing in April 2015 at a total cost not to exceed $167 million.	
Initiative Strategy	People	Provide our employees with technology and tools that improve their work experience and provide them the technology and resources they need while executing their daily tasks
	Process	Improve data quality and availability by eliminating paper-based work processes and installing tools to enable the electronic collection, processing, data validation, review, analysis, and integration of pipeline systems data. Improve PG&E's pipeline risk management capabilities by integrating information from different standalone legacy systems into an integrated system. Support PG&E's Pipeline Safety Enhancement Plan and address the CPUC and NTSB concerns by enabling and supporting asset data that are traceable, verifiable and complete. Generate operational efficiencies related to: the time required to enter and upload data into the system, the time required to locate and collect information maintained in different offices and different records management systems, the time required to correlate and analyze engineering data, and the time associated with field force dispatch as work assignments can be automated and optimized to minimize travel.
	Technology	Deploy mobile technology to collect information from the field at the job site. Consolidate information into our Core Enterprise systems (SAP, GIS, Documentum). Implement Linear Referencing for transmission assets.

Initiative Name	Discussion Topics	Status
Field Survey - Locate & Mark	• Need to determine the future for Android devices at PG&E • Plan new device analysis with damage prevention and Locators/Supervisors	🟥 S
Leak Survey Schedule Migration	• Review of project scope & schedule in light of issues related to data quality Reporting requirements and development of tech down process	🟥 SR
Field Survey - Leak Survey	• Deployed the first two sets of enhancements to Leak Surveyors in versions 1.2 and 1.3 of the Leak Survey Application • Received schedule of dates for additional enhancements; GT Screen development and release scheduled for August	🟨 T
Documentum Implementation	• 14,000 documents quarantined; 15 new users added from MAOP Engineering • Planning completed 06/14/12. Analysis to be complete 07/30 • Roadmap continues to emerge as Working Group progresses • Resolving interdependency project issues with Enterprise Content Management stakeholders • Integrated ECM schedule to be published 06/29. Schedule Impact Assessment to be completed 7/6 • Identification required for Non-Mariner scope	🟨 ST
Preventive Maintenance - Document & Data Modernization	• Prioritizing scope to accommodate Preventive Maintenance Oct 31st release & future 2013 releases • QC/QA activities and reporting out results	🟨 CT
Corrective Maintenance - Leak Repair, Mobile-Ready Development	• New GCM project cost and timeline that significantly increased both costs and schedule – approved via PCR by Sponsor 6/22 • Application Design completed 7/2; Application Build started 7/5 • Revised Training proposal received 7/9 • Employee Focus Group Meetings underway for Mapping, Asset Strategy, Construction/Clerical, Finance, Process Owners and Engineering stakeholders, to complete 7/27	🟩
Corrective Maintenance - Leak Repair Document & Data Clean-up	• Internal quality testing is well within established acceptance criteria • Independent QA review is on schedule	🟩
Preventive Maintenance – Production	• Completed unit testing for Release 1 forms, middleware, SAP • Provisioned 6 more Motion F5v's for pilot users • Created Esri CWA for mapping Proof of Concept	🟩
Transmission Pipeline Asset Management Sandbox Implementation	• Project is ahead of schedule and within forecast	🟩
Supply Chain Materials Traceability	• Validate focus: Inventory Control Management and/or Engineering Design Process (As-built)	🟩
Mobile Technology Rollout	• Gathering mapping data from the Sacramento (pilot region) • Discussed device requirements with field crew foremen to ensure delivered product will meet end user expectations	🟩

Issue Codes	
C	Cost
R	Resource
S	Scope
T	Timeline

Legend:

🟢 On-Target

🟡 Minor Delay

🔴 Requires Mgmt Support

Initiative Schedule and Status

Initiative	**1. Field Survey - Locate & Mark** 🔴
Team Members	[redacted] **Kevin Armato (GO),** [redacted]
Scope	**Replace existing Dell notebooks computers with an Android tablet running an IRTH Android application developed under this project.**
Benefits (Soft)	**The existing Dell computers require that locaters upload pictures from a separate camera (upload issues) and data connections are intermittent requiring time to resynchronize. The Android has a built in camera.**
Costs	**$2.5M**

Milestone / Target Completion Date		Accomplishments/Upcoming Activities
IRTH UIX Design & Mobile Art Delivery	Completed (3/15)	5/1 - Begin Testing of Both IRTH Field Unit and Map Viewer Apps
Farallon Geographics Code Delivery	Completed (3/30)	5/11 - Draft Deployment Plan Prepared
Modification of Farallon Geographics Code	Completed (4/18)	5/18 - Review and Agreement on Deployment Plan
Phase 1 Irth Field Unit Delivery	Completed (4/30)	6/25 - Technology and Peripherals Meeting with Locators – Begin Piloted Deployment and Feedback collection: ON HOLD
Testing Irth Field Unit and Map Viewer Apps	Completed (6/22)	Deployment to Regions on hold until after device comparison and pilot are complete and pilot feedback is documented. Pilot feedback planned to be complete by 8/10.
Go Live – Phase 1 IRTHnet Field Unit Application on Samsung Galaxy Tablet	**ON HOLD**	7/13 – Device Comparison (Windows and Android) with Damage Prevention Lead (Chris McGowan)
Phase 2 Delivery – DELIVERED	Completed (6/27)	7/20 – Device Comparison with Locators / Supervisors and Feedback Collection
Removal of EZTech phones from field	**7/30**	7/26 - Begin Piloted Deployment

Description	Accountability	2012	2013	2014	2015	2016
Costs		$2.5M				
Specific Benefit, Expense Savings						

Project Success Metrics

Metric	OPT	Baseline	Current	Goal
Safety/Quality: Reduction in bi-monthly Audit findings due to increased documentation quality	T	9 Findings	9 Findings	TBD
Adoption: Number of employees on-boarded to new device/electronic forms	O	0 employees	0 employees	73 employees
Productivity: Locate and Mark minutes per ticket	P	39 minutes	45 Minutes	TBD

Project Issues / Concerns / Risks

Risk	OPT / RAG	Mitigation / Next Steps	Completion Date
Side-by-side comparison of Android & Windows versions of IRTH Field Unit	🟥 T	Review with cross-section sample group of users and collect feedback	6/25
Evaluating the use of Android platform for supervisors	🟥 P	Determine device useability by supervisorsy – complete pilot with requirements assessment	7/27

Initiative Schedule and Status	
Initiative	**2. Leak Survey Schedule Migration** 🔴
Team Members	[redacted], **Jay Randolph (GO),** [redacted]
Scope	**Replatform Leak Survey scheduling information from the current SharePoint site to SAP.**
Benefits	**Improved public safety by providing greater transparency and controls that demonstrates that leak survey work is being performed on schedule.**
Costs	**$591K**

Milestone / Target Completion Date		**Accomplishments/Upcoming Activities**
Obtain PMO Approval	**Completed (4/27)**	6/18 - SAP Coding necessary for Gas Distribution Complete
Complete Requirements	**6/29**	7/5 - Confirmation of Project Scope with Mariner Leadership
SAP Ready to Accept Leak Survey Schedules	**7/15**	7/5 - Meeting to review SAP Code Architecture for Gas Transmission

Description	**Accountability**	**2012**	**2013**	**2014**	**2015**	**2016**
Costs		$591K				
Specific Benefit, Expense Savings						

Project Success Metrics				
Metric	**OPT**	**Baseline**	**Current**	**Goal**
Migrate current Transmission SharePoint Schedule to SAP*	O	0 miles		
Migrate current Distribution SharePoint Schedule to SAP*	T	0 Services		
Adoption: Reduction in FTE hours to generate reports	P	118 hrs/ month	118 hrs/ month	59 hrs/ month
Productivity: Number of Divisions / GT Districts on-boarded	O	0	0	31

Project Issues / Concerns / Risks			
Risk	**OPT / RAG**	**Mitigation / Next Steps**	**Completion Date**
Requirements for Gas Transmission are being reviewed which could cause delay in SAP being ready to accept Leak Survey Schedules.	P	Project Team to meet to discuss backend infrastructure.	7/13
Leak Survey Schedule Data is being validated and will not be available for loading to SAP until September	P	Working with [redacted] team to review data and rebuild schedules.	9/7

Current SharePoint includes historic data only up to previous historic cycle.

nitiative Schedule and Status	
nitiative	**3. Field Survey - Leak Survey** 🟡
eam Members	[redacted] **Kevin Armato (GO),** [redacted]
cope	**Increase public safety by replacing the EZTech phone, decreasing the number of paper forms / devices required for Leak Survey tasks by deploying, and utilizing Samsung Galaxy Tablets and DP-IR infrared leak locators.**
enefits	**Consolidation of tools and ease of data entry; digital maps and forms will reduce need for paper**
osts	**$1.8M**

Milestone / Target Completion Date		**Accomplishments/Upcoming Activities**
eak Survey Pilot 19 devices	**Completed (1/20)**	6/25 - Shared survey feedback with Supervisors
rocure devices and peripherals	**Completed (2/3)**	6/26 - Deployed Leak Survey Application Version 1.2
egin updates to Spear Leak Survey Application	**8/20**	7/11 – Deployed Leak Survey Application Version 1.3 and Version 1.3-web for supervisors
rain end users	**8/20**	7/13 -Defining enhancement/test/pilot/deploy cadence for communications to the field and feedback retrieval from their experience
omplete Go Live with Samsung Galaxy 10.1	**8/27**	7/20 - Deployment of Leak Survey Application Version 1.4

escription	**Accountability**	**2012**	**2013**	**2014**	**2015**	**2016**
osts		$1.8M				
pecific Benefit, Expense Savings						

Project Success Metrics				
Metric	**OPT**	**Baseline**	**Current**	**Goal**
afety/Quality: Reduction in i-Monthly Audit findings due o increased documentation uality **{Trend indicator pear Report)}**	T	4%	0.6%	0.5%
doption: Number of mployees on-boarded to new evice/electronic forms **Number of devices logged in}**	O	0 employees	158 employees	185 employees
roductivity: Leak Survey ervices per hour **Add results from Spear eport}**	P	10.4 per hour	13.3 per hour	14 per hour

Project Issues / Concerns / Risks			
Risk	**OPT / RAG**	**Mitigation / Next Steps**	**Completion Date**
User experience with tablets has been less than desirable, exposing gaps in the scope of the project and the design of the application.	T	Continue with Enhancement items prioritized on User feedback; Develop cadence and methodology for communications to and from the field	8/27
Gas Transmission Forms on the Leak Survey Application need to be created.	PT	These will be part of version 1.6	8/27

itiative Schedule and Status

itiative	**4. Documentum Implementation** ●
eam Members	[redacted]
ope	**Set up the Documentum servers and load A-Form and Preventative Maintenance historical information**
enefits (Soft)	**Centralized storage and management of gas transmission records. Enables integration with core GT GIS and SAP systems.**
osts	**$4.76M**

Milestone / Target Completion Date	
ublish Gas Roadmap and Prioritization	Completed (6/11)
ave 1: Plan Phase of Mariner Gas Corrective aintenance: Leak Repair Document & Data eanup Complete	Completed (6/14)
ave 1: Plan Phase of Mariner Gas Preventive aintenance: Valves and Regulators	Completed (6/11)
ave 1: Analysis Phase of Mariner Gas orrective Maintenance: Leak Repair ocument & Data Cleanup Complete	7/30
ave 1: Analysis Phase of Mariner Gas reventive Maintenance: Valves and egulators	7/30

Accomplishments/Upcoming Activities
6/14 - Complete Planning Phase of Mariner Gas Corrective Maintenance: Leak Repair Document & Data Cleanup
6/14 - Complete Planning Phase of Mariner Gas Preventive Maintenance: Valves and Regulators
7/16 - Complete final Integrated Planning session with ECM Cross Functional group
7/18 – Obtain final approval on Enterprise Foundation Integrated Schedule dependencies
8/7 - Complete assessment of Gas Taxonomy alignment with Enterprise Taxonomy
8/29 – Complete final assessment of Gas Taxonomy based on final Enterprise Taxonomy

escription	Accountability	2012	2013	2014	2015	2016
osts		$4.76M				
ecific Benefit, Expense Savings						

Project Success Metrics

Metric	OPT	Baseline	Current	Goal
ove documents from ECTS to ocumentum	O	0 docs	3.49mm docs	2.9mm docs
ocuments converted to Full text arch (OCR)	T	0 docs	3.5mm docs	2.9mm docs
Forms completed				1.Xmm docs
I forms completed				0.7mm docs

Project Issues / Concerns / Risks

Risk	OPT / RAG	Mitigation / Next Steps	Completion Date
Dependency on Enterprise Content Management schedule for enterprise txmy, performance testing, UI selection, object model & folder structure	P	Final planning session to be completed with ECM cross functional group to finalize ECM project interdependencies; ECM SC to resolve project dependency; Enterprise txny deliverable for 7/6 was not complete to finalize the Gas Operations txny.	7/11
Gas Working Group is progressing slower than expected at identifying & launching Initiatives	OP	Full inventory of all gas documents & retails is underway; once complete, Group will have 2 meetings to identify & launch Wave 2 Initiatives	7/20

nitiative Schedule and Status	
nitiative	**5. Preventive Maintenance - Document & Data Modernization** ●
eam Members	**Lorene Harden (PO),** [redacted]
cope	**In an effort to enable mobile technology and enhance safety; locate, collect, scan, code and upload of facility and maintenance records and data for gas transmission and distribution regulator stations, valves, and cathodic protection into SAP and Documentum.**
enefits (Soft)	**Increased safety and compliance for Preventive Maintenance process by digitizing asset information and historical job cards for stations, valves, and cathodic protection. Supports mobile efforts by providing information to field crews in a digital format (replacing paper).**
osts	**$1.69M**

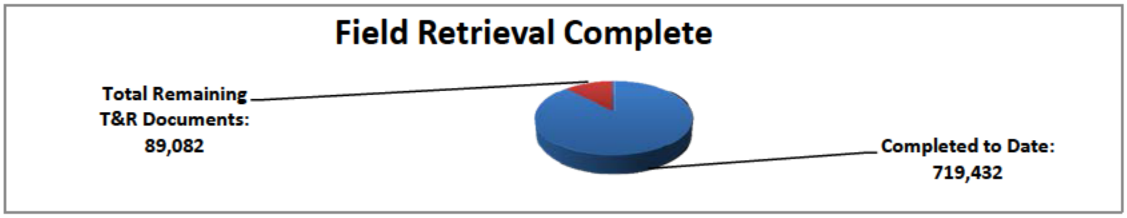
Milestone / Target Completion Date	
efine list of required documents and data fields needed y end users	Completed (5/21)
etrieve and scan all documents within scope	7/27
evelop SAP for the required documents and data fields	8/15
ata-entry of required documents into Oliver	8/31
ata-entry conversion from Oliver to SAP	9/14
ttach all previous required documents to Documentum	9/14
rain end users to update SAP for the gap between etrieval and mobile application	9/28

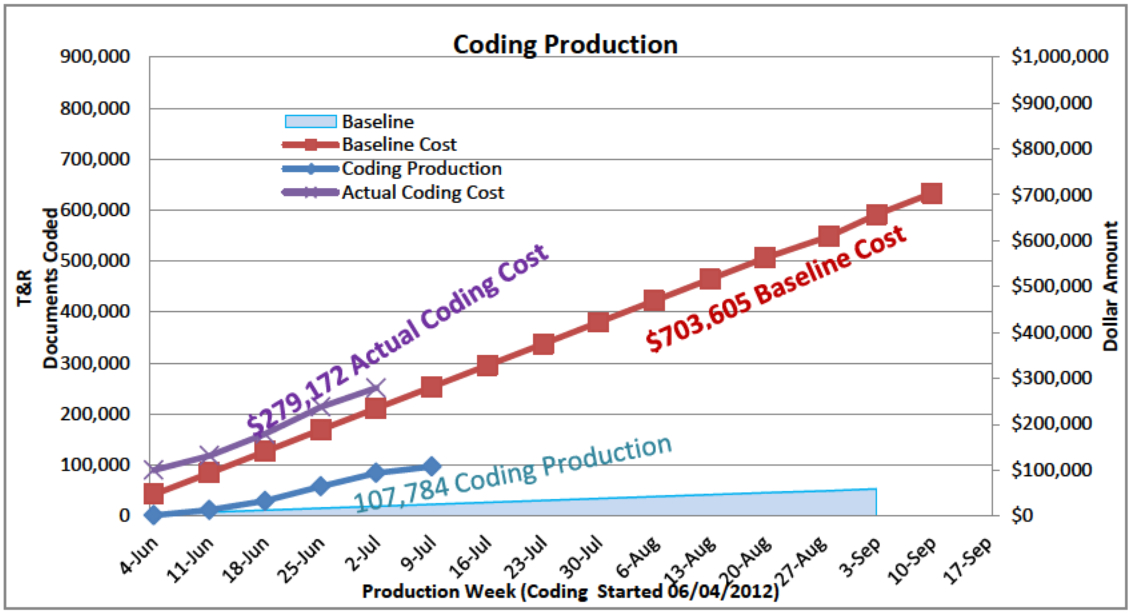
Accomplishments/Upcoming Activities
5/18 - Define QA/QC process for retrieval
6/22 - Define QA/QC process for data-entry
6/30 - 599,453 documents scanned at the end of June (8% over 555,360 projection)
7/6 - Completed 26 work centers
7/6 - Full QA plan
7/13 - Complete 27 work centers
7/27 - 750,000 documents scanned by end of July

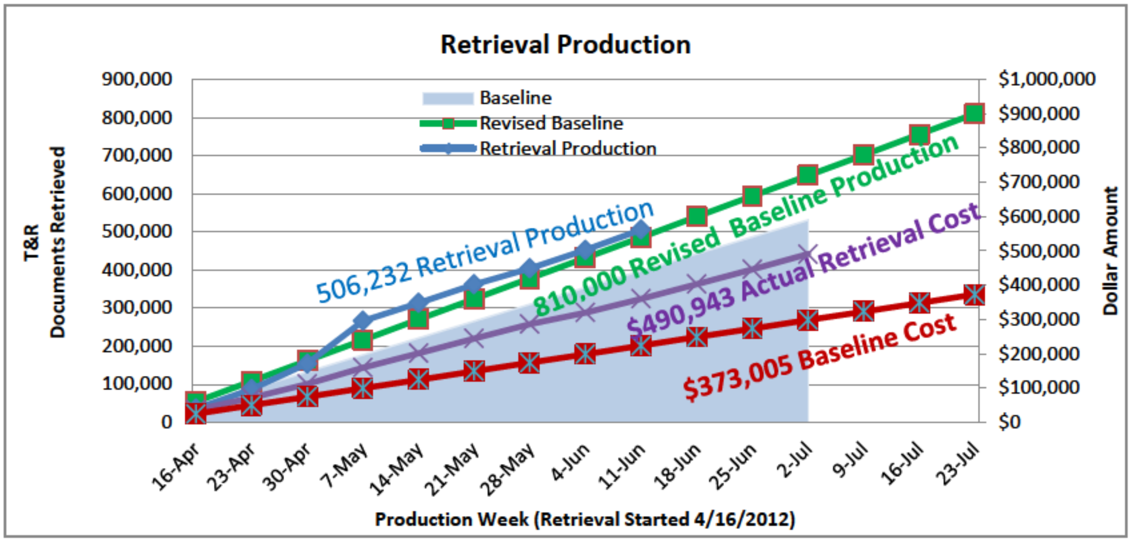
escription	Accountability	2012	2013	2014	2015	2016
osts		$1.69M				
pecific Benefit, Expense Savings						

Project Success Metrics				
Metric	OPT	Baseline	Current	Goal
doption: Number of ocuments retrieved and canned	P	0	630,350	719,164
roductivity: Number of ocuments retrieved and canned per week	P	0	30,897/ week	41,286/ week
uality: Critical error ates based on QA efforts	P	0	4.35% @ 4 Locations	< 5.0% for All Locations

Project Issues / Concerns / Risks			
Risk	OPT / RAG	Mitigation / Next Steps	Completion Date
SAP high-level concept and cost estimate	OPT	IT PM needs confirmation approval	6/15
Scope change to limit budget	OPT	Scope to fully support [redacted] upcoming releases and provide for MAOP stakeholder needs	7/6







Retrieval Progress By Main Work Center

Main Work Center	ANTIOCH	BKRSFLD	CHICO	CINNABAR	COLMA	CONCORD	CUPRTINO	EDENVALE	EUREKA	FREMONT	FRESNO	HAYWARD	LIVRMORE	MERCED	MODESTO	MONTEREY	MRYSVLLE	NAPA	OAKPORT	PETALUMA	RDGECRST	REDBLUFF	REDDING	RICHMOND	ROSEVLLE	SACTO	SALINAS	SNCARLOS	SNFRAN	SNRAFAEL	STCRUZ	STOCKTON	STROSA	VALLEJO
Not Started			X													X	X					X	X		X									
In Progress																											X					X		
Completed	X	X		X	X	X	X	X	X	X	X	X	X	X	X			X	X	X	X			X		X		X	X	X	X		X	X

nitiative Schedule and Status	
nitiative	6. Corrective Maintenance - Leak Repair, Mobile-Ready Development ●
Team Members	[redacted], Jay Randolph (GO), [redacted]
Scope	To safely deliver gas and strengthen regulatory compliance, Corrective Maintenance will improve processes, procedures and technology for recording, maintaining, tracking, repairing and reporting leak information. The initiative will also improve the repair, restoration or replacement of asset components to better establish accountability for the completeness, accuracy, traceability, and verification of asset and mapping data.
Benefits (Soft)	• Mobile ready process to pave the way for mobile deployment • Sustainable data integrity through accurate and complete records • System-wide visibility of and accountability for work • Data validation based on business rules
Costs	$12.93M

Milestone / Target Completion Date		Accomplishments/Upcoming Activities
Analyze Phase	Completed (5/21)	7/5 – Application Build started
Application Design	Completed (7/2)	7/26 – Test Model complete and approved
Application Build	10/12	7/27 – Conclude GCM Employee Focus Group meetings
Application Product Test	12/27	7/31 – Business-approved Facility, Component, Driver, Action (FCDA) Matrix

Description	Accountability	2012	2013	2014	2015	2016
Costs		$8.75M	$4.18M			
pecific Benefit, Expense Savings						

Project Success Metrics

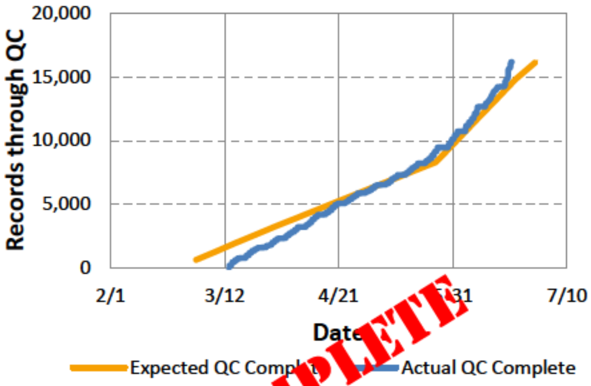
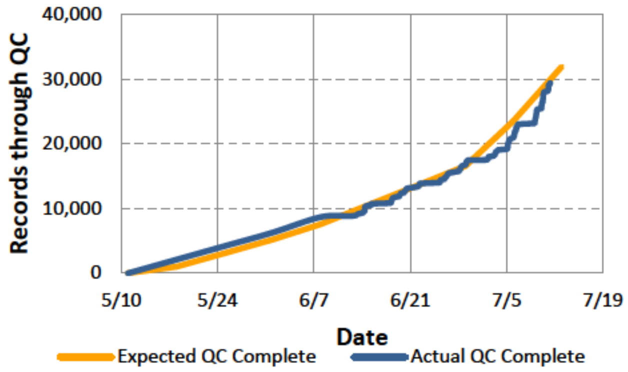
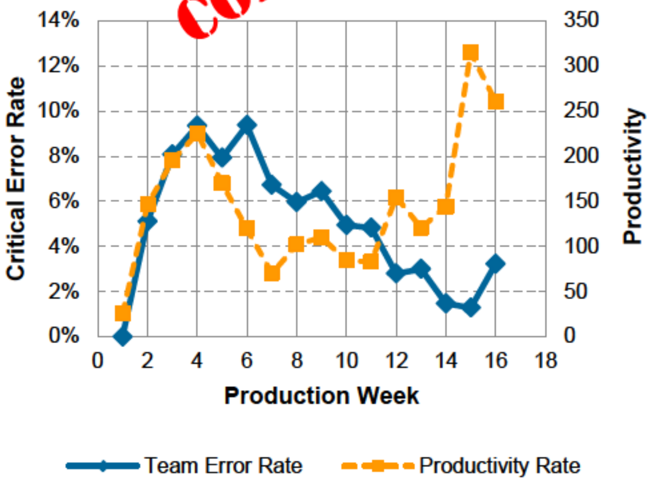
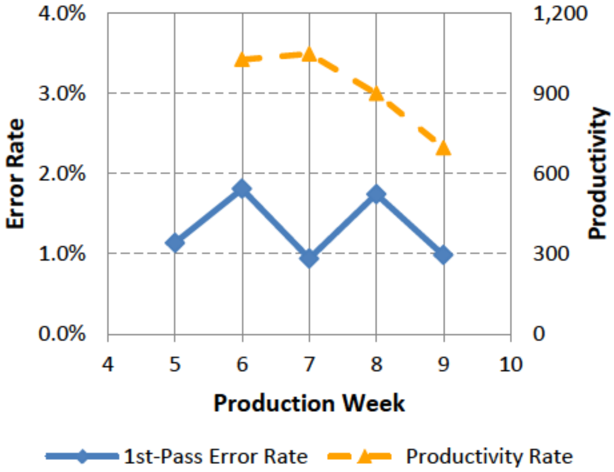
Metric	OPT	Baseline	Current	Goal
Safety/Quality: Decrease n audit findings due to ncrease in A-Form accuracy (per 100 A-Form)	OT	TBD	TBD	TBD
Adoption: Through put; # of Leaks being generated n SAP compared to daily/weekly average prior n IGIS	P	TBD	TBD	TBD
Productivity: Reduce mapping cycle time for eak records only	P	10 days	10 days	2-3 days

Project Issues / Concerns / Risks

Risk	OPT / RAG	Mitigation / Next Steps	Completion Date
IGIS Enhancement Package 2 has not been approved or resolved	PT	Project and LoB to sync up and prepare final approach to freeze code	7/20

Corrective Maintenance - Leak Repair Document & Data Clean-up

COMPLETE

	Leak Repair Mapping & Verification	Leak Repair Record Indexing
Production		
Quality & Productivity		
Error Types	1. **Transmission Verification or Repair Route/ Segment** – An incorrect classification of a leak as originating from a gas line operating above 60 psig or not may result in risk evaluations and mitigation plans being inaccurate. An incorrect route or segment will place a leak on an incorrect pipeline or location of pipe, making risk evaluations and mitigation plans inaccurate 2. **DOT /CPUC Reportable** – Critical to Integrity Management since this is a data field used to filter reportable and non-reportable leaks to the OPS, PHMSA and the CPUC 3. **Repair Mile Point** – An incorrect mile point may place a leak on an incorrect segment of pipe and not accurately represent the pipe specifications of that segment, making risk evaluations and mitigation plans inaccurate	1. **BID-EID range** – Critical documents could be left in a range of images such as different A-Forms and supporting leak information related to other locations 2. **Leak number, Alternate leak number, job number, and alternate job number** – Critical supporting documentation to A-Forms could not be associated to leak record or may be difficult to find (accessibility)

Definitions

Production: Total leak records through 1st and 2nd pass

Productivity: Leak records reviewed through 1st and 2nd pass per person per week

Quality: Critical errors detected and corrected per opportunity

Initiative Schedule and Status

Initiative	**7. Corrective Maintenance - Leak Repair Document & Data Clean-up** ●
Team Members	[redacted]
Scope	**Improve gas pipeline safety by performing data cleanup activities to develop a transmission gas leak repair corrective maintenance historical database from historical paper documents and systems.**
Benefits (Soft)	**Provides for an accurate and complete dataset for IGIS to SAP conversion and other corrective maintenance history. Gas facility maintenance history is an essential component of the IMP analysis process and compliance reporting.**
Costs	**$1.8M**

Milestone / Target Completion Date		Accomplishments/Upcoming Activities
Taxonomy on scanned transmission (>60 psig) records through 8/11	Completed (12/31)	6/21 - Submitted PCR (budget & schedule) and presented to Mariner leadership in challenge session (approved)
Perform QC of Phase 1 work by Asset Knowledge Management	Completed (3/15)	6/22 - Document indexing work plan
Develop overall QA/QC work plan	Completed (5/25)	6/25 - 16,258 documents verified and mapped
Phase 1 data cleanup QA report	7/31	6/28 - Stakeholder impact assessment
Provide IT and IM with historical transmission data collected up to 8/1/11	8/10	7/3 – Initiated Independent Quality Assurance Review
Phase 2 data cleanup strategy and work plan	8/31	7/10 - Data migration prep pilot complete
Phase 1 data cleanup final report	9/28	7/13 - 31,995 records indexed and linked

Description	Accountability	2012	2013	2014	2015	2016
Costs		$1.8M				
Specific Benefit, Expense Savings						

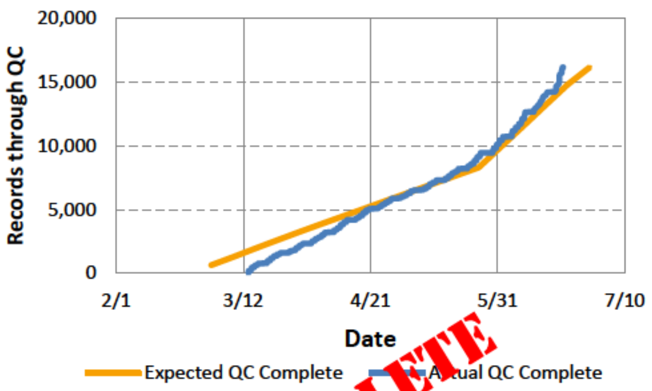
Project Success Metrics

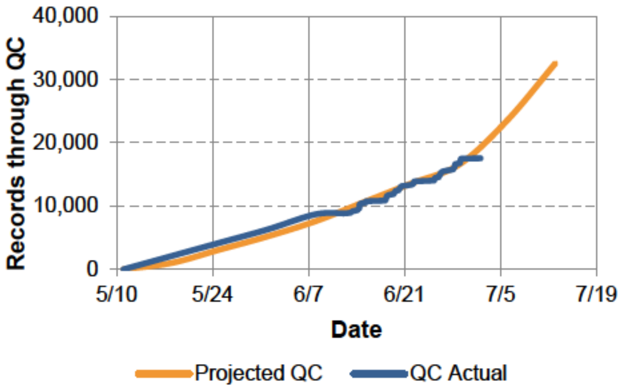
Metric	OPT	Baseline	Current	Goal
Adoption: Number of records indexed	P	0	20,452	31,995
Productivity: Number of records indexed through QC per week/per person	P	300/week / person	900/week/ person	1000/week/ person
Quality: Indexing first-pass error rates	P	N/A	1.8%	2%

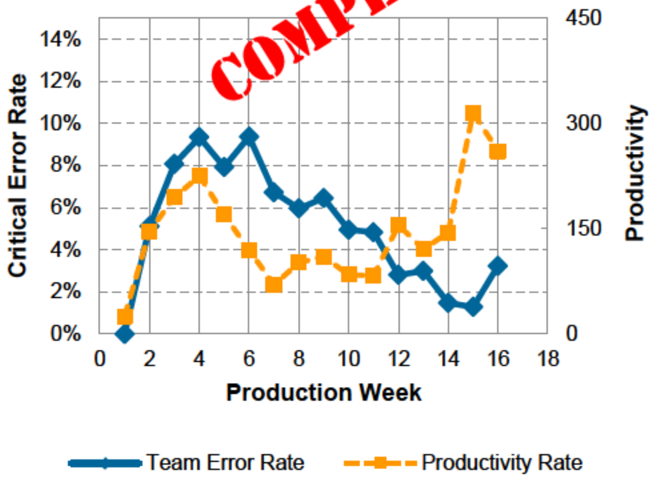
Project Issues / Concerns / Risks

Risk	OPT / RAG	Mitigation / Next Steps	Completion Date
Need to determine scope of work to address PGE-defined transmission leak documentation not collected in 2011.	P	Identify at risk populations and develop preliminary approach to capture and process info in 2013	9/1

Corrective Maintenance - Leak Repair Document & Data Clean-up

<table>
<tr><th></th><th>Leak Repair Mapping & Verification</th><th>Leak Repair Record Indexing</th></tr>
<tr><td>Production</td><td>


COMPLETE
</td><td>


</td></tr>
<tr><td>Quality & Productivity</td><td>


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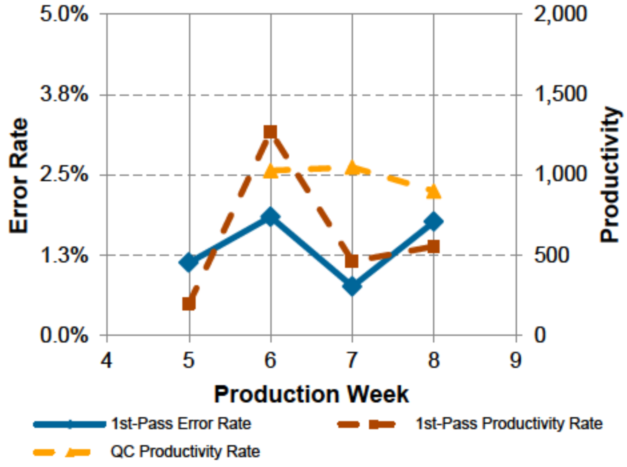

</td></tr>
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4. Transmission Verification or Repair Route/ Segment – An incorrect classification of a leak as originating from a gas line operating above 60 psig or not may result in risk evaluations and mitigation plans being inaccurate. An incorrect route or segment will place a leak on an incorrect pipeline or location of pipe, making risk evaluations and mitigation plans inaccurate
5. DOT /CPUC Reportable – Critical to Integrity Management since this is a data field used to filter reportable and non-reportable leaks to the OPS, PHMSA and the CPUC
6. Repair Mile Point – An incorrect mile point may place a leak on an incorrect segment of pipe and not accurately represent the pipe specifications of that segment, making risk evaluations and mitigation plans inaccurate
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3. BID-EID range – Critical documents could be left in a range of images such as different A-Forms and supporting leak information related to other locations
4. Leak number, Alternate leak number, job number, and alternate job number – Critical supporting documentation to A-Forms could not be associated to leak record or may be difficult to find (accessibility)
</td></tr>
</table>

Definitions

Production: Total leak records through 1st and 2nd pass

Productivity: Leak records reviewed per person per week

Quality: Critical errors detected and corrected per opportunity

Initiative Schedule and Status

Initiative	**8. Preventive Maintenance – Production** ●
Team Members	**Lorene Harden (PO), Kevin Armato (GO),** [redacted]
Scope	**Improve gas pipeline safety by enhancing data quality by collecting and validating maintenance information at the job site for gas transmission and distribution equipment. Covers the work performed by 132 Maintenance and Control (M&C) Mechanics and Control Techs perform yearly maintenance and inspections on valves and regulator stations (acts to transition gas from transmission lines to distribution lines). 60 corrosion mechanics perform yearly pipe to soil reads and rectifier inspections and maintenance to insure that corrosion protection is in place along gas pipes**
Benefits (Soft)	**Improve public safety by reducing the number of handoffs. Information will be collected and input by the mechanic at the job site and validated before the mechanic leaves the site.**
Costs	**$15.87M**

Milestone / Target Completion Date		Accomplishments/Upcoming Activities
Release 1 Requirements and Design	Completed (5/15)	7/3 – deployed 4 Motion F5v's to pilot users
Release 1 Build Complete	7/15	7/13 – provisioned 6 more Motion F5v's for pilot users
Release 1 Testing Complete	9/15	7/13 – Completed Unit testing for Release 1 forms, middleware, SAP changes
Complete Pilot Assessment	7/31	7/12 – Submitted Esri CWA for mapping Proof of Concept for PG&E approval
Release 1 Go-Live	10/31	7/16 - Begin Release 1 Product Testing
Begin Hardware Deployment to All Locations	10/22	7/22 Begin Esri POC
Release 2 Requirements and Design	6/30	7/22 Begin Release 2 Build
Release 2 Build	9/30	7/24 Final business review for Rel 2 Design/Kick off Rel 3 requirements

Description	Accountability	2012	2013	2014	2015	2016
Costs		$7.45M	$8.42M			
Specific Benefit, Expense Savings						

Project Success Metrics

Metric	OPT	Baseline	Current	Goal
Safety/Quality: Reduction of Bi-monthly audit findings for reg stations in Sacto	T	Regs – 50 Valves – 538	TBD	Regs – 40 Valves - 430
Adoption: Adoption of Mobile technology rollout process "Easy" or "Somewhat "Easy"	O	15/17 (88%)	TBD	TBD
Productivity: Average time to close notification from when work was completed	P	CP – 7.92 days M&C – 5.92 days	CP – 0.29 days M&C 2 39	CP – 1 day M&C – TBD

Project Issues / Concerns / Risks

Risk	OPT / RAG	Mitigation / Next Steps	Completion Date
SAP development resources needed for Release 2/3 development	O	Working with SAP team to bring on contractors	7/23
Devices need to be ordered by 7/31/12 in order to meet October deployment	P	Work with Mariner leadership to define ownership of procuring and provisioning mobile devices for Gas T&R users	7/31

Initiative Schedule and Status

Initiative	**9. Transmission Pipeline Asset Management Sandbox Implementation** ●
Team Members	**Sumeet Singh (GO),** [redacted]
Scope	**Test the integration of SAP and GIS using the linear referencing methodology. SAP and ESRI have developed an approach for keeping LR information synchronized between SAP and GIS.**
Benefits (Soft)	**This is a risk mitigation project to test and validate the LR synchronization strategy developed by SAP and ESRI. It is expected that the benefit will be a reduced need to utilize the contingency for this portion of the work.**
Costs	**$21.3M**

Milestone / Target Completion Date	
Gate 1	Completed (4/12)
Complete Plan & Analyze	Completed (6/8)
Gate 2 Review	Completed (6/15)
Complete Design	8/17
Complete Implementation	12/30

Accomplishments/Upcoming Activities
6/8 – Complete Plan and Analyze Documentation
6/14 - Gate 2 approval and funding
6/27 - 2ND SAP Linear Referencing presentation to the business
6/25 - Sandbox hardware installed, turned over to application loading
6/25-6/29 - C&C / Vesta design meetings

Description	Accountability	2012	2013	2014	2015	2016
Costs		$5.45M	$12.67M	$3.21M		
Specific Benefit, Expense Savings						

Project Success Metrics

Metric	OPT	Baseline	Current	Goal
Quality: Execution of testing scenarios	O	0 tests	0 tests	15 tests
Adoption: TBD	NA	NA	NA	NA
Productivity: TBD	NA	NA	NA	NA

Project Issues / Concerns / Risks

Risk	OPT / RAG	Mitigation / Next Steps	Completion Date
Coordination of SAP work between various teams who are making changes in parallel	T	Close coordination with the SAP team during the development of the design documentation. Extending this risk to the end of design	7/30
Issues with the SAP EHP5 update. Oracle issue found and is being addressed with SAP and Oracle. May have schedule impact if not addressed by 6/25	T	EHP5 issue resolved with Oracle patch. Loading of SAP environment continues for Sandbox. Will be 3 weeks over due when completed. Was not required until build start on 8/1. Vesta has started work on one of their sandbox servers.	7/16

Initiative Schedule and Status	
Initiative	**10. Supply Chain Materials Traceability** ●
Team Members	**Karen Roth (PO),** [redacted]
Scope	**2012 Work is planning only** **Trace all materials (including inspection) used in pipeline and station maintenance and construction from the time the source material is received at the manufacturer's site through its useful life in order to improve gas system safety.**
Benefits (Soft)	**Provides traceability for newly installed components mitigating the need for a potential future MAOP Validation project**
Costs	**$6.74M**

Milestone / Target Completion Date		Accomplishments/Upcoming Activities
Re-Validate previous solution (two SAP Solutions) Batch Management • Work Order Solution	7/31	06/28 - Material Traceability Core Team meeting reviewed 1.) existing GIS, 2) existing SAP materials capabilities, and 3) current material traceability efforts
Validate the requirements including materials to be documented	8/31	07/09 – On-boarded Material Traceability Core Team Members for "Process Improvement" facilitation and future "Change Management" requirements.
Evaluate considered other solutions (bar coding, mapping, electronic field coding, etc.)	9/30	07/12 – Material Traceability Core Team meeting review 1.) Current SAP Asset Registry and 2) discussion of Phase I ("roll out" of Material Traceability efforts currently being piloted)
Assess the impacts	9/30	07/24- Material Traceability Core Team Workshop (start development of process flow - "As is and To Be")
Develop implementation plan	10/31	07/31 - Identification of other non-Mariner initiatives that need to be considered and link to this initiative.
		07/31 - Benchmarking Activities - Diablo Canyon current process

Description	Accountability	2012	2013	2014	2015	2016
Costs		$200K	$6.54M			
Specific Benefit, Expense Savings						

Project Success Metrics				
Metric	**OPT**	**Baseline**	**Current**	**Goal**
Safety/Quality: TBD	TBD	NA	NA	NA
Adoption: TBD	TBD	NA	NA	NA
Productivity: TBD	TBD	NA	NA	NA

Project Issues / Concerns / Risks			
Risk	**OPT / RAG**	**Mitigation / Next Steps**	**Completion Date**
Cost of future solution may be significantly higher than original PSEP estimate	O	Various future solutions to be evaluated to ensure benefits and justification	8/31
Requirements not consistent across the LOBs	OP	Define high level gas requirements and engage electric and generation teams	8/31
Several on-going initiatives may impact the final solution	O	Utilizes "Core Team" to coordinate and communicate with other initiatives	9/30

Initiative Schedule and Status

Initiative	**11. Mobile Technology Rollout** 🟢
Team Members	**Ross Leverett (PO),** [redacted]
Scope	**Provide mobile technology to all field gas crews so they may access maps, e-mail, SharePoint, and Technical Information Library.**
Benefits (Soft)	**By providing all field gas crews access to mobile technology, the project will:** • **Enhance safety by providing access to current digital maps (ArcGIS)** • **Increase quality through access to Technical Information (TIL) and SharePoint sites** • **Aide in increased communication with field crews through access to Outlook and the PG&E Intranet**
Costs	**$11.24M**

Milestone / Target Completion Date		Accomplishments/Upcoming Activities
Discuss lessons learnt and user expectations (software/hardware) with stakeholders	**Completed**	6/26 - Ross e-mailed directors to validate device users/LAN IDs. Device/user counts to be verified by 7/15
Establish team members, evaluate budget and determine stakeholders	**7/6**	7/10 **–** Sacramento was chosen for the pilot region; we will start gathering and processing the mapping data for that region.
Determine requirements, analyze form factors, and select hardware/mounting units	**11/16**	7/11 **–** Interviewed 2 field foreman to finalize requirements and ensure we will deliver a product to meet their needs.
Order hardware/software/mounting units	**12/21**	6/26 - Ross e-mailed directors to validate device users/LAN IDs. Device/user counts to be verified by 7/15
IT configuration of devices	**1/18/13**	
Train users, mount units, and deploy devices	**2/1/13**	

Description	Accountability	2012	2013	2014	2015	2016
Costs		$7.86M	$3.38M			
Specific Benefit, Expense Savings						

Project Success Metrics

Metric	OPT	Baseline	Current	Goal
Safety/Quality: TBD	TBD	TBD	TBD	TBD
Adoption: TBD	TBD	TBD	TBD	TBD
Productivity: TBD	TBD	TBD	TBD	TBD

Project Issues / Concerns / Risks

Risk	OPT / RAG	Mitigation / Next Steps	Completion Date
Inadequate lead time for equipment (have not yet piloted Motion F5v tablet or mounting devices)	T	Piloting Motion F5v tablet & reviewing 2010 deployment & Preventive Maintenance pilots to determine project schedule in June	6/29
Hardware/software does not meet user requirements	P	Identify user requirements, analyze form factors, & select hw/mounting units	11/16
Development of mapping solution has dependencies with other Mariner projects	OT	Coordinate with Preventive Maintenance team to see if development can be streamlined to meet deployment dates	7/15

IV. Supporting Information

2012 Actuals and Forecast

$ in thousands

Project	Jan Actual	Feb Actual	Mar Actual	Apr Actual	May Actual	Jun Actual	Jul Plan (CY1)	Aug Plan (CY1)	Sep Plan (CY1)	Oct Plan (CY1)	Nov Plan (CY1)	Dec Plan (CY1)
Independent Review and Detailed Planning	14	380	556	13	65	(367)	203	205	206	208	209	211
Corrective Maintenance-Mobile Leak Repair	104	171	343	377	384	555	834	1,018	1,007	1,363	1,063	798
Field Survey _ Leak Survey	95	77	224	227	78	264	146	136	386	130	132	0
Linear Referenced GIS, Sandbox installation, & SAP Integration	0	0	0	1	838	570	500	569	518	497	882	714
Integrity Management and Risk Analysis Software	0	0	0	0	0	0	0	23	2,051	139	241	267
Legacy Mapping Solution for Mobile	0	0	0	0	0	0	20	20	20	21	21	21
Preventive Maintenance - Production (Mobile Deployment)	0	0	0	199	320	500	689	1,426	1,564	897	691	796
Documentum Implementation & Integration	603	217	78	151	235	310	461	465	468	471	475	460
Field Survey _ Locate&Mark	236	10	264	31	356	301	8	515	781	9	0	0
Preventive Maintenance_ Corrosion	0	0	470	7	26	58	0	0	0	0	0	0
Preventive Maintenance_Valves and Regulators	432	770	316	(14)	67	187	0	0	0	0	0	0
Leak Survey Schedule Migration	0	0	0	0	0	1	53	127	107	56	56	54
Mariner_Mobile Technology Roll Out	0	0	0	0	0	30	1,491	1,594	1,594	1,594	1,491	97
Total Capital	**1,484**	**1,626**	**2,251**	**992**	**2,369**	**2,407**	**4,406**	**6,099**	**8,702**	**5,384**	**5,260**	**3,418**
Independent Review and Detailed Planning	(87)	136	638	589	(512)	(536)	12	12	12	12	12	12
Supply Chain Materials Traceability (Deployment)	0	0	0	0	0	0	29	29	29	29	29	29
Corrective Maintenance_Doc&Data Conversion	(34)	25	29	394	121	775	172	181	152	181	151	91
Preventive Maintenance - Production (Mobile Deployment)	0	0	0	0	0	0	0	0	60	69	60	62
Independent Review and Detailed Planning	0	0	0	0	0	0	32	32	32	32	32	32
Field Survey _ Leak Survey	0	0	0	0	0	0	0	0	0	0	22	22
Field Survey _ Locate&Mark	0	0	0	0	0	0	23	31	30	0	0	0
Preventive Maintenance_T&R, Corrosion	0	0	155	269	17	(1)	127	100	125	300	300	150
Total Expense	**(121)**	**161**	**822**	**1,252**	**(374)**	**237**	**395**	**384**	**440**	**622**	**606**	**398**
Total	**1,363**	**1,786**	**3,073**	**2,244**	**1,995**	**2,644**	**4,800**	**6,483**	**9,142**	**6,006**	**5,866**	**3,816**

Earned Value

Initiatives	SPI	CPI	Earned Value (SPI/CPI)
Preventive Maintenance – Document & Data Modernization	0.94	0.75	1.26
Leak Survey Schedule Migration	0.41	-	-
Field Survey - Leak Survey	0.96	1.12	0.86
Field Survey - Locate & Mark	0.71	1.06	0.67
Preventive Maintenance - Valves and Regulators	0.99	1.17	0.85
Preventive Maintenance - Corrosion	1.00	1.18	0.85
Preventive Maintenance - Production	0.99	0.86	1.16
Corrective Maintenance – Leak Repair Document & Data Clean-up	1.16	1.52	0.77
Corrective Maintenance – Leak Repair, Mobile-Ready Development	1.63	0.72	2.26
Transmission Pipeline Asset Management Sandbox Implementation	1.06	0.79	1.34
Documentum Implementation	1.16	0.81	1.43
Supply Chain Materials Traceability	0.65	-	-
Mobile Technology Rollout	-	-	-

*Note: SPI is calculated based on **Actual/Planned** milestone completion; CPI is calculated as **Actual Cost/Budget** and Earned Value is calculated as SPI/CPI.*

Keys to Success Meeting

Asset Knowledge Management

JULY 19, 2012

Results	🟢	YTD: Overall work is on or nearly on schedule and spending is below plan
Initiative Status	🟡	Peninsula Division Pilot Data validation, Plan and Analyze phase is in progress and behind schedule

I. Goal / Objective

Improve the safety of our gas system by dramatically improving the accessibility and reliability of our gas distribution asset information. Improve data quality by validating existing data prior to converting to a "single source of the truth" for GD asset data. Integrate data types to facilitate risk assessments and provide tools required for Integrity Management.

II. Results

2012 Pathfinder Milestones

	Month Results	BRAG Status	YTD Results	BRAG Status	Full Year	BRAG Status
AA Approval – project begins	Completed	🔵	Completed	🔵	Completed	🔵
Project Initiation phase Gate 1 Review by IT	Completed	🔵	Completed	🔵	Completed	🔵
Complete Plan & Analyze phases, submit for Gate 2 review by IT	Behind	🟡	Behind	🟡	Behind	🟡
Sample GD data to develop scope for overall data conversion	Behind	🟡	Behind	🟡	On Track	🟢
Validation against business objectives of proposed process, technology, and data conversion plans	Behind	🟡	Behind	🟡	Behind	🟡
EPC Approval	On Track	🟢	On Track	🟢	On Track	🟢
Perform Data Conversion Pilot for Peninsula Division	On Track	🟢	On Track	🟢	On Track	🟢
Identify and recommend a DIMP analysis tool	Not Started (Estimated Completion Date 8/15/2012)					
BOD Approval	September, 2012					
Complete Design phase, submit for Gate 3 review by IT	Not Started (Estimated Completion Date 10/1/2012)					

Note: Financial Results compared to the April (3+9) forecast that was sanctioned on April 23rd in a Gas-specific OPC meeting.

thfinder	**June YTD**			**July-Dec Forecast**			**Full Year Forecast**		
	Actuals	**Plan**	**Fav/(unfav)**	**Estimate**	**3+9**	**Fav/(unfav)**	**Estimate**	**3+9**	**Fav/(unfav)**
pense	522	2,239	1,717	3,161	3,161	-	5,400	5,400	-
pital	500	842	342	3,028	3,028	-	3,870	3,870	-

III. Observations / Analysis

Item	Status	Discussion Topics	Mitigation Steps
Complete plan & Analyze phases, submit for Gate 2 review by IT (Indicated as yellow due to resource availability over ride)	🟡	• Preparing requirement specification for the data conversion • Preparing solution blue print for the distribution asset knowledge management • Identified Telvent Miner and Miner (ArcFM) as business solution • Preparing Business Case for EPC approval on 07/26	This review was originally scheduled for 7/12/2012 but will take place on 7/19/2012 instead. The resource constraints remain unchanged.
Sample GD data to develop scope for overall data conversion	🟢	• Have developed a phased approach to the Proof of Concept (POC). At each phase additional data sources will be analyzed and requirements will be developed • The initial POC will be focused on GEMS and landbase. The results of this phase will be used to build the requirements for base GIS • The remaining POC phases will result in completion of the requirements for the overall data conversion strategy. This will be the basis for the data conversion RFP. • Data validation process that has been developed for Peninsula division to be implemented for remaining offices.	
Validation against business objectives of proposed process, technology, and data conversion plans (Indicated as yellow due to resource availability over ride)	🟡	• Out of the box Telvent Data model (ArcFM) is already implemented • Configuration of the base ArcFM model based on business requirements under way • There is a delay in readying the ORACLE environment by IT Application Services due to resource constraints.	We could potentially bring in outside resources to ready ORACLE environment.
Perform Data Conversion Pilot for Peninsula Division	🟢	• Completed the Data Source Matrix and data model review • Completed the POC specifications • Identified a small subset of the Division to perform POC data conversion • Collected the source material for the POC area • Identified DIMP POC requirements • Identified landbase requirements	

IV. Process Improvement Initiatives

N/A

V. Supporting Information

2012 Financial Results						
	June YTD			Full Year Forecast		
Project	Actual (000s)	Plan (000s)	Fav / (unfav) (000s)	Budget (000s)	Forecast (000s)	Fav / (unfav) (000s)
Complete plan, analyze, and design steps in adherence with IT project methodology. Submit project and achieve Gate1 & 2 approval.	475.2	600.0	124.8	32	32	0
Sample GD data to develop scope and plan for pilot and overall project data conversion	521.6	1,788.9	1,267.3	23	23	0
Validation against business objectives of proposed process, technology, and data conversion plans to ensure that business objectives are being met and risks have been identified and mitigation plans have been developed	0.0	25.0	25.0	25	25	0
Identify and recommend a DIMP analysis tool	0.0	150.0	150.0	200	200	0
Data Conversion Pilot – convert applicable data from existing legacy systems and paper-based systems for a section of the distribution system	0.0	0.0	0.0	200	200	0
Project Functions (PM, CM, SW, and HW costs assumed to be 20%)	24.8	516.8	492.0	1,545	1,545	0
Total Capital	**500.0**	**841.8**	**341.8**	**3,870**	**3,870**	**0**
Total Expense	**521.6**	**2,238.9**	**1,717.3**	**5,400**	**5,400**	**0**
Total	**1,021.6**	**3,080.7**	**2,059.1**	**9,270**	**9,270**	**0**

I. Goal / Objective

To increase the Public Safety, Employee Safety, and the reliability of our Gas Assets by ensuring the proper documentation of their location, condition, and associated maintenance activities. This will be done by ensuring the following:

- *Each and every Gas Asset is identified within SAP Asset Registry*
- *Each and every Gas Asset is located on the appropriate Map or within the Enterprise GIS System.*
- *All Gas Asset records are treated as a Corporate Asset*
- *The timeliness to update our assets ranks within the top quartile of the industry*

II. Results

Overall Status Results	🟡	Continued progress with identified challenges productivity is high and 30 day Safety Metric is on track for the current month.

As Built Aging	🔴	As Built Aging increased for June from 741 to 769, 769 job now complete.
30 Day Safety Metric	🟡	Safety metric requires continued focused approach to complete oldest jobs first by working through known issues.
Productivity	🟢	Hiring on track and mapping completion increasing.
Quality	🟡	Data quality metrics continue to be vetted and refined with business partners.

III. Observations/Analysis

Category	Discussion Topics

As Built Aging	• Four indicators of poor performance:
	  • Timeliness to submit AB package to mapping
	  • Quality of Data associated with AB Package
	  • Quality of Data within SAP
	  • Timeliness to Map Assets
	• Lack of Controls

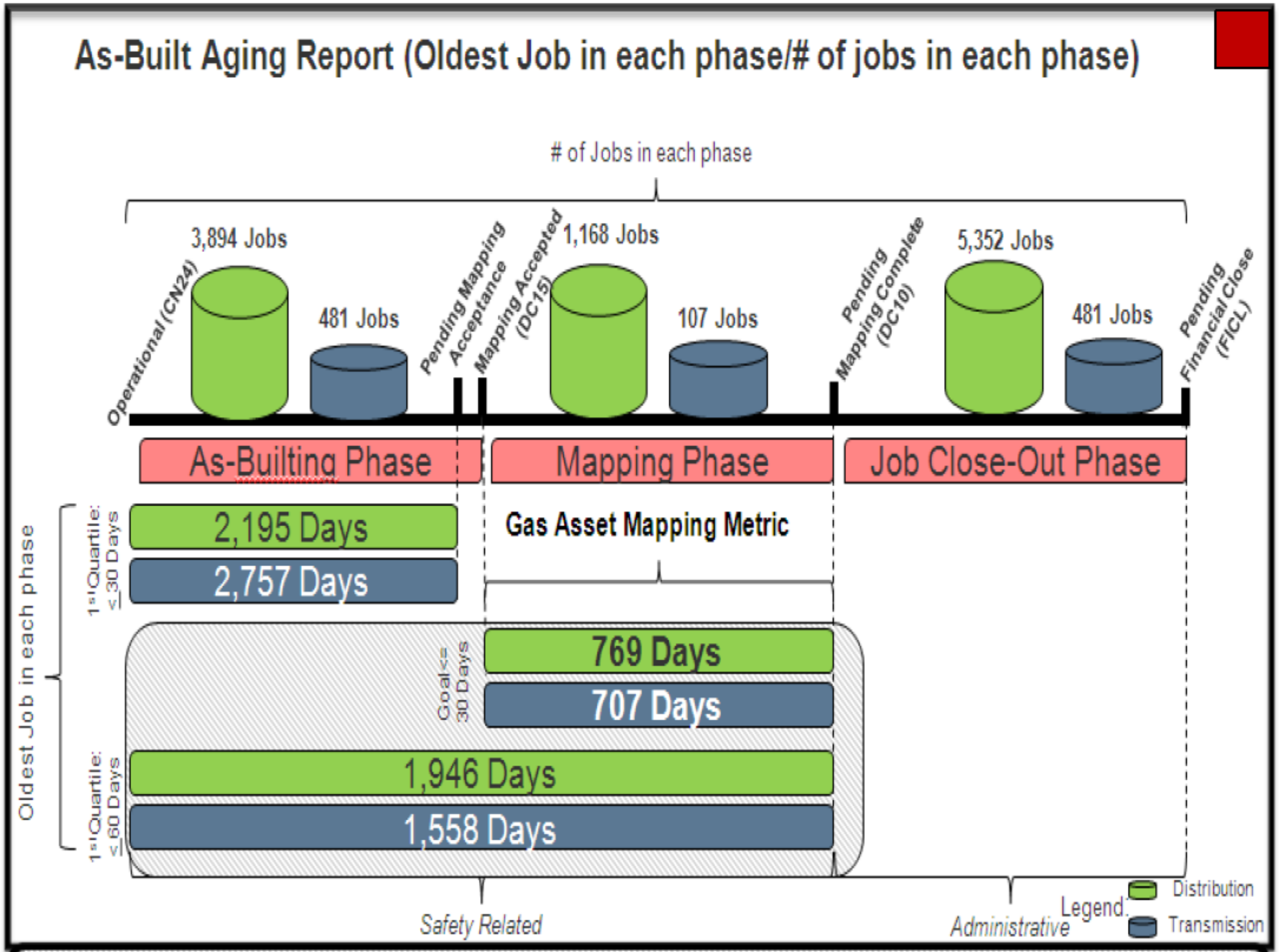
30 Day Safety Metric	• Consistent and again on track for June
	• Slight uptick in the metric attributed to completion of oldest job being completed just after month's end. Potential Barriers to reaching Gas Asset Mapping Metric in the month ahead include:
	  • 400 day step reduction in Metric Max Age
	  • Many current jobs above 550 days old
	  • Pay disparity between Mapping and Estimating (18%) could cause loss of Mappers to Estimating
	  • Competing priorities (CC&B/GEMS Validation, Class Location, Asset Register/CP Stabilization, Encroachment initiatives, Centerline Survey, AB's, A-Form process change drawing away focus.)

Productivity	• Mapping Completion continues to improve and be above Target • Entire Gas Operations job throughput approaching 1000 mapping completions per month! • Additional Headcount Metric above Target • Need to continue to develop Productivity Metrics associated with work effort
Quality	• Further development needs to take place in this area • Working to Stand-Up Data Quality Management and Quality Management Team groups

IV. Process Improvement Initiatives

Key Initiatives	
GEMS Rewrite	Modern planning tool that will enable comprehensive management of all mapping projects, integrated with SAP and Documentum.
IGIS Validation	Mapper verification processes that checklists A-Form field submittal packages. Quality review performed ahead of information addition into IGIS by mappers, ensuring quality and compliance.
Mapping Kiosk Implementation	Paper map elimination initiative in field offices. Kiosks will enable company resources and First Responders ready access to plot active As-Built maps ensuring accurate field work efforts and incident resolution.
OCN Process	Operational Change Notice – Informs Mappers when newly built assets are pressurized in the field prior to As-Builts being formally received from construction. Identify and track if Mapping has been notified when assets are operational in the field and maps updated accordingly within 24 hours
As-Built Training Development	Redevelopment of training program needed to instruct mappers in correct drafting CAD/GIS methods to consistently and accurately capture field As-Built information on final build maps.
Mapper Training Program	Redevelopment of training program which instructs mappers through step modules in correct drafting CAD/GIS methods needed to consistently and accurately map assets.
Lead Mapper Advancement	Redevelopment of training program which provides advanced instruction to Senior Mappers who have completed all Mapper Training program requirements.
Gas Illustration Booklet	To be used in training resources unfamiliar with physical appearance of assets and their associated mapping symbols. The content of this file will also be added to field tablets as a quick access 'glossary' selectable on the display screen as an icon.

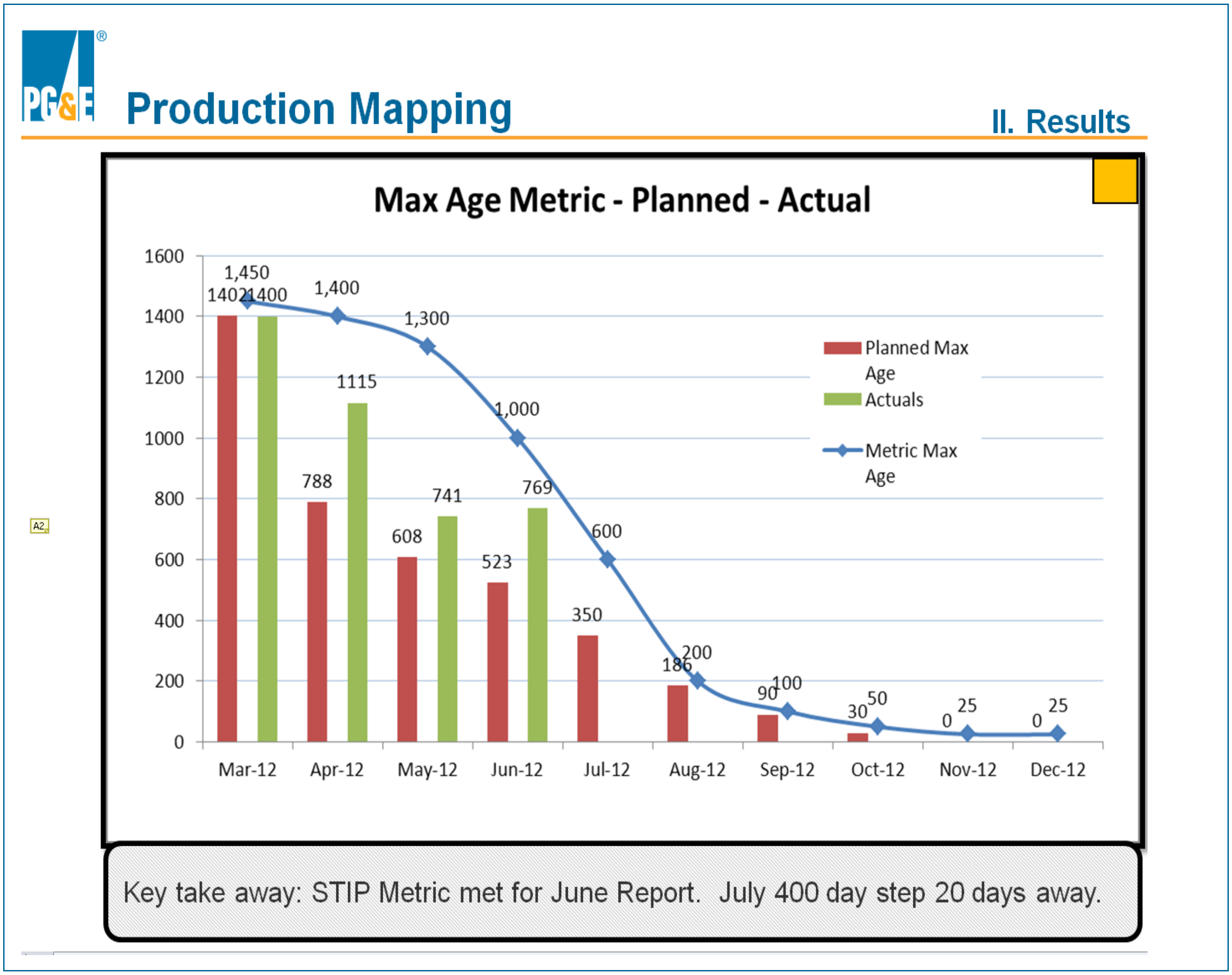
V. Supporting Information - Gas Asset Mapping Metric



As-Built Aging Report (Oldest Job in each phase/# of jobs in each phase)

Key take away: Oldest Job (30486936) is same as last month.
Completed in July. As of 7/12/12 metric status is at 531

Note: All data through June 2012

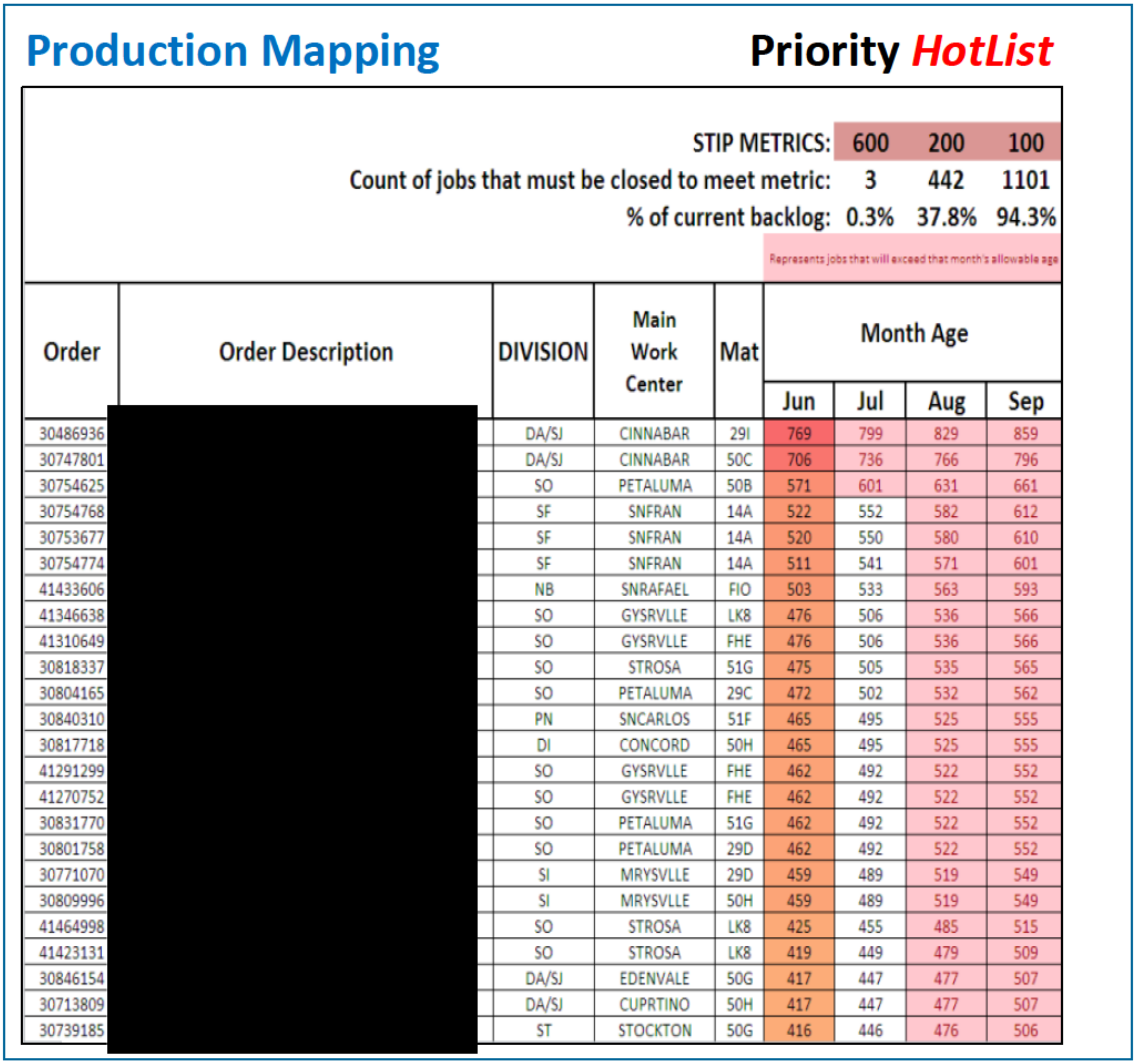


Production Mapping

II. Results

Max Age Metric - Planned - Actual

Key take away: STIP Metric met for June Report. July 400 day step 20 days away.



Production Mapping

Priority *HotList*

	600	200	100
STIP METRICS:	600	200	100
Count of jobs that must be closed to meet metric:	3	442	1101
% of current backlog:	0.3%	37.8%	94.3%

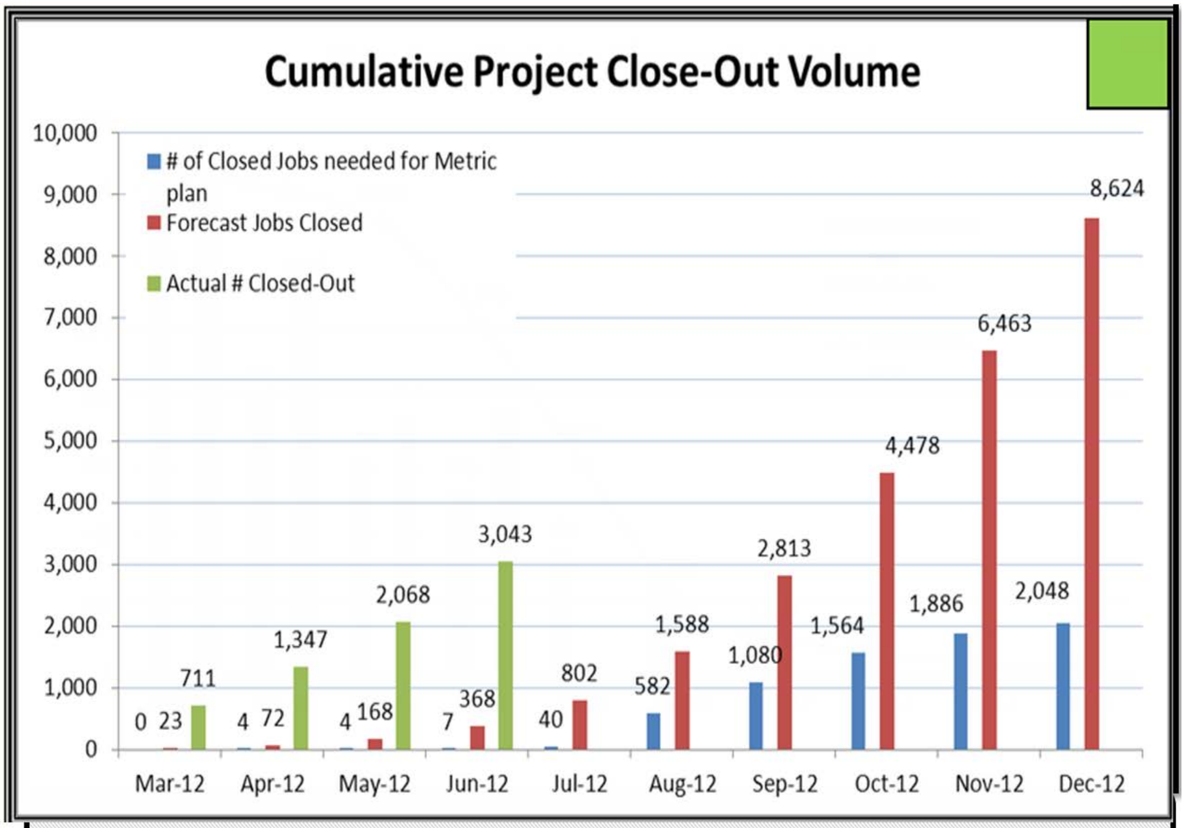
Represents jobs that will exceed that month's allowable age

Order	Order Description	DIVISION	Main Work Center	Mat	Month Age			
					Jun	Jul	Aug	Sep
30486936	[redacted]	DA/SJ	CINNABAR	29I	769	799	829	859
30747801	[redacted]	DA/SJ	CINNABAR	50C	706	736	766	796
30754625	[redacted]	SO	PETALUMA	50B	571	601	631	661
30754768	[redacted]	SF	SNFRAN	14A	522	552	582	612
30753677	[redacted]	SF	SNFRAN	14A	520	550	580	610
30754774	[redacted]	SF	SNFRAN	14A	511	541	571	601
41433606	[redacted]	NB	SNRAFAEL	FIO	503	533	563	593
41346638	[redacted]	SO	GYSRVLLE	LK8	476	506	536	566
41310649	[redacted]	SO	GYSRVLLE	FHE	476	506	536	566
30818337	[redacted]	SO	STROSA	51G	475	505	535	565
30804165	[redacted]	SO	PETALUMA	29C	472	502	532	562
30840310	[redacted]	PN	SNCARLOS	51F	465	495	525	555
30817718	[redacted]	DI	CONCORD	50H	465	495	525	555
41291299	[redacted]	SO	GYSRVLLE	FHE	462	492	522	552
41270752	[redacted]	SO	GYSRVLLE	FHE	462	492	522	552
30831770	[redacted]	SO	PETALUMA	51G	462	492	522	552
30801758	[redacted]	SO	PETALUMA	29D	462	492	522	552
30771070	[redacted]	SI	MRYSVLLE	29D	459	489	519	549
30809996	[redacted]	SI	MRYSVLLE	50H	459	489	519	549
41464998	[redacted]	SO	STROSA	LK8	425	455	485	515
41423131	[redacted]	SO	STROSA	LK8	419	449	479	509
30846154	[redacted]	DA/SJ	EDENVALE	50G	417	447	477	507
30713809	[redacted]	DA/SJ	CUPRTINO	50H	417	447	477	507
30739185	[redacted]	ST	STOCKTON	50G	416	446	476	506

Key take away: Monthly Hot List is now being distributed to Mapping Supervisors for focused approach to complete oldest Jobs in Mapping queue.

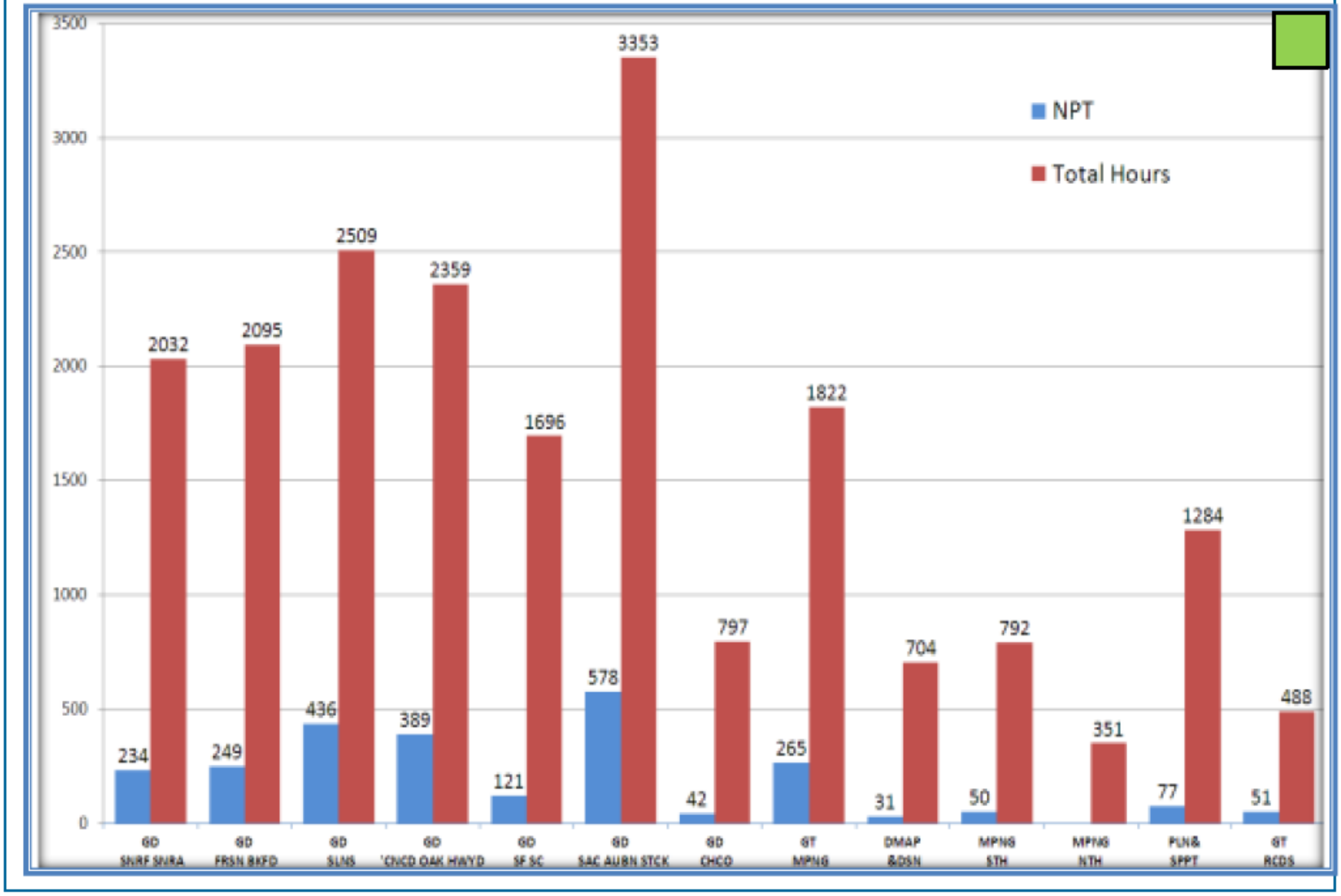
Production Mapping

II. Results

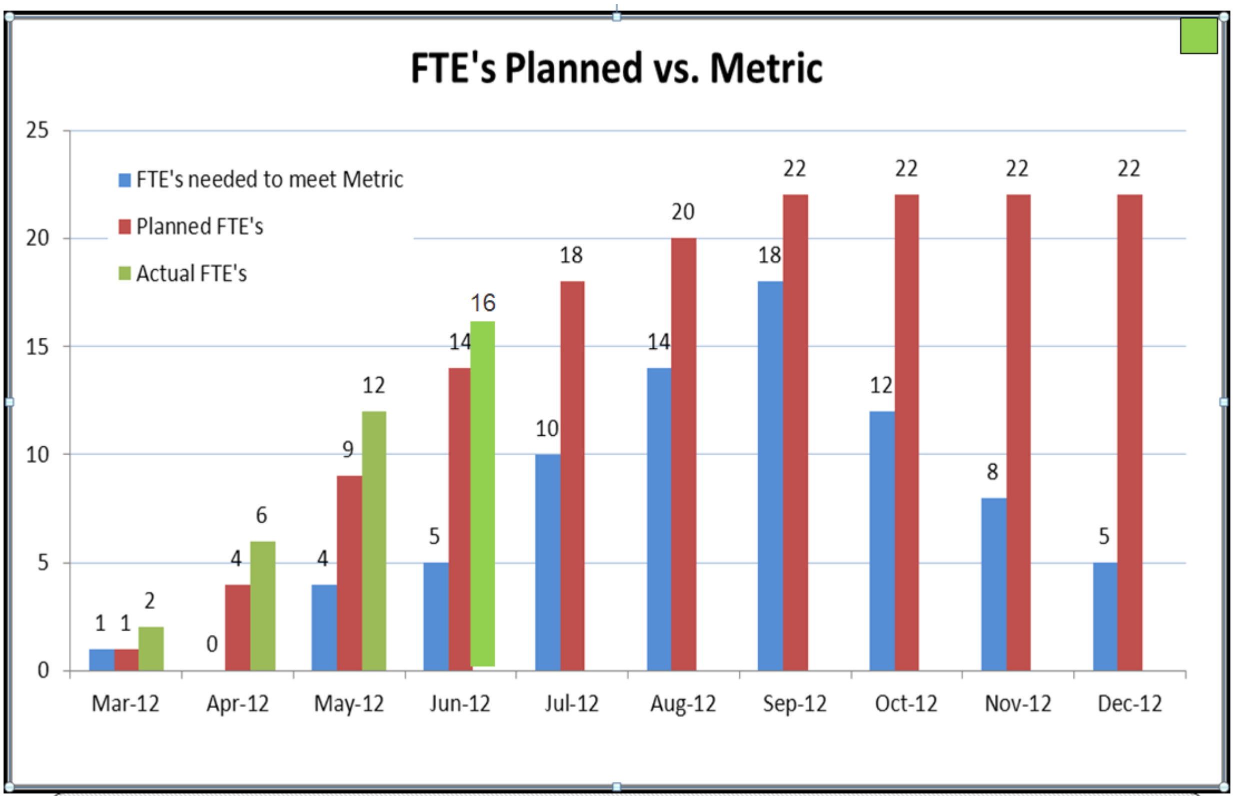


Key take away: STIP Metric met for June Report. July 400 day step 20 days away.

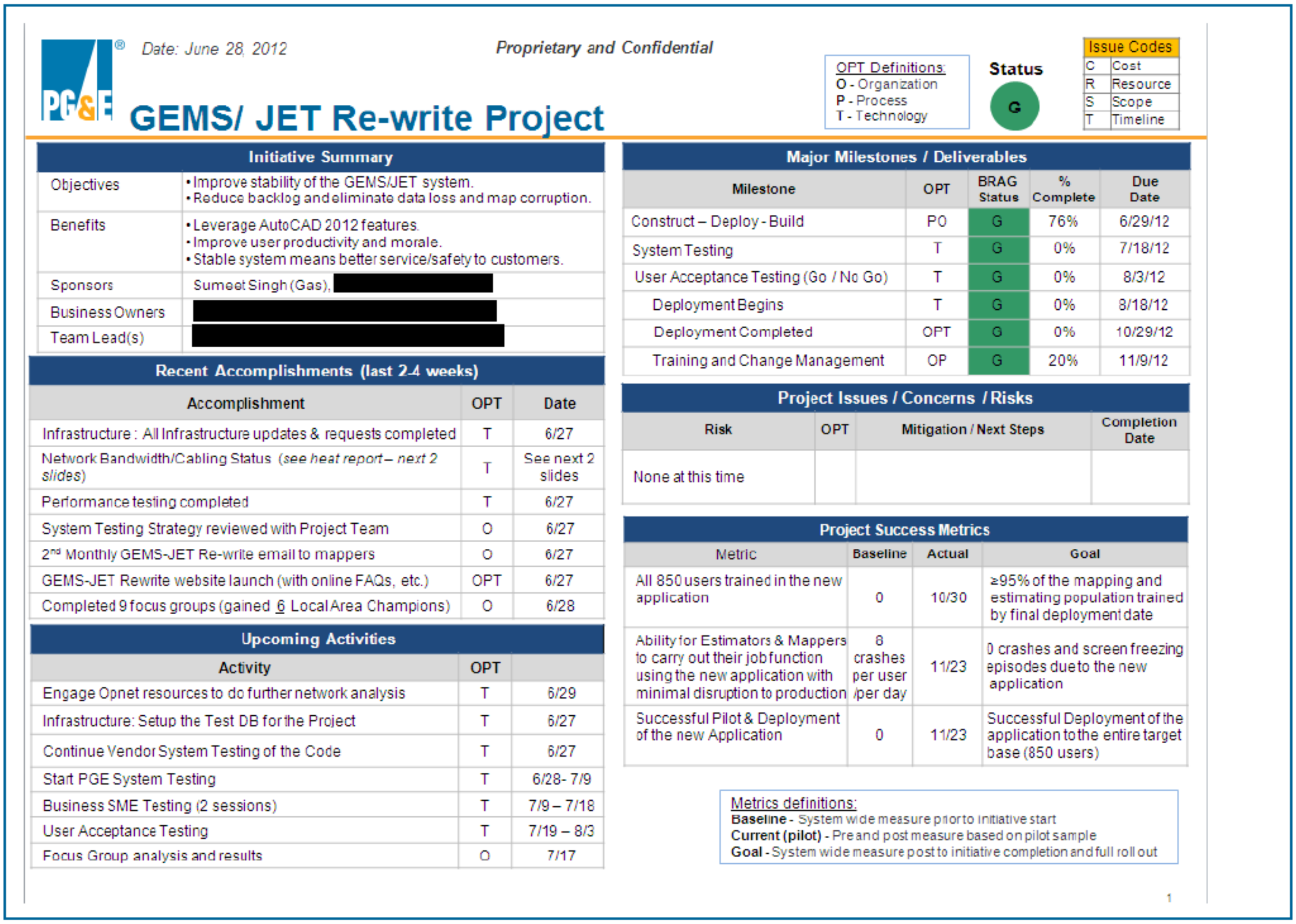
NPT/Total Hours by Division



Net Cumulative FTE's



Key take away: Hiring of additional resources is on track to meet year end goals



Date: June 28, 2012

Proprietary and Confidential

GEMS/ JET Re-write Project

OPT Definitions:
O - Organization
P - Process
T - Technology

Status

G

Issue Codes	
C	Cost
R	Resource
S	Scope
T	Timeline

Initiative Summary

Objectives	• Improve stability of the GEMS/JET system. • Reduce backlog and eliminate data loss and map corruption.
Benefits	• Leverage AutoCAD 2012 features. • Improve user productivity and morale. • Stable system means better service/safety to customers.
Sponsors	Sumeet Singh (Gas), [redacted]
Business Owners	[redacted]
Team Lead(s)	[redacted]

Recent Accomplishments (last 2-4 weeks)

Accomplishment	OPT	Date
Infrastructure : All Infrastructure updates & requests completed	T	6/27
Network Bandwidth/Cabling Status (*see heat report – next 2 slides*)	T	See next 2 slides
Performance testing completed	T	6/27
System Testing Strategy reviewed with Project Team	O	6/27
2nd Monthly GEMS-JET Re-write email to mappers	O	6/27
GEMS-JET Rewrite website launch (with online FAQs, etc.)	OPT	6/27
Completed 9 focus groups (gained 6 Local Area Champions)	O	6/28

Upcoming Activities

Activity	OPT	
Engage Opnet resources to do further network analysis	T	6/29
Infrastructure: Setup the Test DB for the Project	T	6/27
Continue Vendor System Testing of the Code	T	6/27
Start PGE System Testing	T	6/28- 7/9
Business SME Testing (2 sessions)	T	7/9 – 7/18
User Acceptance Testing	T	7/19 – 8/3
Focus Group analysis and results	O	7/17

Major Milestones / Deliverables

Milestone	OPT	BRAG Status	% Complete	Due Date
Construct – Deploy - Build	PO	G	76%	6/29/12
System Testing	T	G	0%	7/18/12
User Acceptance Testing (Go / No Go)	T	G	0%	8/3/12
Deployment Begins	T	G	0%	8/18/12
Deployment Completed	OPT	G	0%	10/29/12
Training and Change Management	OP	G	20%	11/9/12

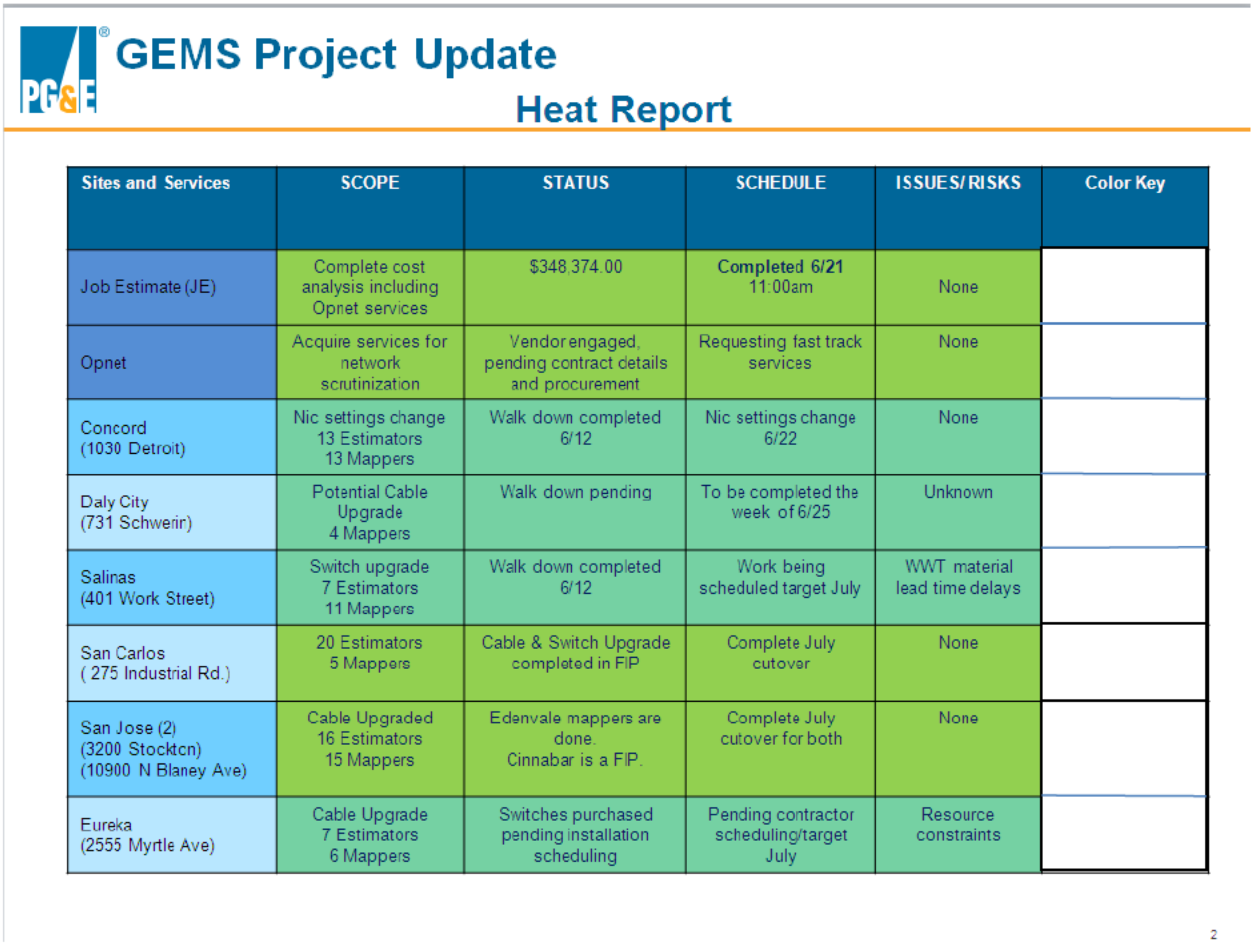
Project Issues / Concerns / Risks

Risk	OPT	Mitigation / Next Steps	Completion Date
None at this time			

Project Success Metrics

Metric	Baseline	Actual	Goal
All 850 users trained in the new application	0	10/30	≥95% of the mapping and estimating population trained by final deployment date
Ability for Estimators & Mappers to carry out their job function using the new application with minimal disruption to production	8 crashes per user /per day	11/23	0 crashes and screen freezing episodes due to the new application
Successful Pilot & Deployment of the new Application	0	11/23	Successful Deployment of the application to the entire target base (850 users)

Metrics definitions:
Baseline - System wide measure prior to initiative start
Current (pilot) - Pre and post measure based on pilot sample
Goal - System wide measure post to initiative completion and full roll out



GEMS Project Update

Heat Report

Sites and Services	SCOPE	STATUS	SCHEDULE	ISSUES/RISKS	Color Key
Job Estimate (JE)	Complete cost analysis including Opnet services	$348,374.00	**Completed 6/21** 11:00am	None	
Opnet	Acquire services for network scrutinization	Vendor engaged, pending contract details and procurement	Requesting fast track services	None	
Concord (1030 Detroit)	Nic settings change 13 Estimators 13 Mappers	Walk down completed 6/12	Nic settings change 6/22	None	
Daly City (731 Schwerin)	Potential Cable Upgrade 4 Mappers	Walk down pending	To be completed the week of 6/25	Unknown	
Salinas (401 Work Street)	Switch upgrade 7 Estimators 11 Mappers	Walk down completed 6/12	Work being scheduled target July	WWT material lead time delays	
San Carlos (275 Industrial Rd.)	20 Estimators 5 Mappers	Cable & Switch Upgrade completed in FIP	Complete July cutover	None	
San Jose (2) (3200 Stockton) (10900 N Blaney Ave)	Cable Upgraded 16 Estimators 15 Mappers	Edenvale mappers are done. Cinnabar is a FIP.	Complete July cutover for both	None	
Eureka (2555 Myrtle Ave)	Cable Upgrade 7 Estimators 6 Mappers	Switches purchased pending installation scheduling	Pending contractor scheduling/target July	Resource constraints	

Metrics	Target	How will it be measured?

Integrity Report - July 2012 for June Results

Results	🔴	Over pressure metric off track YTD but substantial improvement in monthly performance; ILI and ECDA behind plan YTD
Initiative Status	🟡	Working to put concrete plans in place for some initiatives

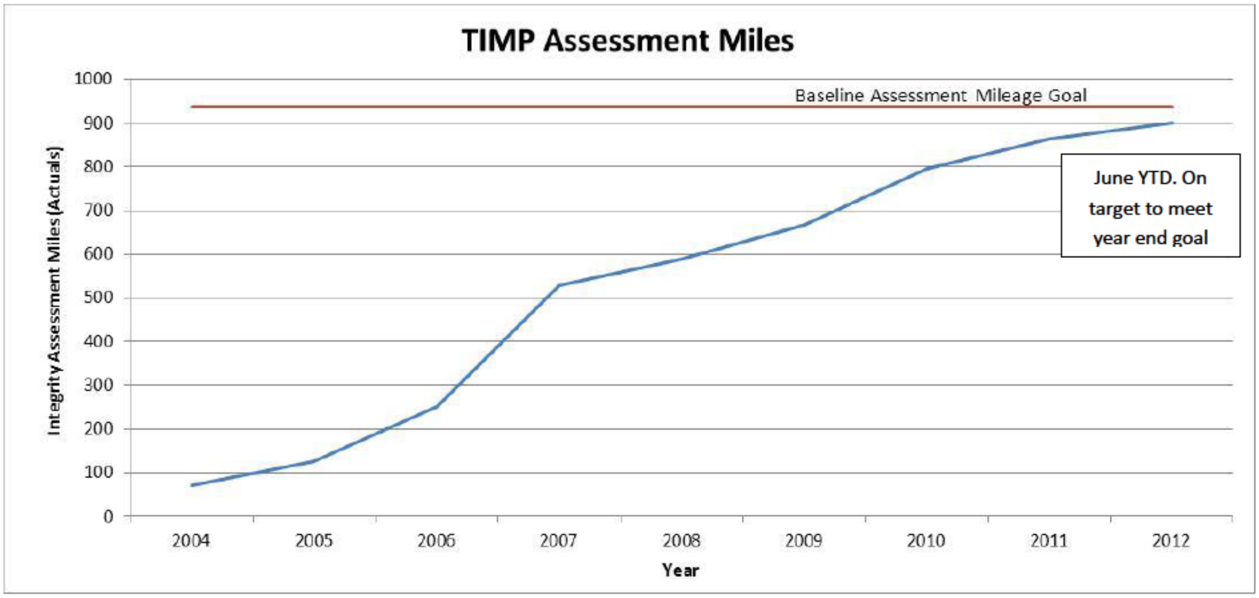
I. Goal / Objective

Manage PG&E's gas transmission and distribution assets to ensure public safety and system reliability, above and beyond code requirements.

II. Results

DIMP	Month Results			YTD Results			Full Year		
	Actual	Plan	Var	Actual	Plan	Var	Forecast	Plan	Var
Gas Over-pressure Event Frequency	2	4	2	49	30	-19	61	42	-19
Total Leaks per Mile of Main and Services	0.861	N/A	N/A	0.861	N/A	N/A	N/A	N/A	N/A

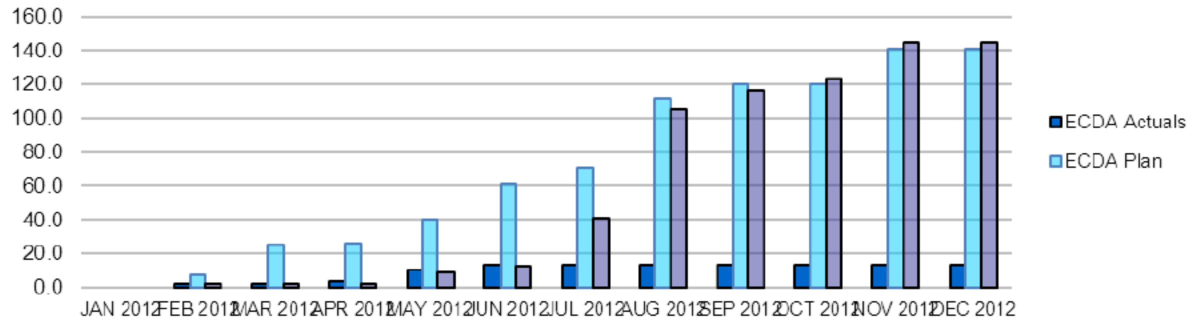
TIMP



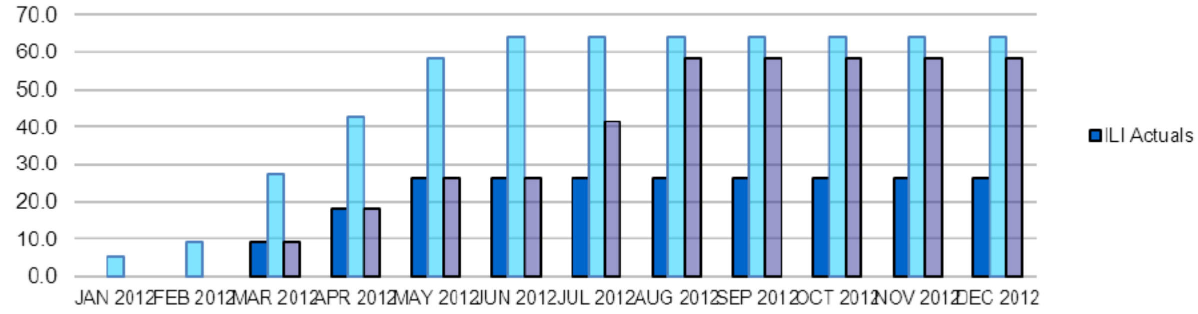
2012 TIMP Baseline Assessment Miles	Month Results			YTD Results			Full Year		
	Actual	Plan	Var	Actual	Plan	Var	Forecast	Plan	Var
Inline Inspection (ILI)	0.0	5.6	-5.6	26.3	58.2	-31.9	58.2	60	-1.8
Ext. Corrosion Direct Assessment (ECDA)	3.3	20.5	-17.	13.6	60.9	-47.3	144.7	140	4.7
Int. Corrosion Direct Assessment (ICDA)	0.0	0.0	0.0	0.0	0.0	0.0	9.35	9.35	0.0

Integrity Report - July 2012 for June Results

2012 YTD ECDA Miles



2012 YTD ILI Miles



III. Observations / Analysis

Category	Discussion of Current Status	
DIMP	**Program Development**	• **First round of performance measures complete** • **Implementation of ICAM for tracking DIMP process currently underway**
	Specific Programs	• **2012 scope of Aldyl-A projects completed, most in pre-construction or construction** • **Cross-bore program inspections have commenced**
TIMP	**DA Mileage**	• **ECDA Mileage behind schedule due to number of issues. Some lag in completing the above ground surveys, permit issues on Earth/Water**

		crossings, previously undiscovered HCA requiring inspection in 2012 and challenging excavations on cased pipe crossings . ICDA Mileage at risk due to late start, permit issues and use of new tools for assessments.
	ILI Mileage	• **Completed 5 of the scheduled 8 ILI runs. Obstructions and lack of MFL tools have caused delays in several projects to date. Final inspections run dates have been set for remaining projects and will be completed by August. L-57B project moved to 2013 due to additional modifications required on pipeline. This re-inspection not due till 2013 thus plan adjusted for 2012 as a result.**

IV. Process Improvement Initiatives

Initiative Overview – Integrity Process		
Exec. Sponsor	**Roland Trevino**	
Process Owner	**TBD**	
Initiative Description	Managing the maintenance of and investment in all assets so that the system performs to acceptable standards.	
Initiative Strategy	**People**	Everyone in the organization fully understands and works in coordination with the asset owners to feed into the integrity/asset management process.
	Process	Asset owners and all responsibility for the assets resides in a single department, with all organizations contributing into the process where all asset families are represented and have a long range plan for addressing risks. The Asset Management/Integrity process is certified as valid, disciplined, and effective, utilizing well developed process for assessing risk and applying it to the work planning process.
	Technology	Ability to track leak trends; quantify risk using real-time asset data, identify integrity issues and mitigation strategies.

Key Initiatives		
Initiative Category	**Initiative Name**	**Status**
DIMP	1. DIMP Audit Prep	🟨
DIMP	2. Aldyl-A	🟩

Integrity Report - July 2012 for June Results

DIMP	3. Cross Bores	🟨
TIMP	4. TIMP Audit Prep	🟨
TIMP	5. Regulatory Driven Integrity Program Update	🟨
TIMP	6. IM Software Tool Development	🟨

Initiative Schedule and Status

Initiative	**1. DIMP Audit Prep**	
Team Members	**Christine Cowsert Chapman, [redacted] Kevin Armato, [redacted]**	
Scope	**Contract with Cyera Strategies and PI Confluence to organize and develop documentation in preparation for DIMP audit in December 2012.**	
Benefits (Soft)	**Opportunity to provide structure to program to ensure audit-readiness in the future.**	
Costs	**$100k**	
Milestone	**Target Completion Date**	**Comments**
Solicit proposals from vendors for audit prep work	Completed	Proposals from Cyera and PI Confluence.
Develop audit plan and strategy	Completed	Met with PI Confluence to develop plan and begin implementation of ICAM.
Mock audit	Q3 2012	Schedule mock audit for July or August to ensure adequate time to correct any identified gaps. Meeting with Cyera Strategies in mid-July to finalize plan for mock audit.
Audit	December 10	CPUC/PHMSA Audit
Develop action plan from audit findings	Q1 2013	Work on improvements to program in 2013 and beyond.

Description	Accountability	2012	2013	2014	2015	2016
Costs	DIMP	$100k				
Specific Benefit, Expense Savings						

Integrity Report - July 2012 for June Results

Discussion Items
Audit prep work has begun in earnest with development of performance measures and implementation of ICAM.

Initiative Schedule and Status		
Initiative	**2. Aldyl-A**	
Team Members	[redacted] **Frontline Energy Services**	
Scope	**Collect data regarding location and basic asset information of Aldyl-A in PG&E's system and identify 23 miles for replacement in 2012.**	
Benefits (soft)	**Improved safety of gas distribution system.**	
Costs	**$2.5 million for engineering work**	
Milestone	**Target Completion Date**	**Comments**
Digitize all Aldyl-A into GIS	Completed	Completed 3/31/2012.
Identify 23 miles of Aldyl-A for replacement	Completed	Projects identified by end of April.
Collect detailed asset information on identified Aldyl-A pipe	Q4 2012	Project on track to meet milestones for data collection in 2012.

Description	Accountability	2012	2013	2014	2015	2016
Costs	DIMP	$2.5M	$1.3M	$1.0M	$1.0M	$1.0M
Specific Benefit, Expense Savings	TBD					

Discussion Items
Vendor providing quality data on Aldyl-A in a timely fashion.

Integrity Report - July 2012 for June Results

Initiative Schedule and Status		
Initiative	**3. Cross Bores**	
Team Members	**Christine Cowsert Chapman, [redacted] Frontline Energy Services**	
Scope	**Develop and implement process for remediating existing cross bores and ensure that processes going forward prevent additional cross bores from occurring.**	
Benefits	**Reduced cost associated with damaging 3rd party sewers mains and laterals, reduced cost related to relocating PG&E's facilities. Improvement of public safety due to reduced risk of gas migrating into customers' homes.**	
Costs	**$5.9 million**	
Milestone	**Target Completion Date**	**Comments**
Implement contract with Frontline Energy Services for work	Completed	Began working with Frontline on cross bore work in March 2012.
Communicate program to external comms, gov rel, and other key internal stakeholders	Completed	Regular meetings with internal stakeholders for program.
Explore ability to recover costs for cross bores performed by contractors	June 30	Met with Kevin Knapp and Bob Suehiro to discuss, follow up required.
Communicate cross bore issue and program to customers and employees	Completed	Determined appropriate communication channels to customers regarding cross bores and are implementing communication strategy.
Coordinate with excavation process owner on prevention of cross bores in the future	Completed	Met with Kevin Knapp and Bob Suehiro to discuss. Met with GC supervisors and agreed to conduct inspections of sewer laterals to ensure no cross bores are left behind.
Completion of 10,000 inspections of sewer laterals and mains	Dec 31	Inspection work has begun and is going smoothly.

Description	**Accountability**	**2012**	**2013**	**2014**	**2015**	**2016**
Costs	DIMP	$5.9M	$14.4M	$14.5M		
Specific Benefit, Expense Savings	TBD					

Discussion Items
Have conducted outreach to GC and M&C where cross bore work is being completed to ensure communication channels are open and any issues are raised and resolved in a timely fashion.

Initiative Schedule and Status

Initiative	**4. TIMP Audit Prep**	
Team Members	[redacted]	
Scope	**Complete audit binders for past assessments, contract with GTS to manage preparation work and to DNV to conduct pre-audit review**	
Benefits	**Demonstrate compliance with Federal Code and PG&E TIMP Risk Management Procedures**	
Costs	**Approximately $500,000**	
Milestone	**Target Completion Date**	**Comments**
Complete documentation for past assessments	🟥 **July 1**	Significant additional work required to prepare for audit as DA records for past years work were often incomplete or inadequate.
Conduct pre-audit	August 1	DNV reviewing records and providing feedback. Schedule for pre-audit adjusted to 7/23 through 8/2.
CPUC Audit	🟩 Sept 14	Two weeks: 8/27-8/31 and 9/10 - 9/14.

Description	Accountability	2012	2013	2014	2015	2016
Costs	TIMP	$0.5M				
Specific Benefit, Expense Savings						

Discussion Items
Audit Preparation work well underway. Completion of many items dependent upon consultants completing Root Cause Analysis reports, LTIMP Mitigation reports and LTIMP Mitigation items. Significant amount of work remains

for teams to complete audit binders, especially for historical ECDA assessments on Stations, E/W crossings and Casings as well as historical ICDA and SCCDA assessments. This work is being performed by limited existing engineering staff while also supporting 2012 inspection work and updates to all RMPs (see Item 5 below).

Initiative Schedule and Status		
Initiative	**5. Integrity Program Update**	
Team Members	[redacted]	
Scope	**Incorporate additional 4 threat categories into Risk Analysis process, Update all RMPs per DNV Level 1 and some Level 2 recommendations, issue new RMPs as required.**	
Benefits	**Compliance with CFR 49 Part 192, Subpart "O" and moving toward industry best practices for TIMP.**	
Costs	**$730,000 for consultant work**	
Milestone	**Target Completion Date**	**Comments**
Report out on review of existing RMPs by DNV	Completed	This work was mostly completed in 2011 and official report out in April of 2012.
Contracts in place for all RMP updates and new RMP creations	Completed	All contracts in place and being actively worked. Detailed schedule created and maintained by GTS.
All RMPs issued for PG&E final review and authorization	August 1	This is a major coordination effort between PG&E and DNV both internally within both companies and between such. All RMPs have been issued to PG&E for review, though several requiring iterations to reach agreement. On track to meet goal.
Issue all updated RMPs and new RMPs	August 15	Issuing revised or new RMPs requires VP and Law Dept approvals. Three RMPs routed for final approval w four more by 7/13. On track to meet goal.

Description	**Accountability**	**2012**	**2013**	**2014**	**2015**	**2016**
Costs	TIMP	$0.73M				
Specific Benefit, Expense Savings	TBD					

Discussion Items
Very complex effort to simultaneously update all Risk Management Procedures that determine the risk analysis and threat identification process as well as updates to implementation procedures (ECDA, ILI, SCCDA and ICDA). New procedures for Long Term Integrity Management Plan development as well as Direct Examination inspection procedure will also impact many aspects of TIMP and provide much clearer guidance going forward. RMP-3, RMP-4 and RMP-5 have been through PG&E technical and Legal review and routed for final authorization.

Initiative Schedule and Status		
Initiative	**6. IM Software Tool Development**	
Team Members	[redacted], **Mariner Project (TBD) and Asset Knowledge** [redacted]**)**	
Scope	**Complete several tasks that will allow for moving to new software tools in 2013 for Risk and Threat Analysis as well as direct access to MAOP Validation data. Includes Structures Digitization, purchase of TIMP Risk Management Software and implementation of interim solution for use of MAOP data.**	
Benefits	**Allows for moving to semi-automated HCA and Class Locations Analysis (thus saving large amounts of engineering time), utilization of wider data input and more efficient risk and threat analysis process (thus allowing for more frequent updates and more representative relative risk) and more accurate risk analysis based on most reliable component data available.**	
Costs	**$550,000 for structures digitization only. Remaining work: TBD cost**	
Milestone	**Target Completion Date**	**Comments**
Structures Digitization Completed	October 1	Contract signed with PhotoScience. The vendor has completed polygon digitization of buildings and in process of identifying building type via aerial photography. First batch of data delivery on August 6th. Funding through TIMP, not Mariner
Purchase and Test Risk Management Software	October 1	Finalized Mariner "playbook" for TIMP and Risk Analysis Software project. Currently in process of qualifying vendors and expanding the current assessment tracking database to automate due date calculation and to incorporate IC/SCC threats into system.
Implement interim solution for using MAOP data in existing GIS 2.0	September 1	Received feedback from GOI team (under MAOP Validation) that special alignment of PFL data is not progressing as expected due to problems w scanned source documents. Currently completed 23.5 miles of special alignment. On track to populate GasMap GIS system w approximately 2900 segments of pipe specification data verified by PLEs and Celerity for class location study. Data will be available alongside current pipe specification data in GasMap and for use in risk analysis.

Description	Accountability	2012	2013	2014	2015	2016
Costs (Structures Digitization)	TIMP	$0.55M				
Costs (RM Software & Interim solution)	Mariner	TBD				
Specific Benefit, Expense Savings	TBD					

Discussion Items

Evaluation of Intrepid as long term GIS solution and determination of modifications/enhancements required to meet IM Business needs is underway. Short term solution that allows for utilization of MAOP data by loading Intrepid data into GIS 2.0 schema for use by TIMP in risk/threat analysis has been agreed upon but not implemented. MAOP Validation team working on spacial alignment of PFL data in Intrepid as interim solution.

V. Supporting Information

None at this time.

Risk Management Plan Update/ Risk Register Report - July 2012 for June Results

Results	●	Continuing with Risk identification process. Gas Operations System Safety update v presented at RPC/URMC. Key risk drivers analysis initiated.
Initiative Status	●	Timelines on track

I. Goal / Objective

Develop a registry of all risks faced by Gas Operations with rankings for impact/consequence and likelihood/probability. Use risk register to identify, assess, and manage risks down to acceptable levels. Propose and act upon response and mitigation plans to reduce the probability and the potential impact of specific risks. Integrate risk register into investment planning process so that all asset expenditures decisions are risk-based.

II. Results

June 11:	Summarized key operational risk drivers that were validated against industry and historical data – see attached tables 1-3 and figures 1-3.
June 15:	Risk and Compliance Committee meeting was held – meeting notes and materials reside at Risk and Compliance Committee Meeting SharePoint.
June 20:	Per feedback from Committee, updated list of key risk drivers that have been identified and mapped to the top three major risk categories in Gas Operations – Preliminary Gas Operations Risk Register has been developed – see Table 4 – a copy of the latest Risk Register resides on the same SharePoint.
June 26:	June RPC paper on Gas Operations System Safety was presented to RPC/URMC – the final draft resides on the same SharePoint.

III. Observations / Analysis

The Current State of Gas Operations Risk Management:

- Risks monitored and managed independently: TIMP; DIMP; PSEP; etc.
- Organization cannot make expenditure decisions based on risk
  - Decisions based on the person submitting budget request or independent risk assessments
- Integrated risk management just starting
  - Key risks and risk drivers identified.

Risk Identification and Validation:

- The key risk drivers were mapped and validated against industry (DOT/PHMSA) data, which included pipeline incidents data (frequency and impact (physical and financial)) on national, state and PG&E level. The identified risks and industry findings were presented to the Risk and Compliance Committee, and are also in the June RPC Paper which Nick will present to RPC/URMC on Tuesday June 26.
- In this risks validation/mapping to industry data process, we observed that some of the key risk drivers, such as "corrosion", "over-pressurization" have different root-cause and impact depending on the type of asset or "family", i.e. Storage; Transmission; Distribution Main; Distribution Services; Meters Regulators, Value; CNG/LNG; and Compression. However, there are also key risks such as "inadequate response and recovery" that do not belong to a specific asset family.

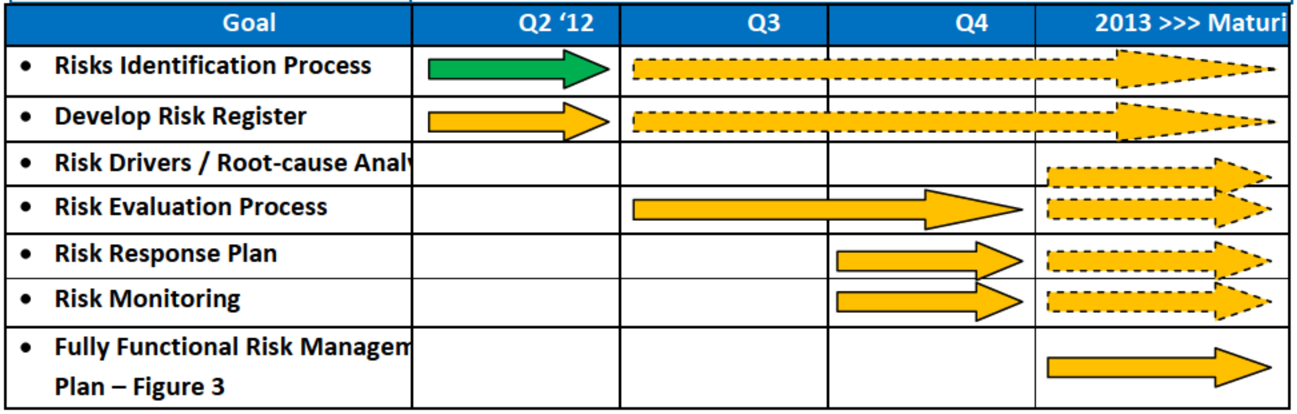
Sponsor: Nick Stavropoulos
Owner: [redacted]

Future Plan for Gas Operations Risk Management:

- As we move forward to risk evaluation/prioritization, root-cause analysis and mitigation plan development, *only* functional Risk Champions may not be the most optimal structure. We may want to utilize a hybrid structure where asset family owners and some process owners and subject matter experts are in the Risk Champion team. This observation was also shared and discussed at the Risk and Compliance Committee, and is being discussed with asset family owners for feedback and an optimal structure.
- A framework within PAS 55 – risk management is one of the most critical areas of focus to achieve PAS 55 certification – see Figure 4.

IV. Process Improvement Initiatives

Initiative Overview – Asset Management (PAS 55)	
Exec. Sponsor	**Nick Stavropoulos**
Process Owner	[redacted]
Initiative Description	Risk Management Plan and Risk Register Development Phase



Goal	Q2 '12	Q3	Q4	2013 >>> Maturi
• Risks Identification Process	🟩➡	🟨⇢		
• Develop Risk Register	🟨➡	🟨⇢		
• Risk Drivers / Root-cause Anal				🟨⇢
• Risk Evaluation Process		🟨➡		🟨⇢
• Risk Response Plan			🟨➡	🟨⇢
• Risk Monitoring			🟨➡	🟨⇢
• Fully Functional Risk Managem Plan – Figure 3				🟨➡

Arrow Legends: Target Ongoing

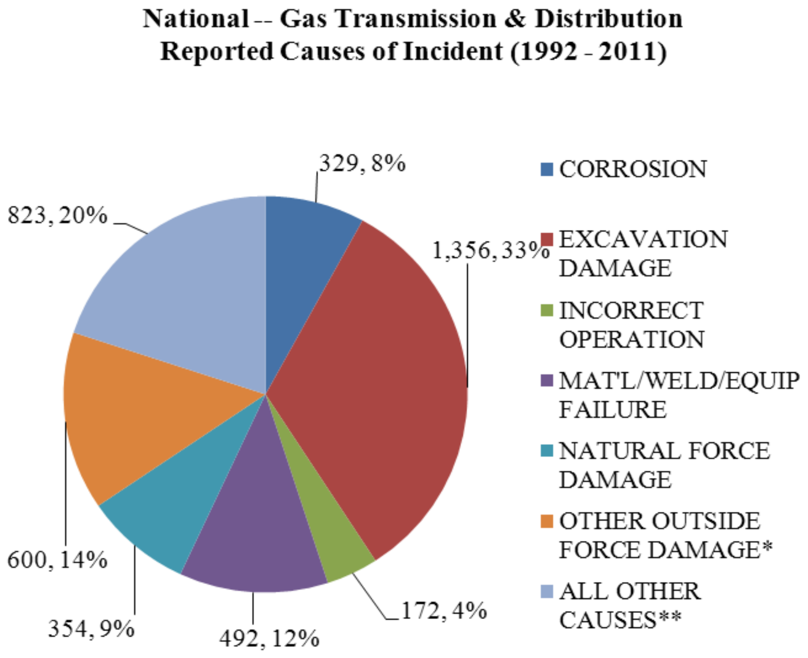
Sponsor: Nick Stavropoulos
Owner: [redacted]

Risk Management Plan Update/ Risk Register Report - July 2012 for June Results

Table 1: National -- Gas Transmission & Distribution - Reported Cause of Incident: 1992-2011

	Frequency		Impact		
	Number of Incidents	Percentage	Fatality	Injuries	Property Damage
CORROSION	329	8%	23	64	$117,369,280
EXCAVATION DAMAGE	1,356	33%	136	478	$232,662,623
INCORRECT OPERATION	172	4%	9	148	$24,205,701
MAT'L/WELD/EQUIP FAILURE	492	12%	14	140	$607,674,725
NATURAL FORCE DAMAGE	354	9%	18	80	$697,349,966
OTHER OUTSIDE FORCE DAMAGE*	600	15%	32	101	$135,753,125
ALL OTHER CAUSES**	823	20%	106	358	$275,539,140
	4,126	**100%**	**338**	**1,369**	**$2,090,554,560**

Figure 1:



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***OTHER OUTSIDE FORCE DAMAGE include:**

FIRE/EXPLOSION AS PRIMARY CAUSE
VEHICLE NOT ENGAGED IN EXCAVATION
ELECTRICAL ARCING FROM OTHER EQUIPMENT/FACILITY
PREVIOUS MECHANICAL DAMAGE
INTENTIONAL DAMAGE
OTHER OUTSIDE FORCE DAMAGE
UNSPECIFIED OUTSIDE FORCE DAMAGE

**** ALL OTHER CAUSES include:**

MISCELLANEOUS CAUSE

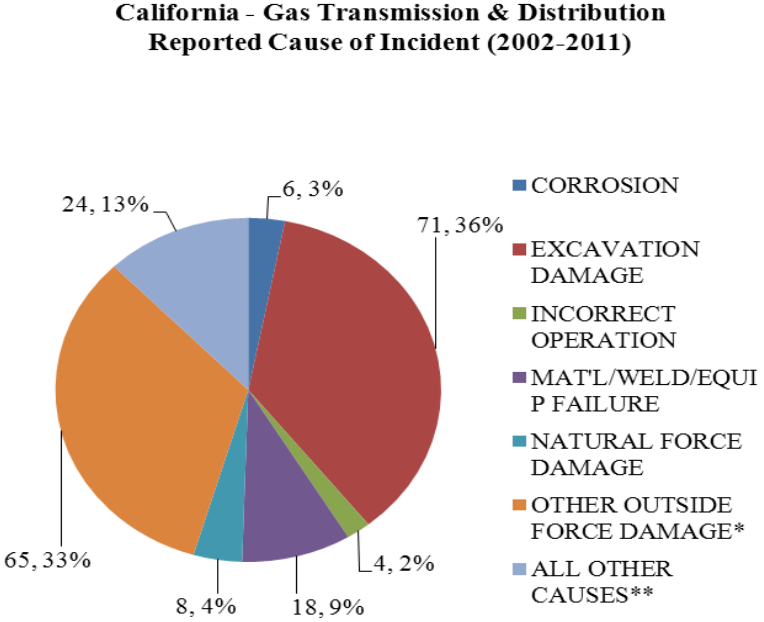
UNKNOWN CAUSE

Risk Management Plan Update/ Risk Register Report - July 2012 for June Results

Table 2: California -- Gas Transmission & Distribution - Reported Cause of Incident: 2002-2011

	Frequency		Impact		
	Number of Incidents	Percentage	Fatality	Injuries	Property Damage
CORROSION	6	3%	0	1	$3,675,200
EXCAVATION DAMAGE	71	36%	3	4	$9,690,145
INCORRECT OPERATION	4	2%	0	2	$5,344,500
MAT'L/WELD/EQUIP FAILURE	18	9%	8	51	$378,770,263
NATURAL FORCE DAMAGE	8	4%	0	0	$3,241,160
OTHER OUTSIDE FORCE DAMAGE*	65	33%	2	9	$7,711,310
ALL OTHER CAUSES**	24	12%	1	7	$4,796,600
	196	**100%**	**14**	**74**	**$413,229,178**

Figure 2:



Source: PHMSA Significant Incidents Files May 31, 2012

***OTHER OUTSIDE FORCE DAMAGE include:**
FIRE/EXPLOSION AS PRIMARY CAUSE
VEHICLE NOT ENGAGED IN EXCAVATION
ELECTRICAL ARCING FROM OTHER EQUIPMENT/FACILITY
PREVIOUS MECHANICAL DAMAGE
INTENTIONAL DAMAGE
OTHER OUTSIDE FORCE DAMAGE
UNSPECIFIED OUTSIDE FORCE DAMAGE

**** ALL OTHER CAUSES include:**
MISCELLANEOUS CAUSE
UNKNOWN CAUSE

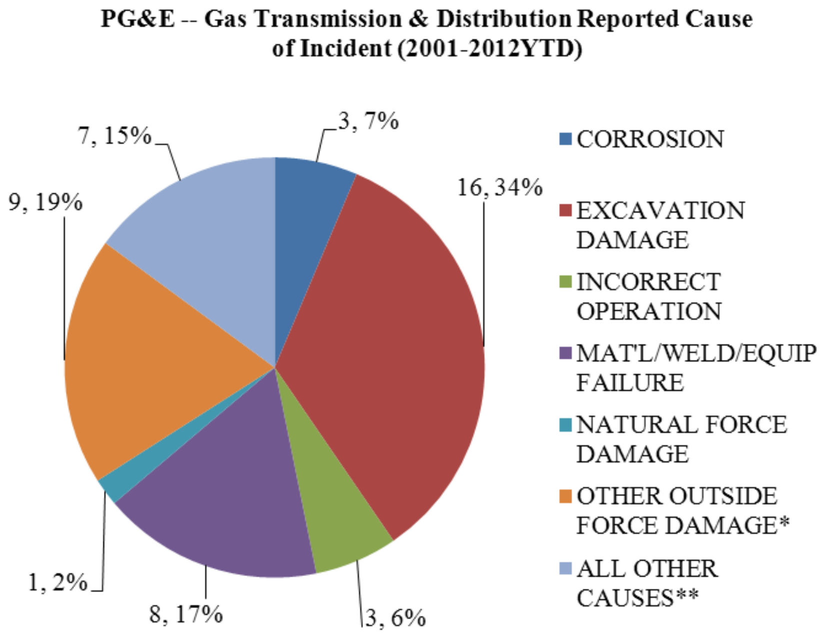
Sponsor: Nick Stavropoulos
Owner: [redacted]

Risk Management Plan Update/ Risk Register Report - July 2012 for June Results

Table 3: PG&E -- Gas Transmission & Distribution - Reported Cause of Incident: 2001-2012YTD

System Safety Risk Drivers		Frequency		Impact		
		Number of Incidents	Percentage	Fatality	Injuries	Property Damage
1.4	CORROSION	3	6%	0	1	$1,171,524
1.2	EXCAVATION DAMAGE	16	34%	1	3	$4,488,538
1.1, 1.3	INCORRECT OPERATION	3	6%	0	1	$5,347,671
1.1, 1.3	MAT'L/WELD/EQUIP FAILURE	8	17%	8	52	$377,168,856
1.5	NATURAL FORCE DAMAGE	1	2%	0	0	$348,563
1.5	OTHER OUTSIDE FORCE DAMAGE*	9	19%	0	1	$1,779,965
	ALL OTHER CAUSES**	7	15%	1	4	$2,420,314
		47	**100%**	**10**	**62**	**$392,725,431**

Figure 3:



PG&E -- Gas Transmission & Distribution Reported Cause of Incident (2001-2012YTD)

Source: PHMSA Significant Incidents Files May 31, 2012

***OTHER OUTSIDE FORCE DAMAGE include:**

FIRE/EXPLOSION AS PRIMARY CAUSE
VEHICLE NOT ENGAGED IN EXCAVATION
ELECTRICAL ARCING FROM OTHER EQUIPMENT/FACILITY
PREVIOUS MECHANICAL DAMAGE
INTENTIONAL DAMAGE
OTHER OUTSIDE FORCE DAMAGE
UNSPECIFIED OUTSIDE FORCE DAMAGE

**** ALL OTHER CAUSES include:**

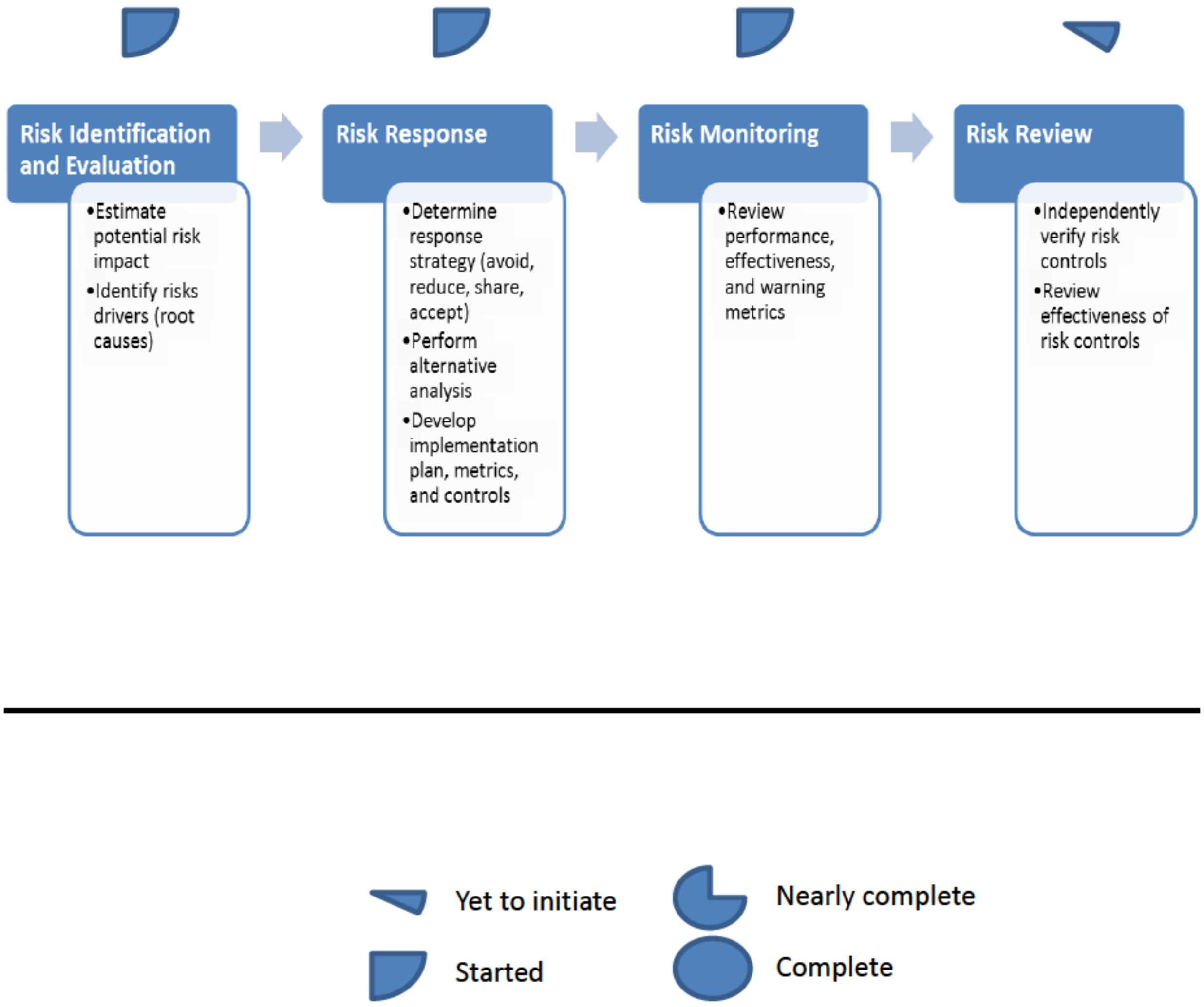
MISCELLANEOUS CAUSE
UNKNOWN CAUSE

Sponsor: Nick Stavropoulos
Owner: [redacted]

Table 4: Draft Risk Register

Gas Operations Top Risks	Risk Drivers Associated with the Top Three Risks
Loss of Containment - The likelihood and the impact depends on whether the loss of containment is due to rupture or leak.	**Over-Pressurization (including on low pressure system)** Incorrect Operations Equipment Failure **Asset Failure** Manufacturing (including QA/QC) Construction/Fabrication - Installation Error Improper Design - Specified Wrong Material **Excavation Damage** PG&E 3rd Party (including unintended damage to PG&E assets) **Corrosion (External/Internal)** Improper maintenance **Natural/Outside Force** Earthquake/Tsunami Landslide/Washout Weather/Temperature **Terrorism/Vandalism**
Loss of Supply and Service	**Loss of Access to Underground Storage Assets** **Loss of Primary Pipeline Supplies** **Loss of Compression** **Inadequate System Capacity** Pressure Reduction Asset/Equipment Failure Improper System Design Incorrect Operations/Maintenance **Loss of Containment** **Unauthorized Operations (Cyber, etc.)**
Inadequate Response and Recovery	**Delayed Emergency Identification** Inadequate System Visibility and Situational Awareness **Slow Emergency Response** Inadequate System Design for Effective Response **Lack of Emergency Response Coordination with External Parties** **Delayed Restoration of Service to Customers**

Figure 4: Overview of the Current Stage of Gas Operations System Safety Risk Response



Risk Identification and Evaluation

- Estimate potential risk impact
- Identify risks drivers (root causes)

Risk Response

- Determine response strategy (avoid, reduce, share, accept)
- Perform alternative analysis
- Develop implementation plan, metrics, and controls

Risk Monitoring

- Review performance, effectiveness, and warning metrics

Risk Review

- Independently verify risk controls
- Review effectiveness of risk controls

Mandated Program Report - July 2012 for June Results

Results	🔴	**Audits/Self Report Results Indicate Compliance Gaps.** Key Filing Dates Met, Self Reports Regularly Raised, No Violations Noted in CPUC Audits (verbal results).
Initiative Status	🟡	Self Reporting Process Evolving, Compliance items in ECTS and Implemented, Team members named; Ad-hoc Teams used for Audits and Self Reports, need to develop overall compliance health metrics.

I. Goal / Objective

Achieve full regulatory compliance through identification & documentation of regulatory requirements and implementation of activities to execute, verify, report and improve performance.

II. Results

20 Self Reports Made (thru June) Indicating Issues with Work Execution and Follow-Through (Overall Compliance Metric Needed to Show Compliance Health) 🔴

Internal Review findings trending down, but continuing Issues with execution/follow-through 🔴

Key Compliance Commitment and Filing Dates Met/On-Track 🟢

Six CPUC Audits with No Violations Noted in Exit Interviews 🟢

Compliance Requirements and Commitments Loaded in ECTS and System Now Available 🟢

Note: *Bold items will be given heavier weithing in determination of overall results*

III. Observations / Analysis

- **Self reporting results indicate gaps in work execution and follow-through**
- **Self reporting gaps identified in geographic areas and/or organizations absent from self reporting; Addressing through targeted communications.**
- **General feedback (verbal) from CPUC during 6 audits do not state specific "violations" found; however issues raised about employee OQ, follow-through on processes & documentation.**
- **Internal Reviews tracking and trending reports being formalized. # of findings decreasing, prioritization being done, actions being developed, but results indicate gaps similar to self reports**
- **Currently hitting key filing dates with corresponding materials and support.**
- **Self reporting – Gaining momentum (5 in June) as more issues are being raised.**

IV. Process Improvement Initiatives

Key Initiatives	
1. Team identification and expectations	Yellow
2. Identification of compliance requirements / commitments and incorporated into ECTS, then ensure requirements are updated	Green
3. Clearly communicate Self – Report expectations and requirements; build employee support to freely raise concerns and possible compliance issues	Green
4. Implement overall health metrics for compliance	Yellow

Mandated Program Report - July 2012 for June Results

Initiative Schedule and Status		
Initiative	**1. Team identification and expectations**	
Team Members	[redacted] **Frances Yee,** [redacted] **& Donnie Jue**	
Scope	**Identify team members and clarify roles of team**	
Milestone	**Target Date**	**Comments**
Team member identification	Completed	Team in place
Have 1st meeting and clarify expectations	July 2012	Initial meeting to discuss team intent and deliverables; currently 1 month behind; now scheduled for July 18 2012.

Initiative Schedule and Status		
Initiative	2. Identification of compliance requirements / commitments and incorporated into ECTS, then ensure requirements are updated	
Team Members	[redacted] **Frances Yee, Gas Ops Representatives, ISTS**	
Scope	**Identify all regulatory compliance items (codes) and commitments. Then move those into ECTS for logging, tracking, assigning leads and reporting.**	
Milestone	**Target Date**	**Comments**
Develop list of compliance requirements	Completed	Requirements list developed for use in ECTS
Move to ECTS	Completed	Successfully migrated to ECTS, system on-line, tasks and reminders being generated monthly.
Process to Update Requirements	August 2012	Develop and implement formal process to ensure compliance requirements and commitments are kept up to date

Initiative Schedule and Status		
Initiative	3. Clearly communicate Self – Report expectations/requirements; build employee support to freely raise possible compliance issues	
Team Members	[redacted] **Frances Yee,** [redacted] **Larry Deniston, Jon Pendleton,** [redacted]	
Scope	**Provide direction to gas operations about how internal reviews are to be used as part of formal CPUC audits and how improvement comes from issue identification.**	
Milestone	**Target Date**	**Comments**
Implement Self Report Process	Completed	Requirement in place Dec 1, 2011 and was unclear in a number of areas. Initial communication to employees about need to comply and raise issues when unsure. Utilizing ad-hoc teams to develop

Self Report items raised and reports made	Completed	As of June 30, 2012, 20 reports made with follow up actions tracked
On-going communications by sharing reports and report summaries	On-going	Face-to-face meetings held, Gas Ops ELT team communications, weekly updates to leadership of "in-progress". Targeting communications to under-represented orgs & geographies.

Initiative Schedule and Status		
Initiative	4. Implement overall health metrics for compliance	
Team Members	[redacted] **Frances Yee,** [redacted] **& Donnie Jue**	
Scope	**Implement overall health metrics for compliance based on weighting of CPUC audits, IA audits, QA/QC audits & reviews, and self report findings. Need both forward looking and historic metrics with trends.**	
Milestone	**Target Completion Date**	**Comments**
Identify Key Metric Inputs	**Aug 2012**	Identify inputs that provide compliance data points. Leverage risk register, internal/external audits and reviews and self report findings. Also identify leading indicator data (e.g. employee input, issues raised, spectrum of reviews/audits).
Create draft metrics	**Aug 2012**	Formulate metrics based on input to create forward and backward looking metrics with indicators of forecast direction. Implement use.
Evaluate effectiveness	**Nov 2012**	Review effectiveness of metrics and address any identified gaps

V. Supporting Information

Attachments include:

- **CPUC audit calendar and summary of results**
- **Self Report Summary Matrix**
- **Key Compliance Commitments and Regulatory Filing Dates**
- Future (Trending/tracking information from internal reviews)

2012 CPUC GO-112E Audit Status

2012 CPUC Audit Schedule / Status

	Scheduled Audit Week	Division/District	Local Contact	Findings (Formal / Exit Interview)	Comment
1	2/13/2012	Operation, Maintenance, & Emergency Plan (System)	[redacted]	Exit Interview	Completed
2	4/9/2012	Willows District (including Gerber & Delevan compressor stations)	[redacted]	Exit Interview	Completed
3	4/23/2012	Fresno Division	[redacted]	Exit Interview	Completed
4	5/7/2012	Rio Vista & Los Medanos Districts	[redacted]	Exit Interview	Completed
5	5/21/2012	DOT Drug & Alcohol Program	[redacted]	Exit Interview	Completed
6	6/4/2012	Sonoma Division	[redacted]	Exit Interview	Completed
7	6/25/2012	Burney District (including Tionesta Compressor Station)	[redacted]	N/A	To be Rescheduled at CPUC request
8	7/23/2012	Operator Qualification Program	[redacted]		
9	8/27/2012, 9/10/2012	Transmission Integrity Manangement Program	[redacted]		
10	9/17/2012	East Bay Division (all)	[redacted]		
11	10/8/2012	San Francisco Division	[redacted]		
12	10/8/2012	Kettleman District (including compressor station)	[redacted]		
13	10/22/2012	Control Room Manangement Plan	[redacted]		
14	11/5/2012	Diablo Division	[redacted]		
15	12/3/2012	General Construction Welding	[redacted]		
16	12/10/2012	Distribution Integrity Manangement Program	Kevin Armato (925) 974-4304		

Updated: July, 2012

Summary of Self Reports with Geographic Location and Organization that Raised Initial Issue

					subtotal = 30		Discovery	
Notif #	Date	DIST. (D) TRANS. (T)	Asset	Address/MP	City	Description	Div/Dist	Org
1	12/30/11	D	Leak Survey	Diablo Division	Various	Notification #1: A PG&E gas mapping employee discovered that 16 plat maps had inadvertently not been included in the leak survey schedule resulting in approximately 13.83 miles of distribution pipeline and 1,242 services not leak surveyed within the five year time requirement which is a violation of 49 CFR 192.723(b)(2). The missed maps are located in Diablo Division, Contra Costa County.	Diablo	Mapping
2	01/13/12	D	Distribution plastic service line	DFM 0632-01 MP 3.71	Williams	Notification #2: MAOP was exceeded on a distribution gas service line tapped off of DFM 0632-01 in the City of Williams, Colusa County due to having no HPR set installed; and (2) Via review of leak survey history for this service line, PG&E discovered that this service line, along with three other service lines tapped off of DFM 0632-01, have not been leak surveyed since July 25, 2005, exceeding the interval to perform required leakage survey every five calendar years.	Sierra	Local Eng
3	01/20/12	T	Pressure Regulator Station	[redacted]	Santa Clara	Notification #3: Deactivated pressure regulator station not properly disconnected from the gas system.	DeAnza	Local Eng
4	01/27/12	D	MAOP Valve	Valve B-24	Fresno	Notification #4: MAOP separation valve missed annual maintenance.	Fresno	Local Eng
5	02/13/12	T	Line 169	[redacted]	Chico	Notification #5: Inadequate odorization of gas in Line 169 at the [redacted] farm tap.	N. Valley	M&C
6	02/22/12	D	8-inch DFM	Two test locations for CPA 3278-39	Burlingame/San Carlos	Notification #6: Missed bi-monthly cathodic protection measurements at two locations on an 8" Distribution Feeder Main in San Mateo County	Peninsula	Local Eng / M&C
7	02/24/12	D	Regulator Station Inlet Valve	DFM 7212-01 MP 3.6	Kerman	Notification #7: Underrated valve installed at (new) District Regulator Station E-07, Fresno County	Fresno	M&C
8	03/12/12	D	Becker pressure relief valve	Various stations	Various	Notification #8: Inadequate venting of pressure relief devices at various station locations	Various	Station Eng
9	03/16/12	D	11 service valves Sacramento	Sacramento Division	Rancho Cordova, Sacramento County	Notification #9: Unqualified employee performing service repairs	Sacramento	Local Eng
10	03/30/12	D	Regulator Station Relief Valve	North Bay Division	Solano County Fairgrounds	Notification #10: Incorrect Relief Valve Setpoint on Gas Distribution System in Solano County	N. Bay	Local Eng
11	04/04/12	D	24 CP Area Resurveys	Central Coast Division	Various locations in Santa Cruz County	Notification #11: Missed CPA resurveys in Santa Cruz County	Central Coast	M&C
12	04/23/12	D	Various	Fresno Division	Various locations in Fresno and Kings Counties	Notification #12: Internal review findings in Fresno Division	Fresno	M&C
13	05/11/12	D	High pressure regulator	Various	Various	Notification #13: High pressure regulator sets not maintained annually	Sierra	Local Eng
14	05/18/12	D	HPR Inlet valves	Church Av DFM near Gilroy - SJ Division	Santa Clara Co. unincorporated	Notification #14: Inlet valves to 12 HPR sets off of Church Av DFM not rated for Church Av DFM MAOP	San Jose	Local Eng / M&C
15	05/25/12	D	DFM 401-01	North Bay Division	Mill Valley	Notification #15: Missed annual leak survey on distribution feeder main on school property	N. Bay	Local Eng
16	06/05/12	T	Cathodic Protection	Various - 180 Locations	Various	Notification #16: Failure to develop action plan for cathodic protection observed to be operating outside of -850mV	Various	Integrity Mgmt
17	06/11/12	D	Gas Reg Set and DFM 0602-01	Sacramento Division	Rancho Cordova and Fairfield	Notification #17: Over-pressurization events in Sacramento and Solano Counties where pressure exceeded MAOP plus 10 percent	Sacramento	Integrity Mgmt
18	06/13/12	D	Reg Station MA-HP-46	n/a	Manteca	Notification #18: Late (internal) inspection performed at district regulator station	Stockton	Integrity Mgmt
19	06/21/12	D	Reg Stations in SJ Div	3 locations in San Jose	San Jose	Notification #19: 3 district regulator station vaults >200 cf discovered with inadequate ventilation	San Jose	Integrity Mgmt
20	06/26/12	D	Leak Survey	Pentz Rd. at Campus Dr.	Chico	Notification #20: Missed Leak Survey in Butte County	North Valley	Integrity Mgmt
IP	N/A	T	Cathodic Protection	Various	Various	Design issue with cathodic protection systems in electric transmission corridors	Various	Integrity Mgmt
IP	N/A	D	DFM		Locations being investigated	Small segments of pipe tapped off lines of >60 psig not mapped	Kern	Local Engr
IP	N/A	D	HPR Relief Valve		Zamora	Inadequate Relief Valve Capacity	Sacramento	Local Engr
IP	N/A	D	Cathodic Protection &	Leak Repairs in various locations	Various	Low P/S Reads Distribution System Untimely Response	Various	Dist IMP
IP	N/A	D	Dist Service Line		Various	Pressure testing of services related to hydro testing/injection activities	Various	LNG CNG
IP	N/A	D	Dist Line/MAOP		Crows Landing	Potential Over-pressurization of Distribution System	Yosemite	Local Eng
IP	N/A	D	HPR Inlet valves		San Jose	Underrated HPR inlet valves on Diana Avenue DFM	San Jose	San Jose Gas T&R
IP	N/A		Dist Valves		Salinas/Cinnabar	Inoperable emergency valve and inoperable valve	San Jose	Dist IMP
IP	N/A	T	Reg Station		Salinas	Transmission regulator station no B inspection in 5 years	San Jose	Dist IMP
IP	N/A	D	Dist Line	[redacted]	Richmond	Discontinued Plastic Fusion Procedure and Fittings	East Bay	Work/Md

Notes: In Progress (IP) items have been raised, but not yet confirmed and/or reported

10-Jul-12

Key Compliance Commitment and Regulatory Filing Dates

#	Key filing requirement dates and RAG status (Blue if Complete)	Status
1	Gas Transmission Safety Report for Jul-Dec 2011 due March 1, 2012:	Complete
2	Gas Distribution Safety Report for Jul-Dec 2011 due March 31, 2012:	Complete
3	4 – PHMSA annual reports due March 15, 2012:	Complete
4	Annual GPRP Report Due Apr 30, 2012:	Complete
5	File San Bruno OII Testimony June 15, 2012	Complete
6	File Gas Safety Report Due June 29, 2012	Complete
7	File GRC NOI July 2, 2012	Complete
8	File Class Location OII Testimony July 23, 2012	On Target/Green
9	Gas Transmission Safety Report for Jan-Jun 2012 due Sep, 2012:	On Target/Green
10	Gas Distribution Safety Report for Jan-Jun 2012 due Sep, 2012:	On Target/Green
11	File GRC Application December 2012	On Target/Green

Results	●	YTD: Base Capital work under-running forecast; Emerging work a risk for the current forecast
Initiative Status	●	Risk prioritization initiative only beginning; Tech tools not started

I. Goal / Objective

Support the safety and reliability of our gas systems in an affordable manner for our customers. This is achieved by using technical knowledge and collaboration to coordinate and develop strategic and operating plans/budgets & forecasts, constructed through the consistent application of risk-based prioritization and governance processes.

II. Results

Assure Affordable Prices for our Customers	Month Results			YTD Results			Full Year		
	Actual	Plan	Var	Actual	Plan	Var	Forecast	Plan	Var
A. Complete All Required and Identified Units of Work	Behind	On Track	🟨	Behind	On Track	🟨	On Track	On Track	🟩
D. Work Plan									
1. Complete Baseline Multi-Year	On Track	On Track	🟩	On Track	On Track	🟩	On Track	On Track	🟩
2. Identify Financial Gaps from 2014 & Beyond Targets	On Track	On Track	🟩	On Track	On Track	🟩	On Track	On Track	🟩

Note: Financial Results compared to the April (3+9) forecast that was sanctioned on April 23rd in a Gas-specific OPC meeting.

	2012 Forecast									2013 Forecast			2014 Forecast		
	June YTD			July-Dec Forecast			Full Year Forecast			Full Year Forecast			Full Year Forecast		
	Current	3+9	Variance	Current	3+9	Variance	Current	3+9	Variance	Current	3+9	Variance	Current	3+9	Variance
Expense															
Transmission Base	$62	$59	($4)	$60	$63	$4	$122	$122	$0	$128	$128	($0)	$137	$136	($1)
Distribution Base	$154	$154	$0	$158	$158	$0	$312	$312	$0	$339	$336	($3)	$423	$365	($58)
TIMP	21	18	(3)	42	33	(9)	63	51	(12)	50	46	(4)	47	41	(6)
DIMP	12	13	2	18	15	(3)	30	29	(2)	38	37	(1)	47	45	(2)
IIC	166	183	16	195	186	(9)	362	369	7	227	241	14	216	193	(23)
Emergent				29	0	(29)	29	0	(29)	85	0	(85)	75	0	(75)
Total Expense	$416	$426	$11	$502	$456	($46)	$918	$882	($36)	$868	$788	($80)	$945	$780	($165)
Capital															
Transmission Base	$107	$119	$12	$165	$156	($9)	$271	$275	$4	$283	$287	$4	$286	$286	$0
Distribution Base	$167	$175	$8	$278	$276	($2)	$445	$451	$6	$553	$558	$5	$840	$796	($44)
PSEP	57	103	$46	347	281	(65)	404	384	(20)	505	480	(25)	521	500	(21)
GT Adders	(3)	(3)	$0	0	0	0	(3)	(3)	0	0	0	0	72	72	0
Emergent										35	0	(35)	45	0	(45)
Total Capital	$327	$393	$66	$790	$714	($76)	$1,117	$1,107	($10)	$1,376	$1,325	($51)	$1,764	$1,654	($110)
OBS - Stanpac	$1	$2	$1	$2	$3	$1	$3	$5	$2	$6	$6	$0	$3	$3	$0

III. Observations / Analysis

DISTRIBUTION

Category	Discussion of Latest Estimate (6 months actual results + 6 months forecast)	
Expense	**Point Forecast**	• **YTD:** ($0.2M) unfavorable variance. Under-runs in buildings and IT. This is due to delays in the Bishop Ranch move and GDCC. • **End of year:** 2012 (6+6) forecast in-line with approved 3+9 forecast.
	Uncertainties	• **Savings Potential:** N/A • **Downside Risk:** Leak Survey and Repair trending higher than anticipated due to higher repair rates. Isolated Steel Services requires additional units due to higher find rates that require repair.

Capex	**Point Forecast**	• **YTD:** $8M favorable variance. Driven by:
		  • $7M: Buildings due to Bishop Ranch delays
		  • $3M: IT – GDCC and Bishop Ranch delays
		  • ($2.5M): Offset by higher than planned unit cost for High Pressure Regulators.
		• **End of year:** 2012 (6+6) forecast in-line with approved 3+9 forecast.

	Uncertainties	• **Savings Potential:** Productivity for main and service replacements • **Risks:** Key risks include delays in GDCC and Bishop Ranch requiring a carry-over of capital dollars to 2013.

TRANSMISSION

Category	Discussion of Latest Estimate (6 months actual results + 6 months forecast)	
Expense	**Point Forecast**	- **Base:** No change to EOY forecast since April sanctioning meeting - **TIMP:** Requesting $12MM incremental funding to accommodate additional scope items, more digs, and higher dig costs than anticipated at April sanctioning meeting
	Uncertainties	- Preliminary estimated associated with emergent work (Centerline Survey, Encroachments, Patrols and Piggability) suggest a $29MM risk to the expense budget
Capital	**Point Forecast**	- **Base:** No change to EOY forecast since April sanctioning meeting except for a $4MM budget transfer - **PSEP:** EOY forecast $20MM higher than filing primarily due to higher pipeline replacement land, permitting, and engineering costs than anticipated. Additionally, pipe replacement construction bids are approximately 13% higher than anticipated
	Uncertainties	- Existing base portfolio of 2012 projects equal to ~$310MM, or a $40 unfavorable variance to DET. However, execution risk on 2012 projects reduces likelihood of realizing significant overrun – $22MM YTD under-run. IP working with Eng/Project Services to prioritize existing portfolio, quantify execution risk, and closely track progress on target projects. - Recent PSEP replacement bids (7/11/12) coming in significantly higher than expected – above 13% mentioned above. Execution risk associated with ramp up in activity in Q3 and Q4.

IV. Process Improvement Initiatives

Initiative Overview – Investment Planning Process		
Exec. Sponsor	[redacted]	
Process Owner	[redacted]	
Initiative Description	Planning for gas operations and improvement for 1, 5, 10+ years using standardized risk based (safety, financial, socio economic) assessment.	
Initiative Strategy	**People**	Share common appreciation for how to prioritize investment plans based on consistent risk assessment.
	Process	Investment Planning process that integrates all sources of work, ensures consistency in risk prioritization and provides governance. **A sanctioning process will be instituted to provide visibility and oversight for all capital spend and expense forecasting.** Planning horizon is at least 5 years. Plan covers expense and capital, projects and programs. Plan for a particular year is built and approved well in advance of that year and directly ties to the strategic plan. Integrated with other Processes: Overall process is such that engineering, design, permitting, long lead materials, etc are in place prior to the start of the construction season to allow those who will execute the work to have the time to properly plan.
	Technology	Modern planning tool that will enable comprehensive management of all investment projects, integrated with SAP.

Key Initiatives		
Initiative Category	**Initiative Name**	**Status**
Foundational	1. Effectiveness, Roles & Responsibility	🟥
Long Range Planning	2. Establish Integrated, Long Range Planning Process	🟩
Governance	3. Governance & Sanctioning Committee Procedure	🟩
Asset Risk Management	4. Risk-based Prioritization Procedure	🟨
Technology - Tools	5. Identify Routine Forecasting, Long Range Planning Tools	🟥

Initiative Schedule and Status		
Initiative	**1. Effectiveness, Roles and Responsibilities**	
Team Members	**Lead:** [redacted]; **Team:** [redacted] **Anne Beech,** [redacted]	
Scope	**A. Identify Roles and Responsibility for all financial analysis, accounting, planning** **B. Identify specific functional requirements and adequate staffing levels**	
Benefits (Soft)	**Ensure clear accountability, adequate staffing, effective development of plans and forecasts.**	
Costs	**None – N/A**	
Milestone	**Target Completion Date**	**Comments**
Complete Director Hiring	Completed	Both Investment Planning directors selected and in-place.
Roles & Responsibilities	April 30	First formal meeting held on April 6th to establish specific roles and responsibilities. Meeting on May 5th to start to define roles between Finance and Investment Planning. This initiative put on hold in June.
Finalize Department Staffing	July/Aug	Transmission Investment Planning staffing turnover.
Communication / Collaboration plan for all major deliverables	August 1	Establish protocol for involving initiators, planners, executors and supporting partners into overall process for delivering final plans and forecasts.

Discussion Items

Transmission Investment Planning: [redacted] all have left the group. Hiring underway to backfill existing roles.

Investment Planning currently identifying contractors to support work across the organization until permanent employees chosen for roles.

Monday meetings with [redacted] continue primarily to cover PSEP work.

Initiative Schedule and Status		
Initiative	**2. S-1/Long Range Planning Process**	
Team Members	**Lead:** [redacted] **Team:** [redacted]	
Scope	**Achieve a 10 year long range planning horizon, fully integrating asset life cycle analysis, compliance combined with a robust risk-based analysis and prioritization process.**	
Benefits	**Organizational clarity, alignment, integrated management system, direction.**	
Costs	**Analyzing consultant bid for 10-yr plan development through the 4th Quarter of 2012.**	
Milestone	**Target Completion Date**	**Comments**
RFP for consultant support	May 31	Bids received, follow-up questions answered; finalize selection end of May
PG&E S-1	June	Gas Operations S1 deadlines pushed out to July. Direct Reports continue to work on key strategy messages.
10-yr Strategic Long Range Plan Deliverable	November	Bridge Strategy Group on-boarded in mid-June to begin Long-Term Plan.

Description	Accountability	2012	2013	2014	2015	2016
Costs	[redacted]	$1.1M				
Specific Benefit, Expense Savings						

Discussion Items
Bridge Strategy on-boarded in mid-June. Initial project plan put together by team. Discussions with Gas ELT members underway. First steering committee meeting scheduled for July 2012.

Initiative Schedule and Status		
Initiative	**1. Gas Governance and Sanctioning**	
Team Members	**Lead:** [redacted]; **Team:** [redacted]	
Scope	**Formalize charter and procedures for overall gas governance and sanctioning structure for gas operations including ties to other corporate governance processes. Include requirements of risk analysis and scoring practice.**	
Benefits	**Create a standard procedure for visibility & oversight regarding major adjustments, deliverables, new projects & priorities of a certain dollar/impact threshold**	
Costs	**TBD**	
Milestone	**Target Completion Date**	**Comments**
Begin Gas Governance and Sanctioning Process	Completed	First meeting March 22nd, second meeting on April 4th. Continuing to refine process and make improvements.
Approvals for 2012(F) expense and capex increases	Completed	3+9 2012 forecast approved along with strategy for 2013-fwd
Formalize Charter & Guidelines	May/June	Draft Charter and Procedure completed. Incorporating feedback and expect to officially issue procedure in July.
Establish formats/guidelines for business cases & presentations	June	Guidelines for business cases & presentations have been included in the procedure document. Formats will be evaluated for improvements throughout 2012.

Discussion Items
Since the first draft was circulated in June, IP has been receiving feedback from end users, will incorporate feedback into the latest draft, and officially issue the documents in July.

Initiative Schedule and Status		
Initiative	**2. Risk-based Prioritization Procedure**	
Team Members	**Lead:** [redacted]; **Proposed Team:** Christine Chapman, [redacted]	
Scope	**Establish risk scoring process for ranking projects and establishing prioritization of work for gas operations. Include how the process will tie into overall governance and sanctioning of work.**	
Benefits	**One, integrated approach to analysis and prioritization of risk to enable a standard, consistent and repeatable process for developing plans and forecasts.**	
Costs	**TBD**	
Milestone	**Target Completion Date**	**Comments**
Finalize Team Members	TBD	Knowledge of Integrity Management, Risk Register and PAS 55.
Define Roles & Responsibilities	TBD	Reached out to other PG&E groups for support and consistency on prioritization model.

Discussion Items
Partnering with the Risk Management organization to identify external models / platforms that may be appropriate for Gas Operations. Holding demonstration sessions in July. Begun discussions with Utility Performance Improvement on initiatives underway for a capital allocation model.

Initiative Schedule and Status		
Initiative	**3. Planning and Forecasting Technology Tool**	
Team Members	**Lead:** [redacted]**; Proposed Team:** [redacted]	
Scope	**Identify technology tool to use in routine, monthly re-forecasting and other scenario analysis.**	
Benefits	**Integrated with / uses SAP to reduce error potential and off-line risks with spreadsheets**	
Costs	**TBD**	
Milestone	**Target Completion Date**	**Comments**
Identify Problem	Completed	Eliminate / reduce Excel based forecasting prior to SAP input, routine needs for re-prioritization between "Cycle" planning and not necessarily in-synch with other LOB & corporate calendars.
Finalize Team Members	TBD	Knowledge of SAP, PSRS, P6, PLM, scenario planning tools
Develop proposed solutions	TBD	
Develop implementation plan	TBD	

Description	**Accountability**	**2012**	**2013**	**2014**	**2015**	**2016**
Costs		TBD				
Specific Benefit, Expense Savings						

Discussion Items
There is currently a significant amount of planning work that is being conducted off-line, in spreadsheets, which only gets input into SAP at specific periods in the calendar. This means a significant level of planning decisions are made via spreadsheets and increase overall error potential. This effort will be proposed at an upcoming Process Governance Committee Meeting.

V. Supporting Information

REFERENCE – Approved 3+9 Forecast

2012 Latest Estimate (3+9) - $ Millions									
Expense	March YTD			APR-DEC Forecast			Full Year Forecast		
	Actuals	**Plan**	**Fav/ (unfav)**	**Estimate**	**Plan**	**Fav/ (unfav)**	**Estimate**	**Plan**	**Fav/ (unfav)**
Gas Distribution	70	70	(0)	238	214	(24)	308	284	(24)
Gas Transmission	28	29	1	95	90	(5)	123	119	(4)
Total Base	**98**	**99**	**1**	**333**	**304**	**(29)**	**431**	**402**	**(28)**
DIMP	7	6	(1)	22	19	(3)	29	25	(4)
TIMP	9	10	0	44	28	(16)	53	37	(16)
Total Bal Accts	**16**	**15**	**(0)**	**66**	**46**	**(20)**	**82**	**62**	**(20)**
San Bruno IIC	**30**	**23**	**(7)**	**381**	**383**	**2**	**410**	**406**	**(4)**

Capital	March YTD			APR-DEC Forecast			Full Year Forecast		
	Actuals	**Plan**	**Fav/ (unfav)**	**Estimate**	**Plan**	**Fav/ (unfav)**	**Estimate**	**Plan**	**Fav/ (unfav)**
Gas Distribution	74	87	12	386	359	(27)	460	445	(15)
Gas Transmission	46	55	10	229	219	(10)	274	274	-
Total Base	**120**	**142**	**22**	**614**	**578**	**(37)**	**734**	**719**	**(15)**
PSEP	**10**	**11**	**1**	**375**	**373**	**(1)**	**384**	**384**	**-**
GT Adders	**(0)**	**0**	**1**	**(3)**	**0**	**3**	**(3)**	**1**	**4**
Stanpac, other	**0**	**0**	**0**	**6**	**6**	**(0)**	**6**	**6**	**-**

Category	Distribution Expense
Savings	• 2012 targeted savings from 2011A with lower unit costs in leak management, meter protection, locate & mark and certain general maintenance activities. • Forecast includes lowers unit costs for meter protection, service and main repairs • Removed contribution to Corporate Advertising request
Emerging Work	• Significant unbudgeted requirements identified after transfer of Field Services: 152,000 meter seat leak backlog, 20,000 meter AC backlog, residential gas shut-off recheck backlog • Emergency, immediate response effort requires staffing to meet STIP Metric • Training curriculum development requires update after years of gaps in refreshing

Scope Refinement	**Planned headcount after** split between Gas and Electric insufficient compared to the work plan Pathfinder project (Gas Distribution Asset Management) initially budgeted only as capital. Re-classified portion of cost to expense Increased Locate & Mark ticket trending in Preventative Maintenance area Isolated Steel Service failure rates are >2% assumed Adjustments to timing for hiring and contractor spend Refined timing and scope of training curriculum forecast Refined the WRO forecast

Category	Distribution Capex
Savings Favorable	Reduced the copper service unit cost down to 2011A
Emerging Work Unfavorable impact on forecast	New state-of-the-art training center Increased fleet costs due to new employees and work Various building projects no longer funded by Corporate Real Estate (CRE) Increased tools
Scope Refinement	Preliminary placeholder in budget for Gas Distribution Control Center (GDCC), now refined scope of work Pathfinder project (Gas Distribution Asset Management) initially budgeted only capital. Re-classified portion of cost to expense based on refined analysis of scope Reduced the number of units in 2012 for High Pressure Regulators (HPR) from 1200 to 1000 Refined WRO forecast Removed double count of IT LOB Gas Funding

Category	Transmission Expense
Savings	
Emerging Work	Class Location study and control work Encroachment impacts not quantified in forecast
Scope Refinement	Hydro tests required for 2012 baseline assessment from PSEP proposed for IIC

Results	🟡	Making progress advancing pilot concept and defining roles and responsibilities
Initiative Status	🔴	Several workshops and follow-up meetings with Scheduling; high level roles and responsibilities identified – needs further discussion/detail & Director still TBH

I. Goal / Objective

Support the safety and reliability of our gas systems in an affordable manner for our customers. We do this by understanding current resource levels, then developing and implementing short and long-term strategies (including augmenting PG&E resources when necessary) to develop a balanced work and resource plan. Within the operating year, we monitor results and make adjustments in order to optimize and efficiently complete transmission and distribution work.

II. Results

Future Report

III. Observations / Analysis

1. Dispatch & Field Services

A follow-up meeting has been held to present the project scope and overall approach to Dispatch and Field Service organizations. The team will first focus on the following two main initiatives as Phase 1 of the project:

i) Emergency Response Goals – To develop a model that estimates hourly trends of incoming emergency calls, based on parameters such as seasonality and day of week, and then determines the optimal resource level to achieve the 30-minutes and 60-minutes goals for emergency response.

ii) Overall Work and Staffing Plan – To develop a monthly model that determines the overall staffing level required to complete all work types that are performed by GSRs, given that all constraints such as deadlines, maximum overtime percentage and resource requirements are met. Flexible work, such as meter changes and leak repairs, will be used to balance the monthly work load on top of the customer-driven work that must be completed in the same month. This model will have a dependency on the model described in i) to make sure that the 30-minutes and 60-minutes emergency response goals will be met with the overall staffing level.

Phase 2 of the project will include improvements such as shift pattern analysis, better scheduling of team trainings/house-keeping meetings to ensure coverage on the field and assignment of tighter customer appointment windows. These will be revisited at a later stage of the project.

The team is in the process of acquiring additional data, performing analysis of the data on hand and finalizing the detail level design (i.e., inputs/outputs, constraints, business rules, etc.) of the models.

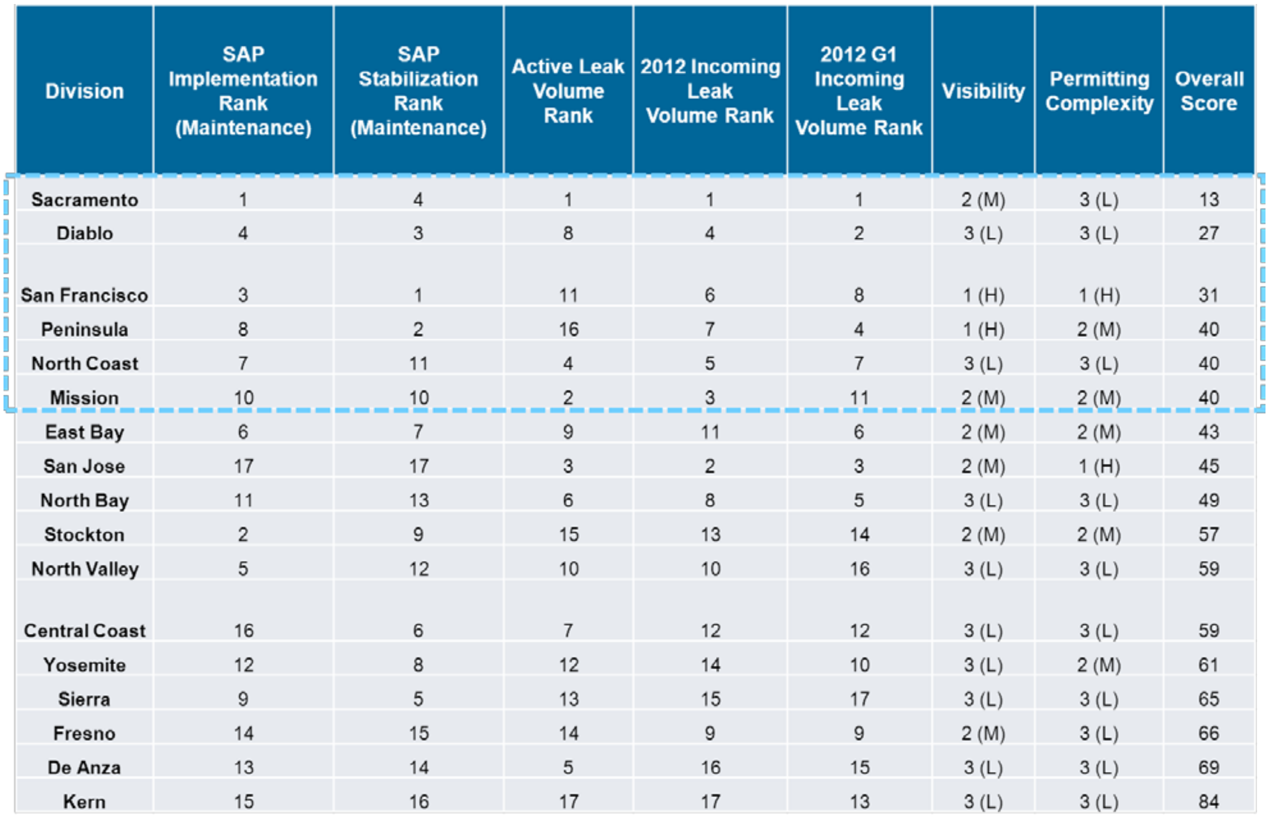
2. Resource Management Process Deep Dive and Pilot Initiatives

As the next step of the Resource Management Workshops held in May and June, the team worked on selecting the division for the Deep Dive/Pilot initiative based on readiness criteria variables, including SAP Stabilization, Leak Repair Volume, Public Visibility, Permitting Lead Time, etc.

The general scope of the Deep Dive will be:
- Study current sub-processes (e.g., estimating, permitting, scheduling, etc.)
- Analyze current issues and examine root causes
- Recommend improvement opportunities

The general scope of the Pilot will be:
- Implement process improvement initiatives
- Facilitate better data management to improve data integrity and completeness
- Simplify current operations, and remove non value-added steps and deliverables

Based on the result of a selection matrix, Sacramento was chosen and this will be discussed at the upcoming Process Governance committee meeting.



Division	SAP Implementation Rank (Maintenance)	SAP Stabilization Rank (Maintenance)	Active Leak Volume Rank	2012 Incoming Leak Volume Rank	2012 G1 Incoming Leak Volume Rank	Visibility	Permitting Complexity	Overall Score
Sacramento	1	4	1	1	1	2 (M)	3 (L)	13
Diablo	4	3	8	4	2	3 (L)	3 (L)	27
San Francisco	3	1	11	6	8	1 (H)	1 (H)	31
Peninsula	8	2	16	7	4	1 (H)	2 (M)	40
North Coast	7	11	4	5	7	3 (L)	3 (L)	40
Mission	10	10	2	3	11	2 (M)	2 (M)	40
East Bay	6	7	9	11	6	2 (M)	2 (M)	43
San Jose	17	17	3	2	3	2 (M)	1 (H)	45
North Bay	11	13	6	8	5	3 (L)	3 (L)	49
Stockton	2	9	15	13	14	2 (M)	2 (M)	57
North Valley	5	12	10	10	16	3 (L)	3 (L)	59
Central Coast	16	6	7	12	12	3 (L)	3 (L)	59
Yosemite	12	8	12	14	10	3 (L)	2 (M)	61
Sierra	9	5	13	15	17	3 (L)	3 (L)	65
Fresno	14	15	14	9	9	2 (M)	3 (L)	66
De Anza	13	14	5	16	15	3 (L)	3 (L)	69
Kern	15	16	17	17	13	3 (L)	3 (L)	84

A kick-off meeting with the Sacramento division has been scheduled at the end of July. The team is currently defining the roadmap and strategy for the Deep Dive/Pilot initiative. The overall approach would be to deep dive into the processes of certain work streams, identify and propose improvement initiatives, and finally pilot the proposed initiatives. The process improvement initiatives will focus on removing non-value added steps or deliverables, facilitating better data management and simplifying current operations.

To support the Process Deep Dive/Benchmarking and Pilot initiative described above, the team has been reaching out to professional consulting firms for additional resources. The goal is to have the consulting team help in the deep dive of the processes of current Gas Operations and providing ideas on best practices and potential process improvements.

Initial meetings have been held with of all the firms being considered, i.e., Accenture, PwC, CH2M HILL, Booz and AT Kearney. A few more follow-up discussions will be held and the bidding/decision-making process will begin shortly afterwards.

3. Coordination of Click Upgrade

The team helped coordinate an initial meeting between Gas Transmission Construction, Project Services and the Click Upgrade project team. Representatives from Click Software demonstrated the key features of the software to the teams. Initial requirements from the teams were gathered by the Click Upgrade team, but actual deployment decisions are pending until further discussions. On the Gas Distribution side, the team will assist in making sure that the current issues and limitations of the Click system are addressed in the project scope.

4. Workforce Strategy

As part of the S-2 process, the team is helping to shape the longer term workforce strategy by assessing the resource requirements based on the expense and capital forecasts for the coming years.

We have had conversations with Booz, McKinsey, Boston Consulting and have a meeting planned with PWC the week of July 16th regarding a limited engagement to analyze workforce levels. This will include field and support functional roles/responsibilities, benchmarking of best-practice staffing levels and recommending driver-based analysis for field force and support staff to better inform and guide adequate staffing levels given current and future work levels. We are anticipating going through a selection process by the end of July and a kickoff by early August. An expected timeline for the exercise is 6-10 weeks for a final report to be issued sometime in late September/early October.

IV. Process Improvement Initiatives

Initiative Overview	
Sponsor	[redacted]
Team Leads	Dir Resource Mgmt
Initiative Description	Manage in-year work plan and coordinate all resources required to execute the work plan, including but not limited to manpower (in-house and contract), materials, tools, construction season timing. Build a multi-year strategy for matching resources to work plans.

Initiative Strategy	**People –** Planned overtime and use of contract labor matches budgeted spending levels. **Process –** Resource Mgt process that builds a resource plan that supports the annual work plan. Long range resource planning allows for workforce/contracting strategies to be built. Planned replacement work is accomplished consistently and budgets are maintained. The work force is focused solely on executing the work efficiently at correct quality. Also, benchmarking seems to be an ad hoc exercise done in many different places in the organization. We will institute a coordinated benchmarking effort that provides only the level of data and information that supports understanding and identification of opportunities. **Technology –** Resource model is in place that supports planning process and scenario analysis, both long term and within year. Latest software for managing resources, mobile solution in crew trucks.

Key Initiatives		
Initiative Category	**Initiative Name**	**Status**
Foundational	1. Effectiveness, Roles & Responsibility	🟨

Initiative Schedule and Status		
Initiative	**1. Effectiveness, Roles and Responsibilities**	
Team Members	**Interim Lead: [redacted]; Team: [redacted], Bob Suehiro, [redacted], Darrell Feldman, [redacted],**	
Scope	**Identify end to end process scope and interdependencies with other processes/functional groups; map out specific responsibilities for each area, identify sources of data and systems used and proposed and develop a prioritized**	
Benefits (Soft)	**Key function identified within Gas Operations reporting to Investment Planning, that is a pure start-up. This group will provide an overall work plan that optimizes use of resources and generates savings and efficiency in work delivered toward the investment plan.**	
Costs	**Potential IT investments already under consideration and further needs remain to be determined in this process. Also, consulting costs are still being analyzed.**	
Milestone	**Target Completion Date**	**Comments**
Complete Director & Supervisor Hiring	🟥	
Roles & Responsibilities and framing discussion	🟨	Depending on other process analysis needs and potential synergies, the consulting team would also assist in defining the roadmap and the long-term strategy of the Resource Management function.

Discussion Items

1. **Identified basic roles and responsibility differences between Resource Management and Distribution Operations Scheduling**
    a. Confirmation and drill-down of more specifics to be completed in August
    b. Reach out to Transmission in August
2. **Resource Management Staffing**
    a. The Director search is ongoing.
3. **Resource Management Optimization –**
    a. New job descriptions for the permanent positions have been posted after upgrade of the recruiting system. The team is in the process of phone screening a few candidates selected out of the applicant pool. [redacted], the interim resource from the Energy Procurement team, is continuing to contribute significantly to the Dispatch Modeling project.

V. Supporting Information

Future Reports

Public Works Coordination Report - July 2012 for June Results

Results	🔴	Desired Metrics Not Available
Initiative Status	🟡	Process Improvement Steps Identified

I. Goal / Objective

Ensure work to improve gas system safety and reliability is conducted in an affordable manner with minimum disruption to the municipalities we serve. We do this by ensuring our work is planned and coordinated with municipal work.

II. Results – Proposed Format / Sample Data – No Change Since Last Report

PG&E Generated Gas Work 2012 (RDRO) Projects	Month Results			YTD Results			Plan	
	Projects	Value	Savings	Projects	Value	Savings	YDT Savings	Full Year Savings
No Synergy*	20	26	N/A	80	128	N/A	N/A	N/A
Internal Synergy – Gas	2	3	0.3	8	12	1.0	0.8	2.5
Internal Synergy – Electric	0	0	0	1	3	0.2	0.2	0.5
External Synergy	3	5	0.1	10	15	0.2	0.5	1.5
Multiple Synergies	1	3	0.2	1	3	0.2	0.2	0.5
Total	26	37	0.8	100	161	1.6	1.7	5.0

*Synergy is where two or more projects are coordinated in a manner that achieves a net savings.

Work Required by Others 2012 (RDRO) Projects	YTD Results					Plan	
	Projects	Value	Projects Reimbursed	Value Reimbursed	Estimated Savings	YTD Savings	Full Year Savings
No Synergy	8	11.2	7	5.6	N/A	N/A	N/A
Avoided via Liaison	1	1.6	N/A	N/A	1.6	0.7	2.0
Synergy with Gas Work	1	1.5	1	0.7	0.9	1.0	3.0
Total	10	14.3	8	6.3	2.5	1.7	5.0

2012 Public Works Liaison Activities	Monthly		YTD		Full Year	
	Actual	Plan	Actual	Plan	Forecast	Plan
Initial Contacts	15	80	60	320	500	500
Critical Contacts**	0	10	0	20	100	100
All Contacts	30	200	450	800	1000	2000

** Critical contact involves a comprehensive exchange of planned PG&E and municipal work within the municipal boundaries.

III. Observations / Analysis

- Government Relations continues to provide advance support and liaison for gas projects/programs such as Aldyl A and PSEP.

- The team discussed concerns about high permitting costs, long permitting lead times and excessive street restoration requirements. We will ask gas liaisons to scope the issue by identifying what the specific problems are and where they exist. This will enable development of an appropriate response. A key step in this process will involve educating gas liaisons on franchise rules and requirements as they relate to permitting.
- Working with Customer Care's consultants from McKinsey & Co. to identify links between our Public Works Coordination efforts and Customer Care's public outreach initiative. Our gas liaisons will likely become a source of information for project related heat maps. We also envision our gas liaisons having a seat at the table and spot on the agenda at division leadership team meetings.

Public Works Coordination Report - July 2012 for June Results

IV. Process Improvement Initiatives

Initiative Overview – Public Works Coordination Process		
Exec. Sponsor	**Jane Yura**	
Process Owner	[redacted]	
Description	The process of coordinating work on the gas system with municipal construction activity.	
Initiative Strategy	**People**	• Public works liaison responsibilities assigned for each municipality. • Roles and expectations for liaison and work coordination clearly defined and broadly understood.
	Process	• Standard process utilized systemwide for coordination of gas work with municipalities. • Joint project planning and long forecasting done with public works – incorporated into multi-year asset investment plan. • Process ensures early communication (at least 6 – 12 months in advance) of PG&E work to municipalities and early assessment (at least 6 – 12 months in advance) of planned municipal work for integration into PG&E work plans.
	Technology	• Relationship management tool in place to identify PG&E and municipal coordinators, to document coordination activities, and to enable tracking and reporting of leading metrics. • Capability to track and report lagging metrics (synergies and savings) built into project management tools. • Capability to identify, describe and map all planned gas work within a municipality for public works coordination built into project management / investment planning / mapping tools.

Key Initiatives

Initiative Category	Initiative Name	Status
Foundational	1. Roles & Responsibilities	🟩
Foundational	2. Relationship Management Tool	🟩
Foundational	3. Standard Process	🟩
Long Range Planning	4. Survey of Municipal Public Works Departments	🟩
Governance	5. Enable Lagging Indicators	🟥
Technology & Tools	6. Process Improvements	🟨

Public Works Coordination Report - July 2012 for June Results

Initiative Schedule and Status

Initiative	**1. Roles and Responsibilities**	
Team Members	[redacted], **Jonathan Little (Gas Distribution)**, [redacted]	
Scope	**A. Identify all municipalities where we work** **B. Clearly define roles and expectations for liaison and work coordination** **C. Assign liaison responsibilities for each municipality** **D. Develop and implement communication plan for balance of organization**	
Benefits (Soft)	**Ensure all municipalities are covered and responsibilities for liaison and work coordination are clear**	
Costs	**None – N/A**	
Milestone	**Target Completion Date**	**Comments**
Identify Municipalities	**May**	Complete. Governmental Relations has provided a list of cities and counties along with contact names, addresses, email, and phone numbers for city managers and public works directors. This enables assignment of gas liaisons.
Roles & Responsibilities	**June 30**	The second draft of the roles and responsibilities document was reviewed by the team. Additional process definition has been developed and an initial roll out is planned for mid July to a core group of gas liaisons.
Assign Coordinators	**June 30**	Complete, however vacancies and rotational assignments will impact implementation in some locations.
Implement Communication Plan	July 31	Plan development not started.

Discussion Items

This initiative was approved as an "Idea Ready to Tackle" by the Process Governance Committee on May 15, 2012.

Success and governance will be impacted by development of Relationship Management tool.

Public Works Coordination Report - July 2012 for June Results

Initiative Schedule and Status

Initiative	**2. Relationship Management Tool**	
Team Members	[redacted]), Jonathan Little (Gas Distribution), [redacted]	
Scope	Identify and implement a relationship management tool for public works coordination efforts and for public safety and emergency preparedness outreach efforts.	
Benefits	Helps avoid duplicative efforts and drives standardization by providing a common platform to document and manage our coordination activities, including development and tracking of metrics. Provides visibility and documentation of communication and coordination activities as a valuable resource for anyone dealing with a particular municipality.	
Costs	TBD	
Milestone	**Target Completion Date**	**Comments**
Identify Solutions	June 30	[redacted] is scoping user requirements and software alternatives.
Requirements Scoped and Tool Selected	Aug 30	
Communication and Change Management Plans Developed	Sept 30	
Training/Workshops Conducted for Key Users	Nov 30	
Training/Workshops Conducted for Secondary Users	Feb 2013	

Discussion Items

This initiative was approved as an "Idea Ready to Tackle" by the Process Governance Committee on May 15, 2012.

[redacted] and [redacted] are supporting this initiative. [redacted] is working with Joel Dickson (Emergency Preparedness), [redacted] and [redacted] to scope user requirements.

Initiative Schedule and Status

Sponsor: Jane Yura;
Owner: [redacted];

Public Works Coordination Report - July 2012 for June Results

Initiative	**3. Standard Process**	
Team Members	[redacted] **Jonathan Little (Gas Distribution),** [redacted]	
Scope	**Develop and implement a standard process to identify gas reconstruction plans and municipal plans and ensure that work is coordinated.**	
Benefits	**Saves money, improves relationships with municipalities, and reduces impact of PG&E work on customers.**	
Costs	**Under $50K.**	
Milestone	**Target Completion Date**	**Comments**
Process Development Approaches Identified and Alternative Selected	June 30	Draft process complete, working with existing technology. Will require division engineers to use spreadsheets until P6 or GIS enhancements enable a better method.
Process Governance Committee Approval Obtained if Required by Selected Approach	July 31	Proposed process should not require sanctioning approval.
Process Developed	Sept 30	Draft process complete.
Process Implemented	Oct 30	On track.

Discussion Items

An approach is required to identify and prepare PG&E work for presentation and discussion. It likely will require establishing regular meetings between gas liaisons and program managers and between gas liaisons from distribution and transmission.
An approach is required to gather municipal work for planning and coordination. Since plans impact gas and electric, we will need to collaborate in the process development.

Public Works Coordination Report - July 2012 for June Results

Initiative Schedule and Status

Initiative	**4. Survey Municipal Public Works Departments**	
Team Members	[redacted] [redacted], Jonathan Little (Gas Distribution), [redacted] [redacted]	
Scope	**Develop and conduct a baseline and annual survey of municipal public works departments to identify improvement opportunities.**	
Benefits	**Provides direction for future improvement initiatives and tracks relationships.**	
Costs	**Under $50K.**	
Milestone	**Target Completion Date**	**Comments**
Develop Survey	🟥 **June 30**	Consultant has been identified but survey tool has not yet been developed.
Conduct Survey	🟩 **Sep 17**	Target date changed based on city/county worker vacations and availability. (Previously Aug 31)
Analyze and Share Results	🟩 **Oct 31**	Target date changed based on city/county worker vacations and availability. (Previously Sept 31).
Develop and implement Improvement Initiatives		Completion date is not applicable until results are analyzed.

Discussion Items

This initiative was approved as an "Idea Ready to Tackle" by the Process Governance Committee on May 15, 2012.

Public Works Coordination Report - July 2012 for June Results

Initiative Schedule and Status		
Initiative	**5. Enable Lagging Indicators**	
Team Members	[redacted], **Jonathan Little (Gas Distribution),** [redacted]	
Scope	**A. Identify and implement changes to existing project management tools to enable tracking of projects with synergies and associated cost savings.** **B. Develop communication plan and provide training for all project managers.**	
Benefits	**Provides a metric for public works and internal project coordination efforts.**	
Costs	**TBD**	
Milestone	**Target Completion Date**	**Comments**
Identify required changes for all project management systems	**May 31**	Complete. [redacted] and [redacted] developed a short specification required to get a cost and time estimate for proposed SAP modifications. The modifications involve the addition of three fields to the Z-Order screen requiring the job owner to select whether there was synergy, the type of synergy, and estimated cost savings to the project as a result of the synergy. The specification has been sent to [redacted].
Obtain governance approval	**June 30**	No progress since last month, but estimated cost of implementation has been revised downward from the $500-$750K range to $50-100K range. Updates to SAP are released once each quarter. The next SAP rollout date is September 21, followed by December 12. This means the earliest we can start reporting on synergy metrics is November.
Roll-out changes to SAP	**Sept 21**	Requires sponsorship.
Develop and implement communication plan, including providing training to project managers.	**Sept 21**	Milestone date changed based on SAP change rollout schedule. Previous target was July 31.
Metrics available	**Nov 30**	Milestone date changed based on SAP change rollout schedule. Previously target was stated as August.
Discussion Items		
This initiative has not been presented to the Process Governance Committee.		

Sponsor: Jane Yura;
Owner: [redacted];

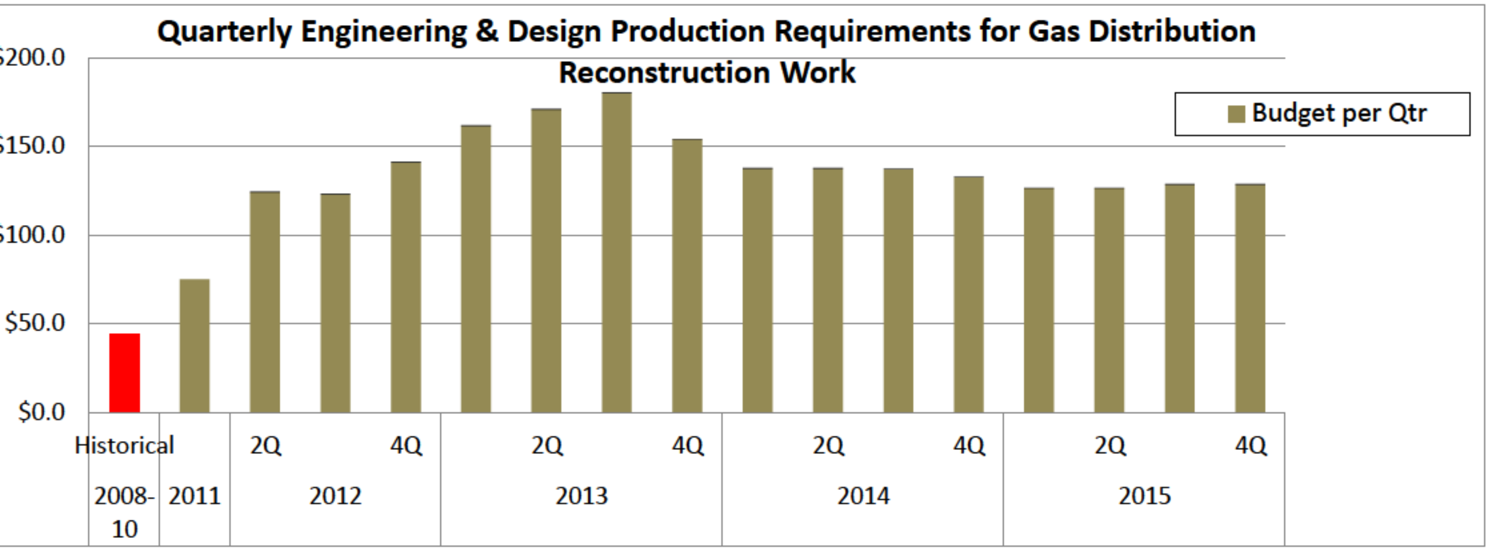
Public Works Coordination Report - July 2012 for June Results

Initiative Schedule and Status		
Initiative	**6. Effectiveness – Ability to Compile/Present Comprehensive Gas Work Plan**	
Team Members	[redacted] [redacted], Jonathan Little (Gas Distribution), [redacted]	
Scope	• Collaborate with Project Management Process team to ensure Public Works Coordination's unique needs are considered when implementing Primavera P6. For example, effective public works coordination will require capability to identify, describe and map all planned gas work within a municipality. It will be necessary to identify all projects by city and county. • Investigate methods (process and tools) to simplify mapping of project information so that planned gas work can be provided to municipalities in map format and develop proposed solutions and planned municipal work can be evaluated for project opportunities.	
Benefits	**Provides a consistent method to identify and consolidate planned work for internal coordination purposes and to enable meaningful coordination efforts with municipalities.**	
Costs	**TBD**	
Milestone	**Target Completion Date**	**Comments**
Consult with Project Management Process owner regarding P6 development.	🟩 On Track	[redacted] has been consulted and understands the dependencies. Further consultation will be required.
Consult Asset Knowledge Management regarding potential project mapping solutions.	🟥 TBD	Initial discussions indicate this will require a more focused effort to understand feasibility.
Process developed for mapping planned gas work by municipality.	🟥 TBD	Milestone has been modified.
Process developed for mapping planned municipal work and moratoriums for project coordination purposes.	🟥 TBD	New milestone.
Discussion Items		
This initiative has not been presented to the Process Governance Committee.		

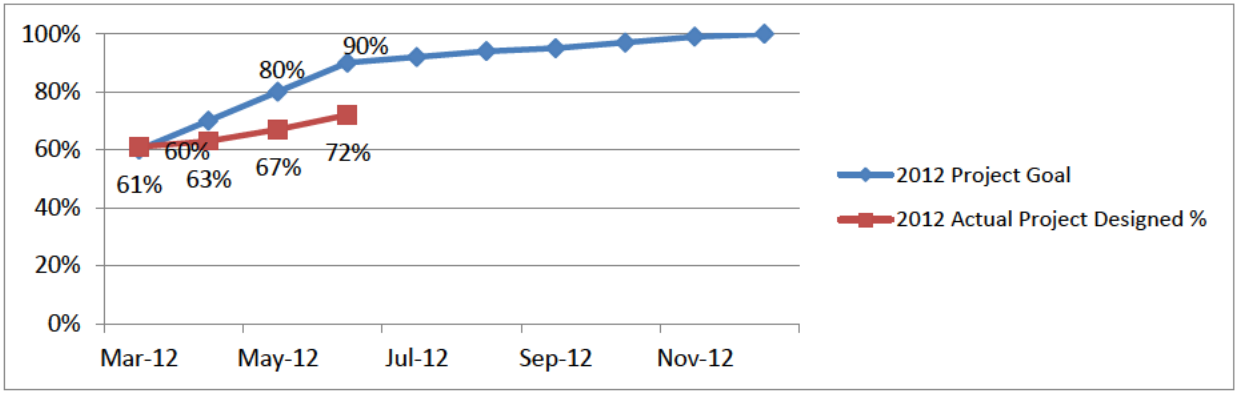
V. Supporting Information

A supporting process for Public Works Coordination is development of long term work plans to enable early identification of work. As our processes and resources mature to enable early identification of work, we will improve our ability to execute and coordinate work.

Showing the volume of gas distribution reconstruction work that must be designed each quarter, the following graph illustrates the ramp up in resources and/or process improvements required to enable advance design completion of 80% of 2014 work by Q3 of 2013. Advance design completion enables affordable execution.



The following graph shows recent progress of design completion for planned 2012 reconstruction work based on the number of jobs. 671 of 936 planned jobs, representing a budget allocation of roughly $230 MM have been designed. The remaining 265 projects represent a budget allocation of approximately $80 MM.



Leak Management Report – July 2012 for June Results

Results	🟡	Leak Management Overall Performance
Initiative Status	🟢	Grade 2 leak repair
Initiative Status	🔴	Distribution and Transmission Leak Survey

I. Goal / Objective

Improve public safety by timely leak surveying of gas assets and the reduction of all backlogged gradable and non-gradable leaks. The latter may be accomplished by:

- Repairing grade 2 leaks within 12 months
- Repair / recheck grade 3 rechecks within 15 months, instead of 60 months
- Repair 100% of grade 2 leaks found before January 1, 2012 by October 31, 2012
- Repair all gas meter set leaks according to plan
- Repair above ground grade 2 & 3 rechecks on or before first recheck date

II. Results

Assures Public Safety for our Customers	Month Results			YTD Results			Full Year		
	Actual	Plan	Var	Actual	Plan	Var	Forecast	Plan	Var
Grade 2 leak repair STIP	On Track	On Track	🟩	On Track	On Track	🟩	On Track	On Track	🟩
Leak Repairs Main	On Track	On Track	🟩	On Track	On Track	🟩	On Track	On Track	🟩
Leak Repairs Services	On Track	On Track	🟩	On Track	On Track	🟩	On Track	On Track	🟩
Meter Set Repairs	Behind	On Track	🟩	Behind	On Track	🟩	On Track	On Track	🟩
Distribution Survey	Behind	On Track	🟥	Behind	On Track	🟥	On Track	On Track	🟩
Transmission Survey	Behind	On Track	🟥	Behind	On Track	🟥	On Track	On Track	🟩

Leak Management Report – July 2012 for June Results

Leak Management Statistics

2012 Volume & Cost													
	Unit Volume- YTD			Unit Cost In Dollars- YTD			Total Cost In Millions-YTD			End Of Year Projection			Dollars in Millions
Work Type	**Actuals**	**Plan**	**Change**	**Actuals**	**Plan**	**Change**	**Actual**	**Plan**	**Change**	**Units**	**Unit Cost**	**Total Cost (in Millions $)**	**2012 Budget**
Leak Repair													
Leak Repairs, Main	1,829	1,373	456	$4,285	$5,884	-$1,599	$12.0	$7.8	$4.1	2,399	$6,543.0	$15.7	$14.1
Leak Repairs, Service BG	3,867	3,535	332	$2,872	$2,880	-$8	$11.1	$10.0	$1.1	4,908	$2,872.0	$14.1	$14.1
Leak Repairs, Service AG	12,843	7,774	5,069	$925	$564	$360	$6.2	$11.9	-$5.7	18,598	$481.0	$8.9	$10.5
Leak Repairs, Service	16,710	11,309	5,401	3,797	3,444	$352	$17.3	$21.9	-$4.6	23,506	$3,353.0	$23.0	$24.6
Meter Set													
Meter Set Repairs - 4180	53,546	46,800	6,746	$97.25	$113	-$15	$5.2	$5.3	-$0.1	78,000	$102.5	$7.8	$8.5
Leak Survey													
Distribution Survey	289,127	477,385	-188,258	$24	$15	$9	$7.6	$6.9	$0.7	889,180	$26.4	$23.5	$13.6
Transmission Survey	760	1,565	-805	$1,283	$626	$657	$0.9	$1.0	-$0.0	3,618	$1,225.5	$4.4	$2.3

At or ahead of plan
Less than 5% of plan
Greater than 5% of plan

Unit volume figures - SAP/BW UC010 report
Unit cost figures - Calculated between volume and cost
Total cost figures - SAP/BW ORD 225 report

Units of Measure

Work Type	Units
Leak Repairs, Main	# of Repairs
Leak Repairs, Service	# of Repairs
Leak Survey Meter Repair	# of Repairs
Distribution Survey	Services Surveyed
Transmission Survey	Miles Surveyed

III. Observations / Analysis

- Leak Repair Main volumes have exceeded planned volumes by 456 units. Service repair volumes significantly exceeded the planned volumes by 5,401 units.
- Leak Repair Main unit cost is below the plan by $1,599. Service Repair unit cost is $352 above the plan.
- YTD Total Costs for Leak Repair Main are over the plan by $4.1m and YTD Total Costs for Leak Repair Service are over the plan by $4.6m.
- EOY leak repair (main) projection is over the 2012 budget by $1.6m. EOY leak repair (service) projection is under the 2012 budget by $1.6m.
- Meter Set Repairs are above plan by 6,746 units. Unit cost is below the plan by $15.
- Distribution gas leak survey is behind plan by 188,258 services.
- Transmission gas leak survey is behind plan by 805 miles.

Key Accomplishments:

- 456 main repairs completed above the plan.
- 5,401 service repairs completed above the plan. Unit cost is $352 above plan.
- 6,746 meter set repairs completed above the plan.
- Developed report that tracks duration from Division survey map completion to update in SharePoint.

Opportunities/Challenges:

- Distribution gas leak survey is running behind plan due to four factors:
    - (i) Slow start attributed to leak surveyor vacancies, new surveyors being trained and operator qualified, and some rain days. (ii) Inaccurate unit reporting. (iii) Unavailability of contractor leak surveyors. (iv) Productivity Factors…including duplication of efforts on Samsung Tablet – due to dual maintenance of paper legacy system and electronic recording system.
- Overall for all metrics, unit counting in SAP must be trued up with actual work completed.

Leak Management Report – July 2012 for June Results

Leak Repair – Open Leak Backlog

	Beginning Backlog	Leaks Added June	Leaks Removed June	Current Month Net Change	Ending Backlog June 30
Grade 2+	577	363	335	28	605
Grade 2	4,119	742	387	355	4,474
Grade 3	41,615	1,439	1,683	-244	41,371
Transmission	76	12	9	3	79
Meter Set	114,725	3,452	9,601	-6,149	108,576
Total	161,112	6,008	12,015	-6,007	155,105

Transmission and grade 2+, 2, and 3 leak data come from IGIS.

Meter Set Repairs data comes from Rich Yamaguchi.

🟩 Backlog Reduced
🟥 Backlog Increased

Observations:

- Grade 2+ and 2 open leaks increased by 28 and 355 respectively. Grade 3 leak backlog reduced by 244.
- Transmission open leaks have slightly decreased by 3, making the total backlog to 79.
- Repairing above ground grade 3 leaks and meter set leaks helped to significantly reduce the overall open gradable and non-gradable leaks.
- In June, 3,452 additional meter set gas leaks were entered into the AMP system.

Key Accomplishments:

- Since January 1, 2012, 72,085 gradable/nongradable leaks have been repaired – of which 18,539 are gradable leaks and 53,546 are meter set leaks. This is a significant reduction given that gas operations began the year with 227,190 leaks on the books.
- Grade 3 open leak backlog continues to trend down with 41,371 leaks in the backlog from 41,615.
- Meter Set Leaks reduced significantly from 114,725 to 108,576.
- Overall graded and non-graded open leaks decreased to 155,105.
- In June, 12,015 leaks were repaired and 6,008 new leaks were found.

Opportunities/Challenges:

- Graded leaks increased from 46,387 to 46, 529(an increase of 142 leaks).
- Transmission leak backlog increased from 76 to 79.
- Grade 3 open leaks are 41,371. Repairing the above ground recheck will help in bringing the backlog down.
- Require development of strategic plan to reduce grade 2 leaks towards goal of equal to, or less than, 500 open grade 2 leaks by December 31, 2013. Current open grade 2 leaks are 4,474.

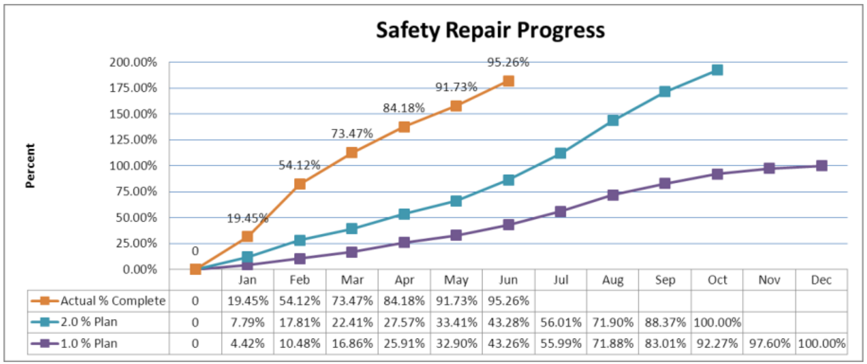
Leak Management Report – July 2012 for June Results

Safety Repair Progress

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
1.0 Plan	322	441	465	659	509	754	927	1,157	811	674	388	175	7,282
2.0 Plan	378	497	521	715	565	810	983	1,213	867	730	0	0	7,282
Actual Grade 2 Leaks Repaired	1,416	2,525	1,409	780	550	257							6,937

2.0 Plan % Complete	5%	12%	19%	29%	37%	48%	61%	78%	90%	100%	100%	100%	95%
Cumulative % Complete	🟩 19%	🟩 54%	🟩 73%	🟩 84%	🟩 92%	🟩 95%							

🟩 At or ahead of 2.0 Plan
🟨 Less that 5% behind 2.0 Plan
🟥 Greater than 5% behind 2.0 Plan



Observations:

- Safety Repair Progress is at 95% completion as compared to 48% projected goal.
- There are just 345 grade 2 leaks to be repaired for the remainder of the year.
- 6,937 out of 7,282 grade 2 leaks have been completed through the end of June.

Key Accomplishments:

- Leak repair crews have far outpaced the goals by completing 95% of target population – vs. plan of 48% leak.
- Actual repairs have consistently been above target resulting in meeting and exceeding 1st and 2nd quarter goals.

Opportunities/Challenges:

- Warm months will be challenging as more surveys are completed, additional rechecks and/or repair work will be required in addition to New Business and Gas Corrective Maintenance work.
- Grade 2 Leaks that were downgraded early in the year must be repaired or zeroed out to be removed from the 7,282 beginning total.

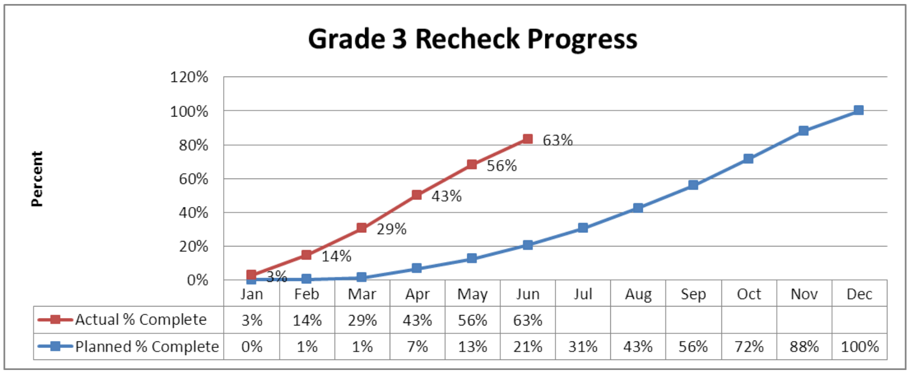
Leak Management Report – July 2012 for June Results

Grade 3 Leak Recheck Progress

		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Planned Grade 3 Recheck Volume		30	52	153	891	938	1,319	1,622	1,935	2,158	2,590	2,670	1,937	16,295
Actual Grade 3 Recheck Volume		444	1,908	2,414	2,307	1,976	1,153							10,202

Planned % Complete	0	0%	1%	1%	7%	13%	21%	31%	43%	56%	72%	88%	100%	63%
Actual % Complete	0	3%	14%	29%	43%	56%	63%							

🟩 At or ahead of schedule
🟨 Less that 5% behind schedule
🟥 Greater than 5% behind Schedule



Observations:

- Grades 3 recheck progress is 63% completed in comparison to 21% planned.
- 1,153 grade 3 rechecks were completed in comparison to 1,319 planned for the month of June.
- Increased focus of lowering backlog for public safety has caused the grade 3 rechecks / repairs to accelerate above plan.

Accomplishments:

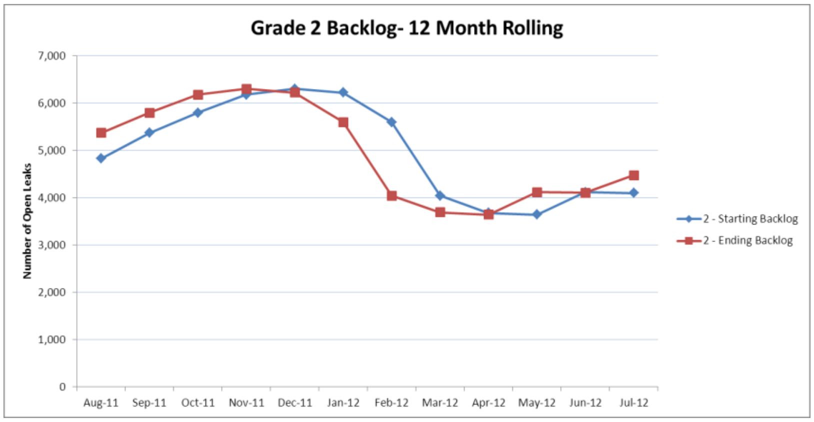
- YTD 10,202 grade 3 rechecks have been completed out of 16,295 planned.

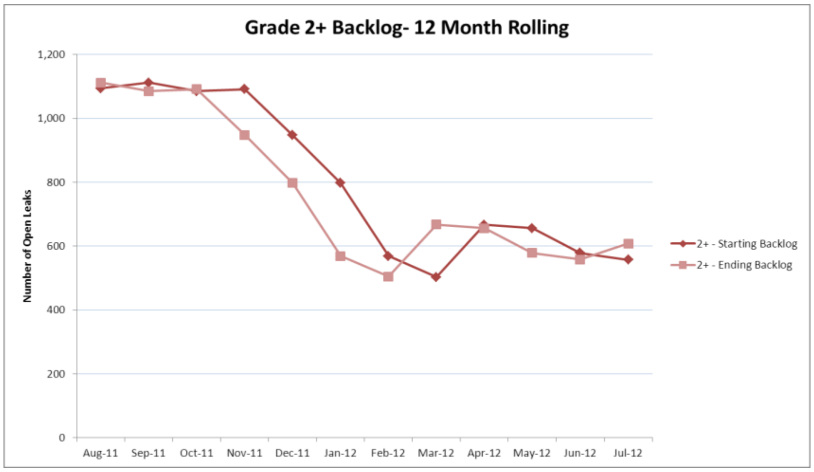
Opportunities/Challenges:

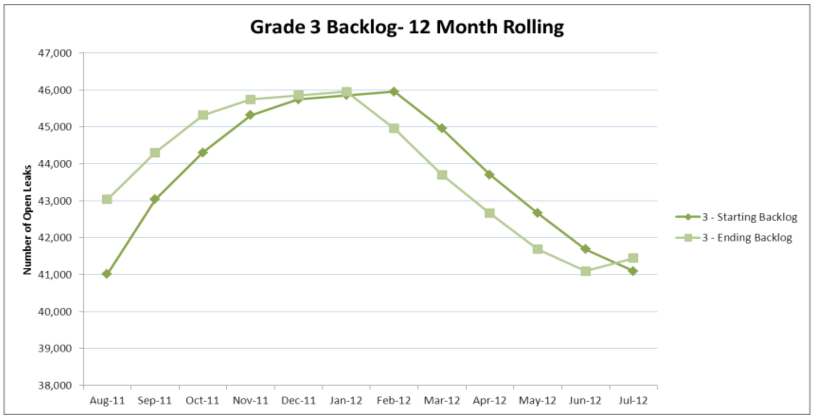
- None at this time – we are ahead of schedule.

IV. Supporting Information

12 Month Rolling Backlog Graphs:







Leak Management Report – July 2012 for June Results

Leak Survey Backlog

	Beginning Units Behind/(Ahead) of Plan	Units Planned in June	Units Completed in June	Current Month Net Change	Ending Units Behind/(Ahead)	YTD Plan Volume	YTD Actual Volume
Distribution (Sharepoint)	108,846	110,186	92,856	17,330	126,176	505,774	379,598
Transmission (Sharepoint)	938.59	11.78	178.19	-166.41	772.18	3,902.98	3,130.80

Observations:

- Per SharePoint Data, Distribution and Transmission survey is behind by 126,176 services and 772 miles, respectively.
- Per SharePoint Data, 92,856 services were completed and 178 miles were surveyed in the month of June.
- In comparison to the last month of (153,568 services and 374 miles), Distribution Survey is behind the plan by 17,330 units while Transmission is ahead of the plan by 166 miles respectively -- showing an exponential increase in productivity.

Key Accomplishments:

- Continue to work Catch-Up Plan to allow for all Distribution and Transmission Leak Survey to be in accordance with 2012 Leak Survey Plan by July 31, 2012. (*Refer to Sample on Pg. 8*)
    - Developed and implemented GT/GD Comparative Analysis Report which captures the time it takes the SharePoint to be updated vs. when the map was completed.
- Weekly calls with Superintendent and Leak Survey Supervisor to maintain frequent and accurate progress checks coupled with immediate resolution where necessary.
- Samsung Tablet enhancements deployed.
    - Low productivity field locations are proactively identified and being visited to improve their adoption of the tools and increase productivity.
    - Continual monitor progress and collect feedback from field.
- Front End Report is complete and each Mapping Office will receive hands on training from LS Team – scheduled to begin July.
- New validation process being created between LS Team and Mapping for SharePoint Plans.
    - Inclusion of 0 Service/0 Feet Plats as part of schedule (finalization in process per Lean Six Sigma).
    - Scheduling SharePoint plan checks on an annual basis.
    - Creating formula/codes in Excel to prohibit erroneous date data entry (e.g. future dates).
- Aerial Inaccessible Surveys
    - (Gas identified in May): Aerial vendor not flying 9.7% of Inaccessible Survey Scope due to, 1) Restricted Air Space; 2) Aerial Vendor error not flying requested lines; 3) GIS error resulting in Shape Files never created for Aerial Vendor to fly.
    - (Gaps addressed in June).
        - Solution 1) Picked up all missed Inaccessible this month with PSEP Aerial Survey.
        - Solution 2) Clearly identify scope and deliverables for Aerial Vendor and GIS Team so that all Shape Files are created correctly and all survey is covered on time. (i.e., 1yr only – no HCA, 6mo, 5yr, or DFMs).
        - Solution 3) Encourage both the Field and LS Team to frequently check the SharePoint for Aerial Inaccessible Signoff Sheets.

    - Solution 4) Put field confirmation as a mandatory requirement for the LS Team for every phase of the Aerial Inaccessible Survey – from requested plats/lines to completion with Signoffs.
    - Solution 5) Generate a Work Procedure to supplement Aerial Inaccessible locations. (Pending)

Opportunities/Challenges:

- Meeting the 7/31 Catch Up plan for Distribution Survey will be challenging due to a limited number of internal and external resources (only 30% passed operator qualification testing with initial group)
- The number one reason leak survey is behind plan is the limited number of internal and external resources, high turnover rate to other duties, resource sharing (e.g. rechecks, locate & mark, repair pinpointing)
  - Solution 1) Hire a small Team of 24 Contractors to help routine leak survey. Limit small number per Region to avoid "blitz effect." These contractors will be trained at the academy and equipped with the Samsung Tablets. (Distribution Only).
  - Solution 2) Create more Leak Survey Courses at Academy.
  - Solution 3) Encourage efficient borrowing from Divisions which are on/ahead of Plan on a Regional level.
  - Solution 4) Promote Surveyors to take trucks home and to begin surveying as early morning.
  - Solution 5) Work overtime strategically.

Leak Management Report – July 2012 for June Results

2012 Leak Survey Catch Up Plan

										Weekly Target (in Svcs)			
Division	FTE[1]	Minimum Productivity Requirement (in Svcs)[2]	Minimum Svcs Capability per week	Needed Svcs Capability per week	Needed FTE at Minimum Productivity	FTE Difference	YTD Service Completed (EzTech)[3]	YTD Service Completed (SharePoint)[4]	YTD Planned[5]	5/20/2012 (Planned)	5/20/2012 (Actual SharePoint)	5/20/2012 (Actual EzTech)	Σ
Bay Area Region	26	44	8,873	8,090	22.4	3.6	41,740	58,166	77,589	8,090	0	0	88,989
San Francisco	4	14.5	1,885	2,870	6.1	(2.1)	14,787	28,162	28,909	2,870			31,575
Diablo	9	10.5	3,071	1,566	4.6	4.4	14,113	14,905	15,877	1,566			17,221
East Bay	5	10.5	1,706	2,159	6.3	(1.3)	9,045	11,232	20,368	2,159			23,744
North Bay	8	8.5	2,210	1,495	5.4	2.6	3,795	3,867	12,436	1,495			16,449
Central Coast Region	28	50	7,053	8,720	27.0	(7.0)	59,307	65,540	111,788	11,318	0	0	124,498
Central Coast	6	9.0	1,755	1,662	5.7	0.3	7,952	9,064	14,804	1,662			18,286
De Anza	2	10.0	650	1,799	5.5	(3.5)	7,966	5,932	9,568	1,799			19,790
Mission	8	10.0	2,600	2,844	8.7	(0.7)	17,892	21,194	36,862	2,844			31,281
Peninsula	6	10.5	2,048	2,415	7.1	(1.1)	17,132	17,431	26,926	2,415			26,562
San Jose	6	10.0	1,950	2,598	8.0	(2.0)	8,365	11,919	23,629	2,598			28,579
Central Valley Region	24	44	8,466	6,134	17.3	6.7	44,503	38,860	63,270	6,134	0	0	67,470
Fresno	7	10.0	2,275	1,915	5.9	1.1	11,052	10,959	16,897	1,915			21,060
Kern	8	10.5	2,730	1,043	3.1	4.9	6,032	3,988	9,801	1,043			11,471
Stockton	3	11.5	1,121	1,427	3.8	(0.8)	14,023	13,762	16,552	1,427			15,699
Yosemite	6	12.0	2,340	1,749	4.5	1.5	13,396	10,151	20,020	1,749			19,240
Northern Region	35	51	9,750	9,330	27.4	7.6	48,610	39,108	87,971	10,835	0	0	119,181
North Valley	7	10.0	2,275	1,650	5.1	1.9	3,191	8,071	15,358	1,650			18,151
Humboldt	6	10.0	1,950	791	2.4	3.6	1,312	1,600	5,601	791			8,703
Sacramento	12	10.5	4,095	4,901	14.4	(2.4)	29,743	20,206	43,853	4,901			53,914
Sierra	4	11.0	1,430	1,987	5.6	(1.6)	11,674	5,605	14,806	1,987			21,857
Sonoma	6	9.5	1,853	1,505	4.9	1.1	2,690	3,626	8,354	1,505			16,556
Total System	113	189	34,141	32,273	94	18.9	194,160	201,674	340,617	36,376	0	0	400,138

Sponsor: Kevin Knapp

Owner: [redacted]

PG&E

Leak Management Report – July 2012 for June Results

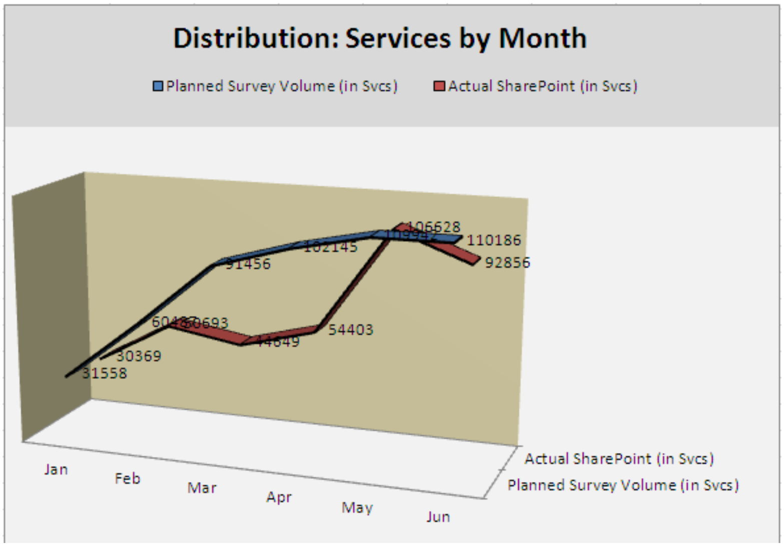
Distribution Survey Progress

Scheduled Months	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	YTD % Plan Complete
Planned Survey Volume (in Svcs)	31558	60487	91456	102145	109942	110186	99,324	85,291	69,831	60,439	22,700	844	505,774
Actual SharePoint (in Svcs)	30369	50693	44649	54403	106628	92856							379,598
Planned % Complete	96%	84%	49%	53%	97%	84%							76%

🟥 Below 75%

🟩 Greater than or Equal to 75%

Distribution Survey Graph



Observations:

- Since the inception of the Catch-Up Plan (5/25), Distribution has improved from 59% to 76% YTD, and is showing an exponential increase in progress.

Opportunities/Challenges:

- Scheduled survey increases in the summer months therefore the risk of limited resources is compounded.
- Lean Six Sigma Leak Survey Plan Restack which will move a significant number of services earlier into the year with peak quantities in the summer months.
    - Significant number of additional Public Assemblies (PA) being added due to new process which compares vendor list to Field data -- if no data is maintained by Field or if there are PAs not currently captured in survey, will have to be added.

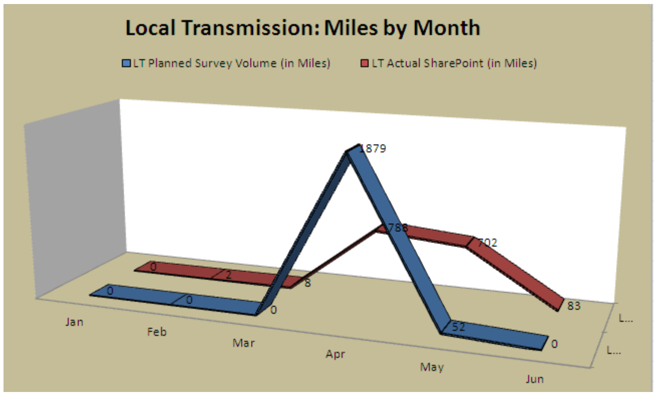
Leak Management Report – July 2012 for June Results

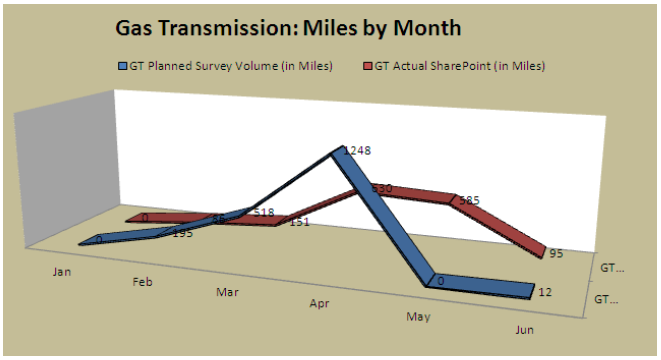
Transmission Survey Progress

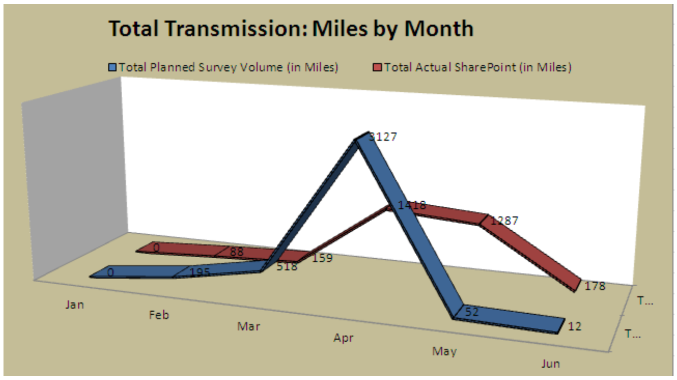
Scheduled Months	Jan	Feb	Mar	Apr	May	Jun	YTD % Plan Complete
LT Planned Survey Volume (in Miles)	0	0	0	1879	52	0	1930
LT Actual SharePoint (in Miles)	0	2	8	788	702	83	1583
LT Planned % Complete	0%	0%	0%	42%	1358%	0%	82%
GT Planned Survey Volume (in Miles)	0	195	518	1248	0	12	1973
GT Actual SharePoint (in Miles)	0	86	151	630	585	95	1548
GT Planned % Complete	0%	44%	29%	50%	0%	806%	78%
Total Planned Survey Volume (in Miles)	0	195	518	3127	52	12	3903
Total Actual SharePoint (in Miles)	0	88	159	1418	1287	178	3131
Total Planned % Complete	0%	45%	31%	45%	2490%	1513%	80%

🟥 Below 75%
🟩 Greater than or Equal to 75%

Transmission Survey Graph







Sponsor: Kevin Knapp
Owner: [redacted]

Leak Management Report – July 2012 for June Results

Observations:

- Since the inception of the Catch-Up Plan (5/30), Transmission has improved from 49% to 80% YTD, and is showing an increase in progress.
- Through the Weekly Leak Survey Calls, and direct communication with Mapping, clarified process flow and electronic documentation process.

Opportunities/Challenges:

- Deployment of new technology to all Gas Transmission surveyors, including Samsung Tablets and DP-IR instruments.
    - GT surveyors must utilize older technology (i.e., EZTech phones) until deployment of Samsung tablets to ensure transparency of surveys on a daily / weekly basis.

- Lean Six Sigma activities may create challenges in terms of resource constraints.
    - 5yr Survey may move to 1yr Survey.
    - Inclusion of Station Survey.

V. Improvement Plan

Initiative Overview – Leak Management		
Exec. Sponsor	**Kevin Knapp**	
Process Owner	[redacted]	
Initiative Description	To ensure public safety by, 1) adopting innovative Leak Survey Technology, 2) replacing paper process/forms with electronic; and 3) careful monitoring of both Transmission and Distribution Leak Survey to guarantee adherence to 2012 LS Plan.	
Initiative Strategy	**People**	[redacted] Mike Falk, Kevin Armato, [redacted] Region Directors, Damage Prevention Supervisors.
	Process	1) Develop robust and detailed Catch-Up Plan system-wide to allow for all Divisions to be in accordance with 2012 LS Plan by 7/31/12. 2) Full deployment of new Leak Survey technology – Tablets/DPIR – and effective and accurate use of both.
	Technology	**Samsung Galaxy Tablet, DPIR Unit**

Key Initiatives		
Initiative Category	**Initiative Name *(Refer to MARINER Initiative Details)***	**Status**
People	1. Proactive Follow-Up Training for those struggling with new technology implementation.	🟩
Process	2. Identify areas where improvements can be made within training methodology.	🟩
Process	3. Identify pinch points which distort the fluidity of work flow and incorporate discussion into weekly check-up calls to remedy immediately.	🟩
Process	4. Identify areas of duplicated effort (e.g. caused by maintaining legacy system/technology) and ensure accurate reporting.	🟩
Technology	5. Identify root cause of technology failure (e.g. obsolete Operating Systems, Black Outs, etc.) and conduct mass fix.	🟩

Project Management Report - July 2012 for June Results

Results	🔴	Financial Performance and Milestone Status
Initiative Status	🟢	Top 4 initiatives selected with owners assigned

I. Goal / Objective

Support the safety and reliability of our gas systems by consistently delivering projects and programs on schedule and on budget. We accomplish this by establishing a consistent project management process, monitoring key performance metrics and driving projects from initiation through to project closeout.

II. Results

Summary Narrative:

- Financials:
  - Capital: Overall underun YTD Capital of $122M vs $165M in DET Budget. The under-runs are mostly due to delays in construction starts.
  - The EOY forecast for Capital overall is $371M vs a DET budget of $265M. Approximately $30MM in projects have been deferred to 2013 throught the spring IPP process, and we are continuing to monitor the forecasts for remaining 2012 work to ensure that we stay within Budget.
  - Expense: Overall over-run of $12M vs $1.6M in DET Budget. Budget re-priortizations occuring through the IPP Process. The S-1 budget process currently underway is expected to yield a plan for all work between now and 2015.
  - The EOY forecast for Expense overall is $29M vs a DET Budget of $6.5M.
- Milestone completions continue to be the biggest risk, with 267 2012 projects still in the planning, engineering or estimating phase. This is trending down from 296 in May.
  - 200 of the 2012 Distribution Projects remain in Estimating.
  - 67 of the 2012 Transmission Projects remain in Planning/Engineering/Estimating.
  - Weekly meetings with direct leadership engagement will track projects and drive to ensure completion.
- Initiatives such as Primavera P6 implementation, and reviews of Project Management business processes and roles have been kicked off and are in progress. These initiatives are expected to dramatically improve our ability to plan and execute work in 2013 and going forward.

2012 Current Forecast (PRJ) Snapshot as of 7/10/12

		Project Services	Programs	Pipeline	Station	Distribution
Financials ($ Thousands)						
Capital Forecast (PRJ)		$ 371,275		$ 95,886	$ 58,377	$ 217,012
Expense Forecast (PRJ		$ 29,458		$ 23,836	$ 5,622	$ -
Total Forecast (PRJ)		**$ 400,733**		**$ 119,722**	**$ 63,999**	**$ 217,012**

Project Management Report - July 2012 for June Results

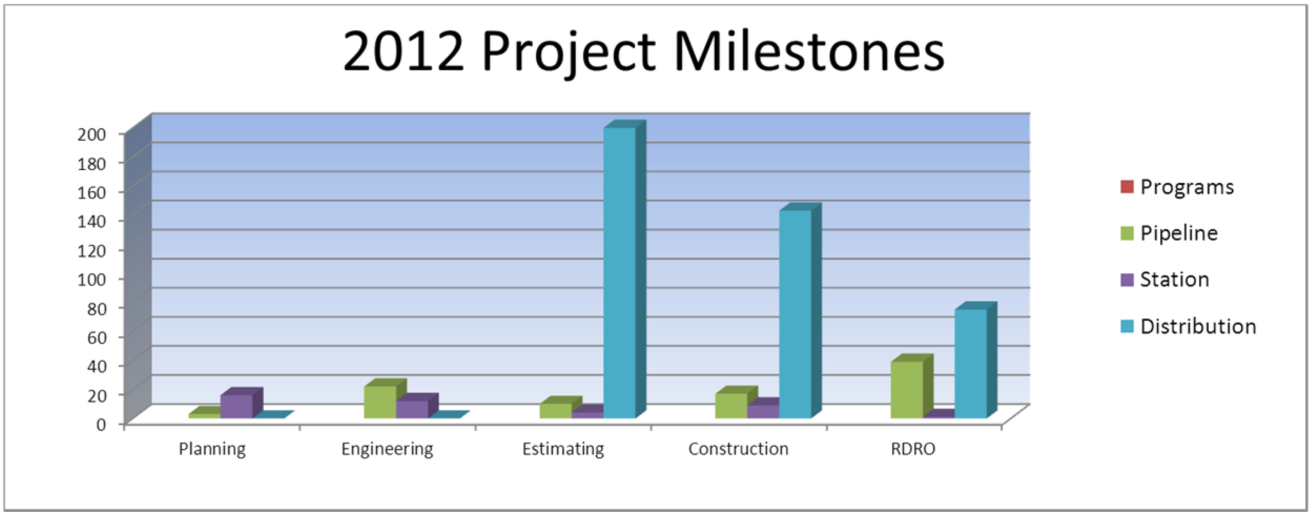
PROJECT FINANCIAL PERFORMANCE

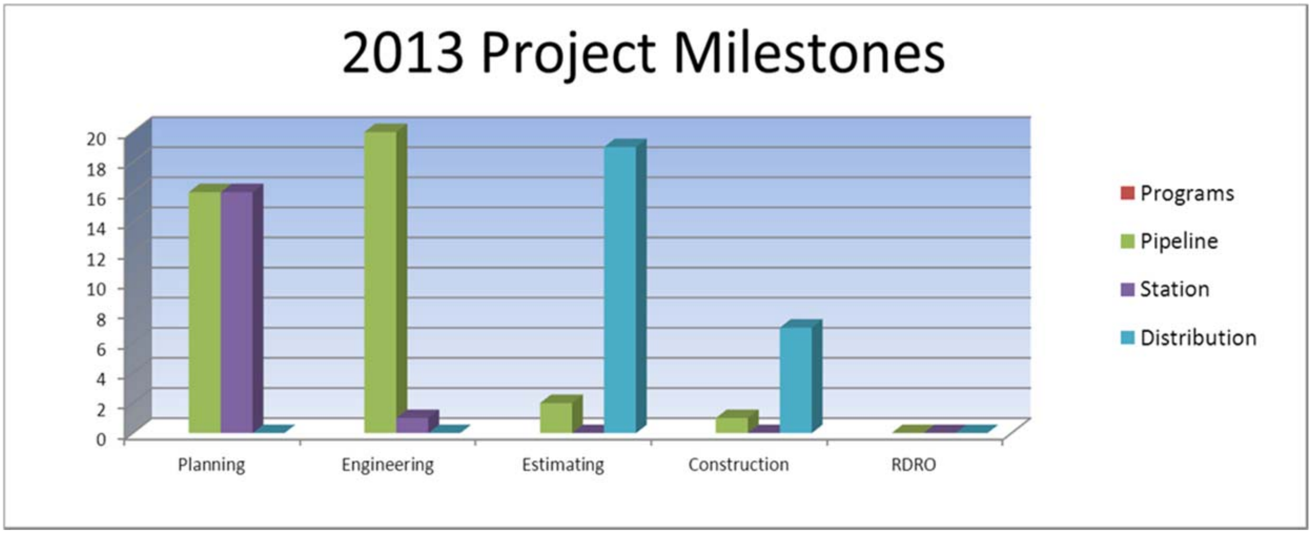
	Project Services DET Plan vs. Actuals									
	June (DET)					YTD June (DET)				
	DET Plan	Actuals	Variance	%	RAG	DET Plan	Actuals	Variance	%	RAG
Gas Pipeline										
Capital	$7,319	$2,921	$4,398	60%	🟥	$38,361	$38,030	$331	1%	🟩
Expense	$304	$1,681	($1,377)	-453%	🟥	$2,880	$9,656	($6,776)	-235%	🟥
Gas Pipeline Total	$7,623	$4,602	$3,021	40%	🟥	$41,241	$47,686	($6,445)	-16%	🟥
Gas Station										
Capital	$7,401	$4,106	$3,295	45%	🟥	$35,358	$17,716	$17,642	50%	🟥
Expense	$255	$301	($46)	-18%	🟥	$1,985	$2,255	($270)	-14%	🟥
Gas Station Total	$7,656	$4,407	$3,249	42%	🟥	$37,343	$19,971	$17,372	47%	🟥
Gas Transmission Total	$15,279	$9,009	$6,270	41%	🟥	$78,584	$67,657	$10,927	14%	🟥
Gas Distribution (See Note #3)										
Capital	$15,140	$14,965	$175	1%	🟩	$91,285	$65,778	$25,507	28%	🟥
Expense	$0	$0	$0			$0	$0	$0		
Gas Distribution Total	$15,140	$14,965	$175	1%	🟩	$91,285	$65,778	$25,507	28%	🟥
Total	$30,419	$23,974	$6,445	21%	🟥	$169,869	$133,435	$36,434	21%	🟥

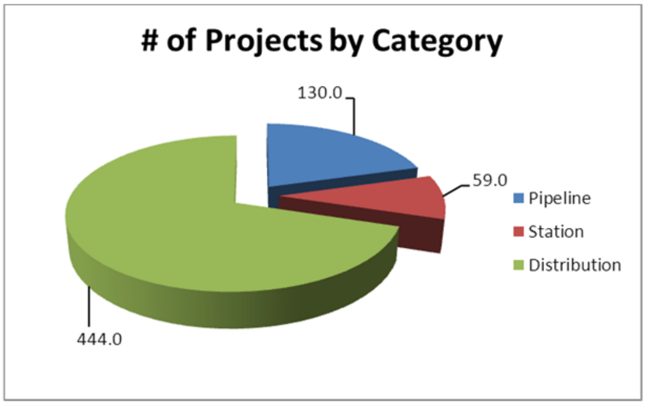
	Project Services PRJ Plan as 7/10/12									
	June (PRJ)					YTD June (PRJ)				
	PRJ Plan	Actuals	Variance	%	RAG	PRJ Plan	Actuals	Variance	%	RAG
Gas Pipeline										
Capital	$10,428	$2,921	$7,507	72%	🟥	$48,330	$38,030	$10,300	21%	🟥
Expense	$3,316	$1,681	$1,635	49%	🟥	$12,101	$9,656	$2,445	20%	🟥
Gas Pipeline Total	$13,744	$4,602	$9,142	67%	🟥	$60,431	$47,686	$12,745	21%	🟥
Gas Station										
Capital	$4,916	$4,106	$810	16%	🟥	$19,848	$17,716	$2,132	11%	🟥
Expense	$290	$301	($11)	-4%	🟩	$2,547	$2,255	$292	11%	🟥
Gas Station Total	$5,206	$4,407	$799	15%	🟥	$22,395	$19,971	$2,424	11%	🟥
Gas Transmission Total	$18,950	$9,009	$9,941	52%	🟥	$82,826	$67,657	$15,169	18%	🟥
Gas Distribution (See Note #3)										
Capital	$19,095	$14,965	$4,130	22%	🟥	$78,855	$65,778	$13,077	17%	🟥
Expense	$0	$0	$0			$0	$0	$0		
Gas Distribution Total	$19,095	$14,965	$4,130	22%	🟥	$78,855	$65,778	$13,077	17%	🟥
Total	$38,045	$23,974	$14,071	37%	🟥	$161,681	$133,435	$28,246	17%	🟥

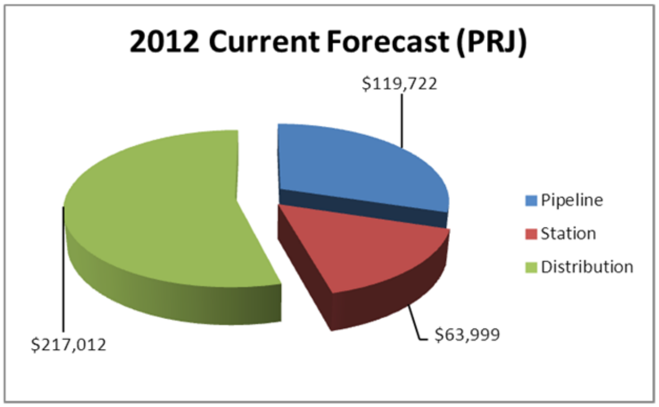
	Project Services Annual Forecast						
	DET	PRJ (as of 7/10/12)	Variance	June %	June R-A-G	May %	May R-A-G
Gas Pipeline							
Capital	$82,106	$95,886	($13,780)	-17%	🟥	-28%	🟥
Expense	$3,218	$23,836	($20,618)	-641%	🟥	-1603%	🟥
Gas Pipeline Total	$85,324	$119,722	($34,398)	-40%	🟥	-52%	🟥
Gas Station							
Capital	$48,018	$58,377	($10,359)	-22%	🟥	-18%	🟥
Expense	$3,260	$5,622	($2,362)	-72%	🟥	-27%	🟥
Gas Station Total	$51,278	$63,999	($12,721)	-25%	🟥	-18%	🟥
Gas Transmission Total	$136,602	$183,721	($47,119)	-34%	🟥	-39%	🟥
Gas Distribution (See Note #3)							
Capital	$135,114	$217,012	($81,898)	-61%	🟥	-51%	🟥
Expense	$0	$0	$0				
Gas Distribution Total	$135,114	$217,012	($81,898)	-61%	🟥	-51%	🟥
Total	$271,716	$400,733	($129,017)	-47%	🟥	-45%	🟥

PROJECT SCHEDULE PERFORMANCE


2012 Project Milestones


2013 Project Milestones


# of Projects by Category


2012 Current Forecast (PRJ)

III. Observations / Analysis

PROJECT FINANCIAL PERFORMANCE

Category	Discussion	
Transmission	**Variance**	• **June YTD**: We continue to close the gap from under spending in the 1st quarter. Since we were not engaged in setting DET, we are getting better forecasts for projects and able to show better numbers. • **Forecast to EOY**: We are currently forecasting to exceed DET. We are going through a reprioritization with Investment Planning, and once this is complete our forecast will reconcile with both DET and PRJ. $30M in work has already been deferred to 2013, and the forecasts are being revised to reflect that. Not all work is being deferred at this point because the current trend indicates that we are tracking to our DET budget YTD. We will continue to monitor the Actual cost trends and make deferrals as needed. • We set our plan using +/- 50% estimates and we do not have an effective mechanism to adjust as we progress on engineering and estimating and understand more about the project and its associated risks
	Risks/Actions	• Main risks are resources, both construction and engineering. We are utilizing the same resources as PSEP, creating constraints and as contracting decisions are made later in the year, we may pay a premium for those contracts in order to get the work done this year as planned, thus driving up our costs. • We continue to work with Sourcing to get contracts out in a timely fashion, as this was a significant issue in the 1st quarter.
Distribution	**Variance**	• **June YTD**: We are still falling short on our forecasted spend with our variance increasing from $11M to $25M from May to June. We are establishing weekly meetings to drive progress on projects from planning through to construction complete. • **Forecast to EOY:** Currently forecasting to exceed DET. Working with Investment Planning to prioritize work along with driving unit cost efficiencies.
	Risks/Actions	• Main risk is completing the planned work. Weekly meetings with direct leadership engagement will track projects and drive to ensure completion. • Weekly planning meetings will also be focused on driving down unit cost.

PROJECT SCHEDULE PERFORMANCE

Category	Discussion	
Transmission	**Variance**	- **June YTD**: Due to resource constraints earlier in the year and contracting issues, we have not been able to get the amount of work ready for construction as planned. That has caused some earlier schedule delays. We are working with engineering and our contractors to close this gap.
	Risks/Actions	- Main risks are resources, both construction and engineering. We are utilizing the same resources as PSEP, creating constraints and as contracting decisions are made later in the year, we risk incurring higher costs for those contracts in order to get the work done this year as planned.
Distribution	**Variance**	- **June YTD**: Due to a late start and internal resource constraints, we have not been able to get the amount of work to construction as planned. That has caused some earlier schedule delays.
	Risks/Actions	- Again, main risks are resources, both construction and engineering. Constrained resources may cause our schedules to continue to slip. - Also, permitting has become a bigger risk, as permitting agencies receive the large volume of work that is coming out of Estimating and Engineering mid-year, delays are resulting as staff at these agencies does not fluctuate to accommodate the increase in workload. - Our Government Relations team is working with some agencies to present a case to increase staff to accommodate large increase in baseline workload. - Weekly meetings with direct leadership engagement will track projects and drive to ensure completion.

IV. Process Improvement Initiatives

Initiative Overview –Project Management Process		
Exec. Sponsor	**Jane Yura**	
Process Owner	[redacted]	
Initiative Description	Drive best-in class project management processes and tools to deliver consistent, planned results.	
Initiative Strategy	**People**	Fully integrate and engage all key players in the project management process from project initiation, through planning and execution. Desired result is that decisions throughout the process are made by the right people with the proper information and guidelines.
	Process	Leverage the existing Project Management Process and implement targeted best practices.
	Technology	Ensure that all technology platforms and tools implemented are consistent with overall enterprise and Gas Operations strategy. Implement Primavera P6 Project Management Platform and integrate with SAP.

Key Initiatives

Initiative Category	**Initiative Name**	**Status**
Foundational	1. Definition of Project Management Role	🟩
Tools/Technology	2. Implement Primavera P6	🟩
Governance/Process	3. Data integration – Base Work and PSEP	🟩
Governance/Process	4. Develop consistent process/procedures across Gas Ops	🟩

Project Management Report - July 2012 for June Results

Initiative Schedule and Status		
Initiative	**1. Definition of Project Management Role**	
Team Members	[redacted]	
Scope	**A. Identify Roles and Responsibilities for Project Managers and how this integrates into the Project Management Process. Driving "Cradle to Grave Ownership"**	
Benefits (Soft)	**Single line of responsibility that will result in timely execution and consistent results**	
Costs	**$175K**	
Milestone	**Target Completion Date**	**Comments**
Establish Definition/Business Case	Complete	Meeting scheduled to develop a consistent definition for Gas Operations and establish initiative milestones
Strategic Objectives	7/15/12	Develop the overall strategic objectives for the Project Management roles that will drive the integration of both.
Conduct Benchmarking (External)	7/15/12	Participants will be utilities with a focus on organizational structure, process best practices, performance metrics, contract management
Assess Current State of PM roles and responsibilities	9/22/12	Includes an inventory of existing processes and evaluation versus best practices and PMBOK
Gaps/Best Practices Defined	9/22/12	The output of the assessment above is a prioritized list of gaps and existing best practices
Recommend Modifications and Define Performance Metrics	10/7/12	Recommend informed changes based on the assessment results
Draft Revised Process	10/30/12	Draft the revised process for use in pilot
Pilot with Select Organization(s)	11/30/12	Pilot will gather data on metrics and other KPIs
Final Draft Process	3/30/13	Roll out to all organizations performing Project Management

Description	Accountability	2012	2013	2014	2015	2016
Costs	[redacted]	$175K				
Specific Benefit, Expense Savings	[redacted]	TBD				

Discussion Items
This will be a cultural shift for all involved organizations. All changes must be incorporated into our existing Project Management Process.

Sponsor: Jesus Soto
Owner: [redacted]

Project Management Report - July 2012 for June Results

Initiative Schedule and Status

Initiative	**2. Implement Primavera P6**	
Team Members	[redacted]	
Scope	**Implement Primavera P6 as the scheduling tool for Project and Program Services. Phased approach focusing first on scheduling, then resource loading and finally cost loading. Will be done in coordination with PSEP. Includes change management/training and establishing external hosting for the P6 data.**	
Benefits	**Single platform to view all work, integrated view of resource needs for all project work. Increased functionality and data availability.**	
Costs	**$3M**	
Milestone	**Target Completion Date**	**Comments**
Develop Team members	Completed	
Estimate and obtain Budget Funding	Completed	
Primavera License Purchase (IT)	Completed	IT purchased an Enterprise license with Oracle on May 31, 2012.
New Hosting Agreement	8/20/12	Hosting quotes received from vendor. Working with IT to develop overall enterprise level approach to external hosting. Because PSEP already has hosted environment, this milestone is not critical path.
Change Management Plan	7/31/12	
Data Migration Complete	8/31/12	
Reporting Cycle Established	10/31/12	

Description	Accountability	2012	2013	2014	2015	2016
Costs	[redacted]	$1,523	$504	$324	$336	$348
Specific Benefit, Expense Savings	[redacted]	$0	$8,800	$17,800	$24,000	

Discussion Items
Integration with other key stakeholders impacted by the use of this platform will be a critical component of the change management for this initiative.

Sponsor: Jesus Soto
Owner: [redacted]

Project Management Report - July 2012 for June Results

Initiative Schedule and Status		
Initiative	**3. Data integration – Base Work and PSEP**	
Team Members	[redacted]	
Scope	**Create consistent reporting frequencies/data/formats to ensure work is well coordinated, progress is consistently reported**	
Benefits	**Integrated plan and improved overall visibility of project and program work**	
Costs	**$0**	
Milestone	**Target Completion Date**	**Comments**
Identify Gaps	Complete	Meeting scheduled to develop this and also establish the preliminary business case
Initial base work projects >$500K in P6 + regular updating	Complete	Initial set of base work projects in P6 by June 30 All 2012 GT base projects > $500K must be in P6 by June 30
Role and skill based resource loading	8/15/12	All 2012 GT base projects > $500k must have at least the 6 basic resources (construction craft, GC craft, inspectors, field engineering, construction manager, contract admin) applied to the construction activity
Integrate P6 with PSRS	8/31/12	
Roll out updated reporting	10/31/12	Significant dependency on roll-out of Primavera P6
Review effectiveness	11/30/12	

Description	Accountability	2012	2013	2014	2015	2016
Costs	[redacted]	$0				
Specific Benefit, Expense Savings	[redacted]	$0				

Discussion Items
Minimal labor cost to evaluate current practices, align nomenclature, update practices, and communicate standards. Cost will be satisfied by existing labor and resources.

Project Management Report - July 2012 for June Results

Initiative Schedule and Status		
Initiative	**4. Develop consistent process/procedures across Gas Ops**	
Team Members	[redacted]	
Scope	**Review the existing Gas Ops Project Management Process, modify to fit current org and business needs, and ensure consistency between Engineering, PSEP and Project and Program Services**	
Benefits	**Single, efficient Project Management Process will bring efficiencies in planning and facilitate consistent results**	
Costs	**$175K**	
Milestone	**Target Completion Date**	**Comments**
Develop strategic objectives of Processes/Technology	7/22/2012	Develop the overall strategic objectives for the Project Management Process and technology platform that will drive the integration of both.
Conduct Benchmarking (External)	7/22/2012	Participants will be utilities with a focus on organizational structure, process best practices, performance metrics, contract management
Assess current state of Project Management Processes	9/22/2012	Includes an inventory of existing processes and evaluation versus best practices and PMBOK
Gaps/Best Practices identified	9/22/2012	The output of the assessment above is a prioritized list of gaps and existing best practices
Recommend modifications/simplifications and define performance metrics	10/7/2012	Recommend informed changes based on the assessment results
Draft revised process	10/30/2012	Draft the revised process for use in pilot
Pilot with select organizations	11/30/2012	Pilot will gather data on metrics and other KPIs
Final draft of PM Process	1/30/2013	Final draft developed based on lessons learned
Roll-out to Gas Operations	Q1 2013	Roll out to all organizations performing Project Management

Description	**Accountability**	**2012**	**2013**	**2014**	**2015**	**2016**
Costs	[redacted]	$175K				
Specific Benefit, Expense Savings	[redacted]	TBD				

Discussion Items

Project Management Report - July 2012 for June Results

V. Supporting Information

2012

	Milestones						RAG Status		
Category	**Planning**	**Engineering**	**Estimating**	**Construction**	**RDRO**	**Total**	**Red**	**Amber**	**Green**
Programs									
Pipeline	3	22	10	17	39	91	3	6	82
Station	16	12	4	9	1	42	1	5	36
Distribution	0	0	200	143	75	418	26	37	355
Total	**19**	**34**	**214**	**169**	**115**	**551**	**30**	**48**	**473**

*R-A-G Status total should equal milestones total

Red = Projected to miss RDRO or missed two milestones
Amber = Missed one milestone but have recovery plan
Green = On track to meet RDRO and all milestones in a timely manner

	Permitting R-A-G Status		
Category	**Red**	**Amber**	**Green**
Programs			
Pipeline	3	4	82
Station	1	2	5
Distribution	7	25	386
Project Services	**11**	**31**	**473**

2013

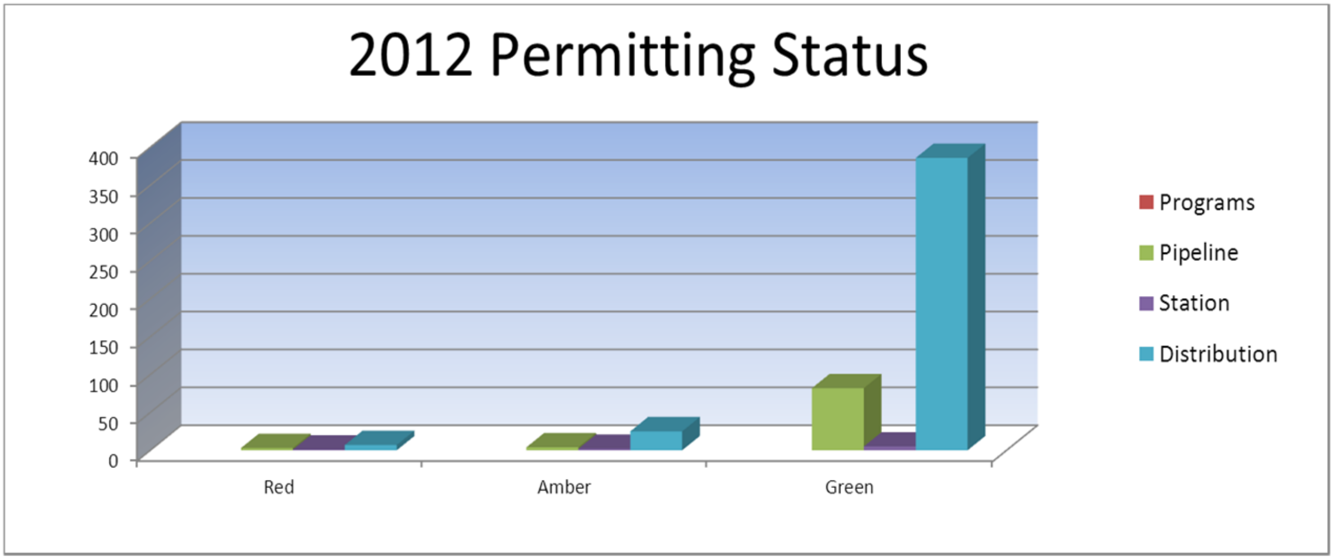
	Milestones						RAG Status		
Category	**Planning**	**Engineering**	**Estimating**	**Construction**	**RDRO**	**Total**	**Red**	**Amber**	**Green**
Programs									
Pipeline	16	20	2	1	0	39	0	0	39
Station	16	1	0	0	0	17	0	0	17
Distribution	0	0	19	7	0	26	0	1	25
Total	**32**	**21**	**21**	**8**	**0**	**82**	**0**	**1**	**81**

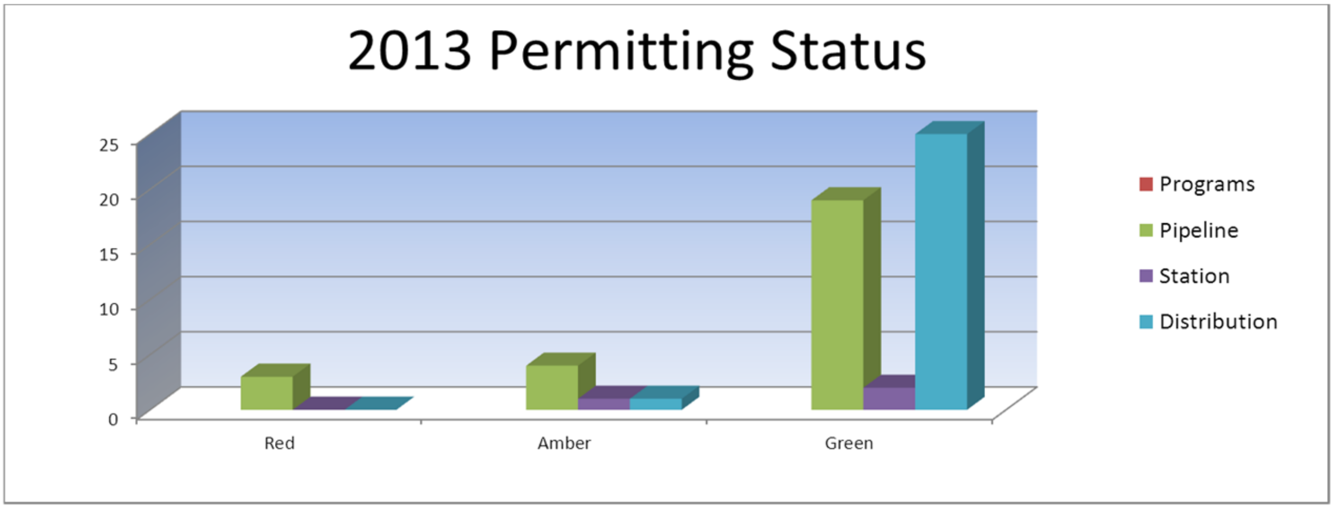
*R-A-G Status total should equal milestones total

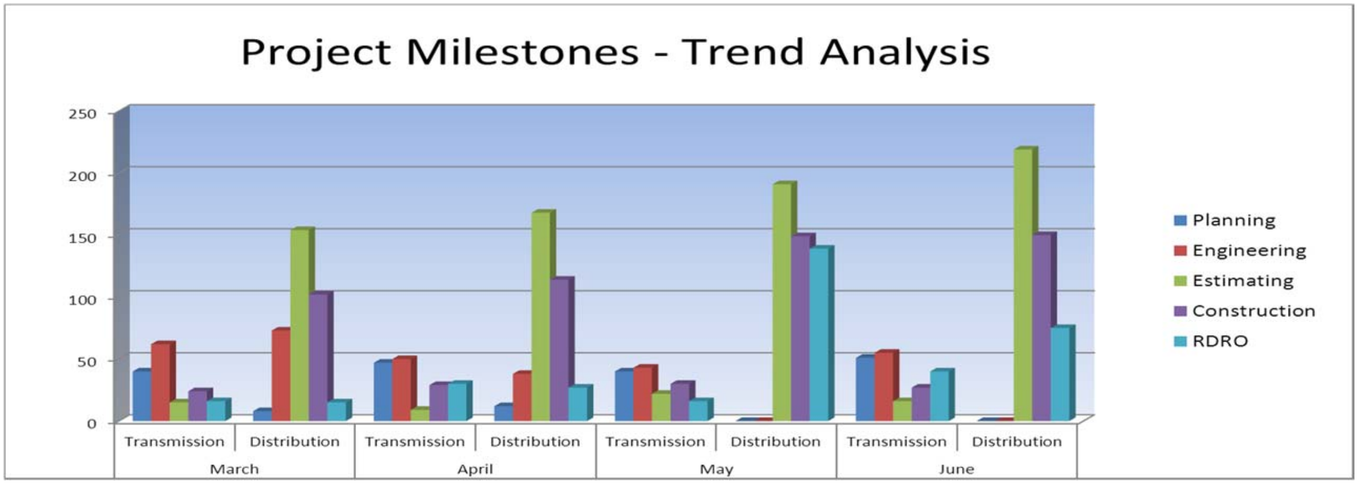
Red = Projected to miss RDRO or missed two milestones
Amber = Missed one milestone but have recovery plan
Green = On track to meet RDRO and all milestones in a timely manner

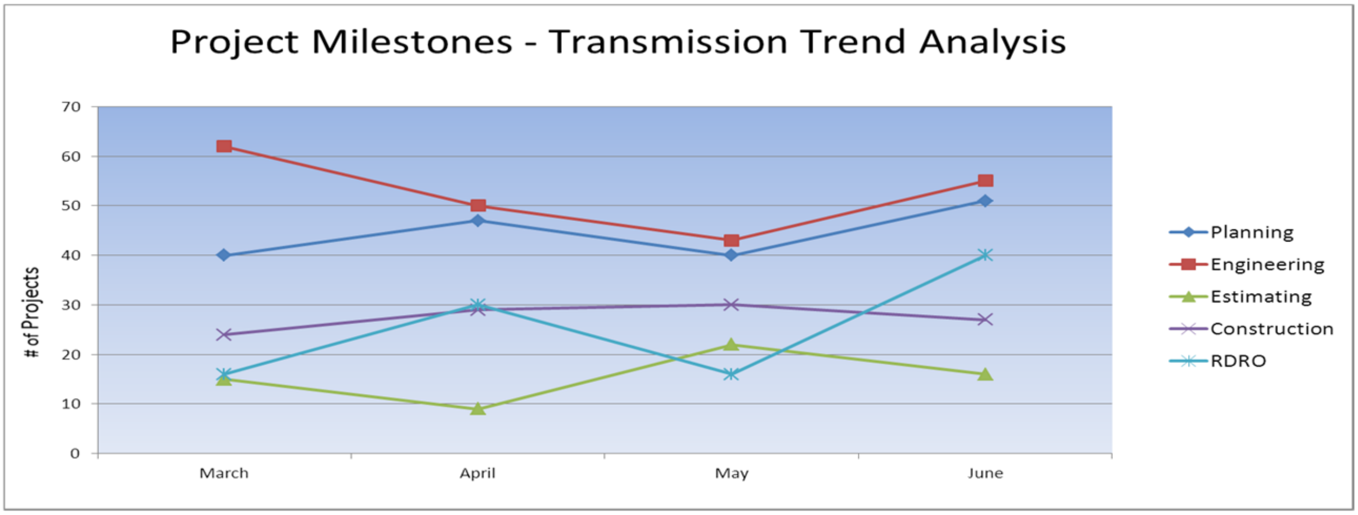
	Permitting R-A-G Status		
Category	**Red**	**Amber**	**Green**
Programs			
Pipeline	3	4	19
Station	0	1	2
Distribution	0	1	25
Project Services	**3**	**6**	**46**

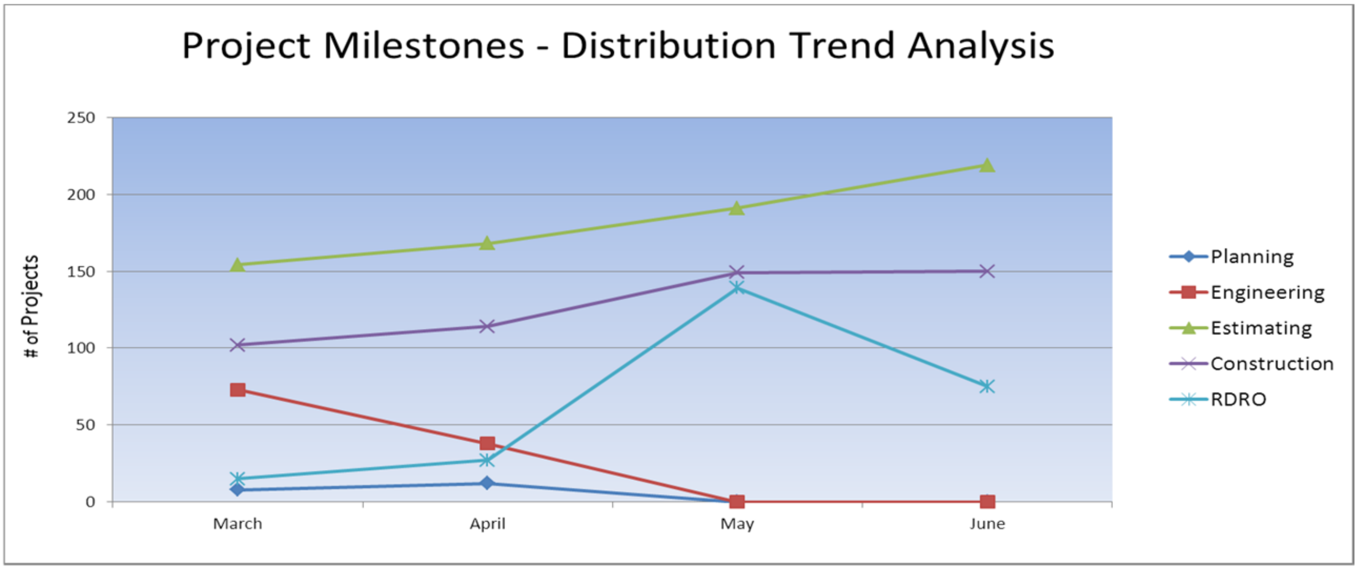
Permitting Milestones



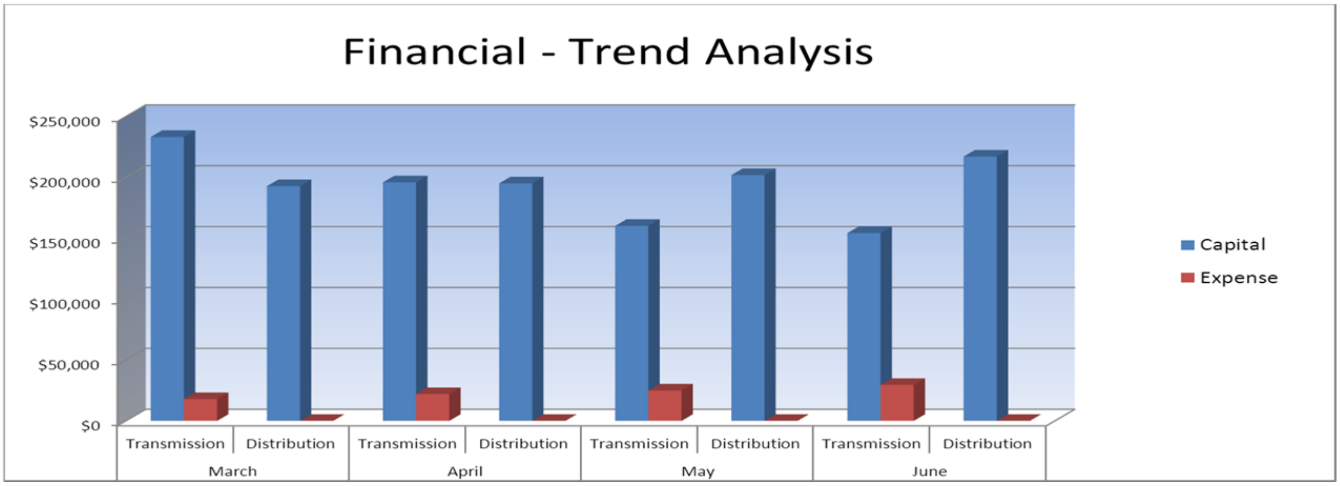



Project Milestones - Trend Analysis
250
200
150
100
50
0
Transmission
Distribution
Transmission
Distribution
Transmission
Distribution
Transmission
Distribution
March
April
May
June
Planning
Engineering
Estimating
Construction
RDRO

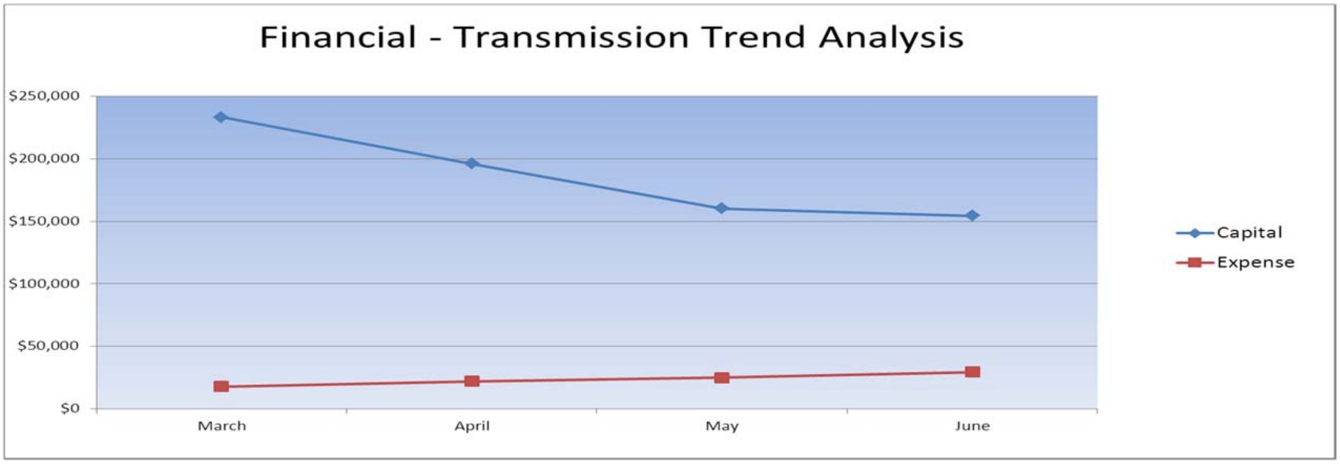

Project Milestones - Transmission Trend Analysis
70
60
50
40
30
20
10
0
# of Projects
March
April
May
June
Planning
Engineering
Estimating
Construction
RDRO


Project Milestones - Distribution Trend Analysis
250
200
150
100
50
0
# of Projects
March
April
May
June
Planning
Engineering
Estimating
Construction
RDRO

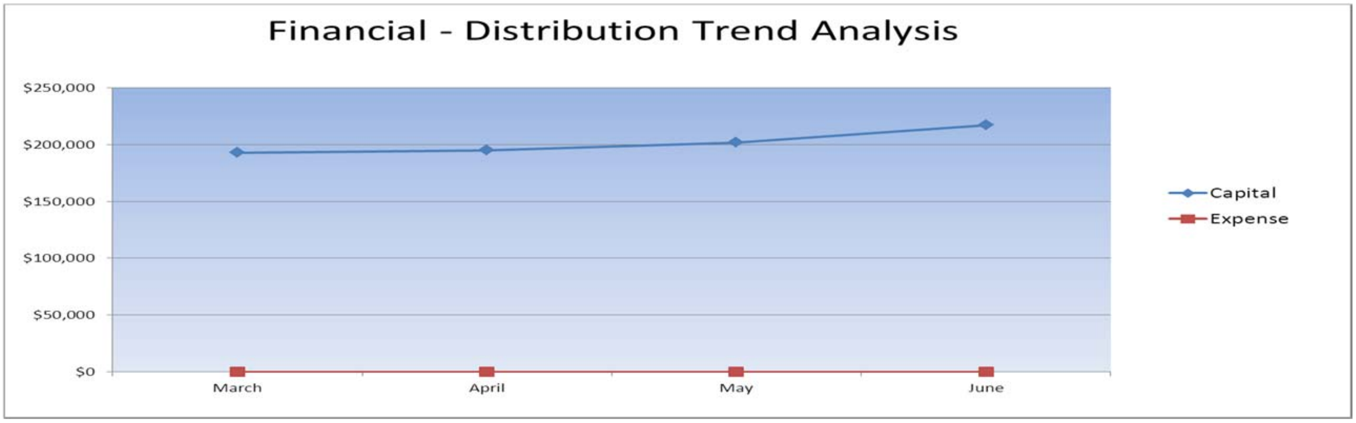
PRJ EOY Forecast



PRJ EOY Forecast - Transmission



PRJ EOY Forecast - Distribution



Project Management Report - July 2012 for June Results

Station Variance Detail (June Variance)

Project Name	June Variance	Explanation	Recovery	YTD June Variance	Explanation	Recovery
- 400/401 install opp at GTN interconn	$308	Field work delayed - GC - M&C due to IFC package not complete in June and some contracts have not book/ received Good Receipts	Offset June variance by reallocating funds into July along with required resources.	($511)	May was over spent and did not forecast correctly due to weather delay, excesss water, mobilization and de-mobilization.	Pro-active in contacting FE & Others to book good receipts and forecasted August and July accordingly. Processed re-authorization for 4 million (~ 500,000) to cover project costs
L-132 Mp 38.9 - 39.54 Pipe removal Glenview	$653	Field work delayed due to access restrictions imposed by the City of San Bruno.	Offset June variance by reallocating funds into July along with required resources.	$603	Work has been delayed	See previous recovery
Wild Goose Delevan	$286	A few high-priced materials, expected to be delivered in the later part of June, did not arrive. Also, the crane rental ($75,000) did not post.	Add the materials that did not show up in June into July's forecast and ensure that these items get booked. With regards to the crane rental, ensure this item gets booked by GC.	$2,290	The billing credit, given to PG&E by the client, posted 1 month before it was forecasted to hit.	Irrevocable
109 Mp 43.47 Rebuild Sullivan St.	$355	This project is experiencing significant difficulties with materials. There has been a general lack of communication of when/where materials are delivered. Based on the lead times in McJunkin's quote, $370,562 worth of materials were likely to be delivered in the later part of June - with a possibility of landing in July. As it turns out, they will arrive in July.	Add the materials that did not show up in June into July's forecast and ensure that these items get booked.	$355	Materials delivery was delayed.	Reforecast the materials in the coming month (July) and ensure Goods Receipts are booked.

Pipeline Variance Detail (June Variance)

Project Name	June Variance	Explanation	Recovery	YTD June Variance	Explanation	Recovery
132 SSF San Jose	($1,184)	Construction started 1 month early to accommodate GC's work schedule. $100k labor variance for early start $236k material early release. $850k early payments to the City for the new easement.	Project is on schedule for meeting RDRO	($2,884)	A portion of work was released in April to accommodate developers that need PG&E to be out of the way for construction of new buildings. The remainder is due to release earlier than planned to accommodate GC work schedule. The team is awaiting release of the final portion of the line east of Zanker Road.	Project is on schedule to meet RDRO
[redacted]	$255	Waiting on a change order from ARB for work completed - will bring the variance down once this comes in and is booked.	Pipeline is tied in - C/O was late coming through	($201)	Variance due to additional Construction Contract cost construction cost due to electric power not being delivered. In addition delay in Material deliveries and unexpected additional Hazardous waste needed to be deposed of from site.	project is complete waiting for C/O to go through
[redacted]	$2,995	OR 100% Reimbursable. OR notification is being routed through EDRS 2012-24513. $3 Million dollar credit received on Tuesday, 06/26.	billing credit finally came in this is a new business re imbursable job	$1,624	These reflect costs that were laid out over and above the estimate billing credits hit late last week.	Credits will be applied in reforcast
[redacted]	$512	Originally GC was slated to start the Meter side of the [redacted] project. Plans changed and the Pipeline side began before the Meter side. The schedule also was extended due to the clients needs.	Project is scheduled to begin the Meter station soon.	$1,446	Project was performed in reverse operation of GC plans Pipeline is being finished now	Variance will true with the construction of meter station once pipeline is complete
- 101 ILI Land Acquisition	$301	Land has not completed the purchase of the Launcher/Receiver site in Palo Alto as planned. They are still negotiating with the owner	will re forecast once Land Dept lets us now how the negotiations are going	$300	Land acquistion was to have taken place negotiations are still underway	Re forecast for when Land Aq will go through
-101 0.00 - 11.85 ILI Upgrade	$786	Delivery of materials is late causing construction activities to be later than planned	Will gr materials once they are delivered	$977	Materials should have been delivered and some work shouuld have already started. Delay in materials and Lands Aq has caused variance	Project work will still take place
-191 2.76 -3.08 relo WRO H)	$633	Land has not prepared and submitted the billing as planned	project is closed out just waitng for final billing credit	$453	Waiting for land to final bill	
- 191 3.90 - 4.69 relo WRO C)	$599	Land has not prepared and submitted the billing as planned	projrct is closed out waiting for final billing credit	639	Waitiong for land to final bill	

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Distribution Variance Detail (June Variance)

Project Name	June Variance	Explanation	Recovery	YTD June Variance	Explanation	Recovery
R4E MWC50 WESTGATE	$793	The Journal Entry that was forecasted (to move funds from MWC 14 to MWC 50) was never requested.	Reforecast the Journal Entry in July and submit the Journal Entry Request during the month of July.	($472)	The Journal Entry that was forecasted (to move funds from MWC 14 to MWC 50) was never requested.	Reforecast the Journal Entry in July and submit the Journal Entry Request during the month of July.
G GPRP WESTGATE, SF	($1,086)	The Journal Entry that was forecasted (to move funds from MCW 14 to MWC 50) was never requested.	Reforecast the Journal Entry in July and submit the Journal Entry Request during the month of July.	$363	The Journal Entry that was forecasted (to move funds from MCW 14 to MWC 50) was never requested.	Reforecast the Journal Entry in July and submit the Journal Entry Request during the month of July.
GP INST MN COFFEE RD, MODESTO, 11	$262	Project started a week later than expected and the forecasted expenditures were over-estimated for the month with respect to Contractor's billing.	Project is in construction and is expected to meet RDRO commitment. BPC was adjusted.	$475	Project started a week later than expected and the forecasted expenditures were over-estimated for the month with respect to Contractor's billing.	Project is in construction and is expected to meet RDRO commitment. BPC was adjusted.
R1 E G GPRP BAYSHORE, SF	($299)	The Journal Entry that was forecasted (to move funds from MWC 14 to MWC 50) was never requested.	Reforecast the Journal Entry in July and submit the Journal Entry Request during the month of July.	$189	The Journal Entry that was forecasted (to move funds from MWC 14 to MWC 50) was never requested.	Reforecast the Journal Entry in July and submit the Journal Entry Request during the month of July.
G GPRP - DE LONG SAN FRANCISCO	$291	Construction start date was delayed due to excavation permit.	Project is now in construction and is expected to meet RDRO commitment. BPC forecast was adjusted.	$10	Construction start date was delayed due to excavation permit.	Project is now in construction and is expected to meet RDRO commitment. BPC forecast was adjusted.
R4E MWC 50 - BAYSHORE, SAN FRANCISCO	$357	The Journal Entry that was forecasted (to move funds from MWC 14 to MWC 50) was never requested.	Reforecast the Journal Entry in July and submit the Journal Entry Request during the month of July.	($26)	The Journal Entry that was forecasted (to move funds from MWC 14 to MWC 50) was never requested.	Reforecast the Journal Entry in July and submit the Journal Entry Request during the month of July.
R1 NORTHPOINT ALDYL-A REPL PHASE 3	$405	Cancelled	Cancelled	$813	Cancelled	Cancelled
CANC R1 NORTHPOINT ALDYL-A REPL PHA	$423	Cancelled	Cancelled	$3	Cancelled	Cancelled
MPR REPL.N.SAN JUAN ROAD AROMAS	($666)	Cancelled	Cancelled		Cancelled	Cancelled
+MCALLEN FROM WILSON TO HOLMAN +	$278	Project delayed by California Water Board permit, forecast was based on estimates of when project would start.	Awaiting permit completion and contract award to ARB, once this is complete we will be back on track…planned estimate will account for this.	$93	Project delayed by California Water Board permit, forecast was based on estimates of when project would start.	Awaiting permit completion and contract award to ARB, once this is complete we will be back on track…planned estimate will account for this.
R2 GP REPLACE UNPROTECTED MAIN MODESTO	$358	Delays in estimating. Communicated date was June 25 the project would be ready to ececute but it was not so the forecast was off.	Awaiting estimating completion of project plan, once this is accomplished we can execute the project. I plan to forecast for an execution date in August that will bring us back on schedule with what is being communicated.	$358	Delays in estimating. Communicated date was June 25 the project would be ready to ececute but it was not so the forecast was off.	Awaiting estimating completion of project plan, once this is accomplished we can execute the project. I plan to forecast for an execution date in August that will bring us back on schedule with what is being communicated.
R2 REPL 1972 FT 2 " & 1 1/4" ALDYL FRESN		Construction started faster than plan	Construction started faster than plan	$370	Construction started faster than plan	Construction started faster than plan
R2 REP 1200FT ALDYL 13SVC BISHOP AV FRES		Construction started faster than plan	Construction started faster than plan	($653)	Construction started faster than plan	Construction started faster than plan

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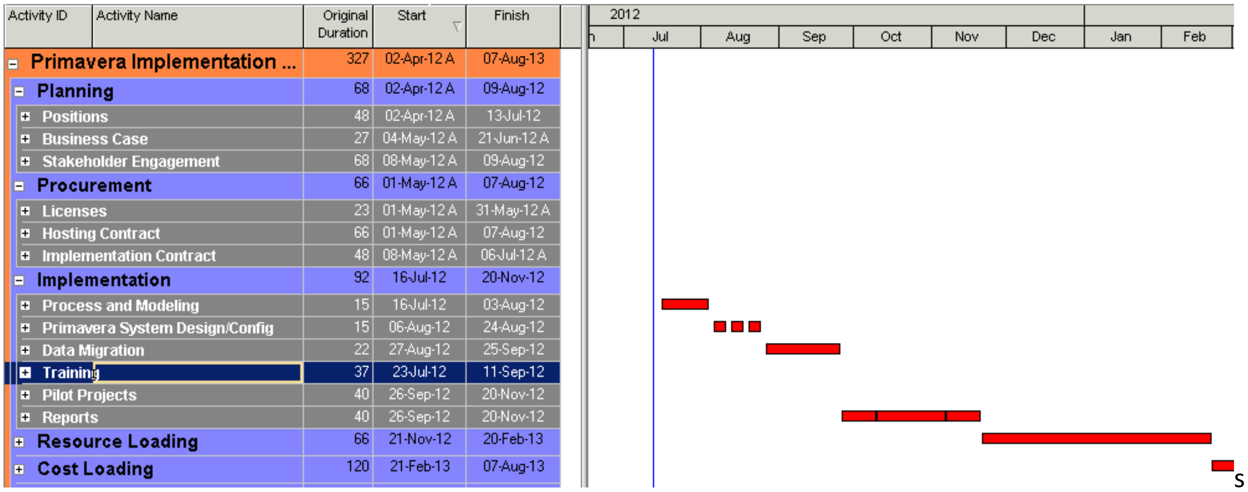

Activity ID	Activity Name	Original Duration	Start	Finish
	Primavera Implementation ...	327	02-Apr-12 A	07-Aug-13
	Planning	68	02-Apr-12 A	09-Aug-12
	Positions	48	02-Apr-12 A	13-Jul-12
	Business Case	27	04-May-12 A	21-Jun-12 A
	Stakeholder Engagement	68	08-May-12 A	09-Aug-12
	Procurement	66	01-May-12 A	07-Aug-12
	Licenses	23	01-May-12 A	31-May-12 A
	Hosting Contract	66	01-May-12 A	07-Aug-12
	Implementation Contract	48	08-May-12 A	06-Jul-12 A
	Implementation	92	16-Jul-12	20-Nov-12
	Process and Modeling	15	16-Jul-12	03-Aug-12
	Primavera System Design/Config	15	06-Aug-12	24-Aug-12
	Data Migration	22	27-Aug-12	25-Sep-12
	Training	37	23-Jul-12	11-Sep-12
	Pilot Projects	40	26-Sep-12	20-Nov-12
	Reports	40	26-Sep-12	20-Nov-12
	Resource Loading	66	21-Nov-12	20-Feb-13
	Cost Loading	120	21-Feb-13	07-Aug-13

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Results		• Refer PSEP and Base Results sections.
Initiative Status	●	See individual initaitive summaries below

Sections I-III: Refer to Project Management Process – PSEP and Base fro Goal/Objective, Results and Observation analysis.

IV. Process Improvement Initiatives

Build Construction Organization (Pierre Bigras)	**Overall Status** **GREEN**
Initiative	Build a new Gas Transmission construction organization with improved processes and a partnership based strategy
Team Members	Construction, Sourcing, HR/Labor
Scope	• Define Construction strategy and partnerships • Establish integrated construction schedule and resource planning • Develop and implement new processes and tools
Benefits (Soft)	This will help a build a construction organization that is well staffed with qualified resources and capable of delivering on its commitment to improve the safety of our gas transmission network.
Costs	Costs included within existing PSEP Construction Management costs.

Milestone	**Target Completion Date**	**Comments**
Develop Construction Labor Strategy - including analyzing cost benefits of PLA for GT Construction Work	06/30/12	At [redacted] recommendation, a PLA will not be pursed but [redacted] [redacted] has been engaged to assist in resolving any labor issues on GT projects.
Build Partnership w/ UA and schedule regular meetings w/ labor representatives.	06/30/12	Initial contact has been made w/ [redacted] of Local 342 on training initiatives. First meeting will occur in July.
Work w/ sourcing to Increase contractor pool to 9 by	09/30/12	This process is Ongoing. 8 firms

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end of Q3	🟩	currently qualified and bidding. 2 added are with legal. An additional 6 have been pre-qualified and the MSA has been sent out and is under review by contractor. A total potential of 16 contractors in the pool will be possible.
Work w/ sourcing to Increase Professional Services Partners for pipeline construction inspectors and managers by 2 by end of Q3	🟦 09/30/12	Tulsa and Canus are now onboard and being used. We are talking with Gulf Eng. as another potential source.
Finalize GT GC Growth Strategy & Process to establish independent GT GC Organization	🟩 09/30/12	Currently developing strategy, new POA's, and new job classifications for Transmission F/M A & B.
Have 69 GT specific workforce either moved to or hired in the new GT GC Organization	🟩 03/31/13	
Have a resource loaded, workable, useable master schedule with all work streams capturing 100% of the GT work	🟨 ~~06/30/12~~ 09/30/12	All PSEP work is accurately reflected on P6 master schedule. However, GT base work is now just getting loaded onto P6 master schedule. GT PM organization is just now getting converted to P6 and staffing to meet demand. 19 new projects were just added to the 2012 P/F and milestone dates for these and all other GT Base work will need to be loaded and accurately reflected in P6.
Formalize & finalize process by which jobs are assigned to GT GC/ regional GC or to contractors	🟦 06/30/12	Assignment Process was finalized and rolled out to PM groups and to all of gas GC.
Select and Roll out & Implement ePM tool in all work streams - Start Training current PM, CM and contractors in the use of the ePM tool	🟩 09/30/12	e-PM Tool has been identified as Skyer and best and final offer has been requested from vendor.

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Have ePM fully operational and used on all projects.	12/31/12	Not yet started. Implementation and training will start after contract finalized w/ ePM vendor.
Identify location for future GT Tools Yard & warehouse - House pigs/ GT specific tools/ Test heads/ baker tanks	12/31/12	A PG&E owned lot in Gilroy has been identified as a potential location. Design and permits are currently being developed.
Establish Task group made up GT GT/ T&R or District M&C groups to establish standardized clearance execution process	09/30/12	In progress. Team headed-up by [redacted] has had one meeting and identified numerous opportunities. Team will meet again after the first cut and cap being performed by a contractor later this month.

Description	Accountability	2012	2013	2014	2015	2016
Costs	N/A					
Specific Benefit, Expense Savings						

Discussion Items

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Quality Performance of GT Construction Management Resources (Pierre Bigras)	Overall Status	AMBER
Initiative	Field procedures and quality improvements.	
Team Members	Pierre Bigras, Bob Suehiro, [redacted], Bob Suehiro	
Scope	• Develop new weld procedures, visual inspection forms and OQ of all GC welders • Develop and roll-out new construction Quality Manual • Develop a welder information database to monitor welder performance	
Benefits (Soft)	These improvements will ensure crew and public safety, reduce failure rates and minimize repair and rework.	
Costs	Costs included within existing costs of capital projects (PSEP and Base).	

Milestone	**Target Completion Date**	**Comments**
Roll out of Visual Weld Inspection forms and OQ of GC welders.	~~06/30/12~~ 08/30/12	Roll-out of visual weld inspection forms in progress. All GC welders were originally scheduled to be OQ'd by June end. However the OQ material being developed by others was not available until 06.28.12. OQ process has just started and is currently scheduled to be completed by 08.30.12. Current Status: 35/47 Welders; 18/32 Apprentices; 7/- Foremen.
Completion and Roll out of QC Manual	09/30/12	All sections of the QC Manual are complete except inspection forms. We have had last minute changes to the visual inspection. Roll out will begin after manual has been finalized.
System wide compliance of weld maps and development of Welder's log	07/31/12	Database to collect information from visual inspection forms under development. This information will be used to run weld reports and monitor welder performance.

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Development and testing of Revised Weld Procedures for new construction	09/30/12	Testing of new procedures underway. Roll-out and communication to welders will begin once testing is complete and new weld procedure are formally issued.

Description	Accountability	2012	2013	2014	2015	2016
Costs	N/A					
Specific Benefit, Expense Savings						

Discussion Items

V. Supporting Information

Refer PSEP Monthly Executive Steering Committee for additional information (to be distributed separately 7/12).

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Results	●	- Additional cleaning, to remove mercury, delayed completion of three hydrotests. - Hydrotest pipeline cleaning protocol identified by the Mercury Assessment Team continues to demonstrate potential to reduce cleaning runs. - Increased 2012 forecast costs due to acceleration of more complex projects (L-109), detailed engineering design and routing through congested areas, permitting requirements/restrictions. YTD capital spending delayed due to pconstruction delays and schedule changes - expected to reverse starting Q3.
Initiative Status	●	See individual initaitive summaries

I. Goal / Objective

The objective of the Pipeline Safety Enhancement Plan (PSEP or the Program) is to enhance safety and improve operations by completing the comprehensive assessment of all 5,786 miles of PG&E's natural gas transmission pipelines. PSEP will fundamentally change the way PG&E manages its gas pipeline assets. PSEP is part of a broader coordinated Gas Operations strategy and is in addition to the improvements PG&E is making to its existing pipeline replacement and maintenance, risk mitigation and integrity management Programs.

II. Results

Safety	**Hours Worked**	**Incidents/Near-Misses**	**Recordables**
	193,042	73	1 Contractor

Strength Testing	**June YTD**	**Target YTD**	**Forecast EOY**	**Target EOY**
Records Validated	19.3 miles	0 miles	19.3 miles	18 miles
Tested & Tied-in	44.7 miles	54.5 miles	166 miles	167 miles
Total	64.0 miles	54.5 miles	185 miles	185 miles
Costs	$62.2M[1]	$64.2M[2]	$190.4M	$190.4M
Unit Cost/Mile	$1.4M	$1.2M	$1.1M	$1.1M
Tests	21	26	85	85
Unit Cost/Test	$3.0M	$2.1M	$2.2M	$2.2M
IFB Engineering[3]	66 tests	71 tests		
Key Takeaways	▪ Higher workstream unit costs due to test delays (environmental), excessive cleaning runs to remove mercury, shorter tests (pressure restorations) and costs associated with tests delayed to 2013 due to integrity management.			

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[1] Includes non-PSEP pressure reduction and integrity management pipeline segment costs of $1.8 million and $7.3 million, respectively

[2] Target costs reflect amount included within unit cost targets set January 2012. This target reduced DET by approximately $38 million to reflect the 2012 impact of certain found pressure records.

[3] IFB Engineering milestones represent completion of pre-construction engineering, which enables the preparation of the construction contract bid package which is then issued for bid (IFB).

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Pipe Replacement	**June YTD**	**Target YTD**	**Forecast EOY**	**Target EOY**
Pipe Installed	3.4 miles	5.9 miles	39 miles	39 miles
Costs	$27.7M	$72.6M	$245M	$224.5M
IFB Engineering	24 projects	27 projects		
Key Takeaways	▪ Managing portfolio of 43.35 miles (26 projects) to meet the 39 mile target. ▪ Increased 2012 forecast costs due to acceleration of more complex projects (L-109), detailed engineering design and routing through congested areas, permitting requirements/restrictions. ▪ YTD underspend drivers due to construction start delays and a project cancellation due to data validation.			

Valve Upgrade/ Automation	**June YTD**	**Target YTD**	**Forecast EOY**	**Target EOY**
Completed	24 valves	24 valves	46 valves	46 valves
Costs	$9.7M	$7.7M	$40.2M	$40.9M
IFB Engineering	15 projects	17 projects		
Key Takeaways	▪ Managing portfolio of 54 valve installations to meet 46 valve target.			

In-Line Inspection Upgrade	**June YTD**	**Target YTD**	**Forecast EOY**	**Target EOY**
Completed (discrete)	18.8 miles			
(end-to end/usable)	0 miles	0 miles	78 miles	78
Costs	$6.9M	$4.5M	$18.2M	$12.7M
IFB Engineering	3 projects	4 projects		
Key Takeaways	▪ Construction on complete 2012 target miles underway. ▪ Increased engineering and construction labor costs.			

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Financial

	All values in millions of dollars		June			Year to Date			Full Year Forecast		
			Actual	Plan	Variance	Actual	Plan	Variance	Act+Forecast	Budget	Variance
	Capital	Workstream Owner									
1	*Hydrotesting*	[redacted]	0.6	1.8	1.2	3.2	4.8	1.6	19.5	15.2	(4.3)
2	*Pipe Replacement*	[redacted]	7.2	23.8	16.6	27.7	72.6	44.8	245.0	224.5	(20.5)
3	*Valve Automation**	[redacted]	1.1	2.9	1.8	7.7	9.7	2.0	40.2	40.9	0.7
4	*In-Line Inspection*	[redacted]	1.0	1.3	0.3	6.9	4.5	(2.5)	18.2	12.7	(5.5)
5	*MAOP*	Singh	(0.1)	0.1	0.2	0.0	0.5	0.5	0.6	0.6	0.0
6	*Mariner (GTAM)*	[redacted]	2.4	2.6	0.2	11.1	19.5	8.4	37.4	45.8	8.4
7	*PMO*	[redacted]	0.0	0.5	0.5	0.2	3.3	3.1	3.4	6.5	3.1
8	*Other***	[redacted]	0.0	0.4	0.4	0.1	0.4	0.3	39.3	39.8	0.5
9	**Total Capital**		**12.3**	**33.5**	**21.2**	**57.0**	**115.3**	**58.3**	**403.6**	**386.0**	**(17.6)**
	Expense	Workstream Owner									
10	*Hydrotesting*	[redacted]	13.8	26.7	12.8	53.2	76.9	23.8	143.1	228.1	84.9
11	*Valve Automation*	[redacted]	0.0	0.4	0.4	0.0	1.5	1.5	1.7	3.0	1.3
12	*Interim Safety Measures*	Falk	0.4	0.2	(0.2)	1.2	0.5	(0.7)	1.7	1.0	(0.7)
13	*MAOP*	Singh	14.9	10.5	(4.3)	72.9	62.8	(10.1)	125.9	125.9	0.0
14	*Mariner (GTAM)*	[redacted]	0.2	0.4	0.1	2.0	2.3	0.3	4.9	4.6	(0.3)
15	*PMO*	[redacted]	0.3	0.6	0.3	5.0	3.6	(1.5)	8.1	7.1	(1.0)
16	*Other*	[redacted]	3.7	0.1	(3.6)	8.5	0.7	(7.9)	3.7	1.3	(2.3)
17	**Total Expense**		**33.3**	**38.8**	**5.5**	**142.8**	**148.2**	**5.4**	**289.0**	**371.0**	**81.9**
18	**Total Pipeline Safety Enhancement Plan**	[redacted]	**45.6**	**72.3**	**26.7**	**199.8**	**263.5**	**63.7**	**692.6**	**757.0**	**64.3**
19	*TIMP Strength Testing*	[redacted]	3.2	0.0	(3.2)	7.2	0.0	(7.2)	42.4	0.0	(42.4)
20	*Other Strength Testing (not PSEP or TIM*	[redacted]	0.7	0.0	(0.7)	1.9	0.0	(1.9)	4.9	0.0	(4.9)

Capital:

Strength Test (Line 1): EOY: forecast reflects purchase of additional 'baker' tanks, LNG/CNG trailers and CNG modules.

Pipe Replacement (Line 2): YTD: Delayed start to construction on four projects, which have all since commenced; reversal of variance anticipated to start in Q3. EOY: Increased forecast due to acceleration of more complex projects on Line 109 into 2012, higher cost construction bids, and higher design phase costs.

In-Line Inspection (Line 4): YTD and EOY forecast reflect increased engineering and construction labor costs

Mariner (Line 6): YTD and EOY forecast reflect delays to complete additional planning of multiple projects undertaken, subsequent ramp-up of deployment resources has been adjusted into 2013.

Expense:

Strength Test (Lines 1, 19 and 20): 2012 forecast remains on target; cost recovery determined by nature of individual pipeline segments.

MAOP (Line 13): YTD: Increased engineering resources added and accelerated dig rate and higher cost per dig. EOY: Ongoing efficiency improvements and work acceleration anticipated to reduce overall costs.

Other (Line 16): YTD: includes standard cost variance expected to reverse.

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III. Observations / Analysis

- June 28: Awarded Pipe Replacement construction contract for project L-111A (6.61 miles) to Snelson Co.
- June 28: Completed Strength Tests T-102F (L-142S, 0.7 miles), T-052-12 (L-142S, 0.67 miles), and TIM-159 (DFM 7219-01, 0.3 miles).
- June 29: Completed Strength Test T-052 (L-118A, 0.5 miles).
- July 2: Awarded Valve Automation construction contract to Michels Co. [redacted] station: 1 valve).
- July 3: Completed Strength Test T-018-12 (L-132, 1.54 miles).
- July 5: Completed Strength Test T-039B-11 (L-132, 1.52 miles).
- July 6: Completed Strength Test T-053-12 (L-142S, 0.66 miles, successful mercury removal).
- July 2 Completed Valve Automation at Diana station (2 valves).
- July 12 Completed Valve Automation at 7A & 7B PLs (5 valves).

Areas of Focus

-
- **Permitting - San Francisco/Peninsula:** Held meeting with SFPUC staff on Monday July 9th to address delayed permitting of three proposed pipe replacement projects (L-109-4B, C and D totaling 2.4 miles) which were previously accelerated into 2012 due to integrity management concerns. As an alternative, permit applications have also been submitted to strength test these segments prior to year end.
- **Pipe Replacement Construction - Contractor Bidding:** Increased 2012 forecast due to acceleration of more complex projects on L-109 into 2012, higher cost construction bids, and revised estimates increasing design phase costs to meet permitting conditions and requirements. While contractor attendance at bid walks remains strong, fewer bids have been received recently. Pipeline Replacement construction contracts totaling over 24 miles or approximately $70 million have been awarded to four contractors (Snelson: five, ARB: three, Rockford: two, and Underground: one). In addition approximately six miles has been assigned to General Construction. By the end of July we plan to have contracted or assigned over 95% of our 39 mile target.
- **Pipe Replacement Construction – Field Activities:** Construction underway on ten (10) of thirteen (13) projects planned for July. However, delays have affected two projects: groundwater (L-109 Spread 4, 1.1 miles) and realignment on construction drawings due to underground structures (L-109 Spread 6, 0.6 miles).
- **Inadequate Cathodic Protection (CP):** Completed verification and validation of CP levels at all ten (10) PSEP Valve Automation/Upgrade locations. A short circuit was identified and resolved at Larkspur station, while the resolution of another short circuit at San Andreas station will be coordinated with the Milpitas District. As a result of the inspections and analysis undertaken by PSEP Engineering, inspection of the CP system after valve installation or modification has been incorporated into PSEP pre-commissioning checks.

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- **Pipeline Cleaning (Mercury Removal and Assessment):** A cleaning protocol identified by the Mercury Assessment and Cleaning (MAC) team has now been implemented in three situations. The protocol involves an aggressive brush pig to break away the pipe scale and then an alkaline solution to dissolve the mercury, which allows it to be washed from the pipeline. In each situation the pipeline was cleaned of mercury in four or less pig runs. In addition, a scrape sample showed that the pipe wall was also cleaned to below the mercury threshold, which means that this protocol can be used for cleaning pipelines to be abandoned.

IV. Process Improvement Initiatives

PSEP PMO Transition ([redacted]		**Overall Status**	**GREEN**
Initiative	Stand-up PSEP-wide project controls and governance.		
Team Members	[redacted] (Lead), [redacted] (CH2MHill Lead), [redacted] [redacted] (CH2MHill)		
Scope	• Effectively transition PMO activities lead by Parsons to CH2MHill. • Provide integrated project management tools across PSEP program, including Scope, Schedule and Cost. • Develop Risk Management and Assessment procedures. • Develop and implement program governance procedures, controls and supporting documentation, including quality assurance and document management.		
Benefits (Soft)	Consistent program controls and governance are essential to project management (resource planning, scope management and execution), performance reporting and risk management.		
Costs	Costs are included within the 2012 Gas Operations budget. Recovery of PMO costs is being sought within the CPUC PSEP application.		
Milestone	**Target Completion Date**	**Comments**	
Transition key PMO roles form Parsons to CH2MHill and PG&E staff	**Completed March 31**	CH2MHIll PMO team in place and supporting program-wide project controls and change control.	
Integrated schedule reporting (P6)	**Completed April 30**	Integrated Strength Test and Pipe/Valve/ILI reports.	
Implement Risk Management Board	**Completed April 30**	Top Risks approved by Board with sub-committee convening to quantify cost and schedule impacts of risks and issues.	
Integrated cost reporting (Cobra)	**Completed June 8**	Integrated Strength Test and Pipe/Valve/ILI reports.	
PM training on cost and schedule procedures	**Completed May 31**	Training completed first week May.	
Functional area status reporting	**Completed May 31**	Cross-functional meeting continues to review status reports.	

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Establish Change Control Board.	Completed April 30	Established governance processes and documentation enabling the traceability and verification of scope, schedule and costs changes. Change control status update included in executive steering committee.
Launch Governance Documents and document management	Completed June 30	• PSEP program management documents approved by Program Manager (agreement reach on issuance with Policy and Standards) • Commenced document management activities
Establish Quality Assurance structure and recurring assessment program in partnership with Internal Audit and Gas Operations QA/QC.	July 31*	• Completed outline of construction roles and responsibilities and determination of key quality control points in partnership with Construction Management and Gas Operations QA/QC • Initial QC analysis presented including field inspections on first pipe replacement projects initiated early May. • *Completion of Pipe/Valve/ILI work execution procedures delayed to 7/31.
Identify milestones related to next phase of PMO activity (3.0)	July 31	• Internal Audit providing advice and counsel on governance documents, procedures and controls assessment. • 1H 2012 internal audits in progress.

Description	Accountability	2012	2013	2014	2015	2016
Costs	N/A					
Specific Benefit, Expense Savings						

Discussion Items

- Integration of program reporting and financial forecasting with Base project activities – use of common tools and updated timelines, e.g. P6.
- Recurring reporting to Executive Steering Committee and senior executives

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Valve Automation Design Standard ([redacted]		Overall Status	AMBER
Initiative	Develop a Valve Automation Design Standard for use throughout Gas Operations, Gas Transmission		
Team Members	[redacted] and Karen Roth		
Scope	• Using the PSEP valve automation design basis, develop a valve automation design standard for GO-Gas Transmission. • Standard will include decision tree, equipment material list, ASV/RCV logic.		
Benefits (Soft)	Ensure consistent use and installation of valve automation equipment throughout GT when new and existing pipelines and pipeline valves are being engineered for installation and replacement.		
Costs	Minimal, included within existing PSEP Engineering design costs and Gas Standards costs.		

Milestone	Target Completion Date	Comments
Draft Standard developed and issued to Codes & Standards for publication	11/1/2012	Standard is currently in development by PSEP Engineering. No progress over the last 2 months. Resources have been fully dedicated to 2012 valve automation projects and scoping 2013 projects. Authorization obtained to hire 2 additional engineers, jobs have been posted.

Description	Accountability	2012	2013	2014	2015	2016
Costs						
Specific Benefit, Expense Savings						

Discussion Items
Draft standard under development. Standard will be based on PSEP valve automation testimony and 2011/2012 project engineering designs and field recommended modifications during construction, start-up, and release to operations.

Sponsor: Johnson
Owner: [redacted]

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PSEP, Pipeline Segment MAOP Data Validation ([redacted]	**Overall Status** **AMBER**
Initiative	Pipeline segment data currently resides in 4 unique Gas Operations Databases, ECTS, Intrepid, GasMap1.0, GasMap2.0. PSEP scope and rate case filing was based on data within GasMap1.0 and MAOP records validation as of 4/30/2011. Update the PSEP filing database to reflect Class Location change updates in 2011 and MAOP records validation to date. This will expedite and improve pipeline segment data validation accuracy, and also ensure that PSEP Phase 1 is focused on untested pipelines segments located within urban areas.
Team Members	[redacted]
Scope	• Link GIS GasMap 1.0 data used to develop PSEP filing with Gas Engineering GasMap2.0 (complete) • Identify class location changes that occurred (up/down) on any PSEP Phase 1 pipe segments. (completed 5/31) • Confirm Class Location Change Impacts on the PSEP Phase 1 scope of work across all GT pipe segments, due 6/30/2012. (completed, we know the segments and proposed changes) • Confirm the impacts on Phase 1 PSEP individual project scopes from updated class location, MAOP records validation & PFL builds. (2012/2013 projects due 9/30/2012; 2014 projects + known new projects due 12/31/2012) • Work with MAOP Records Validation Team and develop method of accessing/retrieving MAOP validated records from Intrepid for use within GasMap2.0. This will reduce PSEP engineering manpower required to validate pipe segment data prior to beginning engineering for testing or replacement. (Completion date pending, requires Intrepid data is geospatially aligned with GasMap 2.0)
Benefits (Soft)	These process improvements will ensure PSEP is working on the highest priority untested urban pipeline segments for pressure testing or replacement. Process improvement will result in improved accuracy of PSEP project scope definition which will improve productive and minimize rework.
Costs	Costs included within existing PSEP Engineering design costs and MAOP records validation costs.

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Milestone	Target Completion Date	Comments
See scope items above	09/30/2012	2012 and 2013 PSEP pipeline replacement and pressure testing project scopes defined.

Description	Accountability	2012	2013	2014	2015	2016
Costs	N/A					
Specific Benefit, Expense Savings						

Discussion Items

- Mears has been contracted to perform class location data validations and ID scope changes from the PSEP filing and data residing within gasMap2.0. Work completed
- PSEP engineering is working with [redacted] (MAOP Records validation) to ID ways to implement data file sharing between MAOP Intrepid system and PSEP GasMap2.0

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Mercury Assessment and Cleaning (MAC) Process ([redacted]		**Overall Status**	**GREEN**
Initiative	Develop a standard process that improves the efficiency of cleaning mercury from pipelines prior to a hydrotest		
Team Members	[redacted] [redacted], (several others)		
Scope	• Understand what industry is doing • Develop best available cleaning process • Educate mechanical contractors and provide advice on high mercury tests • Experiment with new processes and incorporate successful processes into standard process		
Benefits (Soft)	Significantly reduce the overall cost of hydrostatic testing if pipelines with mercury can be cleaned quickly		
Costs	Recovery of strength testing costs is being sought within the CPUC PSEP application, wherein PG&E forecast the costs of completing hydrostatic tests. Costs associated with the removal of mercury were not anticipated within these forecasts. As outlined in its PSEP filing PG&E may request recovery of these costs as changes to the original scope of the project.		
Milestone	**Target Completion Date**	**Comments**	
Form MAC Team	Completed Feb 28		
Conduct demonstration project for Gel Pigs	Completed March 31	Demonstration project was conducted but the pipeline chosen had low levels of mercury	
Conduct interviews with industry experts	Completed May 31	Completed interviews with Delta Tech, N-Spec, PEI, Baker-Hughes.	
Develop Best Available Cleaning Process and Test	Completed June 8	Tested the MAC Team's "Best Available Process" on Line 109 Test T-114-11. The test cleaned the pipe from 4000 PPB to 102 PPB in four cleaning runs compared to ten cleaning runs on a similar length segment in 2011.	
Educate Contractors on what PG&E has learned about mercury cleaning	Completed June 7	Educated all of the strength test team's mechanical contractors about what we've learned and the "Best Available Process"	
Identify new ideas to test which might improve the process	August 31	MAC Team plans to test gel pigs again and additional chemical solutions on upcoming tests with known high mercury levels.	

Sponsor: Johnson
Owner: [redacted]

and analyze results	🟩	

Description	Accountability	2012	2013	2014	2015	2016
Costs	N/A					
Specific Benefit, Expense Savings						

Discussion Items

- Additional tests required to validate whether current protocol can adequately address longer pipeline lengths and higher concentrations of mercury.

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Complete Engineering for 2013 Hydrotests in 2012 [redacted]		Overall Status	GREEN
Initiative	Engineer the hydrotests planned for 2013 in 2012 to allow more planning time for resources and permitting		
Team Members	[redacted]		
Scope	• Identify 2011 and 2012 segments that had been delayed to 2013 • Identify 2013 work needed for IM assessments • Develop prioritized list of 2013 tests • Search for records for each 2013 test • Develop engineering drawings and test plans for each test		
Benefits (Soft)	Allows more planning time for the support services such as material ordering, permitting, contract bidding, etc., which will reduce the overall cost of hydrostatic testing and improve our financial forecasting.		
Costs	Costs to conduct the 2013 engineering work in 2012 are included within the PSEP strength testing budget for 2012. Recovery of strength testing costs is being sought within the CPUC PSEP application.		
Milestone	**Target Completion Date**	**Comments**	
Develop list of hydrotests needed for IM assessments for 2013	**Completed May 31**		
Identify 2011 and 2012 segments that had been delayed to 2013	**Completed May 31**		
Develop prioritized list of 2013 tests	**Completed July 6**		
Develop design basis document and complete a records search for each 2013 test	**October 31**	Metric: number of 2013 tests with design basis complete compared to plan/total	
Develop engineering drawings to the IFB stage and test plans	**December 31**	Metric: number of 2013 tests at IFB stage compared to plan/total	

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for each test	🟩	

Description	Accountability	2012	2013	2014	2015	2016
Costs	N/A					
Specific Benefit, Expense Savings						

Discussion Items

- **Hydrotest engineering will begin design basis and records search for 2013 tests about August 1**

V. Supporting Information

Refer Monthly PSEP Executive Steering Committee (7/13 meeting).

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Results		• Refer PSEP and Base Results sections.
Initiative Status	●	See individual initaitive summaries below

Sections I-III: Refer to Project Management Process – PSEP and Base fro Goal/Objective, Results and Observation analysis.

IV. Process Improvement Initiatives

Build Construction Organization (Pierre Bigras)	**Overall Status** **GREEN**
Initiative	Build a new Gas Transmission construction organization with improved processes and a partnership based strategy
Team Members	Construction, Sourcing, HR/Labor
Scope	• Define Construction strategy and partnerships • Establish integrated construction schedule and resource planning • Develop and implement new processes and tools
Benefits (Soft)	This will help a build a construction organization that is well staffed with qualified resources and capable of delivering on its commitment to improve the safety of our gas transmission network.
Costs	Costs included within existing PSEP Construction Management costs.

Milestone	**Target Completion Date**	**Comments**
Develop Construction Labor Strategy - including analyzing cost benefits of PLA for GT Construction Work	06/30/12	At [redacted] recommendation, a PLA will not be pursed but Mike Vlaming has been engaged to assist in resolving any labor issues on GT projects.
Build Partnership w/ UA and schedule regular meetings w/ labor representatives.	06/30/12	Initial contact has been made w/ [redacted] of Local 342 on training initiatives. First meeting will occur in July.
Work w/ sourcing to Increase contractor pool to 9 by	09/30/12	This process is Ongoing. 8 firms

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end of Q3	🟩	currently qualified and bidding. 2 added are with legal. An additional 6 have been pre-qualified and the MSA has been sent out and is under review by contractor. A total potential of 16 contractors in the pool will be possible.
Work w/ sourcing to Increase Professional Services Partners for pipeline construction inspectors and managers by 2 by end of Q3	09/30/12	Tulsa and Canus are now onboard and being used. We are talking with Gulf Eng. as another potential source.
Finalize GT GC Growth Strategy & Process to establish independent GT GC Organization	09/30/12	Currently developing strategy, new POA's, and new job classifications for Transmission F/M A & B.
Have 69 GT specific workforce either moved to or hired in the new GT GC Organization	03/31/13	
Have a resource loaded, workable, useable master schedule with all work streams capturing 100% of the GT work	~~06/30/12~~ 09/30/12	All PSEP work is accurately reflected on P6 master schedule. However, GT base work is now just getting loaded onto P6 master schedule. GT PM organization is just now getting converted to P6 and staffing to meet demand. 19 new projects were just added to the 2012 P/F and milestone dates for these and all other GT Base work will need to be loaded and accurately reflected in P6.
Formalize & finalize process by which jobs are assigned to GT GC/ regional GC or to contractors	06/30/12	Assignment Process was finalized and rolled out to PM groups and to all of gas GC.
Select and Roll out & Implement ePM tool in all work streams - Start Training current PM, CM and contractors in the use of the ePM tool	09/30/12	e-PM Tool has been identified as Skyer and best and final offer has been requested from vendor.

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Have ePM fully operational and used on all projects.	12/31/12	Not yet started. Implementation and training will start after contract finalized w/ ePM vendor.
Identify location for future GT Tools Yard & warehouse - House pigs/ GT specific tools/ Test heads/ baker tanks	12/31/12	A PG&E owned lot in Gilroy has been identified as a potential location. Design and permits are currently being developed.
Establish Task group made up GT GT/ T&R or District M&C groups to establish standardized clearance execution process	09/30/12	In progress. Team headed-up by [redacted] has had one meeting and identified numerous opportunities. Team will meet again after the first cut and cap being performed by a contractor later this month.

Description	Accountability	2012	2013	2014	2015	2016
Costs	N/A					
Specific Benefit, Expense Savings						

Discussion Items

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Quality Performance of GT Construction Management Resources (Pierre Bigras)	Overall Status	AMBER
Initiative	Field procedures and quality improvements.	
Team Members	Pierre Bigras, Bob Suehiro, [redacted], Bob Suehiro	
Scope	• Develop new weld procedures, visual inspection forms and OQ of all GC welders • Develop and roll-out new construction Quality Manual • Develop a welder information database to monitor welder performance	
Benefits (Soft)	These improvements will ensure crew and public safety, reduce failure rates and minimize repair and rework.	
Costs	Costs included within existing costs of capital projects (PSEP and Base).	

Milestone	**Target Completion Date**	**Comments**
Roll out of Visual Weld Inspection forms and OQ of GC welders.	~~06/30/12~~ 08/30/12	Roll-out of visual weld inspection forms in progress. All GC welders were originally scheduled to be OQ'd by June end. However the OQ material being developed by others was not available until 06.28.12. OQ process has just started and is currently scheduled to be completed by 08.30.12. Current Status: 35/47 Welders; 18/32 Apprentices; 7/- Foremen.
Completion and Roll out of QC Manual	09/30/12	All sections of the QC Manual are complete except inspection forms. We have had last minute changes to the visual inspection. Roll out will begin after manual has been finalized.
System wide compliance of weld maps and development of Welder's log	07/31/12	Database to collect information from visual inspection forms under development. This information will be used to run weld reports and monitor welder performance.

Development and testing of Revised Weld Procedures for new construction	🟩 09/30/12	Testing of new procedures underway. Roll-out and communication to welders will begin once testing is complete and new weld procedure are formally issued.

Description	Accountability	2012	2013	2014	2015	2016
Costs	N/A					
Specific Benefit, Expense Savings						

Discussion Items

V. Supporting Information

Refer PSEP Monthly Executive Steering Committee for additional information (to be distributed separately 7/12).

Materials Management Report - July 2012 for June Results

Results	🟡	Some metrics behind targets ytd
Initiative Status	🟢	Teams now underway to address improvement opportunities

I. Goal / Objective

Support the safety and reliability of our gas systems in an affordable manner for our customers. We do this by effectively managing quality materials from receipt through inspection, inventory, and aging management, order processing, transportation and site delivery.

II. Results

Metric	Goal	Last Period	Current Period
Materials Problem Reports Average Age (Monthly)	Below 45	50	45
Materials Problem Reports - Number Pending Review (Monthly)	n/a	204	238
Bundle Fill Rate (Monthly)	91%	93%	92%
Bundle Fill Rate (YTD)	91%	86%	87%
Inventory Turns (Rolling 12 month - Monthly)	3	2.66	2.60
Forecast Accuracy (Quarterly)	70%	82%	68%

RAG = Green = on track, yellow= variance of within 15%, red = variance of more than 15%

III. Observations / Analysis

Metric	Definitions	Results discussion	RAG Status
Materials Problem Reports (MPR's) Average Age	Measure is average days pending review for open materials problem reports. Objective is to remain below 45 days.	Trend continues to improve. Working with SME's with lengthy open MPR's to complete so that responses to issues are timely. However, open MPR's has gone up from 204 to 238 indicating that continued focus is needed.	🟨
Bundle Fill Rate	This metric is the percentage of material orders (reservations) for 'stock yes' items that are delivered in full and on time from the Distribution Centers. Objective is to achieve 91% or greater.	Significant demand spikes and poor supplier delivery performance contributed to the slight reduction in performance. In response to continual high demand for gas working stock material, the planning team is working to add approximately 1 month of safety stock to each level of the supply chain: suppliers, DC's, and yards. In addition, the planning team is requesting that MRC begin stocking many high usage vendor	🟨
Inventory Turns	Distribution Center cycles, or "turns over", during a year. Calculated by dividing the total consumption during a 12 month period into the inventory average for the same period. Rolling 12 month calculation. Objective is to remain above 3.	Consumption dropped significantly from May to June ($3.0M to $1.9M) while inventory increased to $10M in anticipation of increased gas demand for new and existing gas materials. The turns continue to lag primarily due to $2.1M of skinner clamps and trident seals that were blocked for quality issues in 2010. Without this inventory, turns would be 3.2 (above target).	🟨
Forecast Accuracy	Current metric only includes specific gas programs in the forecast: CSRP, GPRP & HPR programs. Results are reported quarterly.	Total amount forecast for second quarter was $3.5 M. New gas liason in Materials is working to gain better visibility and obtain forecast requirements from the gas estimating teams on future projects. Materials forecasting team working to map process to define/improve performance in this area.	🟨

IV. Process Improvement Initiatives

Key Initiatives

Initiative Name	Status
1. Improve materials forecasting process	🟩
2. Develop materials traceability process as part of Mariner	🟩

Initiative Schedule and Status

Initiative	**1. Improve materials forecasting process**	
Team Members	**Karen Roth, [redacted] Dean Churchwell, [redacted]** [redacted]	
Scope	**Identify actions needed to improve forecasting for gas materials. Develop and implement process changes that result in an ongoing sustainable forecasting process.**	
Status	**Activity/Milestone**	**Target Date**
Actions Completed:	- Held Initial meeting on May 14, 2012. Team identified action items and initial focus areas to resolve forecasting immediate pain points. - 2nd Team meeting held on June 26. Reviewed current status of action items. Materials received updated forecast, but an overall process needs documentation.	Completed
Next Steps:	- Develop end-to-end materials forecast process utilizing exiting tools. Map out that process and bring to the next Materials Process Team Meeting. - Develop summary long lead materials list to improve understanding of materials lead times for ordering. - Review the information in CAPEs and make recommendation whether it will help in forecasting for gas. - Provide an update on any new tools that gas will be using that could help in the forecasting process. - Continue progress with adding fittings and valves to long lead transmission forecasting process	July 31

Description	Accountability	2012	2013	2014	2015	2016
Costs	TBD					
Specific Benefit, Expense Savings	TBD					

Materials Management Report - July 2012 for June Results

Initiative Schedule and Status

Initiative	**2. Develop materials traceability process as part of Mariner**	
Team Members	**Karen Roth,** [redacted]	
Scope	**Trace all materials (including inspection) used in pipeline and station maintenance and construction from the time the source material is received at the manufacturer's site through its useful life in order to improve gas system safety.**	
Status	**Activity/Milestone**	**Target Date**
Actions Completed:	- Reviewed previous project (Pipeline 2020 Materials Traceability Improvement Planning). - Identified additional SME team members including those needed to determine what materials will be tracked and what additional information will be required. - Attended AGA Material Traceability Workshop on June 6 and gathered industry information for use in project development at PG&E. - Held initial team meeting kickoff meeting on June 14. - Reviewed: 1.) existing GIS, 2) existing SAP materials capabilities, and 3) current material traceability efforts at June 28 team meeting. - Reviewed: 1.) Current SAP Asset Registry and 2) plan for Phase I ("roll out" of Material Traceability efforts currently being piloted) at July 13 team meeting.	Completed
Next Steps:	- Benchmarking at Diablo Canyon to see their process. - Start development of "As Is" and "To Be" process. - Identify and understand linkages to other initiatives. - Re-Validate previous solution (two SAP Solutions): Batch Management and Work Order Solution. - Validate the requirements including materials to be documented. - Evaluate/consider other solutions (barcoding, mapping, electronic field coding, etc.) and assess impacts. - Develop Implementation Plan.	**July 31** **Aug 31** **Sept 30** **Oct 31**

Description	**Accountability**	**2012**	**2013**	**2014**	**2015**	**2016**
Costs	TBD	$200K	$6.54M			
Specific Benefit, Expense Savings	TBD					

V. Supporting Information

Current Issues in Materials Management:

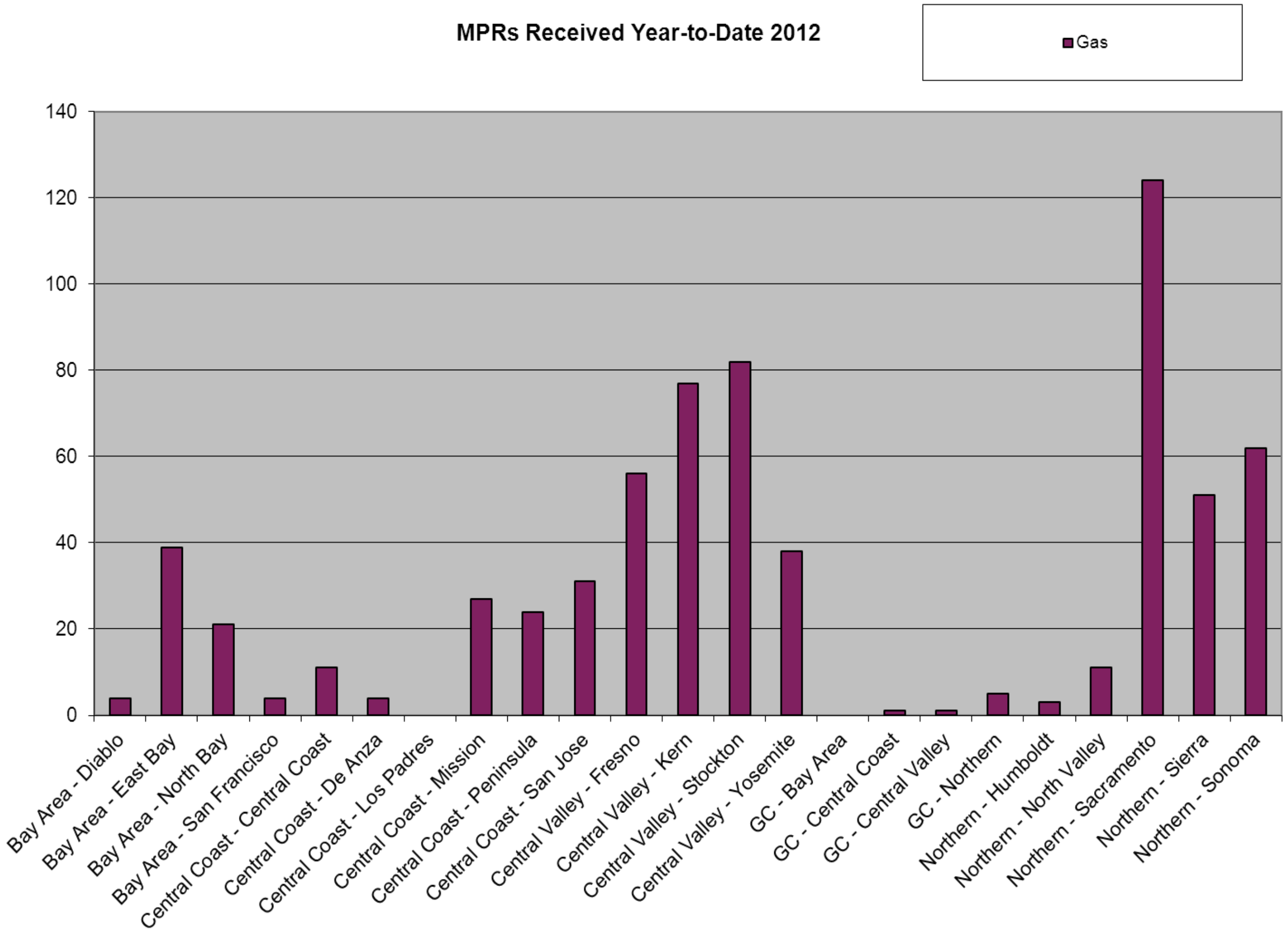
Issue	Status	Owner	Date
Bad Ipex Fittings: 1/2", 1", 1-3/4"	- Establish follow-up plan to locate missing IPEX fittings (172) - Establish project manager to drive digs to replace IPEX fittings - Pursue settlement with IPEX for cost coverage	Cowsert/ [redacted]	8/31/2012
Fisher 627 HP Regulators - Failed Bolts	- Proposed approach: Replace 4000 "customer HPR sets" during 3 year inspection program currently planned - Replace or review remaining 1000 "district reg sets" as next step - Need implementation leader/program manager	Cowsert/ [redacted]	7/31/2012 & Ongoing
Creation of New Transmission Material Codes	- Complete materials code and standards updates for new transmission material codes.	[redacted]	11/30/2012
Met Fit Couplings	- Ongoing tracking of failures and determination of cause (DIMP) - Determine if additional dig locations needed outside SF - Legal assisting in determining possible options for cost	Cowsert/ [redacted] Pendleton	8/31/2012
T&R Materials Project	- The team has moved from Santa Rosa to San Rafael for next location - Develop a schedule to rollout the remaining 25 T&R locations (with current resources will take this year to complete) - Need to develop funding plan	Leverett/ [redacted]	12/31/2012
Engagement on Gas Materials Quality with Field Personnel	- Supplier Quality Assurance to attend grass roots meetings with field gas personnel	Carroll/ [redacted]	8/31/2012
Tech Fab Gas Main Repair Can	- Canceled from use due to supplier quality issue. - Need plan for existing installations.	Cowsert	8/31/2012

Metrics trends for 2012

Metric	Goal	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Materials Problem Reports Average Age (Monthly)	45	41	36	44	54	50	45						
Materials Problem Reports - Number Pending Review (Monthly)	n/a	274	296	263	298	204	238						
Bundle Fill Rate (Monthly)	91%				91%	93%	92%						
Bundle Fill Rate (YTD)	91%			83%	85%	86%	87%						
Inventory Turns (Rolling 12 month - Monthly)	3	2.46	2.47	2.49	2.60	2.66	2.60						
Forecast Accuracy (Quarterly)	70%			82%			68%						

Materials Management Report - July 2012 for June Results

Material Problem Reports YTD June by Division



Excavation Technology - July 2012 for June Results

Results	🟡	**YTD cost per steel main RED, Cost per Service GREEN, Cost per plastic main GREEN**
Initiative Status	🟡	Initiatives identified. Develop and implement solutions

I. Goal / Objective

The goal of the Excavation Technology process is to assure that PG&E is using the safest, most efficient and most effective technology to perform Gas Transmission and Distribution work. Develop and implement a uniform and consistent methodology of determining and tracking unit and unit cost information across all categories of work.
Additionally, all 2012 approved projects and programs are to be completed as planned and funded.

A consultant from CHA was hired to evaluate PGE GC gas crew sizing, trench methods used, and fleet utilization and recommend better practices to improve productivity and effectiveness. Results are included in section IV of this report.

II. Results

Scope of this process initiative initially focused on Gas Pipeline Replacement Program and has been expanded to include all T&D Capital work excluding PSEP.

Total Distribution and Transmission Capital work amounts to $442M and $627 respectively. The tables below depict the number of funded construction projects and dollar amounts in various stages of the process from initiate to post construction.

Gas Distribution Capital Work Progress

Count of Order Phase

Program	Initiation	Estimating Ready	Design	Approval	Pending	Pre-Construction	Construction	Post-Construction	Other	Grand Total
ALDYL-A	10	6	16				11	1		**44**
Cap	2	1	11	3	3	4	16	11		**51**
CSRP	2					1	2			**5**
GPRP	2	7	5	1	9	11	18	10		**63**
HPR	21	6	54	8	19	43	71	52		**274**
Rel	55	4	61	10	34	81	84	168	4	**501**
SBI		1								**1**
New Business										**0**
WRO										**0**
Builings/IT/Other										
Grand Total	**92**	**25**	**147**	**22**	**65**	**140**	**202**	**242**	**4**	**939**

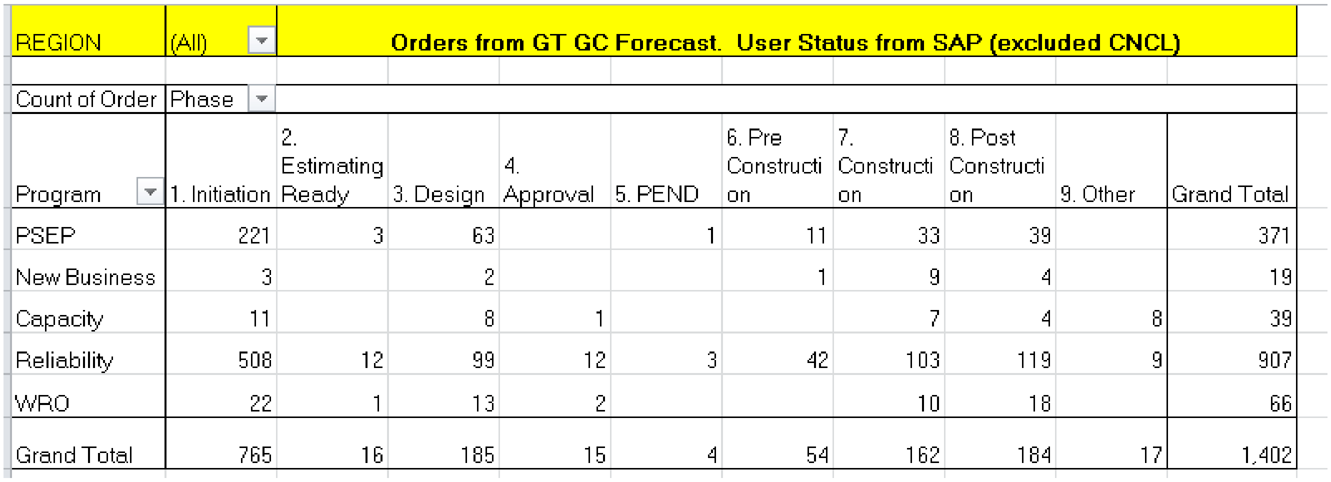
Sum of Estimated Costs

Program	Initiation	Estimating Ready	Design	Approval	Pending	Pre-Construction	Construction	Post-Construction	Other	Grand Total	Budget
ALDYL-A	$60,008	$289,001	$200,013				$12,033,752	$729,450		**$13,312,224**	$36,100,000
Cap	$441,612	$1	$428,521	$3	$1,325,320	$1,215,994	$5,657,923	$2,458,327		**$11,527,701**	$14,000,000
CSRP	$1,521,993					$10,693,454	$44,651,051			**$56,866,498**	$53,500,000
GPRP	$15,001	$7	$133,003	$776,282	$19,333,803	$12,069,361	$25,322,618	$16,126,017		**$73,776,092**	$75,800,000
HPR	$45,018	$6	$1,504,493	$8,177,679	$8,232,611	$12,099,644	$28,986,680	$15,513,955		**$74,560,086**	$39,800,000
Rel	$13,053	$4	$649,496	$649,966	$1,780,615	$2,478,022	$7,828,983	$11,284,102	$29,032	**$24,713,273**	$23,200,000
SBI		$1								**$1**	$0
New Business										**$0**	$33,000,000
WRO										**$0**	$48,000,000
Builings/IT/Other										**$0**	$119,000,000
Grand Total	**$2,096,685**	**$289,020**	**$2,915,526**	**$9,603,930**	**$30,672,349**	**$38,556,475**	**$124,481,007**	**$46,111,851**	**$29,032**	**$254,755,875**	**$442,400,000**

Excavation Technology - July 2012 for June Results

With 50% of the year remaining, two thirds of the projects are engineered and progressing into construction. Approximately one fourth of the projects are completed. Currently forecasting completion of all Cycle 1 funded work for 2012.

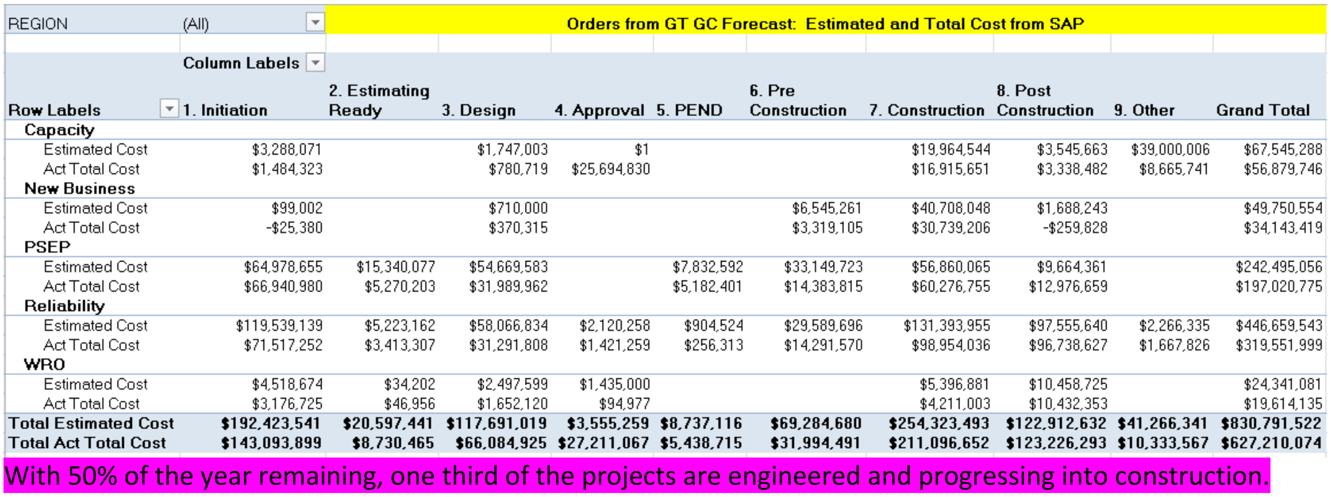
Gas Transmission Capital Work Progress



REGION (All) Orders from GT GC Forecast. User Status from SAP (excluded CNCL)

Count of Order Phase

Program	1. Initiation	2. Estimating Ready	3. Design	4. Approval	5. PEND	6. Pre Construction	7. Construction	8. Post Construction	9. Other	Grand Total
PSEP	221	3	63		1	11	33	39		371
New Business	3		2			1	9	4		19
Capacity	11		8	1			7	4	8	39
Reliability	508	12	99	12	3	42	103	119	9	907
WRO	22	1	13	2			10	18		66
Grand Total	765	16	185	15	4	54	162	184	17	1,402



REGION (All) Orders from GT GC Forecast: Estimated and Total Cost from SAP

Column Labels

Row Labels	1. Initiation	2. Estimating Ready	3. Design	4. Approval	5. PEND	6. Pre Construction	7. Construction	8. Post Construction	9. Other	Grand Total
Capacity										
Estimated Cost	$3,288,071		$1,747,003	$1			$19,964,544	$3,545,663	$39,000,006	$67,545,288
Act Total Cost	$1,484,323		$780,719	$25,694,830			$16,915,651	$3,338,482	$8,665,741	$56,879,746
New Business										
Estimated Cost	$99,002		$710,000			$6,545,261	$40,708,048	$1,688,243		$49,750,554
Act Total Cost	-$25,380		$370,315			$3,319,105	$30,739,206	-$259,828		$34,143,419
PSEP										
Estimated Cost	$64,978,655	$15,340,077	$54,669,583		$7,832,592	$33,149,723	$56,860,065	$9,664,361		$242,495,056
Act Total Cost	$66,940,980	$5,270,203	$31,989,962		$5,182,401	$14,383,815	$60,276,755	$12,976,659		$197,020,775
Reliability										
Estimated Cost	$119,539,139	$5,223,162	$58,066,834	$2,120,258	$904,524	$29,589,696	$131,393,955	$97,555,640	$2,266,335	$446,659,543
Act Total Cost	$71,517,252	$3,413,307	$31,291,808	$1,421,259	$256,313	$14,291,570	$98,954,036	$96,738,627	$1,667,826	$319,551,999
WRO										
Estimated Cost	$4,518,674	$34,202	$2,497,599	$1,435,000			$5,396,881	$10,458,725		$24,341,081
Act Total Cost	$3,176,725	$46,956	$1,652,120	$94,977			$4,211,003	$10,432,353		$19,614,135
Total Estimated Cost	**$192,423,541**	**$20,597,441**	**$117,691,019**	**$3,555,259**	**$8,737,116**	**$69,284,680**	**$254,323,493**	**$122,912,632**	**$41,266,341**	**$830,791,522**
Total Act Total Cost	**$143,093,899**	**$8,730,465**	**$66,084,925**	**$27,211,067**	**$5,438,715**	**$31,994,491**	**$211,096,652**	**$123,226,293**	**$10,333,567**	**$627,210,074**

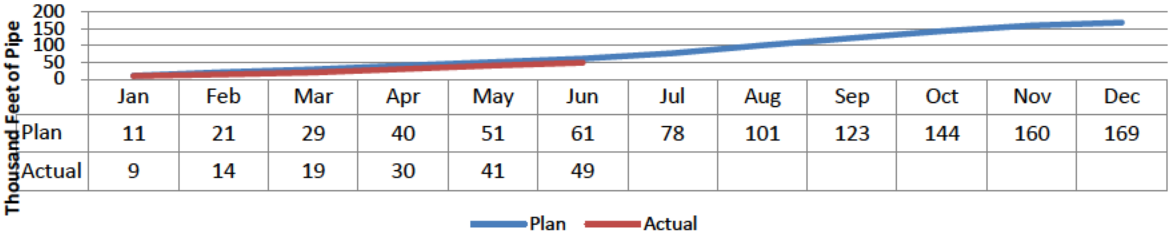
With 50% of the year remaining, one third of the projects are engineered and progressing into construction. Approximately one tenth of the projects are completed. Currently trending to be under our Cycle 1 target and at risk of not completing planned work in 2012. Further analysis and recommendations will be presented by August 1

III. Observations / Analysis for Distribution Programs

Excavation Technology - July 2012 for June Results

MAT 14A – Gas Pipeline Replacement Project

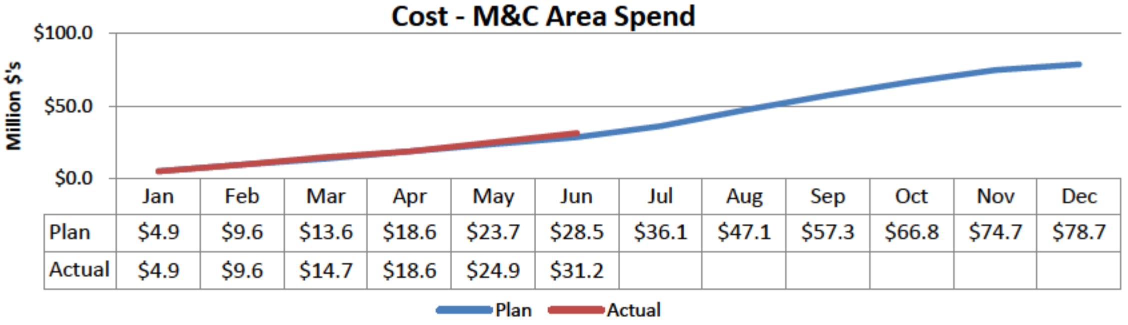
Work - Pipe Replaced



	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Plan	11	21	29	40	51	61	78	101	123	144	160	169
Actual	9	14	19	30	41	49						

Year-to-date, we have replaced 48,553 feet of pipe. This is 12,738 feet below the prorated plan of 61,291 feet. Jobs delayed by approval and permits. Plan to contract 30% of the program.

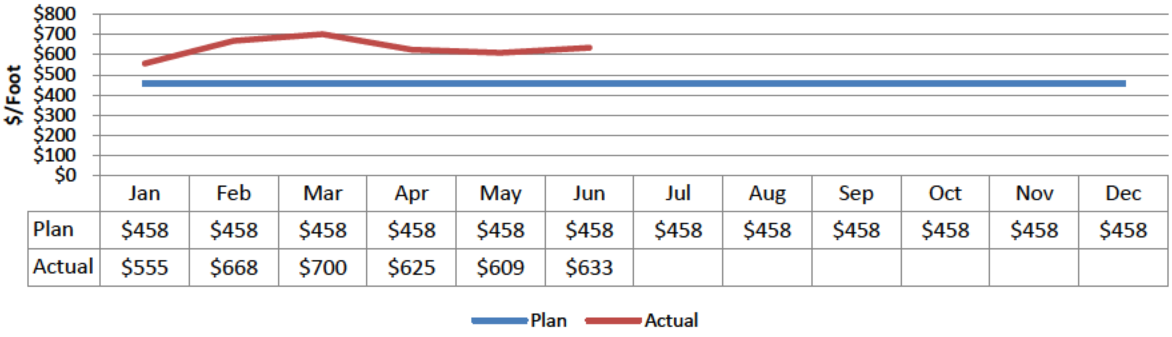
Cost - M&C Area Spend



	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Plan	$4.9	$9.6	$13.6	$18.6	$23.7	$28.5	$36.1	$47.1	$57.3	$66.8	$74.7	$78.7
Actual	$4.9	$9.6	$14.7	$18.6	$24.9	$31.2						

Year-to-date, we are approximately $2.7 million over the CY1 plan. This is a timing variance that will be corrected in future months.

Unit Cost - YTD $/Feet of Pipe Replaced



	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Plan	$458	$458	$458	$458	$458	$458	$458	$458	$458	$458	$458	$458
Actual	$555	$668	$700	$625	$609	$633						

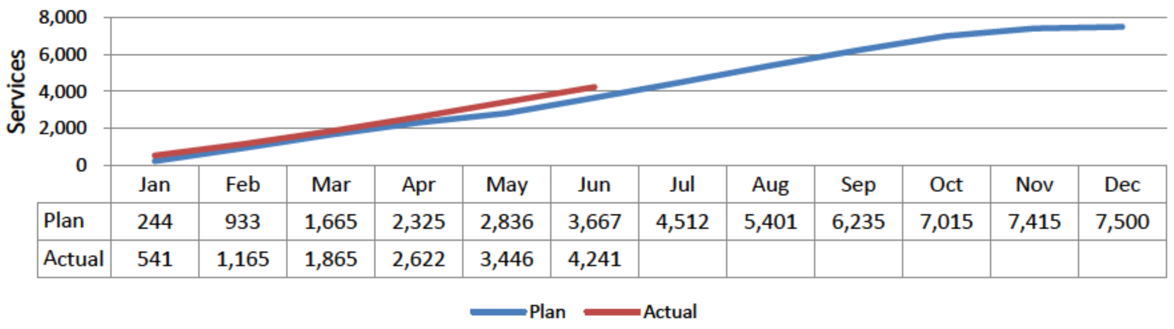
Year-to-date, we are approximately $175 over the targeted unit cost (38%). Unit costs had been declining the last two months but increased slightly this month. More than 85% of projects utilize trenchless construction methods. Unfortunately, more cities are requiring camera test of sewer laterals when using trenchless methods to ensure no cross bores exist and will increase cost on average of $250 per service. Unit costs expected to move toward the target as more main is reported deactivated. Deactivation is the last task of the job therefore units are lagging cost.

Owner: Bob Suehiro

Excavation Technology - July 2012 for June Results

MAT 14B – Copper Service Replacement Project

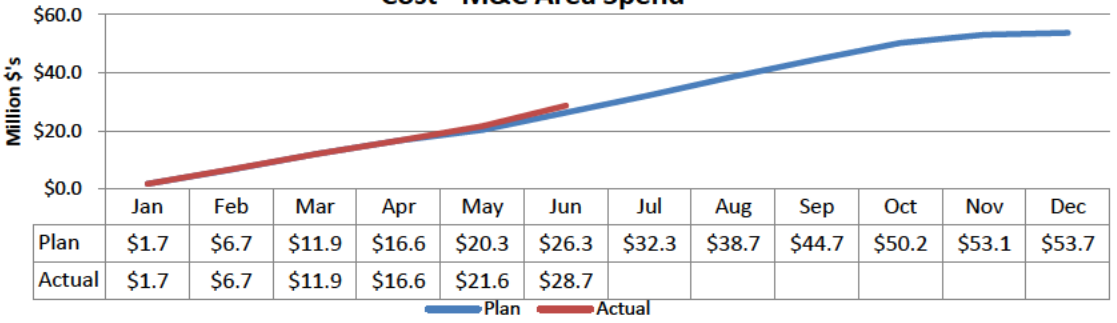
Work - Services Replaced



	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Plan	244	933	1,665	2,325	2,836	3,667	4,512	5,401	6,235	7,015	7,415	7,500
Actual	541	1,165	1,865	2,622	3,446	4,241						

Year-to-date, we have replaced 4,241 copper services. This is 574 services above the prorated plan of 3,667.

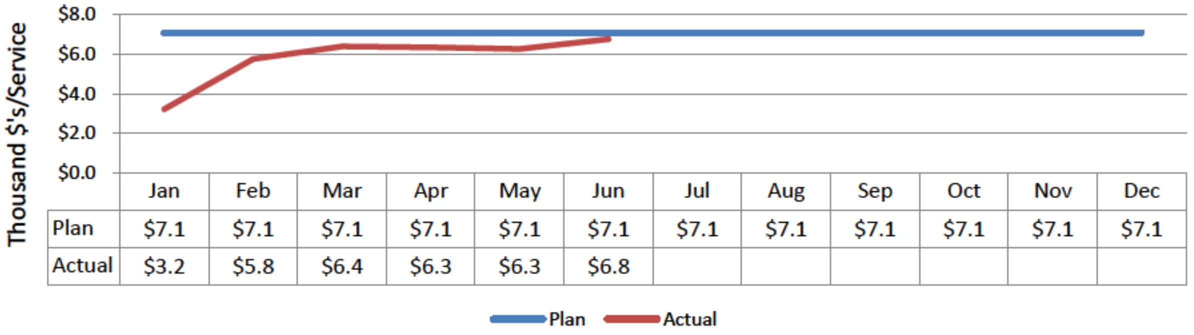
Cost - M&C Area Spend



	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Plan	$1.7	$6.7	$11.9	$16.6	$20.3	$26.3	$32.3	$38.7	$44.7	$50.2	$53.1	$53.7
Actual	$1.7	$6.7	$11.9	$16.6	$21.6	$28.7						

Year-to-date, we are approximately $2.5 million over the CY1 plan. Work is being completed sooner than planned and at lower unit cost.

Unit Cost - YTD $/Service Replaced

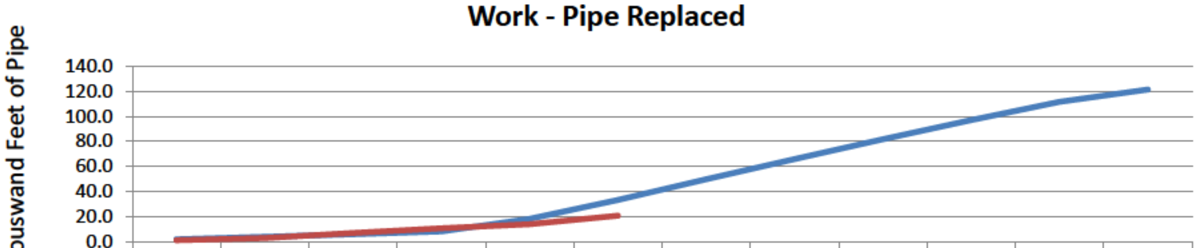


	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Plan	$7.1	$7.1	$7.1	$7.1	$7.1	$7.1	$7.1	$7.1	$7.1	$7.1	$7.1	$7.1
Actual	$3.2	$5.8	$6.4	$6.3	$6.3	$6.8						

Year-to-date, we are approximately $327 under the targeted unit cost (5%). Unit costs increased this month but continue to be below the target. Increase due to contract accrual costs. The unit cost target has been reduced to $7100 from $7500 which results in $3.7M saved and reallocated.

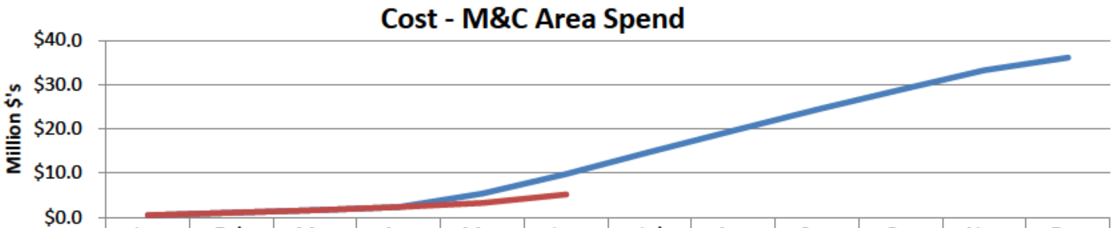
Excavation Technology - July 2012 for June Results

MAT 14D – Plastic Pipe Replacement Program (Aldyl-A)



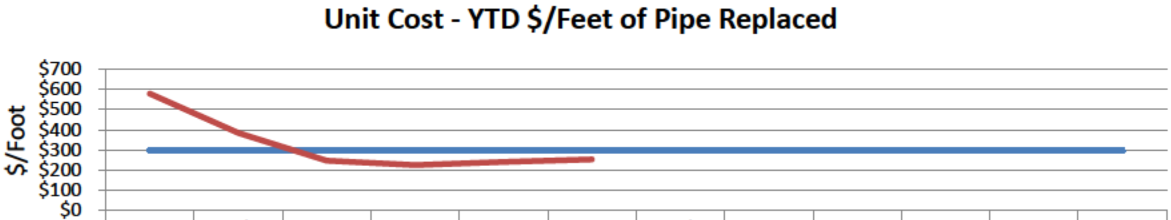
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Plan	1.7	3.6	5.7	7.8	18.1	33.0	49.8	65.9	81.8	97.0	111.8	121.4
Actual	0.9	2.8	6.8	10.4	13.7	20.6						

Year-to-date, we have replaced 20,556 feet of Aldyl-A plastic pipe. This is approximately 12,500 feet below the prorated plan of 33,000 due to late design and approval. Plan is to move more crews onto ready work and add contract crews.



	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Plan	$0.5	$1.1	$1.7	$2.3	$5.4	$9.8	$14.8	$19.6	$24.3	$28.9	$33.3	$36.1
Actual	$0.5	$1.1	$1.7	$2.3	$3.3	$5.2						

Year-to-date, we are approximately $4.6 million under the CY1 plan. This is a timing variance that will be corrected in future months as more ready work is moved into construction.



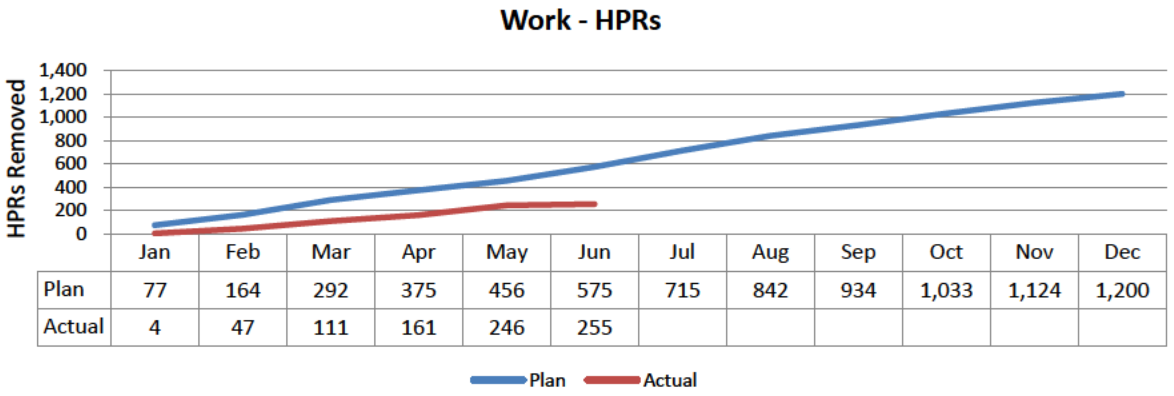
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Plan	$297	$297	$297	$297	$297	$297	$297	$297	$297	$297	$297	$297
Actual	$578	$384	$247	$225	$241	$254						

Year-to-date, we are approximately $43 under the targeted unit cost (14%). Unit costs have stabilized over the last few months and are expected to continue below the target as greater efficiency is achieved.

Excavation Technology - July 2012 for June Results

MWC 2K – HPR

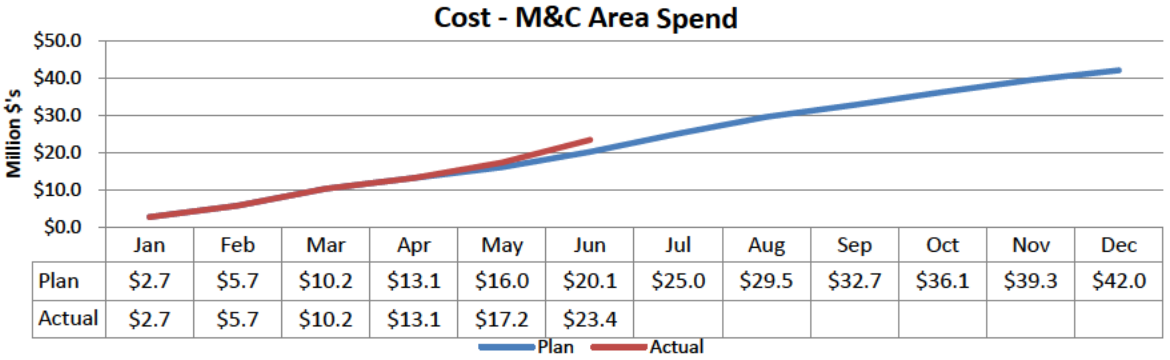
Work - HPRs



	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Plan	77	164	292	375	456	575	715	842	934	1,033	1,124	1,200
Actual	4	47	111	161	246	255						

Year-to-date, we have replaced 255 HPRs. This is 320 below the prorated plan of 575. Plan is to add more contract crews on ready work.

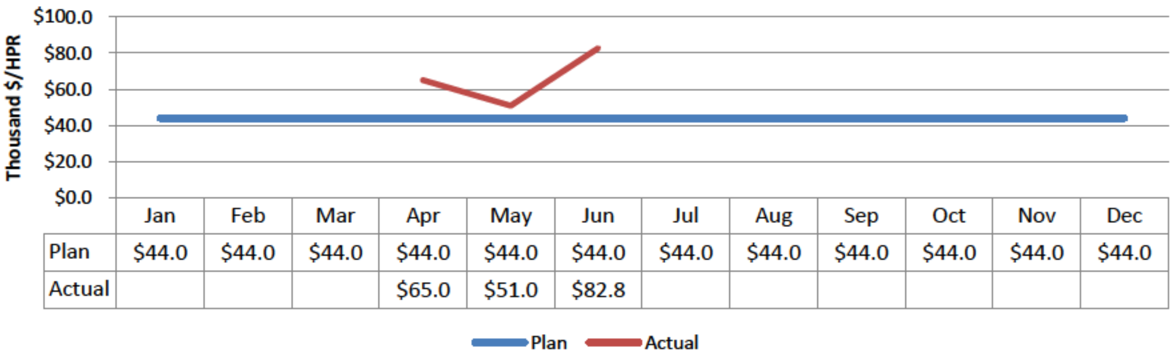
Cost - M&C Area Spend



	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Plan	$2.7	$5.7	$10.2	$13.1	$16.0	$20.1	$25.0	$29.5	$32.7	$36.1	$39.3	$42.0
Actual	$2.7	$5.7	$10.2	$13.1	$17.2	$23.4						

Year-to-date, we are approximately $3.2 million over the CY1 plan. This is a timing variance that will be corrected in future months.

Unit Cost - YTD $/HPR

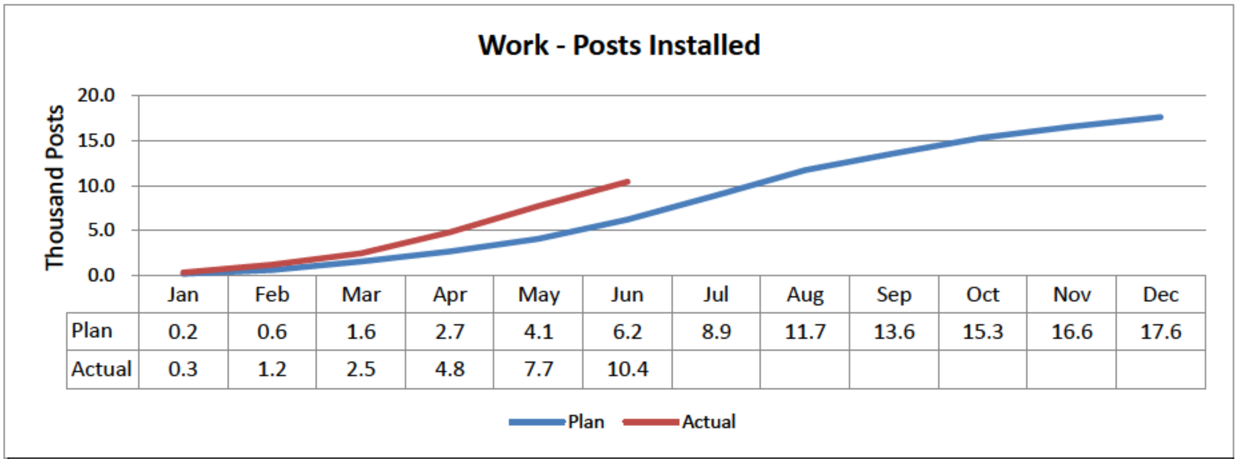


	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Plan	$44.0	$44.0	$44.0	$44.0	$44.0	$44.0	$44.0	$44.0	$44.0	$44.0	$44.0	$44.0
Actual				$65.0	$51.0	$82.8						

Year-to-date, we are approximately $39K over the targeted unit cost (88%). Projects completed have more main and regulator installations as opposed to HPR replacement which significantly adds to the HPR unit cost. Recommend main and regulator costs be tracked independently and new units defined..

Excavation Technology - July 2012 for June Results

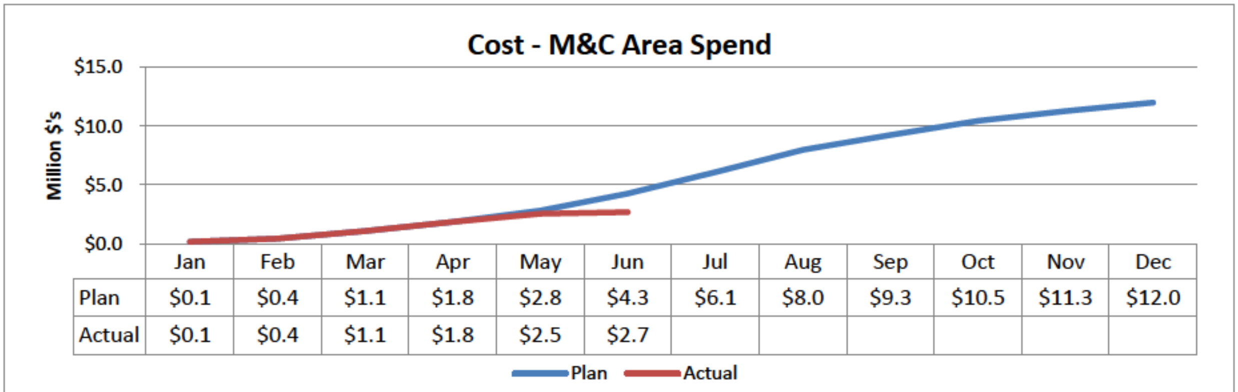
MWC EX - Meter Protection Posts



Work - Posts Installed

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Plan	0.2	0.6	1.6	2.7	4.1	6.2	8.9	11.7	13.6	15.3	16.6	17.6
Actual	0.3	1.2	2.5	4.8	7.7	10.4						

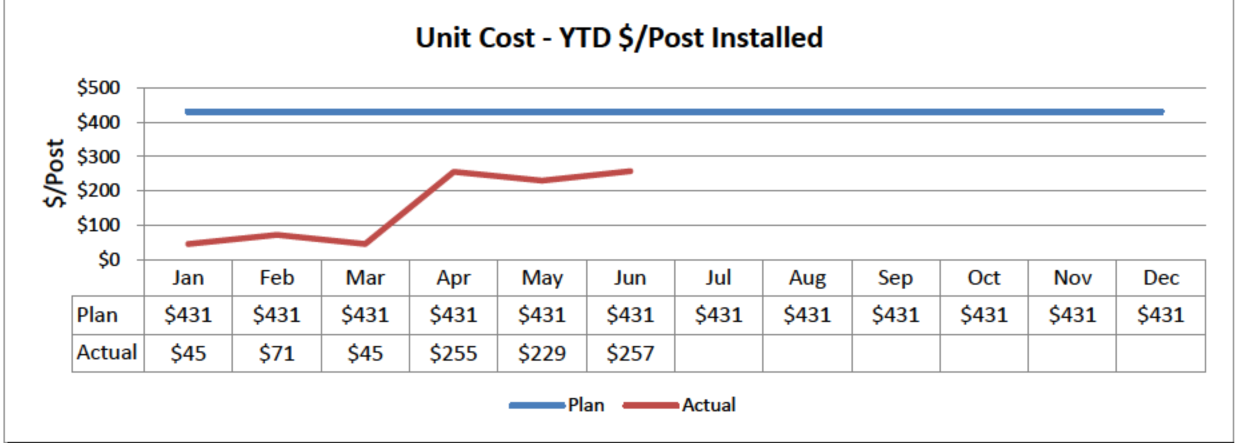
Year-to-date, we have installed 10,400 meter protection posts. This is approximately 4,200 posts above the prorated plan of 4,100.



Cost - M&C Area Spend

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Plan	$0.1	$0.4	$1.1	$1.8	$2.8	$4.3	$6.1	$8.0	$9.3	$10.5	$11.3	$12.0
Actual	$0.1	$0.4	$1.1	$1.8	$2.5	$2.7						

Year-to-date, we are approximately $1.6 million under the CY1 plan. This is a timing variance that will be corrected in future months.



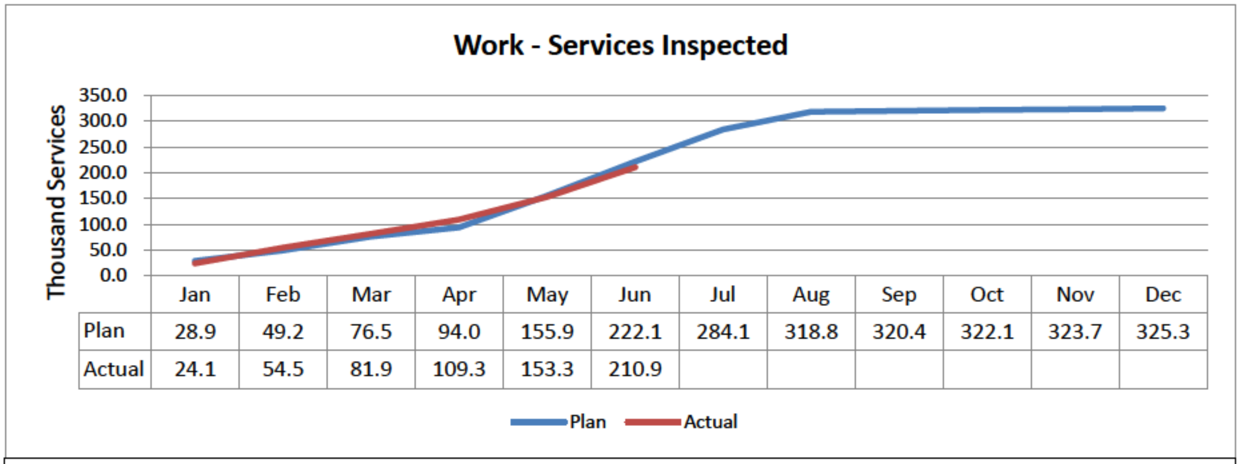
Unit Cost - YTD $/Post Installed

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Plan	$431	$431	$431	$431	$431	$431	$431	$431	$431	$431	$431	$431
Actual	$45	$71	$45	$255	$229	$257						

Year-to-date, we are approximately $174 under the targeted CY1 unit cost (40%). Unit costs increased slightly last month and are expected to continue below the target.

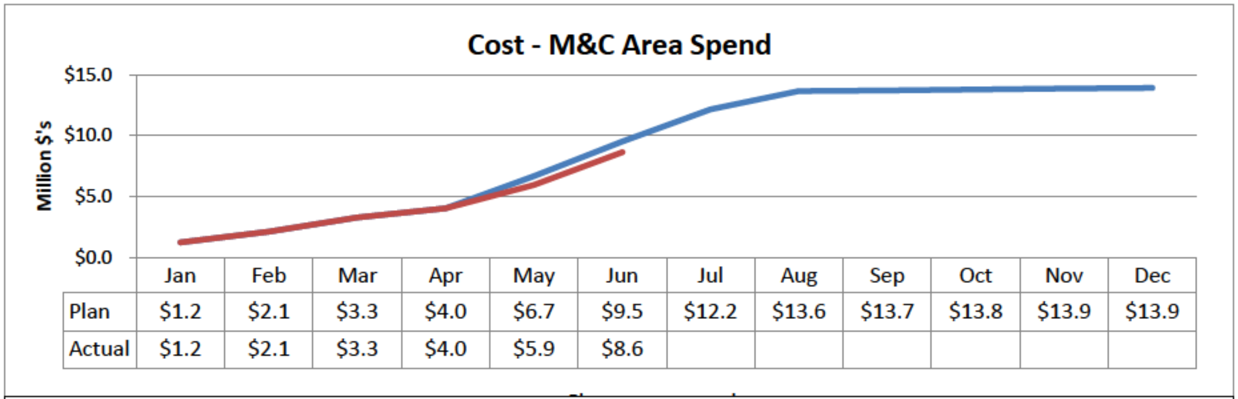
Excavation Technology - July 2012 for June Results

MAT DGE - ISSP Evaluations



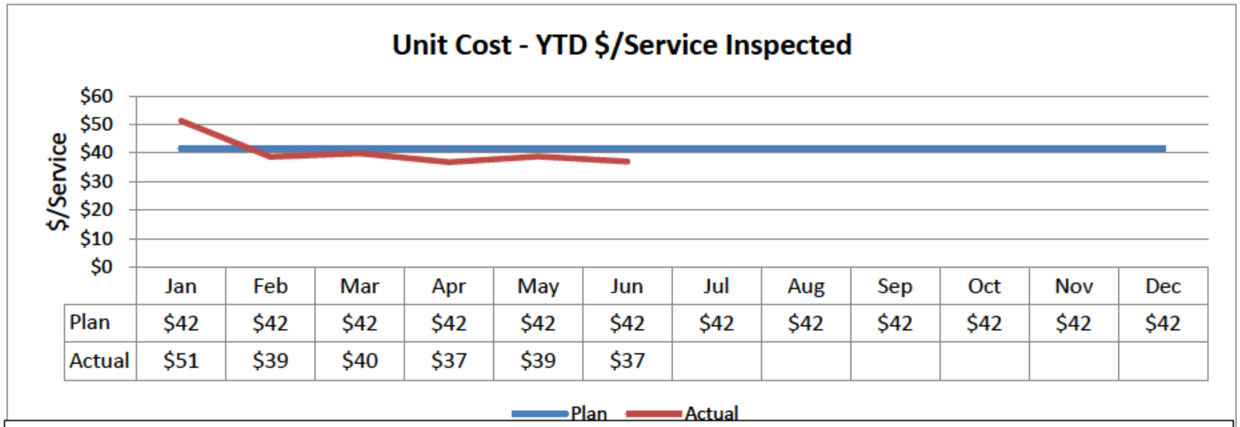
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Plan	28.9	49.2	76.5	94.0	155.9	222.1	284.1	318.8	320.4	322.1	323.7	325.3
Actual	24.1	54.5	81.9	109.3	153.3	210.9						

Year-to-date, we have evaluated 211k steel services. This is approximately 11k services below the prorated plan.



	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Plan	$1.2	$2.1	$3.3	$4.0	$6.7	$9.5	$12.2	$13.6	$13.7	$13.8	$13.9	$13.9
Actual	$1.2	$2.1	$3.3	$4.0	$5.9	$8.6						

Year-to-date, we are approximately $0.9 million under the CY1 plan. This is due to performing this work below the planned unit cost.

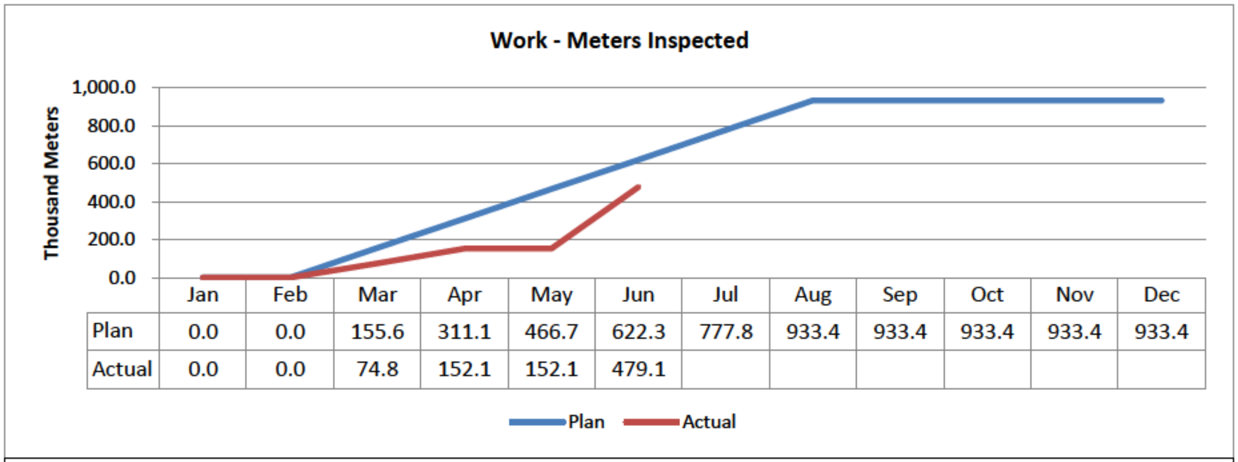


	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Plan	$42	$42	$42	$42	$42	$42	$42	$42	$42	$42	$42	$42
Actual	$51	$39	$40	$37	$39	$37						

Year-to-date, we are approximately $5 under the targeted CY1 unit cost (7%). Unit costs continue below the target.

Excavation Technology - July 2012 for June Results

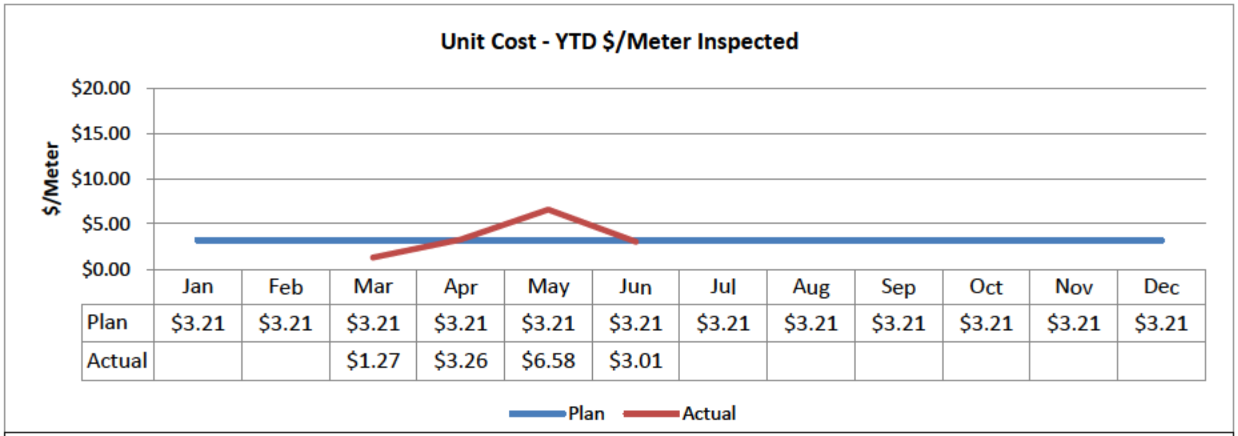
MAT FHK - Atmospheric Corrosion Inspections



Work - Meters Inspected

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Plan	0.0	0.0	155.6	311.1	466.7	622.3	777.8	933.4	933.4	933.4	933.4	933.4
Actual	0.0	0.0	74.8	152.1	152.1	479.1						

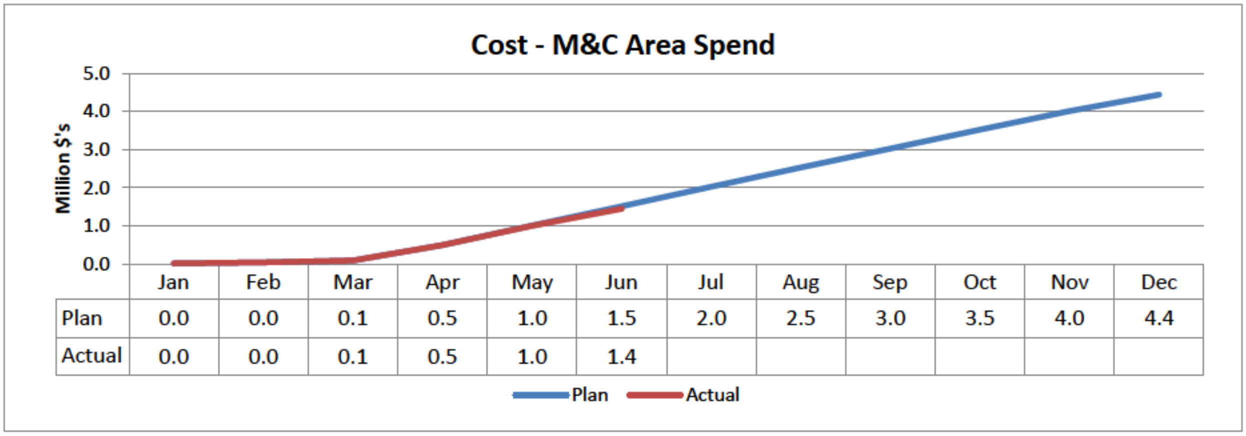
Year-to-date, we have evaluated 479k meters. This is approximately 143k meters below the prorated plan.



Unit Cost - YTD $/Meter Inspected

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Plan	$3.21	$3.21	$3.21	$3.21	$3.21	$3.21	$3.21	$3.21	$3.21	$3.21	$3.21	$3.21
Actual			$1.27	$3.26	$6.58	$3.01						

Year-to-date, we are essentially on the CY1 financial plan.



Cost - M&C Area Spend

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Plan	0.0	0.0	0.1	0.5	1.0	1.5	2.0	2.5	3.0	3.5	4.0	4.4
Actual	0.0	0.0	0.1	0.5	1.0	1.4						

Year-to-date, we are slightly under the targeted unit cost.

Excavation Technology - July 2012 for June Results

IV. Process Improvement Initiative

Initiative Overview	
Sponsor	Stavropoulos
Team Leads	Kirk Johnson /Bob Suehiro
Initiative Description	Using Excavation Technology (low dig, HDD, Keyhole Tech, pipe bursting, inserting, mini excavator, etc.) to reduce costs and improve customer/municipal satisfaction.
Initiative Strategy	People – Trained, qualified resources are available to deploy the most effective, efficient, safe, and least disruptive excavation method. Process – Includes 1) identifying all substructures in the planned excavation path prior to final design to minimize costly construction starts and stops as well as customer and patron dissatisfaction. 2) Excavation methods are agreed upon with stakeholders before final design, estimating, and permit acquisition. 3) Ensure high public safety by verifying all cross bores have not intruded into any substructures. Technology – Utilize state of the art locating instruments to identify substructures depth and type. Utilize most effective and efficient excavating methods available.

Key Initiatives

Initiative Category	Initiative Name	Status
People	1. Pre Engineering and Estimate Preparation	🟨
Process and technology	2. Unit and Unit Cost methodology and reporting	🟨
Process	3. Materials and Planning	🟨
Technology	4. Construction Methods	🟨
People and Process	5. Construction Support	🟨
People and Process	6. Training and Operator Qualifications	🟩

Initiative Schedule and Status

Initiative	1. Pre Engineering and Estimate Preparation
Team Members	Ron Huggins (Supt), [redacted] [redacted]),Cameron Rowland (Const Engr),

Excavation Technology - July 2012 for June Results

	[redacted]	
Scope	Non PSEP T&D Capital Jobs over $200,000 Gross Financial Cost	
Benefits (Soft)	(Fewer construction obstructions causing re-engineering and costly delays. 5-10% savings depending on complexity of job)	
Costs	Additional labor to perform pre engineering field check and walk down approximately 4 man days. Additional labor to set up SAP construction operations for each job, negligible.	
Action and assigned team members_	**Target Completion Date**	**Comments**
a)Differentiate costs between Main and Service by setting up individual operations and charging to orders.	8/31/12	Shane and [redacted] to give [redacted] a list of recommended operations. Cameron to roll out to Construction Engineers with roll out to others by July 1. This would be for 14A and D jobs. In August would implement for all mains and services. Steven Fischer reports roll out in SF complete. [redacted] will update spreadsheet when accounting complete for May, will transfer completed jobs to new accounting method. **By August, all Bay Region jobs will be in new accounting procedure.** Shane set-up operations for 14D and HPRs for Central Coast Region
b)Design Unit Costs – Develop cost per foot main by construction methods	7/15/12	GPRP Meeting is the first Monday of every month. Members of this team are invited to pop in at any time. [redacted] is looking at scenarios provided by construction working with Rick's team. 7/6 Rick needs to provide matrix. Due 7/6. How much for the various scenarios? Update with new technology data. Update [redacted] analysis also. 7/6 Still working out spoil disposal issues, costs are not firm yet.
c)Fast Flow Estimating tool (FFE) to work with Construction to program cost per foot based in trench method used	July	Omar to share costs with estimating. [redacted] to reach out to Omar. Need to incorporate prospecting for directional boring jobs. **Need to look at jobs outside of SF.** Need update from [redacted]. Steven is performing a cost comparison of boring vs. trenching and will develop a spreadsheet.
d)Perform pot hole and sub terrain engineering prior to	June	Per [redacted], need to start looking at jobs sooner to make this a useful option. Bob sent [redacted] Mission Street job to review. Rick

estimating and permitting.	 July July	talked about a company that does 3D profile, sonar, pot holing, Rick reports they walked the Mission St job and it is pot holed very well. Will try sonar, radar, and metal detection technology. Rick will coordinate with [redacted] **The vendor is scheduled to come out in July and demonstrate** 7/6 [redacted] provided information on ground penetrating radar. Rick needs to move quickly. Contact Gel Company to schedule a meeting. **Bob to contact owner of company expressing his interest in technology.**

Description	Accountability	2012	2013	2014	2015	2016

Discussion Items

Initiative Schedule and Status		
Initiative	2. Unit and Unit Cost methodology and reporting	
Team Members	[redacted] **Steven Fischer (GC Gas Supervisor), Shane Doong (Construction Engr.),** [redacted]	
Scope	Identify unit costs that represent gas Capital work. Implement system to capture and report on these units.	
Benefits (Soft)	Clarify cost of each type of work and its components. Focus cost reduction efforts on high cost components.	
Costs	TBD	
Milestone	**Target Completion Date**	**Comments**

Excavation Technology - July 2012 for June Results

a)Benchmark Data, compare apples to apples.	Completed March 30	Shane performed comparisons with benchmark data. Other companies split the service and main costs. Most are contract costs, not labor. Very little consistency. Service density increases costs. Inconsistency in including paving. Need to get to service hours per foot and construction hours per service. (future)
b)Track Aldyl-A Jobs	Completed March 30	[redacted] pulled 2010, 2011, and 2012 data and placed on Excavation Technology SharePoint site. [redacted], Shane and [redacted] have write access, everyone else has read access. This is a very detailed data file to cover everything. Data can be manipulated various ways to pull out specific cost elements.
c)Gather costs for units - Manual effort	July 31	Collect costs charged to specific construction operations assigned to main and services (Item 1a above).
d)Automate unit reporting	10/31	Define units – Completed Explore system options – in progress Choose design of un system – July Implement Design – August Train users – August Develop reports – July-August Test/Refine - September

Description	Accountability	2012	2013	2014	2015	2016

Discussion Items

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Initiative Schedule and Status		
Initiative	3. Materials, Fleet, and Planning	
Team Members	[redacted] **Lenny Caldwell (Mgr Work Methods)**	
Scope		
Benefits (Soft)		
Costs		
Milestone	**Target Completion Date**	**Comments**
a)Issues with material over ordering due to the time waiting for material. Need forum to address issues with Material group.	Completed June 28	Need to have a representative from Materials on this committee, or a separate committee to work on Material issues. **Action: Bob to invite Karen Roth and** [redacted] **to participate on team and address Materials issues.** Omar sent a request out to identify in-stock items, long lead time materials and emergency stock items. He is presently compiling the information. 7/6 Rick to follow-up with Omar
b) Material Planning	**On-going**	7/6 Director team meets every two weeks to identify and address issues related to material ordering and delivery (sourcing and transmission)
c) Long-lead-time material	July/Aug	Another item to address with Materials. **7/6** [redacted] **to add** [redacted] **to Committee.**
d) Adequate emergency stock	August 1	This may have the potential for CPUC implications. Regional Directors are addressing this issue.

Description	Accountability	2012	2013	2014	2015	2016

Discussion Items

Sponsor: Kirk Johnson
Owner: Bob Suehiro

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Initiative Schedule and Status

Initiative	4. Construction Methods	
Team Members	**Rick Salaz (Supt) Lenny Caldwell (Work Methods),Steven Fischer(GC Const supr), Matt Moscato (Div Const Supr)**	
Scope		
Benefits (Soft)		
Costs		
Milestone	**Target Completion Date**	**Comments**
a)Hot Tanking Services Avoid Relight by GSR to allow GSR's to respond to emergencies	May 8 September	Rick reports they can't perform hot tanking in SF as most of the work involves LP conversion to HP Will pilot and train outside SF. Rick will go to Fresno and provide training when project expands to Fresno. Hot tanking saves about $300 per service. He is suggesting a new design for Rick to try out. They are building new kits, proto type, training, no OQ required. Does not have a timeline yet. Training can be conducted in the yards and requires a few hours only. Shane has list of Aldyl-A jobs for Central Coast. **Will use one of Shane's jobs as a pilot.** 7/6 [redacted] reports the existing hot tank kits can't be located. Hastings's team is reviewing a standard change with 6 proto types. **Results are expected in 60 days. Rick to provide feedback on proto types. They need to prepare for mass production, 50 units.** [redacted] offered the service of trailer mounted tanks. There are enough trailer mounted tanks available. Schedule through Austin Hastings and he can respond to the need. 7/6 No job yet where tank trailer is needed.
b)Jobs for consultant to review on May 15 and 16	May 10	Jobs have been identified for Davis and Vacaville. Need Aldyl-A and Steele jobs. **Action: Bob to talk to Mike Graham to identify a job in Central Valley. Completed.**

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c)Excavation Technology	May 8	Rick gave an update on the Badger. He reports good results. Holes are dug in 6 to 7 minutes as opposed to one hour with the backhoe. No dig ins to water or sewer. Contractor is moving trucks in to meet our need. They will also try trenching with the badgers. With the City of SF coming out with new standards that will cost more, more reason to try trenching with the Badger as well. **Completed** Need to target jobs and provide Estimating with the information as this affects estimates.
	July	Exploring bursting and splitting also. . **Working with ARB and Underground Construction to do some splitting for us.** They have been doing this in the mid-West. Will identify job to try splitting and bursting. [redacted] to identify next Aldyl-A job to estimate, will perform walk down of job and try splitting and bursting. **Shane identified a Central Coast job (a 6,000 foot Aldyl-A main with few services) and will award to both ARB and UGCo.**
	July	**Need a future cast iron job for SF. [redacted] to make sure procedure is in place.**
	August	Need location to dump wet spoil created by Badger. Found a dumpsite, [redacted] is working on contract. Lots of potential with the badger. Tried on a few trenching jobs, rolling out to other areas also.
	August	7/6 San Bruno job, employee engagement opportunity. Shane and crew foreman to go to Arizona to see how they do it in field. Contracting out the work is an opportunity for our crews to learn.
	August	Still working out spoil disposal issues due to closure of GC Potrero soil recycling operation as Electric Substation is expanding

Excavation Technology - July 2012 for June Results

Description	Accountability	2012	2013	2014	2015	2016

Discussion Items

Initiative Schedule and Status		
Initiative	5. Construction Support	
Team Members	**Mike Graham (Supt)** [redacted] [redacted] **Shane Doong (Const Engineer), Cameron Rowland (Construction Engr)**	
Scope		
Benefits (Soft)		
Costs		
Milestone	**Target Completion Date**	**Comments**
a)Change Standard Practice requiring the approvals required when going over $1.00.	Completed	Project Services needs to get approval for $1.00 overrun. There should be a threshold established. **Action: Bob to talk to** [redacted] **and change standard**
b)Paving issues, need to get Governmental Relations involved, analyze joint paving projects and money to City.	April 30	[redacted] will look into the joint paving projects for SF. Need to get someone from Governmental Relations involved.
c)Develop procedure for pre-engineering and post-	July/Aug	It is part of the project [redacted] is working on for Bob.

estimate cost comparisons.		
d)Develop threshold requirements for Bob's approval level. e)Post Construction Feedback	Completed May 8 Completed June 5	Previously Bob did not require approvals **Bob to be cc on GPRP jobs. He will assess the constructability and unit costs.** Rick to initiate post construction critique Shane wants estimators to see job in field when job is complete. [redacted] to talk to supervisors to set expectations for estimators. **7/6, push this item out to August. [redacted] to identify the jobs for learning purposes.**

Description	Accountability	2012	2013	2014	2015	2016

Discussion Items

Initiative Schedule and Status		
Initiative	6. Training and Operator Qualifications	
Team Members	**Ron Huggins (supt), Lenny Caldwell (mgr work methods), Rick Salaz (supt) Omar Macay (GC Const supr)**	
Scope		
Benefits (Soft)		
Costs		
Milestone	**Target Completion Date**	**Comments**

Need to revisit training requirements for pilot relights, currently 3 weeks. Utilize Street Fitters, have all training within next 30 days.	April 30 July/august	Rick found out that school says every step has to be followed in the modules. They don't know which modules would apply only to the Street Fitters. Omar Macay is sending his Street Fitters to the training. Once they attend will provide feedback to school on which modules to take out for this purpose. Not able to get fitters into class due to hiring of GSR's. **ACTION: Bob to discuss with Ruben Ramirez.** Omar found there are 3 relight courses with different course codes. Learning Services can't answer the question as to which course is applicable to the Street Fitters and Fieldmen. They are sending the curriculum to Omar so he can identify the appropriate course. Rick is discussing need with Jon Little. 7/6 August 1 training at San Ramon for Bursting 2013 work. Enroll by July 11, let [redacted] know who to enroll. Requested funding for 3rd quarter. [redacted] looking at what training makes sense. Will include tanking. Relight class to be identified by Academy. They do not have a class designed for our GC relight needs.

Description	Accountability	2012	2013	2014	2015	2016

Discussion Items

V. Supporting Information

Below is a copy of the full report submitted by [redacted]. Highlighted in YELLOW are the Keys Report Initiative which addresses the issue/recommendation. Highlighted in FUSCIA are items requiring attention and are to be included in the Keys Initiative.

****

Prepared by:
[redacted]

Summary of Recommendations from Field Visits:

1. Develop, Monitor and Focus on Productivity Metrics

"The most significant enhancement that PG&E can make to increase productivity and reduce construction costs for mains and services is to develop and focus on cost and manpower productivity metrics. Not knowing what current costs are for these activities requires managers to rely on anecdotal information on what methods of construction are most cost efficient. Having metrics allows supervision to manage by fact (i.e., what is the optimal crew size, the most efficient fleet compliment, most cost effective low dig technique, etc.). Metrics also allow management to develop targets that will by their own nature make the workforce to improve productivity. Metrics should be developed and reviewed by senior management on a regular basis, at least monthly. Metrics should be developed from actual cost and man hours worked, as opposed to a pre-determined allocation of time and costs, where possible.

Cost for mains and services should be separated for accuracy and not added together. Other separate and distinct activities such as gas regulator work should also not be included as evidenced in recent studies. Consideration should be given to develop separate metrics for replacement categories such as GPRP and public work projects which are subject to direction from municipal engineers. New business growth should also have its own metrics as it typically is less costly to construct than replacement work. Metrics should also be developed down to the yard or crew level so that individual performance can be identified and addressed.

Cost metrics should be broken down by the major components to include but not limited to: construction labor, estimating, fleet, paving, material, contracts, field services, T&R etc. Initiatives can then be developed by process owners to reduce these costs components where they are significant. At the first line supervision/crew foreman level, metrics should be in the form of feet per man-hour for mains and man-hours per service for greatest accountability. At this level, those employees do not feel they are responsible for other components such as material or fleet costs. They can however, relate and be accountable for the amount of pipe they install per day.

Since PG&E is currently [redacted] benchmarking exercise, reasonable stretch targets should be developed that would place PG&E in [redacted] immediately and then gradually to [redacted]. The goal should be reasonable to accomplish but require "stretch" efforts from all those involved. Gas Construction Efficiency Review San Francisco, CA Page 3"

Examples of metrics to be developed would include:

- Feet of replacement main installed per dollar (both as a total cost and by individual component)
- Dollars per services replaced (both as a total cost and by individual component)
- Feet of replacement main installed per man-hour
- Man-hours per service replaced

These same metrics could be used to gauge productivity for Divisional activities including new mains and services

PGE Corrective Actions
[redacted] Process # 2 Keys Report

2. Develop a Robust Resource Management Group

"Having a resource management group responsible to consolidate and schedule construction work, both on a long and short term basis as well as manage the capital budget would allow the Construction group to focus exclusively on executing the work, particularly cost and productivity. Construction's focus should not be diluted by performing scheduling activities for themselves. The resource management group should be matching the work force against the work plan to determine if adjustments to capacity have to be made either up or down through the use of hiring, attrition or outsourcing rather than excessive amounts of inefficient overtime. In the short term, resource management should be scheduling the work for the workforce to insure Construction always has more work than capacity, giving management the incentive to utilize crews efficiently. In the long term, resource management should be providing feedback to senior management on optimizing the size of the work force, both internal and outsourced. The integrity of the PG&E infrastructure would benefit immensely from an effective resource management group implementing and executing their 1 year and 5 year comprehensive work plans. Having this group will allow PG&E their greatest opportunity to achieve this."

PGE Corrective Actions
Keys Report #3 [redacted]

3. Develop a Long Term (1 year) Back Log of Work

"Interviews with Construction's management suggest that work packages are received "just in time." A whole cadre of issues arises when work packages aren't received well in advance, such as production delays due to material shortages and unavailability of equipment or key personnel (e.g., welders). Opportunities to split up larger crews when they are not warranted to do short term projects are lost when a variety of both long and short term work is not available. Estimating capacity should be expanded to plan and prepare a year's worth of work in advance and the backlog maintained going forward ready for construction. Maintaining a long term backlog of work would enable resource management to levelize the work force in the most cost effective manner."

Corrective Actions
Keys Report # 3[redacted]

4. Optimize Crew Size

"PG&E construction crews generally consist of five employees (six when a Construction Fitter is assigned to the crew) unless more are required on a day where a large outage is scheduled. Extra people were also observed on days when directional drilling or main was inserted. On more than one observation, 4, 5 and 6 service replacements were completed with a five person crew and a Construction Fitter. However, 5 person crews were certainly not the most cost effective crew size each and every day. Cost savings could be achieved by splitting up 5 person crews when the job allows it. But before crews are split up to put more on the road, short cycle work (i.e. leaks, new services, etc.) has to be available for additional 2 and 3 person crews to make this cost effective (see initiative #2). At the same time, management should set 5 person crew productivity targets (initiative #1) that would raise PG&E's performance to 2nd or 3rd quartile. If the crews cannot consistently obtain those targets, then a four or even a three person crew should be considered as the optimum crew size to achieve target man-hour productivity."

PGE Corrective Actions
Keys Report #4 Rick Salaz

5. Optimize Fleet Size and Kind

It can easily be said that PG&E's Construction fleet is large, abundant and in generally good condition.

a. Every San Francisco crew observed had a full size crew truck, pickup, ten wheel dump truck, mini-excavator, and backhoe.

b. The daily overhead of all this equipment alone places significant pressure on unit cost. An evaluation should be performed on lowering fleet costs through initiatives such as reducing the size of the crew trucks as well as a percentage of the dump trucks, and eliminating some backhoes and most pickups.

c. As an alternative to that, the potential exists to field additional two or three person crews by utilizing some of those backhoes and pickups in lieu of crew trucks on short cycle work (e.g., new services, leaks, etc.).

d. What is keeping the cost of the fleet from being a focused area of opportunity is that transportation charges are imbedded in the standard rate and need to be broken out separately for greater transparency (see initiative #14).

Keys Report # 4 5a, Rick Salaz

Keys Report # 3 5b. [redacted] Fleet right sizing
Key Report # 4 5c. Rick Salaz 5 person crew = 2 + 3 person crew
Key Report # 2 5d. [redacted] / [redacted]

6. Charge Actual Time and Reduce Estimating Labor and Costs

a. Presently, estimating costs are an allocation to each project work order. Since main and service costs are allocated to the projects by a predetermined percentage, it cannot be accurately determined if estimating is spending the appropriate amount of time designing mains and services on any given project. Some of PG&E's estimating costs by themselves are more than [redacted] in a recent benchmarking exercise. A common benchmark target for the industry is [redacted]. PG&E should adapt a similar target for its own estimating group.

b. Service design costs can be completely eliminated by having Gas Construction Efficiency Review San Francisco, CA Page 5 crew foremen make their own customer arrangements as many utilities do. PG&E's afterhours crew foremen make their own arrangements currently so the suggested practice is feasible at PG&E. Recent conversations with PG&E's foremen suggest they are willing and in favor of assuming this responsibility today. Elimination of this task for the estimators will create extra capacity to help build the 1 year backlog without hiring incremental estimating employees (see recommendation #3). PG&E should also strongly consider replacing the system of allocating costs to direct charging to learn the actual magnitude of design time being used on every project.

Keys Report #1 6 a. Ron Huggins Jr.
Keys Report # 5 6b. Mike Graham

7. Continue to Expand Low Dig Technology

Virtually every crew in the San Francisco area were utilizing some form of low dig technology installing replacement main, either dead insertion or directional drilling of pipe. Only one replacement outside of the city utilized open cutting when in fact directional drilling potentially could have saved costs. PG&E should do monthly tracking of the percentage of main that is installed through the use of low dig and establish a stretch goal for all of Construction's management to foster continued expansion of this practice. Keyhole/coring use was limited to only exposing foreign utilities in advance of HDD for the construction group and rarely were the existing paving cores placed back into the excavation to avoid repaving, allegedly due to municipal reluctance. Keyhole/ coring may have a greater potential for cost savings in division for maintenance activities, especially leak repair and service cut offs. It is also suggested that if more HDD crews are to be added, Construction should work with Human Resources to develop a legitimate means of assigning adequately skilled equipment operators on each new HDD crew instead of selecting solely by seniority.

Keys Report # 4 Rick Salaz
Keys Report #6 Little
Drilling Rates foreman & driller

8. Insure Material Availability

Supervisors have complained that many of the basic materials required for installation are not available in the storerooms and when finally ordered, require weeks for delivery. Supervisors have developed a work around practice ordering materials for one project against another work order already in progress. All of this causes wasted manpower acquiring materials and misappropriation of material costs. Inventory management should perform a comprehensive review of material needed for most typical construction work and develop the means to maintain adequate stock with reasonable replenishment levels or else develop alternate ways of acquiring materials conducive to the work schedule.

Keys Report # 3 [redacted]

9. Train and Employ more Personnel to Perform Service Turn on-Light Ups

The negative effects of utilizing only service representatives to perform service light ups was observed repeatedly. Gas mechanics trained to install high pressure gas mains and services adjacent to and into customer dwellings are not utilized to light customer's most typical furnace and water heating appliances. PG&E's current light up training courses Gas Construction Efficiency Review San Francisco, CA Page 6 are allegedly as long as 3 weeks and require ride along time with a service representative before being allowed to relight equipment by themselves. The use of service representatives cost nearly $300 per service replaced based on a recent study. In addition, customer dissatisfaction is occasionally caused by a lengthy response time. PG&E should immediately review the training module to reduce relight training from weeks to days. Gas mechanics do not need the full gamut of appliance, troubleshooting training or relighting complex or outdated appliances. Service representatives can be dispatched for those exceptions. Secondly, PG&E should retrain Construction fitting employees and utilize them immediately for light ups. Thirdly, both Construction and Division should train enough employees so that every crew can perform a light up, day or night and begin so immediately when contractual agreements allow this. Eliminating service representatives from the bulk of the daily light up activities will give Service extra capacity to respond to leaks quicker and improve current response times.

Keys Report # 6 Little/ Lenny Caldwell

10. Elevating Important Issues to Senior Management's Attention

Whether it was a standard training or even a local practice issue, Construction employees seemed unenthused about challenging or questioning practices that made little sense or seemingly counterproductive. If PG&E is to make progress reducing their unit costs and increasing feet per man hour, challenging questionable work practices and standards would seem to inspire productive behavior. Many Construction employees have taken the attitude that other groups within and outside of gas have greater authority and questionable practices cannot be changed. Thus employees have in a sense given up and accept all policies and practices to a fault. Process teams should be encouraged to identify unproductive practices and standards to management's attention so that more efficient practices and standards can be implemented.

Keys Report # 5 Mike Graham
Lenny Caldwell

Examples include:

A. The practice of replacing 1" high pressure steel services with 1" high pressure plastic.

In recent visits to PG&E, several instances were observed where 5/8" diameter plastic could have been inserted into the existing 1" steel service, avoiding a costly direct burial installation. The alleged reason for this practice is extra capacity for a tankless hot water heater installation by the customer should it ever occur.

B. Training deciding who gets trained and on what schedule.

Allegedly contractors are systematically retrained when they complete one project but before they start another similar project, even if they are the same employees. In other situations, Training maybe unable to provide trainers for requested courses but may not accept the credentials of gas construction employees to conduct the training either. Thus training is unreasonably delayed.

C. Engineering is frequently rigid about making changes to main replacement plans.

Construction employees questioned proposed replacement pipe size, pressure and materials that prevented them from utilizing lower cost construction methods. The integrity of the system cannot be jeopardized only to save on time installation costs, but one instance was observed where an opportunity to save significant costs was missed (i.e., a steel replacement main installed instead of plastic) because of rigid cathodic protection practices.

D. Local Supervision Creating their "Local" Standards.

One construction yard was directed by their former supervisor not to use company approved couplings to join small diameter plastic service tubing because of past issues. The crews were directed to fuse the pipe instead. In these particular sizes those fuses are the hardest to make correctly. The couplings are accepted and approved internationally. Other crews were breaking home owner concrete garage floors to replace services risers. This was done because these crews mistakenly thought that pulling 5/8" tubing with the aid of an electrical snake through 1 ¼-1 ½" steel piping was against PG&E's standards. This "standard" was found not to be true. These unofficial standards increase replacement costs along with creating customer dissatisfaction. Many issues similar to this could be resolved through process committees where employees discuss concerns amongst appropriate support groups. Construction also needs to implement regular feedback meetings in the yards to discuss process meeting decisions to eliminate ad hoc rule making.

11. Appoint a Paving/Restoration Supervisor.

The paving/restoration function after pipe replacement is left to the area construction supervisor to manage. These supervisors are usually not fully aware of the vendor's contractual obligations and conceivably may be paying extra for services already included in their base price. This could be eliminated by using one supervisor per designated region for Division and Construction together or the entire gas operations group solely for paving and restoration, intimately familiar with every vendor's contractual provisions.

Keys Report # 5 Mike Graham

12. Utilize Field engineering to lay out the Main Replacement and Determine Installation Technique.

Currently an estimating employee will do an on-site visit to determine the main lay and pipe installation technique (e.g., direct burial, HDD, insert, etc.). A walk down is conducted with a field engineer accompanying the estimator on site to approve or revise the plan. The estimator will then complete the design in their office. Anecdotal information suggests that the field engineer frequently recommends design changes and governs the process. Estimating and Construction should consider sending only the field engineer to the site to determine the main lay and construction technique and relay that information back to the estimator in the office. By skipping the site visit the estimator avoids wasting travel time and can complete project designs in shorter time. This would allow estimating to increase their capacity and may help build the work backlog without adding incremental resources. (See recommendation #3)

Keys Report # 5

13. Develop and Maintain Positive Relations with San Francisco and all other Municipalities.

It was obvious that the City of San Francisco has placed many burdensome requirements on PG&E as well as most other outside utilities. However that should not cause PG&E to succumb to every demand without amicable discussions. Positive relations could lead to relaxation of certain rules or allow municipalities to accept new technologies. For example, working through key holes where the street is cut with 18" or 24" circular cutters with the pavement cores grouted back into the street instead of repaving would yield savings. PG&E should evaluate the current state of relationships within its franchise area and determine effort required to develop mutually collaborative relationships.

Keys Report # 5

14. Unbundle the Standard Rate for Cost Transparency.

The standard rate currently used to price construction projects has made calculating total costs easy as it accounts for many components in addition to labor in one flat rate cost. These components include items such as transportation and I/T costs in the $ 159 dollar per hour rate. However, because transportation costs are not separated and charged directly to the individual cost centers or projects, there is no incentive for any one group to scrutinize the amount or type of fleet in their own group. Each group ends up paying the averaged amount of fleet costs spread out over the line of business. The recommendation would be to charge the monthly rental or lease cost of each unit directly to the capital work order, or if expensed directly to the cost center of the yard who controls it. I/T spending is most likely hidden as well and would similarly benefit from more transparency.

Keys report None

15. Evaluate the Roles of Field Engineers, Project Managers and Clerks

Allegedly every Construction supervisor has at least one if not two field engineers assigned to them. There are more than 50 field engineers in Construction. Field engineers may acquire permits, do as-built, record construction details as well as many other tasks. In other utilities, much of this work is completed by the crew foreman, yard clerk or scheduler. In addition, there are approximately 20 project managers assigned to Gas at PG&E. In many situations these people are tracking costs, ordering material, etc., but yet not eliminating the supervisor's presence from the project, as a project manager typically is meant to do. These responsibilities could be assumed by the clerical staff or an analyst. The need to maintain all of these positions with their overlapping responsibilities should be evaluated by PG&E as the potential to reduce unit costs through streamlining this organization is very possible.

Keys Report # 5

Other Issues

1. Replacing Leaking Steel Services in their Entirety Rather than Clamping Corrosion Pitting.

   Anecdotal information suggests that some crew chiefs are clamping leaking services off hours to minimize overtime. While this may be a good practice afterhours, on the next scheduled work day the service should be replaced with plastic where allowed. Replacing corroded steel gas services with plastic rather than repairing them is a generally accepted utility practice. Otherwise a return trip and an afterhour callout for further pitting is highly likely. Further replacement work is typically capitalized whereas repair clamping is usually considered expense work.

Keys Report # 5 Mike Graham

2. Evaluate PG&E's Current Plastic Fusion Practices Against the Industry.

   Field observations revealed that PG&E fused plastic service tee main connection onto plastic main by hand rather than utilizing mechanical applied pressure. Although this is compliant to existing code, PG&E could easily be criticized as using a rudimentary work practice should a gas incident ever be attributed to a bad fuse. All of the prior fuses made by the same method would be under suspicion. PG&E should research the utilities utilizing this practice against those using mechanical techniques. Should PG&E still not be interested investing in the equipment to fuse by mechanical means, alternative means of joining pipe and service tees can be accomplished by electro-fusion or mechanical bolt on tees. These techniques are code compliant and a large percentage of utilities use those methods today.

Excavation Technology - July 2012 for June Results

Keys Report #

May KTS : One initial finding is the "Official" unit cost system is not precise. This system reports performance at a macro level with results presented in dollars per foot of main replaced. However, work other than main replacement is included in the cost. This includes the cost of replacing services, regulation, SCADA, and main de-activation. In addition, the "Official" system does not necessarily match work with spending. Units of work are recorded at the completion of the work while costs are recorded as incurred. This can result in costs being recorded in one period and units of work in another.

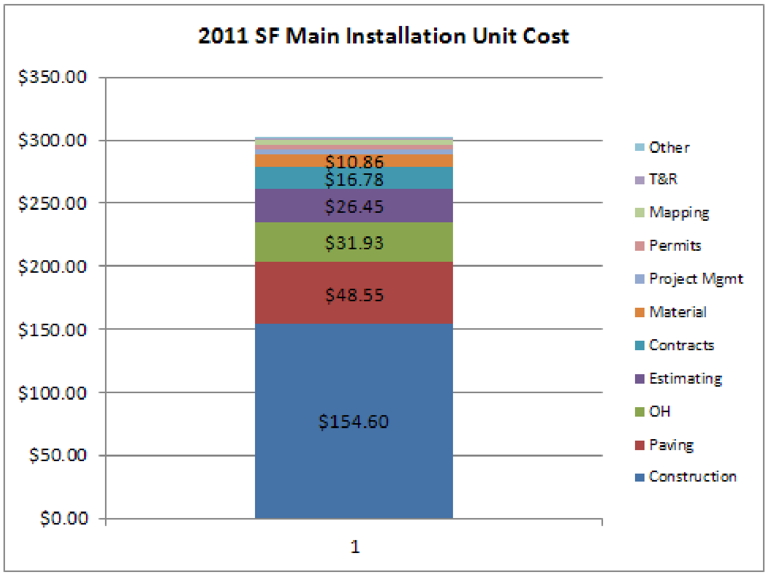
To gain greater insight into our performance, Pipeline Replacement orders for 2010 through 2012 were analyzed to more accurately determine the cost of replacing main and services. Below are the results of this analysis:

	2010			2011			2012		
Div/Reg	Total	Main	Services	Total	Main	Services	Total	Main	Services
SF	$460	$207	$7,105	$534	$252	$7,012	$534	$239	$6,034
EB	$182	$87	$2,332	$399	$178	$9,297	N/A	N/A	N/A
DI	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
NB	$444	$202	$9,871	$408	$181	$14,000	N/A	N/A	N/A
BAR	**$439**	**$198**	**$6,789**	**$524**	**$246**	**$7,142**	**$534**	**$239**	**$6,034**
CC	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
DA	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
PN	$409	$182	$18,178	$566	$252	$14,048	N/A	N/A	N/A
SJ	$170	$75	$16,939	$385	$178	$21,660	N/A	N/A	N/A
MI	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
CCR	**$244**	**$108**	**$17,558**	**$503**	**$226**	**$15,475**	**N/A**	**N/A**	**N/A**
ST	$487	$216	$3,512	N/A	N/A	N/A	N/A	N/A	N/A
YO	$198	$89	$11,044	$235	$105	$9,356	N/A	N/A	N/A
FR	$614	$273	$14,424	$201	$89	$7,571	N/A	N/A	N/A
KE	$352	$156	$7,875	N/A	N/A	N/A	N/A	N/A	N/A
CVR	**$376**	**$167**	**$8,577**	**$207**	**$92**	**$7,867**	**N/A**	**N/A**	**N/A**
SA	$432	$188	$15,625	$221	$102	$6,938	N/A	N/A	N/A
SO	$184	$92	$5,697	$217	$97	$5,855	N/A	N/A	N/A
HB	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
SI	N/A	N/A	N/A	$438	$195	$10,451	N/A	N/A	N/A
NV	$239	$106	$4,733	$262	$117	$9,013	N/A	N/A	N/A
NOR	**$289**	**$132**	**$9,379**	**$262**	**$119**	**$7,875**	**N/A**	**N/A**	**N/A**
System	**$409**	**$184**	**$7,179**	**$463**	**$216**	**$7,465**	**$534**	**$239**	**$6,034**

The analysis shows that in 2011, total unit cost for the system was $463 per foot of main. When non-main related costs are removed, the unit cost decreases to $216 per foot.

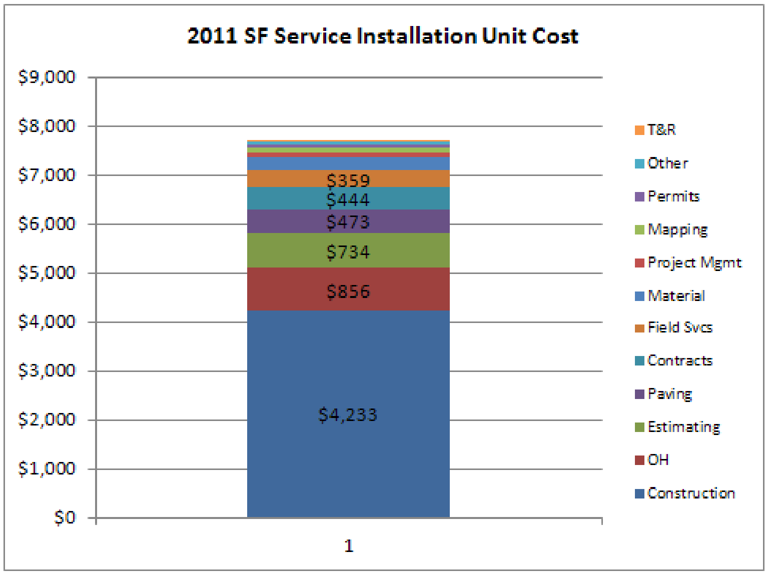
A second finding is that there are many contributors to the cost of this work. An analysis of 2011 work in San Francisco Division is shown below (approximately 80% of GPRP work is in this Division). Construction accounts for approximately ½ of the cost of main replacement. PG&E's cost model includes equipment, IT, and various overhead costs in the construction standard rate.

Resource	Unit Cost	%
Construction	$154.60	51.0%
Paving	$48.55	16.0%
OH	$31.93	10.5%
Estimating	$26.45	8.7%
Contracts	$16.78	5.5%
Material	$10.86	3.6%
Project Mgmt	$3.80	1.3%
Permits	$3.57	1.2%
Mapping	$3.31	1.1%
T&R	$1.77	0.6%
Other	$1.51	0.5%
	$303.13	100.0%



Construction also accounts for 55% of the cost of service replacements.

Resource	Unit Cost	%
Construction	$4,233	55.1%
OH	$856	11.1%
Estimating	$734	9.6%
Paving	$473	6.2%
Contracts	$444	5.8%
Field Svcs	$359	4.7%
Material	$264	3.4%
Project Mgmt	$94	1.2%
Mapping	$92	1.2%
Permits	$87	1.1%
Other	$43	0.6%
T&R	$4	0.0%
	$7,684	100.0%



The next step will be to analyze the value provided by each of these contributors and to identify more efficient ways to obtain the needed services. We anticipate reducing Service Replacements by $600 per service (7.8%) and main replacement by $25 per foot (8.2%) as a result of this effort. This will reduce the cost of this program by approximately $8 million.

Below is an overview of the GPRP work that is estimated to be performed in San Francisco Division during 2012. San Francisco Division represents approximately 75% of the GPRP program in 2012.

Excavation Technology - July 2012 for June Results

2012 San Francisco GPRP Job Estimates

Number of Orders	32
Estimated Total Cost	**$56,804,616**
Feet of Main	102,278
Total Cost / Foot of Main	**$555.39**

Estimated Main Costs	**$25,972,758**
Feet of Main	102,278
Estimated Cost / Foot of Main	**$253.94**

Estimated Service Costs	**$30,831,858**
Number of Services	4,172
Estimated Cost / Service	**$7,390.19**

Main Replacement

Work Method	**Feet of Pipe**	**%**
DB	4,094	4%
HDD	84,131	82%
Insert	12,957	13%
Uprate	1,096	1%
Total Feet of Main	**102,278**	**100%**

Service Replacement	**Services**	**%**
Replace	3,101	74%
Transfer	1,002	24%
Convert	65	2%
Cutoff	4	0%
Total Services	**4,172**	**100%**

As a result of the initial analysis, the Excavation Technology Process team is working on the initiatives listed below.

- Review Current Estimating Charging based on allocation versus actual time spent on job
    - Determine if estimating should be an allocation or direct cost. Currently 29 per foot of steel main and $734 per service
    - If allocation is to continue, validate methodology and percentages.
- Train Crew (street fitter) to perform simple relights to free up GSRs to focus on emergency response. Currently charge averaging $378 per service approximately 2 hours per service
    - Modify training curriculum to basics required to safely perform this work-develop 3 day vs current full 3 week GSR training

Excavation Technology - July 2012 for June Results

- Explore work crews can do post estimating or without estimating.
  - What is contractual and what is not
- Use crew to locate instead of locate and mark employee – frees up production locators to concentrate on third party locate and mark
- Review SLA with Project Management ($94 per foot of main) Field engineers are performing similar work.
- Implement construction charging practices to separate out labor to install main, services, capacity, and compliance. Currently labor to perform work is not differentiated by task just a full job charge. Provide labors hours to install foot of main, service, and other to benchmark and glean out crew best practices.

Fleet Report – July 2012 for June Results

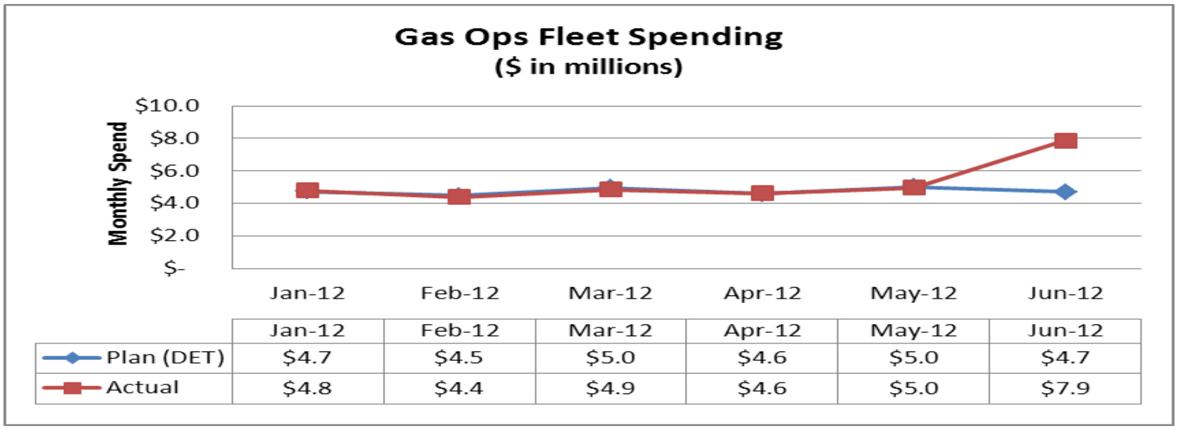
Results	●	YTD Total Vehicle spending on target and favorable by $410K
Initiative Status	●	Identified plans for specific metrics to track fleet costs and identify areas of potential cost efficiencies.

I. Goal / Objective

To provide the correct vehicles and equipment to enable safe and efficient work execution based on short and long term plans.

II. Results

Current Month and YTD Fleet Spending

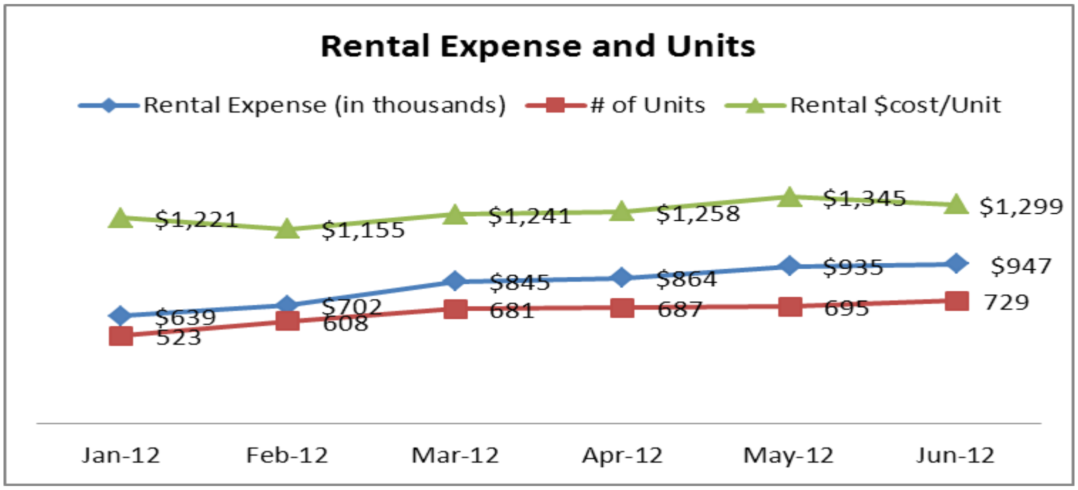


	Jan-12	Feb-12	Mar-12	Apr-12	May-12	Jun-12
Plan (DET)	$4.7	$4.5	$5.0	$4.6	$5.0	$4.7
Actual	$4.8	$4.4	$4.9	$4.6	$5.0	$7.9

Note: In June, there was an over charge of $3.4M due to an IT error, which will be corrected in July. Once corrected, the June variance will be favorable by approx. $205K and YTD variance will be favorable by $410K.

Rental Costs

Note: The rental units in the chart below include units that were currently out on rental and units that were returned during the month. Rental Expense represents rentals via contracted vendors only (approx. 85 – 90% of total rental expense)



Fleet Report – July 2012 for June Results

Outstanding Rentals at 06/30/2012

Note: The total number of rental units in the chart below includes only the units that were currently out on rental at the end of the month.

Duration Range	GC	Northern	Central Coast	Bay Area	Central Valley	GFS	MC Dir Ops	Gas Trans	Public Safety	Project Engnr	Standards and Policies	Asset Mgmt	Grand Total
<30 days	57	8	4	2	5			34	1	1			112
1-1.9 mos	31	13	9	4	1			11	2				71
2-2.9 mos	10	6	6	3	2		1	6	1				35
3-3.9 mos	19	5	1	5	3			9	2	1	1		46
4-5.9 mos	23	14	15	6	4	2	1	9	3				77
6-11.9 mos	40	7	13	16	2	4		14	7	2		1	106
>11.9 mos	41	24	12	20	7	4		19	7	3	1		138
Grand Total	**221**	**77**	**60**	**56**	**24**	**10**	**2**	**102**	**23**	**7**	**2**	**1**	**585**

Owned vs. Rental Units

Note: The total number of rental units in the chart below includes only units that were currently out on rental at the end of the month.

	June		**May**		**April**	
Organization	**Owned Units**	**Rental Units**	**Owned Units**	**Rental Units**	**Owned Units**	**Rental Units**
Gas Dist M&C	3005	450	3000	432	2974	390
Gas Trans	305	102	302	79	292	84
Standards & Policies	27	2	27	2	24	2
Project, Engr, Design	21	7	21	9	24	8
Public Safety Integerity Mgmt	15	23	15	26	13	24
Gas System Ops	0	0	0	3	0	4
Asset Knowledgement	0	1	0	5	0	4
Total	**3373**	**585**	**3365**	**556**	**3327**	**516**

III. Observations / Analysis

YTD Variance Analysis

- Overall Gas Operations is favorable by $410K driven by lower than planned heavy gas crew trucks, service body trucks and third party rentals; this was partially offset by higher than planned fuel costs.
- GC, Northern and Central Valley favorable to plan and Gas Field Services unfavorable to plan.

Observations

- Fleet spending is in line with the plan with M&C driving majority of the spending.
- On average 44% of the rentals have been outstanding for longer than 6 months.
- Gas Distribution M&C has the highest number of units and associated costs for rentals primarily in GC.

Fleet Report – July 2012 for June Results

- Rental units account for approximately 13% of fleet units (owned and rentals).
- Based on the benchmarking data available (see charts below), Gas Ops ranks in the [redacted] for fleet costs per mile as compared to California Utilities (Chart 1) and 10 largest Utilities across U.S. (Chart 2).
  - The cost per mile does not include rentals
  - For SDGE below the cost per mile is at the Utility level and is not Gas Dept. specific.

CHART 1: Gas Ops Fleet at PG&E Compared to California Utilities

[redacted]

Fleet Report – July 2012 for June Results

Key June Accomplishments

- Completed one on one meetings with Directors and Superintendents across the system to review light duty take home vehicles.
- This optimization resulted in 23 truc s returned to either the Fleet Department or the rental vendor. In addition 3 more trucks have been identified to be turned in. This resulted in approximately $18K of monthly ($215K annual) savings as compared to the baseline.

July Objectives

- Fleet in partnership with LOB's will be meeting to review and model all vehicles and equipment by end of August.
- LOBs to update VIS system and help model the crews. Fleet will be training users to help with the modeling.
- Standardize and review the design of the trucks prior to ordering for 2013. The LOB user group will be invited to participate in meetings to determine the future design of the Gas Service Trucks, M&C Mechanic Trucks, CNG Station Technician and L&M Trucks.
- For GT, several vehicle and trailer designs are currently being developed and over 100 trailers will be added to fleet in 2012 to support hydrostatic testing efforts.
- Finalize Field Service truck body design and validate cost differentials for propped design to current standards.

IV. Process Improvement Initiatives

Top Projects / Metrics	Planned / Ongoing Actions	Timeline
Rental Spend report	• Transportation Services will provide a consolidated rentals report • Current process for this type of reporting is very manual labor intensive. • Fleet has partnered with IT to automate reporting • Establish baseline of rentals and their costs and compare to leased rates • Identify any opportunities where short term rentals can be turned into long term leases • Review current light duty rentals and associated costs	August 30, 2012
Long Term Leasing	• Leasing vehicles is currently not an approved process	TBD
Fuel Costs	• Transportation services will provide a consolidated fuel spending report • PG&E entered into a fixed fuel pricing agreement for the first time ○ 60% of fuel purchases locked at $4.15/gallon for diesel and $3.85/gallon for gasoline	August 30, 2012
Light Duty Fleet	• Review each unit for operational and cost effectiveness.	Completed

Fleet Report – July 2012 for June Results

Optimization / USP-12	• [redacted] to meet with Directors to review light duty take home vehicles and rentals. • Utilize a staffing based fleet model to match LOB crew staffing with the vehicle and equipment complements needed to support crews	
Under-utilization of vehicles	• Review of all vehicles and equipment underway • Reporting to be provided once all the vehicles have been modeled into "My fleet" application	Review complete by Sept 1, 2012 Reporting TBD
Above Standard Costs	• Transportation Services will provide a consolidated above standard charges report i.e. accidents, modifications	August 30, 2012

Cost Efficiencies

Currently evaluating cost efficiency opportunities in the following areas:

	Cost Savings Area	Cost Savings (Approx)	Target Date
1	Replace rental units with owned or lease units.	TBD	TBD
2	Increase utilization of the current units	TBD	TBD
3	Reduce take home vehicles	TBD	TBD
4	Increase warranty collection dollars	TBD	TBD

V. Supporting Information

Gas Ops Fleet spending by Organizatoin

	2012					2011		2010	
($ in 000s)	**June Actual**	**vs DET**	**2012 YTD Actual**	**YTD vs DET**	**2012 Annual Budget (DET)**	**2011 Actual**	**2011 Actual Vs. DET**	**2010 Actual**	**2010 Actual Vs. DET**
MC Director GC Gas	2,662	(1,019)	10,780	(832)	19,874	18,504	(226)	17,875	428
Gas Field Services	1,523	(661)	6,093	(846)	10,518	10,037	(504)	9,054	(113)
MC Director Northern Region 3 Gas	816	(295)	3,209	(51)	6,287	5,287	(343)	4,685	81
MC Director Central Coast Region 2 Gas	856	(355)	3,408	(381)	6,072	5,423	(55)	5,008	228
MC Director Bay Area Region 1 Gas	819	(347)	3,302	(432)	5,742	5,158	(412)	4,569	229
MC Director Central Valley Region 4 Gas	519	(189)	2,047	(41)	4,022	3,424	(123)	3,165	31
Gas Transmission Operation Maint & Const	509	(214)	1,991	(161)	3,637	3,087	(619)	2,368	135
Project Engineering & Design	53	(28)	195	(42)	310	285	(60)	218	(16)
Public Safety & Integrity Management	53	(30)	198	(75)	240	228	(36)	197	(17)
Standards & Policies	50	(30)	177	(59)	237	235	(4)	203	(35)
MC Gas VP Office & Misc PCCs	1	2	6	11	38	12	101	443	(129)
MC Director Operations	(1)	3	31	(16)	30	17	(6)	10	(10)
Asset Knowledge Management	4	(2)	45	(34)	22	49	(49)	1	(1)
Gas System Operations	3	(1)	9	0	20	18	(9)	10	0
Investment Planning	1	(0)	6	(2)	8	6	(2)	4	(1)
Gas Executive Vice-President			0	(0)		1	(1)	0	1
Grand Total	7,866	(3,166)	31,497	(2,961)	57,058	51,770	(2,347)	47,810	812

Note: *In June, there was an over charge of $3.4M due to an IT error, which will be corrected in July. Once corrected, the June variance will be favorable by approx. $205K and YTD variance will be favorable by $410K.*

Quality Program - July 2012 for June Results

Results	🟡	While there are many Quality areas with positive (green) results, there are still other areas needing improvement and some results are still under development and not yet available.
Initiative Status	🟡	There are currently five Quality & Improvement intitiatives underway. Two are on track, two are slightly behind, and one has not started yet.

Sections 1 – Goal/Objective

Develop a comprehensive and overarching Quality program for Gas Operations for the purpose of increasing public and employee safety and reducing overall system risk. Enhance existing quality program activities and design, build, and implement additional quality program activities. The goal of the program is to provide an independent and unbiased assessment on the health of Gas Operations and be scalable and flexible to respond the dynamic business needs.

Sections 2 – Results *(through June)*

Table 1 – Pass rate results for QC Assessments

QC Program	March Results	April Results	May Results	June Results	YTD Results	Target For Green
QC Locate & Mark Assessments	**73%**	**69%**	**84%**	**84%**	**76%**	>85%
QC Leak Survey Next Day Assessments	**100%**	**100%**	**100%**	**100%**	**100%**	>97.5%
QC Leak Repair Assessments	**96%**	**95%**	**97%**	**96%**	**96%**	>98%
QC Leak Repair Form-A Reviews	**81%**	**91%**	**96%**	**98%**	**88%**	>90%

Table 2 – QC Program progress toward plan

QC Program	**Unit Type**	**Annual Units (Planned)**	**YTD Units (Target)**	**YTD Units (Complete)**	**% Complete**
QC Locate & Mark Assessments	Each Daily Assessment	600	300	314	**52%**
QC Leak Survey Next Day Assessments	1 full day of survey	214	107	126	**59%**
QC Leak Repair Assessments	Each leak repair	1080	540	527	**49%**
QC Leak Repair Form-A Reviews	Each repair form	750	375	290	**39%**
QC Re-Dig Initiative	Each key milestone	13	7	4	**31%**
QC Field Service Assessments	Each Gas Service Rep	608	300	135	**22%**

Table 3 – Quality Program Financials

Financial Results	**Annual Plan**	**YTD Forecast**	**YTD Actual**	**Variance**
Leak Survey and Repair (8104746)	$ 1,161,390	$ 580,695	$ 429,380	$ (151,315)
Locate and Mark (8108276)	$ 995,254	$ 497,627	$ 569,050	$ 71,423
Q&I Department Costs (14931)	$ 5,927,000	$ 1,862,000	$ 1,944,000	$ 82,000
TOTAL	$ 8,083,644	$ 2,940,322	$ 2,942,430	$ 2,108

Quality Program - July 2012 for June Results

Table 4 - Progress toward Quality & Improvement Department staffing plan

Headcount	JAN (actual)	FEB (actual)	MARCH (actual)	APRIL (actual)	MAY (actual)	JUNE (actual)	JULY (plan)	AUG (plan)	SEPT (plan)	OCT (plan)	NOV (plan)	DEC (plan)
Fulltime	13	13	13	13	24	23	27	35	45	55	60	63
Rotational	9	9	10	10	6	8	3	3	3	2	2	2
Contractor	21	21	22	23	23	23	20	20	17	15	12	10
Interns	0	0	0	0	0	2	2	2	2	0	0	0
Vacancies	54	54	54	54	43	43	38	30	20	10	5	2
% Transition Complete (based on vacancies filled)	**0%**	**0%**	**0%**	**0%**	**20%**	**20%**	**30%**	**44%**	**63%**	**81%**	**91%**	**96%**

Table 5 –Open IA Corrective Actions by Age

# of Open Issues	Months since Issue Reported
1	44 months
14	7-12 months
20	2-6 months
0	<1 month

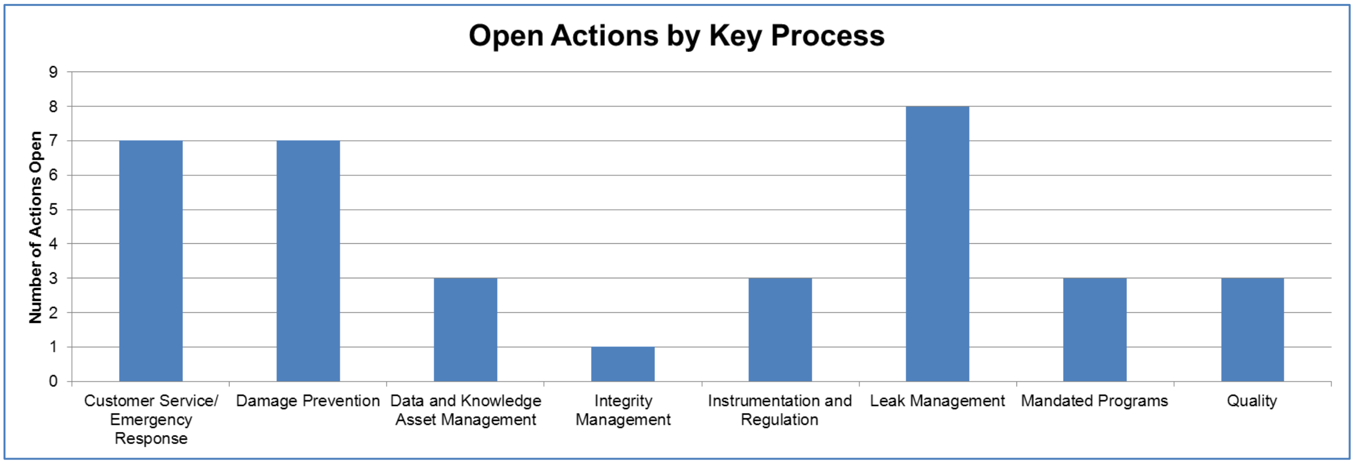


Figure 1. Internal Audit open actions by Key Process

Quality Program - July 2012 for June Results

Sections 3 – Observation/Analysis

Highlights – Challenges

Pass rate results for QC Assessments

Leak Repairs & A-forms –

- 98% of the Assessments for June have passing scores.
- 88% of the reviews for the year have had passing scores.
- Of the reviews that have failed, the two greatest issues are: “Missing USA information” and “Missing SDR or Wall thickness when Required.”
- Challenge: In June, 93 repairs were evaluated. Nearly 96% of the time, after investigations, found leaks were new.

Leak Survey Next Day Assessments (NDA’s) -

- NDA’s check to ensure no Grade 1 leak is left behind by a PG&E leak surveyor.
- Through June, 126 assessments have been conducted with no failures for missing a below ground grade 1 leak.
- A new Leak Survey leak survey scorecard will be introduced in July. The scorecard will be similar to the L&M scorecard and measure the entire process of leak survey including calibration records and comparison of non-grade 1 leak findings.

Locate & Mark –

- The current month target score is 70 with an actual of 80, the minimum passing score increases as the year progresses, with an end of year score planned at 85. At this time, Central Coast Region has the greatest challenge at 74.
- YTD, the QC department has conducted 314 assessments throughout the system verifying 15107 individual marks on 1554 tickets.
- Stretch goals for the divisions have been set to challenge for improvement at the local level. The additional metric (% of assessments passed) presents a more challenging goal for the divisions, driving quality and identifying opportunities.
- Northern Region should be looked upon for best practices. They continue to have the best scores. Central Valley is showing improvement.
- While the results have continued to improve steadily over the course of the year a main area of opportunity is to ensure plat maps are carefully reviewed to ensure all facilities (gas & electric) are marked since the QC is still seeing a high number of “No Marks” for facilities that are present on the plat map.
- An Employee Feedback concern was received about “No Conflict” tickets being closed from the office without a field visit and actually did contain PG&E facilities. The QC Department is now using “No Conflict” tickets in L&M Assessments to determine the level of risk associated with these tickets. The results will be reviewed for further action.

QC Program progress toward plan

Field Service QC Reviews –

- These are currently behind schedule due to QC resources diverted in support of other priority commitments such as training and OQ. There has been a concentrated effort in both areas during the first half of the year to free up the productive time of all available GSR’s in support of the Immediate Response (IR) goals for 2012.
- The recovery plan to complete goal of Field Service QC Reviews includes hiring (4) contract employees. These contract employees will focus on cleaning up the remaining outstanding subsequent OQ evaluations while the QC Specialists focus on the remaining QC reviews.
- So far this year the top five problems that we are finding on the Field Service QC Reviews are: Minor Tag Completion Error, Major Tag Completion Error, Refer to Dealer, Leak Procedure, and failed to inspect an appliance.

Q&I Staffing Plan	• June was not a successful month for filling vacancies. System issues continued to cause delays and errors with jobs postings and the availability of resumes for review. There has been some progress in the beginning of July but, overall, current HR systems and support are not adequate to achieve hiring goals. Current plan is to continue working with HR, communicate the issues, and try to resolve the roadblocks.

Quality Program - July 2012 for June Results

Sections 5 – Initiatives

Table 6 – Initiative Overview Table

RAG Status	Initiative
🟨	QC Work Verification (Re-Dig) Program
🟩	QC for Patrol
🟨	Lean Six Sigma Leak Survey Assessment
🟩	Control Room Management (CRM) Audit
🟩	Corrective Action Program (CAP)
🟥	Employee Feedback Program

QC Work Verification (Re-Dig) Program		
Initiative Status	🟨	Program development is underway. The program staffing and detail plan targets are slightly behind.
Initiative Goal	To fully implement a statistically reliable QC Re-Dig program by year-end.	
Initiative Scope	A Re-Dig is defined as a follow-up excavation that is performed shortly after original excavation work is completed for the purpose of verifying the construction work performed on our buried facilities is fully compliant with governing standards and work practices. This QC program is focused on short cycle installation and repair work performed by Title 200, Title 300, and contract personnel.	
Progress	• Metric Owner (VP) approval for draft detail level program	
Next Steps	• Electronic data gathering process development • Scorecard development • Interview, placement and training of Re-Dig inspectors • Pilot re-dig program in three divisions • Meet with Gov Rel to discuss potential permitting and perception challenges with program and develop a plan to address • Look program integration with PG&E's new brand messaging campaign strategy and local connection	
Initiative Team Representation	Quality Control, Quality Assurance, Methods & Procedures, T&D Supervision, Crew Foreman, GC Field Engineer, Communications (TBD), SAP Scheduling (TBD)	

QC Patrol Program		
Assessment Status	🟩	On track, short term QC program under way
Initiative Goal	Develop/implement a short term QC patrol program relative to existing standards and work processes. Develop/implement a more robust long term QC patrol program taking into consideration any changes that are made to the overall procedures, program and process.	
Initiative Scope	Transmission ground and aerial patrol	
Progress	The short term QC plan has been established to conduct field assessments on a percentage of the foot and aerial patrol. The plan includes QC field patrolling selected line segments, noting all observations, a review of all associated documentation, and tracking any corrective actions noted through completion. A report of all findings will be provided to the Patrol program Manager and Leadership Champions. This QC patrol program started at the end of May and target completion for the system is end of June.	
Next Steps	Develop long term QC patrol program to reflect any changes to the patrol process or work procedures.	

Leak Survey Lean Six Sigma Assessment

Quality Program - July 2012 for June Results

Initiative Status	🟨	Project is behind schedule due to the volume of issues uncovered so far.	
Initiative Timeline	3/1/12 - 7/13/12	**Financial Impact**	Eliminate costs associated with CPUC fines ($16.8MM this year), and eliminate costs associated with IA/QA/QC and CPUC audit findings, rework and Public Safety events.
Project Goal	To ensure 100% of the gas transmission and distribution facilities *mapped* are scheduled and rescheduled for leak survey at the proper frequency. • PG&E has no future self-reported non-compliance or audit findings inside the scope of the project. • PG&E has a controlled process before full Mariner and Pathfinder implementation. • Ensure that the rollout of the new process contains the improved process elements and proper controls with robust implementation (including change management and training).		
Progress	• Analyze Phase Tollgate successfully passed • Joint meeting held with the LS Technical Committee to coordinate our efforts and divide the document creation tasks • Additional Leak Survey Supervisors added to team for the Improve Phase • Team has started to design the improved Leak Survey Process and controls • The LSS team has provided the Leadership Leak Management Task Force with a list of short term controls that could be implemented in the next few months to monitor the LS process until the improved process is ready for implementation.		
Focus Areas/Problem Areas/Successes	• Based on the findings of the Leak Survey LSS team, a dedicated team was formed to revise the re-stacked schedule to bring it into compliance. A governance plan was provided to the team with the proper guidance so that this re-work effort will be successful.		
Next Steps	• Improve and Control Phases • Design new process, determine failure modes and design process controls		
Project Team Representation	Quality Assurance, Integrity Management, Mapping, Leak Survey Supervision, Internal Auditing, UPI (advisors)		

Control Room Management (CRM) Audit

Audit Status	🟩	Completed	**Sponsor**	[redacted]	**Stakeholders**	Melvin Christopher, [redacted] [redacted]
Project Timeline	4/20/12-6/15/12			**Purpose**	Measure the effectiveness to which Gas Control has implemented the PHMSA control room standard. Audit will provide PG&E with preliminary findings in preparation for the CPUC's CRM inspection in October 2012.	
Scope	San Francisco Gas Control Center and the backup center in Brentwood. Audit was conducted by comparing governing federal standards to PG&E's Control Room Management documents. Utilized the PHMSA CRM Inspection checklist, observed control room activities, reviewed records, and interviewed employees.					
Progress	Exit meeting held on June 21 with Control Room Management team. All Quality Audit findings were discussed in detail. The Audit Team provided the CRM team with valuable information to improve the CRM processes and to ensure that they are in compliance with the code in preparation for the CPUC CRM audit, Q3 2012.					
Next Steps	QA and CRM team to agree on corrective action (CA) plan and put them into the CA process.					
Audit Team	[redacted] and [redacted]					

Gas Ops Corrective Action Program (CAP)

Quality Program - July 2012 for June Results

Assessment Status	🟩	Initiative on track. "Idea Ready to Tackle" will be submitted at 7/16 Process Governance Meeting.	
Executive Sponsor	Jane Yura	**Champions** **Lead Champion*	[redacted], [redacted]. and [redacted]
Project Timeline	Q2'12 - Q1'13	**Financial Impact**	• Eliminate costs associated with poor follow up and administration of corrective actions related to CPUC findings, internal audits, QA audits, employee feedback, observations, W&HPI, and other related items. • Eliminate costs of reoccurring CAs by teaching new methodologies to determine root cause and develop robust solutions and controls.
Project Goal	• Develop a fully functional CAP system to fulfill Gas Operations needs in parallel with the PG&E enterprise-wide CAP, which is currently under development (under a much longer timeline). • Drive Gas Ops climate and culture change to execute corrective actions in a different way in order to provide robust solutions. • This program should comply with the requirements of the PG&E enterprise CAP program, PAS 55, and ISO 14001.		
Progress	• IT resources have been lined up, a dedicated PM is being provided by Robert Brook • Team resources are being lined up to work on detailed CA process for Gas Ops and Internal Audit (and potentially Electric Ops) • The ECTS software tool has been chosen and has been configured somewhat in order to provide a more meaningful demo which has been set for July 9. Participating functional areas: Gas Ops, Internal Audit, Elec Ops, EH&S, Power Gen, IT, and UPI. • The Idea Ready to Tackle form has been filled out and is ready to be submitted to committee.		
Focus Areas/Problem Areas/Successes	• There is close coordination between the Gas Ops CAP effort and the PG&E enterprise wide CAP effort. • Gas Ops was chosen to lead the way with process and software tool development. • There is a lot of interest from other groups/LOB's to participate with and monitor the Gas Ops CAP program. • We are in the process of lining up dedicated IT support for this initiative, they are key to our success.		
Next Steps	**<u>Phase 1 – DEMO - Demonstration of Concept</u>** • June 18 - Perform gap analysis between 'out of the box' ECTS CAP tool and the Gas Ops CAP workflow • July 3 – Demonstrate 6-10 CA's in the ECTS system with very little configuration changes		
Project Team Representation	Quality Assurance, Internal Auditing, IT, Electric Ops, Gas Ops Regulatory Compliance, Shared Services		

Employee Feedback Program								
Program Status	🟥	Not yet started, but should have, Targeting having "Idea Ready to Tackle" submitted by July's Governance Mtg	**Sponsor**	[redacted] [redacted]	**Stake-holders**	Gas Ops.	**Project Timeline**	Q2-Q4
Purpose	Develop a formal employee feedback program which will provide a communication and feedback loop for employees to raise their Gas Operations related ideas, concerns, and questions.							
Scope	The feedback system should include electronic entry (intranet portal) and anonymous submittal capabilities as well as the ability to trend and track the information on the back end to proactively detect emerging trends and themes.							

Gas System Operations-Improvement Report June 2012

Results	●	High number of over-pressure events for the year, data not readily available to fully understand scope and causes; behind on addressing gas control NTSB recommendations.
Initiative Status	●	Resource shortage to implement initiatives while handling day-to-day operations.

I. Goals/ Objectives

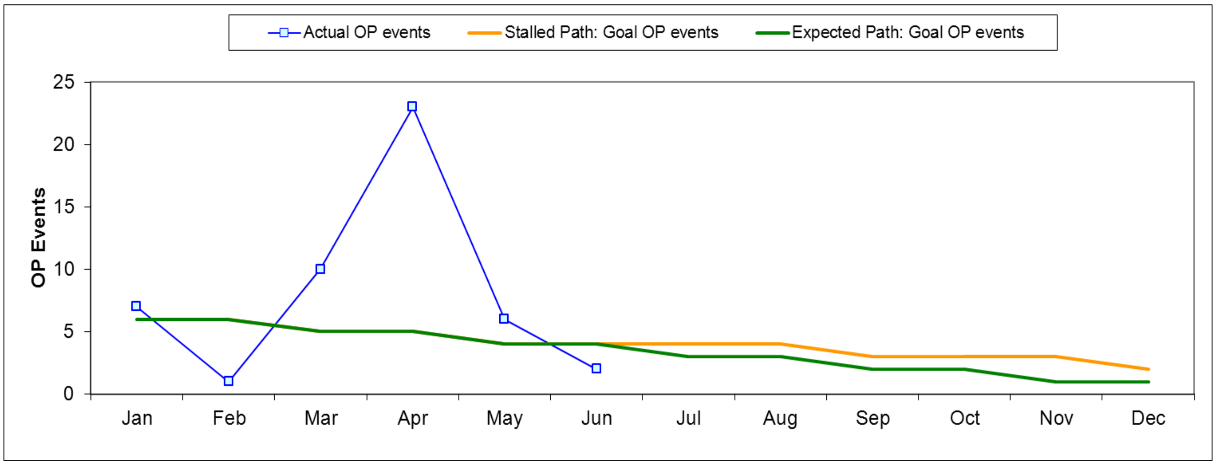
- Gas System Operations and Control manages the gas system to provide for the safe and reliable delivery of gas to customers and acts as the first line of defense for public safety. The gas control function will be:
    - Proactive – prevent event escalation to emergency status
    - Predictive – increase operations system awareness
    - Single point of coordination for emergency response

II. Results

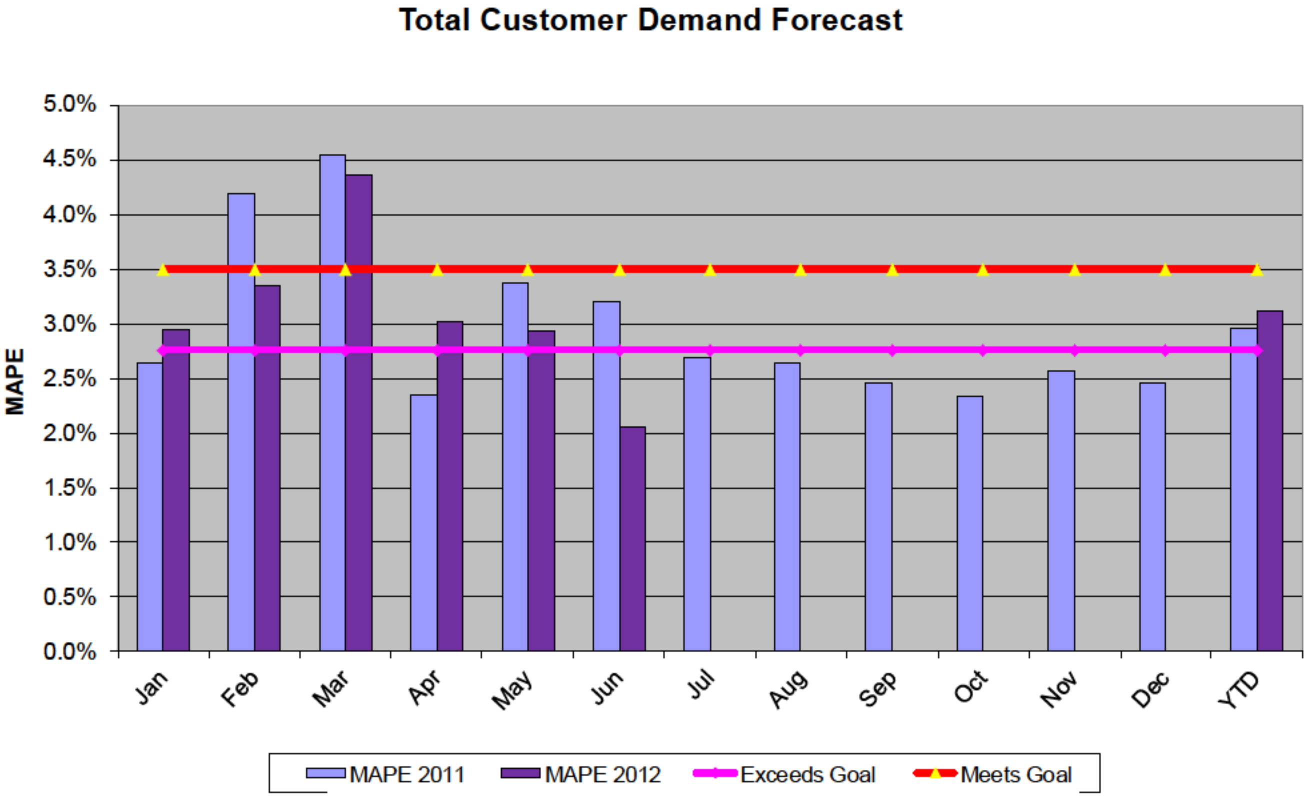
Metrics:

Gas Over-Pressure Event Frequency (Metric GO07)

Number of Overpressure Events	June Actuals	YTD Actuals	EOY Forecast	EOY Goal
Gas System Totals	**2**	**49**	**61**	**≤42**

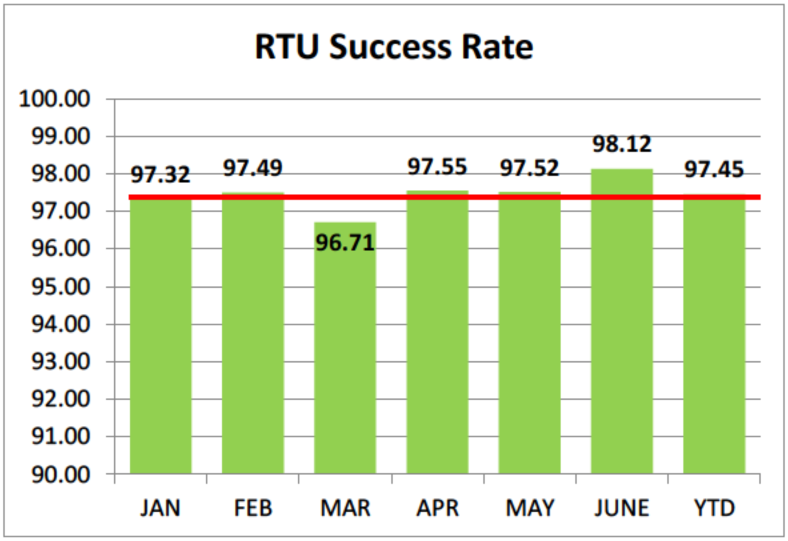


Gas System Demand Forecast Accuracy



MAPE = Mean Average Percentage Error for Daily Forecasts

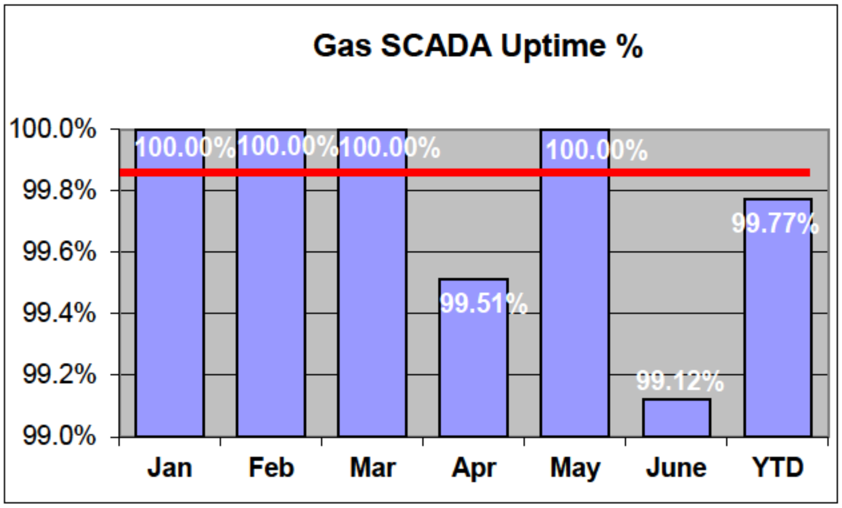
SCADA System Availability



RTU Success Rate %

The average success rate of each RTU responding to the poll from the SCADA FEP server.

The average for 2011 is 97.3.



Gas SCADA Uptime %

The percentage of time that all SCADA FEP servers (that poll field devices) are available and providing field data to Gas Control.

The average for 2011 is 99.86%.

Distribution SCADA Field Installations

Installation Type	2012 Target	To Date Thru June	EOY Forecast	EOY Goal
RTU SCADAPack 350	5	0	5	5
RTU Eagle Research	12	0	12	12
ERX	130	0	130	130
Estimated cost at completion	$1.9 M		$1.9 M	$1.9 M

Note: Field installation sites for 2012 have been identified, construction is scheduled to begin in late August.

Metrics – Tracking as Initiatives:

NTSB Control Room Safety Recommendations Implementation (Metric GO47)

Description	June Status	YTD Status	EOY Status
Implement 3 NTSB Recommendations	**BEHIND**	**BEHIND**	**ON TRACK**

For detailed understanding, observations and analysis – See initiative #5.

Distribution Control Room (Metric GO53)

Description	June Status	YTD Status	EOY Status
Distribution Control Room Implementation	**ON TRACK**	**ON TRACK**	**ON TRACK**

For detailed understanding, observations and analysis – See initiative #6 and 7.

III. Observations / Analysis

Gas Overpressure Event Frequency:

Team has been formed to focus on eliminating overpressure events. See initiative #4.

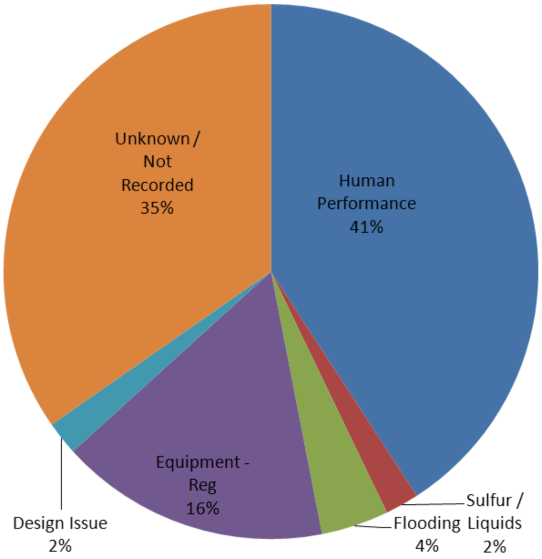
Gas Planning Engineers have analyzed all 50 LP systems (ranging in size from 1 to 23 stations supplying each system) and recommended changes to 40. Through June, setpoint reductions have been completed for 100% of the 40 systems identified.

Work to implement 5/20 policy on backbone transmission system is in progress and forecasted to be complete by the end of July, and pressure setpoint policy for the remainder of the transmission system is being evaluated.

Preliminary root causes for 2 June events: 2 - Human Error.

OP Events by Month				
Month	Distribution – MP/HP	Distribution - Low Pressure	Transmission	Grand Total
January	3	2	2	7
February	1			1
March		2	8	10
April		17	6	23
May		2	4	6
June			2	2
Grand Total	4	23	22	49

2012 Events by Root Cause:



IV. Process Improvement Initiatives

Key Initiatives

Primary Initiative Category	Initiative Name	Status
Compliance & Risk Mgmt	1. CRM – Alarm Management	🟨
Compliance & Risk Mgmt	2. CRM – Gas Control Training	🟩
Improve Safety	3. SCADA Enhancements – Gas Transmission	🟨
Improve Safety	4. Overpressure Events Elimination	🟩
Improve Safety	5. NTSB Gas Control Recommendations	🟨
Improve Safety	6. Co-Located Control Facilities	🟩
Improve Safety	7. Interim Distribution Control Room in SF	🟨
Improve Safety	8. Distribution SCADA System	🟨
Improve Safety	9. Distribution Control Center Key Processes & Tools	🟨
Improve Safety	10. Distribution SCADA Field Installations	🟩
Customer Trust	11. Enhance or Replace Gas Transaction System (GTS)	🟩

Initiative Schedule and Status

Initiative	**CRM – Alarm Management**	
Scope	- **Comply with PHMSA Control Room Management 8/1/12 deadline for Alarm Management implementation** - **Implement New Tools that provide best practice alarm response and analysis integrated across work functions**	
Benefits	- **Regulatory Compliance** - **Improved Alarm Management – Proactive identification of potential issues and increased responsiveness to abnormal operating conditions**	
Costs		
Milestone	**Target Completion Date**	**Comments**
Determine Alarm Prioritization and Responses	**Complete**	Governance document finalized.
Create Master Alarm Database	**Complete**	
Verify Safety Related Alarm Setpoints	**July**	MAOP/MOPs for Alarm Points being determined. MAOP Validation Team providing updated list.
Create Alarm System KPIs & Alarm Exception Reports	**August**	Strategy being developed.
Determine Solution for New Alarm Response Tools	**July**	Alternative solutions being evaluated.
Begin Implementation of New Alarm Response Tools	**December**	Not started.

Discussion Items

Completed design criteria for new alarm response tools. Met with Honeywell, OSISoft and GE on potential new Alarm Management tool solutions. Planning to use OSISoft PI system tools to meet 8/1 requirements but will expand use of existing LogMate (Alarm Reporting Tool) system if PI tools are not complete.

Gas System Operations-Improvement Report June 2012

Initiative Schedule and Status

Initiative	**CRM – Gas Control Training**
Scope	• **Comply with PHMSA Control Room Management 8/1/12 deadline for training requirement implementation** • **Develop/revise training program to ensure Gas System Operators and Transmission Coordinators have sufficient knowledge and expertise to safely operate the gas system.**
Benefits	• **Regulatory Compliance** • **Ensure control room personnel have the training to recognize and respond to abnormal operating conditions on the gas system.**
Costs	

Milestone	**Target Completion Date**	**Comments**
JATC Approval and Letter of Agreement for training program	July 15	Union/Company agreement to accept proposed gas system operator training program. Program to be reduced from 21 to 18 months with appropriate wage progression upon passing Knowledge and Skill assessments. On track to meet deadline.
CRM Training Implementation mandated	August 1	Gas System Training Workbooks developed. 12/13 validated as of 7/11/12, 13/13 target 7/16/12. Ahead of schedule to meet deadline.
Knowledge Assessments to qualify operators	August 1	Knowledge Assessments created and validated based on training material. 11/13 completed as of 7/11/12, 13/13 target 8/1/12
Skills Assessments	August 31	Skill Assessments created and validated. 7/10 target by 8/1/12, 10/10 by 8/31/12
Continued Training Development after 8/31	**On going**	2 additional gas system workbooks, PowerPoint and tailboard training to enhance the effectiveness of the training program

Discussion Items

Initiative Schedule and Status

Initiative	**Overpressure Event Elimination**	
Scope	• Collect and analyze data of overpressure events identifying root causes. • Develop and implement corrective actions to ensure that the gas system is safe for winter operations. • Develop and implement preventative actions to create long term processes to eliminate future overpressure events.	
Benefits	• Increased understanding of the root causes of overpressure events, and the benefits and risks of various mitigation strategies. • Elimination of overpressure events creating increased system safety. • Regulatory compliance.	
Costs		
Milestone	**Target Completion Date**	**Comments**
Evaluate and Implement LP System Sepoint Reductions	Complete	All LP Systems Evaluated. Setpoint changes recommended on 40 systems. Changes 100% complete.
Form Team to address OP events and determine overall strategy	Complete	Team formed and began weekly meetings in July.
Recommend LP System MAOP Policy	July	Recommended new policy was presented and supported by team pending review of GTI report assumptions.
Collect and Analyze Data	July-August	Date related to SCADA, ERXs, Chart Recorders, Regulator Station Equipment Type, Corrective Maintenance being collected and analyzed. LP system winter operation requirements being evaluated.
Perform Root Cause Analysis	August	
Create and Implement Gas Transmission Regulation Setpoint policy	July-October	Policy being fine tuned based upon specific equipment types and system MAOPs.
Develop Corrective and Preventative Action Plans	August-September	
Implement Corrective Action Plan Recommendations for 2012-13 Winter Season	November 1	

Discussion Items

Need determination on monitor setpoint code requirements for transmission and distribution systems.

Initiative Schedule and Status

Initiative	**SCADA Enhancements – Gas Transmission**	
Scope	• Upgrade SCADA tools and displays to improve Gas Controller effectiveness in identifying and responding to gas transmission emergency events, particularly those requiring the use of automated valves.	
Benefits	• Improved Event Detection and Response, particularly line break scenarios • Improved Gas Controller Situational Awareness	
Costs		
Milestone	**Target Completion Date**	**Comments**
Complete Gas Control Benchmarking	Completed	Visited various Gas Control Centers (Jan-March): National Grid, Con Ed, Centerpoint, Spectra, Williams & Transcanada.
Complete Independent SCADA System Review	End of August	CWA to be signed the week of 7/15 and work to begin immediately thereafter.
Update SCADA Navigation & Display Strategy	December	Investigating various concepts.
Design & Pilot ASV/RCV Displays & Protocols	December	Conceptual design work using PI tools completed by Casne Engineering.
Design of system for tracking all critical manual valve positions on SCADA	December	Not started.
Design Video Wall Situational Awareness Displays	February 2013	Investigating video wall display usage by other companies.
Implement ASV/RCV Displays & Protocols Strategy	2013	Implement as ASV/RCV installations are completed.

Discussion Items

These activities are SCADA Enhancement work included in the PSEP-Valve Automation Program.

Initiative Schedule and Status		
Initiative	**Implement NTSB Control Room Safety Recommendations**	
Scope	- **Implement NTSB Recommendations related to:** ○ **911 Notifications (P-11-3)** ○ **Clearance Process (P-11-24)** ○ **SCADA Rupture Detection Tools (P-11-26)**	
Benefits	- **Comply with NTSB safety recommendations**	
Costs		
Milestone	**Target Completion Date**	**Comments**
911 Immediate Notification Based on SCADA Alarms (P-11-3)		
Implement 911 Notifications process based on SCADA alarm triggers.	**Complete**	Control Room process has been implemented requiring 911 notificiations be made based on the following four SCADA alarm indications: - Relief valve open venting gas to atmosphere - Automatic Shut Off Valve (ASV) closed. - Rapid Pressure Drop Alarm activation, indicating high differential across a Remote Control isolation Valves (RCV). - Lo-Lo Pressure alarm, confirmed valid by verification of upstream and downstream pressure sites and the increase of correlated metered flow indicating possible pipeline rupture.
Prototype SCADA emergency response "smart" alarm capability for a HCA	**December**	Develop "smart alarm" capability to improve situational awareness in control room allowing proactive response by Operator. Original target 8/1.
Develop full implementation plan and communicate to NTSB	**December 31**	Based on prototype success, implement 911 Immediate notification based on SCADA activated emergency response "smart alarms". Original target 10/1.
Clearance Process Revision (P-11-24)		
Complete process revision to incorporate contingency planning	**July 15**	WP 4100 -10 revision completed. Revised procedure to be rolled out through TDM process on July 13. Forecast completion July 15. Original target 3/31.
Conduct training of all qualified clearance holders	**September**	WP 4100 -10 revised. work procedure training rollout requires tailboarding with all work groups on "what has changed" from previous version. Tailboarding through TDM rollout required by all field groups by end of July. Formalized WBT training to serve as annual refresher forecasted to be completed in 3rd Quarter. Original target 5/15.

Control Room Rupture Detection Tools (P-11-26)		
Implement OSISoft PI Historian	Complete but issues	Implementation completed, but PI data quality problem with a small number of points has been identified. Data being reloaded from SCADA. To be completed in mid July.
Secure Consultant to Perform SCADA Evaluation	**Mid July**	CWA to be signed and work to begin the week of July 15. Original target 3/31.
Complete Consultant Analysis of SCADA System	**August 31**	Evaluation to be started in early July, complete end of August. Original target 6/1.
Pilot Rupture Detection Tools & Display	**December**	Pilot delayed based upon further evaluation of alternative solutions and completion of SCADA evaluation. Original target 8/1.
Develop Full Implementation Plan based on Pilot Results	**December 31**	Not Started. Forecast completion end of year. Original target 10/1.

Discussion Items

Initiative Schedule and Status

Initiative	**Co-Located Control Facilities**
Scope	**The control centers for gas distribution and transmission will be co-located with the dispatch center to provide coordination between all functions. The control center is planned as a special facility with sufficient redundancy to prevent loss of operation due to electrical, mechanical, and telecommunication equipment and system failures.**
Benefits	- **Improved response to abnormal events** - **Improved timeliness of response to abnormal events** - **Ability for better and more timely communications** - **Improved coordination during emergency events** - **Improved decision making due to centralized availability of records and data**
Costs	- **$63M** - **Cost includes the [redacted] [redacted] remodel and $17M for IT application and processes.**

Milestone	**Target Completion Date**	**Comments**
Define Co-located Facility Space Requirements	**Complete**	Conceptual Design Report - Functional Requirements and conceptual 5th Floor layout prepared by consultant HCS and reviewed by all key stakeholders. Final report to issued in June.
Define and develop solutions for power & communications	**August**	80% complete.
Complete Facility Design	**September**	Determining architect. Should be under contract by early July.
Facility Construction	**February**	Start construction in October.
Start Pilot Testing Facility	**February**	
Full Activation	**2nd Quarter 2013**	Initially dual operations SF and San Ramon.

Discussion Items

Initiative Schedule and Status

Initiative	**Interim Distribution Control Room in SF**	
Scope	• Create a separate but co-located Gas Distribution Control Center. Initially in SF.	
Benefits	• Increased monitoring of Distribution System. • Increased focus on Distribution System operational issues providing for quicker issue identification and action. • Operators trained specifically to handle Distribution operational risks and issues.	
Costs		
Milestone	**Target Completion Date**	**Comments**
Develop functional requirements & staffing plan	Complete	
Design SF Distribution Control Center	Complete	
Create work procedures for Distribution Control	October	Initiated the development of the Control Room Management binder.
SF Facility Construction	October	Finalizing hardware requirements for [redacted], purchase orders process was initiated, process to be completed by end of July.
Hire & initial training for control staff	September	Hiring and training delays. Delays in approval from JATC to Apprentice program changes
Activate SF Distribution Control Center	December	

Discussion Items

Risks Mitigation

- Resources – Hiring and training delays for the Gas Distribution Control Team.
  Mitigation: Escalating issue to upper management for resolution.
- Lack of understanding from divisions and others of Control Room roles and responsibilities.
  Mitigation: Development and implementation of a communication plan

Initiative Schedule and Status

Initiative	**Distribution SCADA System**	
Scope	**Design secure data pathway from distribution system RTUs/ERXs to new distribution system control room consoles.** **Design points data base, alarms data base, display screens for new distribution SCADA system.** **Configure distribution controller SCADA workstations** **Conduct SCADA tools and displays training**	
Benefits	**Provide increased visibility and control capability of the gas distributioin system using SCADA system consistent with gas transmission system.** **Provide proactive monitoring and predictive control capability of the gas distribution system**	
Costs		
Milestone	**Target Completion Date**	**Comments**
System architecture design complete	**August**	Communications and SCADA system architecture. Test Eagle Research RTU and ERX communication solutions.
Autosol Server installed and functional	**End of August**	For ERX communications
Change management system in place to track installation of new Distribution RTUs.	**September**	
Distribution SCADA points data base complete, including end-to-end test for each point	**November**	
Phase 1 SCADA displays complete	**November**	Phase 1 displays will present data in tabular format only.
Create Distribution Alarm Priorities & Response Sheets	**November**	
Create SCADA operator configurations	**November**	
Provide SCADA operator training	**December**	

Discussion Items

Gas System Operations-Improvement Report June 2012

Initiative Schedule and Status

Initiative	**Distribution Control Center Key Processes & Tools**	
Scope	**Provide Processes and Tools to operate a Distribution Control Center that is proactive and predictive in identifying issues before they impact operations, and is ensures any emergency events that do occur are identified and responded to in an effective and coordinated fashion.** **Areas of focus include Clearance Process, Emergency Response, Damage Prevention and System Operations Databases.**	
Benefits	**Improved analysis and decision making in response to abnormal events** **Prevention of dig-ins and O&M human errors due to coordination with control room** **Improved compliance performance**	
Costs		
Milestone	**Target Completion Date**	**Comments**
Clearance Process		
Benchmarking and Stakeholder Discussions	**Complete**	Process design has been finalized and reviewed – Swim lane and associated steps completed
Work Procedure Development	**September**	Finalized Maintenance Clearance process and step descriptions being routed for review. Draft Distribution Gas Clearance Procedure to be completed this week. Planned Clearance FMEA actions and controls finalized and submitted for approval.
IT Technology Build-out	**November**	Schedule may slip if there is a change in software direction. Requirements in areas of tag printing, clearance forms, are not yet identified.
Pilot Implementation	**December**	Pilot without tool will start in October
Fully Implemented	**June 2013**	
Emergency Response		
Define Goals & Objectives	**July**	Created SOW and timelines
Define Roles & Responsibilites for Control/Dispatch/Field	**August**	
Develop Control Room Processes	**August**	
Define Technology Application Requirements	**September**	
Test Implementation	**October**	Frist mock test performed

IT Technology Build-out	March 2013	
Fully Implementated	May 2013	
Damage Prevention		
Define initiative process steps and milestones	Early 2013	
System Operations		
Mapping out "as-is" processes for maintaining distribution operation data & procedures	September	Workstream lead has been identied. Developing plan to visit division offices to review how data/records are store and maintain.
Data collection for key operating information and facility data	December	System wide collection of MAOP Maps, Zone Shutdown Maps and Procedures, BTU Maps, Regulator Station and Valve Data
Develop standardized system wide updating process	June 2013	
Full implementation of standardized updating process	2014	Updating process for MAOP Maps, Zone Shutdown Maps and Procedures, BTU Maps, Regulator Station and Valve Data

Discussion Items

Clearance Process

- Division's personnel not trained for the new processes prior roll-out
  Mitigation: Engage learning academy early in the project to start development of training plan

All Processes

- Integration with GIS not ready before pilot
  Mitigation: Develop interim procedures without GIS

Initiative Schedule and Status

Initiative	**Distribution SCADA Field Installations**
Scope	**Install equipment to monitor & control distribution system at additional field sites. Target is to install equipment over next 6 years to provide 95% system visibility and 20% control of distribution supply points.**
Benefits	**Improved management of distribution system operations.** **Real-time identification of distribution system potential pressure problems and unplanned gas releases.** **Ability to take immediate remote response for key distribution system supply points.**

Costs	• **$1.9M for 2012 installations**	
Milestone	**Target Completion Date**	**Comments**
Identify 2012 Sites and create Work Execution plan	**June**	Completed field installation locations list for 2012. Work execution plan was not completed in June. Working with project manager to determine the new date for the plan. This is not impacting the field installations start date.
Develop and lab test new designs for monitoring and control	**October**	Initiated the approval process to get the Eagle Research devices approved as part of PG&E's standards. On schedule to purchase the 130 ERX units this month, started procurement process with Sourcing.
Complete engineering for 2012 sites	**October**	Completed preliminary sketches for the SCADA cabinets and SCADA equipment layouts for the Eagle Research and SCADA Pack locations.
Begin Field Installations	**August**	Coordinating activities with Government Relations for Mobile ERX locations customer acceptance.
2012 Sites Operational	**December**	

Discussion Items

Risk Mitigation:

- Permits will not be ready in time for construction
  Mitigation: Estimated department to assigned dedicated resources for the project including electrical side
- Insufficient amount of personnel to maintain total project equipment for years 2013 and beyond
  Mitigation: Develop a hiring plan to support project scope
- ERX installations will have a cell phone connections. This was an issue among some customers during the smart meter implementation. Customers may reject ERX
  Mitigation: Engage the Government Relations and communication groups early in the process to review deployment list and adjust as needed. Select several addresses for each low point and have a choice of willing customer to install ERX.
- Division personnel may not be fully trained on the standards/procedures for the maintenance and operations of the existing field equipment. New equipment being installed needing personnel to be trained
  Mitigation: Involve the Work Methods Implementation and Codes & Standards teams to provide training of existing, and guidance for new, standards, work procedures, bulletins, etc. prior/during the field installations.

Gas System Operations-Improvement Report June 2012

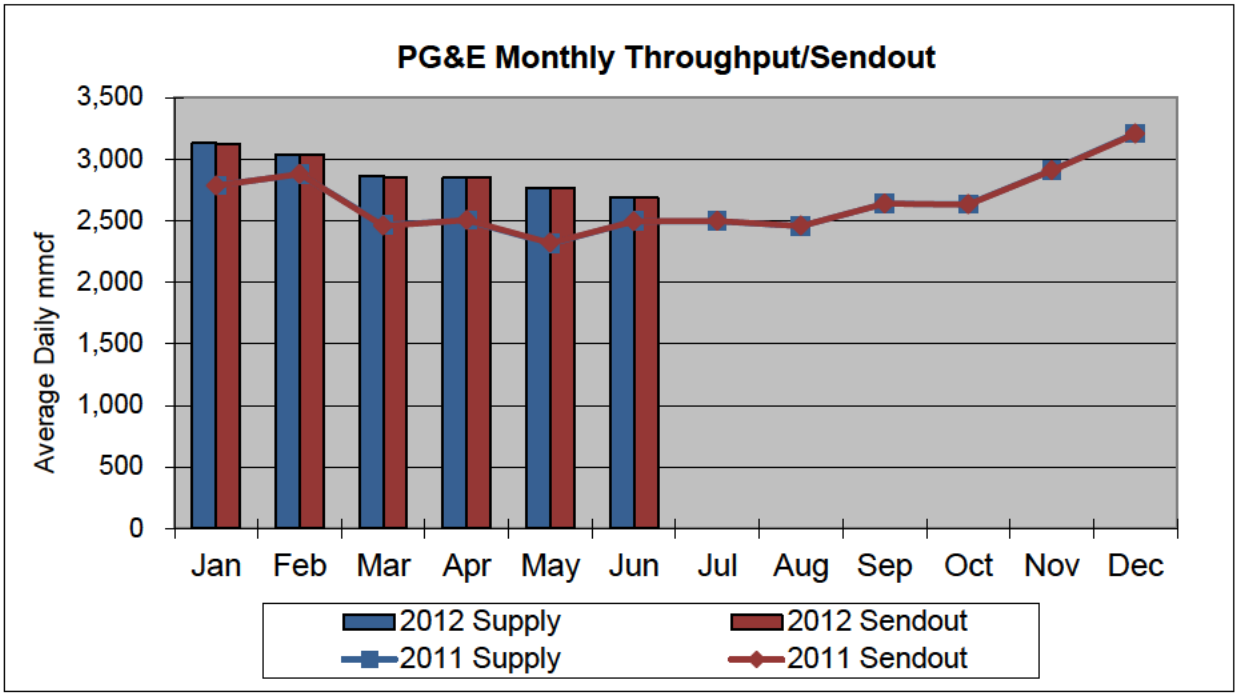
Initiative Schedule and Status

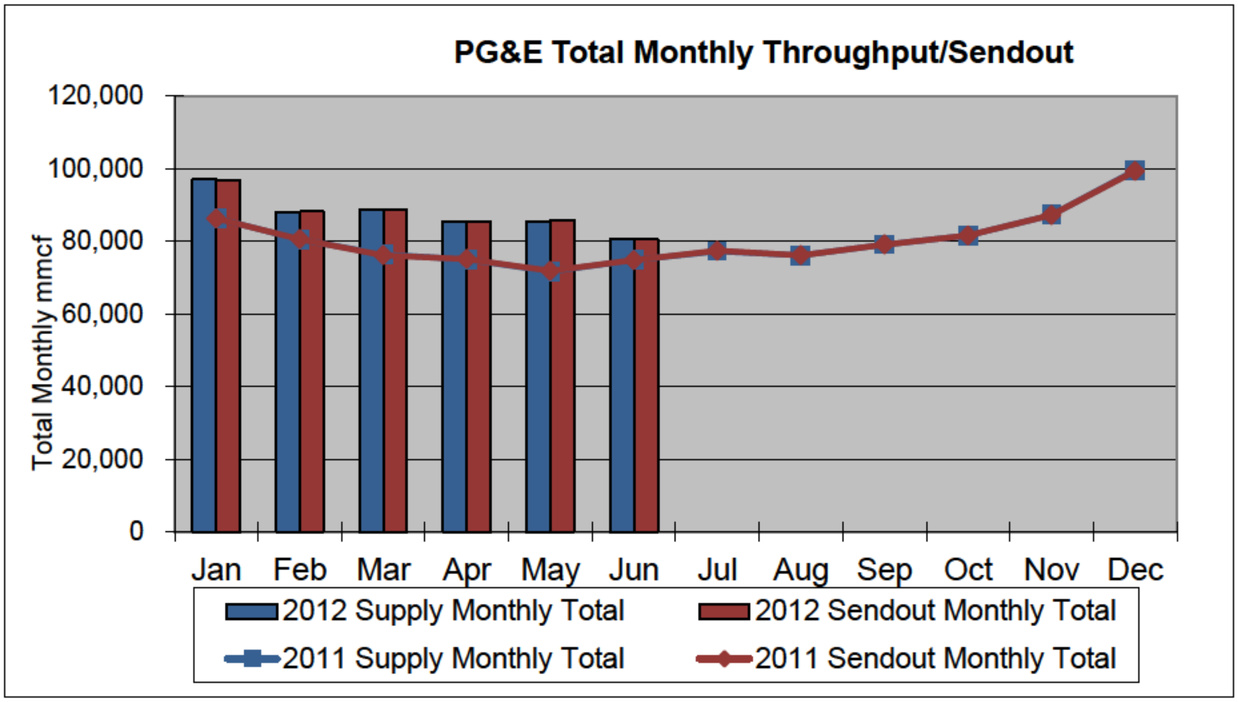
Initiative	**Enhance or replace Gas Transaction System (GTS)**	
Scope	**Improve technology for managing transactions with and for our wholesale customers. GSO relies on the Gas Transaction System (GTS) to administer the commercial aspect of its business.**	
Benefits	**Improve wholesale customers ease of doing business with PG&E** **Reduce errors** **Improve efficiency of internal operations**	
Costs	**TBD**	
Milestone	**Target Completion Date**	**Comments**
Gather Customer Input	**Complete**	Held 3 Voice of the Customer Meetings (1 in SF, 2 in Houston) to gather input from a total of 30 customers representing 24 companies
Gather internal user and IT input	**Complete**	Internal users have identified their GTS change needs.
Assess Level of Effort and user benefits for each item	**June**	The Level of Effort and user benefits has been performed on the customer input items. Some of the internal user items have been delayed due to GSO and IT supporting the S1 process for IT and the 2013 budget request deadlines.
Present findings to GSO and IT Leadership for next steps	**August**	
Implement Recommendation	**TBD**	

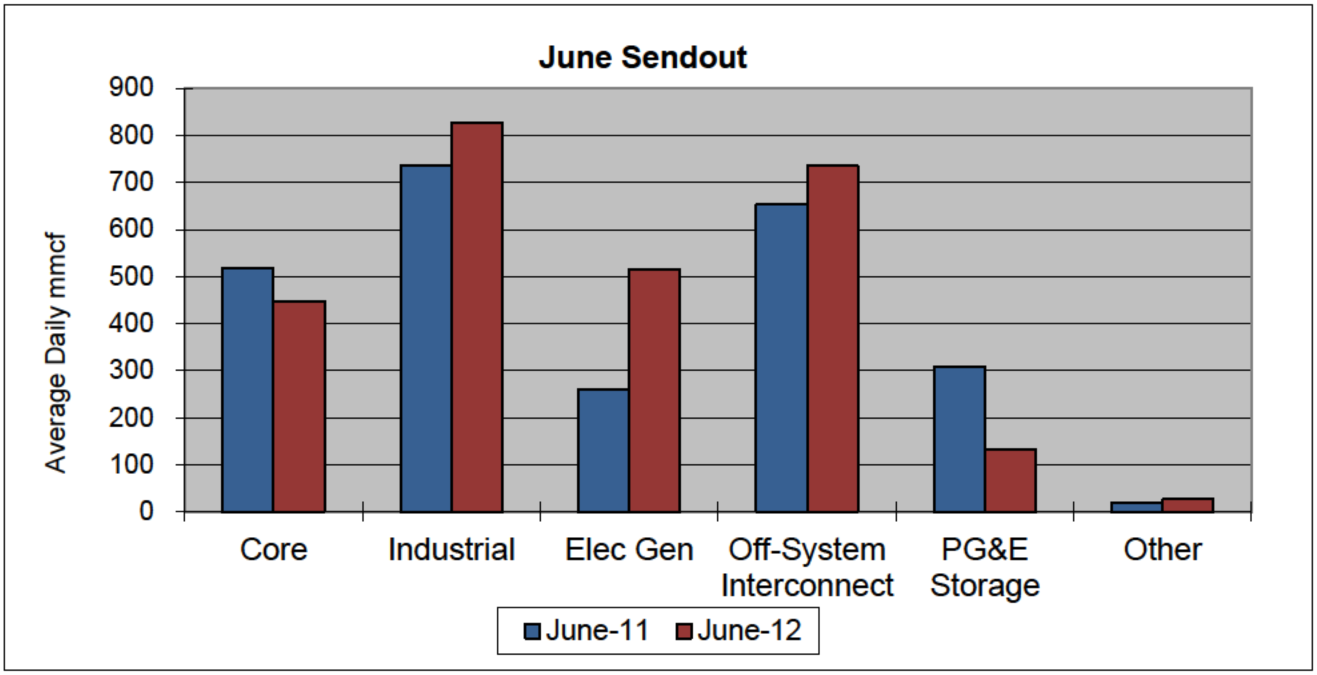
Discussion Items

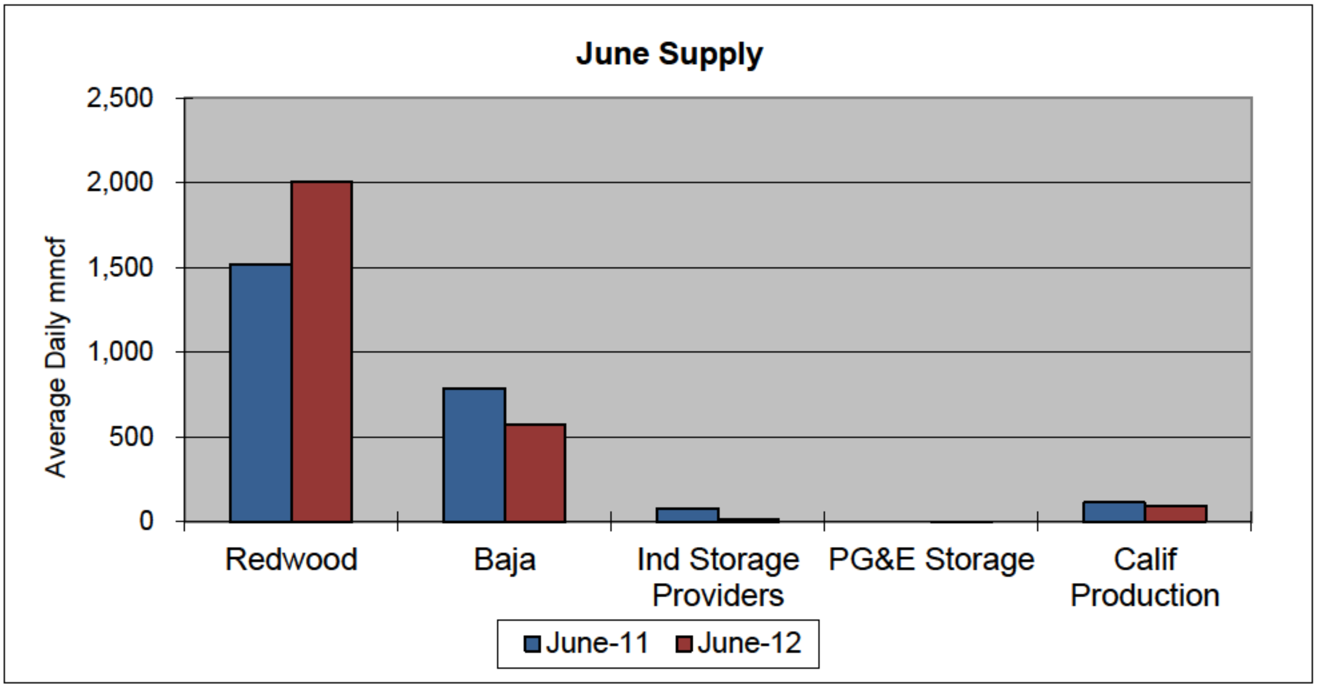
V. Supporting Information

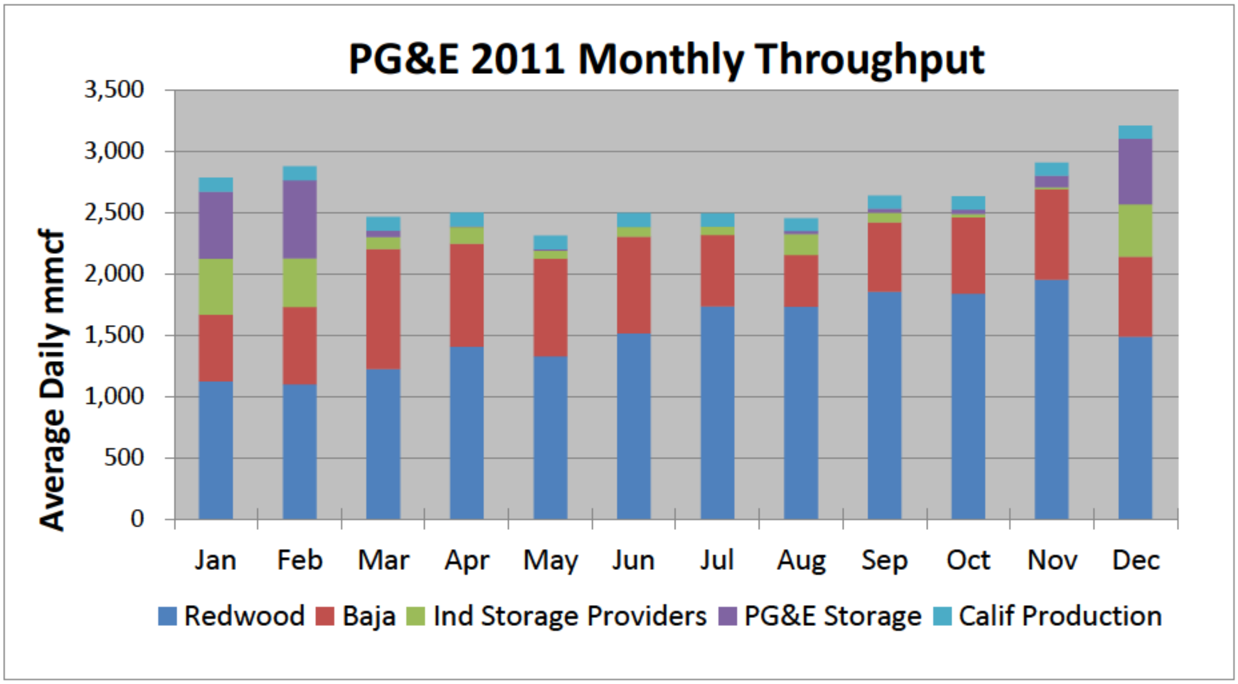
Gas Control System Flow Data

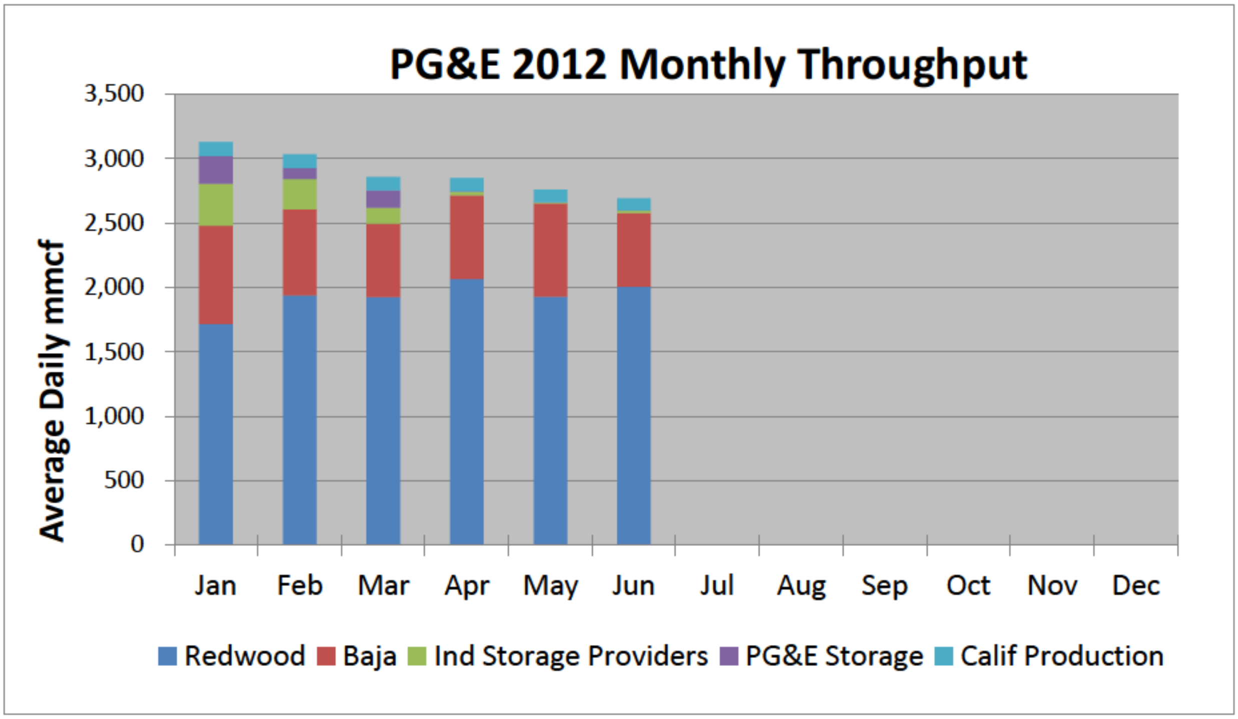




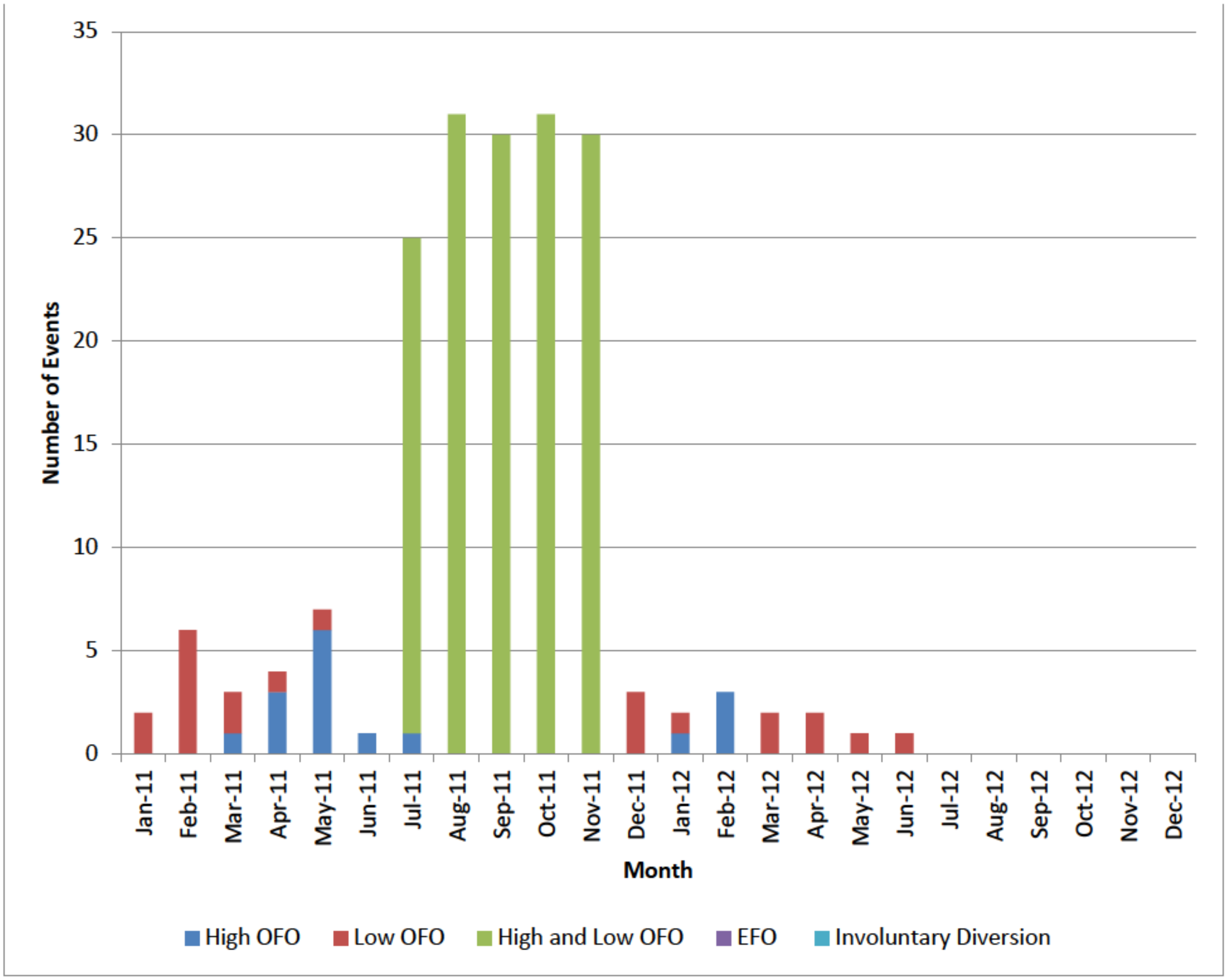

June Sendout
Average Daily mmcf
900
800
700
600
500
400
300
200
100
0
Core
Industrial
Elec Gen
Off-System Interconnect
PG&E Storage
Other
June-11
June-12


June Supply
Average Daily mmcf
2,500
2,000
1,500
1,000
500
0
Redwood
Baja
Ind Storage Providers
PG&E Storage
Calif Production
June-11
June-12


PG&E 2011 Monthly Throughput
Average Daily mmcf
3,500
3,000
2,500
2,000
1,500
1,000
500
0
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Oct
Nov
Dec
Redwood
Baja
Ind Storage Providers
PG&E Storage
Calif Production


PG&E 2012 Monthly Throughput
Average Daily mmcf
3,500
3,000
2,500
2,000
1,500
1,000
500
0
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Oct
Nov
Dec
Redwood
Baja
Ind Storage Providers
PG&E Storage
Calif Production

Flow Orders Event History



Notes:

1. **OFO/EFO/Diversion are Gas Rule 14 tools for Transmission Control to manage Pipeline Inventory within safe operating limits. Customers pay non-compliance charges if they exceed daily imbalance limits on these days.**
2. **We called Daily Hi/Lo Inventory OFOs from July 9 through November 30, 2011 when pipeline inventory flexibility was limited to ~200 MMCF/Day (usually 450 MMCF/Day) due to clearances and pressure reductions on the backbone system.**

Gas Control System Clearance Statistics

CURRENT MONTH AND YEAR TO DATE CLEARANCES APPROVED/COMPLETED				
	APPROVED		COMPLETED	
DISTRICT/DIVISION	MONTH	YTD	MONTH	YTD
BURNEY	0	2	0	2
CENTRAL COAST	8	24	7	11
DE ANZA	2	5	2	5
DIABLO	1	9	1	6
EAST BAY	0	2	0	2
FRESNO	0	5	0	6
HINKLEY	4	13	1	7
HOLLISTER	4	5	1	2
KERN	3	17	1	13
KETTLEMAN	10	20	6	15
LOS MEDANOS	0	4	0	2
MCDONALD ISLAND	0	7	0	5
MERIDIAN	0	1	0	2
MILPITAS	9	50	11	47
MISSION	0	11	0	8
N.BAY	4	15	3	3
N.COAST	1	13	3	9
N.VALLEY	0	14	0	13
OAKLAND	3	10	1	5
PENNINSULA	2	9	3	8
RIO VISTA	1	11	2	9
SACRAMENTO	1	9	1	12
SAN FRANCISCO	4	7	2	4
SAN JOSE	2	9	2	8
SIERRA	0	10	0	8
STOCKTON	5	31	5	30
TOPOCK	3	14	3	14
TRACY	5	14	4	12
WILLOWS	5	6	2	2
YOSEMITE	6	25	4	18
TOTAL	83	372	65	288

Results	🟡	Capacity readiness & mitigation of related operational risks
Initiative Status	🟢	NOP (“5/20”) Analysis Complete

I. Goal / Objective

To ensure that PG&E’s gas transmission, distribution, and storage system has the capacity and operational capability to meet customers’ gas requirements incident-free, reliably, and economically. Key tools in this process are pipeline hydraulic models and other analytical tools that are used to simulate the flows, pressures, and other hydraulic characteristics of the gas system.

II. Results

1. Avoided Costs Due to Creative Gas Planning Analysis

For 2012, GSP planning efforts have avoided $21.7 million in net present value costs through May.

				NPV Costs (millions $)				Capital Cost		
Study Date	**Study**	**Description**	**Type**	Status Quo	GSP Recommend	GSP Savings	% NPV Savings	Status Quo	GSP Recommend	GSP Savings
May-12	DFM 0408-02 HPR Project, Napa	Install main to retire 17 Cust HPRs and 1 Dist HPR Reg Station in lieu of individual rebuilds to current standards.	Dist	$1.87	$1.15	$0.72	39%	$2.20	$1.35	$0.85
May-12	DFM 0405-01 HPR Project, Napa	Install main to retire 14 Cust HPRs and 1 Dist HPR Reg Station in lieu of individual rebuilds to current standards. Utilized recently abandoned DFM as casing pipe to insert distribution main.	Dist	$1.62	$1.02	$0.60	51%	$1.90	$1.20	$0.70
May-12	L-21B HPR Project, Napa	Install main to retire 9 Cust HPRs and 2 Dist HPR Reg Stations in lieu of individual rebuilds to current standards.	Dist	$1.62	$0.84	$0.78	66%	$1.90	$0.99	$0.91
Jun-12	TIM-158, 1819 Hydro test	PSEP proposed hydrotesting 2.33 miles of transmission line 1819-01 before December 2012. GSP analysis showed it was possible to downrate line to 60 PSIG, install a new distribution regulator station at L181A, and remove 6 HPR sets. Future hydrotests avoided.	Trans	$1.1	$0.3	$0.8	70%	$0.0	$0.4	-$0.4
June-12	[redacted]	Estimating believed 500 feet of 3/4" steel main and 3 services needed to be upsized to meet customer's new loads. GSP worked with T&R to gauge inlet/outlet pressures at customer meter set and determined adequate capacity. In addition, GSP spoke with facility manager and discovered their equipment is not used from Oct-Mar. Therefore, winter loads were not a concern. It was determined the customer only needs 2 psig delivery pressure and a larger meter.	Dist	$0.160	$0.002	$0.158	99%	$0.200	$0.002	$0.198
May-12	Foothill Av Main Replacement	GC and GSP identified alternate tie-in location for distribution main replacement project reducing the required amount of 4" main by 700 ft.	Dist	$0.6	$0.4	$0.2	28%	$0.7	$0.5	$0.1
May-12	DFM 3-0832-01 HPR Replacement	GC and GSP identified downrating a 3" DFM paralleling a 6" DFM to distribution pressure to avoid installing a new 2800 ft distribution main. Transfer 14 HPR's to distribution.	Dist & Trans	$1.1	$0.5	$0.6	55%	$1.3	$0.6	$0.7
		Savings from May-June Studies	**T&D**	**$8.1**	**$4.3**	**$3.8**	**47%**	**$8.1**	**$5.1**	**$3.1**
		Cumulative Savings 2012	**T&D**	**$75.4**	**$53.7**	***$21.7***	***29%***	**$108.8**	**$69.3**	***$39.6***

2. Capacity Readiness

Backbone

System	Gas Transmission Firm Committed Capacity Availability		
	Year End Target, %	Year End Forecast	Year To Date Actual, %
Baja Path	68.6%	84.0%	82.3%
Redwood Path	98.9%	98.9%	100.0%
System Avg	**68.6%**	**84.0%**	**82.3%**

Legend	2012 Target, %	**Red**	**Amber**	**Green**	Target Band
System Avg	68.6%	< 63.6 %	63.6 % to 68.6 %	>= 68.6 %	5%

This section is not being updated due to personnel changes to the Over pressure elimination team

Local Transmission

Capacity Readiness Status

System	Typical Winter Day (20-40 days/winter)	Cold Winter Day (1 in 2 year)	Extreme Cold Day to APD (1 in 10 to 1 in 90 year)
Peninsula*	**OK**	**OK**	**OK**
Sacramento*	**OK**	**OK**	**OK. Noncore curtailment increase over 2010: 30% to 70% Affected areas: Auburn, North Sac, Folsom, Lodi *****
Yosemite	**OK**	**OK**	**OK. Noncore curtailment increase over 2010: ~40% to 80% Affected areas: Modesto, Merced. *****
Central Coast	**OK**	**OK**	**OK. Noncore curtailment increase over 2010: 30% to 70%. Affected areas: Santa Cruz, Capitola, Watsonville. *****
All other areas	**OK**	**OK**	**OK**

* Peninsula and Sacramento assume use of forecast available LNG (5 units total after Dec 1).

** Customer counts shown are CC&B Accounts. Total number of residences affected will be higher (apartment building, master meters, etc.)

*** Impacted noncore customers include: [redacted] various noncore hospitals & nurseries.

Chart above is for 2011-2012. This information will be updated later in the year, as winter 2012-2013 approaches.

Local Transmission (cont.)

Estimated Noncore Curtailment Levels (for Stage 2 Day)

The chart below shows the tentative percentage of noncore (interruptible) customer load planned for curtailment in the event of a Stage 2 weather event in the winter of 2012-2013.

The plan is tentative because planning models must assume initial pressures, and the status of initial pressures for many transmission systems is in flux. This is due to pressure reductions now in effect and further possible reductions pending the MOP 5/20 analysis and any integrity testing. The percentages below take into account certain pressure limitations in effect as of May 2012, but do not take into account any possible future reductions driven by the MOP 5/20 analysis or integrity testing. In addition, the values below assume the timely restoration of certain temporary pressure reductions now in effect. If such reductions are not resolved, the values below would be subject to change.

Further detail on the curtailment plan for 2012-2013 will not be available until durable assumptions about initial pressure conditions can be made.

A Stage 2 weather event occurs between a 1-in-10-year degree-day event and a 1-in-90-year degree-day Abnormal Peak Day event, depending on factors such as system performance, actual customer usage, and weather forecast uncertainty.

Stage 2 Noncore Curtailment Levels per System **2012-2013**

Local Transmission System	Number of Noncore Customers to Be Curtailed	Total Number of Noncore Customers	Total Allowable Noncore Usage for System	Total Design Usage for System (MMcf/d)
North Sac Valley	NA	NA	5%	
Humboldt	NA	NA	51%	NA
Yosemite	NA	NA	56%	NA
Peninsula	NA	NA	77%	NA
Fresno	NA	NA	79%	NA
North Bay	NA	NA	91%	NA
Central Coast	NA	NA	92%	NA
San Jose	NA	NA	100%	NA
East Bay	NA	NA	100%	NA
Kern, Los Padres, Redding	NA	NA	100%	NA
Stockton	NA	NA	In progress	NA
Sacramento Valley	NA	NA	In progress	NA
TOTAL	**NA**	**NA**	**NA**	**NA**

The above Capacity Readiness tables relay the state of the gas system at a particular time, but do not yet convey the risks associated with daily changes to the system and the critical actions or work necessary to restore or reinforce the gas system. Future reports will provide more information on these items.

Distribution

Winter	Near-Constrained Systems (Utilization > 95%) Per Model
2010-2011	22
2011-2012	16

The above systems have been flagged to the appropriate distribution planning engineers for possible action (e.g., refinement of existing or initiation of new investment and/or operational plans). No change since last report.

3. Capacity Study Completion Status for 2012-2013

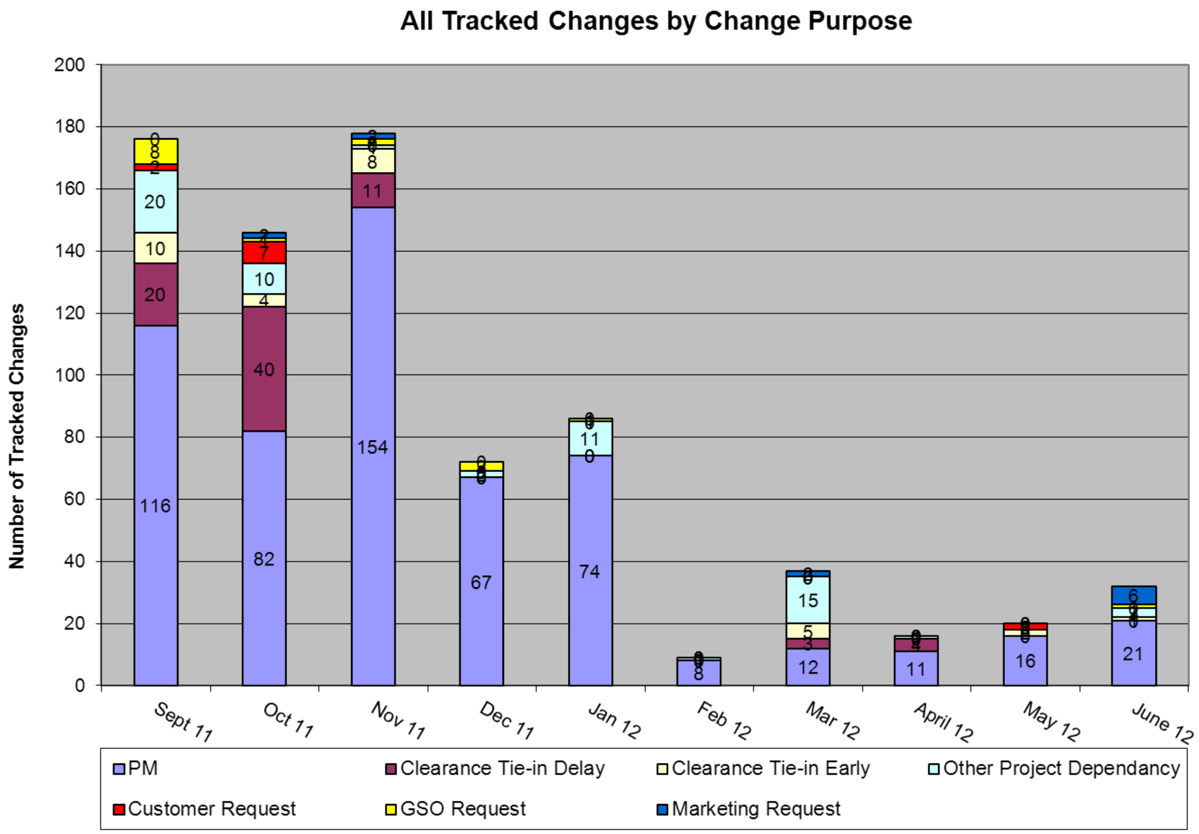
Capacity studies are routine, periodic studies to ensure that systems have adequate capacity under normal operating conditions in light of any growth, changes in upstream or downstream pressures, changes in physical configuration, and the like. (Capacity studies are distinguished from the NOP Study discussed in Section IV. The NOP Study is a one-time effort that examines whether the normal operating pressure of each system can be permanently reduced.)

Distribution	
Division	***% Complete End of 6/12***
Central Coast	0.0
De Anza	0.0
Diablo	0.0
East Bay	5.7
Fresno	0.0
Kern	7.8
Mission	0.0
North Bay	13.5
North Coast	22.3
North Valley	5.3
Peninsula	5.0
Sacramento	0.0
San Francisco	0.0
Sierra	0.0
San Jose	0.0
Stockton	21.3
Yosemite	0.0
Overall	***4.5%***

Transmission	
System	***% Complete End of 6/12***
Redwood (L400/401)	
Baja (L 300)	
North Bay	
Central Coast	
Peninsula	
San Joaquin Valley	
Humboldt	
Bay Area Loop	
Kern	
East Bay	
San Jose	
Sacramento Valley	
North Sac Valley	
Gilroy	
Overall	***0.00%***

Distribution study progress is impacted by the vacant positions in the newly reorganized group of distribution planning engineers. As positions are filled, progress is expected to return to schedule.

4. Outage Management



The above chart quantifies the number of schedule changes processed in the outage schedule (FOG schedule) and breaks the changes down by change purpose.

Change purposes and descriptions:

Customer Request - Change is to accommodate downstream gas customer usage

GSO Request - Change is to accommodate system operation

Marketing Request - Change is to accommodate interest of WM&BD group

PM - (Project Management) This is a broad category to describe the change of a project due to permit issues, land access, labor, material. It is a change requested by the Project Manager due to factors managed by the project team.

Other Project Dependency - Change in the project is due to change of a separate project (i.e. delay due to other project delay)

Clearance Tie-in Delay - Unplanned event in the clearance or any other reason that a clearance runs late

Clearance Tie-in Early - Execution faster than plan.

Criteria for tracking a change in the log

a. Dates change - (new dates not narrowed in on)

b. Duration change

c. Scope Change: MP/Location change or change in impact

III. Observations / Analysis

None at this time.

IV. Process Improvement Initiatives

Normal Operating Pressure (NOP) Reduction Study ("5/20" Study)

Study Objective

Determine feasibility and impacts of reducing Normal Operating Pressure (NOP) to 20 psi below the Maximum Operating Pressure (MOP), with over-pressure protection at 5 psig below MOP. Study scope includes all transmission pipelines represented within active planning models.

Pipeline System Review

System Name	*Scheduled Start*	*Scheduled End*	*% Complete*	*Notes*
Redwood – Line 400/401	3/15/2012	4/16/2012	100%	Loss of 17 mmcfd firm capacity (1)
Baja – Line 300	3/15/2012	4/16/2012	100%	Loss of 11 mmcfd of firm capacity (2)
Bay Area Loop	3/15/2012	5/7/2012	100%	Loss of 42 mmcfd of capacity (6)
Central Coast LT	3/30/2012	4/30/2012	100%	3 of 17 systems can be lowered
East Bay LT	4/10/2012	5/7/2012	100%	12 of 30 systems can be lowered
Fresno LT	4/10/2012	5/7/2012	100%	5 of 29 systems can be lowered
Humboldt LT	3/30/2012	5/7/2012	100%	4 of 8 systems can be lowered
Kern LT	3/30/2012	5/7/2012	100%	4 of 10 systems can be lowered
North Bay LT	3/30/2012	4/30/2012	100%	12 of 28 systems can be lowered
North Sac Valley LT	3/30/2012	5/7/2012	100%	2 of 11 systems can be lowered
Peninsula LT	4/10/2012	5/7/2012	100%	0 of 19 systems can be lowered
Redding LT	3/30/2012	5/7/2012	100%	1 of 2 systems can be lowered
Sacramento Valley LT	3/30/2012	5/7/2012	100%	29 of 48 systems can be lowered
San Jose/Gilroy LT	4/10/2012	5/7/2012	100%	5 of 20 systems can be lowered
Stockton LT	4/10/2012	5/7/2012	100%	0 of 1 systems can be lowered
Redding LT	3/30/2012	5/7/2012	100%	1 of 2 systems can be lowered
Yosemite LT	4/10/2012	5/7/2012	100%	1 of 6 systems can be lowered
Phase 1 Complete	**3/15/12**	**5/15/12**	**100%**	**49 of 181 systems can be lowered**

Note: Results include certain assumptions regarding the status of TROP/CROP pressure reductions and current construction work scheduled for completion in the near future.

Analysis of Results and Impacts

Process Step	*Scheduled Start*	*Scheduled End*	*% Complete*
Assess impact to noncore customer reliability and associated issues	5/15/12	5/31/12	100%
Assess total capital cost to reinforce constrained systems	5/15/12	5/31/12	100%
Develop high-level next-steps plan	5/15/12	5/31/12	100%
Phase 2 Complete	**5/15/12**	**5/31/12**	**100%**

Summary of NOP Reduction Findings:

- Approximately 60% of the gas transmission system can be set at MOP-20 and meet design day standards without investments.
- Because the design day for most transmission systems is Abnormal Peak Day, which assumes the curtailment of noncore customers, curtailments will sharply increase.
- The remaining 40% of local transmission systems cannot meet design day at MOP-20. To address this by increasing pipe size, an estimated $200 million of reinforcements would be required. However, there may be other approaches to achieving design day at reduced pressures on these systems.
- The backbone can perform at MOP-20, but capacity will be reduced. Preliminary order-of-magnitude estimates indicate that this reduction may cause **up to $80 million in increased annual commodity costs** at PG&E Citygate, or **about $1.60 per customer per month**. Reducing backbone pressure to MOP-20 may also **reduce PG&E transport revenue by up to $3 million annually**.

Next Steps:

- Involve the “Strike Team” to analyze alternatives and resource issues.
- After the Strike Team analysis, develop a winter plan for 2012-2013.
- Implement the 5/20 regulation set points on the Backbone system by July 31st.

V. Supporting Information

None at this time.

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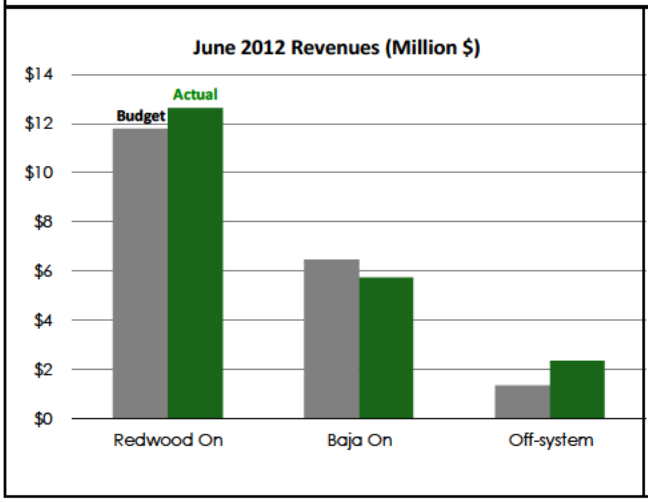
Gas Transmission and Gas Market Storage

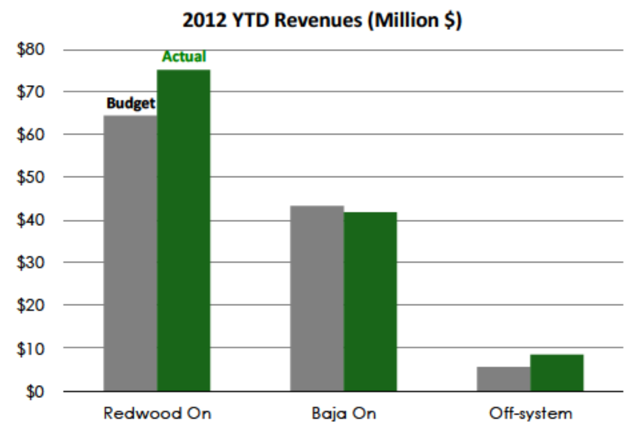
Results		
	🟢	YTD: Transmission Revenues Above the Budget
	🔴	YTD: Gas Market Storage Revenues Below the Budget

I. Goal / Objective

- Deliver value for shareholders by maximizing revenue yield from transportation and storage assets
- Deliver a high level of service to wholesale customers by discovering and meeting their business needs

II A. Results—Gas Transmission Backbone





Backbone Transmission	Monthly Results			YTD Results			Full Year		
	Actual	Budget	Var	Actual	Budget	Var	Forecast	Budget	Var
Redwood-On	$12.6	$11.8	$0.9	$75.1	$64.4	$10.7	$143.0	$130.4	$12.6
Baja-On	$5.7	$6.5	-$0.7	$41.8	$43.2	-$1.5	$81.0	$83.9	-$3.0
[1]Off-system	$2.4	$1.3	$1.0	$8.4	$5.5	$2.9	$17.3	$12.7	$4.7

---

[1] The **2012 Budget** was set in Jul 2011, whereas the Gas Marketing team measures its performance against the **2012 Goals** set in Dec 2011, which incorporates the changes in market dynamics and operating conditions in the backbone system since Jul 2011. The **2012 Goal** for Off-system Revenue is $9.6 Million; the projected 2012 Off-system Revenue is $7.7 Million above the goal.

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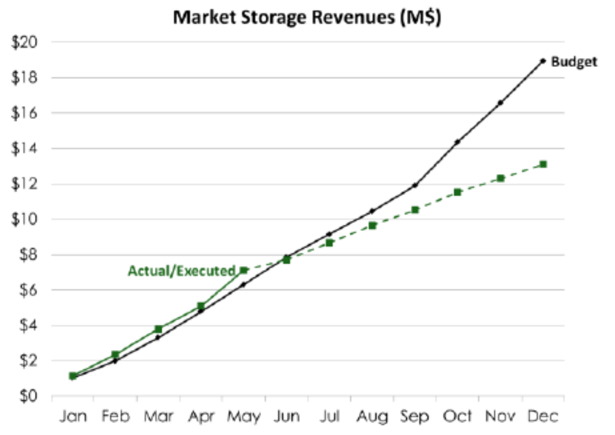
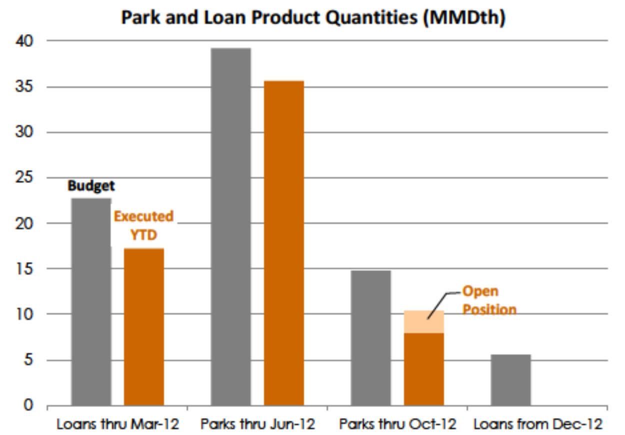
II B. Results—Gas Market Storage



Market Storage Revenues (M$)



Park and Loan Product Quantities (MMDth)

Market Storage	Monthly Results			YTD Results			Full Year		
	Actual	Budget	Var	Actual	Budget	Var	Forecast	Budget	Var
Market Storage[2]	$0.5	$1.5	-$1.0	$7.6	$7.9	-$0.2	$14.4	$18.9	-$4.5

---

[2] The **2012 Budget** was set in Jul 2011, whereas the Gas Marketing team measures its performance against the **2012 Goals** set in Dec 2011, which incorporates the changes in market dynamics and operating conditions in the backbone system since Jul 2011. The **2012 Goal for** Market Storage Revenue is $13 Million; the projected 2012 Market Storage Revenue is $1.4 Million above the goal.

Wholesale Marketing Performance Report - July 2012

III A. Analysis—Gas Transmission Backbone

- **High Redwood-on Price Spreads Continued to Support the Redwood-on Sales as a Preferred Path.** The average daily Redwood on-system full spread in June was $0.49/Decatherm (Dth), which supported continued strong flows on the Redwood path. In addition to firm Redwood flows, the Redwood on-system as-available flows were 36 MDth/day which shippers were willing to pay the maximum tariff rate of up to $0.40/Dth to flow. The average Baja on-system full spread was $0.18/Dth, which was enough to support firm flows in June. The Redwood on-system flows dominated at 1,626 MDth/day as compared to 578 MDth/day on the Baja on-system path; however, Baja-on flows decreased by 185 MDth/day in June from the flow level in May. The addition of the Ruby Pipeline interconnect has continued to change the market dynamics in California with Redwood on-system flows for June 2012 increased by 387 MDth/day versus June 2011.

- **High Gas Demand in SoCal's Market Supported Off-system Spreads**: We continue to capture Redwood off-system opportunities to the SoCal service territory due to the continued shutdown of the San Onofre Nuclear Generating Station (SONGS), which will keep 2,150 MW of generating capacity offline through the summer. In total, sales of daily off-system transport to Kern River Station, TransWestern, Daggett, and High Desert Lateral interconnects reached nearly 437 MDth/day for June 2012 as compared to 287 MDth/day for June 2011.

III B. Analysis—Gas Market Storage

- **Storage Inventory Capacity Relief Strategies**: For most of the month of June, the team limited park sales to short term opportunities that would be cleared by the end of the month. These sales were primarily to help customers balance their supply portfolios during the month. This strategy fit well with the efforts to mitigate storage congestion in the second quarter. As maintenance progressed and models showed more storage inventory available, the team released park volumes for sale to the market. The team initially sold park space for unpark in July, and then ultimately rolled parks forward from July to September as inventories eased.

- **2014 Loan Strategies:** The team continued its efforts to sell park and loan capacity in the forward markets. Although one transaction was executed for first quarter 2014 loan capacity, the team will continue to monitor markets as they remain volatile. Spreads for the remainder of the season park capacity have contracted somewhat, but the team will not release this capacity until operationally feasible.

Wholesale Marketing Performance Report - July 2012

IV. Process Improvement Initiatives

Initiative Overview – Gas Marketing & Customer Service

Exec. Sponsor	Mel Christopher	
Process Owner	[redacted]	
Initiative Description	Establish a culture of innovation and continuous process improvement to deliver value for our shareholders and meet our wholesale customers' needs, thus creating a best in class gas marketing organization.	
Initiative Strategy	**People**	• Develop / retain / hire talent with a robust understanding of market fundamentals and regulatory ratemaking process • Cross-train talent in product, pricing, and trading aspects of the revenue-generating business • Leverage our customers as a source for innovation
	Process	• Interface with Asset Knowledge Management to define data retention and management best practices • Standardize knowledge transfer and process documentation • Conduct industry benchmarking to identify gaps and drive continuous improvement
	Technology	• Critically evaluate the software and hardware platform for all technology-related tools and application • Explore cost effective new solutions to help increase customer satisfaction, and/or generate more revenue, and/or eliminate process inefficiencies

Key Initiatives

Initiative Category	Initiative Name	Status
Technology	1. Rewrite of the Pipe Ranger website	🟨
Process	2. Customer Service benchmarking	🟩
Technology/ Process	3. Service Cloud from Salesforce.com	🟨
Process	4. Gas Storage benchmarking	🟨

Wholesale Marketing Performance Report - July 2012

Initiative Schedule and Status

Initiative	**1. Rewrite of the Pipe Ranger website**	
Team Members	[redacted]	
Scope	• **Update the look and feel of the site and rearrange real estate to better match customer needs** • **Rewrite the back-end to be more supportable (i.e. from PERL to Java)** • **Ensure best possible mobile access**	
Benefits	• **Improved customer satisfaction** • **Improved supportability (both lower cost and quicker response)**	
Costs	**Currently evaluating external proposals and internal PG&E IT costs.**	
Milestone	**Target Completion Date**	**Comments**
Obtain external proposals	**Done**	3 external bids have been received and evaluated.
Define internal IT costs / Obtain additional funding necessary	**End of May**	
Define project scope and plan	**June/July**	
Accept external proposal and finalize project team	**June/July**	
Execute	**Q4 of 2012**	
Roll-out new site	**Q4 of 2012**	

Discussion Items
Additional funding is on hold pending upper management approval. Funds are available for transfer within the Gas Ops for the estimated additional funding of $200,000. Project continues to be at risk without additional funding needed for internal PG&E IT costs.

Wholesale Marketing Performance Report - July 2012

Initiative Schedule and Status		
Initiative	**2. Customer Service Benchmarking**	
Team Members	[redacted] **and** [redacted]	
Scope	**Assess current CGT customer service and compare against industry norms, and or companies known for strong customer service reputations.**	
Benefits	**Confirm where CGT is already offering high quality service and identify where it might improve.**	
Costs	**Minimal; some travel potentially**	
Milestone	**Target Completion Date**	**Comments**
Develop Team members	Apr	Done
Define scope and plan	May	In process; have met with utility benchmarking team and determined how to narrow the field of target companies. Final identification of target companies on hold
Develop survey questions	June	Complete
Reach out to targeted outside companies and internal department members	Aug	Project On hold
Summarize findings	Sept	Project On hold

Wholesale Marketing Performance Report - July 2012

Discussion Items

Three questions are the focus for this benchmarking effort: What does great business-to-business customer service look like? What metrics do the benchmark companies use to monitor the customer service portion of their business? How are they organized to provide their customer service?

In consultation with PG&E's internal benchmarking experts, we have decided to focus on business-to-business wholesale marketing customer service within the delivery sector of business, both energy and non-energy. We plan to survey 5-8 companies.

Project on hold pending further evaluation of whether sufficient information already exists to assess the quality of CGT's customer service.

Initiative Schedule and Status

Initiative	**3. Service Cloud from Salesforce.com**	
Team Members	[redacted]	
Scope	**• Identify if there is a benefit with using Salesforce.com** **• Upgrade current tools to assist in customer service and sales**	
Benefits	**• Gain efficiency in response to customers concern** **• Create collaborative work atmosphere** **• Identify areas for improvement in terms of customer service** **• Empower customers to solve common issues themselves by providing them a forum to do so**	
Costs	**TBD**	
Milestone	**Target Completion Date**	**Comments**
High Level Demo for Leadership	Mar	Demo presented to WM&BD Leadership Team
Detail Demo for Potential Users	May	Demo presented to Contracts Team, Service Reps, and Sales Team on May 30.
Meet with MS Dynamics	Jun	Met with MS Dynamics team in SF on June 11. Will work with MS for demo to Leadership Team.
Create Business Case and Seek Approval	TBD	

Wholesale Marketing Performance Report - July 2012

Business Plan Including Timeline for Phase Implementation	TBD	
Contract Negotiation w/ Salesforce.com	TBD	
Demo MS Dynamics for Leadership Team	Jul	In progress.
Integration with Outlook	TBD	
Integration with GTS	Aug	
Test Period	Sep	
Launch / Go Live Phase I	Oct	

Discussion Items

1. Identify other CRM vendor – Oracle, Microsoft
2. Comparison between Salesforce.com vs. Microsoft
3. Other PG&E organization (Customer Care) is or will be using Salesforce.com; Identify possible synergy
4. Gas Operations has identified a Business Analyst to gather user requirements for a CRM solutions for four groups under the Gas Operations umbrella. WM&BD is one of this group
5. Project may role under overall CRM project for Gas Operations

Wholesale Marketing Performance Report - July 2012

Initiative Schedule and Status		
Initiative	**4. Gas Storage Benchmarking**	
Team Members	[redacted]	
Scope	• Identify leading storage providers across the US • Conduct interviews and site visits to understand how they run their business • Capture lessons learned and define benchmarks	
Benefits	• Explore innovative business strategies to help generate more revenue and increase customer satisfaction • Develop a culture of continuous process improvement	
Costs	TBD – travel costs only	
Milestone	**Target Completion**	**Comments**
Assign team members	May	The vacant position of Senior Project Manager – Storage has been filled.
Define project scope and plan	Jun/ Jul	Definition of the scope and plan is underway and on schedule to complete in July.
Complete interviews and site visits	Oct	
Finalize lessons learned and benchmarks	Nov	

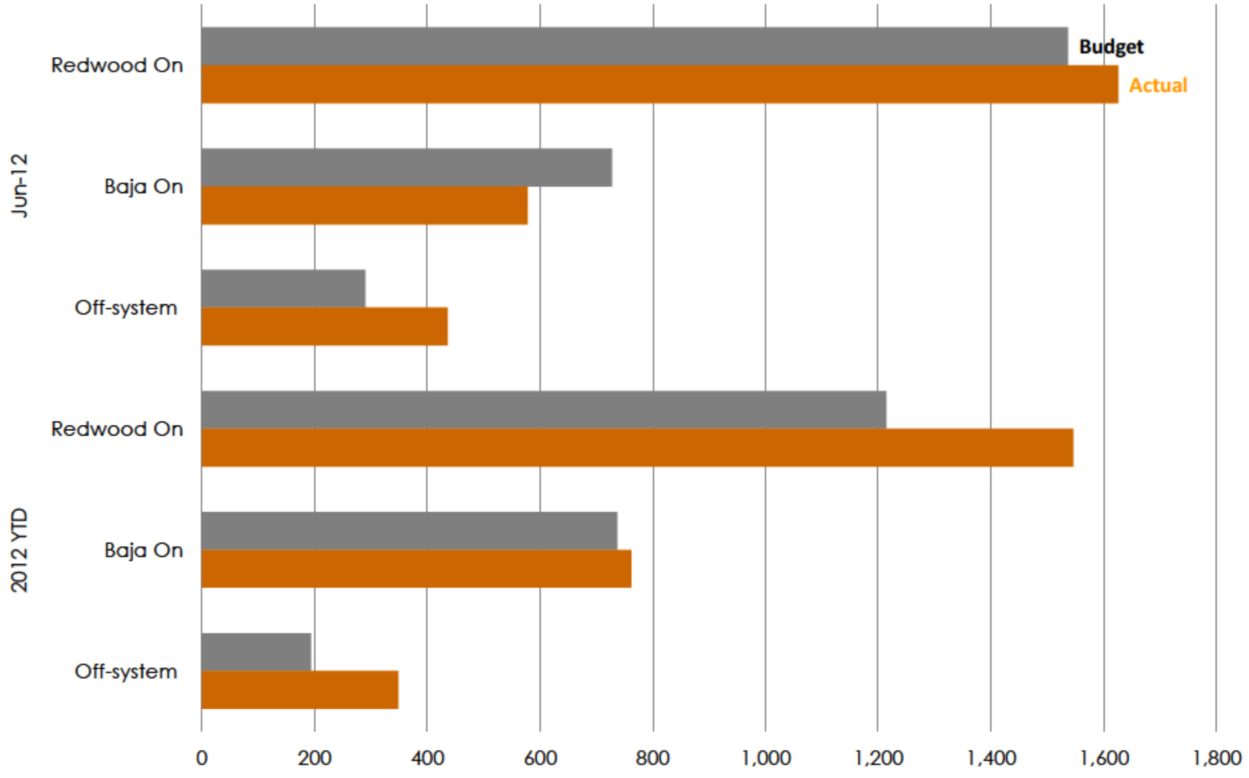
Wholesale Marketing Performance Report - July 2012

Discussion Items

1. What types of storage operations should be benchmarked?
2. What regulatory, operational and market characteristics of the storage operations should include?
3. What solutions have other storage operation found to accommodate today's market?

V. Supporting Information

2012 Average Flows (MDth/day)



GT ROW & Regulatory Compliance Report
July 2012 for June Results

Results	🟢	YTD: Encroachment Pilot Program is on schedule for customer contacts and followup appointments. CPUC audits have been successful – 2 Districts remain to be audited in 2005. Vegetation Management is in schedule to complete all approved work. Awaiting management approval to kick off Centerline Survey.
Initiative Status	🟡	Encroachment Pilot team is assessing the best methodology to extrapolate cost data and customer contacts to reliably predict costs for remainign ROW encroachments. District leak survey completion data does not always match engineering and mapping data as detailed on Share Point site.

I. Goal / Objective

Ensure the PG&E Gas Transmission Right of Way (ROW) is maintained free of encroachments, buildings, trees and other structure so that required pipeline maintenance and replacement activities can be completed. We do this by regular and routine patrols, leak surveys and customer contacts so that we can ensure public safety, employee safety and pipeline safety. We use regulatory compliance audits as a measure of our success and we use the support of engineering, integrity management, land, environmental, customer relations and government relations to complete our assigned tasks.

GT ROW & Regulatory Compliance Report
July 2012 for June Results

II. Results *(through June)*

Encroachment Pilot

Encroachment Program	Pilot Data				
Encroachment Types	**L-132**	**L-153**	**Total**	**# Customers**	**% of Total Potential Encroachments**
Difficult					
House	5	3	8	6	4%
Industrial Shed	0	2	2	2	1%
Loading Dock	0	1	1	0	<1%
Building	0	1	1	1	<1%
Elevated Structure	0	1	1	0	<1%
TOTAL	**5**	**8**	**13**	**9**	**13%**
Moderate					
Shed	18	28	46	42	23%
Awning	11	0	11	6	5%
Deck	4	1	5	1	2%
Green House	1	0	1	1	<1%
Gazebo	1	2	3	0	1%
Hot Tub	0	1	1	0	<1%
Patio	4	2	6	2	3%
Chicken Coop	0	1	1	0	<1%
Pool	0	2	2	0	1%
Barn	0	1	1	1	<1%
Parking Garage	3	0	3	1	1%
Industrial Building (staircase)	0	1	1	1	<1%
Metal Racks	0	1	1	1	<1%
Palm Tree	0	1	1	1	<1%
Large	1	0	1	1	<1%
TOTAL	**43**	**41**	**84**	**58**	**41%**
Simple (Incompatible Vegetation)					
Vegetation	0	20	20	6	
Tree	12	0	12	4	
Trees	13	0	13	8	
Small Vegetation	1	0	1	1	
TOTAL	**26**	**20**	**46**	**19**	**23%**
Clear	22	39	61	61	30%
Total Potential Encroachments	96	108	204	147	
Total Identified Encroachments & Incompatible Vegetation (Total Potential less Clear)	**74**	**69**	**143**	**86**	**70%**
Total Potential Encroachments	70	88	158	128	

GT ROW & Regulatory Compliance Report
July 2012 for June Results

(Tot Pot Encr less Incomp Veg) **Total Identified Encroachments** **(Total Potential Encroachments Less Clear)**	Example: 96-26 = 70 **48 40 97 67 61%** Example: 70 – 22= 48

Line	Encroachment	Total	Hayward	Mountain View	San Leandro	San Lorenzo	Sunnyvale
132	Clear	22	0	6	0	0	16
	Difficult	4	0	1	0	0	3
	Moderate	27	0	9	0	0	18
	Simple	13	0	9	0	0	4
	TOTAL	66	0	25	0	0	41
153	Clear	39	0	0	2	37	0
	Difficult	5	2	0	2	1	0
	Moderate	31	0	0	8	23	0
	Simple	6	0	0	2	4	0
	TOTAL	81	2	0	14	65	0
	TOTALS	**147**	**2**	**25**	**14**	**65**	**41**

Vegetation Management

Vegetation Management	Current Year Funded	Current Year Forecast	YTD Actuals
A. Vegetation Management Program Development	$750,000	$750,000	$570,791
B. Individual Projects – assigned to specific Lines	$1,150,000	$1,011,698	$205,580
C. Bucket Orders – assigned to specific areas	$700,000	$675,107	$142,691
TOTAL	**$2,600,000**	**$2,436,805**	**$919,062**

GT ROW & Regulatory Compliance Report
July 2012 for June Results

GT District CPUC Audits

DISTRICT CPUC AUDITS	SCHEDULED DATE	RESULTS/FINDINGS
Willows	4/9 – 4/13	No violations
Rio Vista	5/7 – 5/11	No violations
Los Medanos	5/7 – 5/11	No violations
Burney	6/25 – 6/29	CPUS postponed this audit No proposed date
Kettleman	10/8 – 10/12	

GT ROW & Regulatory Compliance Report
July 2012 for June Results

GT District Leak Surveys

GT District	YTD Miles Planned	YTD Miles Completed	% of Plan Complete	Total Plan Miles Remaining as of 7/10/2012	June Miles Remaining
GT North Region	**701.0**	**650.5**	**93%**	**455.2**	**51.8**
BURNEY	244.9	244.9	100%	0.2	-
MERIDIAN	315.2	270.3	86%	47.9	44.9
RIO VISTA	87.8	87.8	100%	151.4	0.0
WILLOWS	53.1	47.6	90%	255.6	6.8
GT Central Region	**525.4**	**486.3**	**93%**	**320.2**	**48.0**
HOLLISTER	240.3	244.5	102%	22.9	3.1
LOS MEDANOS	20.7	20.2	97%	22.1	2.1
MCDONALD ISLAND	17.7	16.9	96%	0.8	0.8
MILPITAS	51.0	50.5	99%	56.2	0.5
TRACY	195.7	154.2	79%	218.2	41.4
GT South Region	**746.4**	**473.6**	**63%**	**595.4**	**273.2**
HINKLEY	230.5	222.1	96%	104.2	8.4
KETTLEMAN	406.8	143.3	35%	381.3	264.0
TOPOCK	109.1	108.3	99%	109.8	0.9
TOTAL GT	**1,972.8**	**1,610.5**	**82%**	**1,370.8**	**373.0**

III. Observations / Analysis

ENCROACHMENT PILOT

Team Structure

The Encroachment Pilot team consists of many participants from Governmental Relations, Customer Relations, Land, Environmental and Gas Operations. Two subcontractors have been brought into assist with managing the ROW issues and providing architectural and construction support for moving structures off the easements. Team leaders present regular updates to the Executive Steering Committee. The team conducts check-in conference calls twice each week to respond to the daily customer meetings.

Additional Resources

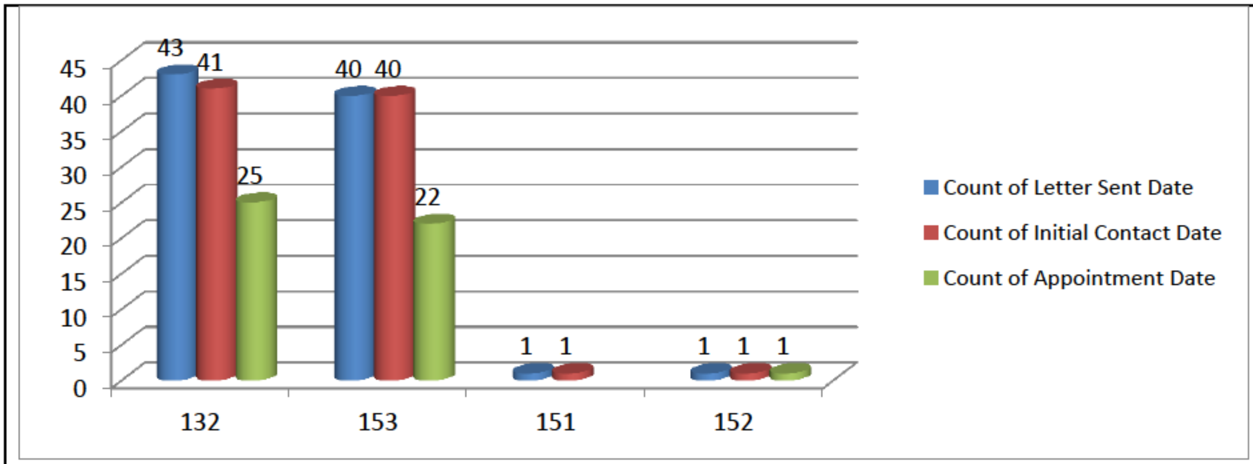
Celerity was recently contracted to provide database management for the progress similar to the process being used by PSEP and other PG&E groups. We are looking to contract a temporary project analyst to provide oversight of the various databases being used.

Customer Contacts

Summary of Activities for June 6/13 to 6/29

- 85 letters sent week of 6/12
- **84 total contacts made to date** *(one non-working number)*
- **50 initial meetings completed; 3 second meeting completed**
- **70 initial appointments scheduled**
- **73 Total Scheduled Appointments**
- 4 letters with the corrected phone number for [redacted] were hand-delivered to homes in on Via Sorrento in San Lorenzo with either disconnected phone numbers or no answer; [redacted] made contact with 3 of the owners;
- 14 letters with the corrected phone number for [redacted] were mailed on June 18

GT ROW & Regulatory Compliance Report
July 2012 for June Results



The team has made positive contact with all customer except one that have been identified as having encroachments on the easement in the Pilot Sections – Line 132 MP 3 through 13 and Line 153 MP 10 through 20. Follow up appointments with our contractors are being completed and Land is now involved in detailed discussions about large trees will be removed.

IV. Process Improvement Initiatives

Initiative Overview – GT ROW & Regulatory Compliance		
Exec. Sponsor	**Kirk Johnson**	
Process Owner	**Michael D Falk**	
Initiative Description	Encroachment Program identify buildings, structures, pools and incompatible vegetation on the easements that inhibit pipeline maintenance activities. Goal is to reclaim a clear easement free of encroachment.	
Initiative Strategy	People	Retrain pipeline maintenance employees on the requirements to maintain an encroachment free easement and then to conduct regular patrols to ensure the easement is kept free of encroachments.
	Process	Conduct a Pilot Program on 10 miles of ROW each on Lines 132 and 153 and identify all types of encroachment structures and incompatible vegetation and then develop the methodology for contacting customers and resolving the issues with the encroachments.

	Technology	Complete a GPS centerline survey of the entire Gas Transmission system so that accurate locations of pipeline can be made. Land is developing a new Vegetation Standard for use in removing trees and other incompatible vegetation from the easement.

PAS 55/ISO 55000 Report – June/July 2012 Results

Results	🟢	Soft gap analysis complete. Certification Road Map and Policy in draft. Training and asset families complete. Asset Management Steering Group Charter pending approval.
Initiative Status	🟡	Confirming Asset Family Owners and Working Group Members have sufficient capacity & organizational knowledge/status to successfully fulfill responsibilities

I. Goal / Objective

Affirm PG&E has systematic and coordinated activities and practices to optimally and sustainably manage its gas assets and gas asset systems and their associated performance, risks, and expenditures over their life cycles for the purpose of achieving our organizational strategic plan through PAS 55/ISO 55000 certification no later than July 4, 2014.

II. Results

June 21:	Conclusion of data collection & interviews for Soft Gap Analysis
July 11:	Asset Management Kick-Off with assigned family owners
July 13:	Communicated approach for certification road map to Asset Management Steering Committee (more follow-up required)

III. Observations / Analysis

- **Soft Gap Analysis**
    - Organizational focus required in three areas: 1) Asset Management, 2) Risk Management, and 3) Change/Culture/Communication
- **Asset Knowledge Management & PAS 55:**
    - Next steps to map requirements of PAS 55 to existing asset knowledge initiatives to determine how initiatives must flex
- **Analysis of impact for implementing code definition for transmission and distribution will be reviewed July 25**
    - Development of detailed project plan will follow and extent of impact will be clear
- **Structure/Authority/Responsibilities:**
    - Asset Management Responsibilities Matrix circulating – observation is that we rely on knowledgeable people rather than the organizational role

PAS 55/ISO 55000 Report – June/July 2012 Results

Process Improvement Initiatives

Initiative Overview – Asset Management (PAS 55)		
Exec. Sponsor	**Nick Stavropoulos**	
Process Owner	[redacted]	
Initiative Description	Certify system safety through PAS 55/ISO 55000 certification no later than July 4, 2014	
Initiative Strategy	**People**	Training plans include competency requirements that are aligned with the asset management plan; Training requirements are reviewed and staff reassessed periodically to align with asset management requirements. Employee morale is robust and employees believe they have what they need to complete their work safely, including the right amount of time to perform tasks. Consultation mechanisms are part of continual improvement of asset management strategy/objectives/plans, functional policies, engineering standards, process/procedures, risk assessments, incident investigation.
	Process	Processes are holistic, repeatable, and auditable. Changes to any part of asset management system, org structure, roles, etc. are assessed for risk to asset management activities before decisions are made. Costs, performance, and risk are optimized over short term and long term in the face of conflicting pressures. Asset management policy, strategy, plans, and objectives are aligned with each other and consistent with the organizational strategic plan and other organizational policies. Processes are in place to ensure effective change management (e.g. guidance documents and training). Processes/procedures in place to control activities over each asset's life cycle (creation, design, acquisition, construction, enhancement, operation, maintenance, and decommissioning/disposal) to ensure that activities are carried out under specified conditions consistent with asset management strategy and control cost, risk, and performance.
	Technology	Technology and systems are aligned and integrated. Recognize, understand, and manage risks from introducing new technology. Actively seek and acquire knowledge about new asset management-related technology (i.e. new tools and techniques). Evaluate new tools/techniques to establish potential benefit to organization.

PAS 55/ISO 55000 Report – June/July 2012 Results

Key Initiatives

Initiative Category	Initiative Name	Status
TBD	TBD	TBD
	Available following development of certification roadmap	

PAS 55/ISO 55000 Report – June/July 2012 Results

Initiative Schedule and Status	
Initiative	Project Planning Phase
Team Members	PAS 55 Working Group (see attached list) and Project Support Team (led by Lessly Field)
Scope	A. Develop and manage detailed project plan, accountabilities, resource requirements, tasks, and deadlines based on gap analysis results. B. Establish a model "fit-for-purpose" asset management plan, starting with the Gas Operations asset management system. C. Set-up governance process for maintaining, monitoring and continually improving the asset management system. D. Develop and deliver appropriate change management and communication plans associated with the certification effort.
Benefits (Soft)	Demonstrate to our stakeholders, including regulators, that we operate a safe gas asset system.
Costs	$500,000 for certification; $350,000 for maintenance audits

Milestone	**Target Completion Date**	**Comments**
Finalize Asset Management Communication Plan	**June**	Working with external resources to develop scope of work to execute plan
Complete Soft Gap Analysis	**June**	Data gathering and analysis completed in June. Results discussed with Working Group (July 10) and Steering Committee (July 13).
Board approval of Steering Committee Charter	**September**	Expect final approval by Steering Committee July 13
Develop draft certification road map (detailed implementation plan)	**Sept. 30**	End of "Plan" Phase. Beginning of Implementation ("Do") Phase. New set of milestones will roll-out following completion of the road map.
Pre-Assessment with Lloyd's Register auditors	**October**	**Pre-Assessment Site Visit - Week of October 8**
Benchmark Road Map and then finalize road map	**November**	Target 3 model utilities with different asset management strengths – like risk, information, and asset health – to validate certification road map
Board approved Asset Management Policy/Strategy documents	**December**	Draft policy and strategy prepared. Will begin socializing with Asset Owners and coordinating with strategic planning effort in July.

Description	**Accountability**	**2012**	**2013**	**2014**	**2015**	**2016**
Costs*	Lessly Field	$375	$TBD	$500k	$350K	$350K
Specific Benefit, Expense Savings			TBD	TBD	TBD	TBD

*Costs reflect audit-related to certify and minimal project support. Costs DO NOT include initiatives identified when certification road map is developed.

Sponsor: Nick Stavropoulos
Owner: [redacted]

PAS 55/ISO 55000 Report – June/July 2012 Results

Discussion Items
Following Soft Gap analysis results, we will have a more detailed project plan. Some areas will require shifting of resources, focus and commitments. For those with a named leadership role in Asset Management activities, including the enabling and controlling activities, mid-year goal adjustments are appropriate.

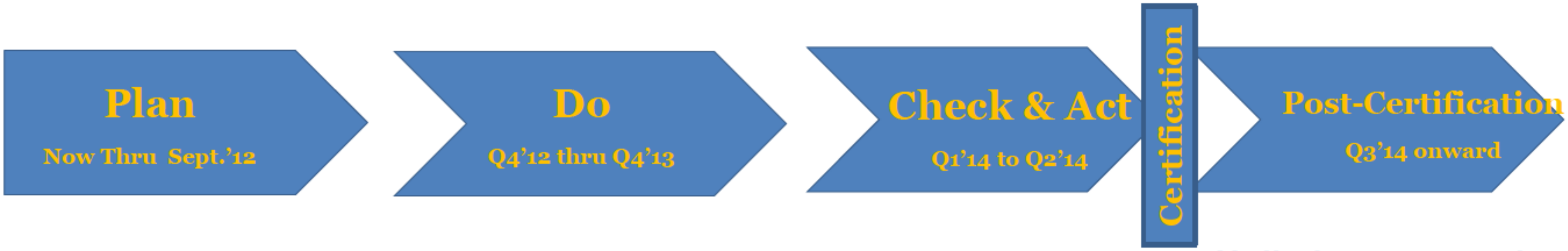
PAS 55/ISO 55000 Report – June/July 2012 Results

PAS 55/ISO 55000 Working Group Sorted by PAS 55 Area of Responsibility

PAS 55	Description	Workgroup Lead
4.1	General Requirements	[redacted]*
4.2	Asset Management Policy	[redacted]*
4.3.1	Asset management Strategy	[redacted]*
4.3.2	Asset Management Objectives	Roland Trevino* with Christine Cowsert Chapman and TBD
4.3.3	Asset Management Plans	[redacted] and [redacted]
4.3.4	Contingency Planning	[redacted]
4.4.1	Structure, Authority and Responsibility	[redacted]*
4.4.2	Outsourcing of Asset Management Activities	Contract Mgt. Director - TBD
4.4.3	Training, Awareness, and Competence	[redacted]
4.4.4	Communication, Participation, Consultation	[redacted] - TBD
4.4.5	Asset Management System Documentation	Karen Roth
4.4.6	Information management	[redacted]
4.4.7	Risk Management	[redacted]
4.4.8	Legal and other Requirements	[redacted]
4.4.9	Management of Change	Karen Roth
4.5.1	Life Cycle Activities	[redacted]*
4.5.2	Tools, Facilities, and Equipment (responsible for calibration and maintenance of test equipment)	[redacted] - TBD
4.6.1	Performance and Condition Monitoring	Ops Performance Manager - TBD
4.6.2	Investigation of Asset-Related Failures, Incidents, Nonconformities	Ops Performance Delegate - TBD
4.6.3	Evaluation of Compliance	[redacted]
4.6.4	Audit	[redacted]
4.6.5.1	Corrective and Preventive Action	[redacted]
4.6.5.2	Continual Improvement	Ops Performance Delegate - TBD
4.6.6	Records	[redacted]
4.7	Management Review	[redacted]*
		* also on Steering Group

PAS 55/ISO 55000 Report – June/July 2012 Results

The PAS 55 Journey



Plan
Now Thru Sept.'12

Do
Q4'12 thru Q4'13

Check & Act
Q1'14 to Q2'14

Certification

Post-Certification
Q3'14 onward

Plan

- *Determine Gas Asset Management Families*
- *Establish asset management policy and strategic planning documents*
- *Review findings from gap analysis*
- *Based on gaps, develop a roadmap for PAS 55 certification (a detailed project plan)*

Do

–

Check & Act

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–

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Holistic, systematic, systemic, risk-based, optimal, sustainable, integrated, documented asset management over the lifecycle of all Gas Operations assets

LINE OF BUSINESS	WORKFORCE PLANNING		MINORITY challenge	FEMALE challenge	STRATEGIES 2012	RECRUITING OWNER	GAS OPERATIONS OWNER	NOTES
GAS OPERATIONS						[redacted]	[redacted] - Champion	
FEMALE Strategy	Engineering	Ongoing			Society of Women Engineers PG&E Chapter	Recruiting Programs - [redacted]	Jane Yura Executive Sponsor	Recruiting Programs to provide recruiting and networking opportunities
POWER PATHWAY Strategy	GSR/Utility Workers	Ongoing			Current Cohorts eligible for Gas Roles: San Jose - 28 grads; 50% diverse no women Cypress - 18 grads; 60% diverse 3 women Fresno - 27 grads at the end of July; 60% diverse; 2 women - PowerPathway and Recruiting leads to report out on actions to promote Gas Ops specific roles to these cohorts; Exploration stage for Development of TradeswomenInc Test Prep and Potential Cohort	[redacted]	[redacted] for Cypress Mandela Relationship	
MILITARY Strategy	Engineering / Supervisors / Other	Ongoing			7/20 TAP Event Camp Marimar and Camp Pendelton; 8/9 Travis Air Force Job Fair (est 200-250); 10/5 TAP Event Camp Lemoore; 11/9 TAP Event Port Hueneme; Cal Maritime Academy contact initiated by Mass Maritime contact for partnership development	[redacted] in partnership with Recruiting Programs - [redacted]	[redacted]	
TEST PREP Strategy	All Relevant Classification requiring Testing	Ongoing			Leverage Communications plan to educate sourced groups; Promote pge.com test prep link (at right); Exploration stage for Development of TradeswomenInc Test Prep and Potential Cohort	[redacted]	TBD	http://www.pge.com/includes/docs/pdfs/about/careers/search/skilled/test/test_preparation_workbook.pdf
	PL1 Engineers Assoc - Sr and PL2	100			June 23/24 Wknd Interview Blitz results (at right); Postings continue to be made to Professional Associations - Post openings with Society of Women Engineers Society of Hispanic Professional Engineers National Society Black Engineers; Engineering College Programs - Cal Poly/Stanford/Davis/Berkeley	[redacted]		6/23 Results; 49 Interviewees; 10 Hires 80% Minority 15 Second Round pool of 13% Female and 60% Minority
	ESC Field Engineers	11			Leverage Military Strategy	[redacted]		
	GSR	60	x		Leverage Military Strategy; Leverage PowerPathway Strategies	[redacted]		Partner with [redacted] / [redacted]
	Welders	12			Communications focus on Test Prep - see above	[redacted]	[redacted]	
	Supervisors	80		x	Exploring Interview B itz Approach for Supervisors; Reviewing relevant candidates from prior pools	[redacted]		
	Utility Workers	127	x	x	Leverage Military Strategy; Leverage Military Strategy; Leverage PowerPathway Strategies	[redacted]		Partner with [redacted] / [redacted]

MINORITY/FEMALE cha lenge = Affirmative Action Plan goal 2012 or DID NOT MEET Aspirational Hiring Goal in 2011

2012 Supplier Diversity Performance & EOY FC
Gas Operations

Metric Owner:

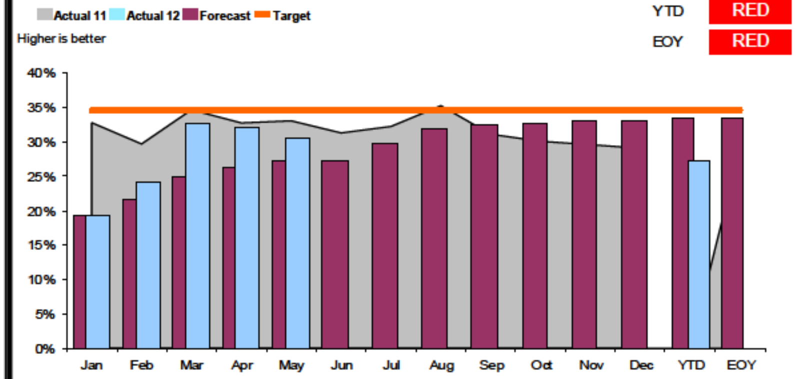
[redacted]

PERFORMANCE SUMMARY – BY YTD

Month RED

YTD RED

EOY RED

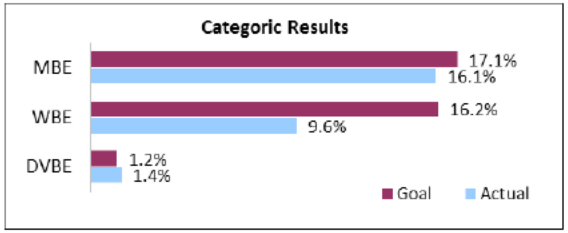


	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	YTD	EOY
Act	19.3%	24.0%	32.6%	32.1%	30.5%								27.1%	
Fcst	19.4%	21.6%	24.8%	26.1%	27.1%	27.1%	29.8%	31.8%	32.4%	32.7%	33.0%	33.0%	33.5%	33.5%
Target	34.5%	34.5%	34.5%	34.5%	34.5%	34.5%	34.5%	34.5%	34.5%	34.5%	34.5%	34.5%	34.5%	34.5%

- Represents YTD actual % with diverse suppliers against target

PERFORMANCE SUMMARY

	Total Spend	Diverse	%
2011 RESULT	$550.3M	$160.2M	29.1%
2012 GOAL	$740.5M	$255.5M	34.5%
2012 MONTH (May)	$70.8M	$21.6M	30.5%
2012 YTD	$323.4M	$87.5M	27.1%
2012 EOY FC	$962.9M	$332.2M	33.5%



PRIME SUPPLIER ROUND-UP PERFORMANCE

* Scorecarded

Top Non-Diverse Primes Supplier Name	2012 YTD Total $	2012 YTD Diverse $	2012 SD %	Diverse Goal	2011 SD %
ARB NC	$53,387,942	$10,246,674	19%	35%	20%
SNELSON COMPANIES N	$34,352,153	$6,217,298	18%	30%	36%
CANUS CORPORATION	$12,449,146	$3,882,277	31%	30%	36%
GULF INTERSTATE ENGI	$12,363,628	$31,280	0.3%		
MEARS GROUP INC	$11,495,406	$1,115,084	10%	12%	9%
*CH2M HILL ENGINEERS	$9,015,702	$4,064,029	45%	30%	40%
*MCJUNKIN CORP	$7,733,070	$1,130,995	15%	5%	
MUSTANG ENGINEERING	$6,596,482	$0	0%		
PRICEWATERHOUSECOO	$6,387,386	$373,508	6%	0%	1%
PSC NDUSTRIAL OUTSO	$5,361,793	$991,521	18%		

🟩 On Target 🟨 Below Target 🟥 High Opportunity

STRATEGY & ACTION PLAN

Materials:

- Engage with S&S as 3rd Party Logistics provider for Pipe, Valve inventory, and facility management (Q3 – Material – Q4 – Yard Management). Material opportunity is currently forecasted at **$18M***

Services:

- Whiskey Slough project to AECOM with $4.2M in diverse subcontracting
- All Pipeline (PSEP) construction projects to include a 35% Subcontracting goal (ARB, Henkel's, Michels, and Snelson)
- Increase direct Diverse spend in the areas of paving, trenching, flagging, etc.

Prime Subcontracting

- Meeting with top 14 Primes to discuss their subcontracting goals and obtain their projected 2012 Subcontracting Forecast (ARB, Snelson, Gulf, etc.).

*** Currently included in Shared Services Forecast**

R&D and Innovation Report - July 2012 for June Results

Results	🔵	First project approvals through the Project Review process
Initiative Status	🟢	Specified the project and information management tool to suppport R&D and Innovation across the Gas Operations team

I. Goal / Objective

The R&D and Innovation group detects, adapts, qualifies and implements innovative solutions in the Gas Operations business to improve its performance measured in public and work safety, customer satisfaction, cost effectiveness, environmental impact, regulatory compliance, and communication. Our objectives for 2012 are:

a. Establish a process to assess, prioritize, and manage R&D and Innovation projects
b. Detect and evaluate new solutions for Gas Operations
c. Leverage collaborative R&D networks to optimize resources
d. Create a path for new solutions to be piloted and deployed in Gas Operations
e. Encourage innovation through internal and external solicitations

II. Results

Objectives		Metrics	Results		Monthly
			Month	YTD	Trend[1]
a	Establish a process to assess, prioritize, and manage R&D and Innovation projects	Number of decisions on R&D projects and Innovations	2	12	↘
b	Detect and evaluate new solutions for Gas Operations	New R&D projects and Innovations in evaluation	5	28	↗
c	Leverage collaborative R&D networks to optimize resources	Percentage of new projects in collaboration	100%	N/A	⇔
d	Create a path for new solutions to be piloted and deployed in Gas Operations	Number of pilots and deployments	0	0	N/A
e	Encourage innovation through internal and external solicitations	Number of collected ideas	0	0	N/A

[1] Monthly results compared to previous month

Nota: No goals have been set to these metrics for 2012. Results are collected here to establish goals moving forward.

June 2012 Results:

- Obtained the first project decisions through the Project Sanctioning Committee
- Participated in the NYSEARCH June Project review meeting in Toronto and visited Invodane, the company in charge of the Explorer robot development for inspection of un-piggable pipelines.
- Started the evaluation of project and information management tools to provide all Gas Operation teams access to R&D and Innovation information and to facilitate the project assessment and management process.

- Initiate preparation of California Energy Commission workshop about Inspection methods and technologies to be held in August 2012.
- Defined the mission of the Expert-Leads who are in charge within the Gas Operation organization of steering collaborative networks' (Nysearch and PRCI) projects and preparing the deployment of their results within Gas Operations.

III. Observations / Analysis

Initiative Schedule and Status

Initiative	**R&D and Innovation**	
Milestone	**Target Completion Date**	**Comments**
First Project Review Meeting	June	Two projects have been reviewed and approved through the Project Sanctioning Committee.
Identify Priorities for innovation at PG&E from key challenges	July	The forum organized by PHMSA on July 19 will be an opportunity to discuss R&D priorities with all national stakeholders of pipeline safety.
Define road maps for priority applications	Sept.	PRCI has produced a comprehensive set of road maps for 12 priority subjects at its meeting in Barcelona on May 16. This information will be combined with internal discussions and other stakeholders' in-put (AGA, PHMSA, CEC, NYSEARCH) to produce road maps for R&D and Innovation at PG&E.
Evaluate all PRCI projects planned for 2013	Sept.	The description of the projects of the 2013 program is now available on PRCI's web site. The evaluation of these projects will be performed at PG&E involving a broad range of stakeholders led by the Expert-leads identified.
Create a database for R&D projects and technologies	Sept.	The requirements have been specified and the assessment of existing tools has started. Tests will be performed in July to confirm the capabilities of the selected products and lead to a decision mid-August for deployment by the end of September.
Create competition and recognition for innovation	Oct.	To fully leverage our organization experience and encourage continuous improvement, we will propose a competition and recognition program. Challenges with other priorities and about people availability continue to delay this effort.
Initiate first tests and pilots following R&D and Innovation projects	Dec.	The change of the Houston test facility ownership may lead to the cancellation of the tests of the ILI pig technologies developed in 2011. The test protocol of the second round of field-tests of the Picarro leak detection technology has been completed. The field-test project will be presented to the Project Sanctioning committee for budget approval in July.

R&D and Innovation Report - July 2012 for June Results

IV. Major Project Milestones – June 2012

PROJECTS AND TECHNOLOGIES	ORGANIZATION	PHASE	PG&E Lead	PLANNED COMPLETION OF CURRENT PHASE	Ind.	MAJOR RESULTS AND COMMENTS
Caliper Tools on Pigs	NDT	Test	[redacted]	8/31/2012	🔴	Change of ownership in the NDT facility led to the cancellation of the tests initially planned for August 2012.
PICARRO leak detection technologie	PG&E	Test	Kevin Armato	12/31/2012	🟢	The test protocol has been defined for a new field test of the Picarro surveyor to prepare pilot and deployment starting in 2013.
	NYSEARCH	Test	Kevin Armato	9/30/2012	🟢	NYSEARCH launched a project to evaluate the Picarro surveyor supported by eight utilities. PG&E does not finance it but participate as an advisor and will get access to the results.
	PRCI	Test	[redacted]	12/31/2012	🔵	PRCI with UC Davis performed an aerial test of the Picarro technology on a section of Enbridge's pipeline in western Texas.
Effect of liquid contamination on Ultrasonic flow meter performance	PRCI/ SouthWest Research Institute	Study	[redacted]	6/30/2012	🔵	The final report shows that: 1/ Depending on their design, some meters may detect the presence of contaminant (oil at 1% in mass concentration) 2/ Meters do not provide reliable information for identifying the nature of the contaminant 3/ Impact on measures depends upon the sensor design and can reach 1.75%, generally over-stating the flow The ultrasonic meter used at PG&E is very good at detecting liquids. This is of value to us in knowing when liquids are present especially when they are sent from third party producers or underground storage as there will be evidence to address the issue. Liquids are undesirable not only because they cause measurement error but more importantly as the summary notes they increase the risk of a “significant” downstream equipment failure. We may want to install our ultrasonic meters in the future to best align for picking up the liquids as an alarm.
Development of a New Unique Alternative Current Corrosion Cathodic Protection Mitigation Criterion (Task 1)	PRCI	Development	[redacted]	11/30/2013	🟢	The result of the literature review shows that the AC current density criteria of 20 A/m^2 generally used to define the risk of corrosion may be invalid in presence of DC current. Recent studies have shown that criteria using AC and DC values provide a much better evaluation of the corrrosion risk. The recent European standard (2011) uses this new approach.
Leak vs. Rupture Boundary for Pipes with a Focus on Low Toughness and/or Ductility	PRCI/ Batelle	Development	[redacted]	6/30/2012	🔵	The project successfully developed and tested (225 cases) a new set of equations and criteria to replace the NG-18 equations proposed by the AGA in the 70s to characterize the transition between leak and rupture (through-wall collapse (TW)). It showed that constraint is the driver of failure within real corrosion and that this level of constraint should be detectible with current ILI technologies. The limitation of the new model is the representation of the "shoulder effect" that can delay the rupture. An extension is proposed to PRCI to investigate this issue.
Explorer 30-36”	NYSEARCH	Development	[redacted]	6/30/2013	🟢	The design of the Explorer 30-36" is complete. The manufacturing will start in July.
Explorer 10-14"	NYSEARCH	Deployment	[redacted]	11/15/2012	🟢	Pipetel sent a proposal for the inspection of the 10" Humbug Creek Pipeline in Sacramento. This inspection would be the first application at PG&E of the untethered technology developed by NYSEARCH.
Casing visual inspection through the vents	NYSEARCH	Development	[redacted]	6/30/2012	🔵	Honeybee Robotics (NY) has successfully developped for NYSEARCH a proof of concept 1.5" robot carrying a high definition camera to visit casing through the vents. This inspection tool should allow a rapid visual inspection of casing without digging. The next step is the design and field testing of an operational prototype.
Demonstration of acoustic locator.	PG&E	Test	Lenny Caldwell	6/30/2012	🔵	The Gas Tracker acoustic locator produced by the company MADE has been field tested in several locations in Napa, San Rafael, and Sacramento.

LEGEND:

🔵	Completion
🟢	On track
🟠	Delays
🔴	Major Issue

R&D and Innovation Report - July 2012 for June Results

V. Project and Technology Portfolio (as of June 30th, 2012)

	Short Name	Description	Main client	Major Process	Status	Collaboration Leverage	PG&E Cost
	3P-SRD tool	Development of a Short Range Distance Measurement tool using Electromagnetic wave reflection.	[redacted]	Integrity Management	Active	1	$ 490k
	Explorer-Video	Development of a video equipped robot for 24-32" pipeline ILI	[redacted]	Integrity Management	Active	1	$ 775k
	GTI-AboveGroundRepair	Analysis of increased leaks on newly instituted repair systems at PG&E to determine root causes	[redacted]	Quality	Active	N/A	$ -
	GTI-Aldyl-A failure	Tests and analysis to determine the root causes of Aldyl-A failures at PG&E	Kevin Armato	Integrity Management	Active	N/A	$ -
	GTI-Threat Interaction	Development of a method to calculate the risk of interacting threats and a generic threat interaction protocol to include threat interactions into IM programs	[redacted]	Integrity Management	Active	N/A	$ -
	Interchangeability	Indoor Air Quality Monitoring and Interchangeability Spreadsheet Enhancements	[redacted]	Public Safety and Emergency Preparedness	Active	12	$ 7k
NEW	JIP_Girth Weld	Girth weld integrity under ground movement	[redacted]	Integrity Management	Active	22	$ 50k
	NYSEARCH 30-36 Explorer	30-36" Robot for In Line Inspection of non-piggable pipes	[redacted]	Integrity Management	Active	2	$ 2,358k
	NYSEARCH Butt Fusion Integrity	Test and validation of butt fusion process for safe long-tem performance	[redacted]	Integrity Management	Active	10	$ 40k
	NYSEARCH Robotic Tools	Development of a series of tools to be mounted on Explorer robots	[redacted]	Integrity Management	Active	9	$ 228k
	NYSEARCH-PIGPEN	Development of a tool to detect encroaching by infrasonic detector	David Wood	Damage Prevention	Active	12	$ 20k
NEW	NYSEARCH-SensorsforRobots	ROBOTICS – MECHANICAL DAMAGE SENSOR & CRACK SENSOR – Phase IV	[redacted]	Integrity Management	Active	25	$ 93k
	NYSERACH-Transkor	Demonstration of aboveground pipeline ispection using megetic tomography	[redacted]	Integrity Management	Active	29	$ 19k
	Oracle	ORACLE Program for Identifying Quantum Leap Technologies	[redacted]	Cross Cutting	Active	15	$ 3k
	PIER-CITRIS	Find new technologies to inspect, monitor and report on the condition of natural gas pipelines	[redacted]	Instrumentation and Regulation	Active	N/A	$ -
	PIER-GTI-StateofArt	Technologies currently used in California to manage pipeline integrity and safety	[redacted]	Integrity	Active	N/A	$ -
	Pipeway-Porcupine	Development of a 600 sensors measuring the radius of the pipe for each 6o of angle for 30" pipeline.	[redacted]	Integrity Management	Active	1	$ 250k
	PRCI-Annual	PRCI Program: 89 active projects	[redacted]	Cross Cutting	Active	63	$ 149k
	PRCI-Picarro Assessment	Evaluation of performance of Picarro's technology to detect and locate gas leaks.	Kevin Armato	Leak/Emergency response	Active	N/A	$ -
	TechFusion	Innovation Data Mining within Federal Agencies	[redacted]	Cross Cutting	Active	15	$ 2k

Short Name	Description	Main client	Major Process	Status	Collaboration Leverage	PG&E Cost
GeoSphere	Geosphere: multi-kilometer proximity detectors using pipes as an antenna and trnsmitter	N/A	Damage Prevention	Rejected	N/A	$ -
IPIX	Remote Control of Distribution Valve	[redacted]	System Operation and Control	Rejected	N/A	$ -
NYSEARCH Bio-methane	Living Lab for Biogas/Biomethane Treatment	[redacted]	Public Safety and Emergency Preparedness	Rejected	6	$ 12k
NYSEARCH Odor-Masking	Odor Masking - Phase II	[redacted]	Public Safety and Emergency Preparedness	Rejected	11	$ 66k
POD-PRCI	Standard Data Model Extension	[redacted]	Data/Asset Knowledge Management	Rejected	N/A	$ -
PRCI - ILI Improvements	ILI Performance Assessment and Improvement	[redacted]	Integrity Management	Rejected	20	$ 50k

R&D and Innovation Report - July 2012 for June Results

	Short Name	Description	Main client	Major Process	Status	Collaboration Leverage	PG&E Cost
	Calm_Energy	Middleware application to integrate asset management functions	[redacted]	Knowledge Management	Evaluation	N/A	$ -
	DiamondGas Sensing	Micro sensor for gas deetction and analysis	[redacted]	Leak/Emergency response	Evaluation	N/A	$ -
	ETCorp	Information aggregation tool for gathering field data and share across organizations	N/A	Leak/Emergency response	Evaluation	N/A	$ -
	Exponent-GPR	Remote interrogation of soil dielectric properties to determine corrosion susceptibility: compaction, aeration, moisture content, and soil chemistry.	[redacted]	Integrity mangement	Evaluation	1	$ 320k
	GTI-Annual OTD	GTI-OTD Program: 120 projects	[redacted]	Cross Cutting	Evaluation	10	$ 750k
	LLNL-DataBase	Building a Complete and Accurate Database of Natural Gas Pipeline System	[redacted]	Data/Asset Knowledge Management	Evaluation	1	$ 3,900k
	LLNL-DiffusionModel	Population Migration for Enhanced Assessment	[redacted]	Public Safety and Emergency Preparedness	Evaluation	1	$ 100k
	LLNL-Mapping	GPR Based Pipeline Mapping and Fault Detection	[redacted]	Integrity	Evaluation	1	$ 4,600k
	LLNL-Risk	Demonstrate Gas Pipeline Probabilistic Risk Analysis in Presence of Uncertainty	N/A	Integrity	Evaluation	1	$ 3,200k
NEW	NYSEARCH - Bioball	Conductor deployer to locate sewer service line	Lenny Caldwell	Damage Prevention	Evaluation	N/A	$ -
NEW	NYSEARCH - Casing Inspection	Tool to eliminate the need to vent natural gas to the atmosphere	[redacted]	Integrity	Evaluation	N/A	$ -
NEW	NYSEARCH - Methane Sensor	Micro sensor for gas detection and analysis	Kevin Armato	Leak/Emergency response	Evaluation	5	$ -
NEW	NYSEARCH - No-blow Tool	Tool to eliminate the need to vent natural gas to the atmosphere	[redacted]	Process Safety	Evaluation	N/A	$ -
NEW	NYSEARCH-Mercaptan Sensor	Tool to eliminate the need to vent natural gas to the atmosphere	[redacted]	Instrumentation and Regulation	Evaluation	N/A	$ -
	Picarro-Augmented Reality	3-D visualization of potential locations for leaks	[redacted]	Leak/Emergency response	Evaluation	N/A	$ -
	PRCI In the Ditch NDE	In the Ditch Non-Destructive Material Characterization	[redacted]	Integrity Management	Evaluation	N/A	$ -
	Synergy - leak simulation	Real time hydrolic simulation to detect leakages	[redacted]	System Operation and Control	Evaluation	N/A	$ -
	TPGS-Coating	TPGS: Optical Fiber Fabric sandwiched between resin coatings to detect intrusion/extrusion on a pipe.	N/A	Damage prevention	Evaluation	N/A	$ -

Gas Technology Portfolio Review

[redacted]

PG&E

July 2012

Key Headlines

Program & Project Delivery

- Mariner
  - Corrective Maintenance: Gate 3 scheduled for July 19. Business returned project to green, approved new timeline (1/24/2013 from 11/28/2012) and cost structure (increase to $13.3M from $7.3M to account for addition of business deployment and change management costs).
  - Preventative Maintenance: Tablets currently being tested (motion F5V)
  - Leak Survey: Action plan created to address open concerns that will carry us through the end of July. Transmission roll out on hold till August. Business turned project from red to amber.
  - Locate & Mark: Review Android and Window OS with cross-section sample group of users and collect feedback. Deployment on hold till device comparison is complete and feedback is compiled (7/20).
  - Documentum Implementation: Continuing to make progress on initiative analysis. Working to gain alignment with Enterprise Foundation schedule, facilitating conversations with the business to clarify funding source. Gas taxonomy is has been submitted for approval.
  - Sandbox: Gate 2 completed 6/14. Gate 3 planned for 8/11-17/12. Creating design documentation. Project is on track.
- Pathfinder Sandbox – Telvent team on site, data model development underway, preparing for Gate 2.
- GEMS Rewrite Project –Significant number of defects were found during Business SME testing that Autodesk is currently fixing. Two day delay; working to still meet System testing date completion of 7/20 and begin UAT on 7/23 as planned.
- Clearance Project – Decision point for technology direction, most of analysis complete
- Proof of concept for Patrol application complete

Strategy & Planning

- Planning for Pathfinder and Mariner Asset Knowledge Solutions to start in September
- Technology Roadmap offsite on June 25 & 26, target for road map is the end of July. Next Step is Control Room.
- Dispatch Roadmap Session in early July
- DCPP visit to see eSOMs application
- 8 new employees and team has grown to from 41 in February to 76 (employees and contractors)
- Financial governance model and PM evaluation method
- Selection process
- Starting up process for DIMP and Integrity tool selection.

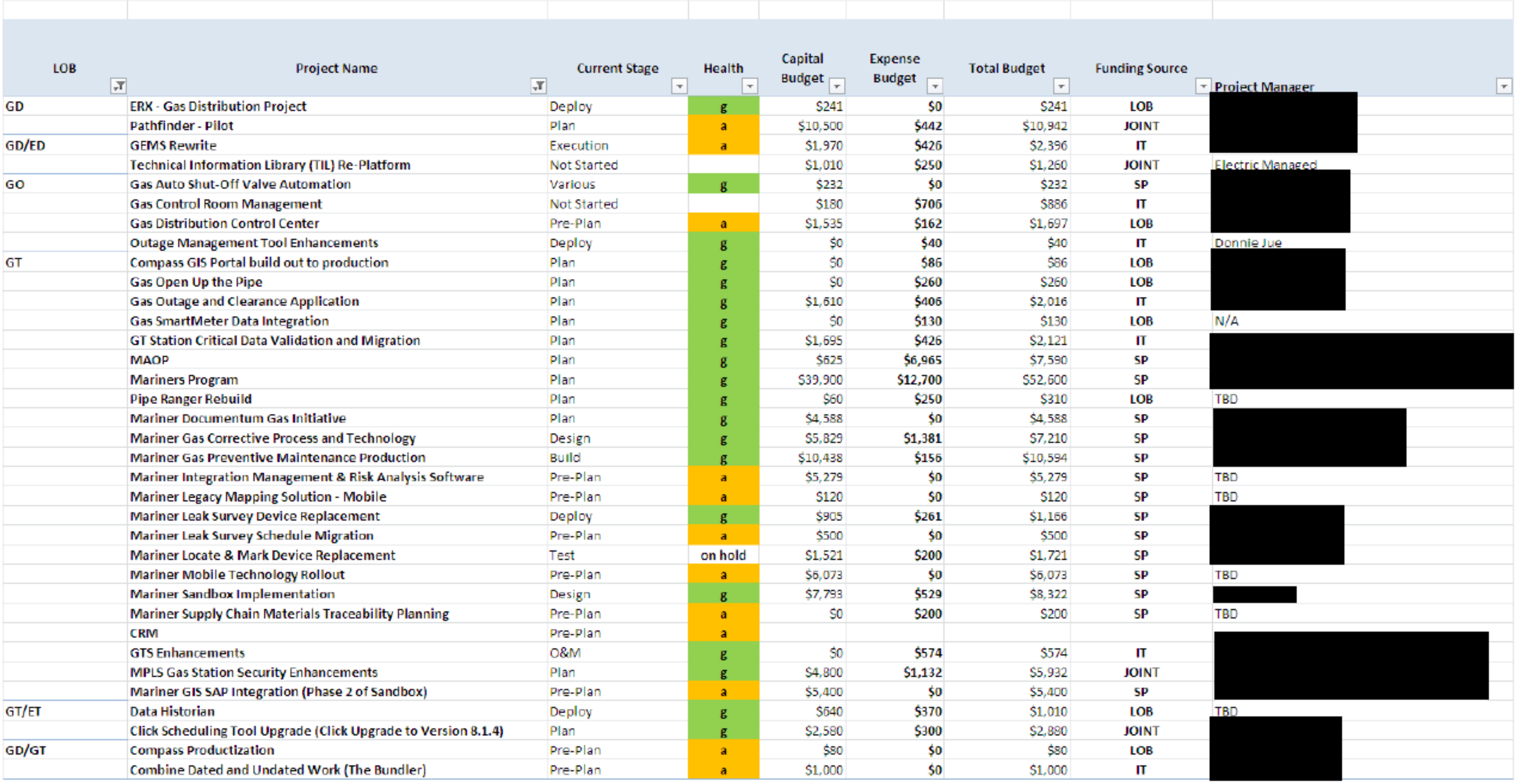
Operations & Maintenance

- GTS data issue when sending conversion factors to CC&B to be used in calculating the usage therms for a customer
- Undergoing Transmission Mapping performance review
- Initiated MobileConnect Architecture review and Operating Plan Refresh to improve system dependability (specific focus on IT support of public safety/immediate response to Gas Leaks and Electric Outages)

IT STIP Key Actions

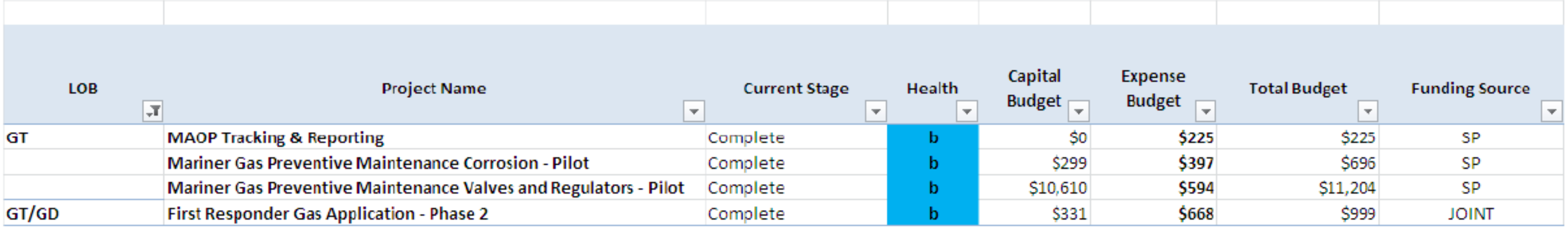
2012 Short Term Incentive Plan (STIP)	Officer Owner	Metric Owner	Key Actions to Meet Target			Tracking Mechanism	
			Key Milestones & Status	Date	Owner	Blue Book	Green Book
Safety (40%)							
INPO Performance Indicator Index - Unit 1	[redacted]	[redacted]	🟦 Deploy Syntempo to support Outage Near-Real Time schedule	03/31/12	[redacted]		✓
			🟦 SAP Plant Maintenance enhancement to address AFI	04/15/12			✓
INPO Performance Indicator Index - Unit 2							
Incidents of Wires Down			🟩 Complete Implementation of Electric Compliance Mobile Solution	09/30/12			✓
			🟩 ED GIS Asset Management deployment enabled conductor type and failure risk analysis	12/31/12			✓
911 Emergency Response							
Leak Repair Performance	Stavropoulos	[redacted]	🟩 Mariner Leak Survey Program	07/11/12			✓
			🟩 Picarro Integration project	TBD			✓
Gas Emergency Response Performance - 30 mins	Stavropoulos	[redacted]	🟦 Improve reliability of middleware technology	06/30/12		✓	
			🟦 Outage Management Tool Enhancement - reporting for first responders and gas crew response to events	06/04/12			✓
			🟩 ARCOS Pilot for GSR callout	10/30/12			✓
			🟩 Improve the timeliness of GPS locations for Dispatch	08/30/12			✓
			🟩 Bundle all Premise Tasks (optimize single-visit completion opportunities)	12/31/12			✓
Gas Emergency Response Performance - 60 mins	Stavropoulos	[redacted]	🟦 Improve reliability of middleware technology	06/30/12		✓	
			🟦 Outage Management Tool Enhancement - reporting for first responders and gas crew response to events	06/04/12			✓
			🟩 ARCOS Pilot for GSR callout	10/30/12			✓
			🟩 Improve the timeliness of GPS locations for Dispatch	08/30/12			✓
			🟩 Bundle all Premise Tasks (optimize single-visit completion opportunities)	12/31/12			✓
Lost Work Day Case Rate	[redacted]	[redacted]	🟦 Form an IT team group to focus on how to use technology to help the LOB's with LWD	04/15/12			✓
			🟩 Identify Interim Diagnostic Reporting	TBD			✓
			🟩 Implement Safety Management System	TBD			✓
Preventable MVIs			🟦 Pilot recommendation for Video Conferencing	03/29/12			✓
			🟦 Tips and training on Utilizing existing Teleconferencing Tools	04/20/12			✓
			🟦 Establish New Motor Vehicle Safety Team	04/30/12		✓	
			🟦 Analyze cost to implement Video Conferencing	06/30/12		✓	
			🟩 Motor Vehicle Standards Update	08/30/12		✓	
			🟩 Send high mileage drivers to Smith Driving School	12/31/12			✓
			🟩 Motor Vehicle Technology Pilot	12/31/12		✓	
Customer (30%)							
Customer Satisfaction Score							
System Average Interruption Duration Index (SAIDI)			🟩 Complete deployment of Electric Mobile R3 Phase 3 for Automation of Switching Orders & Workforce Optimization for Troublemen	09/30/12			✓
			🟩 Complete Pilot for Auto Call Out System (Electric Distribution Ops)	09/30/12			✓
			🟩 Complete Distribution Management System software enhancements pertaining to features associated with electronic tracing, outage analysis, etc.	12/31/12			✓
			🟩 Complete Cornerstone Telecom Infrastructure Build-Out to enable automation of 150 circuits	12/31/12			✓
Gas Asset Mapping	Stavropoulos	Sumeet Singh	🟦 Communicate Interim Tips	03/15/12	Singh		✓
			🟩 GEMS Upgrade Pilot Rollout	08/15/12	[redacted]		✓
			🟩 GEMS Upgrade Rollout	10/15/12		✓	
			🟩 GTAM/GDAM Asset Management Pilots	12/15/12			✓
Financials (30%)							
Earnings from Operations ($M)	[redacted]	[redacted]	🟩 Manage costs effectively and meet year end budget	12/31/12			✓

Delivery Dashboard



LOB	Project Name	Current Stage	Health	Capital Budget	Expense Budget	Total Budget	Funding Source	Project Manager
GD	ERX - Gas Distribution Project	Deploy	g	$241	$0	$241	LOB	[redacted]
	Pathfinder - Pilot	Plan	a	$10,500	$442	$10,942	JOINT	[redacted]
GD/ED	GEMS Rewrite	Execution	a	$1,970	$426	$2,396	IT	[redacted]
	Technical Information Library (TIL) Re-Platform	Not Started		$1,010	$250	$1,260	JOINT	Electric Managed
GO	Gas Auto Shut-Off Valve Automation	Various	g	$232	$0	$232	SP	[redacted]
	Gas Control Room Management	Not Started		$180	$706	$886	IT	[redacted]
	Gas Distribution Control Center	Pre-Plan	a	$1,535	$162	$1,697	LOB	[redacted]
	Outage Management Tool Enhancements	Deploy	g	$0	$40	$40	IT	Donnie Jue
GT	Compass GIS Portal build out to production	Plan	g	$0	$86	$86	LOB	[redacted]
	Gas Open Up the Pipe	Plan	g	$0	$260	$260	LOB	[redacted]
	Gas Outage and Clearance Application	Plan	g	$1,610	$406	$2,016	IT	[redacted]
	Gas SmartMeter Data Integration	Plan	g	$0	$130	$130	LOB	N/A
	GT Station Critical Data Validation and Migration	Plan	g	$1,695	$426	$2,121	IT	[redacted]
	MAOP	Plan	g	$625	$6,965	$7,590	SP	[redacted]
	Mariners Program	Plan	g	$39,900	$12,700	$52,600	SP	[redacted]
	Pipe Ranger Rebuild	Plan	g	$60	$250	$310	LOB	TBD
	Mariner Documentum Gas Initiative	Plan	g	$4,588	$0	$4,588	SP	[redacted]
	Mariner Gas Corrective Process and Technology	Design	g	$5,829	$1,381	$7,210	SP	[redacted]
	Mariner Gas Preventive Maintenance Production	Build	g	$10,438	$156	$10,594	SP	[redacted]
	Mariner Integration Management & Risk Analysis Software	Pre-Plan	a	$5,279	$0	$5,279	SP	TBD
	Mariner Legacy Mapping Solution - Mobile	Pre-Plan	a	$120	$0	$120	SP	TBD
	Mariner Leak Survey Device Replacement	Deploy	g	$905	$261	$1,166	SP	[redacted]
	Mariner Leak Survey Schedule Migration	Pre-Plan	a	$500	$0	$500	SP	[redacted]
	Mariner Locate & Mark Device Replacement	Test	on hold	$1,521	$200	$1,721	SP	[redacted]
	Mariner Mobile Technology Rollout	Pre-Plan	a	$6,073	$0	$6,073	SP	TBD
	Mariner Sandbox Implementation	Design	g	$7,793	$529	$8,322	SP	[redacted]
	Mariner Supply Chain Materials Traceability Planning	Pre-Plan	a	$0	$200	$200	SP	TBD
	CRM	Pre-Plan	a					[redacted]
	GTS Enhancements	O&M	g	$0	$574	$574	IT	[redacted]
	MPLS Gas Station Security Enhancements	Plan	g	$4,800	$1,132	$5,932	JOINT	[redacted]
	Mariner GIS SAP Integration (Phase 2 of Sandbox)	Pre-Plan	a	$5,400	$0	$5,400	SP	[redacted]
GT/ET	Data Historian	Deploy	g	$640	$370	$1,010	LOB	TBD
	Click Scheduling Tool Upgrade (Click Upgrade to Version 8.1.4)	Plan	g	$2,580	$300	$2,880	JOINT	[redacted]
GD/GT	Compass Productization	Pre-Plan	a	$80	$0	$80	LOB	[redacted]
	Combine Dated and Undated Work (The Bundler)	Pre-Plan	a	$1,000	$0	$1,000	IT	[redacted]

Completed Projects



LOB	Project Name	Current Stage	Health	Capital Budget	Expense Budget	Total Budget	Funding Source
GT	MAOP Tracking & Reporting	Complete	b	$0	$225	$225	SP
	Mariner Gas Preventive Maintenance Corrosion - Pilot	Complete	b	$299	$397	$696	SP
	Mariner Gas Preventive Maintenance Valves and Regulators - Pilot	Complete	b	$10,610	$594	$11,204	SP
GT/GD	First Responder Gas Application - Phase 2	Complete	b	$331	$668	$999	JOINT

Mariner

Mariner Report

Initiative Name		Status
Field Survey - Locate & Mark	• Identified field application and map viewer integration issue during testing – be resolved prior to rolling out devices • Review Android and Window OS with cross-section sample group of users and collect feedback	S
Leak Survey Schedule Migration	• Review of project scope & schedule in light of issues related to data quality Reporting requirements and development of tech down process	SR
Field Survey - Leak Survey	• Deployed the first set of enhancements to Leak Surveyors in version 1.2 of the Leak Survey Application • Received schedule of dates for additional enhancements; GT Screen development and release scheduled for August	T
Documentum Implementation	• 14,000 documents quarantined; 15 new users added from MAOP Engineering • Planning completed 06/14/12. Analysis to be complete 07/30. • Roadmap continues to emerge as Working Group progresses • Resolving interdependency project issues with Enterprise Content Management stakeholders. Integrated ECM schedule to be published 06/29. Schedule Impact Assessment to be completed 7/6. • Identification required for non-mariner scope	ST
Preventive Maintenance - Document & Data Modernization	• Field retrieval on schedule • Final form list completed and validated. Coding and SAP build is reflected. • Prioritizing scope to accommodate preventive maintenance Oct 31st release & future 2013 releases	CT
Corrective Maintenance - Leak Repair, Mobile-Ready Development	• Analyze Phase completed 5/21 and Design Phase underway and to be completed 7/6 • New GCM project cost and timeline has been proposed that significantly increase both costs and schedule – Pending mariner review and approval • Change Management, Communications and Deployment Planning to resume. Meetings for focus Groups being set up to engage Mapping, Construction and Finance Work Streams. Week of 7/9	🟩
Corrective Maintenance - Leak Repair Document & Data Clean-up	• Lack of internal QA resources to execute the QA plan in a timely and cost effective fashion. Qualified external QA resources retained and set to begin work later this week on a aggressive schedule	🟩
Preventive Maintenance – Production	• Completed Ventyx forms and SAP build for Release 1 • Gave first Motion F5v's to pilot users; Finalizing Release 2 requirements/design	🟩
Transmission Pipeline Asset Management Sandbox Implementation	• Project is ahead of schedule and within forecast	🟩
Supply Chain Materials Traceability	• Validate focus: Inventory Control Management and/or Engineering Design Process (As-built)	🟩
Mobile Technology Rollout	• Set up meeting to coordinate device selection workshops between business and IT • Development of mapping solution has interdependencies with Preventative Maintenance project	🟩

July 6, 2012

Mariner - IT

Critical Work Initiatives		Status/Explanation		Key Actions to Meet Target		
				Milestone	Date	Owner
Mariner - Gas Transmission Asset Management (GTAM)	AMBER	**Corrective Process and Technology:** Gate 2 review completed 6/28. PCRs approved by Business Stake Holders. **Preventative Maintenance:** Continuing to develop SAP, Ventyx forms, interface for Release 1. Finalizing design for Release 2. **Leak Survey:** Action plan created to address open concerns that will carry us through the end of July. Transmission roll out on hold till August. **Locate & Mark:** Placed on hold to focus on Leak Survey effort. **Documentum Implementation:** Continuing to make progress on initiative analysis. Working to resolve issues with Enterprise Foundation and funding source issues. **Sandbox:** Gate 2 completed 6/14. Gate 3 planned for 8/11-17/12. Project is on track.	🟦	Pilot Mobile Roll out for Preventive Maintenance	3/31/12	[redacted]
			🟦	Initial Mobile Roll out for Leak Survey	4/30/12	[redacted]
			🟦	Establish a leak survey rework plan	6/25/12	[redacted]
			G	Sandbox Application Proof of concept complete	10/15/12	[redacted]
			G	Sandbox Phase 1 Implementation	12/15/12	[redacted]

🟦 COMPLETE (Projects will remain on template for one month)

🟩 ON-TRACK

🟨 AT-RISK (Can be completed by EOY)

🟥 OFF-TRACK (At-risk of not completeing by EOY)

MAOP

MAOP Weekly Summary

MAOP Effort | Week of 06/28/2012 | General IT Status G

MAOP Leadership Teams	Res.	Cost	Sched	Metric	Lead	Trend	Attention Points / Deviations
Overall	G	G	G	G	[redacted]	⇧ G	**Overall MAOP status Green** G Please see slides 5-6 for mileage details. **Overall IT status is Green** G Space issues at 2700 Ygnacio Valley Road are being resolved. Analysis of Gas Transmission IT scope continues both for systems to maintain and projects. Documentum continues to make progress by starting 5 workstreams.
Operations ECTS-Enhancements	G	G	G	G	[redacted]	⇧ G	The ECTS Operations team continues to hit their weekly deliveries. The ECTS is reducing their open Issues & Requests as changes ramp down. Target 6/30. Please see slides 7-9 for the Issues & Request Status Time Line Report and Detailed Report
MAOP Projects	G	G	G	G	[redacted]	⇧ G	IT project health is green and our project planning is constant. Project budget process has improved. For a detailed project report please see pages 10-14 of this report.

G As planned A Needs attention R Escalation required

⇧ G Improving ▭ Stable ⇩ R Increasing Problem

MAOP Weekly Summary

MAOP Effort | Week of 06/28/2012 | General IT Status G

MAOP Leadership Teams	Res.	Cost	Sched	Metric	Lead	Trend	Attention Points / Deviations
Infrastructure & Operations	G	G	G	G	[redacted]	▭	• Performance, Metrics, and Infrastructure detailed information located on pages 15 - 17
Documentum	G	G	G	G	[redacted]	⇧ G	• Per updates from [redacted] and [redacted] detailed located on page 19.
Financials	G	G	G	G	[redacted]	▭	• High level overviews can be found on page 21. • Financials will be updated the week after close of SAP each month.

G As planned **A Needs attention** **R Escalation required**

⇧ G **Improving** ▭ **Stable** ⇩ R **Increasing Problem**

Week of June 24 – 30, 2012

Pathfinder

Pathfinder

Status R

Issue Codes	
C	Cost
R	Resource
S	Scope
T	Timeline

Initiative Summary

Objectives	The overall Pathfinder project is a multiyear initiative meant to capture, store and provide access to PG&E's gas distribution asset records. The Sandbox project is a pilot implementation of the solution. In this project we will complete the plan, analyze, and the design phase of the IT project methodology; determine the quality and availability of distribution asset information; and develop the data conversion protocols. Through these efforts we will develop an efficient data conversion work plan, and identify risks prior to initiating the larger data conversion effort and the Pathfinder solution design and deployment.
Benefits	Allow the business to validate new gas distribution asset data management solution and assist in clarifying the potential hard benefits associated with the full project deployment and identify ways to measure them..
Process Owner	Sumeet Singh
Team Lead	[redacted]

Recent Accomplishments (last 2-4 weeks)

Accomplishment	OPT	Date
Project teams mobilization and onboarding	O	6/4/2012
Install standard Telvent Database Model locally	T	6/7/2012
Begin Data Validation process	O	6/7/2012
Begin Business Flows and Requirements Definitions	O	6/8/2012
Data environment defined, Version 1.0 of DBMS ready but waiting on server	O	7/6/2012

Upcoming Activities

Activity	OPT	Due Date
Standup DBMS environment	T	7/11/2012
Schedule and conduct SAP, and Documentum workshops	P	7/19/2012
Convert and load Sample data conversion into the standard data model	T	7/31/2012

Major Milestones / Deliverables

Milestone	OPT	BRAG Status	% Complete	Due Date
Obtain Advanced Authorization	P	B	100%	3/19/2012
Solution Validation	T	B	100%	3/30/2012
Gate 1 Review	P	B	100%	5/3/2012
Define Data Environment	T	B	100%	7/9/2012
Gate 2 Review	P	G	90%	7/12/2012
DIMP Solution Recommendation	T	G		
Application Proof of Concept Completed	T	G		
Pilot Implementation Complete	P	G		

Project Issues / Concerns / Risks

Risk	OPT	Mitigation / Next Steps	Completion Date
The funding for this project is in the 2014-16 GRC. However small, there is a likelihood that the funding will not be approved.	O	The Business and IT staff have taken great care in preparing the portion for the GRC testimony and supporting information for this project.	
Getting the necessary core team staffing for this project has been problematic.	O	Hire/Appoint Gas Distribution Asset Management Director who can quickly move to build out staff.	
The data validation and conversion portion of this project was also redesigned on 5/25/2012 by the Business.	P	None at this time other than to monitor progress and advise business accordingly.	

Project Success Metrics

Metric	OPT	Baseline	Current	Goal
Adoption	TBD	TBD	TBD	TBD
Productivity	TBD	TBD	TBD	TBD

Projects

PG&E

CONFIDENTIAL - GENERAL ORDER 66D AND DECISION 16-08-024

Gas Outage and Clearance Application

Status S

Issue Codes	
C	Cost
R	Resource
S	Scope
T	Timeline

Initiative Summary

Objectives	Deploy an application to support, manage and track common, standard gas clearance processes across gas transmission and distribution
Benefits	Increase safety by implementing a standard clearance process to mitigate error in the performance of gas pipeline work across gas transmission and distribution, and reduce at fault dig-ins through centralized review of pending work by control center personnel
Process Owner	Mel Christopher
Team Lead	[redacted]

Recent Accomplishments (last 2-4 weeks)

Accomplishment	OPT	Date
On-Boarded contract requirements analyst and SAP Work Clearance Module consultant	T	5/21/2012
Received IT Gate 1 approval for plan/analyze work	T	5/31/2012
IT resources completed transmission clearance training class	T	5/31/2012

Upcoming Activities

Activity	OPT	Due Date
Complete detail requirements interviews	T	6/7/2012
Complete Project Scope and Charter	TP	6/22/2012
Complete Requirements Document	TP	7/2/2012
Complete Solution Blueprint	T	6/22/2012

Major Milestones / Deliverables

Milestone	OPT	BRAG Status	% Complete	Due Date
Plan/Analyze Stage 0Complete	TP	🟨	78%	7/11/12
Design Stage Complete	T	🟩	0%	8/20/12
Build Stage Complete	T	🟩	0%	10/19/12
Test Stage Complete	T	🟩	0%	11/16/12
Deploy for Pilot	TP	🟩	0%	11/18/12

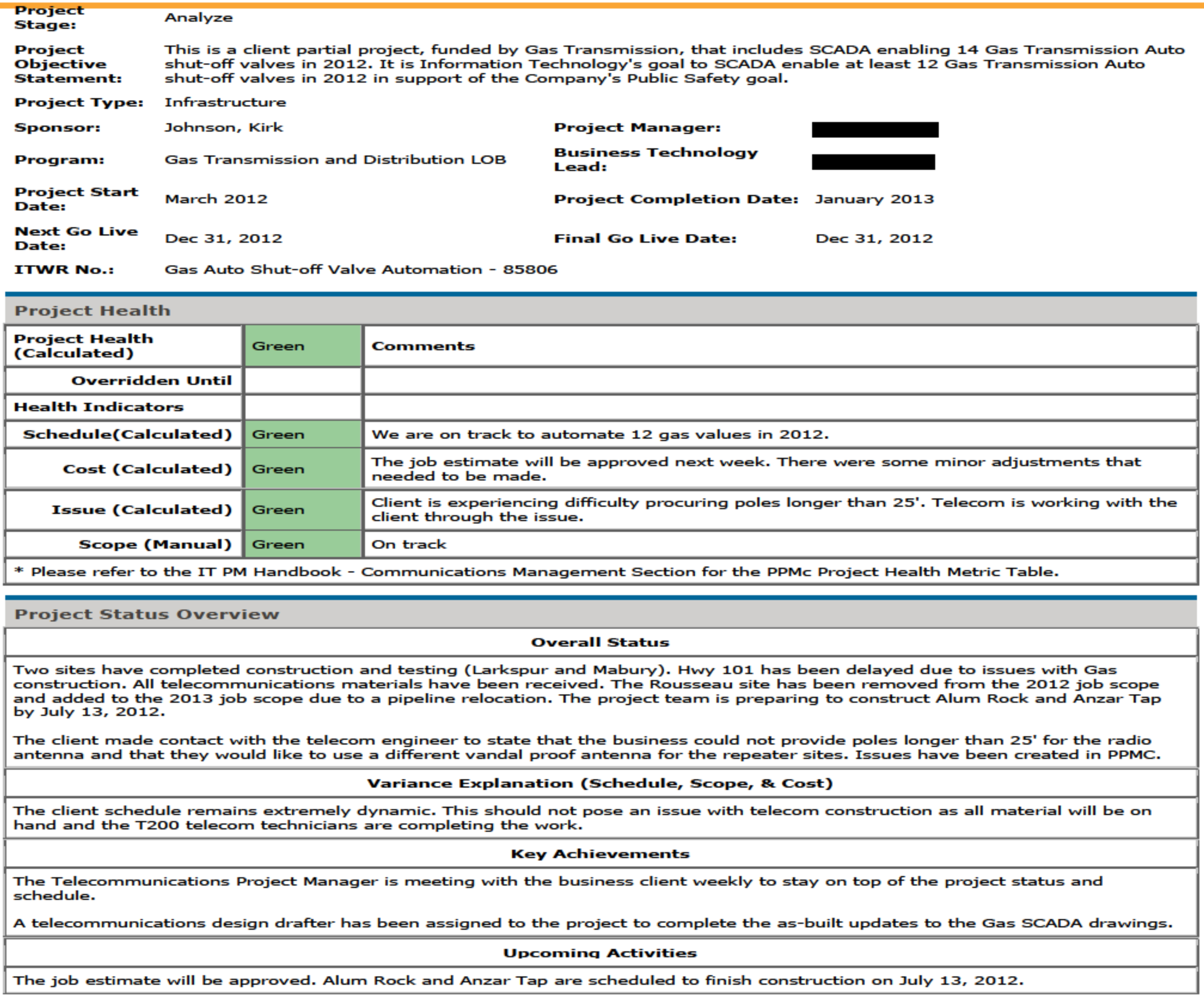
Project Issues / Concerns / Risks

Risk	OPT	Mitigation / Next Steps	Completion Date
Software solution is not finalized. Project scope and budget assumed SAP WCM – customer will look at Ventyx eSOMS as alterative solution. Solution change will affect schedule.	T	Solution Architect engaged to prepare analysis of both solutions Customer to see demo of Diablo Canyon's implementation of eSOMS on 6/20	6/30
SAP asset, equipment or functional location data may not be adequate to specify clearance points. Work may be required to add/enhance data .	P	Hold meeting with business sponsor and project owners to set SAP data strategy as it relates to clearance application.	6/30

Project Success Metrics

Metric	OPT	Baseline	Current	Goal
TBD				

Gas Auto Shut-off Valve Automation



Project Stage:	Analyze		
Project Objective Statement:	This is a client partial project, funded by Gas Transmission, that includes SCADA enabling 14 Gas Transmission Auto shut-off valves in 2012. It is Information Technology's goal to SCADA enable at least 12 Gas Transmission Auto shut-off valves in 2012 in support of the Company's Public Safety goal.		
Project Type:	Infrastructure		
Sponsor:	Johnson, Kirk	**Project Manager:**	[redacted]
Program:	Gas Transmission and Distribution LOB	**Business Technology Lead:**	[redacted]
Project Start Date:	March 2012	**Project Completion Date:**	January 2013
Next Go Live Date:	Dec 31, 2012	**Final Go Live Date:**	Dec 31, 2012
ITWR No.:	Gas Auto Shut-off Valve Automation - 85806		

Project Health

Project Health (Calculated)	Green	**Comments**
Overridden Until		
Health Indicators		
Schedule(Calculated)	Green	We are on track to automate 12 gas values in 2012.
Cost (Calculated)	Green	The job estimate will be approved next week. There were some minor adjustments that needed to be made.
Issue (Calculated)	Green	Client is experiencing difficulty procuring poles longer than 25'. Telecom is working with the client through the issue.
Scope (Manual)	Green	On track

* Please refer to the IT PM Handbook - Communications Management Section for the PPMc Project Health Metric Table.

Project Status Overview

Overall Status

Two sites have completed construction and testing (Larkspur and Mabury). Hwy 101 has been delayed due to issues with Gas construction. All telecommunications materials have been received. The Rousseau site has been removed from the 2012 job scope and added to the 2013 job scope due to a pipeline relocation. The project team is preparing to construct Alum Rock and Anzar Tap by July 13, 2012.

The client made contact with the telecom engineer to state that the business could not provide poles longer than 25' for the radio antenna and that they would like to use a different vandal proof antenna for the repeater sites. Issues have been created in PPMC.

Variance Explanation (Schedule, Scope, & Cost)

The client schedule remains extremely dynamic. This should not pose an issue with telecom construction as all material will be on hand and the T200 telecom technicians are completing the work.

Key Achievements

The Telecommunications Project Manager is meeting with the business client weekly to stay on top of the project status and schedule.

A telecommunications design drafter has been assigned to the project to complete the as-built updates to the Gas SCADA drawings.

Upcoming Activities

The job estimate will be approved. Alum Rock and Anzar Tap are scheduled to finish construction on July 13, 2012.

New Demand

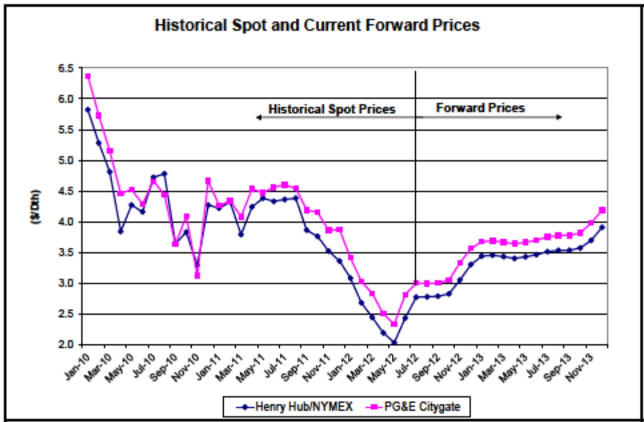
New Demand

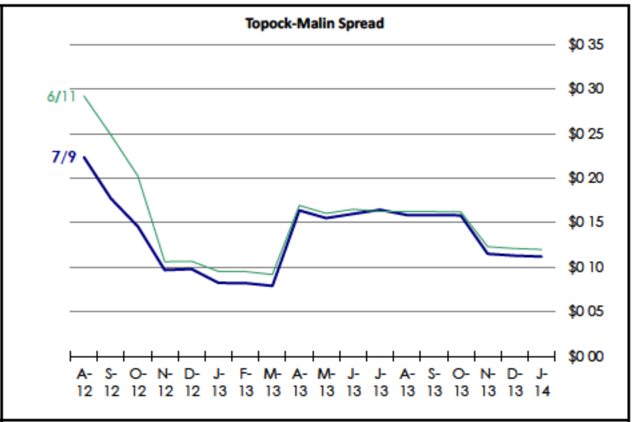
LOB	Project Name	Current Stage	Short Description	Funding Source
GD	Distribution SCADA Site Survey	Follow-up	Web server to host the DISTRIBUTION SCADA SITE SURVEY	
	Emergency Response Performance Management Tool	Pending Review	Ability to track headquarter and employee performance and identify trends in overall IR/Leak response in a timely and efficient manner	
	Integrity Management/DIMP Platform build	GDAM AA	Complete server build to support DIMP and plastic pipeline replacement program	IT
	Picarro			
GO	Electronic Document Management System Replacement	Pending Review	Replaces the Electronic Online Data Library(EODL)	
	First Responder GIS Migration to Compass GIS			
	LemonAide Hotline / Web Portal	Need PM	Set up a formal submittal system for handling employee feedback and concerns.	LOB
	Public Safety Efficacy Metrics Reporting			
	SAP POC			
	SCADA Upgrade Project			
	Smart Calibration Network	Need Funding	Smart Calibration Network to allow the Field Service department in Gas Operations to log monthly calibrations of Combustible Gas Indicators (CGI) into a database whereby the data can be viewed and reported on.	
	LMS Natural Gas System Incident Response WBT	Need PM	Track training for external agencies on public safety utilizing a hosting service.	LOB
GT	Enhance & Integrate Intrepid & SAP Systems (086868)	Follow-up	Reformatting the list for accommodation of all Gas Transmission line (60psig and above) while making the document dynamic. Defining units of pipelines operating at the same pressure and controlled by the same overpressure protection devices into subsystem. Defining Geospatial 086868 layer in Intrepid Creating 086868 tabular output from Intrepid Interconnection between SAP's 4125 process and Intrepid for faster MAOP/MOP updates Capturing historical MOP changes in PI by the use of SAP	
	GTS Assessment			
	Mariner Mobile T&R Phase 2 (183018)	Follow-up	Collect the facility, operating and historical maintenance information for the following: Gas distribution and local transmission regulator stations Gas distribution and local transmission valves Gas distribution and local transmission corrosion control Complete the SAP design for lacking characteristics and measurement points for the same. Update SAP with data pulled from Ventyx	
	GasMap Performanace Enhancements			
	First Responder Mobile Application			

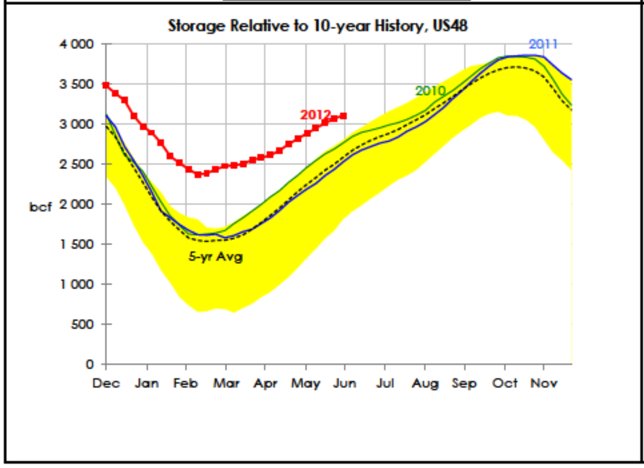
New Demand - 2013

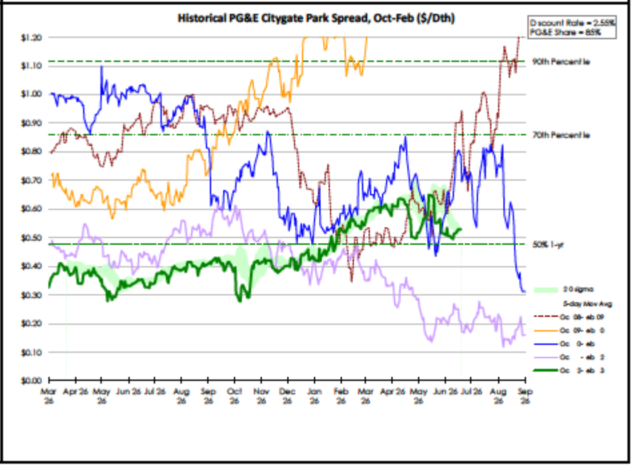
Project Name	Project Description
FAS Interfaces for Gas (rate case)	Realtime Automated Vehicle Locator (AVL) to integrate with FAS. IT Project dependent on Fleet project.
Estimator Toolset Enhancements including Graphic Work Design Tool	GWD will be deployed in 2013. This project is for long term maintenance and enhancements to optimize the software to meet business process changes and incorporate new functionality.
Compass Enablement	This project will replace some of the current MapGuide interfaces with GIS interfaces. 'Currently, Pole Test and Treat, Vegetation Management, SAP, Mobile, and others use MapGuide interfaces. When GIS is deployed, these systems will need to link to the new GIS System.
Ongoing SAP Work Management System Enhancements (Rate Case)	
Ongoing CSD Website Developments (Rate Case)	
Mobile for Short Cycle Crews (Title 200 - Division Crews)	Integration with the Mobile solution with work scheduled to CCD Crews (Customer Connect Desk) 'Scheduling work to CCD through FAS
First Responder Portal	Mobile application in case of emergency; tool to use to communicate to First Responders in case of disaster; tool to allow photos/gps stamp tied to assets
GTS/ABS Expand Contract Adjustments	Expand the types of contract adjustments that exist in GTS. Would also require changes in ABS. Contract adjustments can be created for all exhibits (Transportation, Storage, Park and Lend), NBAAs, and CTAs. The business processes for the California Production Balancing Agreements (CPBA) agreements have been changed and now provide for different types of contract adjustments and a different method of handling them, which requires modification to GTS and ABS.
GTS/ABS Gas Core Firm Storage	Relates to CTA designations that distinguish transport from storage in GTS. New "report" and ABS need the capability to accept G-CFS. Core Transport Aggregators (CTAs) receive two contract exhibits each month, one for transportation and one for core storage. In the past, these two exhibits were simply combined into one, due to system inflexibility. With the recent GTS rewrite project, these exhibits were separated to better reflect the actual business transaction. However, at the time, the billing system (ABS), downstream from GTS, did not have the ability to accept two separate exhibits for each CTA, so the GTS system had to merge the two exhibits back together to pass the data to ABS. This enhancement will rectify this situation so that GTS can reflect both exhibit types and ABS can receive both exhibit types for each CTA.
Enterprise Compliance Tracking System (ECTS) Roll-Out for WM&BD	Implement Enterprise Compliance and Tracking System for Wholesale Marketing and Business Development group to track compliance requirements.
California Gas Daily Reads	This relates to the Flow-Cal system. This modification will allow California producers to have better access to daily information regarding the supply they provide to PG&E. Daily meter reads from the FlowCal program, which contains all of the meter data from California production, will be imported into the GTS system. Daily meter reads would be labeled as non-billing quality/unreviewed meter reads.
GTS/ABS Replacement Business Analysis	Analysis of commercial off-the-shelf options to replace GTS and ABS. The analysis will be from a functional match perspective and a economics perspective.
Self-Service Contact Information	Enable customers to manage contact information and perform basic GTS account management functions for accounts under their contract.
Picarro Transmission	
Mariner: Leak Survey Process Redesign	
GTS Storage Assignments	This project covers three pieces of work which are CPUC mandated by the CTA Settlement Agreement portion of the Gas Accord V decision. These pieces include 1. Making the GTS Application capable of transacting storage assignments, 2. Making the ABS system capable of billing stranded costs for unutilized core storage, and 3. making the Endure application capable of logging the results of the core capacity release program.

Monthly Gas Market Outlook—July 2012


Historical Spot and Current Forward Prices


Topock-Malin Spread


Storage Relative to 10-year History, US48


Historical PG&E Citygate Park Spread, Oct-Feb ($/Dth)

- **Gas price outlook:** As the outage at the San Onofre Nuclear Generating Station (SONGS) continues, the Southern California market remains tight, exerting upward pressure on regional prices for the summer. These factors continue to strengthen SoCal prices and support the PG&E off-system spreads (Topock-Malin). Gas prices at Henry Hub, which typically serve as a starting point for regional prices, have risen recently in response to strong power generation demand noted below.

- **High gas storage inventories and injection constraints.** West and US48 storage continued to set new records for the time of year. The storage surplus over 2011 in the West declined from 134 to 120 bcf; US48 storage surplus declined from 690 to 575 bcf.

- **U.S. dry gas production:** Dry gas production has had a tremendous rebound and returned to the record-high 64 Bcf/day range with offshore production returning to the levels before Tropical Storm Debby. Gas production from U.S. oil wells is expanding at a record pace, led by the Eagle Ford shale and the Permian Basin. Associated gas growth also will soon accelerate in the Bakken shale play with the completion of new infrastructure.

- **Gas Demand**: Power burn soared to a record level in the first week of July, reaching an average of 35.1 Bcf/day. According to NOAA's National Climactic Data Center, at least 4,250 daily record high temperatures have been recorded in the U.S. over the past 30 days, including 224 all-time highs.

Functional Reports

Gas Operations

June 2012

Gas Operations Summary: PCC Cost In

	Current Month					Year-to-Date					Full Year					
Gas Operations PCC Cost In - Summary	(a) Jun Plan (DET)	(e) Jun CY Fcast (CY1)	(b) Jun Actual	(c=a-b) Jun Variance (Plan)	(f=e-b) Jun Variance (Cycle)	(h) YTD Jun Plan (DET)	(l) YTD CY Fcst (Cycle)	(i) YTD Actual	(j=h-i) YTD Variance (Plan)	(m=l-i) YTD Variance (Cycle)	Annual Plan (DET)	Annual CY Fcst	ACT + Rmng CY Plan	Run Rate	Annual Variance	Run Rate Variance
Total Gas Operations	**$60,299**	**$62,931**	**$70,832**	**($10,533)**	**($7,902)**	**$355,555**	**$354,883**	**$363,369**	**($7,814)**	**($8,487)**	**$730,587**	**$766,337**	**$774,824**	**$726,739**	**($35,750)**	**$39,599**
Gas Executive Vice-President	528	451	249	279	202	3,340	2,067	1,849	1,490	218	6,451	4,727	4,510	3,698	1,724	1,029
Asset Knowledge Management	1,144	2,203	2,199	(1,055)	4	6,655	9,710	10,326	(3,671)	(616)	13,617	27,184	27,799	20,652	(13,567)	6,532
Standards & Policies	1,794	2,189	1,903	(109)	287	8,564	8,999	8,713	(149)	286	22,347	24,979	24,693	17,426	(2,632)	7,553
Investment Planning	166	444	240	(74)	204	965	1,550	1,187	(223)	363	2,039	4,739	4,376	2,375	(2,701)	2,365
Gas Distribution Maintenance & Constr	43,296	41,898	44,982	(1,686)	(3,085)	261,063	251,814	254,163	6,900	(2,349)	529,351	512,030	514,379	508,326	17,321	3,704
Gas Transmission Operations SVP			441	(441)	(441)			441	(441)	(441)			441	882	0	(882)
Public Safety & Integrity Management	1,372	1,910	2,012	(640)	(102)	7,628	10,042	9,824	(2,197)	218	15,729	23,664	23,446	19,649	(7,935)	4,015
Project Engineering & Design	3,483	4,194	3,835	(352)	359	19,661	20,094	18,933	728	1,161	39,555	51,851	50,690	37,867	(12,296)	13,985
Gas Transmission Operations Maint & Const	6,033	6,476	12,205	(6,172)	(5,729)	32,937	35,486	43,654	(10,717)	(8,167)	71,576	81,104	89,272	87,307	(9,528)	(6,203)
Gas System Operations	2,032	2,706	2,402	(370)	303	12,062	12,898	12,214	(152)	685	24,483	31,023	30,338	24,427	(6,540)	6,596
Gas Sourcing	417	426	364	53	62	2,478	2,154	2,065	413	89	5,034	4,764	4,675	4,130	269	634
Gas Tranmission Facilities	31	31		31	31	188	63		188	63	376	251	188		125	251
Gas Blocked PCCs	2	2		2	2	15	5		15	5	30	21	16		10	21

YTD DET – unfavorable variance of (-$7.8M) is driven primarily by:

- Gas Transmission Operation Maintenance & Construction (GT OM&C): (-$10.7M) unfavorable variance mainly due to the creation of unplanned contractor PCCs; Contractor PCCs are set up so the contract is a cost into the PCC and time is charged to projects similar to PG&E internal labor
- Asset Knowledge Management: (-$3.7M) unfavorable variance mainly due to additional headcount in Mapping Team driven by the Gas/Electric split as well as Contract dollars previously planned in a placeholder PCC
- Public Safety & Integrity Management: (-$2.2M) unfavorable variance mainly due to higher than planned Employee Costs and additional Non PG&E Consulting Labor
- Project Engineering & Design: (+$0.7M) favorable variance mainly due to hiring delays offset by Non PG&E Consulting Labor
- Gas Executive VP: (+$1.5M) favorable variance mainly due to hiring delays and lower than planned expenses in Other & Employee Related offset by small variances
- Gas Distribution Maintenance & Construction (GD M&C): (+$6.9M) favorable variance mainly due to removal of Electric Operations cascades from Gas Operations in Supervision & Management and hiring delays partially offset by over-accrued vehicle costs to be corrected in July

YTD CY1 – unfavorable variance of (-$8.5M) is driven primarily by:

- GT OM&C: (-$8.2M) unfavorable variance mainly due to the creation of contractor PCCs and additional Non PG&E Consulting Labor partially offset by hiring delays and lower than planned expenses in Other & Employee Related
- GD M&C: (-$2.4M) unfavorable variance mainly due to over-accrued vehicle costs to be corrected in July
- Investment Planning: (+$0.4M) favorable small variances
- Gas System Operations: (+$0.7M) favorable small variances
- Project Engineering & Design: (+$1.2M) favorable variance mainly due to hiring delays

*PCC Cost In Report Excludes Churn: Supervision & Management and Activity Types

Gas Operations Summary by Cost Element

	Current Month					Year-to-Date					Full Year					
Cost In	(a) Jun Plan (DET)	(e) Jun CY Fcast (CY1)	(b) Jun Actual	(c=a-b) Jun Variance (Plan)	(f=e-b) Jun Variance (Cycle)	(h) YTD Jun Plan (DET)	(l) YTD CY Fcst (Cycle)	(i) YTD Actual	(j=h-i) YTD Variance (Plan)	(m=l-i) YTD Variance (Cycle)	Annual Plan (DET)	Annual CY Fcst	ACT + Rmng CY Plan	Run Rate	Annual Variance	Run Rate Variance
Cost In Total (excl churn)	**$60,299**	**$62,931**	**$70,832**	**($10,533)**	**($7,902)**	**$355,555**	**$354,883**	**$363,369**	**($7,814)**	**($8,487)**	**$730,587**	**$766,337**	**$774,824**	**$726,739**	**($35,750)**	**$39,599**
PG&E Labor	45,644	46,845	46,217	(573)	629	267,404	264,437	261,065	6,340	3,373	552,666	579,343	575,971	522,129	(26,677)	57,214
Productive Time	30,662	31,616	32,069	(1,407)	(453)	176,475	177,892	176,763	(288)	1,129	362,498	383,721	382,591	353,527	(21,222)	30,194
Non Productive Time	4,499	4,542	3,879	620	663	29,577	26,709	25,548	4,029	1,161	65,800	65,881	64,720	51,095	(81)	14,786
Labor Burden	10,482	10,687	10,269	214	419	61,352	59,836	58,753	2,599	1,082	124,368	129,741	128,659	117,507	(5,374)	12,234
Non PG&E Labor	564	797	2,493	(1,929)	(1,696)	3,472	4,745	7,759	(4,287)	(3,015)	7,331	9,127	12,142	15,519	(1,796)	(6,392)
Consulting	545	649	2,292	(1,747)	(1,643)	3,354	4,015	6,884	(3,530)	(2,869)	7,099	7,338	10,207	13,768	(239)	(6,430)
Staff Augmentation	19	148	201	(182)	(52)	118	730	876	(757)	(146)	232	1,789	1,935	1,751	(1,557)	38
Material Total	1,271	1,607	1,908	(637)	(301)	8,786	10,089	10,774	(1,988)	(685)	17,452	20,663	21,348	21,547	(3,211)	(884)
Material related expenses	1,215	1,539	1,845	(629)	(306)	8,422	9,634	10,327	(1,905)	(693)	16,713	19,758	20,450	20,654	(3,045)	(896)
Material Burden	55	68	63	(8)	6	364	455	447	(83)	8	740	905	897	893	(166)	12
Contracts	464	1,527	4,856	(4,392)	(3,329)	1,818	7,871	13,599	(11,781)	(5,728)	3,853	15,804	21,531	27,198	(11,951)	(11,395)
Other and Employee Related	2,267	3,330	3,255	(988)	75	14,096	17,008	16,134	(2,038)	874	28,573	38,194	37,320	32,268	(9,621)	5,925
Employee Related	1,450	2,138	1,353	97	785	9,010	10,513	9,785	(775)	727	18,457	24,259	23,532	19,571	(5,802)	4,688
Other Costs	817	1,193	1,902	(1,085)	(709)	5,086	6,495	6,349	(1,262)	147	10,116	13,935	13,788	12,697	(3,818)	1,237
Facility Charge	614	607	684	(70)	(77)	3,684	3,509	3,663	21	(154)	7,365	7,141	7,295	7,326	224	(184)
IT-DEVICEFEES	561	596	628	(67)	(31)	3,343	3,454	3,503	(160)	(50)	6,685	7,011	7,060	7,006	(326)	4
Vehicles	4,699	4,762	7,866	(3,167)	(3,104)	28,534	28,528	31,498	(2,964)	(2,970)	57,052	57,474	60,443	62,996	(421)	(5,522)
Activity Types	1,137	1,335	1,526	(388)	(191)	6,606	6,482	6,835	(228)	(353)	13,181	13,598	13,950	13,670	(417)	(72)
Supervision and Management	3,079	1,524	1,400	1,678	123	17,811	8,759	8,540	9,272	220	36,429	17,983	17,763	17,079	18,446	904

Year end variance of current forecast from original budget

Year end variance from forecast if current run rate holds

YTD DET – unfavorable variance of (-$7.8M) is driven primarily by:
- •Contracts: (-$11.8M) unfavorable variance mainly due to creation of contractor PCCs in GT OM&C
- •Non PG&E Labor: (-$4.3M) unfavorable variance mainly due to higher than planned staffing as a result of hiring delays in GT OM&C and Project Engineering & Design
- •Vehicles: (-$3.0M) unfavorable variance mainly due to over-accrued vehicle costs to be corrected in July
- •Other & Employee Related: (-$2.0M) unfavorable variance mainly due to higher than planned expenses in Public Safety & Integrity Management and GT OM&C as a result of additional Consulting labor
- •Material: (-$2.0M) unfavorable variance mainly due to higher than planned expenses for office supplies in Public Safety & Integrity Management, for P-Card and tools in GT OM&C, and for tools in GD M&C
- •PG&E Labor: (+$6.3M) favorable variance mainly due to hiring delays in GT OM&C, Project Engineering & Design, and GD M&C partially offset by Bargaining Unit Labor overruns in Asset Knowledge Management
- •Supervision & Management: ($+9.3M) favorable variance mainly due to removal of Electric Operations cascades from GD M&C and GT OM&C

YTD CY1 – unfavorable variance of (-$8.5M) is driven primarily by:
- •Contracts: (-$5.7M) unfavorable variance mainly due to creation of contractor PCCs in GT OM&C
- •Non PG&E Labor: (-$3.0M) unfavorable variance mainly due to higher than planned Consulting staffing in GT OM&C and Project Engineering & Design as a result of hiring delays
- •Vehicles: (-$3.0M) unfavorable variance mainly due to over-accrued vehicle costs to be corrected in July
- •PG&E Labor: (+$3.4M) favorable variance mainly due to hiring delays in Project Engineering & Design, Gas System Operations, GD M&C, and GT OM&C

*PCC Cost In Report Excludes Churn: Supervision & Management and Activity Types

2012 Gas Operations Headcount & Recruitment

									May Recruitment (2)			
Cost Center		Job Band	Jun Act	Jun CY1	Jun CY1 to Jun Act Variance	(1) Dec Sanctioned / CY1 Plan	Dec Sanctioned to June Actual Var	Dec Sactioned to (June Act + Recruitment)	Draft	On Hold	Open	Total
			a	b	c	d	e	f	g	h	i	j
					b-a		d-a	d-(a+j)				g+h+i
PGE1TD-GAS	Gas Operations	PL1	571.50	737.50	166.00	944.00	372.50	191.50	13.00	0.00	168.00	181.00
		PL2	117.00	114.00	-3.00	140.00	23.00	(9.00)	2.00	1.00	29.00	32.00
		PL3	35.00	36.00	1.00	42.00	7.00	(3.00)	1.00	0.00	9.00	10.00
		A&T	74.00	58.25	-15.75	68.25	(5.75)	(28.75)	1.00	0.00	22.00	23.00
		ESC	338.75	330.75	-8.00	471.75	133.00	90.00	0.00	0.00	43.00	43.00
		Executive	8.00	7.00	-1.00	7.00	(1.00)	(1.00)	0.00	0.00	0.00	0.00
		IBEW	2,494.00	2,546.00	52.00	2,678.00	184.00	1.00	0.00	0.00	183.00	183.00
		Hiring Hall	107.00	87.00	-20.00	74.00	(33.00)	(33.00)	0.00	0.00	0.00	0.00
		Unknown		15	15	15.00	15.00	15.00	0.00			0.00
		Total	3,745.25	3,931.50	186.25	4,440.00	694.75	222.75	17.00	1.00	454.00	472.00

	2012 Headcount Actual & Remaining Plan														
Gas Operations	*Jan 2012 Act*	*Feb 2012 Act*	*Mar 2012 Act*	*Apr 2012 Act*	*May 2012 Act*	*Jun 2012 Act*	*Variance June Act- May Act*	*Jun 2012 CY1*	*Variance Jun Act - June CY1*	Jul 2012 CY1	Aug 2012 CY1	Sep 2012 CY1	Oct 2012 CY1	Nov 2012 CY1	Dec 2012 CY1	Dec 2012 DET
Gas Executive Vice-President	3	4	4	3	3	3	-	4	(1)	4	4	4	4	4	4	12
Asset Knowledge Management	106	99	100	157	164	169	5	166	4	213	216	219	225	229	230	92
Standards & Policies	78	77	84	87	96	110	14	127	(17)	151	169	183	193	196	196	161
Investment Planning	12	11	10	14	16	13	(3)	23	(10)	27	28	27	27	27	27	12
Gas Distribution Maintenance & Constr	2,480	2,488	2,485	2,502	2,623	2,649	26	2,721	(72)	2,737	2,788	2,809	2,798	2,801	2,802	2,732
Gas Transmission Operations SVP	-	-	-	-	-	1	1	-	1	-	-	-	-	-	-	-
Public Safety & Integrity Management	78	81	80	83	83	89	6	94	(5)	111	115	125	134	137	139	100
Project Engineering & Design	153	158	168	174	186	255	69	264	(9)	360	365	368	374	380	384	209
Gas Transmission Operation Maint & Const	246	251	279	288	292	299	7	349	(50)	428	430	435	436	436	436	360
Gas System Operations	130	131	132	129	137	158	21	184	(27)	189	205	211	216	222	222	147
Total for Provider Cost Centers	**3,286**	**3,300**	**3,342**	**3,437**	**3,599**	**3,745**	**146**	**3,932**	**(186)**	**4,220**	**4,320**	**4,381**	**4,407**	**4,432**	**4,440**	**3,825**

146 positions added in June

3749 total headcount in June compared to 3932 total headcount planned in CY1

Run rate per month from July - Dec to meet Dec Sanctioned 694/6 = 116

Most significant YTD underruns are in Gas Distribution M&C (72), Gas Transmission M&C (50) and System Operations (27)

***Notes**

(1) Sanctioned HC increased from 4,306 to 4,440 (increase of 134 Dec HC) with transition of Scheduling and Dispatch from Customer Care to Gas Operations effective with June Reporting

(2) June Recruitment: The recruiting report isn't available from HR for the next month or two as a result of the transition to our new Talent Connect.
May recruitment presented for comparative purposes only
Draft position not posted but is in process; this could be for several reasons including getting a job description from the hiring manager
On Hold not actively recruiting at this time or holding for a later date; this could be for several reasons including waiting until 3rd quarter for some other purpose
Open actively recruiting for the position

Source: [redacted] in HR Data Services

Functional Reports

Gas Executive Vice-President (Stavropoulos)

Gas Executive Vice-President (Stavropoulos)

	Current Month					Year-to-Date					Full Year			
Cost In	**(a) Jun Plan (DET)**	**(e) Jun CY Fcast (CY1)**	**(b) Jun Actual**	**(c=a-b) Jun Variance (Plan)**	**(f=e-b) Jun Variance (Cycle)**	**(h) YTD Jun Plan (DET)**	**(l) YTD CY Fcst (Cycle)**	**(i) YTD Actual**	**(j=h-i) YTD Variance (Plan)**	**(m=l-i) YTD Variance (Cycle)**	**Annual Plan (DET)**	**Annual CY Fcst**	**ACT + Rmng CY Plan**	**Run Rate**
Cost In Total (excl churn)	**$528**	**$451**	**$249**	**$279**	**$202**	**$3,340**	**$2,067**	**$1,849**	**$1,490**	**$218**	**$6,451**	**$4,727**	**$4,510**	**$3,698**
PG&E Labor	290	123	100	189	23	1,715	838	819	896	19	3,432	1,572	1,553	1,638
Productive Time	186	80	72	114	8	1,092	575	575	517	0	2,162	1,035	1,035	1,150
Non Productive Time	26	11		26	11	165	79	62	103	17	364	164	147	123
Labor Burden	78	33	29	49	4	458	183	182	276	1	906	373	371	364
Non PG&E Labor	83	83	82	2	2	500	620	618	(118)	2	1,000	1,120	1,118	1,236
Consulting	83	83	81	2	2	500	620	616	(116)	4	1,000	1,120	1,116	1,232
Staff Augmentation			1	(1)	(1)			2	(2)	(2)			2	4
Material Total	2	2	1	1	1	10	8	6	4	1	21	19	17	12
Material related expenses	2	2	1	0	1	10	7	6	4	1	19	18	16	12
Material Burden	0	0	0	0	0	1	0	0	0	0	1	1	1	1
Contracts			0	(0)	(0)		15	15	(15)	(0)		15	15	31
O her and Employee Related	141	178	6	134	172	1,061	440	247	814	193	1,884	1,488	1,295	493
Employee Related	109	137	7	102	129	638	357	101	537	256	1,274	1,157	901	202
Other Costs	31	41	(1)	32	43	423	83	146	277	(63)	610	331	394	291
Facility Charge	3	3	3	(0)	(0)	17	17	18	(0)	(1)	34	34	35	35
IT-DEVICEFEES	0	2	2	(1)	(0)	2	5	5	(3)	(0)	4	15	15	10
Vehicles							0	0	(0)			0	0	0
Activity Types	9	9	6	3	3	35	23	22	13	2	76	64	62	43
Supervision and Management		51	48	(48)	3		102	100	(100)	2		401	399	200

*PCC Cost In Report Excludes Churn: Supervision & Management and Activity Types

2012 Gas Operations Headcount & Recruitment

									May Recruitment (2)			
Cost Center		Job Band	Jun Act	Jun CY1	Jun CY1 to Jun Act Variance	(1) Dec Sanctioned / CY1 Plan	Dec Sanctioned to June Actual Var	Dec Sactioned to (June Act + Recruitment)	Draft	On Hold	Open	Total
			a	b	c	d	e	f	g	h	i	j
					b-a		d-a	d-(a+j)				g+h+i
PGE1GAS-EVP	Gas Executive Vice-President	PL1			0		0.00	0.00				0.00
		PL3	1.00	1.00	0.00	1.00	0.00	0.00				0.00
		A&T	1.00	1.00	0.00	1.00	0.00	(1.00)			1.00	1.00
		Executive	1.00	2.00	1.00	2.00	1.00	1.00				0.00
		Unknown			0		0.00	0.00				0.00
		Total	3.00	4.00	1.00	4.00	1.00	0.00	0.00	0.00	1.00	1.00

***Notes**

(1) Sanctioned HC increased from 4,306 to 4,440 (increase of 134 Dec HC) with transition of Scheduling and Dispatch from Customer Care to Gas Operations effective with June Reporting

(2) June Recruitment: The recruiting report isn't available from HR for the next month or two as a result of the transition to our new Talent Connect.
May recruitment presented for comparative purposes only
Draft position not posted but is in process; this could be for several reasons including getting a job description from the hiring manager
On Hold not actively recruiting at this time or holding for a later date; this could be for several reasons including waiting until 3rd quarter for some other purpose
Open actively recruiting for the position

PCC Data

Source: [redacted] in HR Data Services

June 2012

Functional Reports

Asset Knowledge Management (Singh)

June 2012

Asset Knowledge Management (Singh)

	Current Month					Year-to-Date					Full Year			
Cost In	**(a) Jun Plan (DET)**	**(e) Jun CY Fcast (CY1)**	**(b) Jun Actual**	**(c=a-b) Jun Variance (Plan)**	**(f=e-b) Jun Variance (Cycle)**	**(h) YTD Jun Plan (DET)**	**(l) YTD CY Fcst (Cycle)**	**(i) YTD Actual**	**(j=h-i) YTD Variance (Plan)**	**(m=l-i) YTD Variance (Cycle)**	**Annual Plan (DET)**	**Annual CY Fcst**	**ACT + Rmng CY Plan**	**Run Rate**
Cost In Total (excl churn)	**$1,144**	**$2,203**	**$2,199**	**($1,055)**	**$4**	**$6,655**	**$9,710**	**$10,326**	**($3,671)**	**($616)**	**$13,617**	**$27,184**	**$27,799**	**$20,652**
PG&E Labor	1,056	1,816	1,860	(804)	(44)	6,009	8,337	8,417	(2,409)	(81)	12,205	22,928	23,009	16,835
Productive Time	703	1,230	1,280	(577)	(50)	3,952	5,623	5,719	(1,767)	(96)	7,971	15,177	15,273	11,438
Non Productive Time	85	141	129	(44)	12	493	706	686	(192)	21	1,097	2,300	2,279	1,371
Labor Burden	268	445	451	(183)	(6)	1,563	2,007	2,013	(449)	(6)	3,137	5,451	5,457	4,025
Non PG&E Labor	2	98	72	(69)	27	100	289	191	(91)	98	287	1,233	1,135	382
Consulting		1	66	(66)	(65)	87	77	153	(66)	(76)	262	259	335	306
Staff Augmentation	2	97	6	(4)	91	12	212	38	(25)	175	25	975	800	76
Material Total	5	38	25	(20)	13	30	148	111	(81)	37	63	382	345	222
Material related expenses	5	36	24	(20)	12	29	141	106	(77)	35	62	364	329	212
Material Burden	0	2	0	(0)	2	0	8	5	(5)	3	1	18	16	10
Contracts	1	133	90	(90)	42	41	352	953	(912)	(601)	68	1,170	1,771	1,906
Other and Employee Related	41	76	72	(31)	5	242	300	266	(24)	35	495	906	872	532
Employee Related	38	69	71	(33)	(1)	226	258	232	(6)	26	465	714	688	464
Other Costs	3	7	1	2	6	16	43	34	(18)	9	31	192	183	68
Facility Charge	10	14	12	(2)	2	63	67	64	(2)	3	126	149	146	129
IT-DEVICEFEES	11	15	19	(8)	(4)	66	79	85	(19)	(6)	131	170	176	170
Vehicles	2	5	4	(2)	2	11	42	45	(34)	(3)	21	74	76	90
Activity Types	4	3	37	(34)	(34)	21	70	164	(144)	(95)	70	114	209	329
Supervision and Management	13	5	9	4	(4)	75	26	29	45	(3)	149	58	62	59

*PCC Cost In Report Excludes Churn: Supervision & Management and Activity Types

2012 Gas Operations Headcount & Recruitment

									May Recruitment (2)			
Cost Center		Job Band	Jun Act	Jun CY1	Jun CY1 to Jun Act Variance	(1) Dec Sanctioned / CY1 Plan	Dec Sanctioned to June Actual Var	Dec Sactioned to (June Act + Recruitment)	Draft	On Hold	Open	Total
			a	b	c	d	e	f	g	h	i	j
					b-a		d-a	d-(a+j)				g+h+i
PGE1ASETKNOWMG	Asset Knowledge Management	PL1	50.00	51.50	1.50	72.00	22.00	17.00			5.00	5.00
		PL2	11.00	9.00	-2.00	17.00	6.00	3.00		1.00	2.00	3.00
		PL3	4.00	5.00	1.00	7.00	3.00	1.00			2.00	2.00
		A&T	6.00	5.00	-1.00	8.00	2.00	(1.00)			3.00	3.00
		ESC	84.00	87.00	3.00	113.00	29.00	16.00			13.00	13.00
		BEW	2.00	2.00	0.00	2.00	0.00	0.00				0.00
		Hiring Hall	12.00	6.00	-6.00	11.00	(1.00)	(1.00)				0.00
		Total	169.00	165.50	-3.50	230.00	61.00	35.00	0.00	1.00	25.00	26.00

***Notes**

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May recruitment presented for comparative purposes only
Draft position not posted but is in process; this could be for several reasons including getting a job description from the hiring manager
On Hold not actively recruiting at this time or holding for a later date; this could be for several reasons including waiting until 3rd quarter for some other purpose
Open actively recruiting for the position

Source: [redacted] in HR Data Services

Functional Reports

Standards & Policies (Yura)

June 2012

Standards & Policies (Yura)

	Current Month					Year-to-Date					Full Year			
Cost In	**(a) Jun Plan (DET)**	**(e) Jun CY Fcast (CY1)**	**(b) Jun Actual**	**(c=a-b) Jun Variance (Plan)**	**(f=e-b) Jun Variance (Cycle)**	**(h) YTD Jun Plan (DET)**	**(l) YTD CY Fcst (Cycle)**	**(i) YTD Actual**	**(j=h-i) YTD Variance (Plan)**	**(m=l-i) YTD Variance (Cycle)**	**Annual Plan (DET)**	**Annual CY Fcst**	**ACT + Rmng CY Plan**	**Run Rate**
Cost In Total (excl churn)	**$1,794**	**$2,189**	**$1,903**	**($109)**	**$287**	**$8,564**	**$8,999**	**$8,713**	**($149)**	**$286**	**$22,347**	**$24,979**	**$24,693**	**$17,426**
PG&E Labor	1,319	1,596	1,413	(94)	184	5,710	6,657	6,349	(639)	308	16,449	20,132	19,823	12,699
Productive Time	837	1,018	931	(94)	87	3,619	4,253	4,087	(468)	166	10,305	12,643	12,477	8,173
Non Productive Time	131	158	101	31	57	585	652	585	0	67	1,856	2,283	2,216	1,170
Labor Burden	350	420	381	(31)	39	1,507	1,753	1,678	(171)	75	4,288	5,205	5,130	3,355
Non PG&E Labor	359	392	242	116	150	2,151	985	842	1,309	144	4,305	2,463	2,320	1,683
Consulting	359	379	216	143	163	2,151	893	712	1,439	181	4,304	2,291	2,110	1,424
Staff Augmentation	0	13	26	(26)	(13)	0	92	129	(129)	(37)	1	173	210	259
Material Total	17	17	32	(16)	(15)	101	163	173	(73)	(10)	227	283	293	346
Material related expenses	15	16	30	(15)	(14)	92	151	160	(68)	(9)	209	262	271	319
Material Burden	2	1	2	(1)	(1)	9	12	14	(4)	(1)	18	21	22	27
Contracts	1	80	5	(4)	75	24	366	358	(334)	7	39	559	552	717
Other and Employee Related	56	56	110	(55)	(55)	276	453	532	(257)	(80)	725	843	923	1,065
Employee Related	48	46	104	(55)	(57)	230	397	475	(244)	(78)	625	728	806	949
Other Costs	7	9	7	0	3	46	56	58	(12)	(2)	100	115	117	116
Facility Charge	6	6	7	(1)	(1)	36	35	37	(1)	(2)	73	72	73	74
IT-DEVICEFEES	7	9	10	(3)	(1)	43	50	53	(10)	(3)	87	103	106	106
Vehicles	19	23	50	(30)	(27)	118	144	177	(59)	(33)	237	282	315	354
Activity Types	9	9	31	(22)	(22)	95	139	184	(89)	(45)	187	224	270	367
Supervision and Management	2	2	2	(1)	(0)	10	8	8	2	(0)	19	18	18	16

*PCC Cost In Report Excludes Churn: Supervision & Management and Activity Types

2012 Gas Operations Headcount & Recruitment

									May Recruitment (2)			
Cost Center		Job Band	Jun Act	Jun CY1	Jun CY1 to Jun Act Variance	(1) Dec Sanctioned / CY1 Plan	Dec Sanctioned to June Actual Var	Dec Sactioned to (June Act + Recruitment)	Draft	On Hold	Open	Total
			a	b	c	d	e	f	g	h	i	j
					b-a		d-a	d-(a+j)				g+h+i
PGE1STANDPOLCY	Standards & Policies	PL1	60.00	84.00	24.00	147.00	87.00	53.00	1.00		33.00	34.00
		PL2	17.00	16.00	-1.00	19.00	2.00	(1.00)			3.00	3.00
		PL3	5.00	5.00	0.00	5.00	0.00	0.00				0.00
		A&T	9.00	5.00	-4.00	7.00	(2.00)	(5.00)			3.00	3.00
		ESC	1.00		-1.00		(1.00)	(1.00)				0.00
		Executive	1.00	1.00	0.00	1.00	0.00	0.00				0.00
		IBEW	16.00	14.00	-2.00	15.00	(1.00)	(2.00)			1.00	1.00
		Hiring Hall	1.00	1.00	0.00	1.00	0.00	0.00				0.00
		Unknown		1.00	1.00	1.00	1.00	1.00				0.00
		Total	110.00	127.00	17.00	196.00	86.00	45.00	1.00	0.00	40.00	41.00

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May recruitment presented for comparative purposes only
Draft position not posted but is in process; this could be for several reasons including getting a job description from the hiring manager
On Hold not actively recruiting at this time or holding for a later date; this could be for several reasons including waiting until 3rd quarter for some other purpose
Open actively recruiting for the position

PCC Data

Source: [redacted] in HR Data Services

June 2012

Functional Reports

Public Safety & Integrity Management (Trevino)

June 2012

Public Safety & Integrity Management (Trevino)

	Current Month					Year-to-Date					Full Year			
Cost In	**(a) Jun Plan (DET)**	**(e) Jun CY Fcast (CY1)**	**(b) Jun Actual**	**(c=a-b) Jun Variance (Plan)**	**(f=e-b) Jun Variance (Cycle)**	**(h) YTD Jun Plan (DET)**	**(l) YTD CY Fcst (Cycle)**	**(i) YTD Actual**	**(j=h-i) YTD Variance (Plan)**	**(m=l-i) YTD Variance (Cycle)**	**Annual Plan (DET)**	**Annual CY Fcst**	**ACT + Rmng CY Plan**	**Run Rate**
Cost In Total (excl churn)	**$1,372**	**$1,910**	**$2,012**	**($640)**	**($102)**	**$7,628**	**$10,042**	**$9,824**	**($2,197)**	**$218**	**$15,729**	**$23,664**	**$23,446**	**$19,649**
PG&E Labor	1,216	1,181	1,151	66	31	6,832	6,289	6,174	658	115	14,146	15,619	15,504	12,348
Productive Time	807	791	798	9	(7)	4,446	4,173	4,152	294	21	9,132	10,092	10,070	8,303
Non Productive Time	76	65	53	23	11	555	410	365	190	46	1,289	1,394	1,348	729
Labor Burden	333	325	299	34	26	1,831	1,706	1,658	173	48	3,724	4,133	4,085	3,315
Non PG&E Labor	9	9	333	(324)	(324)	34	293	879	(845)	(586)	64	324	910	1,759
Consulting	4	4	327	(323)	(323)	4	280	867	(863)	(587)	4	280	867	1,735
Staff Augmentation	5	5	7	(2)	(2)	30	13	12	18	1	60	43	42	24
Material Total	12	44	270	(257)	(225)	75	244	644	(568)	(400)	139	497	897	1,287
Material related expenses	12	44	267	(255)	(223)	73	234	629	(557)	(396)	134	483	878	1,259
Material Burden	0	1	3	(2)	(2)	3	10	14	(12)	(4)	4	14	18	28
Contracts	3	456	(26)	29	481	14	1,314	128	(114)	1,186	26	4,040	2,854	256
Other and Employee Related	66	77	184	(117)	(106)	313	1,233	1,442	(1,128)	(208)	635	1,666	1,874	2,883
Employee Related	62	71	63	(1)	9	302	389	487	(185)	(99)	624	806	905	975
Other Costs	5	6	121	(116)	(115)	11	845	954	(943)	(110)	11	860	969	1,908
Facility Charge	8	8	9	(1)	(1)	48	47	50	(1)	(2)	96	95	98	99
IT-DEVICEFEES	15	17	19	(3)	(1)	90	97	100	(10)	(2)	180	199	202	200
Vehicles	23	45	53	(30)	(9)	123	207	198	(75)	8	240	460	451	397
Activity Types	8	66	16	(8)	50	41	270	169	(128)	102	88	668	567	337
Supervision and Management	10	7	4	7	3	57	46	41	16	5	115	96	92	83

*PCC Cost In Report Excludes Churn: Supervision & Management and Activity Types

2012 Gas Operations Headcount & Recruitment

									May Recruitment (2)			
Cost Center		Job Band	Jun Act	Jun CY1	Jun CY1 to Jun Act Variance	(1) Dec Sanctioned / CY1 Plan	Dec Sanctioned to June Actual Var	Dec Sactioned to (June Act + Recruitment)	Draft	On Hold	Open	Total
			a	b	c	d	e	f	g	h	i	j
					b-a		d-a	d-(a+j)				g+h+i
PGE1PUBSAFEIM	Public Safety & Integrity Management	PL1	60.00	65 00	5.00	94.00	34.00	23.00	4.00		7 00	11.00
		PL2	7.00	9 00	2.00	14.00	7.00	1.00			6 00	6.00
		PL3	3.00	2 00	-1.00	3.00	0.00	(1.00)			1 00	1.00
		A&T	11.00	2 00	-9.00	3.00	(8.00)	(8.00)				0.00
		ESC	6.00	6 00	0.00	11.00	5.00	3.00			2 00	2.00
		Executive	1.00	1 00	0.00	1.00	0.00	0.00				0.00
		BEW	1.00	1 00	0.00	5.00	4.00	4.00				0.00
		Unknown		8 00	8.00	8.00	8.00	8.00				0.00
		Total	89.00	94 00	5.00	139.00	50.00	30.00	4.00	0.00	16 00	20.00

***Notes**

(1) Sanctioned HC increased from 4,306 to 4,440 (increase of 134 Dec HC) with transition of Scheduling and Dispatch from Customer Care to Gas Operations effective with June Reporting

(2) June Recruitment: The recruiting report isn't available from HR for the next month or two as a result of the transition to our new Talent Connect.

May recruitment presented for comparative purposes only

Draft position not posted but is in process; this could be for several reasons including getting a job description from the hiring manager

On Hold not actively recruiting at this time or holding for a later date; this could be for several reasons including waiting until 3rd quarter for some other purpose

Open actively recruiting for the position

Source: [redacted] in HR Data Services

Functional Reports

Project Engineering & Design (Soto)

June 2012

Project Engineering & Design (Soto)

	Current Month					Year-to-Date					Full Year			
Cost In	**(a) Jun Plan (DET)**	**(e) Jun CY Fcast (CY1)**	**(b) Jun Actual**	**(c=a-b) Jun Variance (Plan)**	**(f=e-b) Jun Variance (Cycle)**	**(h) YTD Jun Plan (DET)**	**(l) YTD CY Fcst (Cycle)**	**(i) YTD Actual**	**(j=h-i) YTD Variance (Plan)**	**(m=l-i) YTD Variance (Cycle)**	**Annual Plan (DET)**	**Annual CY Fcst**	**ACT + Rmng CY Plan**	**Run Rate**
Cost In Total (excl churn)	**$3,483**	**$4,194**	**$3,835**	**($352)**	**$359**	**$19,661**	**$20,094**	**$18,933**	**$728**	**$1,161**	**$39,555**	**$51,851**	**$50,690**	**$37,867**
PG&E Labor	2,906	3,429	3,136	(231)	293	17,203	16,062	14,757	2,446	1,305	34,372	43,915	42,610	29,514
Productive Time	1,959	2,323	2,123	(163)	200	11,232	10,440	9,558	1,674	882	22,230	28,496	27,614	19,116
Non Productive Time	185	243	263	(78)	(20)	1,590	1,638	1,553	37	85	3,445	4,780	4,695	3,106
Labor Burden	761	864	751	10	112	4,380	3,985	3,646	734	339	8,697	10,639	10,301	7,292
Non PG&E Labor	1	2	147	(146)	(145)	31	963	1,605	(1,575)	(642)	234	1,173	1,815	3,210
Consulting	1	1	82	(81)	(81)	16	898	1,393	(1,377)	(495)	218	1,100	1,595	2,786
Staff Augmentation		1	65	(65)	(64)	14	65	212	(198)	(147)	16	73	220	425
Material Total	23	73	13	10	60	168	229	92	76	137	304	665	528	184
Material related expenses	23	66	13	10	53	159	210	91	68	119	291	599	480	182
Material Burden	1	8	0	0	7	9	19	1	8	18	13	66	48	2
Contracts	265	290	167	98	123	585	982	768	(183)	214	1,247	1,794	1,580	1,536
Other and Employee Related	107	260	176	(69)	84	590	945	709	(119)	236	1,277	2,554	2,318	1,418
Employee Related	92	245	168	(76)	77	508	882	665	(157)	217	1,108	2,401	2,184	1,329
Other Costs	15	16	9	7	7	82	64	44	37	19	169	153	134	89
Facility Charge	40	40	46	(6)	(6)	238	232	244	(6)	(12)	477	470	482	488
IT-DEVICEFEES	32	32	34	(2)	(1)	188	193	196	(8)	(3)	376	383	386	392
Vehicles	24	24	53	(28)	(28)	153	162	195	(42)	(33)	311	318	351	390
Activity Types	21	21	42	(21)	(21)	151	138	186	(35)	(48)	284	263	312	372
Supervision and Management	64	22	21	42	1	354	188	181	173	7	673	315	309	362

*PCC Cost In Report Excludes Churn: Supervision & Management and Activity Types

2012 Gas Operations Headcount & Recruitment

									May Recruitment (2)			
Cost Center		Job Band	Jun Act	Jun CY1	Jun CY1 to Jun Act Variance	(1) Dec Sanctioned / CY1 Plan	Dec Sanctioned to June Actual Var	Dec Sactioned to (June Act + Recruitment)	Draft	On Hold	Open	Total
			a	b	c	d	e	f	g	h	i	j
					b-a		d-a	d-(a+j)				g+h+i
PGE1PROJENGDEN	Project Engineering & Design	PL1	80.00	107.00	27.00	129.00	49.00	(1.00)	6.00		44.00	50.00
		PL2	14.00	13.00	-1.00	16.00	2.00	(6.00)	2.00		6.00	8.00
		PL3	2.00	4.00	2.00	5.00	3.00	1.00			2.00	2.00
		A&T	5.00	5.00	0.00	4.00	(1.00)	(2.00)			1.00	1.00
		ESC	136.75	128.75	-8.00	223.75	87.00	66.00			21.00	21.00
		BEW	3.00	4.00	1.00	4.00	1.00	1.00				0.00
		Hiring Hall	14.00	2.00	-12.00	2.00	(12.00)	(12.00)				0.00
		Unknown			0		0.00	0.00				0.00
		Total	254.75	263.75	9.00	383.75	129.00	47.00	8.00	0.00	74.00	82.00

***Notes**
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May recruitment presented for comparative purposes only
Draft position not posted but is in process; this could be for several reasons including getting a job description from the hiring manager
On Hold not actively recruiting at this time or holding for a later date; this could be for several reasons including waiting until 3rd quarter for some other purpose
Open actively recruiting for the position

Source: [redacted] in HR Data Services

Functional Reports

Investment Planning ([redacted])

June 2012

Investment Planning ([redacted])

	Current Month					Year-to-Date					Full Year			
Cost In	**(a) Jun Plan (DET)**	**(e) Jun CY Fcast (CY1)**	**(b) Jun Actual**	**(c=a-b) Jun Variance (Plan)**	**(f=e-b) Jun Variance (Cycle)**	**(h) YTD Jun Plan (DET)**	**(l) YTD CY Fcst (Cycle)**	**(i) YTD Actual**	**(j=h-i) YTD Variance (Plan)**	**(m=l-i) YTD Variance (Cycle)**	**Annual Plan (DET)**	**Annual CY Fcst**	**ACT + Rmng CY Plan**	**Run Rate**
Cost In Total (excl churn)	**$166**	**$444**	**$240**	**($74)**	**$204**	**$965**	**$1,550**	**$1,187**	**($223)**	**$363**	**$2,039**	**$4,739**	**$4,376**	**$2,375**
PG&E Labor	157	307	213	(56)	94	874	1,206	1,062	(189)	144	1,792	3,421	3,278	2,125
Productive Time	102	198	155	(53)	43	562	790	717	(156)	72	1,144	2,180	2,108	1,435
Non Productive Time	14	27	6	8	21	85	91	62	23	29	193	352	323	123
Labor Burden	41	82	52	(11)	30	228	325	284	(56)	42	455	889	847	567
Non PG&E Labor						6			6		74	68	68	
Consulting						6			6		74	68	68	
Material Total	0	0	1	(1)	(1)	1	5	5	(4)	(0)	4	11	11	10
Material related expenses	0	0	1	(1)	(1)	1	5	5	(4)	(0)	4	11	11	10
Material Burden	0	0	0	(0)	(0)	0	0	0	(0)	(0)	0	0	0	0
Contracts		111	0	(0)	111	0	222	1	(1)	221	1	890	669	2
Other and Employee Related	3	20	16	(13)	4	18	64	59	(41)	5	33	228	222	118
Employee Related	3	19	16	(13)	4	18	64	59	(41)	5	35	226	221	118
Other Costs	0	0	0	(0)	0	0	0	0	(0)	0	(1)	1	1	0
Facility Charge	3	3	3	(0)	(0)	15	15	16	(0)	(1)	31	31	31	32
IT-DEVICEFEES	2	2	2	(0)	(0)	13	14	14	(1)	(0)	25	26	26	28
Vehicles	1	1	1	(0)	(0)	4	5	6	(2)	(1)	8	9	10	12
Activity Types	1	1	4	(3)	(3)	34	19	24	10	(5)	71	56	60	48

*PCC Cost In Report Excludes Churn: Supervision & Management and Activity Types

2012 Gas Operations Headcount & Recruitment

									May Recruitment (2)			
Cost Center		Job Band	Jun Act	Jun CY1	Jun CY1 to Jun Act Variance	(1) Dec Sanctioned / CY1 Plan	Dec Sanctioned to June Actual Var	Dec Sactioned to (June Act + Recruitment)	Draft	On Hold	Open	Total
			a	b	c	d	e	f	g	h	i	j
					b-a		d-a	d-(a+j)				g+h+i
PGE1INVESTPLAN	Investment Planning	PL1	5.00	11.00	6.00	16.00	11.00	7.00			4.00	4.00
		PL2	2.00	4.00	2.00	4.00	2.00	1.00			1.00	1.00
		PL3	2.00	2.00	0.00	3.00	1.00	(1.00)			2.00	2.00
		A&T	3.00	5.25	2.25	3.25	0.25	0.25				0.00
		Executive	1.00	1.00	0.00	1.00	0.00	0.00				0.00
		Total	13.00	23.25	10.25	27.25	14.25	7.25	0.00	0.00	7.00	7.00

***Notes**
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May recruitment presented for comparative purposes only
Draft position not posted but is in process; this could be for several reasons including getting a job description from the hiring manager
On Hold not actively recruiting at this time or holding for a later date; this could be for several reasons including waiting until 3rd quarter for some other purpose
Open actively recruiting for the position

Functional Reports

Gas Transmission Operation Maintenance & Construction (Johnson)

June 2012

Gas Transmission Operation Maintenance & Construction (Johnson)

	Current Month					Year-to-Date					Full Year			
Cost In	(a) Jun Plan (DET)	(e) Jun CY Fcast (CY1)	(b) Jun Actual	(c=a-b) Jun Variance (Plan)	(f=e-b) Jun Variance (Cycle)	(h) YTD Jun Plan (DET)	(l) YTD CY Fcst (Cycle)	(i) YTD Actual	(j=h-i) YTD Variance (Plan)	(m=l-i) YTD Variance (Cycle)	Annual Plan (DET)	Annual CY Fcst	ACT + Rmng CY Plan	Run Rate
Cost In Total (excl churn)	**$6,033**	**$6,476**	**$12,205**	**($6,172)**	**($5,729)**	**$32,937**	**$35,486**	**$43,654**	**($10,717)**	**($8,167)**	**$71,576**	**$81,104**	**$89,272**	**$87,307**
PG&E Labor	4,957	4,476	4,332	625	144	26,645	23,312	22,768	3,877	544	58,524	57,006	56,462	45,536
Productive Time	3,450	3,057	3,127	322	(70)	18,217	16,107	15,931	2,286	176	39,920	38,562	38,386	31,863
Non Productive Time	478	411	269	209	142	2,755	1,937	1,732	1,022	205	6,574	5,822	5,617	3,464
Labor Burden	1,030	1,008	936	94	72	5,673	5,268	5,105	568	164	12,030	12,622	12,459	10,209
Non PG&E Labor	9	26	1,522	(1,512)	(1,496)	74	998	3,172	(3,098)	(2,174)	133	1,153	3,327	6,345
Consulting	6	4	1,444	(1,438)	(1,440)	56	691	2,750	(2,694)	(2,059)	88	714	2,773	5,500
Staff Augmentation	3	22	77	(74)	(55)	18	307	422	(404)	(115)	45	439	554	845
Material Total	76	158	466	(390)	(308)	539	893	1,195	(656)	(302)	1,165	2,003	2,305	2,390
Material related expenses	75	154	457	(383)	(303)	520	867	1,168	(648)	(301)	1,129	1,946	2,247	2,336
Material Burden	1	4	9	(7)	(5)	19	26	27	(8)	(1)	36	56	57	54
Contracts	37	191	4,463	(4,425)	(4,272)	218	3,439	10,328	(10,110)	(6,889)	519	4,488	11,376	20,656
Other and Employee Related	225	833	590	(366)	243	1,374	2,924	2,382	(1,008)	543	2,729	7,908	7,365	4,764
Employee Related	195	560	296	(101)	264	1,199	1,886	1,367	(168)	519	2,378	5,242	4,723	2,734
Other Costs	30	273	294	(265)	(21)	175	1,039	1,015	(840)	24	351	2,665	2,642	2,030
Facility Charge	22	24	26	(3)	(1)	134	135	138	(3)	(3)	270	272	275	275
IT-DEVICEFEES	41	55	59	(17)	(4)	244	275	281	(36)	(5)	488	600	606	562
Vehicles	294	409	509	(214)	(99)	1,830	2,038	1,991	(161)	47	3,637	4,507	4,460	3,982
Activity Types	145	266	213	(67)	53	806	1,209	1,162	(356)	47	1,543	2,617	2,570	2,324
Supervision and Management	225	38	27	199	12	1,074	262	238	836	25	2,568	551	526	475

*PCC Cost In Report Excludes Churn: Supervision & Management and Activity Types

2012 Gas Operations Headcount & Recruitment

									May Recruitment (2)			
Cost Center		Job Band	Jun Act	Jun CY1	Jun CY1 to Jun Act Variance	(1) Dec Sanctioned / CY1 Plan	Dec Sanctioned to June Actual Var	Dec Sactioned to (June Act + Recruitment)	Draft	On Hold	Open	Total
			a	b	c	d	e	f	g	h	i	j
					b-a		d-a	d-(a+j)				g+h+i
PGE1GASTRANOMC	Gas Transmission Operation Maint & Const	PL1	61.00	78 00	17 00	108.00	47 00	21 00			26 00	26 00
		PL2	16.00	14 00	-2 00	18.00	2 00	(2 00)			4 00	4 00
		PL3	5.00	5 00	0 00	5.00	0 00	(1 00)	1 00			1 00
		A&T	10.00	9 00	-1 00	9.00	(1 00)	(4 00)			3 00	3 00
		ESC	19.00	25 00	6 00	27.00	8 00	4 00			4 00	4 00
		Executive	1.00	1 00	0 00	1.00	0 00	0 00				0 00
		BEW	182.00	210 00	28 00	261.00	79 00	61 00			18 00	18 00
		Hiring Hall	5.00	3 00	-2 00	3.00	(2 00)	(2 00)				0 00
		Unknown		4 00	4 00	4.00	4 00	4 00				0 00
		Total	299.00	349 00	50 00	436.00	137 00	81 00	1 00	0.00	55 00	56 00

*Notes

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Open actively recruiting for the position

Source: [redacted] in HR Data Services

Productive Capacity Factor

Resource		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Avg
GT GC														
	2012 DET	88.0%	88.0%	88.0%	91.0%	91.0%	91.0%	91.0%	89.0%	89.0%	89.0%	74.0%	74.0%	86.9%
	2012 CY1					85.0%	85.0%	85.0%	85.0%	83.0%	83.0%	82.0%	82.0%	83.8%
	2012 Actual Overall	79.5%	68.0%	55.8%	70.0%	83.4%	85.1%							73.6%
	2012 Billable Only*	103.7%	99.8%	83.9%	81.2%	91.9%	95.4%							92.6%
	2011 Actual Overall	93.3%	76.1%	79.8%	99.5%	67.9%	91.9%	105.4%	70.6%	95.1%	87.3%	78.3%	89.5%	86.2%
	2011 Billable Only*	98.6%	84.0%	83.1%	99.7%	69.1%	101.1%	112.7%	76.3%	102.8%	93.5%	85.5%	95.8%	91.9%
GT M&O														
	2012 DET	81.0%	81.0%	81.0%	81.0%	81.0%	81.0%	86.0%	86.0%	86.0%	84.0%	84.0%	84.0%	83.0%
	2012 CY1					80.0%	81.2%	82.2%	83.2%	82.7%	82.0%	82.9%	84.0%	82.3%
	2012 Actual Overall	80.4%	74.2%	97.8%	72.4%	74.4%	90.3%							81.6%
	2012 Billable Only*	85.4%	79.3%	94.0%	74.3%	79.1%	94.9%							84.5%
	2011 Actual Overall	85.5%	77.9%	76.8%	84.6%	81.5%	82.1%	87.1%	82.6%	82.9%	89.1%	84.6%	88.8%	83.6%
	2011 Billable Only*	87.8%	83.0%	81.4%	90.1%	85.8%	87.3%	91.2%	87.9%	84.2%	93.9%	88.9%	93.7%	87.9%
GT Const Mgmt**														
	2012 DET	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2012 CY1					85.0%	80.2%	70.0%	70.0%	60.0%	81.0%	60.0%	60.0%	70.8%
	2012 Actual Overall	N/A	N/A	N/A	N/A	51.3%	57.6%							54.4%
	2012 Billable Only*	N/A	N/A	N/A	N/A	-43.3%	0.0%							-21.6%
	2011 Actual Overall	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2011 Billable Only*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

- GT Construction DET: overall 6 points lower productivity as management is focused on staffing
- GT Construction CY1: minimal variance
- GT M&O DET: overall 9 points higher productivity due to higher amounts of OT than planned which resulting in increased time billed to projects
- GT M&O CY1: overall 9 points higher productivity due to higher amounts of OT than planned which resulting in increased time billed to projects
- GT Const Mgmt lower due to management being focused on staffing as well as current workforce is primarily contractors and new employees that require training

Notes:
Productive capacity factor = billed time / productive time
* Billable Productive Capacity Factor reflects the Productive Capacity of only billable employees, with the time of non-billable employees excluded

Overtime & Double-Time 2012 CY1 Plan vs. June Actual

A	B = C + D	C	D	E = F + G	F	G	H = E - B
Resource	**Jun OT & DT**	**Jun OT**	**Jun DT**	**CY1 OT & DT**	**CY1 OT**	**CY1 DT**	**CY1 Variance Fav/(Unfav)**
GT GC	77.7%	49.9%	27.8%	25.0%	20.0%	5.0%	(52.7%)
GT M&O	35.8%	25.1%	10.7%	28.8%	19.5%	9.3%	(7.0%)
GT Const Mgmt	9.7%	9.7%	0.0%	12.0%	10.3%	1.7%	2.3%

- GT GC: 53 points higher mainly as a result of contractors not getting excavations done prior to the clearances as well as increased complexities around clearances (multiple tap and cut locations or multiple tie locations) which results in extensive labor that runs into OT.
- GT M&O: 7 points higher mainly due to increased work load with Hyrdrotesting, ILI and Valve Automation.
- GT Const Mgmt: 2 points lower mainly due to lower than planned headcount (billable) which has lead to lower OT levels.

Notes:
*GT Construction includes GC Testing & Maintenance and GT Construction Management

2012 Standard Rates - Transmission

GT GC*	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2011 Actual	N/A	N/A	N/A	N/A	N/A	N/A	119.70	123.03	134.33	136.56	160.00	208.93
2012 Actual	215.57	286.64	273.17	195.64	172.41	193.58						
2012 DET	150.73	150.73	150.73	150.73	150.73	150.73	150.73	150.73	150.73	150.73	150.73	150.73
2012 CY1					158.29	158.29	158.29	158.29	158.29	158.29	158.29	158.29

GT M&O - Northern	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2011 Actual	120.64	131.68	117.81	125.16	120.16	128.63	137.54	128.14	123.97	108.94	128.15	126.04
2012 Actual	123.22	141.18	122.53	131.01	139.29	156.19						
2012 DET	133.98	133.98	133.98	133.98	133.98	133.98	133.98	133.98	133.98	133.98	133.98	133.98
2012 CY1					128.15	128.15	128.15	128.15	128.15	128.15	128.15	128.15

GT M&O - Central	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2011 Actual	124.81	143.21	133.66	124.43	133.56	113.57	117.53	111.52	108.03	113.35	127.53	131.96
2012 Actual	127.98	145.42	103.15	162.06	150.05	132.17						
2012 DET	129.95	129.95	129.95	129.95	129.95	129.95	129.95	129.95	129.95	129.95	129.95	129.95
2012 CY1					126.33	126.33	126.33	126.33	126.33	126.33	126.33	126.33

GT M&O - Southern	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2011 Actual	122.04	135.83	128.06	126.98	144.48	135.61	136.17	121.22	143.34	122.61	149.03	140.80
2012 Actual	134.34	144.53	115.89	147.96	144.41	150.72						
2012 DET	130.33	130.33	130.33	130.33	130.33	130.33	130.33	130.33	130.33	130.33	130.33	130.33
2012 CY1					134.97	134.97	134.97	134.97	134.97	134.97	134.97	134.97

GT Const Mgmt**	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2011 Actual	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
2012 Actual	N/A	N/A	N/A	N/A	371.03	301.18						
2012 DET	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
2012 CY1					151.63	163.52	156.58	144.37	209.11	124.66	191.76	230.70

- GT Construction DET & CY1: higher rate due to time not charged as majority of staff is in management; rate will decrease as number of field personnel increases
- GT M&O Northern DET & CY1: higher rate due to increased supervision and management costs, increased vehicle costs and increased training.
- GT M&O Central DET & CY1: higher rate due to increased supervision and management costs, increased vehicle costs and increased material costs.
- GT M&O Southern DET & CY1: higher rate due to increased supervision and management costs, increased vehicles costs and increased OT costs.
- GT Const Mgmt DET & CY1: higher rate due to significantly lower than planned construction hours billed out (~2,500) because of lower than planned headcount.

Notes:
Actual Rates = Actual Cost In / Hours Out – this is equivalent to the rate needed to be charged in order to clear costs.
*GT Construction was newly formed in July 2011

Functional Reports

Gas Distribution Maintenance & Construction (Knapp)

June 2012

Gas Distribution Maintenance & Construction (Knapp)

	Current Month					Year-to-Date					Full Year			
Cost In	(a) Jun Plan (DET)	(e) Jun CY Fcast (CY1)	(b) Jun Actual	(c=a-b) Jun Variance (Plan)	(f=e-b) Jun Variance (Cycle)	(h) YTD Jun Plan (DET)	(l) YTD CY Fcst (Cycle)	(i) YTD Actual	(j=h-i) YTD Variance (Plan)	(m=l-i) YTD Variance (Cycle)	Annual Plan (DET)	Annual CY Fcst	ACT + Rmng CY Plan	Run Rate
Cost In Total (excl churn)	**$43,296**	**$41,898**	**$44,982**	**($1,686)**	**($3,085)**	**$261,063**	**$251,814**	**$254,163**	**$6,900**	**($2,349)**	**$529,351**	**$512,030**	**$514,379**	**$508,326**
PG&E Labor	31,895	31,484	31,452	443	32	191,489	190,148	189,512	1,977	637	389,558	386,773	386,137	379,024
Productive Time	21,412	21,334	21,795	(384)	(462)	126,354	128,574	128,796	(2,442)	(221)	255,436	257,795	258,017	257,591
Non Productive Time	3,338	3,269	2,893	445	376	22,220	19,885	19,279	2,941	606	48,661	45,642	45,036	38,559
Labor Burden	7,146	6,882	6,764	381	117	42,915	41,689	41,437	1,478	252	85,462	83,336	83,084	82,874
Non PG&E Labor	89	177	26	64	151	506	564	272	234	292	1,094	1,504	1,212	545
Consulting	81	168	11	70	157	465	525	220	246	305	1,013	1,420	1,115	439
Staff Augmentation	9	10	15	(6)	(5)	41	39	53	(11)	(13)	81	84	98	106
Material Total	1,129	1,261	1,095	34	167	7,820	8,316	8,499	(679)	(183)	15,437	16,641	16,824	16,997
Material related expenses	1,077	1,208	1,046	31	162	7,498	7,937	8,114	(616)	(177)	14,773	15,914	16,091	16,228
Material Burden	51	53	48	3	5	322	379	385	(62)	(6)	664	727	733	769
Contracts	143	192	136	6	55	810	949	926	(116)	23	1,684	2,121	2,098	1,853
Other and Employee Related	1,563	1,742	2,044	(481)	(302)	9,826	10,330	10,144	(318)	186	19,989	21,683	21,497	20,288
Employee Related	871	937	575	296	362	5,689	6,049	6,103	(414)	(54)	11,555	12,374	12,428	12,206
Other Costs	693	805	1,469	(777)	(665)	4,137	4,281	4,041	96	240	8,433	9,309	9,069	8,082
Facility Charge	479	467	529	(50)	(61)	2,873	2,709	2,832	41	(123)	5,740	5,507	5,630	5,664
IT-DEVICEFEES	429	438	455	(26)	(18)	2,564	2,595	2,621	(57)	(26)	5,126	5,208	5,234	5,242
Vehicles	4,334	4,253	7,195	(2,861)	(2,942)	26,285	25,922	28,876	(2,591)	(2,954)	52,578	51,803	54,757	57,753
Activity Types	909	930	1,139	(230)	(209)	5,246	4,399	4,687	560	(288)	10,513	9,205	9,493	9,374
Supervision and Management	2,327	954	912	1,415	42	13,644	5,881	5,794	7,850	87	27,632	11,583	11,496	11,587

*PCC Cost In Report Excludes Churn: Supervision & Management and Activity Types

2012 Gas Operations Headcount & Recruitment

									May Recruitment (2)			
Cost Center		Job Band	Jun Act	Jun CY1	Jun CY1 to Jun Act Variance	(1) Dec Sanctioned / CY1 Plan	Dec Sanctioned to June Actual Var	Dec Sactioned to (June Act + Recruitment)	Draft	On Hold	Open	Total
			a	b	c	d	e	f	g	h	i	j
					b-a		d-a	d-(a+j)				g+h+i
PGE1GASDISTMC	Gas Distribution Maintenance & Constr	PL1	161.00	228.00	67.00	244.00	83.00	52.00			31.00	31.00
		PL2	31.00	32.00	1.00	32.00	1.00	(2.00)			3.00	3.00
		PL3	9.00	9.00	0.00	9.00	0.00	(2.00)			2.00	2.00
		A&T	15.00	12.00	-3.00	12.00	(3.00)	(3.00)				0.00
		ESC	78.00	65.00	-13.00	78.00	0.00	(2.00)			2.00	2.00
		Executive	2.00	1.00	-1.00	1.00	(1.00)	(1.00)				0.00
		BEW	2,278.00	2,298.00	20.00	2,368.00	90.00	(74.00)			164.00	164.00
		Hiring Hall	75.00	75.00	0.00	57.00	(18.00)	(18.00)				0.00
		Unknown		1	1	1.00	1.00	1.00				0.00
		Total	2,649.00	2,721.00	72.00	2,802.00	153.00	(49.00)	0.00	0.00	202.00	202.00

*Notes
(1) Sanctioned HC increased from 4,306 to 4,440 (increase of 134 Dec HC) with transition of Scheduling and Dispatch from Customer Care to Gas Operations effective with June Reporting
(2) June Recruitment: The recruiting report isn't available from HR for the next month or two as a result of the transition to our new Talent Connect.
May recruitment presented for comparative purposes only
Draft position not posted but is in process; this could be for several reasons including getting a job description from the hiring manager
On Hold not actively recruiting at this time or holding for a later date; this could be for several reasons including waiting until 3rd quarter for some other purpose
Open actively recruiting for the position

Source: [redacted] in HR Data Services

Productive Capacity Factor - Distribution

Resource		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Avg
D-Gas														
	2012 DET	68.0%	68.0%	68.0%	71.0%	71.0%	72.0%	72.0%	72.0%	72.0%	72.0%	69.0%	67.0%	70.2%
	2012 CY1					75.7%	76.7%	76.6%	76.6%	76.6%	76.0%	73.6%	71.7%	75.4%
	2012 Actual Overall	71.8%	71.3%	64.8%	71.4%	77.9%	79.0%							72.7%
	2012 Billable Only*	81.2%	81.1%	74.4%	81.0%	87.5%	88.9%							82.4%
	2011 Actual Overall	72.2%	59.3%	66.1%	73.5%	70.6%	69.6%	73.3%	72.0%	72.2%	71.0%	70.6%	70.1%	70.0%
	2011 Billable Only*	87.3%	72.3%	76.8%	86.9%	83.6%	83.5%	89.2%	87.2%	87.9%	85.8%	85.8%	85.8%	84.3%
GC-Gas														
	2012 DET	84.0%	84.0%	84.0%	87.0%	89.0%	89.0%	89.0%	89.0%	89.0%	89.0%	89.0%	82.0%	87.0%
	2012 CY1					87.9%	87.9%	87.9%	87.9%	87.9%	87.9%	87.9%	80.9%	87.0%
	2012 Actual Overall	82.8%	83.0%	82.6%	82.8%	87.6%	86.8%							84.3%
	2012 Billable Only*	88.4%	89.1%	88.7%	87.8%	93.6%	92.2%							90.0%
	2011 Actual Overall	85.0%	87.4%	80.7%	86.5%	87.0%	88.0%	90.0%	89.4%	88.8%	89.3%	88.6%	89.1%	87.5%
	2011 Billable Only*	90.5%	93.5%	86.0%	93.0%	92.6%	94.0%	96.4%	96.0%	94.8%	95.0%	95.5%	96.0%	93.6%
D-T&R														
	2012 DET	71.5%	71.5%	71.5%	71.5%	74.5%	74.5%	74.5%	74.5%	74.5%	74.5%	71.5%	71.5%	73.0%
	2012 CY1					82.0%	82.0%	82.0%	82.1%	82.2%	83.7%	79.1%	79.1%	81.5%
	2012 Actual Overall	77.2%	84.3%	81.5%	81.4%	85.3%	84.8%							82.4%
	2012 Billable Only*	85.7%	93.5%	87.1%	89.3%	92.9%	93.9%							90.4%
	2011 Actual Overall	72.3%	66.4%	68.8%	73.0%	75.7%	76.1%	75.2%	73.7%	76.1%	79.4%	80.6%	80.3%	74.8%
	2011 Billable Only*	88.6%	80.1%	83.6%	87.5%	90.6%	91.3%	90.8%	87.4%	90.9%	93.9%	94.2%	94.2%	89.4%
Field Services														
	2012 DET	68.5%	67.7%	67.3%	69.8%	69.7%	70.9%	75.5%	70.1%	69.1%	71.2%	72.2%	71.1%	70.3%
	2012 CY1					67.6%	68.9%	69.0%	68.1%	67.1%	69.3%	70.2%	69.1%	68.7%
	2012 Actual Overall	72.4%	70.1%	69.6%	69.9%	66.2%	65.8%							69.0%
	2012 Billable Only*	79.0%	76.9%	76.5%	77.1%	71.9%	71.6%							75.5%
	2011 Actual Overall	68.6%	67.7%	67.3%	69.7%	69.6%	70.8%	75.1%	70.1%	69.0%	74.5%	78.3%	74.7%	71.3%
	2011 Billable Only*	74.6%	73.9%	73.8%	76.4%	76.2%	77.5%	81.9%	76.6%	75.4%	80.9%	84.5%	80.9%	77.7%

- D-Gas DET: overall 7 points higher productivity due to improved weather allowing more work to be completed
- D-Gas CY1: overall 2 points higher productivity due to improved weather allowing more work to be completed
- GC-Gas DET: overall 2 points lower productivity due to anticipated lower PCF than June DET and training hours.
- GC-Gas CY1: minimal variance
- D-T&R DET: overall 10 points higher productivity due to extensive work in Meter Change-outs, Cathodic Protection, Gas Transmission support and assisting with Leak Repairs and plan initially set too low due to clerical personnel moving to a separate PCC
- D-T&R CY1: overall 3 points higher productivity due to extensive work in Meter Change-outs, Cathodic Protection, Gas Transmission support and assisting with Leak Repairs
- Field Services DET: overall 5 points lower productivity due to managing Leak Repairs and Emergency Response Time Improvement efforts
- Field Services CY1: minimal variance

Notes:
Productive capacity factor = billed time / productive time
* Billable Productive Capacity Factor reflects the Productive Capacity of only billable employees, with the time of non-billable employees excluded

Overtime & Double-Time 2012 CY1 Plan vs. June Actual

A	B = C + D	C	D	E = F + G	F	G	H = E - B
Resource	**Jun OT & DT**	**Jun OT**	**Jun DT**	**CY1 OT & DT**	**CY1 OT**	**CY1 DT**	**CY1 Variance Fav/(Unfav)**
D-Gas	29.0%	21.2%	7.7%	25.4%	21.1%	4.3%	(3.6%)
D-T&R	27.9%	20.3%	7.6%	21.3%	16.5%	4.7%	(6.7%)
GC-Gas	26.5%	21.6%	4.9%	23.7%	17.1%	6.7%	(2.7%)
Field Services	17.2%	13.0%	4.2%	16.5%	12.1%	4.4%	(0.7%)

- D-Gas: 4 points higher mainly due to 1) extensive Leak Repair work (FI and 50) due to accelerated leak repair target, 2) additional Mark & Locate work due to improved weather allowing more construction work, and 3) continued Leak Survey work
- D-T&R: 7 points higher mainly due to work in Meter Change-outs, Cathodic Protection, and Gas Transmission support
- GC-Gas: 3 points higher mainly due to GPRP, HPR, and Gas Transmission work.
- Field Services: minimal variance

2012 Standard Rates - Distribution

M&C Gas*	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2011 Actual	146.20	162.77	143.34	130.19	137.59	133.10	136.22	126.29	137.55	132.86	161.32	155.97
2012 Actual	160.21	154.73	160.15	156.59	154.51	161.93						
2012 DET	150.73	150.73	150.73	150.73	150.73	150.73	150.73	150.73	150.73	150.73	150.73	150.73
2012 CY1					158.29	158.29	158.29	158.29	158.29	158.29	158.29	158.29

Gas T&R	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2011 Actual	143.86	166.94	141.97	137.74	130.47	128.56	142.26	128.81	135.58	120.60	139.49	138.40
2012 Actual	147.39	139.45	141.21	130.78	139.98	146.95						
2012 DET	150.52	150.52	150.52	150.52	150.52	150.52	150.52	150.52	150.52	150.52	150.52	150.52
2012 CY1					143.10	143.10	143.10	143.10	143.10	143.10	143.10	143.10

Field Services	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2011 Actual	127.77	149.57	141.55	141.53	142.23	139.74	141.06	141.92	145.20	130.66	132.42	132.87
2012 Actual	141.38	145.07	140.88	142.15	149.33	162.00						
2012 DET	146.82	146.82	146.82	146.82	146.82	146.82	146.82	146.82	146.82	146.82	146.82	146.82
2012 CY1					141.10	141.10	141.10	141.10	141.10	141.10	141.10	141.10

- M&C Gas DET & CY1: higher rate due to lower headcount than planned which reduces overall billable hours.
- Gas T&R DET: lower rate due to higher OT (7 points) as a result of extensive work on Meter Change-outs, Cathodic Protection, Gas Transmission support and assisting with Leak Repairs
- Gas T&R CY1: higher rate due to lower headcount than planned which reduces overall billable hours.
- Field Services DET & CY1: higher rate due to lower headcount than planned which reduces overall billable hours.

Notes:
Actual Rates = Actual Cost In / Hours Out - this is equivalent to the rate needed to be charged in order to clear costs.
*M&C Gas is a combination of GC Gas and Gas Construction

Functional Reports

Gas System Operation (Christopher)

June 2012

Gas System Operation (Christopher)

	Current Month					Year-to-Date					Full Year			
Cost In	**(a) Jun Plan (DET)**	**(e) Jun CY Fcast (CY1)**	**(b) Jun Actual**	**(c=a-b) Jun Variance (Plan)**	**(f=e-b) Jun Variance (Cycle)**	**(h) YTD Jun Plan (DET)**	**(l) YTD CY Fcst (Cycle)**	**(i) YTD Actual**	**(j=h-i) YTD Variance (Plan)**	**(m=l-i) YTD Variance (Cycle)**	**Annual Plan (DET)**	**Annual CY Fcst**	**ACT + Rmng CY Plan**	**Run Rate**
Cost In Total (excl churn)	**$2,032**	**$2,706**	**$2,402**	**($370)**	**$303**	**$12,062**	**$12,898**	**$12,214**	**($152)**	**$685**	**$24,483**	**$31,023**	**$30,338**	**$24,427**
PG&E Labor	1,848	2,433	2,127	(279)	306	10,929	11,588	10,772	157	816	22,188	27,977	27,161	21,545
Productive Time	1,206	1,584	1,402	(196)	182	7,002	7,356	6,842	160	514	14,198	17,739	17,225	13,685
Non Productive Time	167	219	167	0	51	1,129	1,312	1,225	(96)	87	2,321	3,145	3,058	2,450
Labor Burden	475	630	557	(83)	72	2,798	2,920	2,705	94	215	5,669	7,092	6,877	5,410
Non PG&E Labor	12	10	70	(58)	(60)	71	31	180	(110)	(149)	140	89	238	360
Consulting	11	9	65	(54)	(56)	68	31	173	(105)	(142)	136	86	228	346
Staff Augmentation	0	0	5	(4)	(4)	2	1	7	(5)	(6)	4	3	9	14
Material Total	7	13	5	2	8	41	84	49	(8)	35	92	163	128	98
Material related expenses	7	13	5	3	8	40	82	48	(8)	34	91	161	126	96
Material Burden	0	0	0	(0)	(0)	1	1	1	(0)	0	1	2	2	2
Contracts	13	75	20	(6)	55	126	231	122	5	110	268	726	616	243
Other and Employee Related	35	56	50	(16)	6	207	255	347	(140)	(93)	424	664	757	695
Employee Related	33	53	48	(15)	5	200	232	291	(91)	(58)	394	611	669	581
Other Costs	2	3	2	(0)	1	8	22	57	(49)	(34)	30	54	88	113
Facility Charge	43	43	50	(7)	(7)	259	252	265	(7)	(13)	517	511	524	531
IT-DEVICEFEES	23	27	28	(5)	(1)	134	145	148	(14)	(3)	268	306	309	296
Vehicles	2	3	3	(1)	(0)	9	8	9	0	(1)	20	22	22	18
Activity Types	29	28	37	(8)	(9)	166	211	237	(71)	(26)	326	370	396	475
Supervision and Management	21	19	13	7	5	120	93	84	36	9	239	196	187	167

*PCC Cost In Report Excludes Churn: Supervision & Management and Activity Types

2012 Gas Operations Headcount & Recruitment

									May Recruitment (2)			
Cost Center		Job Band	Jun Act	Jun CY1	Jun CY1 to Jun Act Variance	(1) Dec Sanctioned / CY1 Plan	Dec Sanctioned to June Actual Var	Dec Sactioned to (June Act + Recruitment)	Draft	On Hold	Open	Total
			a	b	c	d	e	f	g	h	i	j
					b-a		d-a	d-(a+j)				g+h+i
PGE1GASSYSOPRS	Gas System Operations	PL1	94.50	113.00	18.50	134.00	39.50	19.50	2.00		18.00	20.00
		PL2	19.00	17.00	-2.00	20.00	1.00	(3.00)			4.00	4.00
		PL3	4.00	3.00	-1.00	4.00	0.00	0.00				0.00
		A&T	14.00	14.00	0.00	21.00	7.00	(5.00)	1.00		11.00	12.00
		ESC	14.00	19.00	5.00	19.00	5.00	4.00			1.00	1.00
		BEW	12.00	17.00	5.00	23.00	11.00	11.00				0.00
		Unknown		1	1	1.00	1.00	1.00				0.00
		Total	157.50	184.00	26.50	222.00	64.50	27.50	3.00	0.00	34.00	37.00

***Notes**

(1) Sanctioned HC increased from 4,306 to 4,440 (increase of 134 Dec HC) with transition of Scheduling and Dispatch from Customer Care to Gas Operations effective with June Reporting

(2) June Recruitment: The recruiting report isn't available from HR for the next month or two as a result of the transition to our new Talent Connect.
May recruitment presented for comparative purposes only
Draft position not posted but is in process; this could be for several reasons including getting a job description from the hiring manager
On Hold not actively recruiting at this time or holding for a later date; this could be for several reasons including waiting until 3rd quarter for some other purpose
Open actively recruiting for the position

Source: [redacted] in HR Data Services

ATTACHMENT 45

PG&E Corporation

WARNING: Proprietary Confidential Information

Date: February 10, 2012 **File #:** 12-014 (1B11-0112)

To: VICE PRESIDENT – GAS STANDARDS AND POLICIES

From: INTERNAL AUDITING

Subject: Audit of Gas Damage Prevention Program

JANE K. YURA:

Audit Objective and Scope

As part of our 2011 audit plan, we assessed controls over the effectiveness of the Utility's gas damage prevention program. We focused on processes and controls that the Utility uses to plan, execute, and document the established elements of the damage prevention program, including mark and locate activities, pre-construction field meetings and standbys, aerial patrols, and managing non-compliant excavators. We also examined two emerging issues in damage prevention where the Utility either lacks procedures or existing procedures weren't followed.

Excavation accidents ("dig-ins")[1] are the leading cause of damage to underground gas pipelines nationwide. The Utility is required under federal pipeline safety regulations and California laws and regulations to establish and operate a damage prevention program to manage this risk.[2] The Gas Standards and Policies organization establishes and maintains the Utility's damage prevention standards and work procedures, while applicable groups within the Gas Distribution and Transmission organizations perform the damage prevention work on the pipelines.[3] The Utility spends approximately $34 million annually on the damage prevention program and approximately 120 employees are assigned to damage prevention-related work.

Audit Approach

To perform our work, we (1) reviewed federal and state gas pipeline and utility safety regulations and Utility Operations (UO) Standards and procedures; (2) analyzed the results of previous audits performed in 2009 and 2010 by Internal Auditing (IA) and Gas Quality Assurance (QA),

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[1] The Utility typically has around 2,000 dig-ins annually. About 5-10 percent of these dig-ins are "PG&E At-Fault" events, where the Utility failed to mark its underground assets prior to an excavation, mis-marked the location of the assets, or digs into its own or other utility's marked assets. Dig-ins can result in gas leaks, building evacuations, road closures, customer outages, and costly repairs. Dig-ins can also generate unfavorable media attention.

[2] Title 49 Code of Federal Regulations 192 Subparts L&M, California Government Code Section 4216, and California Code of Regulations Title 8 prescribe the minimum requirements for gas pipeline damage prevention programs.

[3] The Utility operates approximately 42,000 miles of gas distribution mains, 5,800 miles of gas transmission line and 3.3 million gas service lines of varying lengths. Virtually all of these assets are installed underground and are subject to the damage prevention rules.

along with the related corrective action plans; (3) reviewed current damage prevention program documentation; and (4) discussed damage prevention methods and procedures with employees from Gas Standards and Policies, QA, and Gas Distribution and Transmission.

Conclusion

Overall, we conclude that the Utility's processes and controls for damage prevention are not adequate[4] to ensure accurate, consistent, and efficient execution of the damage prevention program. In particular, the Utility needs to improve controls in the following areas: (1) mark and locate, (2) pre-construction meetings and standbys, (3) line marker signage, (4) aerial pipeline patrols, (5) managing excavators who don't comply with damage prevention rules, (6) plastic gas service replacement installations, and (7) protecting pipelines from wheel loading damage from extremely heavy vehicles that may drive over them. These items are discussed below.

Findings and Management Action Plans

1. Mark and Locate Timeliness (Medium Risk)[5]

Background: Federal and state rules require gas pipeline operators to participate in "one-call" notification systems to identify and surface-mark the location of underground utilities in the vicinity of proposed excavations. Utilities are generally required to mark the location of their underground assets within two working days after notification of upcoming excavations, but may renegotiate a later time if mutually agreed upon by the utility and the third-party excavator.

Issue: In 2009 and 2010, IA and QA noted that recordkeeping processes used to establish the on-time performance of the Utility's mark and locate program had a system glitch, in that the time-clock feature of the software would be halted just by opening the record without performing the work or documenting an agreement with the excavator to postpone the work. As a result, the reports for on-time performance generated using this software showed a 99 percent on-time response for 2010 that cannot be relied upon. Interviews with employees in the damage prevention program confirmed that this deficiency has not yet been corrected.

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[4] Internal Auditing uses the classifications of "adequate," "needs strengthening," and "not adequate" in assessing controls.

[5] To classify risks, Internal Auditing uses the categories of low, medium, and high, based on the likelihood and significance of the risk resulting in harm to the Utility.

In 2011, IA received information from field employees that work orders ("tickets") for mark and locate services in certain divisions were several weeks behind schedule. Discussions with management confirmed that unexpectedly high demand for mark and locate services coupled with shortages of employees qualified to perform the work had resulted in tickets worked three to four weeks late in these divisions.

Significance: Failure to complete mark and locate tickets within allowable time limits can delay scheduled construction work and increase the incidence of at-fault dig-ins when excavators commence work without surface markings. In addition, inaccurate recordkeeping of mark and locate timeliness does not allow management to promptly identify, diagnose, and correct potential resource shortages.

Management Action Plan: The Utility will provide an action plan to address this issue by April 20, 2012.

2. <u>Pre-Construction Field Meetings and Construction Standby</u> (Medium Risk)

Background: When underground construction is scheduled near high-priority assets such as high-pressure gas transmission lines, the Utility is required to meet with excavators at the jobsite in advance of the work to discuss allowable work methods, scheduling, and oversight procedures. The Utility must also provide a trained representative to observe the construction, and modify or halt the work if the pipeline is threatened by construction damage.

Issue: During its 2009 audit of the damage prevention program, QA noted that the Utility lacked uniform and consistent methods for developing, updating, and distributing Critical Facility Lists, which identify the location of high-priority assets for mark and locate employees in the field. The Utility also lacks uniform and consistent procedures to ensure that pre-construction field meetings and construction standbys are scheduled, performed properly, and documented. Our interviews with employees in the damage prevention program confirmed that this deficiency has not yet been corrected.

IA was also made aware of an incident in 2011 where a Utility employee on standby duty ordered a Utility contractor to halt work that he considered a threat to the safety of the line, but the contractor refused to comply and continued with the work.

Significance: Failure to consistently identify the location of high-priority facilities during the mark and locate process and to inspect work being performed near these assets increases the likelihood that these facilities may be damaged during construction. Unobserved and/or uncorrected damage can further increase liability for the Utility in the event of subsequent problems on the line traceable to the construction damage. Also, the effectiveness of construction standby as a damage prevention measure is diminished when all parties are not fully trained and responsive to the roles and responsibilities of the standby inspectors, especially orders to halt unsafe work.

Management Action Plan: The Utility will provide an action plan to address this issue by April 20, 2012.

3. Line Markers (Medium Risk)

Background: Federal safety regulations require pipeline operators to install and maintain line marker signs over transmission pipes at road crossings, railroad crossings, and wherever else necessary to reduce the possibility of damage to the transmission line. The Utility typically installs marker signs when pipelines are built such that the next sign in either direction can be seen from any sign along the pipeline. Signs may also be added over time to ensure that the next sign remains visible and to compensate for any development along the pipeline, such as new buildings, highway expansions, and growing landscaping. Because these signs are frequently damaged or destroyed by traffic collisions, farm equipment, vandalism, and theft, sign repair and replacement is an ongoing challenge.

Issue: During its 2009 audit, QA noted that the Utility lacked uniform and consistent methods for repairing and replacing signs found on patrol to be damaged or destroyed. In particular, QA found that missing and damaged line markers are not consistently documented in patrol records and that the Utility has not established a time limit on when markers must be repaired or replaced. QA found that Utility Procedure TD-4412P-09 requires local supervisor to decide where and when to repair or replace line markers. Our interviews with employees in the damage prevention program for this audit confirmed that this procedure remains in effect.

Significance: In addition to being a regulatory safety requirement, line markers remain the first line of defense for preventing excavation damage, especially in agricultural areas where pipelines pass below fields under cultivation. Failure to maintain or replace conspicuous marker signs increases the likelihood that a pipeline may be inadvertently struck by a farm implement or other earthmoving device.

Management Action Plan: The Utility will provide an action plan to address this issue by April 20, 2012.

4. Scheduled Pipeline Patrols (Medium Risk)

Background: In order to comply with federal pipeline safety rules that require patrolling gas transmission lines, the Utility employs fixed-wing aircraft to perform regular patrols to look for threats to the pipelines such as construction, leaks, excavation, blasting, and agricultural earth moving. The procedures for performing and documenting aerial patrols are contained in the Utility's Aerial Pipeline Patrol Manual and Utility Work Procedure WP 4412-07.

Issue: The Patrol Manual specifies that the flight crew is required to document action items noted during aerial patrols and to also document the response to the observation in a file sorted by flight number. During its 2009 audit of the damage prevention program, QA noted that the documentation supporting responses to aerial patrol observations was often missing, and that the Utility did not have a procedure to ensure that required corrective actions were completed. The most recent updates to WP 4412-07 (dated December 14, 2011) have shifted responsibility for writing and overseeing corrective work orders generated during aerial patrols to local management, but the procedures still lack a periodic review step to ensure that all existing work orders are completed.

Significance: Failure to promptly address and fully document corrective actions taken to address pipeline threats, and incomplete assurance that all open work orders identified during patrols are finished, increases the potential for damage to the pipeline and liability to the Utility that could otherwise be prevented.

Management Action Plan: The Utility will provide an action plan to address this issue by April 20, 2012.

5. Non-Compliant Excavators (Medium Risk)

Background: Federal pipeline damage prevention rules require pipeline operators to prepare a list of excavators who normally work around the pipelines and communicate with them as often as needed about the elements of their damage prevention program. In response to these requirements, the Utility adopted a series of measures in Utility Standard 4412 and Gas Information Bulletin 155 for dealing with non-compliant excavators who have histories of repeatedly digging into Utility assets, including meetings, letters, unannounced site visits, and keeping updated lists of non-compliant excavators.

Issue: During its 2009 audit of the damage prevention program, QA noted that the specified methods called out in the Utility's non-compliant excavator program weren't always completed.[6] In responding to these findings, the Utility advised that the existing program was being discontinued. Our interviews with employees in the damage prevention program confirmed that there are no plans to re-implement the non-compliant excavator program.

Significance: Without a comprehensive program to manage non-compliant excavators, the Utility faces an increased risk that the already identified non-compliant parties will continue to damage Utility assets during their underground excavations.

Management Action Plan: The Utility will provide an action plan to address this issue by April 20, 2012.

6. Plastic Service Replacements – Uninstalled Locator Wires (Medium Risk)

Background: In the late 1960s, plastic pipe largely replaced metallic pipe for customer gas service lines. When possible, the Utility inserts new plastic service pipes inside of an existing steel service when the steel pipe is being replaced. Utility standards for this work require that copper locating wire be inserted along with the new plastic pipe in order to aid in locating the service in subsequent years.

Utility standards also allow these plastic insert replacement projects to be completed using a compression-type finishing kit ("Powell kit") at the meter end of the pipe. However, because the Powell kit has no place for the inserted locating wire to emerge at the customer end, the wire is seldom installed. Gas Distribution employees have estimated that since the early 1980s (when this method was adopted) tens of thousands of plastic services have been installed without a locating wire.

Issue: Besides the general control issues associated with failing to adhere to Utility construction standards, gas services installed without locating wires can make subsequent mark and locate efforts difficult, more costly and less effective. In addition, Utility construction standards do not

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[6] In the 2009 audit sample, unannounced site visits were not performed at all, monthly updates to the non-compliant excavator list were distributed annually, notification letters were sent 83 percent as often as required and meetings with non-compliant excavators took place 89 percent of the times needed.

require testing and documenting that a newly-installed plastic service can be located all the way from the meter to the main (using any locating method) before the job is finished. For this audit, IA queried the Gas Incident database and found 17 at-fault dig-ins on plastic pipe that were associated with missing or damaged locating wire in the past two years; 8 of these incidents involved plastic insert replacement projects.

Significance: Allowing construction procedures that conflict with one another to go without resolution, or allowing procedures to be disregarded may give the misperception that compliance with Utility procedures is optional. In addition, installing gas services that are difficult to locate later also increases the risk of a Utility at-fault dig-in on that service.

Management Action Plan: The Utility will provide an action plan to address this issue by April 20, 2012.

7. Non-Excavation Damage to Buried Pipelines – Wheel Loading From Extremely Heavy Vehicles (Medium Risk)

Background: Gas Transmission Line 105-A is a 60-year old, 30-inch diameter steel transmission pipe that runs beneath Hollis Street in Emeryville. On December 20, 2011, a 320-ton mobile crane operated by the Bigge Crane and Rigging Co., drove down Hollis Street over line 105-A at about milepoint 40. Although the contractor had received an encroachment permit to drive the crane on Hollis Street, the Utility was not notified of the plan and did not perform an analysis to determine whether wheel loading of this magnitude could cause damage to the pipe below.

Issue: Because this work did not involve any excavation, the normal damage prevention processes were not activated. The Utility doesn't have any procedures to evaluate which vehicles in the service territory are capable of damaging underground pipelines by driving over them, nor does the Utility have any advance notification process that allows it to appraise which pipelines might be impacted by moving these vehicles.

Significance: Excessive wheel loading caused by moving extremely heavy vehicles can potentially result in damage or breakage of buried gas pipelines below.

Management Action Plan: The Utility will provide an action plan to address this issue by April 20, 2012.

[redacted] performed this audit. We appreciate the cooperation and assistance he received from everyone he contacted. If you have any questions, please contact [redacted], Karen McGovern on ext. 3-6836, or call me on ext. 3-0292.

STEPHEN J. CAIRNS

KAREN R. MCGOVERN

cc: Nickolas Stavropoulos
William D. Hayes
Kirk K. Johnson
Anil K. Suri
Rolando I. Trevino
Michael D. Falk
[redacted]
Barbara M. Reiling
Michelle L. Wilson
Deloitte & Touche LLP

ATTACHMENT 46

PG&E Pacific Gas and Electric Company®

irth Solutions

IRTH/Field Unit/Android Mobile
New Start Time Field & Add Notes

New Start Time Field

What was added?

- IRTHnet, Field Unit, and the Android Mobile application now have a restricted New Start Time field.

NOTE: The New Start Time field will only be available if the "Notification of New Start Time" response is selected. If any other responses are used, this field will be grayed out.

Why?

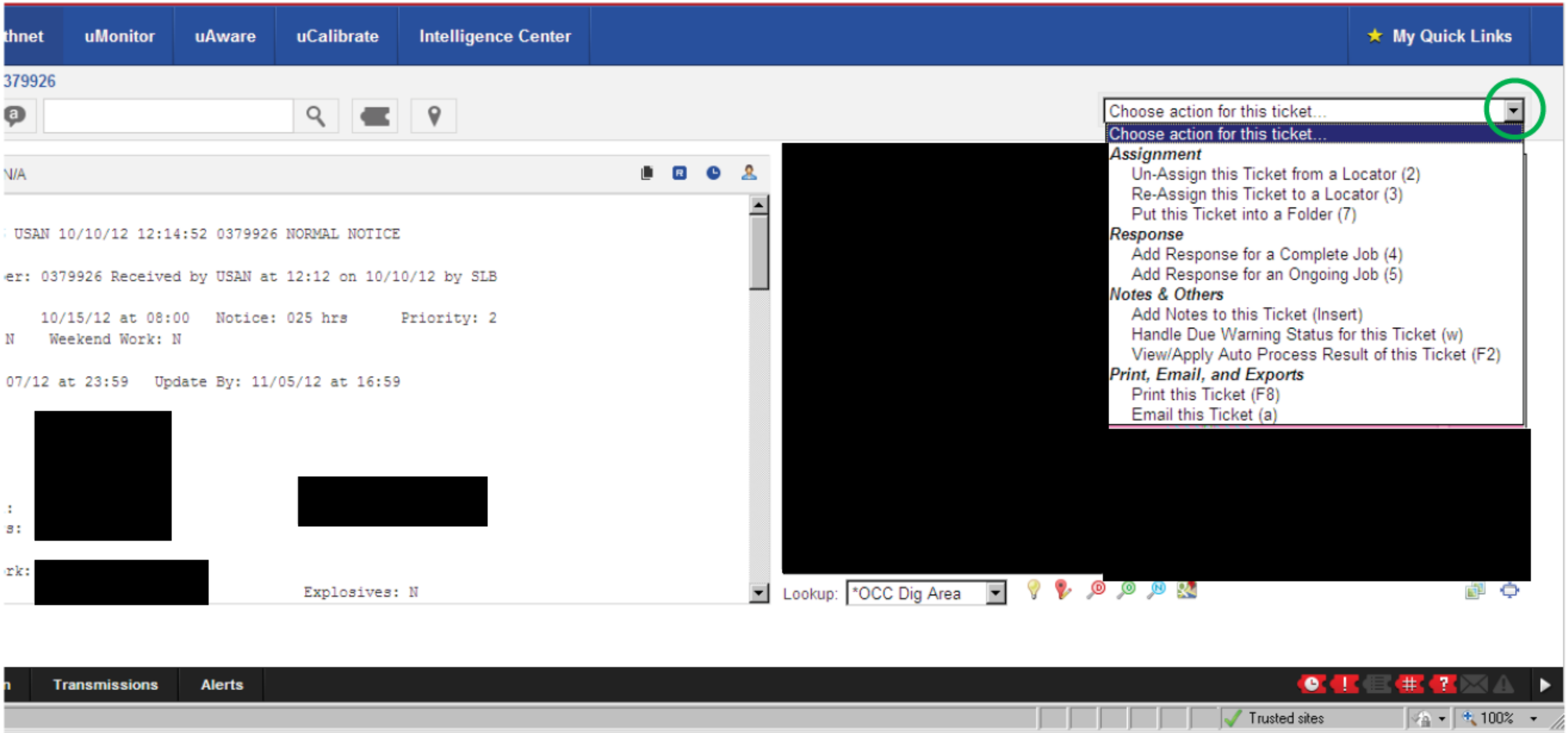
- Safeguard to help ensure the required information is provided when this response is used.

Table Of Contents

ATTENTION: LEAVING A VOICEMAIL WITH THE EXCAVATOR NO LONGER APPLIES AS A VALID METHOD OF CONTACT FOR NOTIFICATION OF NEW START TIME. (It will still be shown as an available option until IRTH is able to remove it. Please do not use it.)

If NO contact was made with the excavator and a new start time was NOT mutually agreed upon, proceed as follows:

Step 1. In Irth, click the arrow to access the pull down action menu.



```
USAN 10/10/12 12:14:52 0379926 NORMAL NOTICE

er: 0379926 Received by USAN at 12:12 on 10/10/12 by SLB

    10/15/12 at 08:00   Notice: 025 hrs     Priority: 2
N    Weekend Work: N

07/12 at 23:59   Update By: 11/05/12 at 16:59
```

[redacted]

:
s:

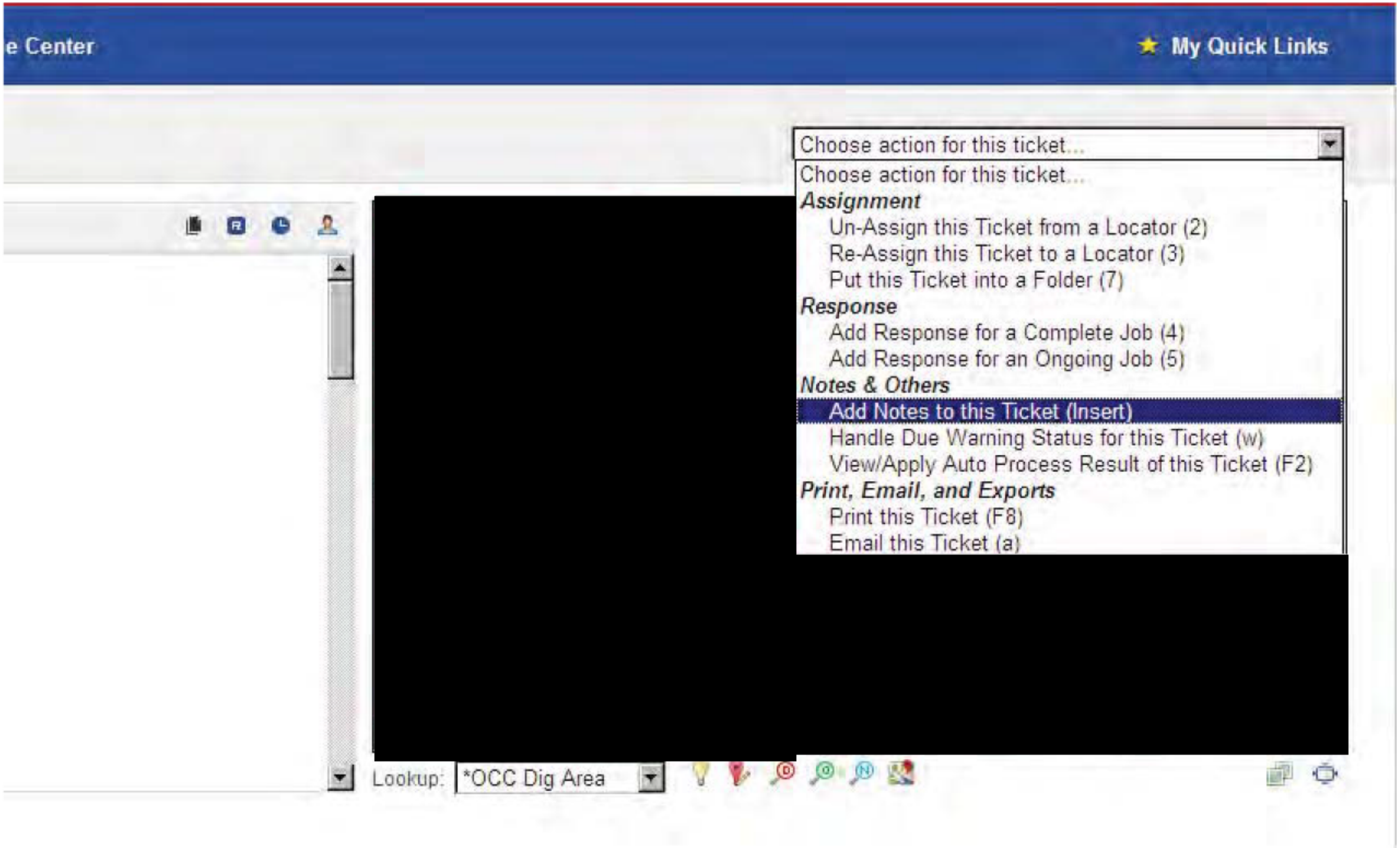
[redacted]

rk: [redacted]

Explosives: N

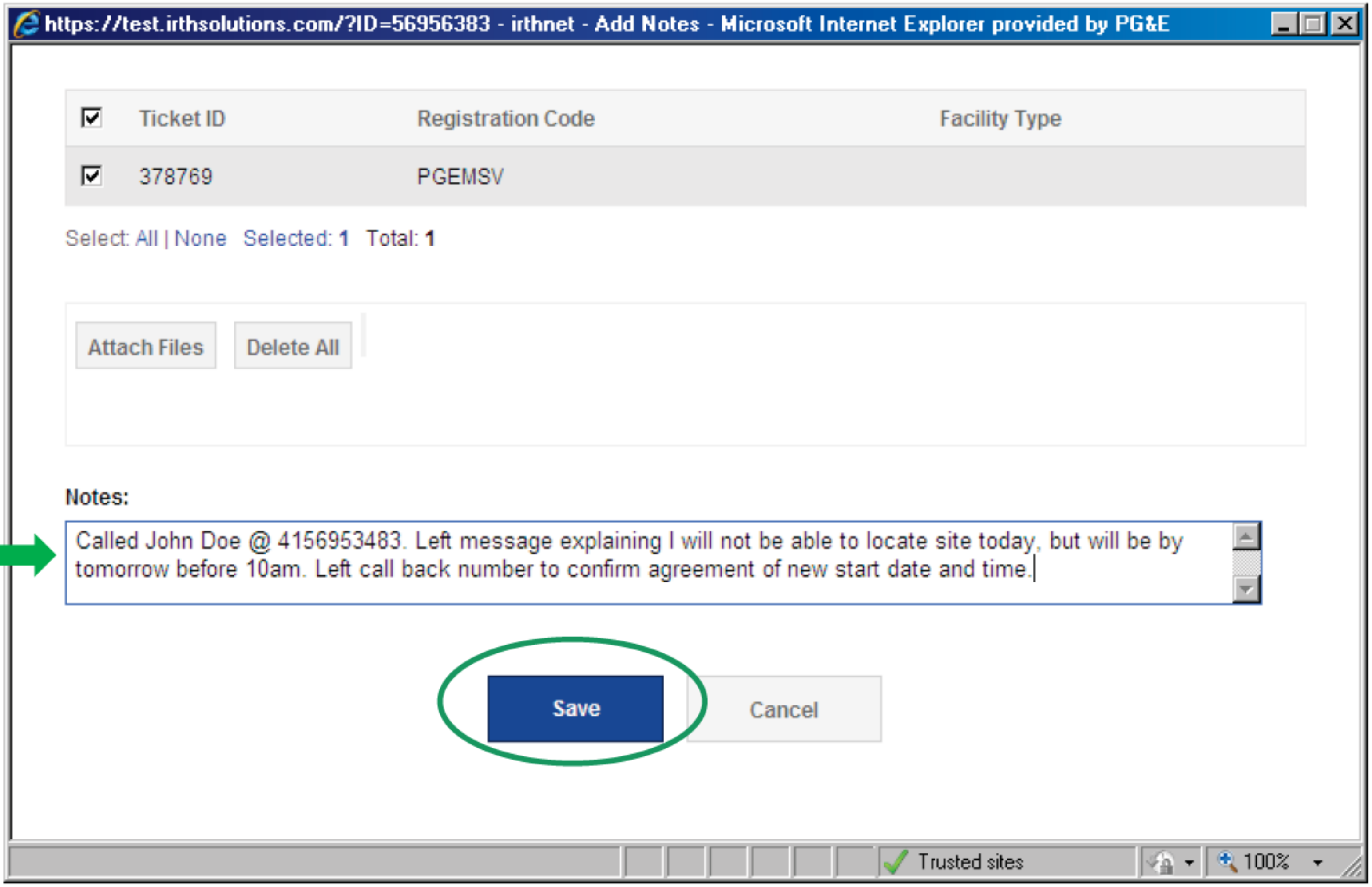
[redacted]

Step 2. Choose "Add Notes to this Ticket".



[redacted]

Step 3. Enter note as shown below into the “Notes:” field.



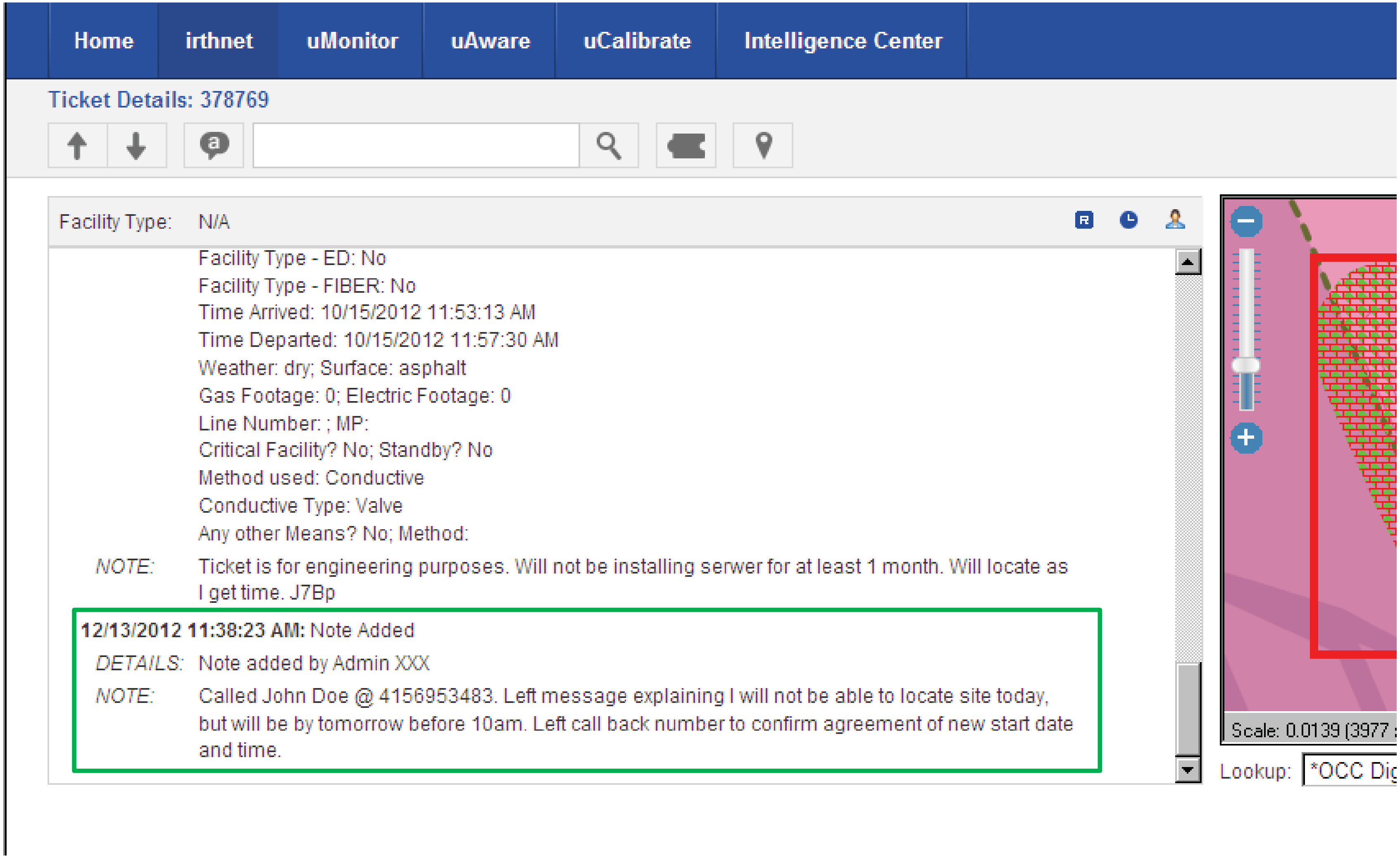
☑	Ticket ID	Registration Code	Facility Type
☑	378769	PGEMSV	

Notes:

Called John Doe @ 4156953483. Left message explaining I will not be able to locate site today, but will be by tomorrow before 10am. Left call back number to confirm agreement of new start date and time.

Step 4. Click “Save” when finished.

Step 5. The note will now be displayed in the ticket history, as shown below.



Ticket Details: 378769

Facility Type: N/A

Facility Type - ED: No
Facility Type - FIBER: No
Time Arrived: 10/15/2012 11:53:13 AM
Time Departed: 10/15/2012 11:57:30 AM
Weather: dry; Surface: asphalt
Gas Footage: 0; Electric Footage: 0
Line Number: ; MP:
Critical Facility? No; Standby? No
Method used: Conductive
Conductive Type: Valve
Any other Means? No; Method:

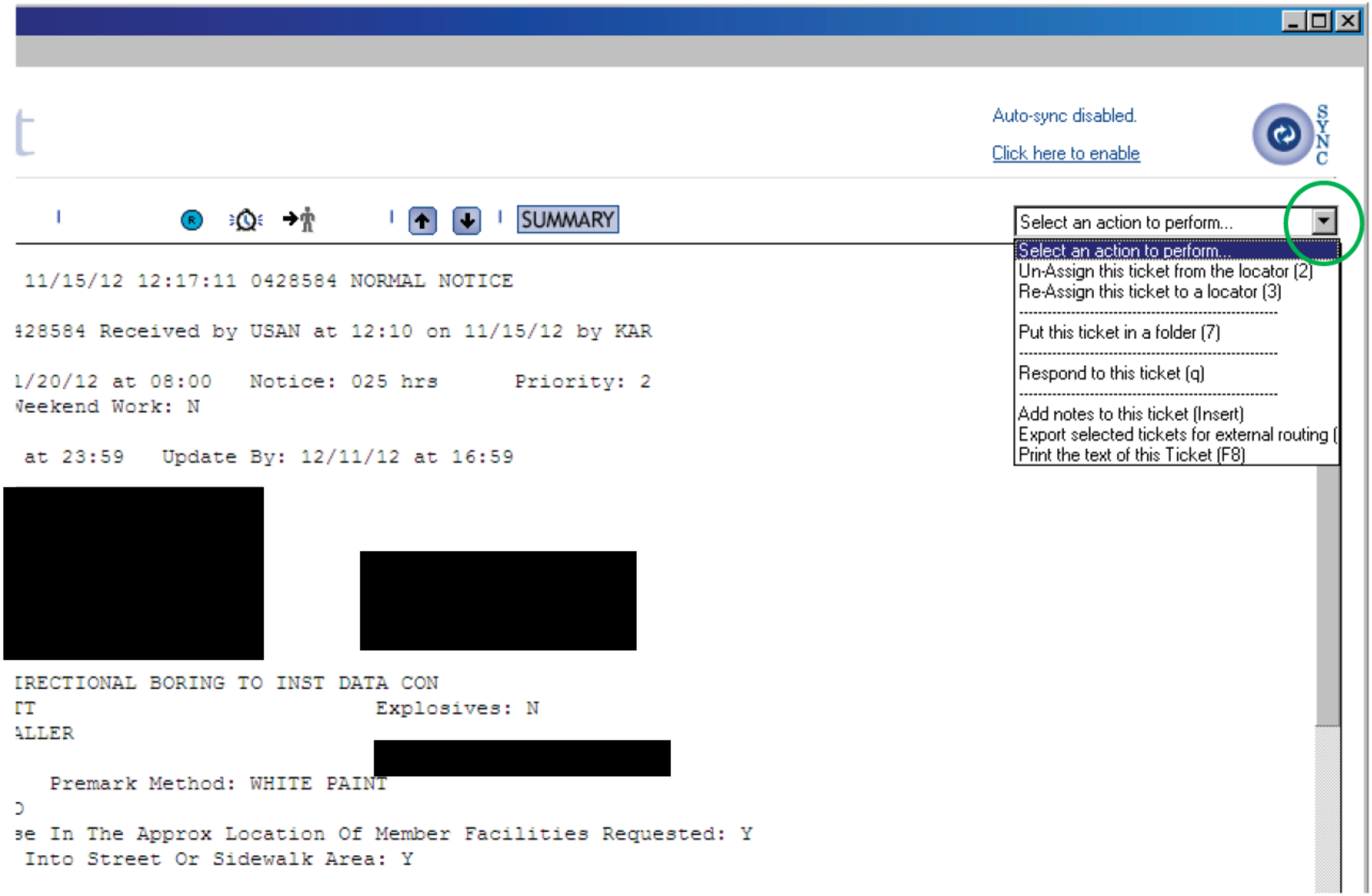
NOTE: Ticket is for engineering purposes. Will not be installing serwer for at least 1 month. Will locate as I get time. J7Bp

12/13/2012 11:38:23 AM: Note Added

DETAILS: Note added by Admin XXX

NOTE: Called John Doe @ 4156953483. Left message explaining I will not be able to locate site today, but will be by tomorrow before 10am. Left call back number to confirm agreement of new start date and time.

Step 1. In Field Unit, click the arrow to access the pull down action menu.



```
 11/15/12 12:17:11 0428584 NORMAL NOTICE

428584 Received by USAN at 12:10 on 11/15/12 by KAR

1/20/12 at 08:00   Notice: 025 hrs      Priority: 2
eekend Work: N

 at 23:59   Update By: 12/11/12 at 16:59
```

[redacted]

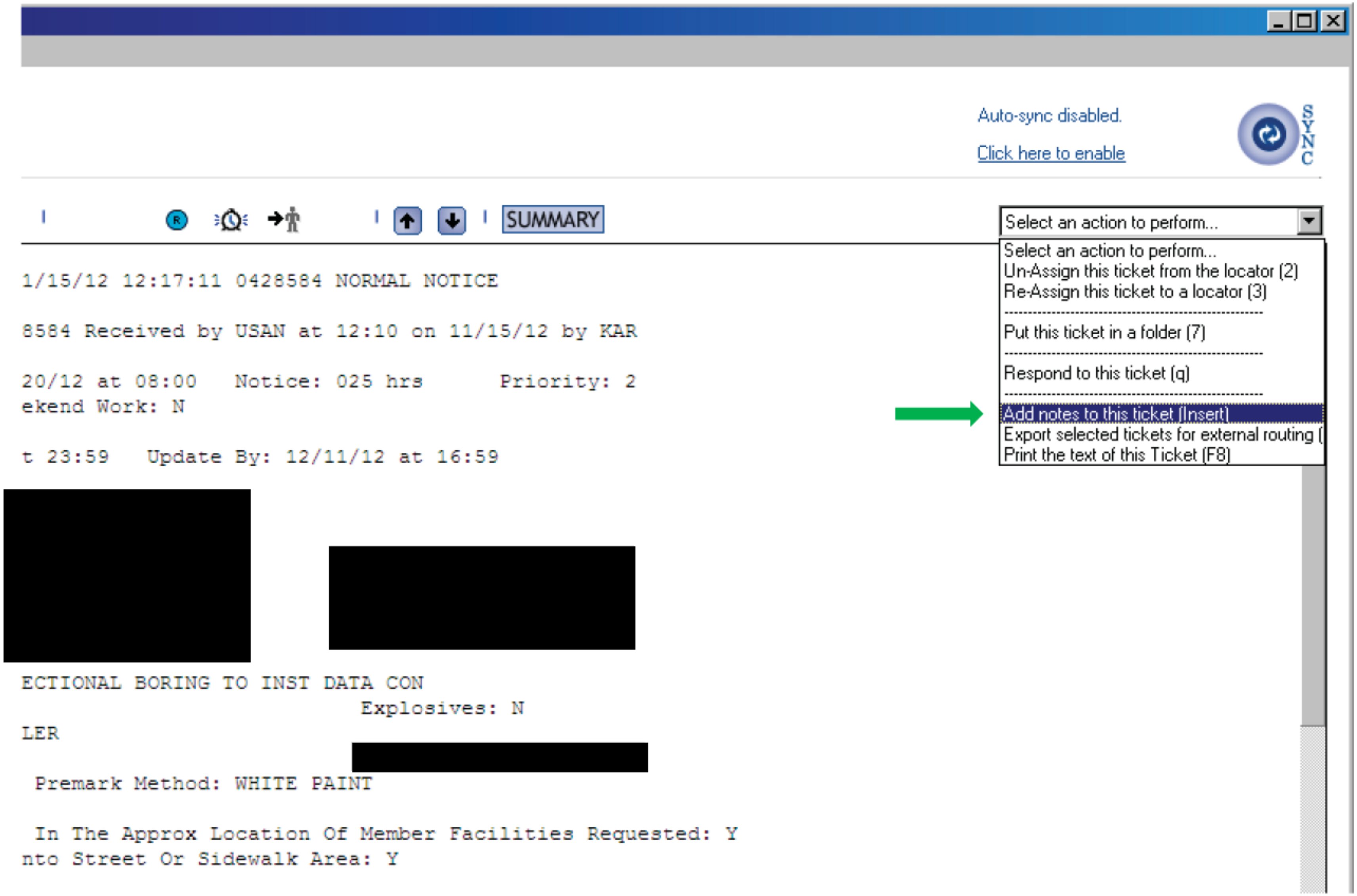
[redacted]

```
IRECTIONAL BORING TO INST DATA CON
T                             Explosives: N
ALLER
```

[redacted]

```
   Premark Method: WHITE PAINT
)
e In The Approx Location Of Member Facilities Requested: Y
 Into Street Or Sidewalk Area: Y
```

Step 2. Choose "Add Notes to this Ticket".



```
1/15/12 12:17:11 0428584 NORMAL NOTICE

8584 Received by USAN at 12:10 on 11/15/12 by KAR

20/12 at 08:00   Notice: 025 hrs      Priority: 2
ekend Work: N

t 23:59   Update By: 12/11/12 at 16:59
```

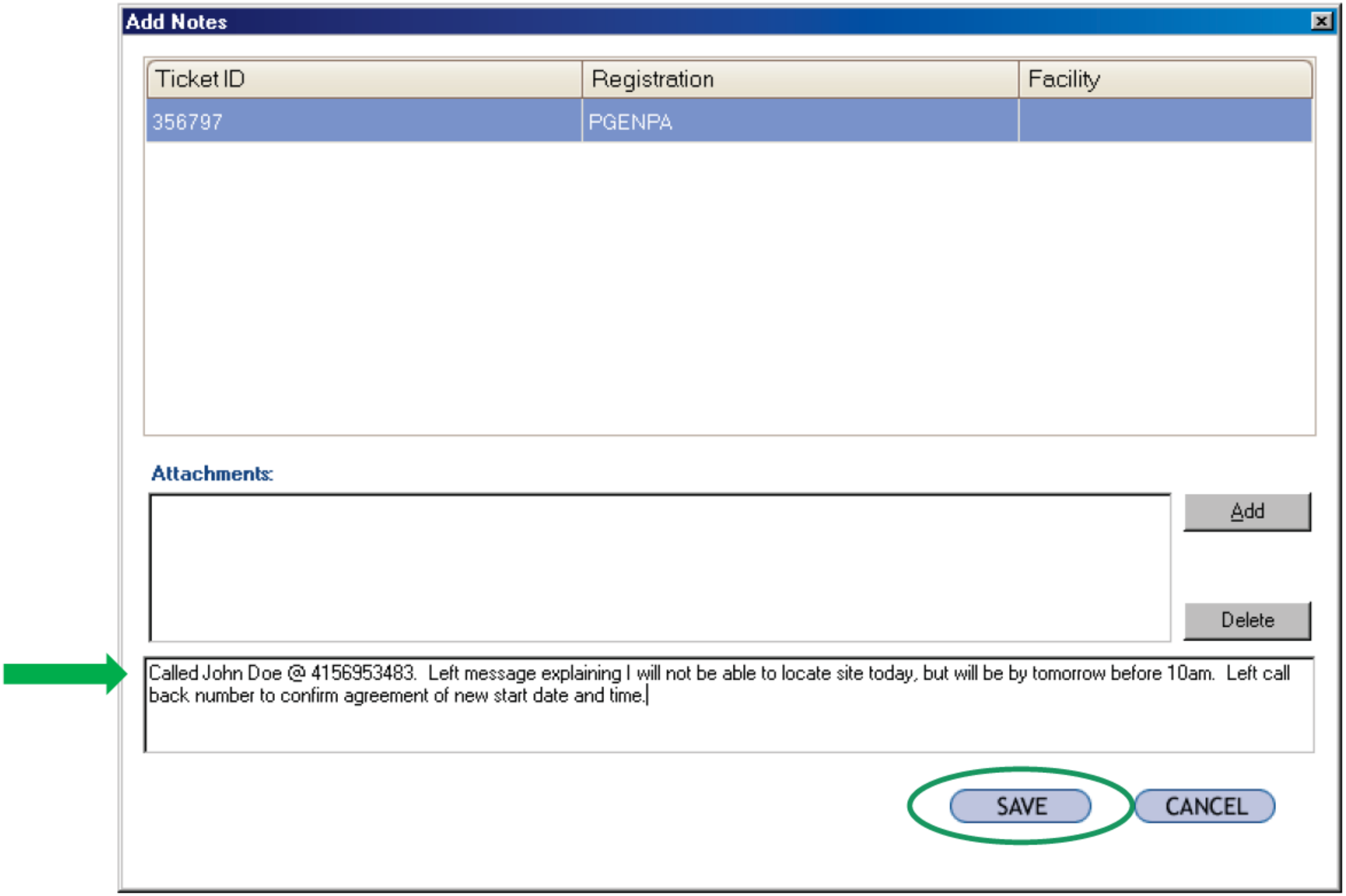
[redacted] [redacted]

```
ECTIONAL BORING TO INST DATA CON
                                 Explosives: N
LER
```

[redacted]

```
 Premark Method: WHITE PAINT

 In The Approx Location Of Member Facilities Requested: Y
nto Street Or Sidewalk Area: Y
```

Step 3. Enter note as shown below into the "Notes:" field.

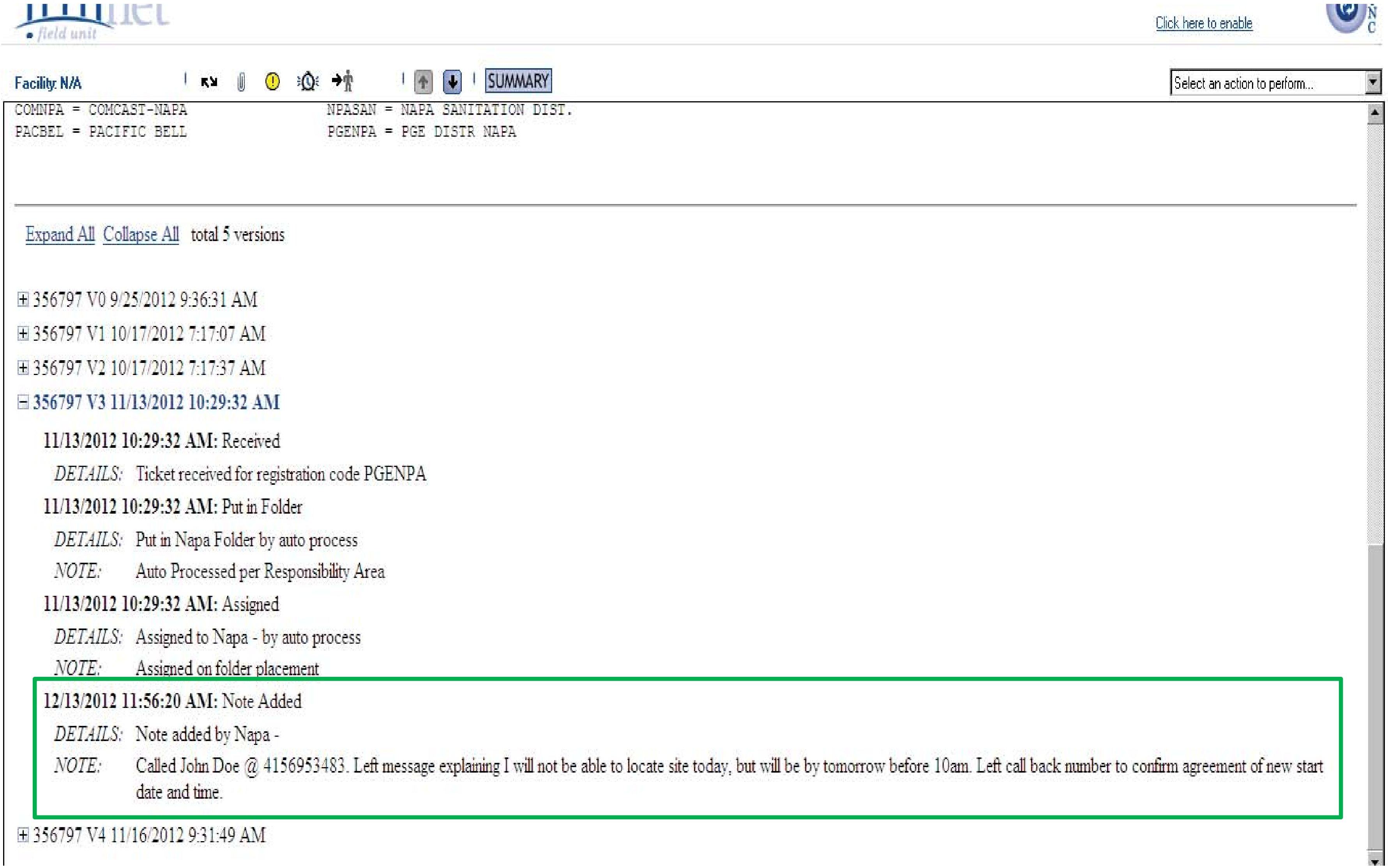


Ticket ID	Registration	Facility
356797	PGENPA	

Called John Doe @ 4156953483. Left message explaining I will not be able to locate site today, but will be by tomorrow before 10am. Left call back number to confirm agreement of new start date and time.

Step 4. Click "Save" when finished.

Step 5. The note will now be displayed in the ticket history, as shown below.



```
COMNPA = COMCAST-NAPA                NPASAN = NAPA SANITATION DIST.
PACBEL = PACIFIC BELL                PGENPA = PGE DISTR NAPA
```

Expand All Collapse All total 5 versions

⊞ 356797 V0 9/25/2012 9:36:31 AM

⊞ 356797 V1 10/17/2012 7:17:07 AM

⊞ 356797 V2 10/17/2012 7:17:37 AM

⊟ **356797 V3 11/13/2012 10:29:32 AM**

11/13/2012 10:29:32 AM: Received

DETAILS: Ticket received for registration code PGENPA

11/13/2012 10:29:32 AM: Put in Folder

DETAILS: Put in Napa Folder by auto process

NOTE: Auto Processed per Responsibility Area

11/13/2012 10:29:32 AM: Assigned

DETAILS: Assigned to Napa - by auto process

NOTE: Assigned on folder placement

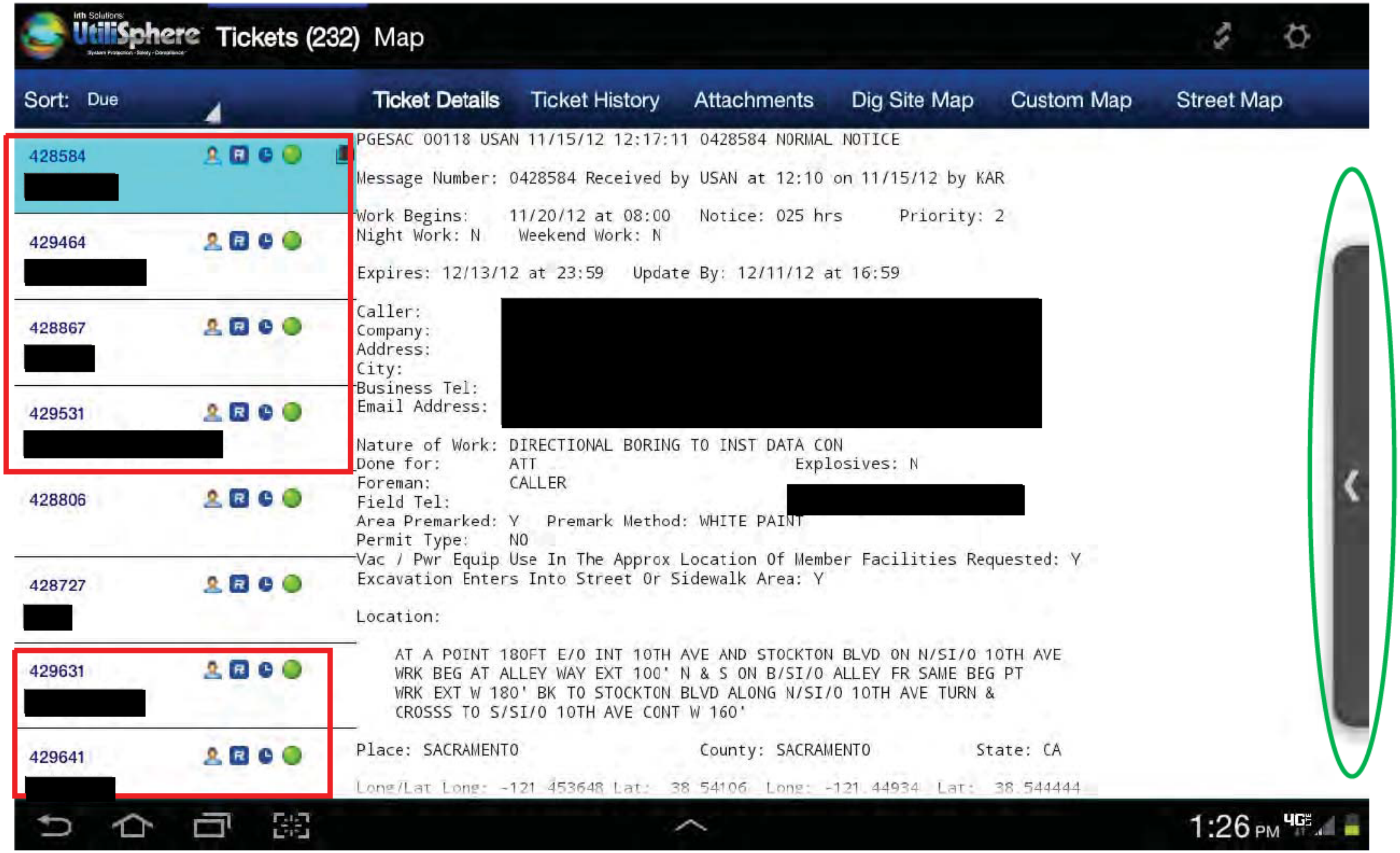
12/13/2012 11:56:20 AM: Note Added

DETAILS: Note added by Napa -

NOTE: Called John Doe @ 4156953483. Left message explaining I will not be able to locate site today, but will be by tomorrow before 10am. Left call back number to confirm agreement of new start date and time.

⊞ 356797 V4 11/16/2012 9:31:49 AM

Step 1. In the Android Mobile application, tap the side bar arrow to access the action menu.



[redacted] [redacted] [redacted] [redacted] [redacted] [redacted] [redacted]

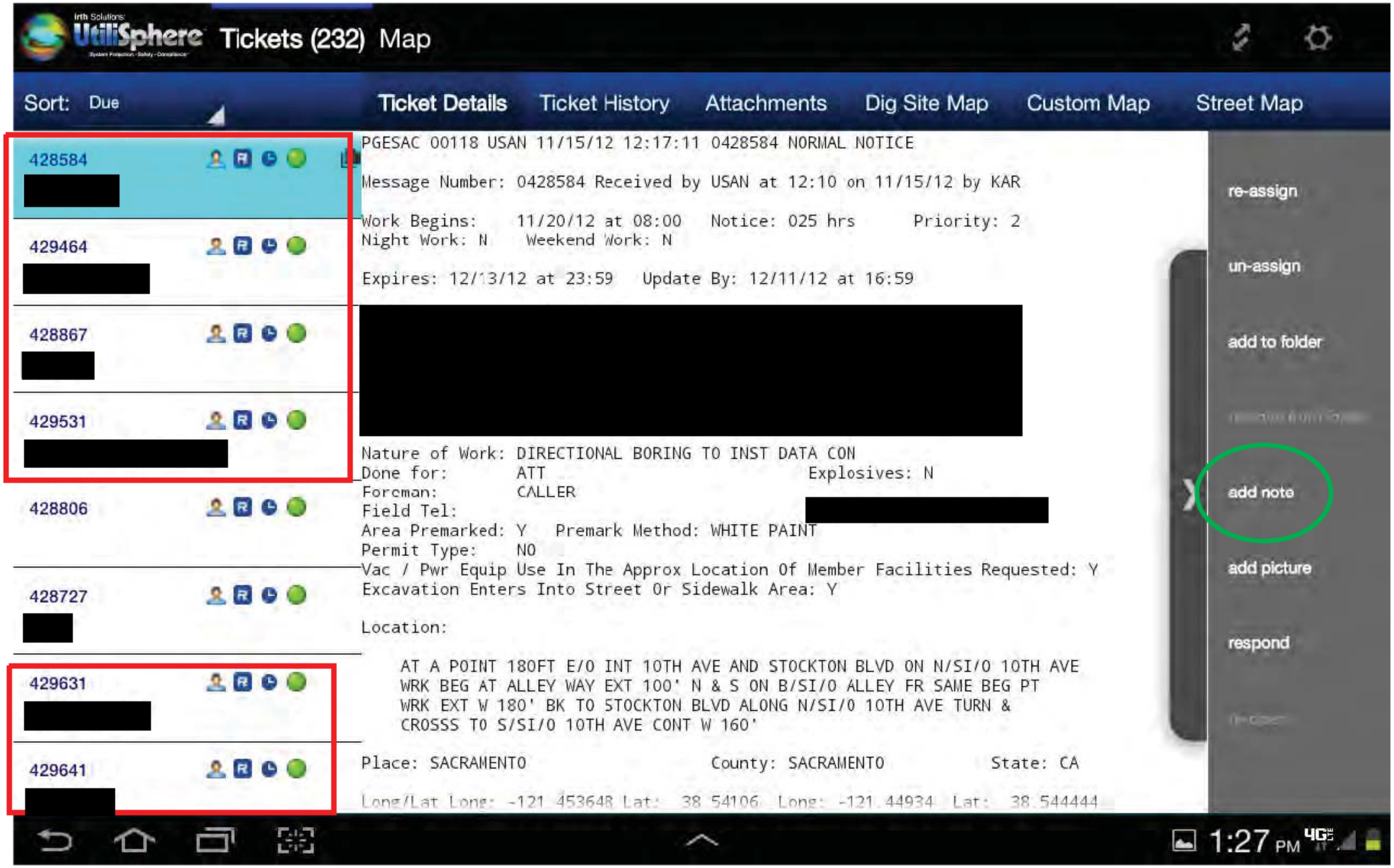
```
PGESAC 00118 USAN 11/15/12 12:17:11 0428584 NORMAL NOTICE

Message Number: 0428584 Received by USAN at 12:10 on 11/15/12 by KAR

Work Begins:    11/20/12 at 08:00   Notice: 025 hrs     Priority: 2
Night Work: N    Weekend Work: N

Expires: 12/13/12 at 23:59   Update By: 12/11/12 at 16:59

Caller:
Company:
Address:
City:
Business Tel:
Email Address:
```

[redacted]

```
Nature of Work: DIRECTIONAL BORING TO INST DATA CON
Done for:       ATT                           Explosives: N
Foreman:        CALLER
Field Tel:
Area Premarked: Y   Premark Method: WHITE PAINT
Permit Type:    NO
Vac / Pwr Equip Use In The Approx Location Of Member Facilities Requested: Y
Excavation Enters Into Street Or Sidewalk Area: Y

Location:

    AT A POINT 180FT E/O INT 10TH AVE AND STOCKTON BLVD ON N/SI/O 10TH AVE
    WRK BEG AT ALLEY WAY EXT 100' N & S ON B/SI/O ALLEY FR SAME BEG PT
    WRK EXT W 180' BK TO STOCKTON BLVD ALONG N/SI/O 10TH AVE TURN &
    CROSSS TO S/SI/O 10TH AVE CONT W 160'

Place: SACRAMENTO               County: SACRAMENTO          State: CA

Long/Lat Long: -121.453648 Lat:  38.54106  Long: -121.44934  Lat:  38.544444
```

[redacted]

Step 2. Tap "add note".



428584
[redacted]

429464
[redacted]

428867
[redacted]

429531
[redacted]

428806

428727
[redacted]

429631
[redacted]

429641
[redacted]

```
PGESAC 00118 USAN 11/15/12 12:17:11 0428584 NORMAL NOTICE

Message Number: 0428584 Received by USAN at 12:10 on 11/15/12 by KAR

Work Begins:    11/20/12 at 08:00   Notice: 025 hrs      Priority: 2
Night Work: N    Weekend Work: N

Expires: 12/13/12 at 23:59   Update By: 12/11/12 at 16:59
```

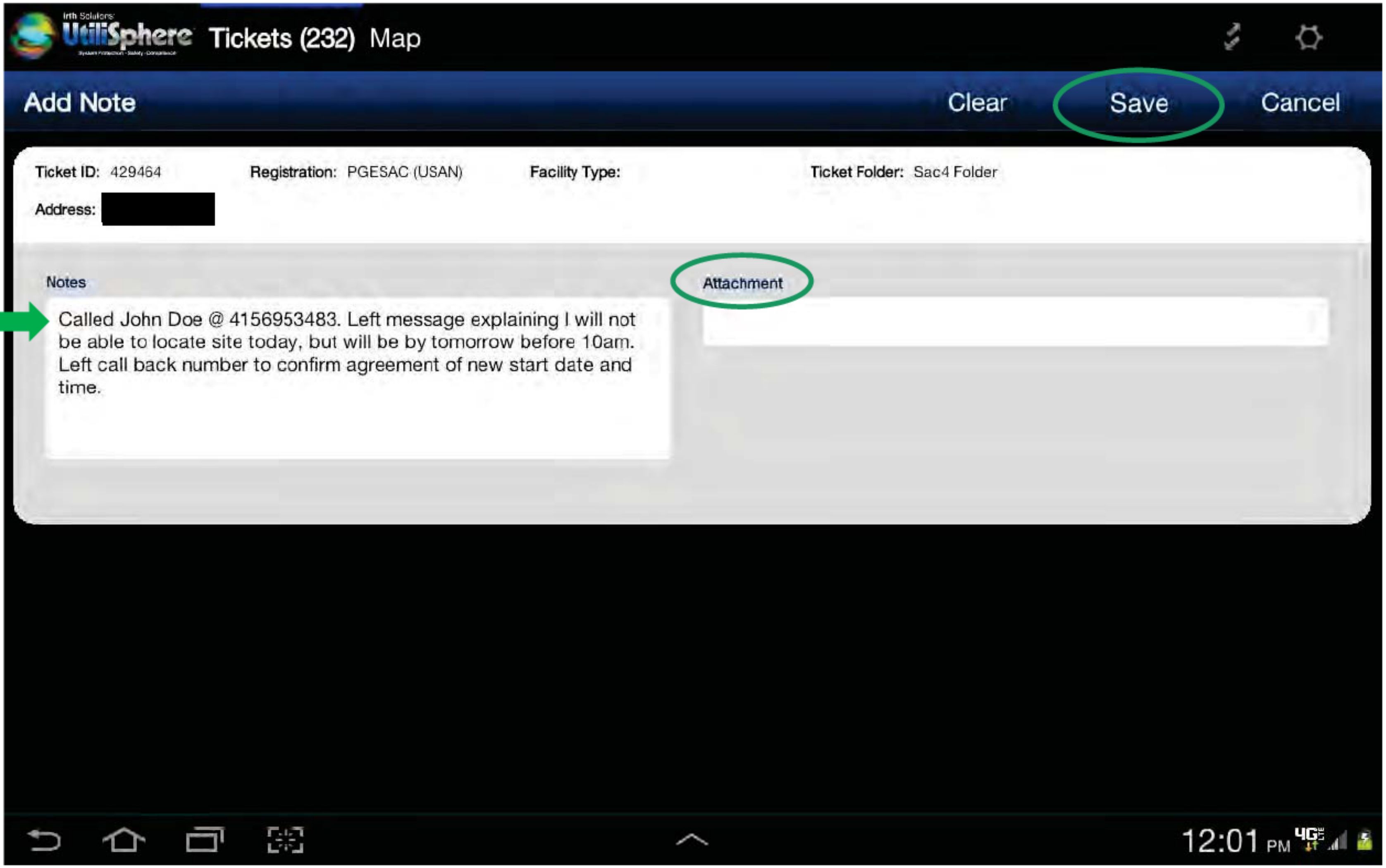
[redacted]

```
Nature of Work: DIRECTIONAL BORING TO INST DATA CON
Done for:       ATT                              Explosives: N
Foreman:        CALLER
Field Tel:
```

[redacted]

```
Area Premarked: Y   Premark Method: WHITE PAINT
Permit Type:    NO
Vac / Pwr Equip Use In The Approx Location Of Member Facilities Requested: Y
Excavation Enters Into Street Or Sidewalk Area: Y

Location:

    AT A POINT 180FT E/O INT 10TH AVE AND STOCKTON BLVD ON N/SI/O 10TH AVE
    WRK BEG AT ALLEY WAY EXT 100' N & S ON B/SI/O ALLEY FR SAME BEG PT
    WRK EXT W 180' BK TO STOCKTON BLVD ALONG N/SI/O 10TH AVE TURN &
    CROSSS TO S/SI/O 10TH AVE CONT W 160'

Place: SACRAMENTO                County: SACRAMENTO          State: CA

Long/Lat Long: -121.453648 Lat:  38.54106  Long: -121.44934  Lat:  38.544444
```

Step 3. Enter note into the “Notes:” field and add an attachment if necessary.



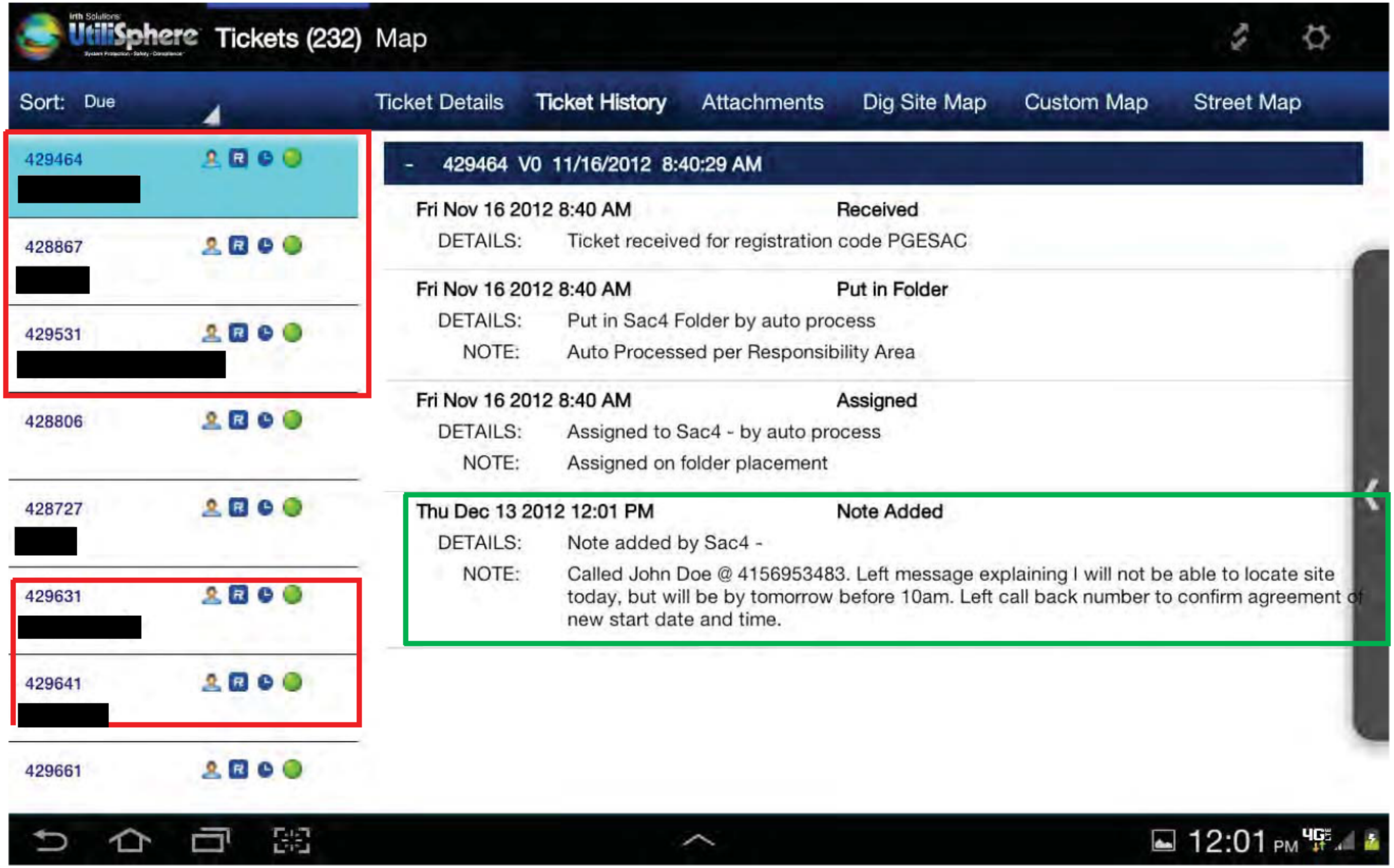
Ticket ID: 429464 **Registration:** PGESAC (USAN) **Facility Type:** **Ticket Folder:** Sac4 Folder

Address: [redacted]

Called John Doe @ 4156953483. Left message explaining I will not be able to locate site today, but will be by tomorrow before 10am. Left call back number to confirm agreement of new start date and time.

Step 4. Click “Save” when finished.

Step 5. The note will now be displayed in the ticket history, as shown below.



429464 [redacted]

428867 [redacted]

429531 [redacted]

428806

428727 [redacted]

429631 [redacted]

429641 [redacted]

429661

- 429464 V0 11/16/2012 8:40:29 AM

Fri Nov 16 2012 8:40 AM **Received**
DETAILS: Ticket received for registration code PGESAC

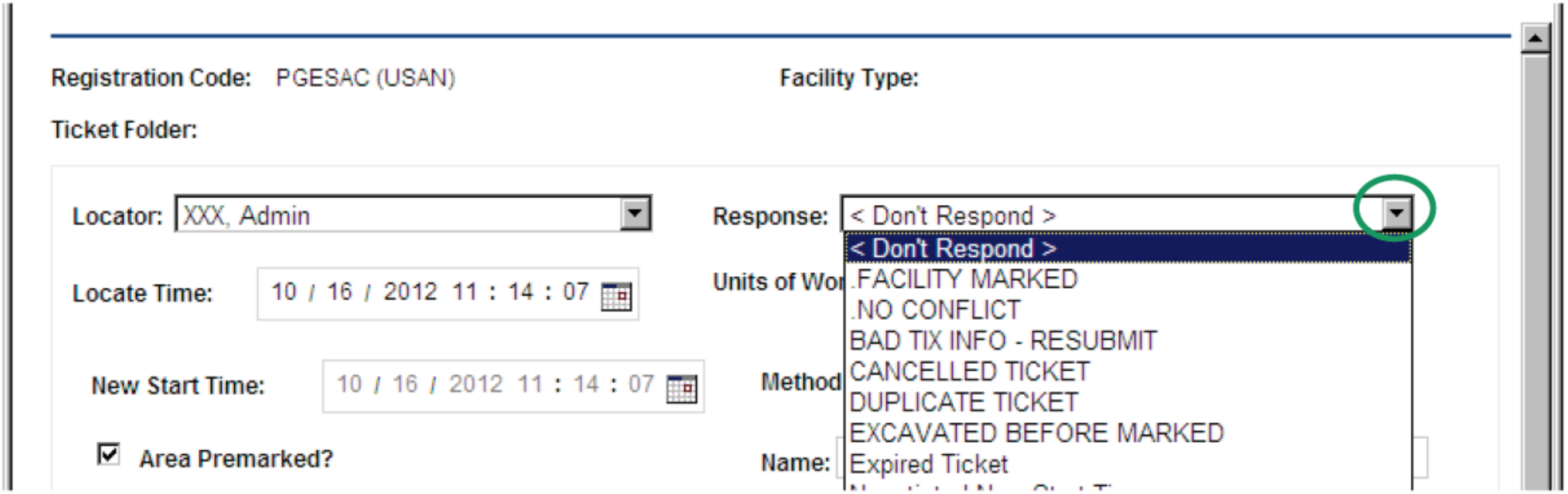
Fri Nov 16 2012 8:40 AM **Put in Folder**
DETAILS: Put in Sac4 Folder by auto process
NOTE: Auto Processed per Responsibility Area

Fri Nov 16 2012 8:40 AM **Assigned**
DETAILS: Assigned to Sac4 - by auto process
NOTE: Assigned on folder placement

Thu Dec 13 2012 12:01 PM **Note Added**
DETAILS: Note added by Sac4 -
NOTE: Called John Doe @ 4156953483. Left message explaining I will not be able to locate site today, but will be by tomorrow before 10am. Left call back number to confirm agreement of new start date and time.

When contact with the excavator HAS been made and a mutual time IS agreed upon, continue with the following procedure:

Step 1. In the Response Screen for Irth, click the down arrow to access the "Response" selection menu.



Registration Code: PGESAC (USAN)

Facility Type:

Ticket Folder:

Locator: XXX, Admin

Response: < Don't Respond >

Locate Time: 10 / 16 / 2012 11 : 14 : 07

New Start Time: 10 / 16 / 2012 11 : 14 : 07

☑ Area Premarked?

Step 2. Select "Notification of New Start Time". Note: This will replace "Respond To An Open Ticket"

New Start Time: ☐ 10 / 22 / 2012 10 : 59 : 09

☑ Area Premarked?

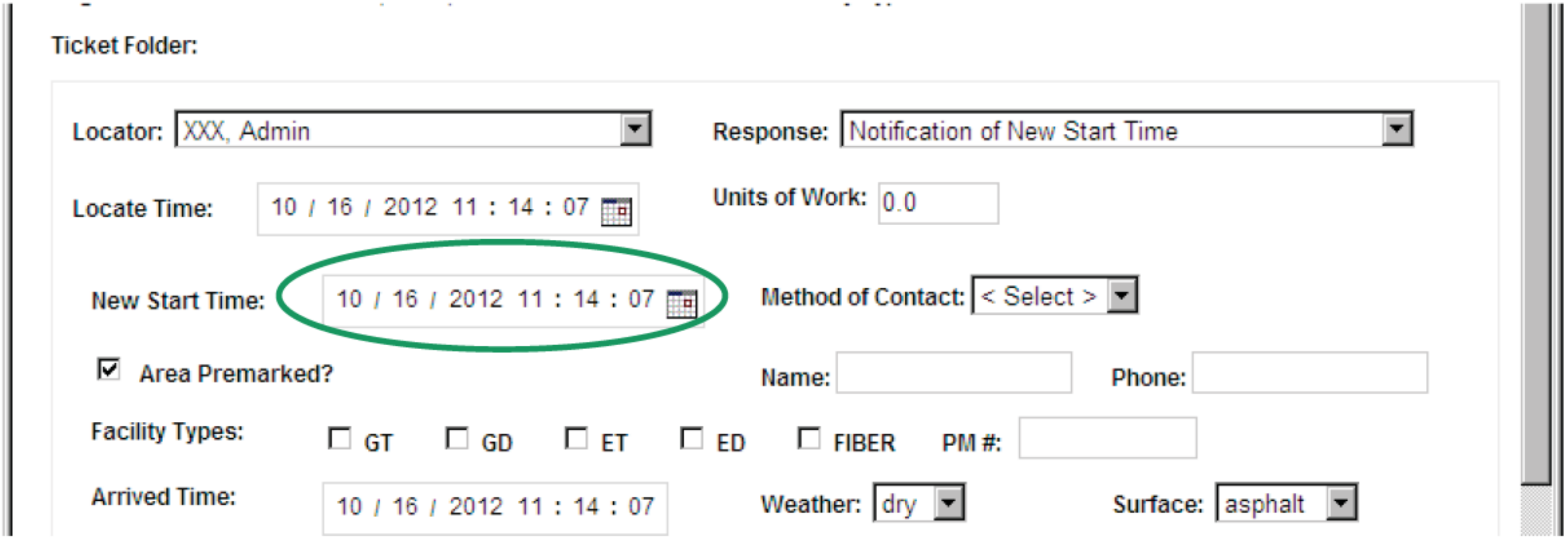
Facility Types: ☐ GT ☐ GD ☐ ET ☐ ED

Arrived Time: 10 / 22 / 2012 10 : 59 : 09

Gas Footage:

Line Number:

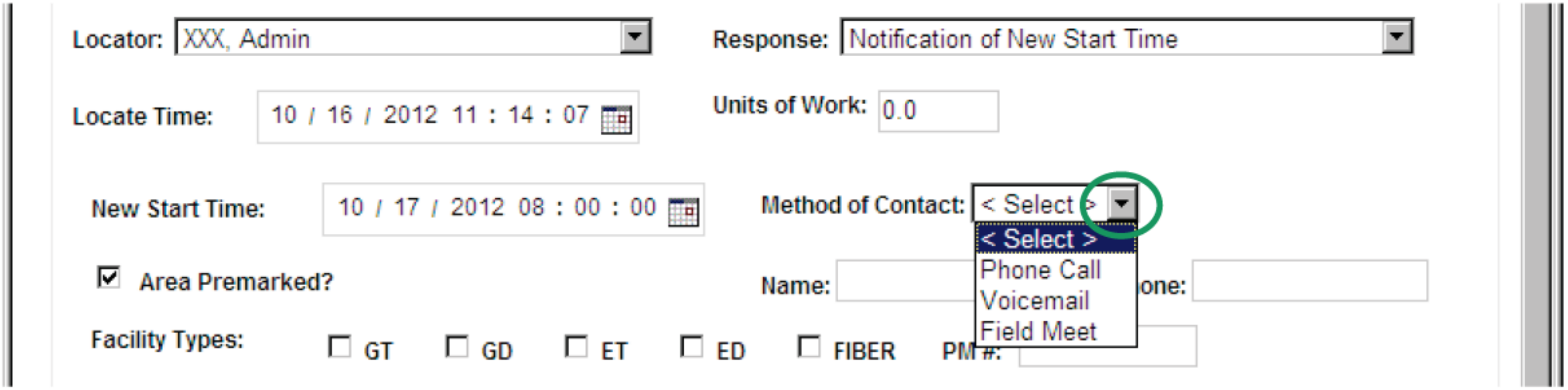
Step 3. Click inside "New Start Time" field to adjust new start date and time.



Ticket Folder:

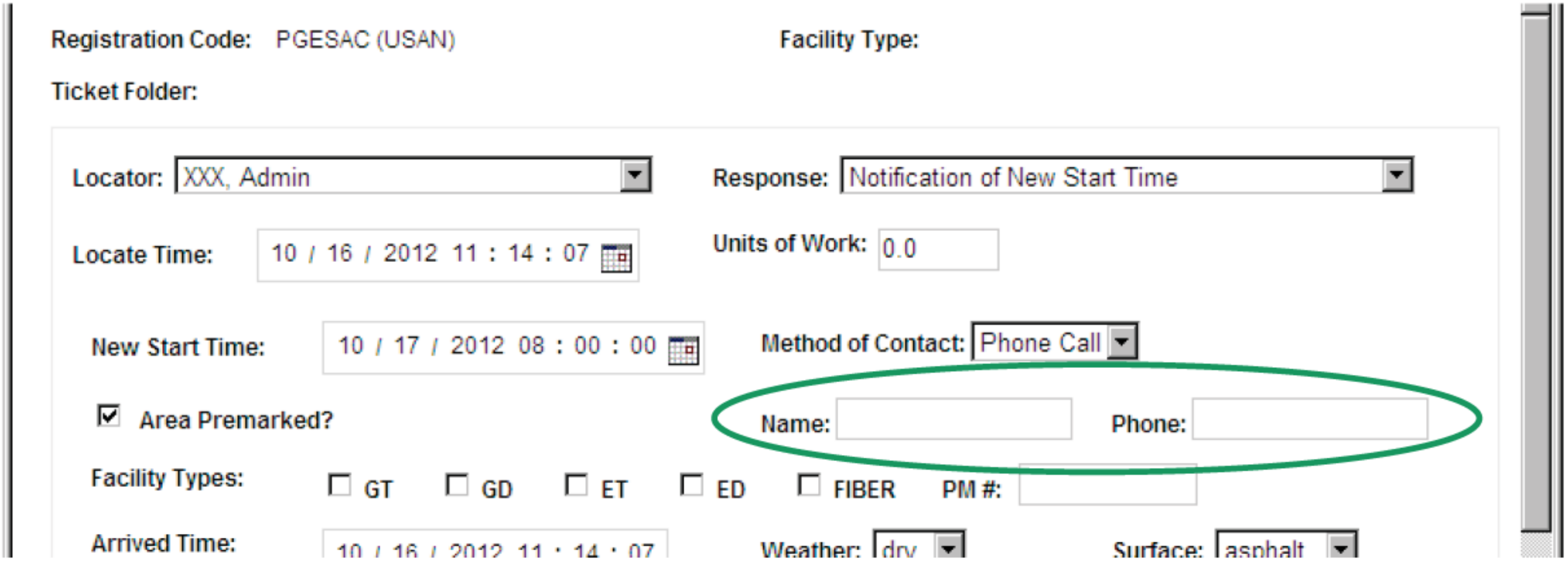
Locator: XXX, Admin
Response: Notification of New Start Time
Locate Time: 10 / 16 / 2012 11 : 14 : 07
Units of Work: 0.0
New Start Time: 10 / 16 / 2012 11 : 14 : 07
Method of Contact: < Select >
☑ Area Premarked?
Name:
Phone:
Facility Types: ☐ GT ☐ GD ☐ ET ☐ ED ☐ FIBER
PM #:
Arrived Time: 10 / 16 / 2012 11 : 14 : 07
Weather: dry
Surface: asphalt

Step 4. Click down arrow to select "Method of Contact".



Locator: XXX, Admin
Response: Notification of New Start Time
Locate Time: 10 / 16 / 2012 11 : 14 : 07
Units of Work: 0.0
New Start Time: 10 / 17 / 2012 08 : 00 : 00
Method of Contact: < Select >
☑ Area Premarked?
Name:
Phone:
Facility Types: ☐ GT ☐ GD ☐ ET ☐ ED ☐ FIBER
PM #:

Step 5. Enter Name and Phone number in the correct field.



Registration Code: PGESAC (USAN)

Facility Type:

Ticket Folder:

Locator: XXX, Admin

Response: Notification of New Start Time

Locate Time: 10 / 16 / 2012 11 : 14 : 07

Units of Work: 0.0

New Start Time: 10 / 17 / 2012 08 : 00 : 00

Method of Contact: Phone Call

☑ Area Premarked?

Name:

Phone:

Facility Types: ☐ GT ☐ GD ☐ ET ☐ ED ☐ FIBER

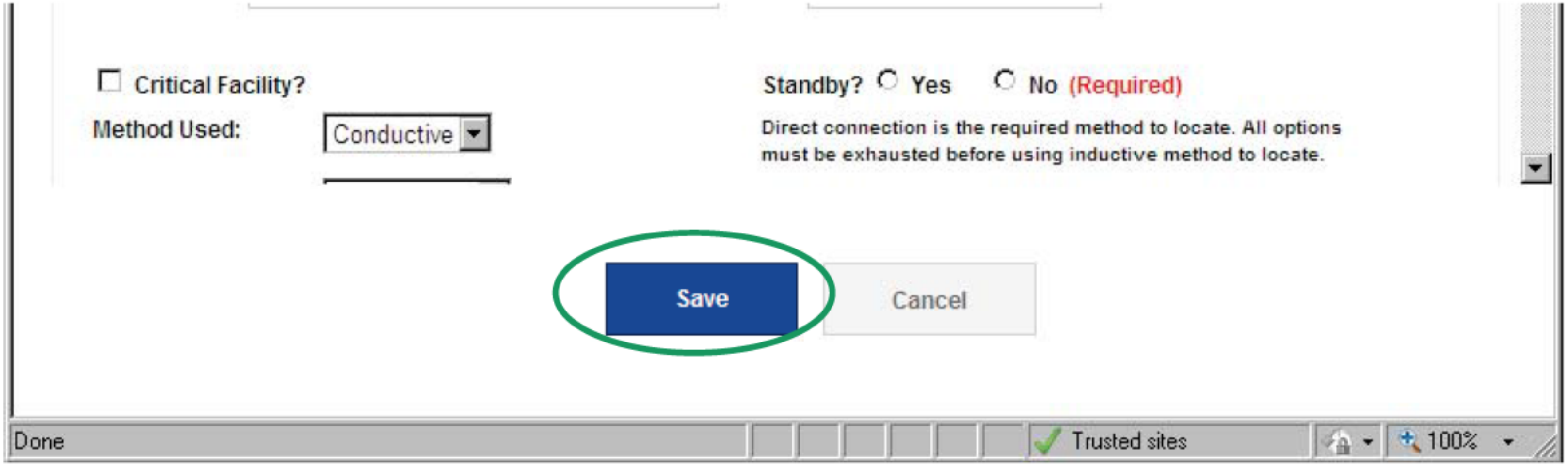
PM #:

Arrived Time: 10 / 16 / 2012 11 : 14 : 07

Weather: dry

Surface: asphalt

Step 6. Once all other necessary information is entered and displays as correct, click “Save”.



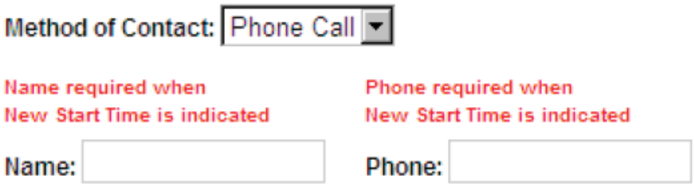
☐ Critical Facility?

Standby? ○ Yes ○ No (Required)

Method Used: Conductive

Direct connection is the required method to locate. All options must be exhausted before using inductive method to locate.

Note: User will be prompted if required information is not entered.



Method of Contact: Phone Call

Name required when New Start Time is indicated

Phone required when New Start Time is indicated

Name:

Phone:

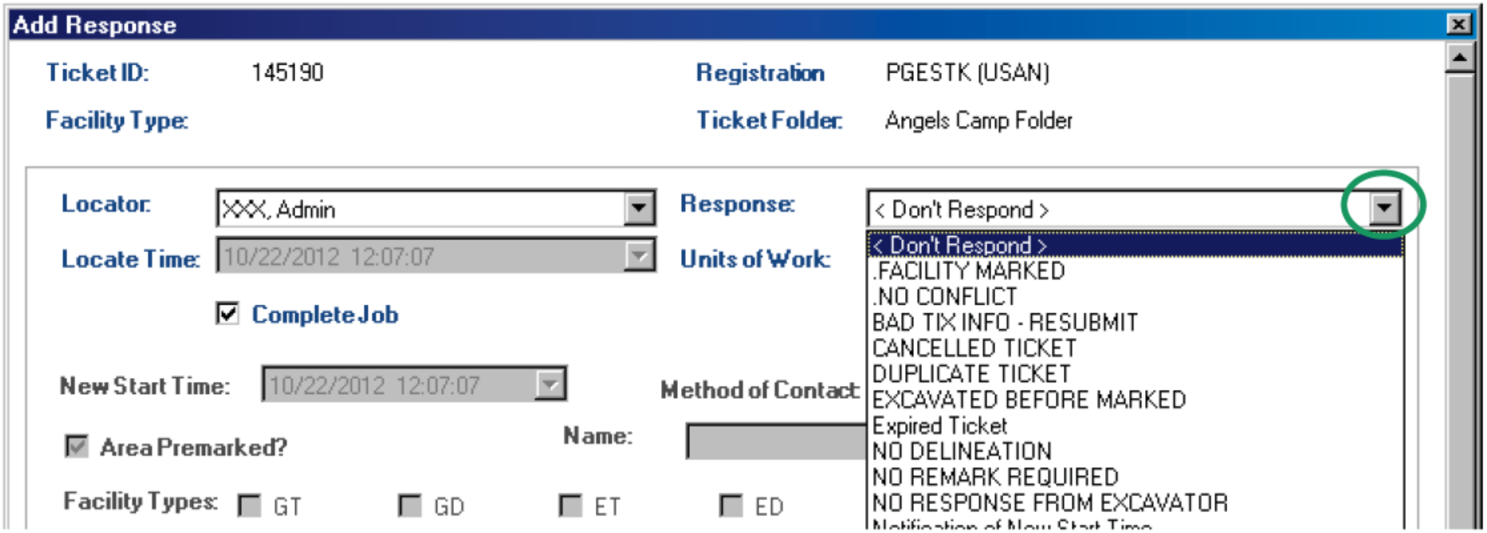
Step 7. Once saved, Ticket Details will display the new start time information as indicated.

10/16/2012 11:42:13 AM: Responded

DETAILS: Notification of New Start Time: added by Admin XXX, Locate Time: 10/16/2012 11:14:07 AM

New Start Time: 10/17/2012 08:00:00 AM
Method of Contact: Phone Call
Contact Phone: [redacted]
Contact Name:
Area Premarked? Yes
Facility Type - GT: No
Facility Type - GD: No
Facility Type - ET: No
Facility Type - ED: No
Facility Type - FIBER: No
Time Arrived: 10/16/2012 11:14:00 AM
Time Departed: 10/16/2012 11:42:13 AM
Weather: dry; Surface: asphalt
Line Number: ; MP:
Gas Footage: 0; Electric Footage: 0
Critical Facility? No; Standby? No
Method used: Conductive
Conductive Type: Valve
Any other Means? No; Method:

Step 1. In the Response Screen for Field Unit, click the down arrow to access the "Response" selection menu.



Add Response

Ticket ID: 145190

Registration PGESTK (USAN)

Facility Type:

Ticket Folder: Angels Camp Folder

Locator: XXX, Admin

Response: < Don't Respond >

Locate Time: 10/22/2012 12:07:07

Units of Work:

☑ Complete Job

New Start Time: 10/22/2012 12:07:07

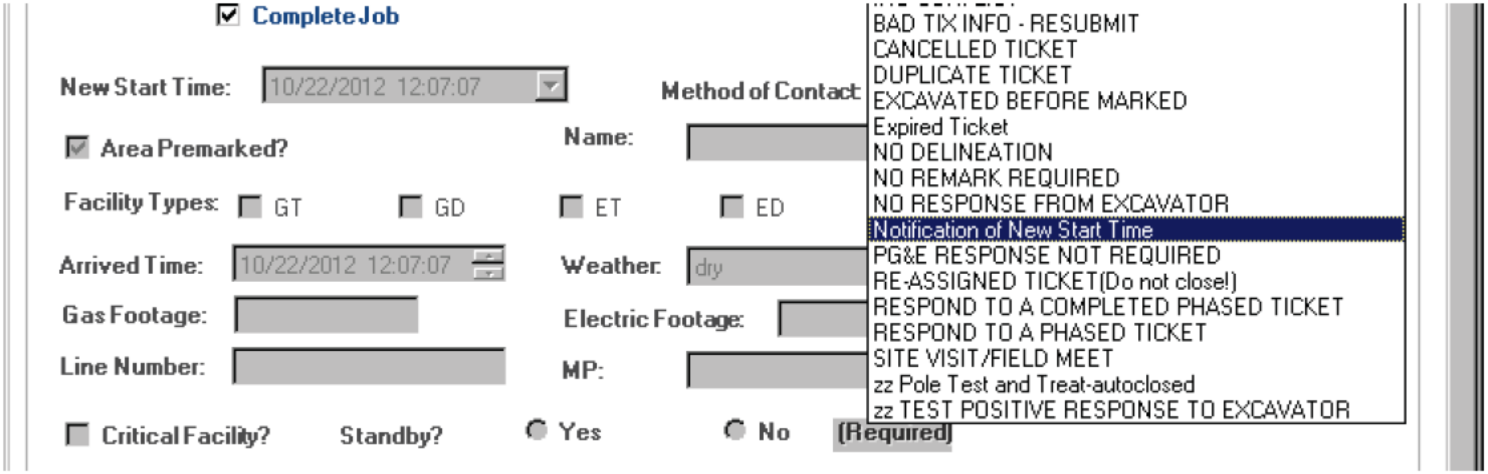
Method of Contact:

☑ Area Premarked?

Name:

Facility Types: ☐ GT ☐ GD ☐ ET ☐ ED

Step 2. Select "Notification of New Start Time". Note: This will replace "Respond To An Open Ticket".



☑ Complete Job

New Start Time: 10/22/2012 12:07:07

Method of Contact:

☑ Area Premarked?

Name:

Facility Types: ☐ GT ☐ GD ☐ ET ☐ ED

Arrived Time: 10/22/2012 12:07:07

Weather: dry

Gas Footage:

Electric Footage:

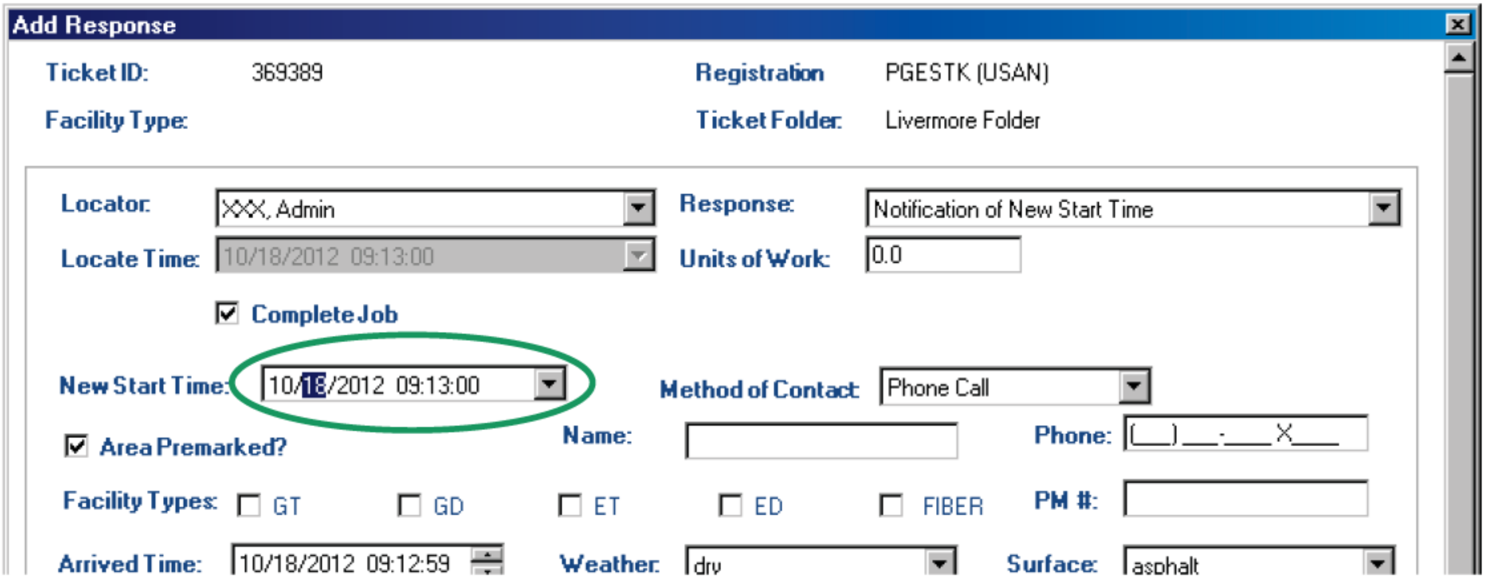
Line Number:

MP:

☐ Critical Facility?

Standby? ○ Yes ○ No (Required)

Step 3. Click inside "New Start Time" field to adjust new start date and time.

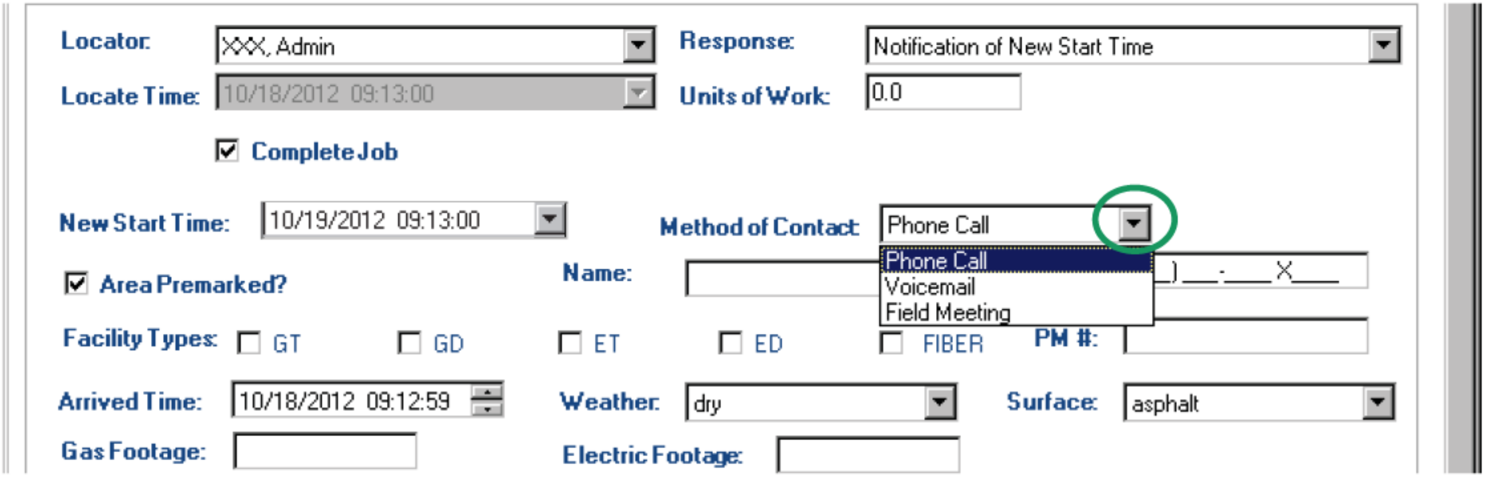


Add Response

Ticket ID: 369389
Registration: PGESTK (USAN)
Facility Type:
Ticket Folder: Livermore Folder

Locator: XXX, Admin
Response: Notification of New Start Time
Locate Time: 10/18/2012 09:13:00
Units of Work: 0.0
☑ Complete Job
New Start Time: 10/18/2012 09:13:00
Method of Contact: Phone Call
☑ Area Premarked?
Name:
Phone: (__)___-____X____
Facility Types: ☐ GT ☐ GD ☐ ET ☐ ED ☐ FIBER
PM #:
Arrived Time: 10/18/2012 09:12:59
Weather: dry
Surface: asphalt

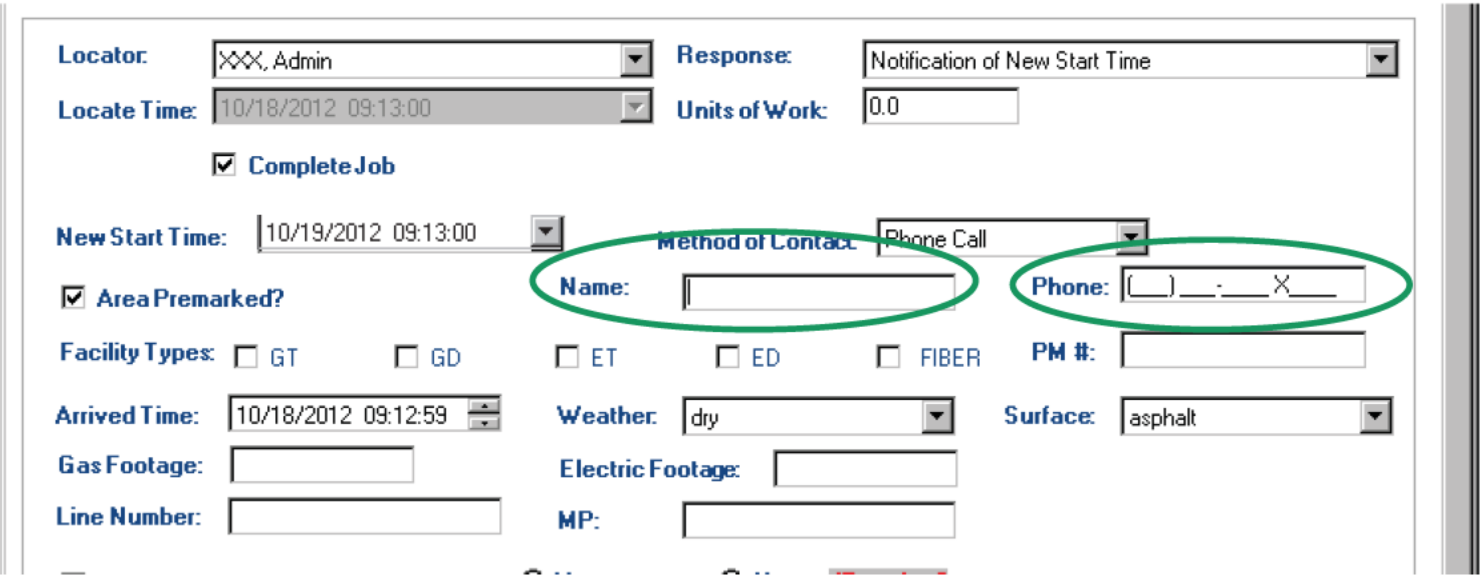
Step 4. Click down arrow to select "Method of Contact". Note: Field Unit defaults to "Phone Call".



Locator: XXX, Admin
Response: Notification of New Start Time
Locate Time: 10/18/2012 09:13:00
Units of Work: 0.0
☑ Complete Job
New Start Time: 10/19/2012 09:13:00
Method of Contact: Phone Call

☑ Area Premarked?
Name:
Phone:)___-____X____
Facility Types: ☐ GT ☐ GD ☐ ET ☐ ED ☐ FIBER
PM #:
Arrived Time: 10/18/2012 09:12:59
Weather: dry
Surface: asphalt
Gas Footage:
Electric Footage:

Step 5. Enter Name and Phone number in the correct field.



Locator: XXX, Admin

Response: Notification of New Start Time

Locate Time: 10/18/2012 09:13:00

Units of Work: 0.0

☑ **Complete Job**

New Start Time: 10/19/2012 09:13:00

Method of Contact: Phone Call

☑ **Area Premarked?**

Name:

Phone: (__)___-____X___

Facility Types: ☐ GT ☐ GD ☐ ET ☐ ED ☐ FIBER

PM #:

Arrived Time: 10/18/2012 09:12:59

Weather: dry

Surface: asphalt

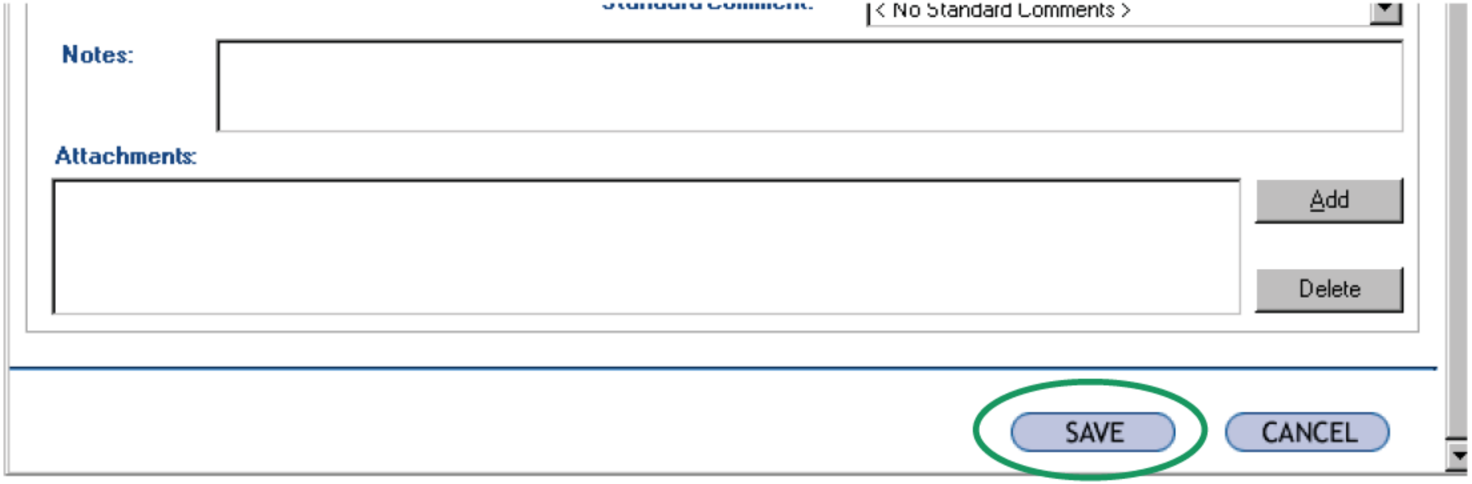
Gas Footage:

Electric Footage:

Line Number:

MP:

Step 6. Once all other necessary information is entered and displays as correct, click “Save”.

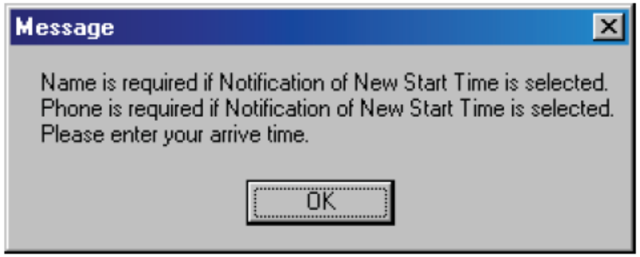


< No Standard Comments >

Notes:

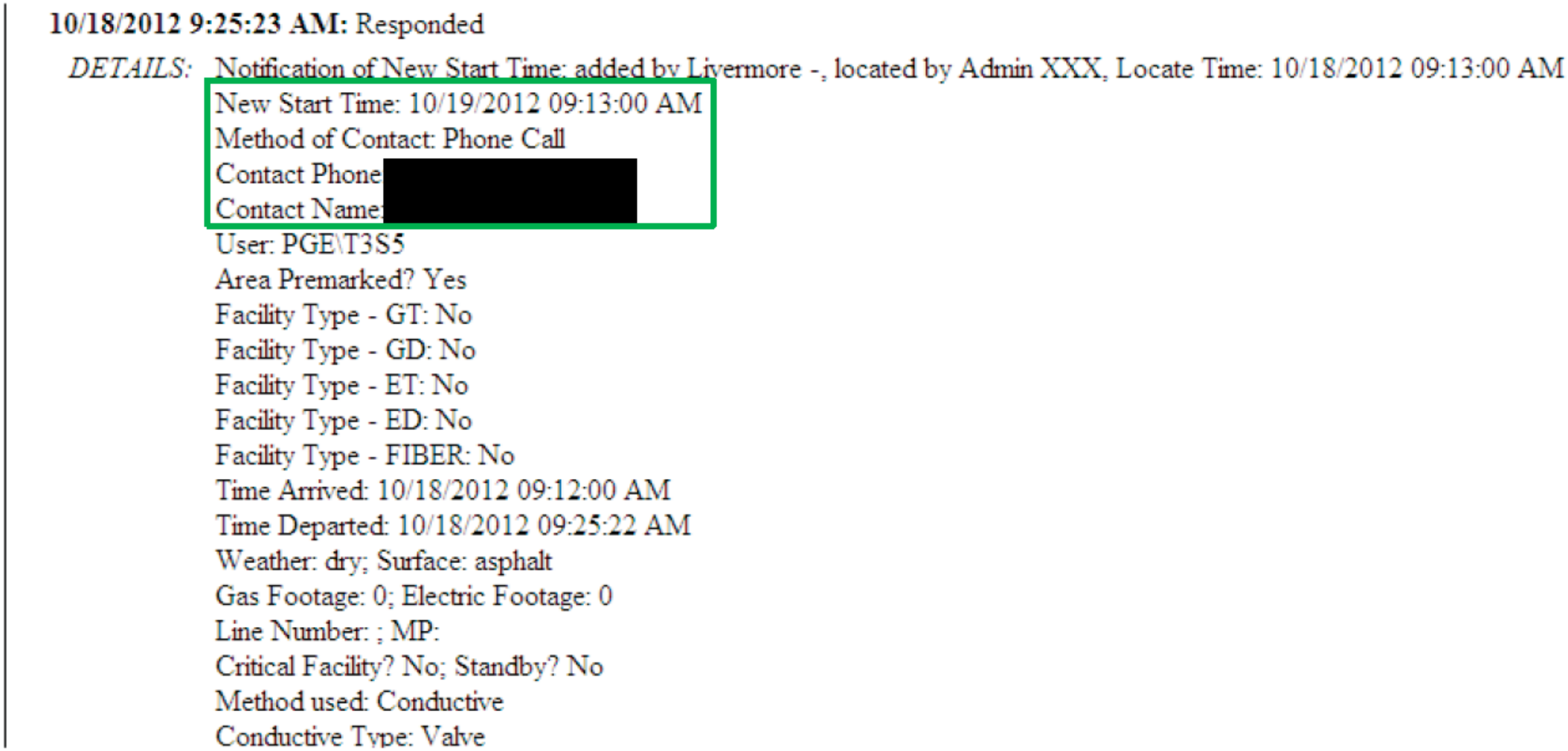
Attachments:

Note: User will be prompted if required information is not entered.



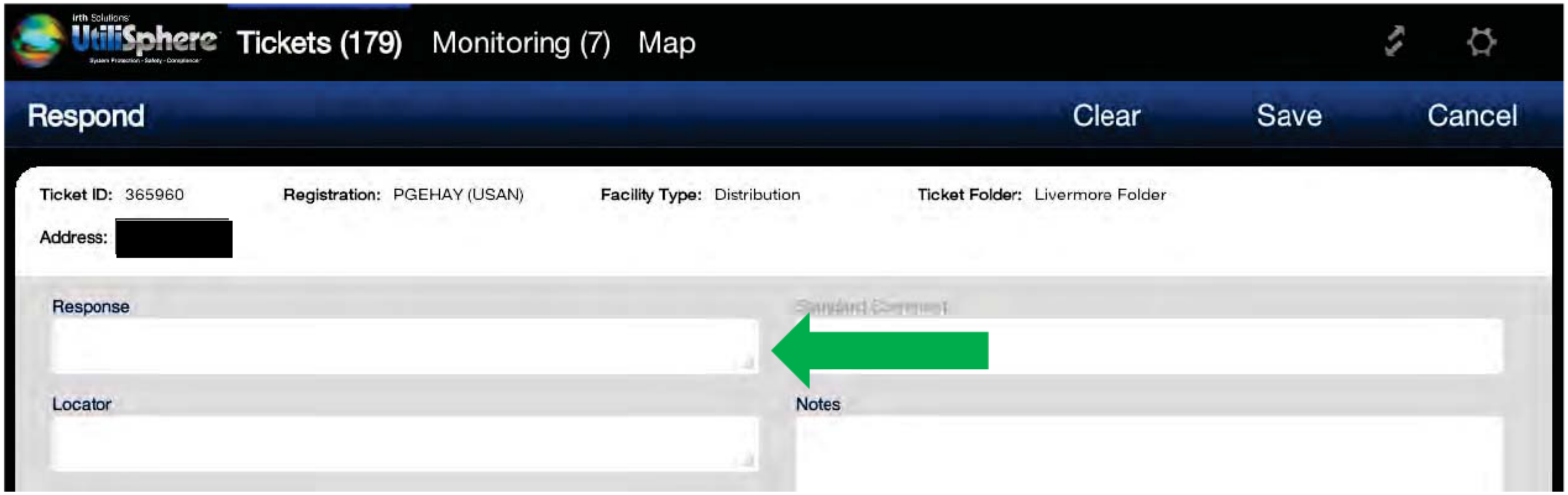
Name is required if Notification of New Start Time is selected.
Phone is required if Notification of New Start Time is selected.
Please enter your arrive time.

Step 7. Once saved, Ticket Details will display the new start time information as indicated.


10/18/2012 9:25:23 AM: Responded

DETAILS: Notification of New Start Time: added by Livermore -, located by Admin XXX, Locate Time: 10/18/2012 09:13:00 AM
New Start Time: 10/19/2012 09:13:00 AM
Method of Contact: Phone Call
Contact Phone [redacted]
Contact Name
User: PGE\T3S5
Area Premarked? Yes
Facility Type - GT: No
Facility Type - GD: No
Facility Type - ET: No
Facility Type - ED: No
Facility Type - FIBER: No
Time Arrived: 10/18/2012 09:12:00 AM
Time Departed: 10/18/2012 09:25:22 AM
Weather: dry; Surface: asphalt
Gas Footage: 0; Electric Footage: 0
Line Number: ; MP:
Critical Facility? No; Standby? No
Method used: Conductive
Conductive Type: Valve

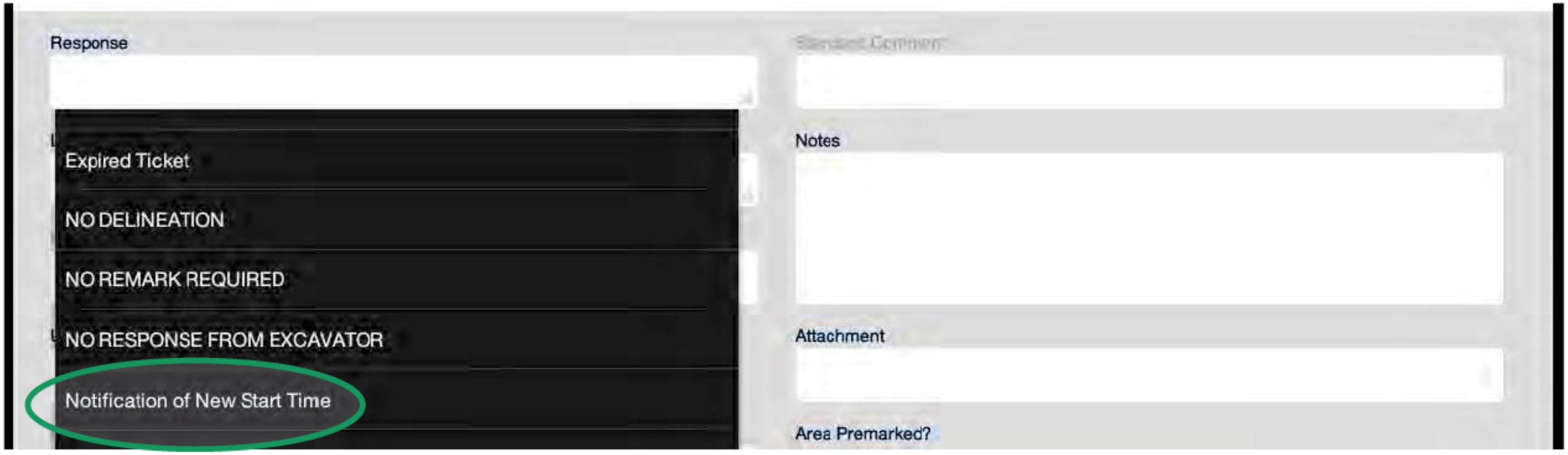
Step 1. In the Response Screen for the Android Mobile app, tap inside the “Response” field.



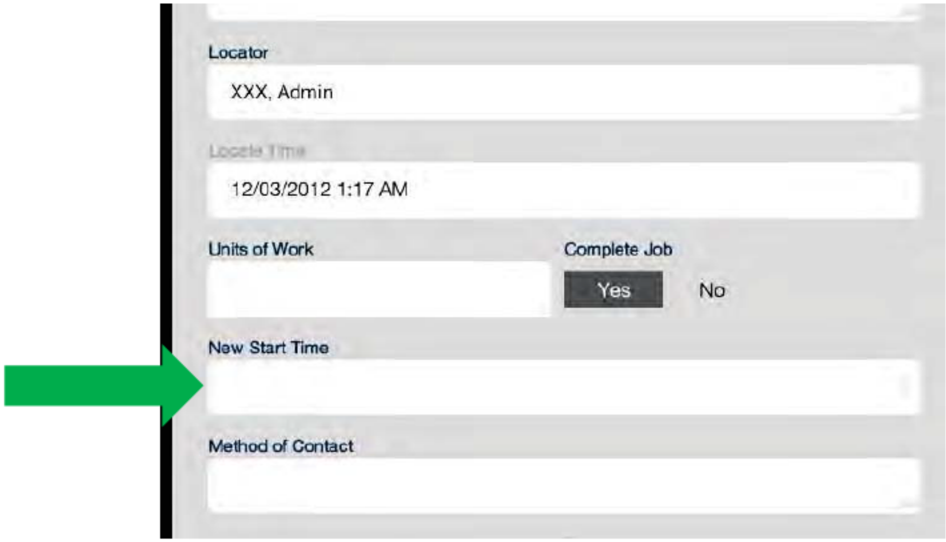
Ticket ID: 365960 **Registration:** PGEHAY (USAN) **Facility Type:** Distribution **Ticket Folder:** Livermore Folder

Address: [redacted]

Step 2. Select “Notification of New Start Time”. Note: This will replace “Respond To An Open Ticket”.



Step 3. Tap inside "New Start Time" field.



Locator: XXX, Admin

Locate Time: 12/03/2012 1:17 AM

Units of Work:

Complete Job: ● Yes ○ No

New Start Time:

Method of Contact:

Step 4. Tap the arrows or swipe up and down over the displayed numbers to adjust the date and time.

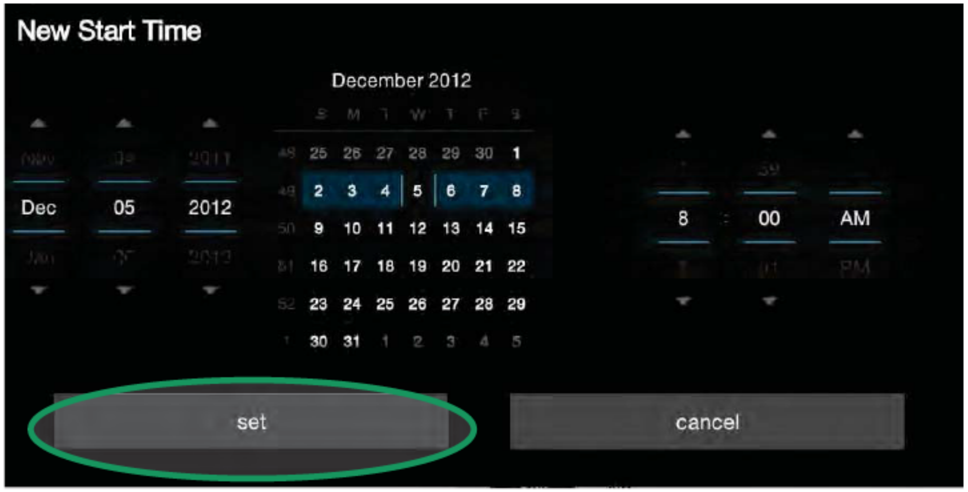
New Start Time

Dec 05 2012

December 2012

8 : 00 AM

Step 5. When the new start time is correct, tap “Set”.



New Start Time

Dec 05 2012

December 2012

8 : 00 AM

Step 6. The New Start Time will now be active, as shown below.

New Start Time: 12/05/2012 8:00 AM

Area Premarked? [✓ Yes] No

Method of Contact:

Facility Types: GT GD ET

Name:

Phone:

Weather: dry

PM #

Method Used

Step 7. Tap the "Method of Contact" field to choose how the excavator was contacted.

New Start Time: 12/05/2012 8:00 AM

Method of Contact:

Name:

Phone:

Area Premarked? Yes

Facility Types

Weather: dry

PM #

Method Used

Step 8. Tap on the appropriate method.

Locate Time: 12/03/2012 1:17 AM

Attachment

Area Premarked? Yes

Facility Types

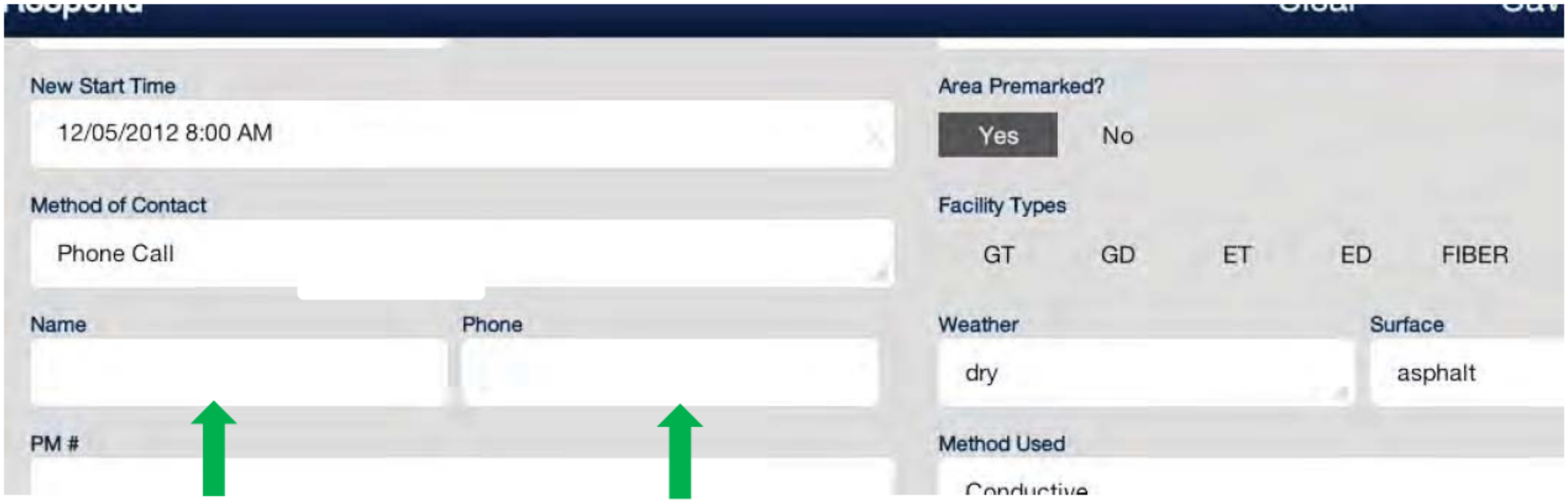
Name:

Phone:

Weather: dry

Surface: asphalt

Step 9. Tap the Name and Phone fields to enter the name and contact phone number of the excavator.



New Start Time: 12/05/2012 8:00 AM

Area Premarked? Yes No

Method of Contact: Phone Call

Facility Types: GT GD ET ED FIBER

Name:

Phone:

Weather: dry

Surface: asphalt

PM #:

Method Used: Conductive

Note: User will be prompted if required information is not entered.

Error In Form

Method of Contact is required when New Start Time is indicated
Name is required when New Start Time is indicated
Phone is required when New Start Time is indicated
Time Arrived must be changed from default
Time Arrived must be before Locate Time

Step 10. Once all other necessary information is entered and displays as correct, click “Save”.

Ticket ID: 365960 Registration: PGEHAY (USAN) Facility Type: Distribution Ticket Folder: Livermore Folder

Address: [redacted]

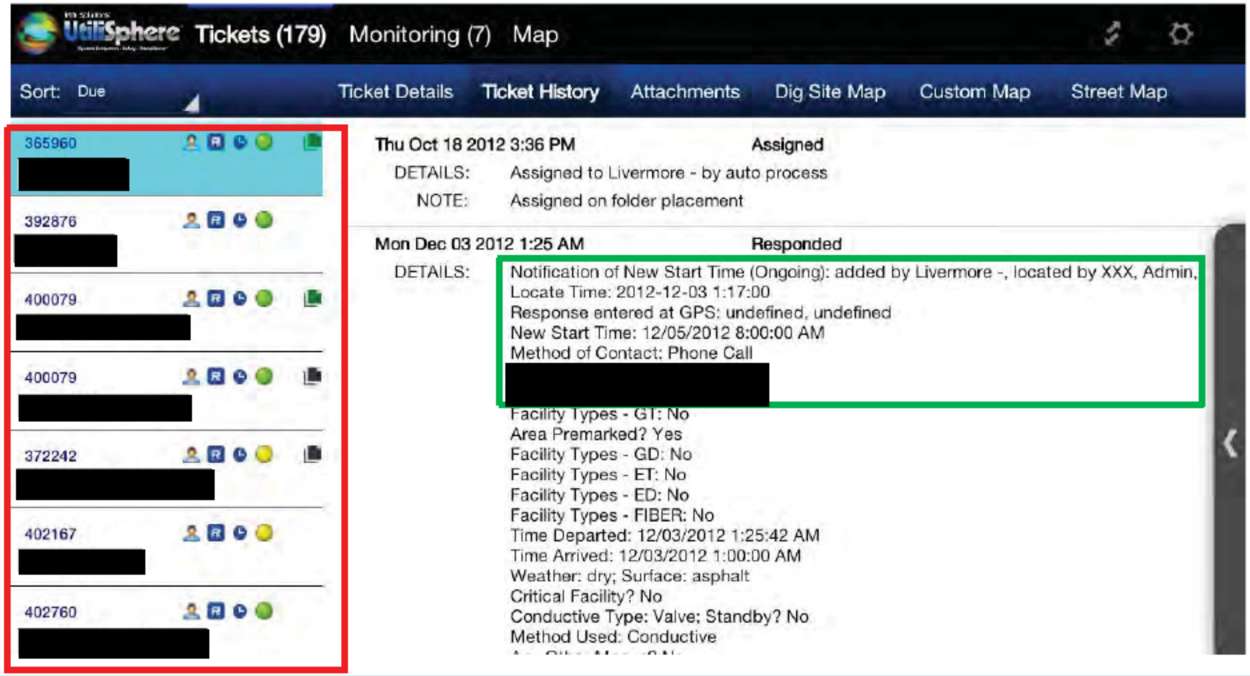
Response: Notification of New Start Time

Standard Comments

Locator

Notes

Step 11. Once saved, Ticket History will display the new start time information as indicated.



365960 [redacted]

392876 [redacted]

400079 [redacted]

400079 [redacted]

372242 [redacted]

402167 [redacted]

402760 [redacted]

Thu Oct 18 2012 3:36 PM Assigned
DETAILS: Assigned to Livermore - by auto process
NOTE: Assigned on folder placement

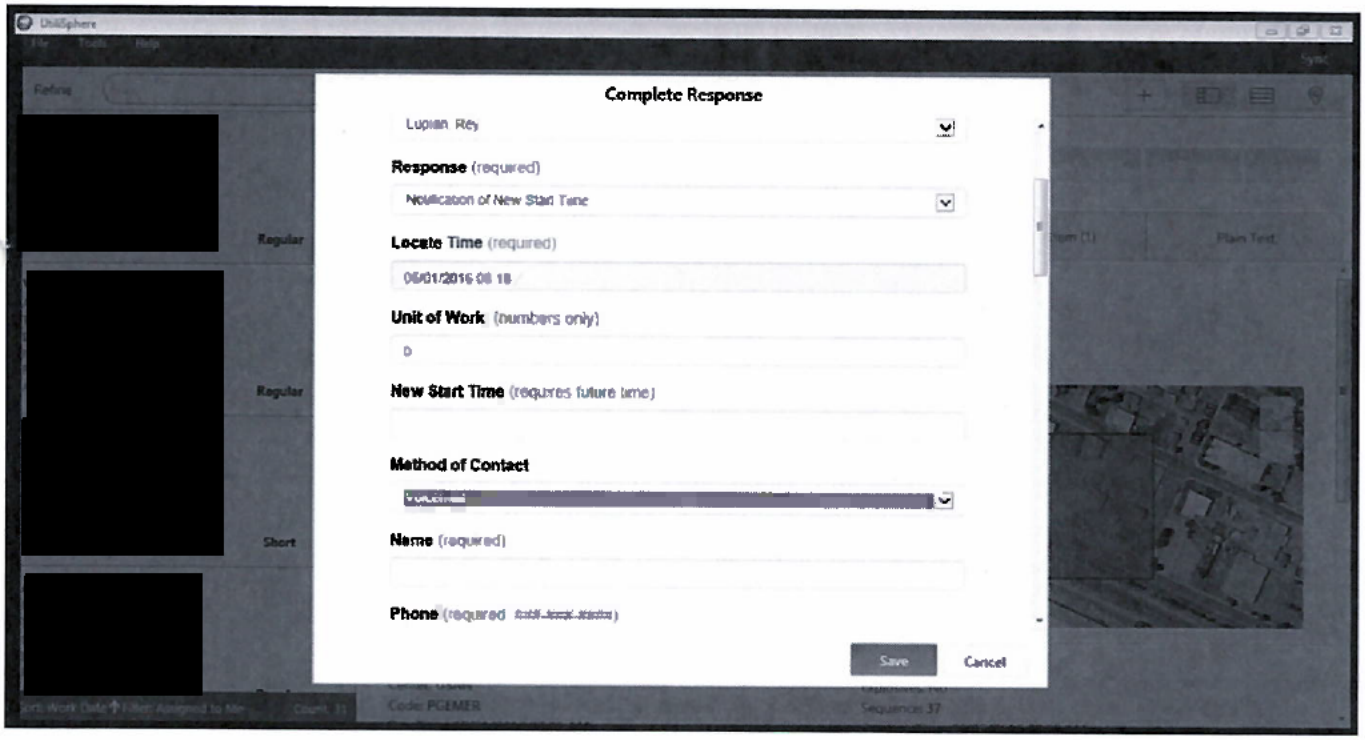
Mon Dec 03 2012 1:25 AM Responded
DETAILS: Notification of New Start Time (Ongoing): added by Livermore -, located by XXX, Admin,
Locate Time: 2012-12-03 1:17:00
Response entered at GPS: undefined, undefined
New Start Time: 12/05/2012 8:00:00 AM
Method of Contact: Phone Call
[redacted]
Facility Types - GT: No
Area Premarked? Yes
Facility Types - GD: No
Facility Types - ET: No
Facility Types - ED: No
Facility Types - FIBER: No
Time Departed: 12/03/2012 1:25:42 AM
Time Arrived: 12/03/2012 1:00:00 AM
Weather: dry; Surface: asphalt
Critical Facility? No
Conductive Type: Valve; Standby? No
Method Used: Conductive

From: Smith, Mitchell L.
To: Gas Ops GTDO Locate and Mark Supervisors
CC: Carroll, Jeffery; Walker, Steven
Sent: 6/1/2016 9:40:12 AM
Subject: FYI - QM Assessments

All,

Recently in Yosemite division we experienced an unfavorable assessment that was driven by the fact that "Notification of New Start Time" was negotiated by voicemail. This was deemed an inaccurate response and led to 2 "late tickets" on an assessment. The worst part about it was the fact that a different employee placed the notes on the ticket prior to the locator being assessed seeing the ticket. The locator being assessed completed the jobs as he saw fit because he was under the impression that a new start time was negotiated properly. He did everything correctly but still lost 50 points (over 10% difference in Error Rate) due to the actions of another employee(who thought he was doing the right thing). I have been in contact with the QM department and they have brought to my attention that these scores should be "viewed as a measure of how effectively the process is being executed" as a team, not on an individual basis.

Here is the reason why we are facing this issue in my and possibly your areas as well:



[redacted]

[redacted]

[redacted]

[redacted]

Complete Response

Lupian Rey

Response (required)
Notification of New Start Time

Locate Time (required)
06/01/2016 08 18

Unit of Work (numbers only)
0

New Start Time (requires future time)

Method of Contact
Voicemail

Name (required)

Phone (required ###-###-####)

This screen shot shows that UtiliSphere allows locators to use a drop-down menu and select "Voicemail" as the "Method of Contact" for negotiating a new start time. This is very misleading because it makes it seem like this is an acceptable response. In all honesty, this is a set-up and I feel that this should be removed from the drop down menu to make sure this doesn't happen to anyone else.

For the time being, I am going to be tailboarding my team about this and make sure it doesn't happen again and I would urge you all to do the same, should you see it appropriate.

Thank you for your time and let me know if you have any input.

Mitchell Smith | Supervisor – Locate & Mark
Pacific Gas and Electric Company

ATTACHMENT 47

From:	Smith, Mitchell L.
To:	Gas Ops GTDO Locate and Mark Supervisors
CC:	Carroll, Jeffery; Walker, Steven
Sent:	6/1/2016 9:40:12 AM
Subject:	FYI - QM Assessments

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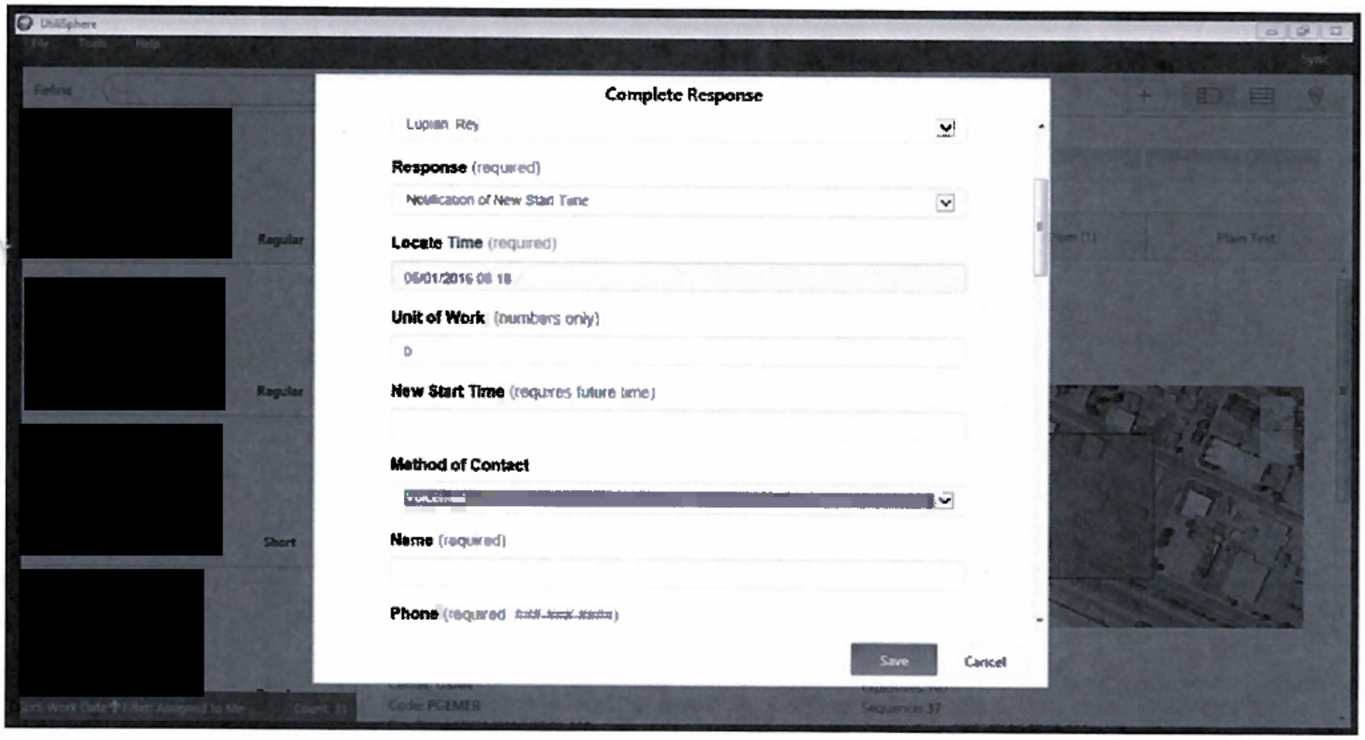
Here is the reason why we are facing this issue in my and possibly your areas as well:



[redacted]

[redacted]

[redacted]

[redacted]

Complete Response

Lupian Rey

Response (required)

Notification of New Start Time

Locate Time (required)

06/01/2016 08 18

Unit of Work (numbers only)

0

New Start Time (requires future time)

Method of Contact

Voicemail

Name (required)

Phone (required ###-###-####)

Code: PGEMER

Sequence: 37

This screen shot shows that UtiliSphere allows locators to use a drop-down menu and select "Voicemail" as the "Method of Contact" for negotiating a new start time. This is very misleading because it makes it seem like this is an acceptable response. In all honesty, this is a set-up and I feel that this should be removed from the drop down menu to make sure this doesn't happen to anyone else.

For the time being, I am going to be tailboarding my team about this and make sure it doesn't happen again and I would urge you all to do the same, should you see it appropriate.

Thank you for your time and let me know if you have any input.

Mitchell Smith | Supervisor – Locate & Mark
Pacific Gas and Electric Company

ATTACHMENT 48

⊟ State Change History

Submit Issue/Action Plan	Mgr Reviews Issue & Action Plan	Approve Issue and Action Plan	Six Month Hold	Review This Issue For Closure	Manager Review	Close	Closed
➔ by [redacted]	3/12/2012 10:02:37 AM Owner : McGovern, Karen	➔ by McGovern, Karen	3/12/2012 10:48:04 AM Owner : [redacted]	➔ by [redacted]	12/6/2012 3:32:46 PM Owner : McGovern, Karen	➔ by McGovern, Karen	12/7/2012 6:30:53 AM Owner : [redacted]

⊟ Standard Section

Audit Name:	Gas Damage Prevention Program
Current Audit Report Number:	12-014
Title: **Title** Audit or Issue name	Mark and Locate Timeliness
Line Of Business:	Utility **Risk:** Medium Risk
Issue Description: **Issue Description** Detailed description of the issue as identified in the original audit	In 2009 and 2010, IA and QA noted that recordkeeping processes used to establish the on-time performance of the Utility's mark and locate program had a system glitch, in that the time-clock feature of the software would be halted just by opening the record without performing the work or documenting an agreement with the excavator to postpone the work. As a result, the reports for on-time performance generated using this software showed a 99 percent on-time response for 2010 that cannot be relied upon. Interviews with employees in the damage prevention program confirmed that this deficiency has not yet been corrected. In 2011, IA received information from field employees that work orders ("tickets") for mark and locate services in certain divisions were several weeks behind schedule. Discussions with management confirmed that unexpectedly high demand for mark and locate services coupled with shortages of employees qualified to perform the work had resulted in tickets worked three to four weeks late in these divisions. Failure to complete mark and locate tickets within allowable time limits can delay scheduled construction work and increase the incidence of at-fault dig-ins when excavators commence work without surface markings. In addition, inaccurate recordkeeping of mark and locate timeliness does not allow management to promptly identify, diagnose, and correct potential resource shortages.
Action Plan: **Action Plan** Plan agreed to by Management and IA for addressing this issue	The Utility will provide an action plan to address this issue by April 20, 2012. 6/1/12 1. Fix system glitch - Mark & Locate system glitch has been corrected. Clock only records the time completed when an actual response is saved. 2. Create late ticket metrics - Mark & Locate has created a weekly late ticket metrics to be used by

supervisors to evaluate their team's performance. These reports are also utilized by superintendents and directors to evaluate supervisor's performance. Additional resources have been acquired and placed in areas of need.

3. Create safeguards in the IRTH application - Create a safeguard in IRTH/Field Unit application that requires certain information be entered when a locator identifies a new start date. When a "Negotiate New Start Time" response is selected, the locator will be prompted to list the name & phone number of who they contacted and the method of negotiation (phone call, voicemail, field meet). The response will not be able to be saved without making a selection and entering the required information.

AIC: **AIC** Auditor In Charge	[redacted]	**Follow-Up Coordinator:**	[redacted]
Principal Auditor:	(None)	**Follow-Up Auditor:** **Follow-Up Auditor** Auditor assigend by Follow-Up Coordinator to follow up on the issue	(None)
Asst. Follow-Up Auditor: **Asst. Follow-Up Auditor** Assitant Auditors are sometimes assigned by the AIC	(None)	**IA Director:**	Cairns, Stephen J.
IA Manager:	McGovern, Karen	**IA Support Staff:**	(None)
Client Officer's Direct Report:	Trevino, Rolando I.	**Client VP/ Director / Manager:**	Cowsert Chapman, Christine
Client Manager: **Client Manager** Individual within the client organization who has the authority to provide status updates on behalf of that organization - ususlly Manager level or above	Mcgowan, Chris	**Client Contact:** **Client Contact** Client subject matter expert for this issue	Armato, Kevin M
Attorney: **Attorney** Attorney assigned to the follow-up audit - normally used for Attorney Work-Product type audits	(None)		
Issue Origination Date: **Issue Origination Date** Date the issue was identified (normally the same date	2/10/2012		

as the audit report)

Original Client Commitment Date: 4/20/2012
Original Client Commitment Date

Original date provided by client for completing the entire action plan for this issue

Original Client Milestone Date: 1/1/2029
Original Client Milestone Date

Original date provided by client for achieving an established milestone, on the way to completing the action plan for this issue

Current Client Commitment Date: 12/31/2012
Current Client Commitment Date

Revised date provided by client for completing the entire action plan for this issue

Current Client Milestone Date: 1/1/2029
Current Client Milestone Date

Revised date provided by client for achieving an established milestone, on the way to completing the action plan for this issue

Milestone/Commitment Date History:
Milestone/Commitment Date History

Enter all revisions to Client Commitment and Milestone Dates along with client reason for the delay

Public Comments:
Public Comments

Field for providing status updates or comments on this issue

10/30/2012 12:56:03 PM - [redacted]:
[redacted],

I've attempted to update ECTS with information and received the error "You do not have permission to edit actions outside of the department you are operating in". IRTH has been notified to release the Android version to us as soon as possible. They are aiming for a production release of November 16th. We may need to push our delivery date for this item back to November 30th. Do you see any issues with being able to do this?

Thanks,

Chris McGowan
Locate & Mark Process Owner
GE&O IM Systems Integrity

10/1/2012 9:19:06 AM - Mcgowan, Chris:
Safeguard customization was released to PG&E from IRTH on 10/01/12 for testing. Depending on the testings outcome, the customization should be implemented within a few weeks.

Auditor Notes:
Auditor Notes

Used for comments intended for IA viewing only.

12/6/2012 3:32:46 PM - [redacted]:
Based on email traffic from Chris Mcgowan on 12/4/2012 and 12/6/2012 confirming that changes to Irthnet have been programmed and implemented, a review of accompanying traing materials and a discussion with a mark and locate supervisor on field roll-out, I recommend this item for closure.

Issue Effective Close Date: 12/7/2012

Issue Effective Close Date

Date issue is to be considered closed for reporting purposes (may be different than the date it was actually closed in TeamTrack)

Current Audit Report Date: 2/10/2012

⊟ System Section

Managers and Up with Access: (None)

Managers and Up with Access

Multi User field that contains all Managers, Directors, and VPs with access to this Issue

Submit Date: 3/12/2012 10:02:37 AM

Submit Date

The date that the item was created/submitted

Last Modified Date: 12/7/2012 6:30:53 AM

Last Modified Date

The last time the item's data was changed

Last Modifier: McGovern, Karen

Last Modifier

The last person to change the data in this item

Last State Change Date: 12/7/2012 6:30:53 AM

Last State Change Date

The last time the state of this item was changed

Last State Changer: McGovern, Karen

Last State Changer

The last person to change the state of this item

Original Audit Report Number: 12-014

Original Audit Report Number

Used to track the originating (parent) audit for all follow-up audits.

Follow Up Audit Number:

Aging Of Open Issues (In Months): 0 - 5

⊟ Link(s) to Audit or Issue(s)

146038: Gas Damage Prevention Program

[Current Item]

Change History

12/7/2012 6:30:53 AM by McGovern, Karen
Close Date Changed From Unassigned To 12/7/2012 6:30:53 AM
Active/Inactive Changed From Active To Inactive
State Changed From Manager Review To Closed Via Transition: Close
Secondary Owner Changed From [redacted] To [redacted]
Owner Changed From McGovern, Karen To [redacted]
Last State Changer Changed From [redacted] To McGovern, Karen
Last State Change Date Changed From 12/6/2012 3:32:46 PM To 12/7/2012 6:30:53 AM
Last Modifier Changed From [redacted] To McGovern, Karen
Last Modified Date Changed From 12/6/2012 3:32:46 PM To 12/7/2012 6:30:53 AM
Issue Effective Close Date Changed From Unassigned To 12/7/2012

12/6/2012 3:32:46 PM by [redacted]
State Changed From Six Month Hold To Manager Review Via Transition: Review This Issue For Closure
Secondary Owner Changed From Mcgowan, Chris To [redacted]
Owner Changed From [redacted] To McGovern, Karen
Last State Changer Changed From McGovern, Karen To [redacted]
Last State Change Date Changed From 3/12/2012 10:48:04 AM To 12/6/2012 3:32:46 PM
Last Modifier Changed From [redacted] To [redacted]
Last Modified Date Changed From 12/3/2012 11:30:54 AM To 12/6/2012 3:32:46 PM
Auditor Notes Changed From '' To '[Appended:] Based on email traffic from Chris Mcgowan on 12/4/2012 and 12/6/2012 confirming that changes to Irthnet have been programmed and implemented, a review of accompanying traing materials and a discussion with a mark and locate supervisor on field[...]'

12/3/2012 11:30:54 AM by [redacted]
Last Modified Date Changed From 10/30/2012 12:56:03 PM To 12/3/2012 11:30:54 AM
Current Client Commitment Date Changed From 11/30/2012 To 12/31/2012

10/30/2012 12:56:03 PM by [redacted]
Last Modifier Changed From Mcgowan, Chris To [redacted]
Last Modified Date Changed From 10/1/2012 9:19:06 AM To 10/30/2012 12:56:03 PM
Public Comments Changed From '[Original Text]' To '[Prepended:]10/30/2012 12:56:03 PM - [redacted] : [redacted] , I've attempted to update ECTS with information and received the error "You do not have permission to edit actions outside of the department you are operating in". IRTH has been notified to release the[...]'
Current Client Commitment Date Changed From 10/31/2012 To 11/30/2012

10/1/2012 9:19:06 AM by Mcgowan, Chris
Last Modifier Changed From [redacted] To Mcgowan, Chris
Last Modified Date Changed From 8/2/2012 8:24:29 AM To 10/1/2012 9:19:06 AM
Public Comments Changed From '' To '[Appended:] Safeguard customization was released to PG&E from IRTH on 10/01/12 for testing. Depending on the testings outcome, the customization should be implemented within a few weeks. '

8/2/2012 8:24:29 AM by [redacted]
Secondary Owner Changed From Armato, Kevin M To Mcgowan, Chris
Client Manager Changed From Armato, Kevin M To Mcgowan, Chris
Last Modified Date Changed From 6/1/2012 8:10:18 AM To 8/2/2012 8:24:29 AM

6/1/2012 8:10:18 AM by [redacted]
Last Modifier Changed From McGovern, Karen To [redacted]
Last Modified Date Changed From 3/12/2012 10:48:04 AM To 6/1/2012 8:10:18 AM
Action Plan Changed From '[Original Text]' To '[Appended:] 6/1/12 1. Fix system glitch - Mark & Locate system glitch has been corrected. Clock only records the time completed when an actual response is saved. 2. Create late ticket metrics - Mark & Locate has created a weekly late ticket metrics[...]'

Current Client Commitment Date Changed From 4/20/2012 To 10/31/2012

3/12/2012 10:48:04 AM by McGovern, Karen
State Changed From Mgr Reviews Issue & Action Plan To Six Month Hold Via Transition: Approve Issue and Action Plan
Secondary Owner Changed From [redacted] To Armato, Kevin M
Owner Changed From McGovern, Karen To [redacted]
Last State Changer Changed From [redacted] To McGovern, Karen
Last State Change Date Changed From 3/12/2012 10:02:37 AM To 3/12/2012 10:48:04 AM
Last Modifier Changed From [redacted] To McGovern, Karen
Last Modified Date Changed From 3/12/2012 10:03:15 AM To 3/12/2012 10:48:04 AM

3/12/2012 10:08:28 AM by (None)
Contact Changed From [redacted] To Trevino, Rolando

3/12/2012 10:03:15 AM by [redacted]
Last Modified Date Changed From 3/12/2012 10:02:37 AM To 3/12/2012 10:03:15 AM
Original Client Milestone Date Changed From Unassigned To 1/1/2029
Current Client Milestone Date Changed From Unassigned To 1/1/2029

ItemNotification	2118	1029	0	40	DeleteAction	0	
Revoke	2118						
Delete	0	2118					

ATTACHMENT 49

Exhibit: 4
CPUC Proceeding: EVO
Witness: SOTO
Date: 3-1-18

Shannon M. Ross, CSR No. 8916
Reporting Section, California Public Utilities Commission

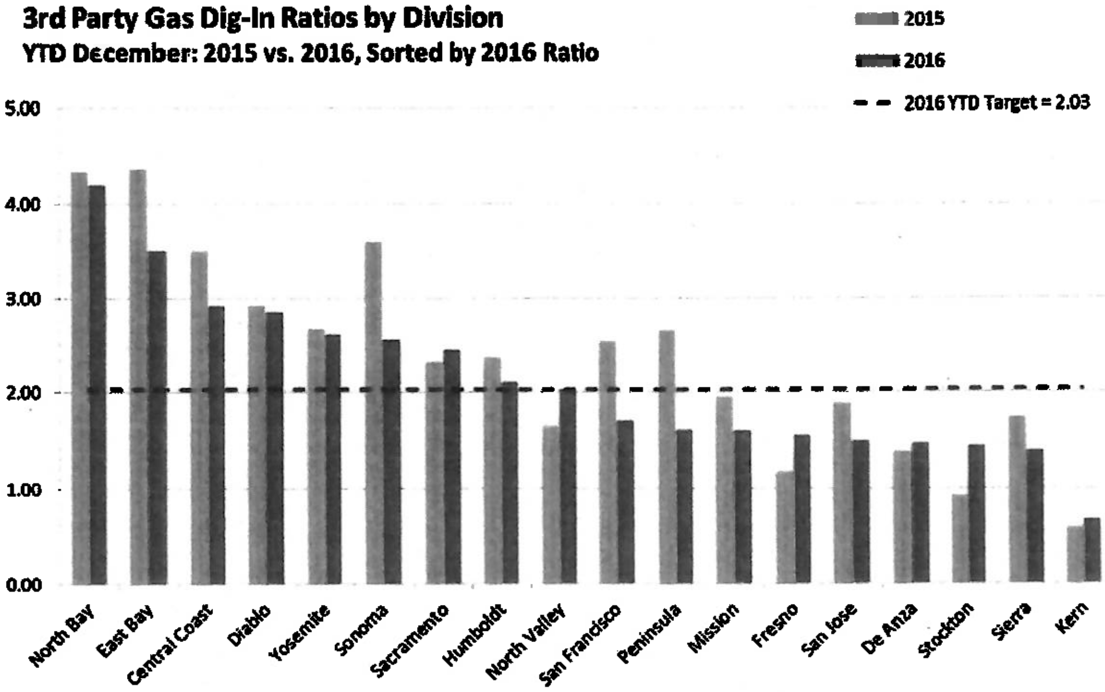
Gas Operations BPR
Keys to Success

January 2017

"Courage is what it takes to stand up and speak; courage is also what it takes to sit down and listen. ."

– Winston Churchill

Divisional dig-ins, tickets, and ratios for YTD December 2015 and 2016 are provided in the chart and table below. The following 8 divisions did not meet the EOY safety goal: North Bay, East Bay, Central Coast, Diablo, Yosemite, Sonoma, Sacramento and Humboldt. Although these divisions did not meet the EOY target, all have improved or maintained their ratios compared to the same period in 2015, with the exception of Sacramento, which experienced a 6% increase. In addition, 12 of the 18 divisions (67%) experienced dig-in ratio decreases.



	Dig-Ins			Tickets			Ratios		
Division	2015	2016	% Change	2015	2016	% Change	2015	2016	% Change
North Bay	134	137	2%	30,886	32,625	6%	4.34	4.20	-3%
East Bay	168	166	-1%	38,488	47,381	23%	4.36	3.50	-20%
Central Coast	101	93	-8%	28,778	31,813	11%	3.51	2.92	-17%
Diablo	132	124	-6%	45,232	43,482	-4%	2.92	2.85	-2%
Yosemite	141	135	-4%	52,616	51,718	-2%	2.68	2.61	-3%
Sonoma	80	60	-25%	22,219	23,520	6%	3.60	2.55	-29%
Sacramento	226	274	21%	97,474	111,869	15%	2.32	2.45	6%
Humboldt	33	25	-24%	13,917	11,909	-14%	2.37	2.10	-11%
North Valley	50	52	4%	30,220	25,674	-15%	1.65	2.03	22%
San Francisco	65	67	3%	25,629	39,398	54%	2.54	1.70	-33%
Peninsula	111	106	-5%	41,691	65,909	58%	2.66	1.61	-40%
Mission	74	77	4%	37,842	47,967	27%	1.96	1.61	-18%
Fresno	61	85	39%	51,597	54,633	6%	1.18	1.56	32%
San Jose	99	91	-8%	52,478	60,876	16%	1.89	1.49	-21%
De Anza	45	65	44%	32,336	44,219	37%	1.39	1.47	6%
Stockton	49	70	43%	53,379	48,444	-9%	0.92	1.44	57%
Sierra	73	60	-18%	42,064	43,083	2%	1.74	1.39	-20%
Kern	52	47	-10%	89,333	71,460	-20%	0.58	0.66	13%
Other	n/a	n/a	n/a	2,722	2,992	10%	n/a	n/a	n/a
Total	**1,694**	**1,734**	**2%**	**788,901**	**858,972**	**9%**	**2.15**	**2.02**	**-6%**

Notes:
Other primarily includes PG&E Fiber and applies only to USA tickets.
2015 dig-ins and ratios have been restated to include excavation-related coating/wrap damages.

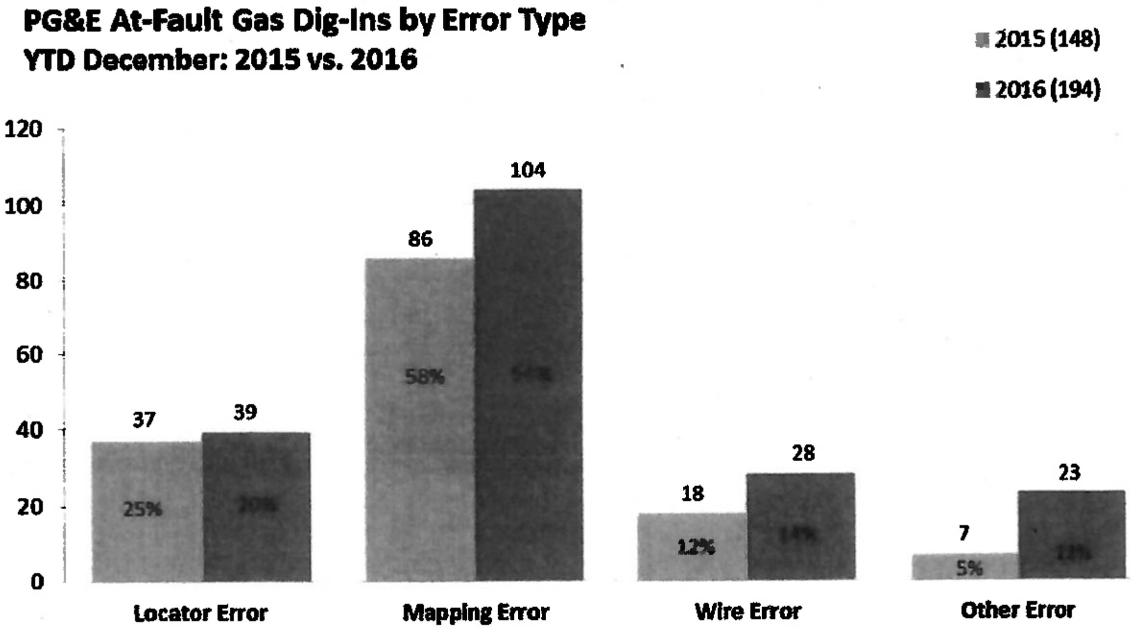
Locate and Mark

The table below shows YTD December 2016 Locate and Mark tickets worked and late tickets compared to the same period in 2015. Late tickets for all divisions have dramatically decreased. Systemwide, there were 44 late tickets in 2016 compared to 3,385 in 2015 — a decrease of 99%.

L&M Tickets Worked and Late Tickets
YTD December: 2015 vs. 2016

	Tickets Worked			Late Tickets		
Division	**2015**	**2016**	**% Change**	**2015**	**2016**	**% Change**
Central Coast	21,743	24,492	13%	59	0	-100%
DeAnza	21,843	25,131	15%	73	3	-96%
Diablo	31,277	31,259	0%	67	8	-88%
East Bay	28,299	34,678	23%	179	9	-95%
Fresno	37,854	39,801	5%	80	0	-100%
Humboldt	12,339	10,339	-16%	706	0	-100%
Kern	42,753	42,255	-1%	285	1	-100%
Los Padres	17,293	20,227	17%	33	1	-97%
Mission	24,271	30,669	26%	20	2	-90%
North Bay	23,779	24,650	4%	85	8	-91%
North Valley	24,420	19,849	-19%	34	0	-100%
Peninsula	27,000	31,909	18%	88	0	-100%
Sacramento	72,572	80,797	11%	35	2	-94%
San Francisco	18,317	22,227	21%	165	5	-97%
Sierra	32,558	31,586	-3%	48	2	-96%
San Jose	32,171	37,530	17%	127	2	-98%
Sonoma	15,331	16,134	5%	221	1	-100%
Stockton	35,018	34,877	0%	595	0	-100%
Yosemite	38,974	38,546	n/a	485	0	-100%
Total	**557,812**	**596,956**	**7%**	**3,385**	**44**	**-99%**

The chart below shows YTD December 2016 and 2015 at-fault gas dig-ins by type of error. Overall, PG&E at-fault dig-ins have increased 31% (from 148 to 194) year-over-year. All error types have increased.

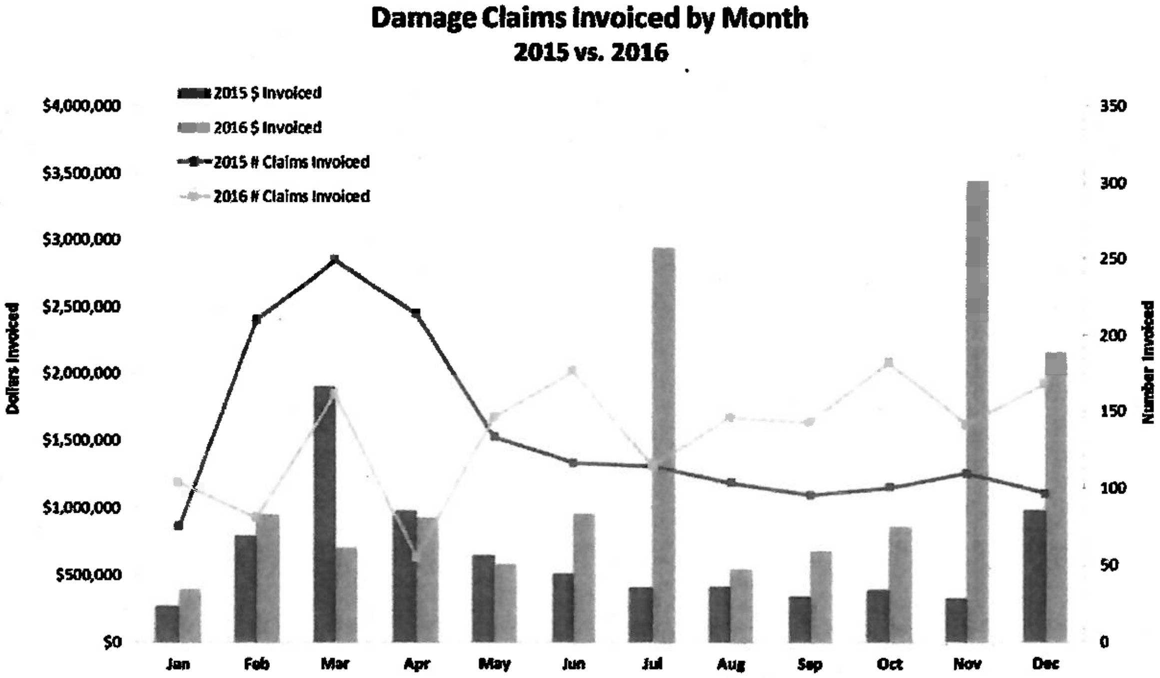


Note: Locator errors consist of mis-marks, inadequate marks or not located. Mapping errors are generally facilities that are not mapped. Wire error consists of the locating wire missing or broken. Other error can include equipment failure, layered pipes, and construction defects. Other error also includes operator error damages caused by PG&E electric and gas crew.

The increase in PG&E at-fault dig-ins is partly attributed to Locate and Mark competency challenges associated with a high level of attrition and increased workload issues. To address the growing trend in at-fault dig-ins, Locate and Mark supervisors are continuing to conduct end-of-day reviews in all divisions. Supervisors are also holding locators accountable for following all work procedures, and recognizing those who regularly do so. Quality Management is working with Senior Compliance Representatives to identify and train locators.

Damage Claims

2016 and 2015 damage claims invoiced and associated revenues are shown in the chart below. YTD December 2016, Damage Claims invoiced 1,620 claims representing $15.1 million for an average of $9,350 per claim. The 2016 totals reflect a $3.5 million reduction adjustment due to a decision by GT finance to not pursue hydrotest claims. In comparison, 1,614 claims representing $7.9 million for an average of $4,903 were invoiced for the same period in 2015. For the month of December 2016, there were 168 claims invoiced totaling $2,154,739, including four transmission claims totaling $1,405,001.


Damage Claims Invoiced by Month
2015 vs. 2016

The table below shows the total number of unbilled damage claims and where they reside in the review process. As of the end of December, there were 87 pending claims. 31 of these are more than 30 days old due to missing time cards, open invoices, pending agency reports and pending paving costs/invoices. The current average bill is holding steady at 35 days old, which is a significant improvement compared to an average of over 100 days at the beginning of the year. Damage Claims is continuing to see increased support from the field in providing the necessary documentation to process claims since the inception of the claims aging report in May. This report is sent out on a weekly basis to M&C and clerical directors and has been successful in reducing the number of outstanding claims.

Unbilled Damage Claims

Total Pending	87
DP War Room Pending Review	8 (9%)
Construction	32 (37%)
Field Services	33 (38%)
L&M	7 (8%)
Paving/Estimating	9 (10%)
Mapping	10 (11%)

Note: Pending area (e.g., Construction, Mapping) counts do not sum to the Total Pending count since a claim can be pending information in several areas.

ATTACHMENT 50

Exhibit: 3
CPUC Proceeding: EUO
Witness: STAVROPOULOS NICK
Date: MARCH 2, 2018

Karly Powers, CSR No. 13991
Reporting Section, California Public Utilities Commission

PACIFIC GAS AND ELECTRIC COMPANY
Gas Operations Data Response

PG&E Data Request Index No.:	11718		
Request Date:	02-06-2018	Date Sent:	02-23-2018
Requesting Party:	CPUC-SED		
External Requester:	Wai-Yin "Franky" Chan	PG&E Contact:	Mike Bradley

QUESTION 11718.01: On December 20, 2017, PG&E stated,

"*Using the updated information available to us from the recent improvements to IrthNet, we are planning to review all of the data request responses that we have provided to SED on locate and mark issues since mid-2016, and to revise these responses as needed to reflect updated historical late ticket numbers and any other information based upon those numbers. Given the volume of data requests in this matter to date, this may take some time, but our goal is to provide these updated responses to SED in January.*"

On January 26, 2018, PG&E followed up on its December, 2017 statement, saying,

"*My December 20th email to you indicated that we are reviewing all of the data request responses that we have provided to the SED on locate and mark issues since mid-2016, and that we would be revising the responses to reflect updated historical late ticket numbers and any other information based upon those numbers. To be clear, we also will be correcting representations in those responses that the Guidepost investigation indicates, or that we otherwise determine, need to be revised, not just the late ticket numbers and related information.*"

With these statements in mind, please provide the following information:

a. The updated historical late ticket numbers referenced in the January 26, 2018 statement.
b. The methodology used by PG&E for determining the late ticket numbers that were initially reported to SED.
c. The methodology used by PG&E for determining the "updated historical late ticket numbers" that PG&E references in the December 20, 2017 email.
d. The categories of the data that PG&E is updating, including, but not limited to:
    a. Counts of late tickets by division and district.
e. A breakdown of the data that PG&E is updating by year.

RESPONSE 11718.01: As noted in the correspondence referenced herein, PG&E is reviewing the logic that was used to derive historical late ticket counts from IrthNet and is working to determine more inclusive logic to derive revised historical late ticket counts from IrthNet. A third-party consulting firm, Bates White, has been retained to aid in understanding the IrthNet system and developing and validating this logic. Once this revised logic is finalized and reviewed by Bates White, PG&E will update this response to explain how the revised ticket counts were derived based on the information available in IrthNet and provide the resulting data. We anticipate that this data will be able to be broken down by month and division.

At present, as explained above, we anticipate revising historical late ticket numbers from 2012 through 2017. PG&E is continuing to assess its IrthNet reporting logic to identify the actions that could be taken on a ticket that would have caused it to be misclassified. As those conditions are identified, the total number of late tickets identified may change. PG&E expects that its current estimates of 44,794 late tickets out of 760,177 total tickets received in 2012, of 51,272 late tickets out of 671,015 total tickets received in 2013, 47,589 late tickets out of 702,275 total tickets received in 2014, 61,114 late tickets out of 820,455 total tickets received in 2015, and 55,666 late tickets out of 898,120 total tickets received in 2016 will change as PG&E's work continues and the logic of its IrthNet search function becomes more refined. The current estimates reflect tickets from this period that had no initial response and are past the due date time, that had an ongoing response and are past the due date time, or that have a completed response but the completed response was after the due date time.

As to (b), as we previously explained in our response to Index No. 10895.01 (delivered to the SED on June 9, 2017), the late ticket numbers we initially reported to SED for January-June 2016 were queried from IrthNet using the "Past Due Ticket Listing" function. For late ticket numbers prior to January 2016, we utilized the Organizational Reporting Initiative ("ORI"), which is a repository for portions of IrthNet data and SAP data. PG&E has determined that those search functions operated in a manner that would not count tickets as late if the personnel took certain actions in IrthNet prior to the ticket's start time, even if the required locating and marking activities were not completed within the required timeframe.

QUESTION 11718.02: Will the "updated historical late ticket numbers" referenced in PG&E's December 20, 2017 statement show an upward adjustment of the late ticket numbers in each category identified in response to question 1? If not, please identify any category that will see a downward adjustment.

RESPONSE 11718.02: PG&E is continuing to assess its IrthNet reporting logic to identify actions that could be taken on a ticket that cause it to be misclassified. As those conditions are identified, the number of instances at issue may change.

QUESTION 11718.03: Please provide a list identifying each past data request response that PG&E plans to update and/or revise. Please provide an explanation for each update or revision.

RESPONSE 11718.03: Because PG&E's review of the data in consultation with Bates White and, as previously discussed with SED, the Guidepost review are ongoing, PG&E is still in the process of determining the responses that may need to be updated or revised beyond the data discussed above.

QUESTION 11718.04: Please provide, in chronological order, all communications (including emails, messages, reports included Joel Dickson, John Higgins, Jesus Soto, or Nickolas Stavropoulos related to the following:

a. Intentional under-reporting of late tickets
b. Falsification of locate and mark records
c. Any instances of intentional under-reporting of late tickets
d. Any instances of potential falsification of locate and mark records
e. Prior to the Guidepost investigation, matrices for counting late tickets that differed from the matrix PG&E used to count late tickets.
f. Prior to PG&E's own internal Guidepost investigation, approaches for counting late tickets that differed from the approach that PG&E used to count late tickets.

RESPONSE 11718.04: On February 16, 2018, Charles Middlekauff from PG&E and Darryl Gruen from SED agreed to modify this request. That agreement was reflected in a series of e-mails and on February 19, 2018, PG&E provided to SED a red-line version of this request. PG&E and SED agreed to the following revised version.

> *Please provide, in chronological order, all communications from January 1, 2012 through December 31, 2017 (including emails, messages, reports and other documents) on which John Higgins, Jesus Soto, or Nickolas Stavropoulos were included related to the following:*
>
> a. *Intentional under-reporting of late tickets*
> b. *Falsification of locate and mark records*
> c. *Any instances of intentional under-reporting of late tickets*
> d. *Any instances of potential falsification of locate and mark records*
> e. *Prior to the Guidepost investigation, matrices for counting late tickets that differed from the matrix PG&E used to count late tickets, where the communication contains (matri! /10 (option! or alternative!)).*
> f. *Prior to PG&E's own internal Guidepost investigation, approaches for counting late tickets that differed from the approach that PG&E used to count late tickets, where the communication contains (matri! /10 (option! or alternative!)).*
>
> *In addition, PG&E and SED agreed to include the following request to Question 11718.04:*
>
> *Please provide, in chronological order, all communications from January 1, 2014 through December 31, 2016 (including emails, messages, reports and other documents) on which Joel Dickson was included related to the following:*
>
> a. *Intentional under-reporting of late tickets, where the communication contains (falsify falsification false).*
> b. *Falsification of locate and mark records, where the communication contains (falsify falsification false).*
> c. *Any instances of intentional under-reporting of late tickets, where the communication contains (falsify falsification false).*
> d. *Any instances of potential falsification of locate and mark records, where the communication contains (falsify falsification false).*
> e. *Prior to the Guidepost investigation, matrices for counting late tickets that differed from the matrix PG&E used to count late tickets, where the communication contains (matri! /10 (option! or alternative!)).*
> f. *Prior to PG&E's own internal Guidepost investigation, approaches for counting late tickets that differed from the approach that PG&E used to count late tickets, where the communication contains (matri! /10 (option! or alternative!)).*

Based on this agreed to revision, PG&E is producing documents responsive to these requests to SED. PG&E and SED also agreed that the document production would be on a rolling basis and would be completed by February 26, 2018. Provision of these documents does not reflect a determination that the document indicates any employee's knowledge of falsification or intentional under-reporting of locate and mark records or late tickets, but rather reflects PG&E's effort to provide documents that relate to the topics identified in the data request and our discussions with SED as areas of SED's interest.

QUESTION 11718.05: Please identify the first date PG&E became communicated internally about falsification of late tickets. Please provide that communication

.**RESPONSE 11718.05:** PG&E is separately providing email correspondence from a variety of custodians that includes correspondence relating to instances in which an 811 ticket was reported in PG&E's IrthNet system as timely based on actions taken in the IrthNet system other than the completion of the ticket within the time required by California Government Code Section 4216, including correspondence (to the extent any such correspondence exists) responsive to SED's requests regarding the falsification of locate and mark records. Provision of these documents does not reflect a determination that the document indicates any employee's knowledge of falsification or intentional under-reporting of locate and mark records or late tickets, but rather reflects PG&E's effort to provide documents that relate to the topics identified in the data request and our discussions with SED as areas of SED's interest. These documents are being provided in response to Question 11718.04 above. In addition, PG&E will provide the results of the independent review currently being conducted by Guidepost Solutions LLC regarding these issues.

QUESTION 11718.06: Did anyone employed by PG&E authorize the method of PG&E's late ticket counting that PG&E intends to revise to reflect "updated historical late ticket numbers and any other information based upon those numbers"? If so, please identify all such employees and the communications they issued to make such authorizations.

RESPONSE 11718.06: PG&E has identified instances in which PG&E personnel and/or contractors took actions on an IrthNet ticket that caused the system's then-current reporting logic to classify the ticket as timely when it was not completed within the required timeframe. PG&E will provide the results of the independent review currently being conducted by Guidepost Solutions LLC regarding these issues.

QUESTION 11718.07: Did PG&E have a practice, procedure, policy or other PG&E document in place that authorized the method of PG&E's late ticket counting that PG&E intends to revise to reflect "updated historical late ticket numbers and any other information based upon those numbers"? If so, please list all such practices, procedures, policies and PG&E documents, and provide them.

RESPONSE 11718.07: PG&E policy did not authorize employees to take actions in the IrthNet system that were designed to result in a ticket being classified in IrthNet as timely when it was not actually completed within the time required by California Government Code Section 4216. To the extent that any such activity occurred as a matter of practice, PG&E will provide the results of the independent review currently being conducted by Guidepost Solutions LLC regarding these issues.

ATTACHMENT 51

Exhibit: 4
CPUC Proceeding: EUO
Witness: STAVROPOULOS, NICK
Date: MARCH 2, 2018

Carol A. Mendez, CSR No. 4330
Reporting Section, California Public Utilities Commission

From: Dickson, Joel
To: Carroll, Jeffery
CC: [redacted]
Sent: 3/4/2016 7:43:27 AM
Subject: RE: BULLET POINTS FOR FAIRFIELD DIG IN

Ok. Please look at how we showed up as a integrated DP team for incident as well. Look at communication protocols between us and the field M&C folks; look at transitioning investigation efforts between DiRT, L&M and billing; look at how this ticket was transitioned between [redacted] and [redacted] evaluate why the 2"offset was not mapped/CAP it and finally there seems to be a clear communication breakdown between our team and the contractor. [redacted] spoke to me yesterday at length regarding how challenging it is to work these long/exhaustive tickets with the contractor.
Thanks J

From: Carroll, Jeffery
Sent: Thursday, March 03, 2016 5:06 PM
To: Dickson, Joel
Cc: [redacted]
Subject: FW: BULLET POINTS FOR FAIRFIELD DIG IN

Joel:

These bullet points will be provided to Erik Kurtz for tomorrow's AM briefing on the Fairfield Dig-in.

I have reviewed and there is nothing factually wrong with the points. There are some alleged conversations and perhaps some discrepancy of notes viewed on an iPhone vs a Tablet – but these are issues that we need to resolve separately – and do not alter the facts below.

I will be working with [redacted] on this.:.

Jeff

From: Gil-Blanco, Jorge
Sent: Thursday, March 03, 2016 3:39 PM
To: Carroll, Jeffery
Subject: FW: BULLET POINTS FOR FAIRFIELD DIG IN

Jeff,
Eric Kurtz contacted my investigator and asked him to provide him with a bullet point email regarding the Fairfield dig-in, so he could address it on the morning call tomorrow. Please call me regarding this.
Jorge

Jorge Gil-Blanco Supervisor, Investigations
Dig-in Reduction Team (DiRT)
Pacific Gas & Electric Co. / Gas Emergency Preparedness
6121 Bollinger Canyon Rd., Bldg "Z", San Ramon CA 94583
Desk: (925) 328-5805 Cell: (925)786-1414 Email: j9gn@pge.com

811
Know what's below.
Call before you dig.

From: [redacted]
Sent: Thursday, March 03, 2016 2:54 PM

To: Gil-Blanco, Jorge
Subject: BULLET POINTS FOR FAIRFIELD DIG IN

- ON 02-26-16 @ 1144HRS, [redacted] OF RADER EXCAVATING CALLED IN FOR A USA TICKET. USA TICKET NUMBER #097667 WAS ASSIGNED TO THIS REQUEST.

- IN THIS TICKET THE AREA TO BE MARKED AND LOCATED WAS CALLED FOR AS FOLLOWS: "E/SI /O PENNSYLVANIA AVE FR DANA DR TO GATEWAY BLVD EXT 20' E INTO PROP FOR ENT DIST".

- ON 02-29-16 @ 1157 HRS, PG&E L&M [redacted] MADE AN ENTRY INTO THIS USA TICKET SHOWING THAT THIS TICKET WAS LOCATED AND MARKED, BEING CLEARED FOR EXCAVATION TO START AS OF 03-02-16 @ 0800HRS. IT ALSO HAS LISTED THAT THE AREA WAS PRE MARKED.

- ON 02-29-16 @ 1159HRS A POSITIVE RESPONSE WAS SENT TO RADER EXCAVATING, CLEARING THEM FOR EXCAVATION WITHIN THE ABOVE NOTED AND DELINEATED AREA REQUESTED.

- ON 03-02-16 @ 1142HRS, [redacted] MADE A FOLLOW UP USA TICKET REQUEST. THE NOTES ON THIS REQUEST ARE, "CUST SEES NO EVIDENCE OF MARKINGS PLS CANTACT [redacted] [redacted] WITH ETA TO MARK SITE OR GIVE CLEARANCE ASAP."

- ON 03-02-16 [redacted] CONTACTED [redacted] ABOUT WHY THE AREA BETWEEN B. GALE WILSON BLVD AND GATEWAY BLVD, ON PENNSYLVANIA AVE HAD NO MARKINGS, [redacted] TOLD [redacted] THAT HE HAD "MESSED UP" AND NOT MARKED OUT THIS AREA. [redacted] TOLD [redacted] THAT HE WOULD COME OUT THE NEXT MORNING AND GET THIS AREA LOCATED AND MARKED.

- ON 03-03-16 WHEN [redacted] WENT TO GET IN HIS WORK TRUCK, HE SAW HE HAD A FLAT TIRE. HE THEN CALLED PG&E L&M [redacted] AND ASKED HIM TO RESPOND TO THE LOCATION TO PERFORM THE LOCATE AND MARK FOR THIS AREA.

- ON 03-03-16 AT APPROXIMATELY 0855HRS WHILE [redacted] WAS DOING A LOCATE AND MARK FOR UNDERGROUND PG&E UTILITIES IN THE AREA, A RADER EMPLOYEE WAS USING A BACKHOE WITHIN THE DELINEATED USA TICKET AREA AND STRUCK A 2" PLASTIC GAS MAIN, CAUSING THE RELEASE OF GAS FROM THE LINE.

- UPON TALKING TO BOTH [redacted] AND [redacted] BOTH TOLD ME THAT NEITHER OF THEM HAD UPDATED THE USA TICKET THAT HAD BEEN CLEARED FOR EXCAVATION, TO SHOW THAT THE EXCAVATION SHOULD NOT TAKE PLACE UNTIL THE AREA BETWEEN B. GALE WILSON AND GATEWAY WAS LOCATED AND MARKED. NEITHER [redacted] OR [redacted] TOLD / INFORMED ANYONE FROM RADER NOT TO DIG / EXCAVATE UNTIL THE AREA IN QUESTION WAS LOCATED AND MARKED. MARK OF RADER EXCAVATING ALSO CONFIRMED THIS.

- [redacted] TOLD ME THAT HIS CREW HAD IN FACT POT HOLED THE AREA NEAREST THE NORTH MOST DELINEATION (NEAR GATEWAY @ PENNSYLVANIA) WHERE AN OLD YELLOW PAINT MARKING WAS, TO TRY AND SEE IF IN FACT THERE WAS A GAS LINE THERE. THIS YELLOW PAINT MARKING SHOWED A GAS LINE RUNNING IN AN EAST / WEST DIRECTION. UPON POT HOLING IN THIS AREA, THEY LOCATED A "GAS VALVE". RADER THEN BEGAN TO EXCAVATE WITH A BACKHOE APPROX 8' SOUTH OF THE LINE THEY BELIEVED WAS SHOWING TO RUN EAST / WEST OF THE LOCATION. WHILE USING A BACKHOE TO EXCAVATE AND AREA FOR A VAULT, THEY STRUCK AND DAMAGED A 2" PLASTIC GAS MAIN BELONGING TO PG&E, THAT WAS RUNNING IN A NORTH / SOUTH DIRECTION.

- [redacted] WAS ON THE SITE AT THE TIME THIS DAMAGE OCCURRED AND MADE THE NOTIFICATION TO PG&E CREWS.

ATTACHMENT 52

BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE
STATE OF CALIFORNIA

IN THE MATTER OF THE INVESTIGATION PERTAINING TO PG&E'S POLE MAINTENANCE PRACTICES.)

CONFIDENTIAL

EXAMINATION UNDER OATH OF JENNIFER BURROWS

REPORTER'S TRANSCRIPT
San Francisco, California
September 1, 2017
Pages 1 - 189

Reported by: Alejandrina E. Shori, CSR No. 8856
Thomas C. Brenneman, CSR No. 9554
Carol A. Mendez, CSR No. 4330

PUBLIC UTILITIES COMMISSION, STATE OF CALIFORNIA
SAN FRANCISCO, CALIFORNIA

IN THE MATTER OF THE INVESTIGATION PERTAINING TO PG&E'S POLE MAINTENANCE PRACTICES.

EXAMINATION UNDER OATH OF JENNIFER BURROWS

IN ATTENDANCE: September 1, 2017

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BE IT REMEMBERED THAT, by Subpoena, and on Friday, September 1, 2017, commencing at the hour of 9:00 a.m. thereof, at the offices of the CALIFORNIA PUBLIC UTILITIES COMMISSION, 505 Van Ness Avenue, Room 2204, San Francisco, California 94102, before ALEJANDRINA E. SHORI, CSR No. 8856, THOMAS BRENNEMAN, CSR No. 9554, and CAROL MENDEZ, CSR No. 4330, personally appeared,

JENNIFER BURROWS

called as a witness herein, who, being first duly sworn, was thereupon examined and interrogated as hereinafter set forth.

* * * * *

EXAMINATION

BY MR. GRUEN:

Q On the record.

Good morning. Would you please state your name for the record.

A Jennifer Lynn Burrows.

Q And would you spell that as well?

A J-e-n-n-i-f-e-r L-y-n-n B-u-r-r-o-w-s.

Q And your address?

A [redacted]

Q Great. Ma'am, my name is Darryl Gruen and I'm the staff counsel Legal

Division for the California Public Utilities Commission, and I'm doing this examination under oath -- that's what these questions are, questions and answers to you is called -- today on behalf of the Commission's SED division. And I'm here with Ken Bruno who is program manager for the Gas Safety and Reliability Branch of the Safety Enforcement Division.

Do you have the spelling of Mr. Bruno?

THE REPORTER: (Nods.)

MR. GRUEN: Q Okay. So an examination under oath is just like a deposition, except there's no underlying proceeding. So that's why PG&E does not have the right to be here, and it's why we're able to have this like a deposition or like a question and answer with a record.

Okay. When I say PG&E doesn't have the right to be here, I know you're an employee of PG&E.

A Right.

Q I mean that they don't have the right to have their attorneys here --

A Representation.

Q -- unless you want them.

And I'll ask you now just to be

clear. You have -- you can ask for PG&E's attorney to be here or your own attorney to be here. And just to be clear, do you want to have PG&E's attorney at this examination under oath?

A No.

Q Okay. And do you want to have your own personal attorney?

A No. Thank you.

Q So we don't know yet where we are going with this EUO right now. And by that I mean since we're not in any formal proceeding, we could use this information later if we decide to go and have a formal proceeding as a result of information that we're gathering. So we may do that later. Do you understand that?

A Yes.

Q Okay. And when I ask questions, it's important that you provide truthful and complete answers to them. Please answer my questions directly. I may ask certain questions very broadly which will give you a chance to add to your answers. And in some cases, I may ask you to just give as much detail as you'd like. And I'll let you know when that's the case. But please keep your answers directly responsive to the questions that I ask. Do you understand that?

A Yes.

Q Okay. And if you do not understand my question either because I've not articulated it well or I've just phrased it poorly or something doesn't make sense, please either ask me to repeat it or just say you do not understand the question.

A Okay.

Q Please do not speculate or guess about what the question is. Okay?

A Yes.

Q Okay. And I'll just hand over -- this is a subpoena. Did you receive a subpoena --

A I did.

Q -- to appear today?

Okay. And I'll just share this with you.

I'm handing over to, for the record, just a copy of the subpoena that we sent to Jon Pendleton, PG&E's attorney.

Do you recognize that as the subpoena that you received to appear today?

You want to take a look at it?

A Yes.

Q Okay. Great.

So if this could be marked as Exhibit 1. I'll hand this to the court reporter.

(Exhibit No. 1: Subpoena to Appear was marked for identification.)

MR. GRUEN: Q Jennifer, you're under -- you're here today under compulsion of subpoena and witness fees. That's what this subpoena means.

So the Safety and Enforcement Division as a department of -- as a division of the Commission has statutory authority to issue the subpoena to compel the attendance of employees to testify and produce documents. And that's part of our supervisorial authority over utilities like PG&E. So this -- what that means is you're not here voluntarily and the information you provide us is not voluntary. You're answering questions because we're requiring it.

A Mm-hmm.

Q That's what that means. Do you understand that?

A Yes.

Q Okay. A word about communications you've had involving PG&E attorneys. If you have -- let me just be clear what I mean. If you had a communication during your work as a PG&E employee that included a PG&E attorney, then those communications are protected. They're protected information and should not be disclosed.

A Okay.

Q Any communications. So if I ask you questions and answering involves a communication that involved a PG&E attorney --

A Okay.

Q -- we're not asking about that here.

A Okay.

Q That's protected and confidential.

So any questions I ask -- stated another way, any questions I ask are not specifically asking about communications that included PG&E attorneys. Do you understand that?

A Yes.

Q Okay. Okay. Let me state this on the record. PG&E is prohibited from retaliating against you for information you disclose to us in response to our questions to you. As I said, you're not voluntarily giving us information. You're required to.

We're not saying in any way that

PG&E has retaliated against you because we have no information at this time suggesting that that's happened.

A Right.

Q But I want to put this out here to say that we'll do everything in our power under the law to ensure that there is no retaliation against you for any information that you provide to us. Okay. We take very seriously our legal duty and prerogative to protect persons who provide information to us needed to promote safety --

A Mm-hmm.

Q -- the public interest, or both. Okay?

A Yes.

Q And if you have any questions -- I'll ask you, do you understand that first?

A I do understand.

Q Okay. Do you have any questions about what I've just said?

A I don't.

Q Okay. If you feel that you are being threatened for retaliation or actually retaliated against by anyone at PG&E, you can inform us promptly.

And when I say "us," you can inform Ken or me --

A Yes.

Q -- promptly of the nature of the threats or actual retaliation. Do you understand that?

A I do.

Q Do you have any reason to believe that PG&E will retaliate against you for coming to talk to us today?

A Not at this time.

Q Okay. Do you have reason to believe PG&E has retaliated against anyone else who has or could communicate with us regarding PG&E's locating and marking practices?

A Not at this time.

Q Okay. Has PG&E threatened or in any way suggested retaliation against you for communicating with us today?

A Absolutely not.

Q Good. Okay.

Have any non-attorneys spoken with you about the topics identified in the subpoena today?

A Non-attorneys.

Q Anyone who isn't an attorney.

A So, I do know someone else who was --

Q Okay.

A -- called in.

Q Yes.

A Okay.

Q Who was that?

A Katherin Mack.

Q Okay.

A Who told me that I was probably going to be here. Asked.

Q Okay.

A Yeah. Mm-hmm.

Q What else did you talk with Katherin about related to today?

A Just that she was here for a long time. And that -- I'd already seen the data request because I'm part of Quality Management and part of the data that you requested was related to the information that my department actually produces.

So all she -- she called me to tell me that I -- she just wanted me to know that she had provided my name as someone you guys might be interested in talking to.

Q Okay. Good.

A And that it might be a long time -- you might keep me a long time if you talk to me, that kind of a --

Q We'll do our best to be as efficient as we can today.

A That's all right.

Q If you need a break for any reason --

A Yeah.

Q -- we're going through, just let us know.

A Okay.

Q In fact, maybe this is a good time to say probably you will -- maybe propose a 15-minute break mid morning sometime.

A Okay.

Q And then maybe do lunch --

If it works for you, Ms. Shori, perhaps at noon and then reconvene at one o'clock, if that works with the court reporters.

THE REPORTER: (Nods.)

MR. GRUEN: Q Okay. Let's see. All right. The first, just as a kind of a beginning, just to get started, maybe if I could just, so we have a common understanding of certain terms --

A Okay.

Q -- related to locating and marking just for the record. I'm going to ask you about your understanding of the meaning of some terms and I'll do my best to work with you just as you've explained them.

A Okay.

Q How you define them so we can have a basis of understanding as we move forward.

So the first question, are you familiar with the term locating and marking?

A Yes.

Q What does that term mean to you in the context of PG&E's natural gas system?

A It means that you are required, if you are planning to excavate -- which is always the debated term -- but to call 811 before you dig, and we are required to respond to that within 48 hours and/or before any construction start date.

Q Yeah. Good.

And you said excavating is a debated term and then you used the term "digging."

A Mm-hmm.

Q You want to elaborate on what that means?

A Just because I think that the general public sometimes is confused whether they need to call or not, and if they are okay to go ahead and -- like if it's their property and such. So that was what I meant by that.

I think there's still --

Q Okay.

A -- confusion around when it's absolutely required --

Q Okay.

A -- to call 811.

Q Okay.

A Yeah.

Q Good. Okay. So moving forward when we use the term locate and mark, or locating and marking, we'll use that to mean what you just described.

A Okay.

Q Okay? Good.

And also I mentioned it, but when I'm asking about locating and marking unless I say otherwise, I'm specifically asking about matters related to PG&E's natural gas system.

A Okay.

Q Another term question. What is the term used to describe someone who goes out on behalf of PG&E and locates and marks its underground equipment within an identified excavation area?

A A locator.

Q Yeah. Thank you.

A Mm-hmm.

Q That's the understanding I had,

too.

A Okay.

Q Just to get it on the record so we're clear, and anyone who reads this later understands that we had common understanding what we're talking about.

Okay. And if -- I think you talked about a requirement. But if someone who wants to dig calls in and says "I want to dig" and it's in PG&E's service area, how long does PG&E have in order to respond to the excavator's call?

A So it's 48 hours and I know there's -- so I've been out of Gas for a bit now, but there's a pending requirement that says 48 hours. Slight change from when we actually receive the request. So --

Q Okay.

A -- when the clock starts ticking has changed. Right. So it used to be 48 hours from when they call in. Then it became 48 hours from when we receive the ticket. Like if I receive it at 4:00 p.m. today, the clock starts at 8:00 a.m. or whatever my beginning of day is, I have 48 hours from that time period so --

Q So if you got the ticket at 4:00 p.m. today --

A Yeah.

Q -- for example --

A It would start tomorrow morning.

Q Your first business day?

A Yeah. Uh-huh.

Q So in this case, Tuesday --

A It would be Monday -- yeah. Tuesday.

Q After Labor Day.

A A holiday.

Q Yeah.

A Yeah. I'd have 48 hours.

Q Starting Tuesday morning?

A Mm-hmm.

Q So then you would need to respond to a ticket at 4:00 p.m. this afternoon by Wednesday, the close of business on next Wednesday in that case?

A Yeah. That's my understanding --

Q Okay.

A -- of the change, mm-hmm.

Q Good. And what would -- what would happen -- or what would be recorded if PG&E did not respond in this example that we just talked through, what if PG&E did not respond by Wednesday?

A So, I don't know the -- because I was not on that side of the house to know how they make contact or --

Q Okay.

A -- if they report that all to, you know, to you, but it's a late ticket basically and it's counted in our metrics.

Q Yeah.

A Yeah.

Q That's all I'm looking for, is just the terminology --

A Okay.

Q -- at this point. So we know a late ticket just means that if PG&E, in this example, did not respond within the 48 hours starting the next business day --

A Yeah.

Q -- after the ticket was received, then it's noted as what's called a late ticket?

A Late ticket, mm-hmm.

Q Okay. Great.

Okay. So with that, let me switch a little bit.

I know Mr. Pendleton, PG&E's attorney, sent to me a copy of your work experience. And I have that here and I understand you have a copy of it as well --

A Mm-hmm.

Q -- in front of you?

Okay. Great.

If we can just, for the record -- what I'll do, I might suggest too if you want to use that one that's fine.

A Okay.

Q But if you have this one as well, because this is going to be the one I'll ask to be marked as an exhibit on the record as well.

So if I could ask, I'll identify it as Work History Summary for Jennifer Burrows as provided by PG&E dated August 31, 2017 at 12:52 p.m. and ask that this be marked as Exhibit 2.

(Exhibit No. 2: Work History Summary was marked for identification.)

MR. GRUEN: Thank you.

Q Okay. And you have a copy of what I just described in front of you?

A I do.

Q Okay, great.

So, you mentioned -- after glancing at this, my instinct is not all of this is locate-and-mark related experience but probably some of it is.

A Yes.

Q Could you identify for us which part of it is locate and mark experience.

A Sure. The Interim Senior Manager position from April of 2016 to May of 2017. And there, I -- there was also some overlap as well in the Data Quality Manager position because we had a number of re-orgs during that time within the Quality Management Department.

When I hired -- when I came over to Gas in 2013 as a Data Quality Manager, I reported up through Sumeet Singh in the Asset Management team. And maybe around April of 2014, they moved my Data Quality team under the larger Quality Management team under Mallik Angalakudati. He was the vice president of, I forget what the name of the team was called, but he had a number of assorted finance and resource management I think, which really doesn't speak to Quality.

Q Okay.

A But regardless. And so as part of the larger Quality Management team, I think maybe sometime in 2015 was when they started re-orgs within the Quality Management group. And as part of that, rather than the Data Quality piece, they wanted to move me into more of our Field Quality team.

So our Data Quality team is responsible for reviewing documentation and ensuring that what's in the ground is accurately reflected in our systems of record. And it has a focus -- really, the strongest focus is on our as-built documentation or construction job packages is maybe a better term for you. And so then, my passion is definitely closer to being in the field. And so knowing that, the senior manager at the time moved me into a -- they did a preventive maintenance basically, manager and so I was put over the Locate and Mark program and the Survey program at that time. And so my folks are responsible for going behind -- ensuring procedural adherence so they'd go behind those performing the work. Sometimes they are side by side, sometimes they're after the fact, and they review the work being performed and the documentation to ensure that it meets our company's standards.

Q Okay.

A In April of 2016, my boss retired and I became the Senior Manager for Quality Management over all data and field quality assessments.]

Q And a couple of questions about that. So then the interim senior manager of Quality Management Gas Operations would be, when you were a Data Quality Manager in Gas Operations, the relationship between those two positions, the Data Quality Manager of Gas Operations answers directly to the senior manager?

A It did not when I assumed the job.

Q Okay.

A It actually reported to a director of Asset Knowledge Management within the Asset Management organization under Sumeet Singh, S-i-n-g-h. It then moved under the Vice President of -- I think it was called Finance and Resource Management at the time and began reporting up to the larger Quality Management organization. So, prior, they had separated Data Quality and Field Quality -- had in two different works. And I was trying to remember the timing for -- probably late 2015 or early 2016, we actually began -- Mallik, the VP's job was eliminated, and we began reporting directly to Jesus through Vince Gaeto, the director of Super Gas Operations.

Q And I know that the court reporters are going to ask me later, so I will ask you now. Just in terms, you mentioned a few names, and if you could spell each one for the record.

A Sure. Mallik is M-a-l-l-i-k. Angalakudati is A-n-g-a-l-k-u-d-a-t-i (sic), and Jesus is Jesus, J-e-s-u-s, and Soto is S-o-t-o.

Q And could you identify also their titles, each one?

A Sure. So Sumeet Singh was the Vice President of Asset Management.

Q Okay.

A And Mallik was the Vice President of Finance and Resource Management and then changed to Gas Business Process Management, I think. GBPM is the acronym. And Jesus Soto is the Senior Vice President, Gas Operations.

Q Thank you. And if you could bear with me a moment. Okay. So just so I'm clear, I think we talked about as Data Quality Manager For Gas Operations, you have here on your work history which is Exhibit-2 from December 13, 2013 to March 2016, at least I'm understanding at least for part of that time, you answered to Sumeet?

A Yes.

Q Okay. And did you also answer to Mallik for part of that time?

A Yes.

Q Can you tell us when you started answering to Mallik?

A I think approximately April of 2013 or 2014 that we started reporting to Mallik.

Q Okay.

A So the intention of all these reorganizations were they didn't feel that Quality could report to Operations and be able to produce the type of findings that we needed to, which may then compromise -- let's say it was basically information that was hard to hear about maybe things that were being done outside of procedure and they didn't want those folks being the ones that then evaluated our performance. So all these moves were designed to give Quality Management the independence so that we could do the job that we were hired to do and to make sure that we could bring that information forward without fear of retaliation.

Q Okay. That's helpful. Let me just -- just to round that out, I will get back to that and ask you a couple of questions about what you just said, but if I heard right earlier, excuse me, you began to answer to Jesus Soto at a certain point as well. When was that approximately?

A I think that it was late 2015 or early 2016. It was before I became the senior manager.

Q Okay. And did you continue to answer to Jesus Soto when you become the senior manager of Quality Management Gas Operations?

A Yes. When I say that I did, I mean through the senior manager and there was a director, but we reported directly to -- that director reported directly to Jesus Soto.

Q And who was the director who you reported to?

A Vince Gaeto, G-a-e-t-o.

Q Okay. And was Vince Caeto --

A Gaeto with a "G."

Q With a "G." Okay. Did you report to Vince Gaeto? Was he the director? I'm just trying to understand the organizational structure.

A So although he was my director, for the most part I ran Quality and that would be his -- what he would say, pretty independently as the senior manager. He definitely gave me the autonomy to be able to -- he didn't have time anyway to invest in Quality Management. He is responsible for, if you haven't heard of Super Gas Ops, he was responsible for how we were supposed to change the way we do business and standardize and make it more consistent going forward.

Q Okay.

A So that was his key, I mean later in the lead of our affordability effort. So that was his focus area and Quality Management was not his. Not that I couldn't tap him from time-to-time, if I needed to escalate things, but from the day-to-day he was not involved in general, yeah.

Q Okay. All right. So -- and before Jesus -- before you answered to Jesus through Vince, who did you answer to? What was the chain of management?

A So I was a manager at that time. Within Quality Management, I answered to Karen Roth, who was the senior manager of Quality Management. And Karen Roth, R-o-t-h -- Karen Roth answered to Mallik Angalakudati as the VP.

Q Who did Mallik answer to?

A Mallik answered to Jesus.

Q Okay. So Jesus remained while you were the Data Quality Manager --

A Absolutely.

Q Let me just finish for the record.

I know you know the answer to this, but while you were Data Quality Manager and while you were interim senior manager, all the way from December 2013 to May 2017, Jesus was -- oversaw the line of management that you answered to?

A Yes.

Q Okay. Great. Thank you. All right.

All right. Regarding Quality Management, you talked about -- you mentioned the word "retaliation" and it caught my attention. What was the concern that there could be retaliation for you doing your job as -- in Quality Management?

A So, it wasn't a specific example. It was just part of we had in -- actually it was probably prior to me joining Gas or, I'm sorry, joining a larger Quality Management organization. So in 2014, at some point they -- PG&E engaged, I call them the professors. They brought in some subject matter experts in the area of quality, which was [redacted], which is [redacted], I believe, and [redacted] [redacted], and actually that was at the request of Nick Stavropoulos, who had continued to pose the question: Are the

Quality Management focusing their resources in the right areas and are they providing data that helps the organization -- operations run their business? We were producing a lot of information but was it being used to help improve the operation.

So we brought these professors in. I want to say it was maybe March of 2014 the engagement started and they evaluated our Quality Management system and they basically produced a set of recommendations around how we could basically elevate, which was what they said we needed to do -- elevate the role of quality to the level of affordability and reliability, that safety would always be paramount but that there was a need to bring quality more to the forefront of what we're doing, with an acknowledgement that our focus on, you know, compliance and safety was where we needed to be after San Bruno but that we needed to bring quality forward. And so they presented a number of recommendations which included us putting in place Jim Howe as our quality senior-like officer and Chair of our Quality and Performance Improvement Committee, which is QPIC, which is an executive forum in which the entire executive leadership team come together on a monthly basis and we would present our findings and talk through issues that were occurring and figure out how we should resolve them and resource them appropriately. And they had -- part of their recommendations were to maintain the independence of the Quality Management team. And their recommendation really said, you know, the most successful quality organizations they have seen are those that maintain an independence from operation so that they can effectively do the job that they are designed to do and that is produce findings but, in fact, maybe will be -- I don't know if you want to say against, but basically findings that impact really their operational leadership. So that was part of their report.

Q So if I understand right, what they observed was that as Quality Management you were answering to Operations leadership and they suggested that you have an independence from the Operations leadership as the Quality Management team; is that right?

A And I don't think they found our existing structure, because we were an asset management probably when they first took a look at us and then a finance organization as the assessment was going on. I don't think they found that in conflict, but I think it was something that they said you need to preserve and make sure that it has its independence based on the fact that we perform -- the Quality Management organization performs quality assurance. And so part of -- another part of the recommendation was to clearly define QC and QA. And at the time, even Karen's group had QA QC, which I always took exception to, because of how we ended up defining QA and QC is quality control occurs within the process. It doesn't need to be a person. It could be a checklist, et cetera. There are a number of quality control actively training, but quality assurance is where we come behind and make sure those controls that they put in place within the process are effective in achieving the desired outcome and in accordance with our procedures.

So that's how we defined quality control and quality assurance. And we just made sure to keep enforcing that we -- our quality assurance and whenever we had requested and things from line of business, we would filter it with those types of guidelines.

Q You want to make sure that our

court reporter hears everything. Because when we're -- we all go home for the weekend, this will be the last thing that we have. So I look over at her periodically just to be sure.

A Okay.

Q If -- just to tag a term, and I think you explained the term, but when you said QA QC, that means quality assurance quality control, right?

A It does, yes.

Q And you have explained what that means already, as I understand it, unless you want to add anything?

A No. That's good for now.

Q Okay. And if you want to come back to it later, please feel free.

Quality assurance quality control, two things. I want to hone back on just whether there was a concern, even generally, about retaliation for the quality assurance group doing its work. Was there any concern that you would be retaliated against or the group you work for would be retaliated against for doing your job before the professors came?

A So probably the best people to speak to that would be my employees because they have more of a history of being involved in that group.

Q Okay.

A But definitely as different issues came up and needed to be addressed, they would get -- give me direction to tread lightly or warnings about being careful. And so I believe that they have seen that in their past at PG&E.

Q Okay.

A So I believe that there are employees that had a concern but --

Q Go ahead.

A But me personally, maybe it's not the right -- it's the wrong thing to say, but I say, "Bring it on." And I told them every time that, you know, don't worry about me because if I was fired as a result of any of these findings, because I do due diligence and I make sure that whatever the summary of the finding is and whatever the specifics, that I do -- that I ensure that I bring the facts forward and it doesn't have any personal, and so if in fact that were to happen to me, I told them that I would have a comfortable retirement because I make sure that I document well anything that is found.

Q Yeah. On the point of

documentation, I'm going to ask you a few things throughout today that will get at that. Before we go there, that is very helpful. I appreciate you mentioning that.

In terms of any specific examples where there was concerns of retaliation to the quality assurance group where you heard an employee say to you -- they said to you directly that they felt they might be retaliated against or would be or when they told you that, you thought, "Gee, there seems like there is a concern of retaliation here."

A So, I'm just struggling because there is definitely -- so I definitely felt based on, in presenting certain things from members of the, you know, director leadership team that it wasn't necessarily appreciated, and as a result potentially like not included in certain meetings afterwards and I felt it to be intentional. But I don't think that -- I mean maybe it's a level of retaliation. I think that there's, you know, instances where maybe people just are resistant maybe to -- or don't want to maybe engage with us or exclude us, things of key discussions, but I can't think of examples where they told me, "Hey, I know someone that --" and I'm saying that it's just their hearsay for me.

So it's like I was told that we had some contract inspectors for construction that actually brought an issue forward and subsequently their contract was ended. I didn't -- I wasn't part of the organization, the field organization Quality Management at that time, so it's speculation.

Q I completely get the speculation, but what we can do is follow up with people, if you can identify anyone who mentioned this to you.

A Yeah. And it wasn't specific to Locate and Mark, but.

Q Okay. You anticipated one of the next questions which is when you were talking about quality assurance, was there any -- I think part of your role in doing quality assurance was specific to locating marking; is that right?

A Yes.

Q So, any concerns about retaliation in that area, quality assurance with regards to locating and marking?

A No. I mean Joel Dickson was the director of Locate and Mark. And when I referenced the fact that potentially he would -- it was in reference to him when I talked about being excluded from meetings and potentially the way in which he interacted with me after producing results. In a few cases, he said he hadn't seen them previously which I didn't agree with because we share things as they happen, right. But I do believe that he did then exclude me from some conversation or from meetings. After that started, it wasn't too long after Vince Gaeto took over the department. He started engaging only with Vince. So he was director-to-director and there was a different tone.

Q Okay. But can you say more about when you say you felt that Joel Dickson excluded you from meetings, what was it that you think prompted that exclusion? Was there something you could point to?

A Yeah. And I don't remember the exact data that we presented that he did not like, but there was an executive-level meeting where we presented the results for his team and he took exception within the meeting to the results, and then he subsequently had a conversation with my director in which he provided him some feedback that -- like a coaching opportunity basically that then Vince brought back to me and asked more about when, you know, we had presented him the information. And, you know, he just told me that Joel had taken exception and it was after that meeting that I noted he started going directly to Vince, where previously we had met regularly and he had always engaged directly with me.

Q Okay. And is this specifically when you presented the results for his team?

A Yes.

Q Is this results with regards to locating and marking?

A Yes.

Q Can you talk about what results he presented to his team that he took exception to?

A So I can't tell you exactly what part of it because we evaluate all of Locate and Mark on many different questions, but it probably has to -- I mean the highest critical findings that we have are no marks, mismarks and late tickets. So those are the highest level that would probably have, you know, the largest reaction from him.

Q Okay.

A But we did have -- in addition to our issues are our constant debate on late tickets. We also had a number of no mark and mismark discussions related to the fact that his team -- the Locate Mark team in the field was saying that they potentially, you know -- if you called in the ticket, I go out to mark the ticket, you tell me that you don't actually -- the delineations are on the ground, the marks -- the paint marks are on the ground. The delineations is what we call them, put there by the person that is doing the work and that is how we use their guide to determine where we locate. And so maybe when I get there as a locator for Joel's team, you tell me that you actually are only going to work in a partial piece of that area and then you just mark that piece. I come out as a Quality Management personnel and I see the delineations and I find something you did not mark within those delineations and then you tell me, "Well, I negotiated with the person that called in the ticket, with the contractor", that is not per our procedure requirements. You have to clearly document that. You have to stay within -- you're supposed to tell them actually, per our requirements, at the time you're supposed to tell them to call in a new ticket because it will not match. If something happened, it wouldn't match. They could say that they called in for that entire area. And ultimately they decided to dig outside of where they asked you to mark, and then it would come back on us. So our proper procedure said that you cannot work with a customer. And subsequently we had -- which is part of my role. It's like when there is a difference of interpretation regarding the procedure, then I would facilitate discussions that we then had with Legal and Joel to talk through.

Q Just please fell free to keep going, but I just wanted to flag any conversations with Legal, just any attorneys --

A Right.

Q -- we are not asking about. So I'm just cautioning you about those conversations to keep private.

A Okay. Yeah. So those specific, I won't mention, but we just made sure that we could change the procedure to do right by the customer and then ensure that we had the proper documentation in place so that our marks actually matched the intended.

Q So I want to understand the terms and I think I'm getting it. A no mark would be a situation where an excavator called in and the locator did not mark the area prop --

or did not mark the area at all that the excavator marked and even though there was something to be marked?

A Yes.

Q Go ahead.

A They could have marked 20 things properly, right? But they missed something.

Q They missed something.

A So it doesn't mean they didn't go there at all.

Q Okay.

A It typically means that they missed something.

Q Okay. And a mismark would be where they just didn't mark it in the right place?

A Yeah. They didn't interpret correctly.

Q Okay. Okay. Okay. And by not interpreting correctly, it would mean that you would go out and see that there was a marking that was not in the proper place where it was supposed to be, to properly mark the underground facility?

A Right. Right.

Q Okay. And the no mark and the mismark, you presented those findings to Joel?

A I present all findings to Joel. So

on a monthly basis, I have a process owner meeting with Joel and the superintendents and I share all of the findings. On a daily basis, he is sent -- he is copied on the e-mails of the assessments as they happen. They usually go out within like a 48-hour of completion.

Q Okay.

A And any high findings because there could be low, medium and high in those assessments, any high findings we reach out immediately to the supervisor and we ask for someone to meet us at the site. And we walk down to try to determine why it is that they did a mismark or a no mark, et cetera. And that then filters -- typically high findings make it up the chain a lot faster but regardless, he would know about high findings within around 48 hours of them happening.

Q What made a finding a high finding as opposed to a mid or a low?

A So we just evaluated what we felt. They don't like us to use the word "risk" because there is a very structured risk assessment methodology that they use at that company with -- related to our assets. But we worked with a line of business and our subject matter experts within our business and procedures to determine for the questions that we asked what the implications were for safety.

Q So you were exercising some judgment in order to say: Okay, because of the safety concerns for this particular locate and mark, this is going to be a high finding.

A Right. And they did not change. I should say probably 95 percent of the time they would -- like each question was a high, medium or low. There were questions and some of our assessments -- and I'm not sure if Locate and Mark is one of them -- where we could have, like for an abnormal operating condition, we could have a low, medium or high --

Q Okay.

A -- depending on if it was an abnormal operating condition we felt needed immediate attention --

Q Okay.

A -- versus an abnormal operating condition that would potentially be a monitor, like maybe potentially there is some corrosion but it's not of a level that where it needs to be addressed immediately. It should be there noted.]

Q Okay. So if there was an urgent matter you might flag it as high?

A Right.

Q Because it needed immediate attention?

A Yes.

Q Whereas if it was a corrosion, it still might be a significant problem it sounds like, but if maybe it wasn't as urgent?

A If it wasn't severe corrosion then to where we think that the pipe is compromised or meter is compromised, then it would -- we could have an AOC or Abnormal Operating Condition that was potentially high or a low.

Q Okay. And so these high tickets.

A High findings.

Q High findings. Thank you. You would flag them and send them to Joel Dickson on a daily basis?

A So he was cc'ed on the assessments that went out, that typically went out within 48 hours of the assessment being completed.

Q Okay.

A And he then -- we also had a monthly meeting. We called it the process owner meeting. And he was considered the process owner of locate and mark. We would deep dive. We had the large decks that we would deep dive the finding. In addition, we've sent out a weekly report to -- it's called -- we called it the slicer report. And he and his superintendents and his supervisors had access to it. And they -- we called it the slicer because they could slice and dice it any way they wanted. They could determine if there was a certain employee that was driving their findings, if it was a certain division that was driving their findings, what history of findings. If they were a repeat offender, we had years worth, or as far back as our database went, we would have all of the assessments, let's say, for that employee so they could see, did they have a bad day, do they always have bad days, you know, kind of thing, and do they want them to continue to locate or is it time to, you know, suspend that for some period of time, retrain them, etcetera.

Q Do you have -- I'm sorry.

A Go ahead.

Q Okay. You're done. Do you have the daily findings, the weekly slicer reports, and the monthly e-mails, do you still have all of those?

A Yes.

Q And if we wanted to ask for those, what question would we need to ask in order to get those?

A So the -- you would want to ask for copies of the quality management assessment e-mails and the weekly slicer reports for locate and mark. You could say weekly report e-mails to include the slicer link, link to the slicer reports. And all of this obviously has happened when I was there and not sure if it's continuing, but. And then the monthly process owner presentations. And there is also monthly QPIC, which was the Quality Process Improvement Committee dashboards. And you could also ask for a monthly quality management dashboard because we -- for each program we had a consolidated deck so you would be able to see, for every program that we assess, we had a dashboard that was associated with that.

Q Okay. And the timing of that when you were there and providing all of those things, can you give us an idea of dates?

A Yeah. So definitely that the level of reporting was an evolution. When I first entered the depar -- the larger quality management organization there was a lack of sophistication with some of their reporting and their dashboards, and that was one of the focuses that I had in providing -- well, creating all of that was led by me creating the process owner meetings and dashboards and enhancing the quality management dashboards and creating the slicers.

Locate and Mark was the first slicer report we developed. And so I want to say it was probably for the slicer reports. There would be a quality management dashboard report through this whole time, but you would be able to see sort of an evolution of it. For the slicer report I think that that occurred sometime in 2015, but I'm not sure, exactly sure of the date.

Q Okay.

A And that process owner meeting probably began in the 2015, late 2015 timeframe. That was one of the key opportunities I felt we struggled with driving improvement and quality because of we didn't have clear process owners. So we had people that maybe supervised Locate and Mark but didn't own the process end to end. And we never achieved a full process owner structure until the McKinsey group came in to lead our gas storage ship efforts with --

which was in I think that was late 2016.

Q Is the McKinsey?

A McKinsey Consulting.

Q Were those the professors you mentioned earlier?

A No.

Q Okay.

A So they -- we couldn't -- we went through iterations of trying to establish process owners, and people didn't really want to kind of identify and tag their resources to these roles because it wasn't like that would be your only job. It would be in addition to your day job you are now a process owner. And so along with being a process owner you needed to, you know, drive some form of continuous improvement with your processes.

So when the big affordability challenge came on the radar in 2016 the consulting group was brought in to support us figuring out how we -- because our target was like, I don't remember, maybe $180 million gas needed to save or something very significant. And so in order to do it they needed to define what structure they were going to use to sort of have people at a point to identify savings ideas or opportunities.

And since we had been pushing for probably at least a year within the Quality and Process Improvement Committee to get people to name these process owners, we had to come up with an agreed upon process architecture, make sure we were all clear on which were mega processes and which were lower processes, etcetera.

And we had struggled and struggled, and when McKinsey came in and said "We need a structure in which we can start leveraging folks and key points of contact," then Gaeto said "This is what we want to go for. It's what we've been trying to establish." And within six weeks of McKinsey coming on board suddenly, you know, it was all solidified, not that there wasn't changes in the names as they were sort of re-orging, but there was a structure, everybody was assigned, and we are moving forward.

So we always call people process owners and quality management, and we, like Joel being Locate and Mark, but we sort of gave him that crown versus the executives saying "Joel, you are the process owner for Locate and Mark."

Q   Okay.

A Or the larger damage prevention. So while I say he was the process owner, he may -- he may not consider him like the end-to-end process owner. He may more consider himself the Locate and Mark organization.

Q Okay.

A Owner.

Q And the timing of him being whether you want to call it the Locate and Mark process owner or if he would consider it the Locate and Mark organization owner, when did he assume that role?

A When -- officially or? I don't know when he became a director.

Q How about officially?

A Officially is whenever the McKinsey or gas stewardship, gas stewardship program rolled -- rolled out. And as I'm saying, they probably -- they probably nominated someone else as it went through, but Joel was initially the process owner. And they may have called it damage prevention rather than Locate and Mark specifically, but I want to say more formally it probably was late in 2016 that they -- that they made it more official.

Q Okay.

A But we had been meeting with him. As soon as I took over that was our key point of contact, which was sometime in 2015 that I had the Locate and Mark program.

Q So you were giving him the high findings, the weekly slicer reports, and the monthly e-mails?

A Monthly meetings, but yeah.

Q The monthly meetings. Excuse me. Thank you. Starting when you took over in about in 2015?

A Right.

Q And was there a point in time when you stopped giving him those things?

A No.

Q That information?

A No.

Q So --

A We always included him because he was the director.

Q Okay. The reason I asked that is because I understood that -- I understood you to say earlier that he had -- that Joel had taken exception to certain findings and began to exclude -- you started being excluded from meetings?

A Mm-mm.

Q So I'm trying to just understand

the nature of when you were excluded from meetings and why.

A So I didn't believe that that was true, what you said, because there had never been any -- I had never, ever engaged with him any differently. Whether he called into the meetings or was present on the calls didn't matter. He still received the information --

Q Okay.

A -- that we were presenting.

Q You continued to provide all that information.

A Absolutely.

Q The monthly, weekly, and daily information you were telling me about.

A So he may have said that he hadn't seen it, which could be because he didn't look at it.

Q Okay.

A But to me there was no -- nothing -- I don't want to say credible, but I can't think of the word I want to use. With his comment I didn't felt like it was accurate.

Q What comment was that?

A That he hadn't seen the information.

Q He said that he hadn't seen it?

A In the meeting that's what he -- he said, "Well, I'm not familiar, I haven't seen, you know, this information." And that wasn't my -- I don't feel like that was true.

Q Can you give more context around when he said he hadn't received the information, what information he was talking about?

A Well, it was -- I can't remember the exact month or data set that he was looking at. I just remember the situation was that in the executive meeting he looked at it. He wasn't prepared to respond to it. And so he -- his response was that he wasn't able to speak to it because he hadn't seen it.

Q Was he talking about Locate and Mark findings?

A I believe that he was.

Q Okay. Let's just take a step back for a second.

A Well, it has to be Locate and Mark because that's the only program that I --

Q It does.

A -- evaluate for him.

Q Absolutely.

A Absolutely.

Q Loud and clear. Loud and clear on that. What I'm suggesting you take a step back on is just to try to jog your memory.

A Yeah.

Q For context and see if you can just take a moment, take your time and just go back and see if you can place yourself in the setting and see if you can just remember any of the details about what it was, anything significant that struck you about that meeting and what it was that you recall either yourself or your colleagues telling him with regards to the findings and what it was he said in response to that, just as best you can. And take your time on that.

A So long ago that what I remember most about it is feeling the immediate discomfort because it was obvious he was angry that he was being put on the spot and then the subsequent change in the fact that coming out of the meeting he immediately called Vince, and when Vince came to me, I said that's odd because typically Joel and I have had touch points throughout my career, and he's always felt comfortable addressing them with me one on one.

And so for me the reason why it stood out, it's not the first time that I made Joel angry, right, or presented something that he took exception to, but this was different for me in that he then now changed the way that he would typically interact with me and not bring it to me directly and talk it through with me. He took it to my director, and then -- and then the subsequent meetings after that which typically would have been him, his superintendents, me, he knew that Vince was not engaged with quality management. He wouldn't -- I wouldn't be -- I wasn't on those invites or I found out about the meetings happened later, right. So that's why it stood out for me.

Q Okay.

A Because often we would in these -- often in the meetings regarding the findings Joel would be challenged. He would challenge, you know, challenge me, challenge the findings.

Q Okay. Was -- just in terms of timing, do you have an idea of when that meeting happened?

A Well, it has to be -- because Vince was my boss. I remember that clearly.

Q Okay.

A And Vince, it would be somewhere

between the April 2016.

Q And May 2017?

A Yeah. And early on. So closer to April of the 2016.

Q Okay. Why -- so in May 2017 you stopped working on Locate and Mark?

A Yes. I went to Electric Transmission.

Q So you stopped working on Gas and Locate and Mark?

A Yes.

Q Was that your choice?

A It was.

Q Okay. Did it have anything to do with what was going on in Locate and Mark?

A No, not specifically Locate and Mark. The largest driver for me was that in January of 2017 we had our first round of layoffs in Gas, and I found I ended up having to lay off two of my supervisors within field quality as well as three of my field employees.

And I felt like it was not consistent with the messages that I was getting from senior leadership because they were saying that they thought quality management should have, meaning the senior directors and above, more staff and that our team was critical, and too, we had found some, you know, very significant procedural places where folks weren't following procedure that could have harmed them and/or the public.

And so I felt like -- I mean I continued to get this really positive feedback, and Jesus would just say, "You know, Jennifer, your team, what you do, we're so thankful for what you do, and this is what them needing more of. And as long as you're a part -- as long as I'm here leading, you will always be part, quality management will be part of this organization and will report directly to me."

And so all this good feedback, and then suddenly the layoffs come and not -- nothing fell within what I was told were the guidelines of the policy, and that I also received a voluntary letter. Voluntary and involuntary. Involuntary is you're being laid off, right, and you have a -- you can search. Voluntary is there's this many of you, three of you and two jobs and somebody needs to volunteer.

And so in that January timeframe the senior manager position was eliminated. I was given -- one of my manager positions was eliminated, and I was given two of the manager roles basically as well as keeping senior manager role. And the man that was targeted basically that worked for me, he was a few months from his benefits retirement eligibility. And so I -- from my director I set out an overall lack of concern for the employees. I didn't feel -- we had already been through two to three rounds of spans and layers to determine that this in fact was the proper work structure and that we had the proper spans getting the complexity of our business and how many procedures that our supervisors had to know.

And so I felt like Vince Gaeto personally and I were not aligned because people are important to me. The job we were doing is important to me. And I felt like he had a conflict of interest because he was leading our affordability efforts. And so he wanted to make a statement that he could cut. I was the biggest. So he had I think 80 people in total, and 60 of them reported to me.

So he was -- his -- his job probably was in question based on did he have enough span underneath him. But I felt like he was kind of conflict of interest, and he made choices that -- and in fact made -- I had eliminated one of our programs because I felt like it wasn't in line with our -- with our -- what we were chartered to do. And I told those people they were being reallocated to other needs because we had contractors doing Locate and Mark assessments and leak survey.

And so I told them that they would be retrained and that we would absorb them. And ultimately we ended up laying them off. I ended up getting a voluntary letter. Anybody impacted, which I was impacted, wasn't supposed to have to deliver the message. I had to drive to Clearlake in the middle of the storms with road closures and lay off one man. Then I had to take the company plane the very next day and lay off another man.

And then I came back the next morning to get my own letter. And I said, you know, I need to -- I need to -- I was subsequently rated in the top box and given a huge L tip, which is our long-term incentive, to -- for the efforts improving quality and changing the organization and moving it forward a few months later.

But I felt like there's such an

inconsistency in those messages. And when I went and talked, not about me, but to Sumeet and to Peter Kenney, who is the senior director of T&D Construction I think is his title, and to Mel Christopher, who was the senior director of maintenance and construction operations, I believe. None of them --

Q How do you spell their names?

A Peter Kenney is K-e-n-n-e-y. And Mel Christopher is Christopher, C-h-r-i-s-t-o-p-h-e-r. They all were unaware of the changes that Vince had made. They didn't know he eliminated the senior manager role. And so for me I just need to make a better decision for myself.

Q Okay.

A So it wasn't really hard because I, you know, I felt like the reason Quality made the step forward that it did was because, and the employees acknowledged to me that they have never had someone that was just willing to not let issues go and just keep driving them forward and make sure that to resolution, and we had become a force, you know, to be reckoned with. Like the people took our findings seriously, and they took action. And it was all -- you know, reporting to Jesus really helped us, right? People weren't going to dismiss the findings we brought forward because they knew they were going to have to answer to Jesus related to those findings ultimately.

So that's why I left. And Electric, I'm not going to lie, Electric is definitely my passion because the urgency. The employees like, you know, they say we -- maybe never heard the expression, but they say like "We believe blue," right? We are so -- the commitment we have to the employee safety and public safety or the commitment I have personally -- getting emotion -- but in Electric you feel it daily, right?

I worked so many hours, weekends and holidays and making sure that everybody was restored. And then when I went to Gas, they don't have the amount of outages and the urgency, and so I felt like a different focus. And I just identify with the electric side more. Like they covet their linemen. And in Gas they covet their engineers, right. And I like the emotion of the linemen, you know. Vince Gaeto told me that they had started working for him. You don't bring emotion into leadership.

And I knew it wasn't going to go

well because my people, if you talk to my employees, it was a huge loss when I left them. And they were afraid when I left because they knew -- they knew that they were exposed even from a -- mainly from a -- now the layoffs are coming, and who is going to negotiate to ensure that they keep their jobs, right, and will they be seen as the import -- have the same importance after I'm gone and they don't have somebody sitting at the table with the executives bringing the findings forward and making sure there's an emphasis.

And so I went back to Electric because I feel like it was -- and I was -- I left Electric only because I was retaliated against for not taking a progression of the director position. And so I left Electric and came over to Gas to move, as a personal decision. And then that person is now retired and left the company. And so I wanted to go back to Electric because I -- I just feel the passion for the work over there and the urgency of safety perspective. So.

Q Okay.

A Yeah.

MR. GRUEN: Appreciate that. I wonder if we want to take a break, if you want to a few moments.

Why don't we go off the record?

(Recess taken.)]

MR. GRUEN: Q Why don't we go back on the record, please.

I just wanted to clarify a couple of things --

A Sure.

Q -- from before. One of the things just to, when you talked about being excluded, were you talking about yourself being excluded from these?

I think you were talking about the monthly meetings when you said you were being excluded. Did I get that right or were you being excluded from something else?

A They weren't the monthly -- he can't -- Joel wouldn't have the authority to exclude me from --

Q Okay.

A -- monthly meetings. They were just meetings related to locate and mark in which typically I would be at the table to help.

Q Yeah.

A You know, talk through the issues or brainstorm --

Q Yeah.

A -- next steps, and that kind of thing. So they were related. Whatever the information that he took exception to, they were subsequent meetings to talk more about whatever those findings were. And those were the meetings in which he was just inviting Vince and not including me.

Q And these meetings were not subsequent to what?

A The meeting in which he was frustrated with whatever information was presented, and then afterwards he reached out to Vince.

Q In that meeting where he was frustrated with the information that was presented, was that a monthly -- one of the monthly meetings?

A It was one of our monthly meetings but it could have been risk and compliance or it could have been QPIC, which is the Quality and Process Improvement Committee.

Q Yeah.

A There were multiple executive meetings --

Q Okay.

A -- in which -- in Risk and Compliance, typically it is a focus more on our data --

Q Yeah.

A -- quality. And then the QPIC meeting, it was -- usually had a heavier focus on the fuel quality data.

Q Yeah.

A Yeah.

Q So he -- I think I understand, but I want to be sure.

A Mm-hmm.

Q At one of the QPIC or other meetings, Joel heard something he didn't like, just to be blunt.

A Or saw.

Q Saw something he didn't like?

A Mm-hmm.

Q Okay.

A He was asked to respond to it.

Q Okay.

A Like here's the data, here's the results, Joel tell us about what, like what you're doing to this or what's causing this or whatever. He wasn't prepared -- this -- to -- he hadn't prepared himself to address it.

Q Uh-huh.

A And so --

Q And he started to -- was this for a locate and mark finding --

A Yes.

Q -- specifically?

A It was related to locate and mark. Whether it was data --

Q Yeah.

A -- or field, I'm not sure.

Q Okay. Mismarks, no marks, late tickets, do you know what it is?

A That would be the field portion. But he also -- at one point, I remember him frustrated because he also reviewed all of the calibration information related to their instruments and some of their logs hadn't been appropriately signed off. Not that they hadn't been calibrated but they hadn't been signed off, which is part of our procedures, high level findings in front of the executives. So it could definitely have been related to calibration too, which wouldn't be a high finding given that it was calibrated. Just wasn't reviewed and approved.

Q Okay.

A But still the number of -- it was like 30 something, so it could have been related to those as well.

Q Okay.

A But that would be -- in Risk and Compliance, that would be the information we would look at for --

Q Okay.

A -- for the data quality side of the house.

Q And Risk and Compliance would have monthly meetings also?

A Risk and Compliance, so we had three governing, governance committees.

Q Yeah.

A The executives did. And one was Financial and IT Governance which was called FITGOV.

Q Okay.

A One of the others, RCC, which is our Risk and Compliance Committee.

Q Okay.

A And finally our QPIC, which was Quality and Performance Improvement Committee. And you may, if you thought for a moment about it, you may think Risk and Compliance and Quality, like how you do you delineate the agenda material.

Q Yeah.

A And we always struggled with that, but the reason Quality had its own forum was because they -- the executives acknowledged that we were just trying to get our legs under ourselves as far as the elevating quality and we didn't want it to takeover our Risk and Compliance conversations. So we thought, or so I was told because the first thing I noticed was that it's weird to separate them, and Jim Howe, H-o-w-e, told me that they had discussed it originally when the QPIC was going to be formed. And they decided to roll Quality in with Performance Improvement rather than with Risk and Compliance because felt just Quality, being in its infancy they thought they would spend so much time address- -- or talking about how we defined QA versus QC and all these things that we wouldn't have time to talk about in Compliance issues. And so they had two different governance bodies.

Q So you were active on the Quality Assurance team, you were active on the QPIC committee?

A Yes. I was a standing member.

Q You were a standing member.

A Yeah.

Q But it sounds like even with what you said, you were also involved in the Risk and Management?

A Risk.

Q Or --

A Risk and compliance.

Q I'm sorry. Risk and Compliance.

A Yes. I was standing member of that committee.

Q Also. So you would attend both meetings regularly?

A Yes.

Q What about the FITGOV committee?

A FITGOV, no. Only if I needed -- you know by special topic or if I needed funding.

Q Okay.

A Things like that.

Q So you -- and you would see Joel Dickson in both?

A Yes.

Q The Risk and Assessment as well as -- did I say that right?

A Risk and Compliance.

Q Risk and Compliance -- going to keep trying. I'm going to continue. Please correct -- please continue to correct me on that. You would see Joel Dickson on the Risk and Compliance committee meetings regularly, as well as the QPIC committee meetings regularly?

A Yeah. I would say that he attended Risk and Compliance more regularly than QPIC. And we didn't invite necessarily the process owners to every meeting. We tried to bring them in on a periodic basis, maybe like once a quarter to speak to their programs and their results.

Q Okay.

A No. I am not doing anything. I just thought I'd plug in my other -- sorry.

Q That's okay. Take your time.

So, it was one -- it was either Risk and Compliance or QPIC.

A Mm-hmm.

Q Where what happened -- where this happened, where you presented findings, asked him what's being done about this?

A Mm-hmm. And I didn't ask him. I would say the executives asked him. I just present the information and they ask him to respond to it. Yes.

Q And he wasn't prepared?

A He wasn't prepared. He seemed caught off guard.

Q So he didn't give a response to it?

A Yeah. He -- he -- so my recollection was he indicated that he hadn't seen the information and wasn't prepared to --

Q Okay.

A -- speak to it.

Q Okay. And after this, you understand that he spoke regularly with Vince Gaeto outside of the QPIC and the Risk and Compliance meetings?

A I wouldn't say he spoke regularly with him, but he had a conversation with him.

Q Okay.

A And expressed that he was unhappy, that he felt that he hadn't seen the information ahead of time.

And then in -- when he would call meetings, that it was my opinion that prior to this, they would always involve me coming to the meeting as the representative from Quality Management. He then would invite Vince to those meetings and not include me.

Q Okay. So --

A First -- for a certain period of time because Joel didn't always call the meetings. Usually his superintendent often would call meetings.

Q Yeah.

A But I'm talking about they were meetings after this that focused on whatever we were talking about there. And a few of them where I could tell.

Q Yeah.

A -- not I would tell. Where

I wasn't on the invite and Vince made it clear to Joel that he couldn't represent my knowledge. Right.

Q Two things.

A Mm-hmm.

Q The first one I think I'm gleaning, correct me on this, is there was an issue in that meeting where he was asked -- you presented findings, he was asked by an executive What are you doing to address this, and he seemed caught off guard. And you heard a concern, if I understood right, that he did not -- he said he didn't get the information?

A Mm-hmm.

Q But you had -- you told me you had provided the information regularly, so you were surprised that he said that he didn't get the information.

A Yes.

Q I have that right?

A Mm-hmm.

Q And then --

A And he didn't always attend the monthly process owner meetings. Sometimes he would --

Q He didn't always attend?

A -- send his delegate, which tended

to be Jeff Carroll, C-a-r-r-o-l-l.

Q Okay.

A Right.

Q Okay. But this happened to be one of the meetings he attended.

And then the other thing was out of this one meeting that you recall that we were talking about where he was caught off guard, then is that when he started to talk off-line with Vince Gaeto, do you think?

A Well, he did have a -- he did have a specific conversation with Vince because Vince came to talk to me as feedback from Joel. And then his subsequent meetings related to the information, he didn't include me in those invites.

Q Okay. So he used to have separate from QPIC and from Management and Compliance, did I get that right?

A No.

Q Risk?

A RCC. Risk and Compliance, yeah.

Q I will try to get that before -- thank you. Keep correcting me. I'll get it.

A Yes. Risk and Compliance Committee.

Q The Risk and Compliance Committee, RCC?

A Mm-hmm.

Q So separate from those two committee meetings, QPIC and RCC, Joel, Vince and you, maybe others too, would meet outside of those meetings and you'd talk about locate and mark issues. And that after that meeting where he was caught off guard, you were excluded from these separate meetings between yourself, Joel and Vince?

A Yes.

One clarification is that Vince typically wouldn't be included prior. Vince was included after the fact because Vince --

Q So --

A -- typically would not be involved in any of my --

Q Okay.

A That's the structure, how it was set up, is that as the senior manager I should interact with the directors --

Q Okay.

A -- directly. We never -- on and off, we didn't have a director. As we went through all these different re-orgs, there had always been a director and so --

Q Okay.

A -- so Joel wouldn't -- I mean Vince wouldn't typically be part of my discussions with Joel.

Q Okay. Until -- and so Joel started talking with Vince instead of you --

A Right.

Q -- after this meeting where we was caught off guard, if you will.

A And I will say that he maybe -- in prior -- prior times, he may not have had, right, a director to go to. So --

Q Vince might not have had a director?

A Joel might not have had a director to go to because it may have just been me and then the VP.

Q Okay.

A And then suddenly, it's like suddenly Vince is over us and now he's not happy with something that I did and so now he's going to -- well, not something that I did, but related to me presenting information. So now he's going to re- -- he's going to just go only to the director-to-director conversation --

Q Okay.

A -- and exclude me from those conversations.

Q Yes. But there was a period of time in which Vince -- you answered to Vince

Gaeto?

A Yes.

Q He presented findings and Joel Dickson still spoke with you --

A Absolutely.

Q -- instead of Vince. How long was that?

A It's because I don't know when Vince become our director that I'm struggling to know the timeline. Four to six months. Four to six months, probably.

Q Okay.

A Yeah.

Q So some time, he was still speaking with you and getting --

A And much longer, he and I spoke directly but just the period that Vince was my director.

Q Yeah.

A And the whole dynamic was that there was Joel, Vince and I in the picture was probably like four to six months.]

Q Okay. And what would he talk to you about regarding Locate and Mark? Was it similar stuff to what you would talk about in the QPIC meetings?

A So. Yes. Always -- so the QPIC meetings were obviously focused on all the programs. So Joel and I, when we met, it was specific. It would always be specific to Locate and Mark and whatever the issues were, and so maybe it would be that -- I wouldn't say that he initiated the meetings, but maybe he didn't attend the process owner meeting that month, and maybe I wanted to make sure that for QPIC or Risk and Compliance, he knew if the findings had spiked or something. I wanted to make sure he knew what he was walking into that I would set up special meetings with him just to touch base prior to the meetings and not just happen once in a while, but he didn't -- maybe he didn't. And I knew, you know, Jeff wouldn't be part of whatever meeting it was and make sure that we're, you know, on the same page.

Q Who would reach out and initiate these meetings, you or Joel?

A Most of the time it was me. I would say 9 out of 10 times I would be -- I'm not saying he never did because we also would have action items assigned together sometimes in these meetings. They would say Jennifer and Joel and he may drive meeting requests but, yeah.

Q After the meeting where he was caught off guard, did you reach out to him to try to have more of these meetings with just you and him?

A No.

Q How come?

A Because I chose to see if it would -- I felt like with my past experience with Joel, it would be better just to let things cool off, I guess would be better.

Q Okay. And so the -- I guess I'm trying to understand what happened that the meetings just stopped and --

A Well, we still had our process owner meetings --

Q Yeah.

A No. That just --

Q You still had the process owner --

(Crosstalk. Court reporter interjects.)

MR. GRUEN: Q So, just for the record, where were we? So, let me try and capture this. And she's right. I will try not to interrupt.

What changed after the meeting that he was caught off guard such that you stopped meeting with him off-line?

A I don't -- nothing in particular changed, other than I knew that he was frustrated and I felt like holding him accountable wasn't the best way to approach the situation. So having a discussion about the fact that that was information that had been shared with him -- and one correction is that you said he had attended the meeting and seen it. I don't know that to be true. He had been provided it -- the information.

Q Okay.

A And he had a delegate from his organization in the meeting, like someone representing him. Whether he actually, you know, opened the e-mail or reviewed it, I can't speak to that. I just know that we provided it regularly.

So, like I said, in my experience with Joel, for me, what he was telling me by going to my director was that he wanted someone of his equal standing, that he was going to change the relationship between us, where we used to address things one-on-one. And so when he decided that he was going to go to my director, I didn't feel that the next good step for me would be to set up a meeting with him to talk to him about the fact that, you know, the information, or how he had portrayed the situation isn't how I felt and that he absolutely had been, you know, presented with or provided the information in the meeting. And I didn't feel like that was going to be the best way, constructive way to deal with the situation. I thought I would let him deal with Vince and I would continue to provide the support and work with Jeff and --

Q Okay. I think I follow. How did you learn that Joel had decided to talk with someone at the director level instead of you?

A Because Vince came to me and said: Hey, Joel called me after that meeting and expressed that he was not -- he hadn't seen that information and that we need to do a better job of ensuring that he is prepared to address those things and, you know, the data in meetings and --

Q Okay. And how did you learn that there were ongoing meetings between Joel and Vince and that Joel was speaking to Vince instead of you?

A Because Vince would ask me if, like you know, he would think I would be included, right? So typically how I would find out is maybe he would ask me if I was ready for the meeting or what I was bringing to the meeting or maybe ask me why I wasn't attending the meeting and that is how we worked out that I wasn't a part of those meetings. I wasn't invited.

Q So Vince was surprised that you were no longer attending the meetings with Joel?

A Yes. And that I was -- I don't want to say no longer because this series of meetings resulted from whatever the issue was in that meeting. These meetings in particular were set up for us to like work through or improve whatever was identified as an action in that meeting. And so they were -- those meetings are the ones in which, that I wasn't invited and Vince was like, "Hey. I need you to -- I'm not able to speak to your information. So I'm going to need you in those meetings."

Q So Vince asked you to attend the meetings with Joel?

A Yes. Yeah. And if I remember correctly, he actually sent a request to have me included in those meetings.

Q Do you have that request?

A Probably not. Probably not.

Q He asked you to attend but you still did not?

A No. Once -- I think maybe two or three of the meetings happened before Vince finally was like, this is not productive.

Like, I need you to be in the meeting. And so there were probably just two to three meetings that I didn't attend and then subsequently added back. And those meetings actually more became a working team, like maybe at a lower level anyways. And I had good relationships with those others -- the managers on this team.

Q At the RCC and QPIC meetings, after the one where you found him off guard, how was he at that point? How was Joel in terms of his preparation level?

A In the examples that I'm remembering are examples in which, for instance, when he was asked about late tickets, his answer was that we had some junior supervisors who weren't familiar with the process and so he was addressing it and it wouldn't be happening going forward, which from my understanding -- which I knew it wasn't true. That is what I should say. I knew that not to be the driver of late tickets because I had asked my team to sample tickets across the service territory and once he gave that answer I asked -- well, I don't know if it was once he gave that answer. He had given that answer outside of the meeting to me when I had followed up on the late tickets. He said it came back through Jeff Carroll, that Joel said he believed it was a local issue in a few places and that it wasn't going to happen going forward. And he also gave that answer in QPIC. And in between him -- whatever two weeks or something that had passed, I had had all my specialists pull tickets from every division to show me that it was a problem in every division.

Q The late tickets were a problem?

A The late tickets were a problem in every division. So when you ask what his level of preparation, I don't ever remember him stumbling. He always provided an answer. Whether I believe that that answer was well --

Q Founded?

A Well-founded is not --

Q I shouldn't try to put words into your mouth either.

A Is well-validated or the fact that his answers lacked -- for me didn't always tie back to the data is what I felt. But he had an answer in subsequent meetings.

Q Did you ever -- I will use your term "validated." When you thought that his answer wasn't well-validated, is it fair to say wasn't supported by the data?

A Yes.

Q Did you point that out to anyone?

A So, in the meeting, Francis Yee, Y-e-e, who was a counterpart of mine within Quality Management, she actually challenged him because they -- when he named off like it's in these divisions that the chart actually showed different occurrence rate than in other divisions he didn't address, and so she specifically -- she either prodded Vince who then asked the question or she said the question directly. So it was either Francis or Vince, but it was with Francis identifying it that they actually asked him. And he -- and I don't remember him responding or having a response that he stuck with his initial response that it was a -- that they identified it as related to a few supervisors and their inexperience and that they had addressed that with them.

Q And did Francis -- well, let me ask it this way: I think -- did anything happen as a result of that meeting? I mean what came out of that?

A Not as a result of that meeting.

Q Okay. As a result of that -- I mean --

A Nobody questioned. I mean the question went out there.

Q Yeah.

A And Joel just reiterated that that was the driver and that it had been addressed, sort of indicating that maybe he got the exact locations wrong but in fact that that -- the driver was the same, the inexperience of the supervisor and understanding the process and it had been addressed with those individuals in particular.

Q What was Francis' title?

A She took on the role of Data Quality Manager for me.

Q After you --

A She worked for me as the senior manager of Quality Management.

Q Okay. So the data continued to come in daily, weekly, monthly, about late tickets in every division, right?

A Late, yes. There may have been -- so I should say that the analysis that I had them do was off-line. It wasn't part of our formal assessment plan. So I just said, "Hey, this is the feedback we got from Joel and I want to confirm if that is in fact the truth and so can you pull it?" So we didn't add that into our -- the ones that we found, we didn't add into our late ticket metric because it wasn't part of our sampling plan. And so that it was information that I then, you know, talked to Jeff about and said: Hey, I think that that's, you know, we saw it more systemically. And so I don't think that that is the driver -- the driver that was cited by Joel.

Q Did you -- identifying it to Jeff that there was a systemic concern, do you know if that -- two things -- that was based on an independent analysis you had your staff do, right?

A Uh-huh. (Affirmative response.)

Q For the record.

A Yes.

Q And when you reported that to Jeff, do you know if that information got back to Joel?

A So, although I cannot connect the conversations that happened afterwards within a two-week approximately window, there was a conference call held with all of his supervisors, Joel, Jeff. Jeff Carroll was the one doing the -- I think Joel kicked it off and then Jeff did the primary speaking, communicating the message. And they -- Jeff made it clear that regardless of why it was happening, that it was not an acceptable practice to move tickets into different statuses in order to stop them from going late per the way they monitored late tickets, which is a different metric than the way I monitor late tickets and that they were to -- the supervisors were to convey that message to their teams. And if the tickets needed to go late, they needed to let them go late. And that was the only way we were going to truly understand if we had the proper resources in place in order to address the tickets in the time frame that was required. So they didn't -- and they invited me, as well as my supervisor, whose name is Vince Whitmer, W-h-i-t-m-e-r, my supervisor meaning he worked for me over Locate and Mark program specifically. So they invited us both to the call to listen to them communicate that message very clearly.

Q Okay. Let me -- before we -- you said a lot and I just want to clarify. The study that you had -- I mean it's not a study -- analysis that you had your staff do to identify the systematic problem, is there a name to that?

A No.

Q Is there a way we could ask for it?

A You could potentially ask for any -- outside of formal assessments, any data that Quality Management would have related to late tickets that were found, any examples of late tickets that were found, data or examples of late tickets that they identified.

Q Could you -- do you have an idea of the timing when that would be?

A It would be between April and June of 2016, I think.

Q Okay. Done by your group?

A Done by Vince Whitmer's team.

Q Done by Vince Whitmer's team. Okay.

A Which is my team but specifically I had three different supervisors but Vince is the one over Locate and Mark survey.

Q Is he still there?

A Yes.

Q All right. The information about, and I'm going to try to capture the right words, but please correct me if I don't have this right. When the information was presented about not changing the status of late tickets so they would not become late, did I say that in a fair way? Did I characterize that right?

A Yes.

Q That information was presented to whom and by whom?

A It was presented to the Locate and Mark leadership team which were the supervisors of Locate and Mark. And it was presented by -- I believe it was kicked off by Joel, but the bulk of the direction was given by Jeff Carroll, the superintendent of Locate and Mark.

Q So Joel is part of the present --

A He was on the call and he spoke during the call but not the main facilitator, yeah.

Q And he spoke on the call? He was part of the group that was giving the presentation?

A Yes. He was there to reinforce the message. So he spoke periodically to reinforce the message.

Q Okay. And who on the Locate and Mark leadership team would have received that message on that call?

A The supervisors of Locate and Mark.

Q Who specifically?

A I don't know how many supervisors they have, but I think they have approximately one per division and so probably 16 to 19. I don't know if they took a formal roll call, so I can't tell you that all of them were on the call, but the invitees were the Locate and Mark, all Locate and Mark supervisors.

Q For each division?

A All of Joel's -- I think they're assigned by division, yes. I think there is one per division.

Q Okay.

A So it was all of the supervisors within Joel's Locate and Mark organization.

Q Okay. These would be the supervisors who would answer to Joel?

A They would answer to the superintendent who answered to Joel, yeah. That's the organizational structure. The supervisors report to the superintendent, who reports to Joel. And Joel has, throughout my tenure, overseen Quality. There have sometimes been two superintendents and sometimes one superintendent. So I will just caveat it with the fact there were times when Katherin Mack was one of the superintendents and Bobby Week, W-e-e-c-k, I think. Bobby Weeck was the superintendent and Jeff Carroll was one of the superintendents. And towards the end for a brief time, where I was a little bit more separated because I was senior manager, Shonda Abercrombie was one of the superintendents. But Jeff Carroll was a fairly consistent member throughout the meetings of the team, yeah.

Q Okay. Approximately when would that phone call have happened?

A That phone call would have happened approximately I would say May of 2016.

Q Okay. So this would have been after the -- if I can call it the meeting where Joel was caught off guard?

A Yes.

Q Okay.

A I would think so.

Q Okay. And why was it that there was a message saying that -- to stop changing late tickets so they no longer appeared late?

A I don't know -- I mean I know that we identified it. I know that Joel had an initial response. I know that Jeff and I had a brief conversation regarding the fact that we see it more broadly in Quality Management than potentially the reason that was given or the driver that was given and that I know within a, you know, two-week, three-week window that suddenly there was this meeting held. But I don't know what happened behind the scenes to drive them to have the meeting.

Q Okay. Okay. Just maybe a follow-up clarification about the high, medium and low. What was the term that you used? Those were describing -- they weren't describing tickets. They were describing assessments that you did?

A So an assessment for us is based on a locator. We typically look at -- we try to identify five tickets that they -- in order, five tickets per assessments. And then a finding is just a one -- each ticket we basically answer the same questions for each ticket. So a finding is related to a specific question that we're asking related to the adherence to the procedure.

Q Okay. Okay. What prompts you to go out and check a particular mark, one as opposed to -- you don't check all of them, or do you?

A No.

Q So how do you decide which ones to check?

A So that is something that I changed the methodology for in my tenure as the manager of that organization because when I began as the manager, they called it random sampling. And one thing that I pulled from what the professors said was that we should move away from as much as possible the reference to like a statistical population, because a statistical population would indicate that we accept error in what we do. And given the type of work that we're looking at and the risk associated, to indicate that you would accept a level of risk or that it would be appropriate to like build in risk is not -- wasn't something that made sense. They really recommend that we look at a representative-sampling approach. And for me, I didn't necessarily agree with how they defined "random" in Quality Management before I joined the team, because they had some type of -- I used to tease them that it felt like a bingo-type of way in which they chose it or like popcorn. Like they just would go to this spreadsheet and they would click some button and it would spit out someone to go look at, right? And what happened is I might look at you five times but I would only -- but I might never look at Ken that year, right? And Joel did take exception to that process because he felt like, you know, there's things we know. There's intelligence we have that would say that: Does that give you an overall health of your program, when I keep looking at you just because it told me to do that?

And so I proposed that what we would do is build into our representative sampling strategy that we would try -- because we could, with our resources we could only look at maybe 300. We could only perform like 350 assessments per year, which when you think of four to five tickets per assessment, it's probably like 1,800 tickets we look at. And we think that there's probably 150,000 that are facility-marked a year. It seems to be increasing by 15 to 20 per year, but we don't have the resources. So what I told Joel is I'm going to build in as many characteristics of the population of tickets that you have, to try to give you the best idea of the overall health. And so I will try and look at each of your employees one time, at least once. And I will -- if in Sacramento you have 25 percent of the facility-marked tickets, then if I'm only doing 350 assessments, I'm going to try to do 25 percent of those in Sacramento because that is your highest volume, right?

So this is how we built out our plan. We took those 350 and we looked at how many historically we facility-marked in the previous year in those divisions. We divided up the 350 into -- using the volume of tickets, and then from that we attempted to at least evaluate each locator one time. And so when we would, based on geography and the fact that I only have, you know, three or sometimes four if we were -- if we were behind or something, but if I only have three or four people doing those assessments, it would be like, you know, maybe this week I'm in a certain division. And so on a daily basis they more would -- they would look at the list to determine who hadn't been assessed and then try to identify five tickets. You know, the person might not have been working so it wasn't a perfect strategy, but five tickets to look at, you know, and five tickets that were, you know, if there were more than five to choose from they tried to pick five, you know, maybe one was phase, maybe one was -- so that it would demonstrate different parts of the procedure. So they would try to get a really good understanding if the locator understood what to do in different situations, right, that they would come across.

So that's how we tried to retrain

or rebrand with all of the process owners and the executives, we do representative sampling. We do representative sampling. No matter how many samples we look at, we try to build in as many characteristics of the work that is being done to ensure that we can give you a good idea if the procedure and standards are being followed.]

Q I think I heard a couple of things in there, and I just want to be sure.

A Okay.

Q Whether you want to call it representative or not, the sampling included giving a certain amount of assessments to a division that had a lot of tickets. So you maybe give more assessments to the areas that had more tickets?

A Yes.

Q And less to those that had fewer tickets. You'd give assessments and try and look at the various -- to give a broad idea of the various characteristics to a ticket, to the different tickets?

A Yes.

Q You'd want to give each employee or each locator maybe at least one look?

A On an annual basis.

Q On an annual basis.

A Yes. We would do our very best.

Q And then the rest of the 1800 tickets that you looked at, did I miss anything? Were there any other things that really dictated your approach?

A Or characterize our sample, I would say no.

Q Okay.

A Our intention was to, as time passed and, you know, see if there were other characteristics that might make more sense as the data was sophisticated enough for us to know. And you know, that was the strategy, but since it was a new concept, we're just kind of building in the characteristics as we go and, you know, because you could, you know, for construction or for leak survey maybe want to look at plastic, make sure you incorporate steel, do like dual commodity locates and things like that. But for the time being we were just at the volume, indicating the volume of work and then trying to look at each employee.

Q Okay.

A Yeah.

Q Did you have -- I got earlier from earlier this morning that you would use your judgment to figure out if an assessment was high or medium or low. Did I get that part right?

A Not the assessment.

Q Okay.

A We were -- it was a collaborative cross-functional effort on usually an annual basis to determine if -- what the assessment would look like for the next year.

Q Yeah.

A We'd come together. We'd decide if any of the questions were, you know, if there had been changes to the procedure, if we wanted to add anything, delete anything, and if we wanted to change at all the priorities or risk levels that we had previously. That was collaborative. We did not -- every year you go in knowing, here's the questions, high, medium, low. That was agreed upon by Joel's team, by our coastal standards team, and by our team. And we would decide those rankings together, and then we would move forward.

The only time there's some subjectivity in a high, medium, or low finding would be for things, like I said, there were a couple of questions, and I can't remember the Locate and Mark, but like leak survey, I gave the example of the Abnormal

Operating Condition where there's a finding that could actually be -- might be low or might be high depending on the actual AOC. And that would be completely appropriate because there are some AOCs that are low and some high.

Q AOC?

A An AOC is an Abnormal Operating Condition. So in general, like 98 percent of the questions are whenever you find them, they're the same, high, medium, or low ranking, but there are a couple that we identified. And I'm not sure if it applies to Locate and Mark. But on some of the assessments there were, before we left, we left the opportunity based on the actual, because it wasn't cut and dry because it could be a different condition to be able to evaluate and figure out whether it was actually high, medium, or low. But that wasn't the --

Q Okay. That wasn't the what?

A That wasn't the assessment. At the assessment level we do not dictate pass or fail. When I first became part of the team we used to give a percentage. So we'd say, Ken got a 72 on his assessment, 72 percent. And one thing the professor said, I don't know what that means, like I don't know. That's not clear enough. And so we reversed our -- we reversed it, which definitely wasn't as clear to me either. It was an error rate. So we then said here's your error rate. And in your assessment e-mail not only would it say the error rate, but it would say how many high, medium, and low findings that you actually had. So then that would give the supervisor.

So we wanted to be very clear that we give you the information as the line of business of Locate and Mark. We give you the information for you to make the decision about your employee, how to appropriately coach them and/or remediate it. But we don't make that decision. So that whole used to say this percentage is a pass or fail. They said that's -- I mean quality management, it's not -- it's not our decision to make. The line of business needs to take holistically the information they know about that employee and decide if they continue -- if they want them to continue doing the work they're doing, if they need to be pulled off and remediated.

Q Yeah. I think you shed a piece of light that I didn't get earlier --

A Okay.

Q -- on this, which was, the purpose of this information was for coaching and to help the employees get better at their work?

A Absolu -- or to identify where there's ambiguity in our procedures. And so that we need to true up the language so that we can all interpret it the same, right. But that is the -- that is what -- that is the why. We called it the English job, right. The people that my team, if they go out in the field, it's not an easy thing, right. They're not, you know, everybody isn't embracing them to say "Oh, you're helping me." I think we changed that, and people were more welcoming of us as time went on.

Q Yeah.

A But, because at first they really -- when I was part of the group they thought of us as the police, right. We don't want to be viewed as the police. And the passion that these folks had is keeping the employees safe and the company and the public. And they wanted things to be better. And so that's why they were part of it. They had passion for going out and spending time with these folks so they would understand what they should be doing and how they could improve.

And that was the basis for the QM team. And we didn't want the -- we didn't want to have people view us as police. We wanted -- although we were independent, we wanted to be viewed as just measuring the adherence and ability for our folks on the front line to understand clearly what the expectations were.

Q Okay. That's very helpful. Thank you.

The subjectivity. And I think you mentioned you weren't sure if there was any that applied to locating and marking, the assessments on locating and marking. Could anyone have influenced or did anyone influence -- no.

Let me ask it this way. Could anyone have influenced an assessment going from, if the quality team said, "Hey, this is a high, this one is high," could anyone have influenced it to make it medium or low and have the team change its findings?

A Yes. They have the opportu -- do you mean after the assessment or when we're initially determining if it's a high, medium, or low finding?

Q Both.

A And I would say both, because I mean the purpose of the cross-functional discussions to initially agree on our -- what the following year's assessment would be gave those other teams, Codes and Standards and Locate and Mark, the ability to weigh in. And I feel in general that that was a collaborative process in which we were all pretty much aligned on those priorities.

Q Okay.

A When we had a finding, we would then share it with -- we would send out a preliminary notification, and we would give the supervisors time to discuss it with us before we finaled it. And so they could -- they could debate the finding with us. And it wasn't common, but there are some cases where there was a consideration that maybe was -- that we missed that made it a gray area.

And like I said, it wasn't -- the purpose wasn't for us to -- if we could -- if we could change behavior and ensure that going forward the employee knew exactly what should happen, then we would balance that with what is it we're really trying to get at. Do we want to be hard and fast and say that this is the rule, or can we see how there are some findings we have that are reasonably missed, right.

We left the finding. It still was reported up for a no mark or miss mark, but we might say in the detail behind it that it was reasonably missed. Like we could see. Our locator happened to find it, but it was difficult for him, and he has a high expertise level. And we could easily see, we have for a leak survey too. Maybe we found a leak that they didn't find. But we see why it was reasonably missed.

Like we felt like, you know, in some cases they would say your team doesn't have, especially in leak survey, the time pressure because they may only do a hundred services, and the actual leak surveyor is doing thousands of services. And so we would try to make sure they were as consistent as possible in how many tickets they completed in a day.

We would divulge to them if our -- if it showed their locator spent five minutes on this ticket and ours spent 20 minutes on the ticket, then that would also be a point of discussion. If we thought based on the complexity that they should have spent 20 minutes, we would talk that through with them too that we think maybe a driver could be that the person was going too fast. But there are cases where we feel that a no mark or miss mark could be reasonably missed and that it was really through, you know, the hearer's expertise and the fact that person probably has seen a similar situation that they found something that the locator may have missed.

Q Okay.

A So we did allow for there to be discussion, and it wasn't common, but there were findings that we reversed upon occasion because we felt like -- and we would typically -- we would try not to ever make that call ourselves if we felt like it had a procedural nature, like something, a specific wording.

We would get like Simon Van Oosten, V-a-n, capital O-O, I mean one capital O, o-s-t-e-n. We would have a call and have Locate and Mark, Simon, who was our, within the Codes and Standards team. He's our subject matter expert. And because I tried to deflect some of the energy when I felt like it was specific to a debate regarding the words in the procedure standard and have Simon be the person that spoke to what the procedure said. And often we would -- he would have a WebEx and he would read it and reference it, and then we would discuss if there was really a need for clarification or a reason that -- misinterpretation. So.

Q Yeah. Let me ask it this way. I think what you've really thoughtfully explained frankly is that if you changed an assessment level from high to not high, there was an underlying safety rationale for doing so through the discussion of the process.

A On an assess -- on a specific employee's assessment or one word?

Q I think it was for an assessment.

A Okay.

Q When you changed a finding for a specific assessment.

A Yes.

Q I think that there was -- I'm understanding that there was a safety type of discussion in saying, well, for example, was a mark missed, and you'd talk it through from a safety perspective. Am I -- does that sound right?

A One clarification is I would never -- we would never -- if you had a miss mark, a no mark, or a late ticket, it was always a high. The only thing that we may discuss with you is whether in fact --

Q Okay.

A There may be -- so the things that we might reverse were other findings. And it could be that -- and we would never change the ranking. A high is a high and a medium is a medium and a low is a low. We would never negotiate with you on an assessment the priority of the finding.

Q Okay.

A It's always a high. But we may negotiate or discuss if there's a finding which the supervisors felt that their employee did exactly what they should have done and that that is either reasonably missed or open for interpretation or we would discuss with them, and we may reverse the finding.

Q Okay.

A But not -- we would never change the level of high, medium, and low that was already predetermined.

Q Okay. And the level of high, medium, or low, was there any influence outside of the quality group?

A Yes.

Q At the time it was being determined, before you actually came up with a final determination --

A That was --

Q -- of high, medium, or low?

A The high, medium, or low was determined by the collective group on an annual basis, and the line of business, Locate and Mark, and we followed this with our other programs as well. Locate and Mark, Codes and Standards, and Quality would all come together. We would -- Quality would come up with the questions. They would propose the ranking.

And then we would sit with them, sit with the Locate and Mark and Codes and Standards, preferably in one meeting, and we would walk through each of the questions. We would talk about any changes that we'd made. We would ask if there were any potential other changes that may or, you know, procedural changes that maybe we hadn't considered. And then we would decide if the rankings stayed the same from the previous year, if they were -- if we needed to make any changes and/or rank new questions. So that was something we did collectively.

Q Okay. Outside of the groups that you just talked about was there any influence from management as to what the questions would say on a year-to-year basis?

A Well, just the management of those organizations. Just so they were -- I mean typically, Joel, Jeff Carol, those were the people involved in the discussions.

Q Okay. Was there any suggestions that you disagreed with about how the questions read?

A Not that I recall.

Q Okay. So you supported -- in your judgment the questions were --

A Yes.

Q -- were valid for purposes of coming up with a high, medium, or low assessment?

A Yes.

Q Okay.

A For Locate and Mark.

Q For Locate and Mark.

A I will add that caveat.

Q Good.

A Yes.

Q How would you -- were the assessments summarized in any way?

A Yes.

Q On a monthly, yearly basis?

A All, all of the above.

Q How would we ask for?

A There's a daily assess -- the daily assessment e-mail or individual assessment e-mails, and there are weekly, typically weekly finding e-mails. There wouldn't be all the way back, but there were, before I left, there were weekly finding e-mails. There are monthly reports, monthly dashboards. So all of those I mentioned to you previously, the daily assessments, the weekly reports with the slicers, the monthly process owner presentations, the monthly DAT, quality management dashboards, and the monthly QPIC dashboards are all the results summaries that would be reflective of the findings.

Q Got it.

A Yes.

Q Okay. I'm clear.

A Okay.

Q Thank you. Were there any correlations between the level of assessment and an incident?

A An incident meaning?

Q Something that was related to an accident.

A Like a dig-in.

Q Dig-in, for example, yeah.

A So we have a DIRT team, D-I-R-T,

and I'm not even sure what it stands for, but the DIRT team, DIRT being the acronym, actually is responsible for doing the investigations related to dig-ins.

Q Okay.

A And I -- quality management was not involved in those investigations. I did ask Joel if I could -- if our team could review the paperwork related to those tickets and/or be part of some of the investigations because I wanted to see, for instance, if they said it was a third party dig-in and they're at fault because the marks weren't on the ground, I told Joel that I would like to review the paperwork related -- for those that did call tickets in, let's say, just to review to see if a ticket had been called in, how it had been handled internally, and just determine if there was something we could do better in order to have avoided the dig-in.

And Joel did not want quality management involved in those, in the investigations, not at this time. It was I think his response, from what I recall.

And subsequently I did express, closer to my departure, probably like in the last month or so before I left, there would -- I would have sent -- I did send

Jesus an e-mail saying that I believed that the DIRT team should report to me because I felt that -- that it may be difficult -- well, so I just said I felt they should report to me so that they could be independent of the organization in which -- that may be a contributing cause basically to the dig-ins or may be partially at fault. I felt like it was a QA function.

And so I didn't get a response to that e-mail, but, and it was a kind of a common thing that I had said multiple times. I felt like the DIRT team to different, you know, to Vince. And as we were re-orging, you know, and looking at spans and layers, I just said I think that given the function or how I understand it, the function of the DIRT team, that I -- that I didn't feel like, especially in the time period of reporting to Joel, that they could -- that that would be a good place for them to be in presenting findings that maybe said that we were at fault.

And so I wanted my -- what I thought is that the DIRT team should be part of quality management and that in fact we should do -- follow our same assessment for those tickets, because I thought -- I just thought it was a more end-to-end view, that we could not only look at how the tickets were marked, but then for things that went wrong, how did it go wrong and what we could learn from that. So.

Q Do you know the -- if anything was -- you said you didn't get a response to that e-mail to Jesus Soto. Do you know if anything was done as a result of that, of your e-mail to Jesus about the really the DIRT team and the dig-in review being under the quality assessment group?

A I don't belie -- I don't know of anything that was done. I did ask Mel Christopher and Donny Jew in the last month, I would say, that I was -- so probably in the April 2017 timeframe I reproposed to them I think it would be helpful if quality management, because I attended one of Mel Christopher's operating review sessions they call it, and the DIRT team in that operating review session, which was like a monthly download of the performance of his organization, the DIRT team did a presentation.

And I can't remember the manager's name, but they did a presentation. And at that time I said to Mel and to Donny, you know, I'd offered previously to Joel and offered again for quality management to either participate in -- participate in the review, some of the investigations and do a paperwork review so that you could see if in fact there were other drivers.

And Mel and Donny were -- thought it was an excellent idea, were very receptive. And I -- I did pass it on to Vince Whitmer and Francis Yee, who ultimately succeeded me for the field quality role. And I don't know if anything happened with it, but Mel and Donny were very open to it. And my view on their intention was that they are open to under -- to the like we'll find it and fix it strategy. So they want to know so they can make sure it doesn't happen going forward.

And to that end when all of the late tickets, that April 2016 to June, Donny was a manager at that time of the QC function or the compliance desk is something else they called it. And he and I had been meeting related to a risk and compliance action item. And I mentioned what we had been finding with the late tickets. And at that time he said, you know, and I guess this just speaks to his want to do the right thing, he's like, "You know, I developed a protocol for -- for the tickets." And we had never gotten off the ground. He goes, but I'm going to bring it forward again and see if we can start having his compliance desk folks start reviewing some of the tickets.

And I don't know if that ever -- if they ever were able to get it moving forward because somewhere in this timeframe the SGO or Super Gas Ops process started looking at the Locate and Mark process from end to end and trying to figure out what controls might -- that was led by Katherin -- what controls might be put in place to address some of the issues, not just with quality but with other process type issues.

And so I think that Donny's looking at those records might have been put on hold pending the outcome of that. But I know that at some point he did develop a protocol for looking at the tickets. And he had brought it by our team, and he was preparing to kick something off. And it wouldn't be to go out in the field. It would just to have been to look at irthnet, which is the tool. That's with an i-r-t-h, irthnet. But it would just be to look at the tool and review and determine if they were being processed appropriately because he was -- he wasn't in previous discussions or provided with those late ticket results.

Q So I'm just -- just hearing your answer, something changed. I mean I heard you say that you heard Joel tell you that it wouldn't be a good idea to have dig-in review?

A He didn't say it would be a good idea. I just asked if we could be involved, and he said not, no.

Q Did he say why?

A No.

Q Did you get any response from anyone as to why?

A No.

Q Okay.

A He just made it clear he didn't want us involved.

Q Did you suggest it to anyone else?

A I suggested to Jesus late, much later, that the DIRT team become part of my organization. I suggested to Vince an organizational design struc -- or conversations about the DIRT team being part of my organization. And I also more in the April timeframe I believe suggested to Mel and Donny that we do the paperwork reviews.

Q Okay.

A So I don't -- the answer to your original question is I would -- I never was involved in understanding what role we may have played in the incident.

Q Okay.

A Or the Locate and Mark team, I should say, played in the incident.

Q I follow. Okay.]

A Where the Locate and Mark team played into that.

Q I follow. Thank you.

A Yeah.

Q This could potentially be a good time to break for lunch.

A Okay.

MR. GRUEN: Let's go off the record just a moment.

(Off the record.)

MR. GRUEN: Let's go back on the record.

EXAMINATION

BY MR. BRUNO:

Q Hi, Ms. Burrows. I just wanted to follow-up on two of the answers that you recently provided.

With respect to the DIRT team, did they ever request data from you on your QA for your individuals that you assessed?

A Not to my knowledge.

Q And did -- so, separate question. Did Joel, Joel, did he review the QA?

A Joel.

Q Joel, excuse me. Joel Dickson, did he -- was he familiar -- did he review the QA data for the employees? For instance, would he know if some employees had late tickets and therefore had high findings?

A Absolutely.

Q Okay. And is this -- are late tickets for the individuals that you QA, is that pretty -- is that -- do those occur pretty regularly or are they -- they rare?

A So, I -- to give you an idea of perspective, I believe in 2016, we had 40 late tickets and that was on 300 -- I don't know, 300 to 350 assessments. So around 1800 tickets, let's say we looked at somewhere between 17-, 1800 tickets and we had about 40 late tickets. And that doesn't mean that there were 40 people who had late tickets because it could be that one assessor could end up with -- if we looked at five, they could have multiple late tickets out of their five. So it would be somewhere -- 40 or less locators would have --

Q Sure.

A -- late tickets. And, yeah.

So -- and you haven't asked me, but I should probably clarify that you know Joel had a late ticket metric as well. And it was not the same metric that I had, so maybe that's a good point of clarification is because Joel measured late tickets using irthnet data. And what that meant was any ticket that was not marked within 48 hours. And so the caveat for my organization would be that if when I went in and looked at the ticket you moved the status to inclement weather, maybe you did that appropriately but -- or I shouldn't say that maybe you did it appropriately. You moved it to inclement weather because it was raining. We have specific protocol that you have to do in order to do -- you have to actually call and make contact with the customer and let them know that you are not marking the ticket that day, and tell them when you will be back out. And you have make -- before you can close that ticket, you have to make three attempts to contact that person.

So if the person said in the ticket "inclement weather, left message with excavator," it's a late ticket because they did not indicate who they talked to, when they talked to them, or that they gained agreement, right. So our late ticket metric says wasn't marked within 48 hours or appropriately dispatched.

So if you used inclement weather, another common offender was phasing a ticket, so phasing is meant for large jobs where I go out to the job, Ken tells me it's three blocks, and Ken says "Today I'm only working on this block," and I say as a locator, "okay, well I'm going to mark this block today, the next block tomorrow and the following block on the third day" and you agree with me and I appropriately thoroughly note it in the ticket that I talked to Ken at this time, here's his contact number, and we agreed on X, Y and Z, that is an appropriate phased ticket and it won't be a late ticket if I came out and saw that the second block wasn't marked.

But what we were seeing is that the locator is at the yard at the end of the day, knows they're not going to be able to get to those tickets, and phases the single service. And there's no reason to phase a single service because you would never -- you would always be able to mark that, right?

So there were a number of statuses that were being used to then -- once you put "inclement weather" or "phasing" it took it off the counter. So no longer was it visible in irthnet as a late ticket.

So Joel just looked at that one -- Joel's team, how they set their parameters, looked at that one criteria for late tickets. And so he had a late ticket metric maybe that said -- at one point his said six, mine said 15, and the question came: Why do you guys have difference in those?

Q In the RCC or QPIC meetings --

A Yes.

Q -- when Joel Dickson was asked about the late metrics, was that your data --

A Yes.

Q -- that they were asking about?

A Yes.

Q And he --

A QPIC, typically.

Q And Joel, Joel Dickson --

A Mm-hmm.

Q -- I believe my understanding is that while he didn't use your data, he saw your data and knew that you had 40 out of approximately 1800?

A Yes.

Q So when he answered, my understanding, explaining his answer was that he said something to the effect of junior supervisors?

A Yes.

Q Is -- I'm just trying to understand that answer in relation to your data.

A So when we was responding, it was not -- the results I gave you were like at the end of the year. This -- when he specifically was being questioned regarding it, it was sometime in the year. So there was a fewer -- you know, there was not -- it hadn't been 40 at that time. Right. It was a much lower number. They said what's going on with your late tickets and he was able to say, since there were you know 10 to 15 examples, he was able to give that explanation. And at that point it was accepted and we moved on.

Q But based on your knowledge and experience, was that a reasonable explanation?

A If it were true, but it wasn't. Yeah.

I mean, it could definitely. An inexperienced supervisor who didn't know procedure could have definitely given poor guidance, right, to his employees about being able to, just not telling them that they had to make contact.

I mean, it could have happened but that wasn't what was driving those late tickets. That wasn't -- the supervisors and the divisions he indicated, that wasn't the -- that wasn't the --

Q Okay.

A Those weren't the drivers of the -- could have been the driver of a couple of them. Could have. But was it the driver for the whole organization? The fact that he said it was a local problem that was being addressed with those individual's supervisors in a couple of locations or few locations, however he deemed it, that wasn't.

Q Sure.

A That wasn't the entirety of the problem, yeah.

Q Okay. And then just so I understand, was your data captured in the slicer report, is that what the executives were looking at in the QPIC and the RCC meetings?

A They were looking at -- in the QPIC meeting, they were looking at the quality.

So this is a good nuance because in 2016, the QPIC dashboard was high findings per 100 assess- -- for a hundred assessments. And the high findings were only, they were only mismarks and no marks at that time. Late ticket was not included in the high findings until 2017. So it wasn't on Jesus' radar until 2017 that it became part of that data set.

And in fact, I was -- I did have a meeting in this June 2016 timeframe where Jesus called my supervisor in to explain the difference between my late ticket metric and Jesus' -- I mean, Joel's ticket metric.

So the QPIC, at QPIC they were saying -- they were adjusting no marks and mismarks. It was not because late tickets wasn't a high finding. It was because the QPIC dashboard and the overall quality metric was in its infancy. And I think 2015 was the first year and we kept like -- we were refining it. Every year we were trying to improve it to be more reflective of the overall process.

So in 2015, that wasn't part of figuring out, and it was inconsistent. So for some of the programs, it was high findings per hundred. And in some, it was just Grade 1s left behind for leak survey. So there was -- you had to read for each program, you had to read the exact definition of what the metric was and which findings were included. And there was a lot of discussion that went on between my predecessor Karen Roth and those leaders of those organizations on what the ultimate metric should be because it was meant to be an executive level.

So that's why it wasn't every single question. It wasn't the results of every single question. It was hey, this is new. We have this QPIC. We want to put something in front of them that shows them where they should focus their attention and where we may have opportunities within the programs. And so they -- they didn't -- it wasn't a lot of time to put the metric together but she held meetings, they came up with, in 2015, what they would be. And it was in 2017 that I was like, that I decided I wanted for every program to be completely consistent, and so it was going to be all high findings.

And so the late ticket would have been presented. It would be included in the high findings for late tickets beginning in January 2017 for QPIC.

So I would say that we met, Vince Whitmer and I met with Jesus sometime in June of 2016 to review with him our late ticket findings and discuss with them what's different about ours versus Joel's and --

Q Okay. So, thank you.

I guess I just want to get a little more clarity.

The conversation from the executives when they asked Joel Dickson about the late tickets, where did that data come from?

A So, he was a process owner. So most likely that was from a meeting in 2017 where he was having to address --

Q I see.

A -- his program more holistically because they would deep dive -- each meeting, they would try to bring in one to two process owners and get a more detailed idea of how the program is going and what they are doing to address any issues that they have. And so, in -- that was one of the times that he was brought in to talk about his findings in a more detailed view.

MR. BRUNO: Okay. Thank you.

EXAMINATION

BY MR. GRUEN:

Q Yeah. Can I ask a couple follow-ups?

I think the difference between your metric and Joel's for late tickets, did you tell Joel or communicate with him about your metric?

A Oh, yeah. Yes.

Q So he knew you had a different metric than he did?

A Absolutely. Yeah.

Q And he chose to keep the one that he was using?

A Yes.

Q Did your metric capture more late tickets than his?

A Yes. And his, the ones he captured were not part of our data set. We didn't like double count them. Once he already identified them as late, we wouldn't go pull a late ticket to assess and double count it.

Q Did his metric capture any late tickets that yours didn't?

A All of his were not in our data set.

Q Okay. So --

A His only were captured by the

system.

Q Got it. It was two independent sets?

A Mm-hmm.

Q So your metric was proposing what was looking at late tickets in addition to his.

So what kinds of late tickets did your metric capture that his didn't?

A All of the late tickets that we captured that his didn't were tickets in which irthnet -- from irthnet's perspective, they were responded to because someone had gone in and in some way manipulated, just meaning not -- by manipulated, I just mean changed, in some way changed the ticket status.

And so what -- the late tickets that we captured are the ones wherein which the statuses were changed and didn't and were not -- it wasn't a change that matched the standard procedure of how a ticket should be identified in that. It was moved to a status and a proper -- could have been proper contact not made with the excavator, it could have been it was moved to a status that was inconsistent with the type of ticket it was. But all of that resulted in the fact that from an irthnet perspective, based on the criteria that was set for that report, the report that Joel pulled for late tickets -- and not meaning Joel did it himself but an analyst as his representative -- it only looked for tickets in which no one had changed the status and determined if it had met the 48-hour requirement.

My team went and did the deeper dive into the statuses of the ticket to determine if the status changes met our company standards and procedures and were aligned with the regulations.

Q All right. Which company procedures -- do you know the company's -- I'm sorry. The company procedures and regulations that you're talking about, where would we find those?

A So I don't remember the exact standard and procedure number, but the codes the standards team can provide to you the locate and mark procedures.

Q Yeah.

A And the stand- -- the procedure and the standard. And it's very consistent. We only have one standard procedure. It's not found in different --

Q How would we get a hold of the metric that you were using?

A The late ticket metric?

Q Yeah.

A The definition of a late ticket metric or just the results of the findings?

Q Really both.

A Okay. So the Quality Management team would be able to provide the exact -- well, they can provide you a copy of the assessment template that shows you every question we ask and what the right priority is. And then the reports previously I stated will provide all of the results related to the individual assessments as well as the weekly and monthly reports.

Q Okay. What -- how would you suggest we ask the question of the Quality Management team to get the metric, both the definition and the results?

A I would ask for a copy of the -- whatever the time period you'd like, the annual assessment template for locate and mark for whatever period that you would like to look at.

Q Okay.

A And that will define the exact wording that qualify the metric.

MR. GRUEN: Okay. I know we're past noon and I suggested noon for lunch. Do we want to take a break?

MS. MENDEZ: Yes, we do.

MR. GRUEN: Off the record, please.

(Whereupon, at the hour of 12:25 p.m., a recess was taken until 1:00 p.m.)]

* * * * *

AFTERNOON SESSION - 1:10 P.M.

* * * * *

JENNIFER BURROWS

resumed the stand and testified further as follows:

MR. GRUEN: On the record, please.

Q Okay. A couple of things just to clarify. In the meeting -- remember the meeting we were talking about -- I'm just kind of tagging it as the meeting -- I think you mentioned where Joel was caught off guard, where we we're talking about that? And he was asked the question I think you said about late tickets. Did I get that right?

A Yes.

Q Okay.

A Well, no, I'm not sure what he was asked the question about in the meeting where he -- are you talking about the meeting where he was frustrated because he felt like he didn't see the data?

Q Yes.

A That meeting I don't know what the data was. There was a meeting where he was asked about late tickets where he referenced the supervisor's inexperience being the driver, are two different meetings.

Q Those are two different meetings?

A Yeah.

Q At the one he -- I'm just using caught off guard where he said he didn't see certain information, I think, certain information that your group had provided him.

A Yes.

Q Certain late ticket information, I think, or was it assessment information?

A I believe it was -- I don't remember. It was just specific to quality data that he was asked to explain and said that he wasn't -- that he hadn't seen it prior and so he wasn't prepared to speak to it. And I don't remember if that had to do with his data quality data, which would be related to calibrations or if it was specific to Locate and Mark and late tickets. I don't think that it had to do with late tickets.

Q Okay. Okay.

A Yeah. So I think that the information he took exception to was not related to late tickets.

Q So it was related to -- it was related to no marks or mismarks then?

A Not necessarily. I don't remember

exactly how many questions we asked, but there's a series of questions we ask for field quality and there's just a couple of questions we asked related to our data our records for calibration.

Q But the monthly and weekly and daily e-mails that you gave him, that was assessment data, right?

A Yes.

Q Was that the data that he was asked about in this meeting where he was caught off guard?

A It may have been but I'm not positive because if it was Risk and Compliance, it was data quality. And not until the very end of my role as senior manager did we start presenting the process owner's data and field together. But because the data quality team had been separate, it had always had a different mechanism for sharing and that was really only for Locate and -- I mean for Locate and Mark it was only related to their calibrations. That is all they looked at in data quality. So the bulk of the data he was getting very regularly was all related to the field quality team that did the evaluations of the locator's facility mark tickets.

Q Do you know if he was paying attention to that data?

A I believe that he was. He did attend the meetings. Periodically he did from time-to-time comment on the assessments, e-mails. And so in general he was very familiar with the information.

Q Okay. Okay. I think that the e-mails -- what I'm struggling with is the e-mails, the daily, weekly, monthly e-mails, like the slicer report, that was based on assessments.

A Yes.

Q And the assessments, maybe -- can you help me understand the relationship between the assessment of the locates and marks and late ticket information?

A Sure. One question on the assessment template is related to was the ticket marked within the requirement. I don't know if it says within 48 hours but it says the exact requirement how it's stated in our standards. So for every ticket that we would assess -- so if I am assessing, if Ken's my locator, I have five tickets, I'm going to ask that ticket -- I'm going to answer that question five times as I review his tickets.

Q Okay. Yeah.

A So then when I'm done with the assessment, I'm the quality specialist, I then send out a summary e-mail that says, "On August 31st, I assessed Ken Bruno from such and such division and he had a, you know, three percent error rate, which would be high -- sorry Ken -- with, you know, there were two high, with one medium and one low finding. And then there is a -- either a PDF or a link to the document so you could actually scroll through the document in detail and find out what they were. I asked them to spell out the high findings. I asked them to put that in detail so that they wouldn't have to dig in. They could see two high findings late tickets or two-minute marks or two-minute marks, et cetera. But then they could open it up and they could see how they did on every single question --

Q Okay.

A -- and any additional comments. But we tried to indicate positive comments, as well, if there were things that they did right. Because that was supposed to be a balanced assessment. If they didn't get any, we would say, "Great job" and a nice job on their notes or for whatever it may be.

Q Okay. And you have been helpful. You have shed light a couple of times. I know I asked you before lunch, too, about how the assessment got at late ticket information.

A Right.

Q So I understand your answer, again, I'm wondering, too, if you -- how you would have conveyed the late ticket information that you learned about within the assessments to Joel?

A So this is also an evolving process. Like our communication plan and strategy was very inconsistent with the different programs. So the level of inconsistency of communications increased as, you know, with during the time I oversaw the program. So, they always, even prior to me, there was a monthly dashboard for quality management that went out. But -- and the supervisor was always -- the direct front-line supervisor was always made aware of those high findings the day it happened.

Q Okay.

A As far back as I can remember, Joel was always -- had requested and was always cc'ed on the assessment e-mails that went out usually within 48 hours unless there was a discussion around a finding or a discrepancy or something. The goal was to get it out within 48 hours of the assessment. So he was always cc'ed on those. So he could see them as they were happening. So when I first came onboard, he was at least seeing the assessments and he was seeing a monthly dashboard. And then once I went into the position, that's when I started building in the monthly process owner meeting, where we would have a presentation that we would go over in detail. I didn't want to hope that he might look at -- open up the dashboard because the dashboard was every pro -- a one-slide per program and so it was imbedded. I didn't know if they were looking at it or that was good enough. So we started having the monthly meetings.

Shortly after, I was over the Locate Mark program and then we kept layering on, like after a few more months, a slicer. The weekly slicer report was something because Joel wanted to know the history, historical information and he wanted to be able to dive down by division. And Donny Jew had been doing a slicer report related to other compliance data and he said that his supervisors already knew how to navigate that format. So we tried to create a slicer report that looked very similar so they would understand how to drill down. You could just click buttons and it would be their employees kind of thing.

And then like I said, he wasn't always part of the QPIC meeting, so he wouldn't see that, but right before I transferred over to electric transmission, we were formalizing a process by which every high finding, that the directors would get a phone call because -- the same day, because John Higgins, in a meeting I had had with John Higgins, he had expressed that he would prefer that he just be notified of any high finding rather than put it on his superintendents or directors to decide if it, you know, was at a level that would require -- that they should loop him in. He just wanted to take that out of the equation because then there is no like bias. It's not like he is only, you know, giving only -- like we are only reporting things that Carroll does, not what Ken does. And so he's like, "I don't want any of that." He is like, "I just want to know every high finding." So we were in the process of putting that in place.

They transitioned the leadership to Mel. So for a couple of months it was on hold because I didn't know if Mel Christopher would want that kind of instant notification. But Mel definitely did want it. And so as I was transitioning out, they were starting to immediately call the director level first so that they would be in the loop and they could do whatever they needed before we then notified they could get their facts. We give them a couple of hours or whatever and then notify Mel. We were going to establish just an e-page if -- where we were headed so that we would actually simultaneously after we had talked to the supervisor that it would just e-page the superintendent, director and senior director. But it just -- we kept trying to improve the way we communicated and make it more consistent between the programs and to be fair to everyone, you know, and not pick certain issues, just because maybe we thought it was of high risk or high importance.

Q Okay. So did you ever experience anyone influencing you to change the substance in an assessment?

A Not for Locate and Mark. Other than them challenging a finding and having to discuss and figure out, you know, what the confusion was or what the disagreement was but not words or anything like that, not for Locate and Mark.

Q Okay. Okay. So you were left to independently come up with your findings based on your review of the Locate and Mark?

A Yes.

Q Come up with them and then after you had put the draft together you would discuss with other groups whether certain findings were reasonable?

A After -- for the high findings -- in general for the medium and low, we would just send out the assessment finalized.

Q Okay.

A But for the high findings, we started a process because we were getting a lot of -- we were getting a lot of e-mails back. So when we send out the findings, there's a bunch of folks copied on it, right. We have our codes and standards and leadership and everything. So we had started to get responses back --

Q Okay.

A -- in which people were challenging -- the supervisors primarily were challenging our findings. And I didn't want that in an e-mail with all these other people because I felt like it brought undue -- well, and sometimes they weren't super professional with the way they were -- their language and stuff. So I was just like, you know what? Let's just put in place the process where we send them the preliminary assessment and allow them 48 hours for those high findings to challenge them, if necessary. And it was upon them to reach out to us. And if we didn't hear anything back, we would just send it out.

But on the high findings, I just didn't want a lot of e-mails. Because, you know, some of my specialists, because they wanted to like respond back if they didn't feel like it was a valid challenge. And if there were just some debates in the e-mails, that I was like this doesn't make any of us look good and so we established a process. But it was never like challenging the language. It was just they thought that it shouldn't be a finding, that the person was trying to do the right thing and it should be okay whatever they did. And so they would talk it through and try to tell us how they were interpreting the requirement and why they thought that that person's actions met the requirement. And that's when I sometimes said we would call in codes and standards and make sure that how we interpreted it would be the intended -- the intention and that kind of thing.

Q Did Joel Dickson ever tell you to change anything in the assessments?

A I'm trying to remember the exact finding. There was pushback on my team at one point because the procedure had changed or the -- actually the regulation, the regulatory requirement had changed and our procedure hadn't yet become effective. And so -- and that was related to the late ticket and the reference earlier I made about how they changed it going into this year to be a 48 hours from the time we received it to -- I mean 48 hours from the next business day, right, from when we received it.

And so there was an ask that we wouldn't count any -- even though our procedure still stated the old requirements, and we were -- so we had to counter as late tickets because we measure procedural adherence, there was an ask, and I don't know if it was from Joel, but Joel and Jeff, et cetera, had asked, "Can we not put those on the metric because they're meeting the state requirement?" And so, for me, I didn't -- I said, "Well, I need to still capture the fact that they were late compared to our procedure" but I said, "I will definitely separate them out and say based on the new requirements what the regulatory, we consider late versus just because our procedure."

We were trying to push on the fact that the procedures needed to be updated, so I didn't have a problem with that, but I don't feel like Joel ever asked me to change a -- with the exception of the ones where we had debate, you know, he never asked me to change a finding and nothing I can remember, you know, specific to late tickets.

Q Okay. I think I'm understanding but just so I'm sure, the procedure would -- that was --

A In place.

Q -- in place would have said the clock for the time to -- the clock for the 48 hours to start starts the day that the call comes in?

A Right. When it's requested. When the person calls in. The 48 hours of when the person calling in.

Q 48 hours of the time that the person calls in. Okay. And then the new requirement would say that the clock starts not 48 hours from the time that the digger calls in but instead starts 48 hours from the next business day after --

A Right.

Q -- the digger calls in?

A Yeah.

Q And so the PG&E procedure had not been changed to say the same thing as what the new requirements said?

A Yeah. It hadn't -- it hadn't been published. It had been drafted but it hadn't been published. So we were caught in the -- the Quality Management team was caught in the debacle because we knew that was coming and that was the requirement, but our procedure still stated a requirement that was above-and-beyond.

Q Joel Dickson asked you to --

A Honor the regulatory requirement and not count the tickets that were late related to our procedure which was more aggressive than the regulatory requirement.

Q I follow that.

A And make sure -- and/or make sure that we reflected which ones were late tickets out of compliance from regulatory versus which were out of compliance with our procedures, so -- so it would express the true picture to the executives, right.

Q Got it. That's an example of your metric identifying late tickets that the one Joel was using did not; is that right?

A No.

Q Okay.

A No.

Q Your metric had other ways of counting late tickets that the one that Joel was using did not?

A Joel's metric only looked at tickets that had not been dispatched and/or responded to is how I would put it. I don't know if those words would be consistent with like the irthnet, the man who manages irthnet, but Joel's metric only looked for tickets we hadn't touched, late tickets that we hadn't touched.

Q And what else did your metric look at?

A We looked at tickets that had been processed by the locators and identified if they were within the guidelines of the procedure which said that there are very descriptive changes you're able to make statuses depending on the conditions you find in the field; for instance, what I referenced earlier was phasing tickets and inclement weather where you're unable to access. If you run into any of those situations, if it's raining, obviously you're not going to put paint on the ground, you have to be able to make contact.

And so what my team was finding is where people were unable to get to those tickets and so rather than let them go late, they would go in and move them into a status to get them so they no longer would be monitored -- tracked by irthnet as a late ticket. Once it goes into this inclement weather status, it's no longer monitored by -- in the way in which they set up their late ticket report. Once you put phase ticket, those new statuses mean that you're working it. You just aren't able to complete it. So it puts it into the holding bucket, for lack of a better term, it puts it into a holding place which would -- if it was actually valid would be completely okay. Like if it was -- if you have inclement weather, it is okay to call the customer and notify them you will be out when it clears up. That is completely within proper procedure. If you have a ticket that needs phasing because it is so large in scope, it is okay. But if you get back to the yard, at the end of the day your shift is over and you have got five tickets that are due in the next hour you know you're not going to get to, it is not appropriate to phase them.

Q And your metric was catching certain --

A Because my people look into the system and they look at all those time stamps and they go out in the field and they look at the actual tag in situé, right? They're looking at the location and they're saying this does not qualify for phasing or they don't -- they didn't indicate who they spoke with and what time and what the phone number is when they said it was inclement weather. So it's a late ticket if you don't communicate. So that's the part -- they just run a report. Joel's team just runs a report and they just see what the data tells them. My team looks at all the fields and makes sure that those actions that they took on that ticket were properly applied and that they were properly documented.

Q Okay. Okay.

A You could never run a report and know what -- I shouldn't say never --

Q Go ahead.

A I shouldn't say never because I feel like -- I felt like there was more structure they could have placed on the irthnet. They could have built additional logic into irthnet to be able to look for some of these inconsistencies, like technically you shouldn't be able to choose phasing on a single service, right. It should be something of a complex scope. And so the feedback was that -- I do think that there's another thing that we -- in leak survey we have breadcrumbs. That is what we call them. You can look and see where the surveyor was and see them on their route and we use that to -- when we find a missed leak, we look back to see were they even in that area? Did they miss it because they didn't walk past it? And so the irthnet tool how we use it -- I don't know if it offers it, but there are no breadcrumbs. So in some cases, you know, for some of our other errors, with the mismarks and no marks and things like that, they would say they were at that location, but we didn't have any evidence in the tools that they were at the location. So we always were -- I do believe that there's other controls that you could build into the tools that we see in other tools that irthnet doesn't provide. So that is why it requires our manual review in order to understand the late ticket process.

Q Let me back up and just understand. The metric that you used, did you tell or communicate with Joel about that metric?

A Yes. And let me just say, a late ticket -- when you say metric, the metric is the same, right. It's just that we're -- so it didn't -- we didn't mark it within 48 hours. That is what he is getting at. That is what I'm getting at. The metric is the same. The data that we look at to determine it is different. He just relies on a system dump with two criteria and I look at the tickets in detail. I go into the ticket and I make sure that whatever happened to that ticket, if we missed that time, was it valid or wasn't it valid? Where he's -- his report would never show that.

Q Okay. Okay. And you were providing -- I appreciate the clarification. Were you communicating the additional ticket detail from your and your staff's review to Joel?

A Absolutely. And you will see that in -- if you were to review the process owner monthly presentations, you would see in certain months, and I don't remember when it started, but it's a deep dive. There is a slide that is just about late tickets and it tells you these are the drivers. Like are they doing incorrect phasing? Did they not properly contact the third-party? We try to break it down so we deep dive in those presentations what statuses they're typically using incorrectly and/or what actions are not -- are they taking that aren't correct like in fulfilling the contact requirement or whatever or poor notes, you know, didn't properly document, that kind of thing. So we definitely -- I don't think it's in every single one, but probably, you know, you'll see starting sometime in 2016 that it popped up and it continued to be part of the deck. It just got refreshed every month.

Q I see. I missed the date. When did it start? When did the deck start to include that information?

A The deep dive on late tickets, it was in 2016, mid-to-late 2016 I'd probably say.

Q And you said that the deep dive on late tickets continued.

A Well, we continued to refresh the slide.

Q And this was in the QPIC?

A No. That was in this process owner meeting.

Q Okay.

A And that he was -- like I said, he wasn't there every single time. Sometimes Jeff was his delegate on those meetings, but Jeff was always seeing it and Joel would, you know, every other month probably he would come.

Q So you saw Joel seeing these slides on late tickets --

A Yes.

Q -- at these meetings?

A Yes. Saw or heard. Sometimes it was WebEx. He would call in.

Q A call in?

A And we were all looking at the same WebEx, right.]

Q Yes. I follow.

A Okay.

Q In the meetings, whether they were in one room or on WebEx, did you hear any reaction from Joel at any time in reaction to the deep dive slide information?

A Usually the comments that I can remember from Joel are typically when he -- when there was an improvement, you know, an improvement. Like when the number had gone down, you know, typically his comments were reinforcing that they were improving. I don't remember specific comments related to where they were, you know, when there was issues, or I think it was July. I think we had thought we were improving in July or August of last year. We had a big spike, and you know, the comments which came from his team, and I don't remember if he said it or Jeff said it, was that that was a high volume month, right. So they were attributing it to the people who were feeling pressured and reverting to their behaviors, you know, of trying to stop the tickets from going late.

And they didn't think that, or you know, they would revisit it and that they would want to see it going forward, but they think that it was related to the pressure for high in that high volume month. And you would see that in the results. You would see a spike in one month last year which I think was July.

Q Did you ever hear or see a communication from Joel as to why PG&E should only look at late tickets in irthnet instead of looking at the data that you and your team came up with?

A I didn't. I did not see a communication like that.

Q Did you see Joel use the data that you provided, the additional late ticket data that you provided him? Did he consider that?

A So I believe, well, he considered it in our meeting, and he knew that it was there. But he presented late ticket with his metrics. In these different operational review sessions the late ticket metric he presented was his -- was the one that I referenced that was based on irthnet. And so the metric that Jesus consistently saw was Joel's irthnet late ticket metric. That was the one that he -- there was no -- in the sessions he didn't present his number, and that has a quality management number with it.

Q So would Jesus -- did Jesus become aware of the late ticket information that you and your team had come up with?

A So in -- in a meeting with the executives Joel was presenting his late ticket metric, and I had leaned over to Jodi, J-o-d-i, Kubota, K-u-b-o-t-a, who is Jesus's chief of staff. And she had made a comment about it being so low given what had been past practice. And I had said that it referenced that it didn't take into account that we had I think at the time like 15. Joel was presenting 6, and we had 15.

And so at the break she asked me to tell her more about it. And I explained to her the difference of the metric. And at a meeting sometime after that, not long after, but I don't remember the exact timeframe, when that -- when the late ticket, no, the 6 was presented to Jesus, Jodi referenced, how does this relate to Jennifer's late ticket metric?

And at that time the following morning Jodi called at Jesus's request my super -- the supervisor that worked for me, Dennis Whitmer, and asked for an urgent -- he works in San Jose -- a 4:30 meeting with Jesus that afternoon. And so Vince asked that I be invited. And I called Jodi and asked to understand what was prompting it to make sure that we wanted to know what to expect and what we should bring. And so she had explained the context of how it had come up.

And we met with Jesus at 4:30 that afternoon, which I believe was -- I believe it was in the month of June last year. And Jesus kicked it off, the meeting off and said that, you know, late tickets are of the utmost importance to him because I think he said four years ago that he was in this campaign basically to get people to call before you dig.

And he was doing a lot of communication with the contractor community and that he was asking them to call in, and they said, "Well, you know, you're -- the problem we have is you guys don't come out in time." And he promised them at that time, he made a commitment, "If you call, we will come."

And so he has thought, you know, he has been looking at the data, and he sees this really low number, and he thinks that they're doing a fantastic job he said but continues to get feedback that we're not coming out. And he said, and I know the timeline could be better established if I knew when the gas rodeo was, but we have an event where we, you know, have the guys come in from the field, and they execute their work, and we recognize the best, you know, there's teams.

So at the same time they were doing the gas rodeo they were doing, which I don't see as separate, but they were doing a Locate and Mark rodeo at the same facility. So

Jesus was standing up. I think they were reward -- or handing out the rewar -- or awards, and next to him were some GC of our gas general construction crews, and they said they wished that they could get the locaters to show up for their jobs the way they had for the rodeo.

And so Jesus said "I want to understand more about this." And so they said, "Well, you know, we call it in, but they don't come out on time, or they delay our jobs." And he's like, I'm listening to this, and he said, it's not making any sense. Like I see 6, you know, and for the year, and how many tickets we've marked. And so he wanted to understand. He's like how -- how do -- you know, some of the same questions you guys asked. How do we establish our sample? What does that look like? And we have 15, and they have 6, and are our 15 part of those, you know, are those 6 in our 15?

And he asked -- we brought documented examples that to his chagrin were not part of the 15. My supervisor went in and pulled some current examples, and one of which he happened to pull was one from that was for general construction. So our own crew in which the status had said, you know, something to the effect that we couldn't get ahold of the excavator, which is bad if it's our own company, doesn't really hold true.

So he had three to five examples all highlighted. Walked him through how we look at the case. I mean it was very -- Jesus wants the detail, and he wants to make sure that he's not -- that he has all his facts straight before he tackles it. So he wanted to know exactly how, what fields and how we looked at it and how we came to that conclusion. And you know, he was very frustrated. He -- not with us at all. He's just like "I want you to put yours on his metric." And I said, well, I don't think that -- you know. I mean I think it could be presented together, but I think we should keep them separate because I think there's value in understanding what we identify doing the analysis versus what is automatic in the tool.

And so anyway, he said that he wanted to take it and pack it up, you know, talk to John Higgins about it. And so you know, he assured us that he was going to, you know, carry it forward and get to the bottom of it and understand.

And so maybe two days later I was

in an executive meeting. It ended, and John said to me, John Higgins, H-i-g-g-i-n-s, he said, "Hey, Jenn, do you have some time?" I said sure. And he said, "I want to talk about these, you know, tickets that Jesus gave me." And I kind of smiled, you know. And he's like -- I said yeah. He goes, "Oh, were you in that meeting?" I said, "Yeah, I was." And he said, "Well, can you give me a little bit more information so I can get an understanding of the tickets and how you measure it?" So I spent some time walking him through it. And he said he was going to talk to Joel about it. And there was no -- he didn't, you know, he wasn't upset with me or he didn't express. And was he like, "No thanks. This is great." I mean. You know, is this something that Joel -- he asked, something that Joel is familiar with it? Has he seen this information?"

So I kind of -- I walked through kind of the sequence of events that we had talked about earlier about how we had brought forward the late tickets. And then, you know, Joel had sort responded. It was a local issue how we'd shared that we could find it throughout the system. How they then had a conference call with a larger group.

And anyway John said he was going to talk to Joel. He just wanted to make sure that we had shared it and before the conversation with Jesus. So anyway, that was the conversation that I had. And I don't know what happened after that. I wasn't part of any discussion.

Q And that -- I'm not asking precisely.

A Yeah.

Q The gas rodeo and the conversations that came from it happen, would that have been last year?

A Yeah. It was in 2016. But I feel like the conversation that Jesus was referencing related to the gas rodeo was really fresh. Like it had happened within the, you know, past week or so. The GC guys made that comment to him, and then, and then short -- you know, within a couple of days he was in the meeting where Jodi had called out to him.

Q When you say the past week or so, you don't mean this last week?

A No, no, no. The past -- prior to -- whenever he called us in for the conversation, Vince and I, I feel like the gas rodeo was -- had just happened because the -- I feel like he said, and I don't remember this clearly, but I feel like he said "This weekend when I was at the rodeo they said, you know, or last weekend do it." He made a reference that made me feel like it was -- I didn't attend, but.

Q They were near, close in time?

A Yes, yeah.

MR. BRUNO: Q Ms. Burrows, could I go back to the example you gave where you said you couldn't get ahold of the excavator when your crew pulled a ticket. Am I understanding it correctly that that would be an example where Joel's data would show that as not late but yours would show it as late?

A Correct. So Joel's data would have -- because it was moved into this like no contact from excavator, or I forget the exact status, but the status is made for when there's like a gate and it's locked, right. And I forget the exact words we used, but there's an exact status that goes along with that. So Joel's data, it would not be part of his data set because it was -- there was a response indicated. Someone did touch that ticket, move it to a different status.

But when I would look at it, I would see that it was moved to that, but there was no person, there was no number indicated, there was no time indicated, there was no name of a person that they contacted indicated. So it would be it -- it would not be in accordance with our procedure.

Q And had you seen --

A I think that one might have been marked ten days.

Q Okay.

A So it had gone on such and such a date, right. Like with -- on the day it was due within a few hours of it being due it was changed in status to no contact from excavator, whatever the status was. And then when you look at when your ticket was actually closed based on when it was called in, it was like ten days later. So like eight days past the due date and worse past the construction start date, which probably means that crew wasn't able to start their job when they had it scheduled.

Q Is it fair to say that there's a PG&E procedure that supports Joel's group doing that?

A Supports Joel's group.

Q Moving in in a category that says, could not get ahold of the excavator?

A It is a valid status.

Q And therefore it's not late?

A In that case it was not. It's a valid status you could use, but that wasn't the -- that wasn't the right situation. There would be a case when you would come up to a ticket. The gate would be locked. You couldn't get into the -- or it was inaccessible for some reason, and you would need to call them and call the excavator, let them know, I can't access the location. We need to renegotiate a new time. There is a -- that would be a valid avenue.

All these are valid statuses that can be used at the appropriate time. These late tickets that were seen are when they chose one of those statuses when it wasn't and did not follow the appropriate procedure. It wasn't the right situation, or they didn't appropriately document. In some cases they say they did it, but there's no proper doc -- they didn't note it in the tools. Like when we talked to them, they say "Oh, no, I called them." But it doesn't matter because if you don't document it, it didn't happen, right?

Q I understand. And forgive me for reasking this question, but in the example you just gave where you said could not get in and called, called the excavator, something to that effect.

A Yeah.

Q You're making contact in that example. And the ex -- I understand that to mean it's a two-way contact.

A The locator would be making contact.

Q And the excavator knows? But the original example --

A And you have to try three times. If you can't get ahold of them, you have to try three times before you're able to like let's say close out the ticket. If you try three times and you can't get ahold of them, you can close it out because they're notified. That will trigger it to call back in.

And I will say that a lot of them give phone numbers that are not their direct line because they don't want all the -- all the communications. Like the USA, they'll circle back with them and tell them, give them statuses. Like they have automatic dial up information. So a lot of times the number they give us is an office number. So we can't actually call them. That's what results in us leaving multiple messages type thing.

Q I see.

A I will say it's not an easy thing, and we don't -- it is hard to get ahold of them.

Q So if it was one call, if it was one -- if they only tried once to get ahold of the excavator and left a comment, could not get ahold of the excavator, that wouldn't be a valid status. But if they did it three times, it would be?

A If they could note, this is, we called this number and left a voice mail at the time, and if it was properly documented.

Q Okay. And you would be okay with that? That would pass your QA?

A Right. Yes. There has to be some reasonable diligence, you know, not going to call the customer to ask if that happened, but.

MR. GRUEN: Q Okay. I wanted to ask you if you -- just generally speaking, if there's anything more that just in the locating work, the context of the locating work, any other communications that raised concerns for you?

A I will say that after the conference call that Joel and Jeff Carol held to reset expectations around making --

discontinuing the practice, right, of moving tickets to prevent them from going late, that within a week or two of that call one of the supervisors had asked, because I told -- I had made it clear to Locate and Mark supervisors that if ever they felt like they had a question about a finding and that they wanted -- they didn't feel like they were making progress with the supervisor, they were always welcome to call me.

And so although I don't remember his name, I know it was a -- I know it was a man, one of the male supervisors. He had called me just to talk about -- and it might have been a positive contact. He might have just called to tell me that the specialist was doing well. But as a part of that conversation he thanked me for pushing back on late ticket issue. And he said that he felt the call was a direct result of me driving the results and keeping, you know, them out in front of them, of Joel and Jeff and that they had felt a lot, and then they, and I took it to mean that he was talking about the leadership, the supervisors, that for a long time that they felt like that was not right, and they shouldn't be doing it, but they didn't feel like they had anywhere to go. Like they didn't know who to tell.

And subsequently I spoke with Vince Whitmer, who is the supervisor, and said that one of the supervisors had called and thanked me. And he said that he wasn't surprised because he had heard that Joel had personally called them, the supervisors, and threatened that if they let ticket go late that they would be terminated. And so there was this really high level of fear in the groups within the teams that they would not let tickets go late.

Q Yeah.

A And it's obviously not something I ever heard Joel say, you know, but that was something that he had indicated that he had heard from more than one of them because the -- more than one of the supervisors had expressed to Vince that Joel had threatened, threatened them basically.

Q Threatened them to not have late tickets?

A Or they would lose their jobs or get fired.

Q Or they would lose their jobs.

A However you want to say it.

Q Just a clarification about that, that threat. Was the threat of them losing their job if they didn't -- for them to not have late tickets, or was it that they not allow late tickets to be properly recorded?

A So the threat, the interpretation was that they would do whatever was necessary for the tickets not to go late and pass the requirement. And their interpretation of that from my understanding is that they should, you know, change the status, do whatever they needed to so that it wouldn't appear on the report. That was the -- that was the -- since they didn't have the people to work the tags, their only avenue was to manipulate the tickets, right.

Q When you say "the interpretation," was that an interpretation you heard someone tell you, or is that your own inference?

A Well, that was an interpretation that they told me.

Q Who?

A Vince Whitmer told me that they were instructed to not work the tickets in time, but they were instructed to not let them go late by whatever means that they could find.

Q Okay.

A That was the interpretation.

Q And when you say they were

instructed, that was Vince's interpretation of Joel's instructions?

A Yes. Which he was -- which the supervisors told -- the supervisors, and I doubt he called employees. I would think he would probably stick with the supervisors. But the folks that talked to him from the Mark and Locate communicated to Vince that they were told that they should not let the tickets go late and use what -- do what they needed to do. I'm sure -- I'm sure Joel wouldn't be specific about giving them, you know, giving them the ideas about how to do that, but.

Q Right.

A But I see your nuance, and that's not, for me it's like I wouldn't -- I wouldn't -- I couldn't see why there would be fear if he just said "Work your tickets on time." So. But the word "fear" was used. They were afraid for their -- for their jobs if the tickets were to go late.

MR. BRUNO: Q But Ms. Burrows, would it be fair to say that there were in fact late tickets? However, employees were told to do whatever it takes. So there would just not appear to be late tickets?

A I wasn't privy to those

conversations. I just feel like that was the interpretation. That's how the employees took it because the employees knew that they were late. And the only justification that I have ever heard for why they would do that, because the people, you know, the large 98 percent, I don't know how many percent, but of people at PG&E, everybody that I work with wants to do the right thing.

Q Sure.

A And tries to do the right thing. And I can't image that Locate and Mark happened to get all the employees that want to do the wrong thing, right.

Q Right.

A So I --

Q Right. And what I'm getting at is there's not a change in the process where you're sending more people out more frequently. So you're really just playing internally with the metrics or the data moving --

A So I think you would see that they did increase staff.

Q They did.

A Over the years.

Q Okay.

A Absolutely. And that there's -- we

were constantly -- they'd bring on 30 to 40 contractors at one time for certain -- I know like there was Google. I forget what they call it, but they're high definition, like cable or whatever. You know, there were people that they brought on.

Q Okay. So that would make it not late just because you've increased resources, but in the scenario we were just describing, it's making it not late by putting it in a different category or doing whatever it takes.

A So I think the situation is probably both. I think that there were situations where there were not -- was not -- there weren't sufficient resources to mark them. And so people put them in a status. I think there's also situations where there were some bad seeds. Because I can remember one ticket in particular that the woman phased five tickets at the end of the day from the yard. And I -- I believe that she's a bad seed. Like it wasn't -- she didn't do it because she was short on time. I feel like she most likely would have pointed to is that she probably didn't make good use of her time during the day, and so she was trying to cover it, cover up her -- her lack of production, productivity.

So I don't think it's a hard and fast rule. I can't say that every -- every late ticket was driven by them not wanting it to go late, and they were doing all the right things, and they didn't have enough people. That I'm sure that once the tricks like were learned that then it enabled people who did not want to be productive to then use those -- use those same processes to make up for the fact that they weren't doing their work during the day.]

MR. BRUNO: Okay. Can we go off the record real quick?

MR. GRUEN: Off the record, please.

(Off the record.)

MR. GRUEN: Back on the record.

Q So do you know -- can you point to any facts that show why there would have been the instructions to have no late tickets by any means necessary?

A A fact?

Q Anything that you know.

A No fact.

Q Okay. Let me give you an example of what I might have in mind.

A Mm-hmm.

Q And then just see if this -- for

example, do you know if there were any incentives for not having late tickets?

A I'm not familiar with their recognition structure.

Q Okay. Okay. Okay. Do you know, when you say there's -- that's for managers in general, you don't --

A Oh, no. Generically.

Q Yeah.

A STIP, things like that, which is short-term incentive plan, and based on the company results --

Q Okay.

A -- and that type of thing. Work. Everybody's standard. But as far as like your supervisor's scorecard and what role late tickets play in their --

Q Yeah.

A -- because everybody has -- specific to your role and operations, you would have specific metrics, like I had to complete all my assessments or something like that.

Q Yeah.

A I never saw Joel's supervisors' performance --

Q Okay.

A -- management documents or

anything --

Q Okay.

A -- to know if late tickets was a metric or measurement.

Q Okay. Do you know, do you have reason to believe that anyone lost their job for having too many late tickets?

A I don't.

Q Or who would have had a bad performance evaluation for having too many late tickets?

A No, I don't.

Q Any consequences, do you know anyone who would have received any consequences or punishments or anything like that for having too many late tickets?

A I don't know of anybody.

Q Okay. Really quickly, I think that I understood you to say earlier that late tickets got a high assessment status at the beginning of this year.

A It became part of the -- it had the high -- it was a high finding already.

Q Okay.

A It became part of the QPIC metric for Locate and Mark this year because we made it all high findings.

Q So --

A So previously it was only mismarks and no marks.

Q Yeah.

A That made it to the executive level metric. And I'm not -- and like I said, I'm not sure how, because that was determined by Karen Roth, my predecessor, so I am not sure how the mismarks and no marks were included and late tickets were not.

But this year, rather than have to have a list in front of you to figure out what the metric meant, I decided to make them consistent and incorporate all the high findings into the executive level metric. So --

Q Yeah.

A -- the error rates would be for all findings rather than a subset of high findings that they felt were, you know, most impactful.

Q So for the high findings to get into the executive level metric, does that mean that late tickets as a high -- high finding in the executive level metric would at that point become apparent to certain executives when they weren't before then?

A Yeah.

Q Is that what that means?

A If it wasn't apparent to them previously through some of those conversations that I've mentioned --

Q Yeah.

A -- they were officially part of the QPIC quality process improvement meetings beginning in January.

Q And would --

A I could say in February. This year as soon as we had data, because there was a lag in us getting -- because of affordability, there was a lag in us onboarding our contractors that do the assessments, so there -- whenever in this year that we actually started our assessments is when they would start seeing the data.

Q Okay. And would the late ticket data that you're talking about became high findings have been late ticket data according to the information that you and your team had created or according to the information that Joel had used based on irthnet?

A It would only be the data my team presented because in the quality process improvement council, the results that were presented were those of my quality team. It was not -- they were not the operational metrics.

Q Okay. So -- but your -- the late data that you and your team created was a different set of data than the data that was the operational data from irthnet?

A Yes.

Q Okay. So only just, only the subset that you and your team found of late tickets?

A Yes.

Q That would be in the high findings executive level set?

A Just reviewed or discussed in QPIC, yes.

Q Okay. What are your thoughts about also including the irthnet data as a high finding?

A So I know that they have Tier 5 huddles beginning some time this year. And these tier huddles are part of the super Gas Ops structure that was brought by McKenzie and they started by having Tier 1 huddles which are at the front line. And then over time, they started like supervisor level, then superintendent level, then director level. And this year they kicked off Tier 5, which is Jesus' level. And with the Tier 5s they have incorporated the quality metrics into those huddles.

And so I think if you asked for the Tier 5 huddle board from -- for Locate and Mark, you would most likely see the late ticket -- I haven't seen it, but we had proposed, right, you would most likely see late tickets from Joel -- from the Joel, the irthnet report, and then you would also see late tickets from Quality Management.

And I don't really now how they do that, if they're snapshots from last week to week or if they are current last week to this week plus year to date, I think is how they do it but I'm not completely sure. But I think you would see them both listed but separately. I would expect to see that.

Last draft I saw I could count both of them.

Q Okay.

A It makes perfect sense, to your question. It would make perfect sense to use whatever quality data the organization had along with ours. But it really had been specific to our team brought to the table.

Q Yeah, I follow.

A Yeah. Because it was a QA versus QC, like I was saying.

Q Okay.

A Yeah.

Q I guess I'd just ask -- this is very broad and it's meant to be.

A Okay.

Q But any -- you talked to the -- at the beginning of the day, you talked about just having documented communications. I think you were talking just about things that raised concerns for you. But if there's anything, I just want to give you a chance as we're winding up here, to identify if there are any communications that raise -- that documented anything that you have that raised concerns for you in Locating and Marking regarding PG&E's Locating and Marking practices.

A There's nothing else that I can think of that for me wasn't resolved because I felt like anything that I -- didn't sit well with me, I would just keep bringing it up over and over again until I felt like the resolution was reasonable or that you know, whatever level that I thought would take action was aware of it.

So even just having Jesus engage in the discussion and be clear on it, I felt like -- you know, I felt somewhat at peace with those items because if they didn't take action, that wasn't my responsibility. But

I never wanted to feel like maybe if Jesus knew, he would have handled it differently. And then I didn't want to resent that it wasn't handled, thinking that he probably knew I wanted to make sure that if I couldn't get it resolved at a lower level, that I at least put it on the radar and then everybody who needed to know, knew. And I didn't expect them to answer to me, but just hoped.

And I always felt like for sure that Jesus, I mean I think he has a lot of integrity and he would always want to do the right thing, and he would never -- he would never want -- if in fact this is what was happening with the tickets then, that he wouldn't never want this to happen. He would never support that happening and it would never be his direction to anyone.

MR. GRUEN: Okay. Can we go off the record for a moment?

(Off the record.)

MR. GRUEN: On the record, please.

EXAMINATION

BY MR. BRUNO:

Q Ms. Burrows, so earlier you mentioned there was one lady who you felt was rushed at the end of the day and had five tickets that were -- changed status in a relatively short period of time. Would you recall the name of that employee?

A I don't -- I don't remember.

Q Okay.

A I don't remember -- I'm laughing because her shadow in the picture looked like the Hamburglar, so I kept calling -- I mean, I couldn't remember her name and I kept calling her the Hamburglar, which is totally inappropriate. Because of her hard hat that had the bill on it, in her pictures when she marked the ticket, that's what it looked like. So I don't remember her name but I believe she was out of the San Jose yard.

And I was trying to remember her supervisor's name because I think actually he was a lead that was standing in for the supervisor at the time and he did give us quite a bit of a challenge on that.

But it was another thing that was driving for me the use of breadcrumbs because --

Q Sure.

A -- of the fact that they were phased from the yard and she was telling us that she had been to that location. And when we went to the location, obviously it didn't indicate phasing or any reason why she couldn't have marked it. She may have cited the intersection was busy or something like that, but none of her excuses came to be. And I can't remember her name.

Q Okay. Thank you.

And then I also want to go back to some numbers that you mentioned earlier. I do recall the number 40 out of 1800.

A Mm-hmm. Yes.

Q And I believe that was out of 1800 QA tickets, 40 of them were late tickets. Is that accurate?

A It is accurate. I mean the 40 -- like 95 percent sure. 40 was the number.

Q Right.

A Was within one or two of that.

Q Ballpark.

A And the 1800 is a rough, because it represents four to five tickets per like 350ish assessments that we performed last year. So that was a rough number, but I know it's pretty consistent with what our plan was for this year. So it's a good estimate.

Q Okay. And that was --

A 2016.

Q That 40 was pulled, a combination of random and selected based on some criteria that you developed?

A The 40 was --

Q Or excuse me, the 1800.

A Oh.

Q That you sampled.

A Yes. So that is -- we target to do about 350 assessments. And each assessment, we try to get five tickets, so we go to the field. And that day we take a look to see what's been assessed previously, see if we can find a new person -- they don't know when we are coming -- we look for a new person, we go into their folder, look for the tickets that they marked in the last 24 hours. We try to find four to five tickets that they did that we can go out and take a look at. We'd like to have five.

And so those 1800 are the -- you know, if you take the 350 multiplied by four or five, that was my roundabout number for how many we looked at last year.

Q Would that ratio 40 out of 800, would it be fair to say that you could extrapolate that to the population or would you expect a similar rate?

That's roughly 2.2 percent when I --]

A I don't think it would stand up to like a, you know, a statistician.

Q Right.

A But I definitely -- it's something that I calculated myself. If we found 40 in a population of 1,800, what could that potentially look like for, you know, the 150,000 we facility mark a year. And that is something that often when, you know -- another thing Jesus asked me is like, "Why do you keep saying 150,000? I think we do a million or something." I was like, no, I only look at facility-mark tickets. There are a bunch of other statuses that are available, and some auto close and things like that when we don't have facilities in the area, but for those that we actually go out and facility mark, that is my sample population. So to extrapolate -- I mean I don't think it's an illogical argument. I just don't think it passes statistical --

Q I understand. You're saying it's not a statistically-determined sample. I also heard you say three percent would be high in the hypothetical you gave where I had late tickets at three percent? I think you gave a hypothetical example where you said, "Ken, let's say you have three percent late tickets."

A I was not talking about late

tickets.

Q Oh. I'm sorry.

A I just meant a three percent error rate --

Q I see.

A -- meaning for your overall assessment. So since the assessment is based on a number of questions and it actually -- each question can repeat based on the complexity of how many marks that they laid on the ground, so there's -- we can calculate an error rate. So we say how many errors out of how many opportunities for each question. So I was just saying for your overall assessment, which would be five tickets with who knows how many opportunities, you added three percent error rate, that would be very high.

Q Okay. Thank you for the clarification. I'm sorry I misunderstood that.

A Yeah.

Q And then my final question is: Following the gas rodeo, you mentioned that your team pulled and came up with I believe it was 16 or something around there?

A The 16 was our year-to-date results.

Q Oh. It was a year-to-date?

A So the year-to-date results at the time we met with Jesus I believe was 16. And -- I'm sorry it was -- well, I believe it was 15 is what I stated.

Q Okay.

A Joel's results at that time said 6. We pulled -- Vince Whitmer pulled some examples to show Jesus for that meeting, and the examples he pulled somewhere between 3 and 5. I can't remember the exact number he brought in. I said to Jesus' credit they were not part of the 15. So instead of Vince bringing 5 of the 15 that we had, he thought it would be better to have something current so that nobody would say, "Oh, well, it's not happening any more. Look. It hasn't happened in 30 days." He just looked into some tickets that day and pulled 3 to 5 brand new examples to show Jesus. So the 15 that we referenced when we met with him didn't include, and we didn't add in those 5 because it wasn't part of our sampling. We went and we are looking specifically for them. So we didn't feel like it made sense to add it to our -- it compromised our sampling process. We looked for them directly and pulled them out.

Q Sure. Do you recall how many tickets you went through to come up with that 15?

A It would just be -- we didn't -- it would state it on the monthly dashboard. So the monthly dashboard would say how many assessments we completed year-to-date, how many tickets we reviewed year to date, and it summarizes all the errors that we found. And actually it's the backside of the dashboard. You can actually -- it will show you all the errors that we found related to what divisions they were found. So you could see the frequency for each of the findings.

MR. BRUNO: Okay. Great. Thank you. Thank you, Ms. Burrows.

MR. GRUEN: I think that's all we have. So, let's go off the record for just a moment, if we can.

(Off the record.)

MR. GRUEN: Okay. Let's go back on the record.

Ms. Burrows, on behalf of SED, I wanted to thank you very much for your time and insights today. As we noted at the beginning, the answers to your questions -- to the questions that we've asked, excuse me, have been required. And I just remind you that if you have any reason to believe that you are being retaliated against or there is a threat of retaliation, to please, please let us know. Please feel free -- you can ask John Pendelton, the attorney for my contact information if you want to e-mail me directly or, yeah, you can get Ken's information as well that way I believe. So, but, yeah, we wanted the thank you very much for your time.

Q And with that, I will just ask: Do you have any other questions or concerns for the record that you want to ask while we're here?

A I do not.

Q Okay. Great. Let's go off the record.

(Off the record.)

(Whereupon, at the hour of 2:39 p.m., this matter having concluded, the Commission then adjourned.)]

* * * * *

BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE
STATE OF CALIFORNIA

IN THE MATTER OF THE INVESTIGATION PERTAINING TO PG&E'S POLE MAINTENANCE PRACTICES.

CERTIFICATION OF TRANSCRIPT OF PROCEEDING

I, Alejandrina E. Shori, Certified Shorthand Reporter No. 8856, in and for the State of California do hereby certify that the pages of this transcript prepared by me comprise a full, true and correct transcript of the testimony and proceedings held in the above-captioned matter on September 1, 2017.

I further certify that I have no interest in the events of the matter or the outcome of the proceeding.

EXECUTED this 1st day of September, 2017.

Alejandrina E. Shori
CSR No. 8856

BEFORE THE PUBLIC UTILITIES COMMISSION

OF THE

STATE OF CALIFORNIA

IN THE MATTER OF THE INVESTIGATION PERTAINING TO PG&E'S POLE MAINTENANCE PRACTICES.

CERTIFICATION OF TRANSCRIPT OF PROCEEDING

I, Thomas C. Brenneman, Certified Shorthand Reporter No. 9554, in and for the State of California do hereby certify that the pages of this transcript prepared by me comprise a full, true and correct transcript of the testimony and proceedings held in the above-captioned matter on September 1, 2017.

I further certify that I have no interest in the events of the matter or the outcome of the proceeding.

EXECUTED this 1st day of September, 2017.

Thomas C. Brenneman
CSR No. 9554

BEFORE THE PUBLIC UTILITIES COMMISSION

OF THE

STATE OF CALIFORNIA

IN THE MATTER OF THE INVESTIGATION)
PERTAINING TO PG&E'S POLE)
MAINTENANCE PRACTICES.)

CERTIFICATION OF TRANSCRIPT OF PROCEEDING

I, Carol A. Mendez, Certified Shorthand Reporter No. 4330, in and for the State of California do hereby certify that the pages of this transcript prepared by me comprise a full, true and correct transcript of the testimony and proceedings held in the above-captioned matter on September 1, 2017.

I further certify that I have no interest in the events of the matter or the outcome of the proceeding.

EXECUTED this 1st day of September, 2017.

Carol A. Mendez
CSR No. 4330

ATTACHMENT 53

Exhibit: 5
CPUC Proceeding: EVO
Witness: Soto
Date: 3-1-18
Shannon M. Ross, CSR No. 8916
Reporting Section, California Public Utilities Commission

PACIFIC GAS AND ELECTRIC COMPANY
Gas Operations Data Response

PG&E Data Request Index No.:	11718		
Request Date:	02-06-2018	Date Sent:	02-23-2018
Requesting Party:	CPUC-SED		
External Requester:	Wai-Yin "Franky" Chan	PG&E Contact:	Mike Bradley

QUESTION 11718.01: On December 20, 2017, PG&E stated,

"*Using the updated information available to us from the recent improvements to IrthNet, we are planning to review all of the data request responses that we have provided to SED on locate and mark issues since mid-2016, and to revise these responses as needed to reflect updated historical late ticket numbers and any other information based upon those numbers. Given the volume of data requests in this matter to date, this may take some time, but our goal is to provide these updated responses to SED in January.*"

On January 26, 2018, PG&E followed up on its December, 2017 statement, saying,

"*My December 20th email to you indicated that we are reviewing all of the data request responses that we have provided to the SED on locate and mark issues since mid-2016, and that we would be revising the responses to reflect updated historical late ticket numbers and any other information based upon those numbers. To be clear, we also will be correcting representations in those responses that the Guidepost investigation indicates, or that we otherwise determine, need to be revised, not just the late ticket numbers and related information.*"

With these statements in mind, please provide the following information:

a. The updated historical late ticket numbers referenced in the January 26, 2018 statement.
b. The methodology used by PG&E for determining the late ticket numbers that were initially reported to SED.
c. The methodology used by PG&E for determining the "updated historical late ticket numbers" that PG&E references in the December 20, 2017 email.
d. The categories of the data that PG&E is updating, including, but not limited to:
    a. Counts of late tickets by division and district.
e. A breakdown of the data that PG&E is updating by year.

RESPONSE 11718.01: As noted in the correspondence referenced herein, PG&E is reviewing the logic that was used to derive historical late ticket counts from IrthNet and is working to determine more inclusive logic to derive revised historical late ticket counts from IrthNet. A third-party consulting firm, Bates White, has been retained to aid in understanding the IrthNet system and developing and validating this logic. Once this revised logic is finalized and reviewed by Bates White, PG&E will update this response to explain how the revised ticket counts were derived based on the information available in IrthNet and provide the resulting data. We anticipate that this data will be able to be broken down by month and division.

At present, as explained above, we anticipate revising historical late ticket numbers from 2012 through 2017. PG&E is continuing to assess its IrthNet reporting logic to identify the actions that could be taken on a ticket that would have caused it to be misclassified. As those conditions are identified, the total number of late tickets identified may change. PG&E expects that its current estimates of 44,794 late tickets out of 760,177 total tickets received in 2012, of 51,272 late tickets out of 671,015 total tickets received in 2013, 47,589 late tickets out of 702,275 total tickets received in 2014, 61,114 late tickets out of 820,455 total tickets received in 2015, and 55,666 late tickets out of 898,120 total tickets received in 2016 will change as PG&E's work continues and the logic of its IrthNet search function becomes more refined. The current estimates reflect tickets from this period that had no initial response and are past the due date time, that had an ongoing response and are past the due date time, or that have a completed response but the completed response was after the due date time.

As to (b), as we previously explained in our response to Index No. 10895.01 (delivered to the SED on June 9, 2017), the late ticket numbers we initially reported to SED for January-June 2016 were queried from IrthNet using the "Past Due Ticket Listing" function. For late ticket numbers prior to January 2016, we utilized the Organizational Reporting Initiative ("ORI"), which is a repository for portions of IrthNet data and SAP data. PG&E has determined that those search functions operated in a manner that would not count tickets as late if the personnel took certain actions in IrthNet prior to the ticket's start time, even if the required locating and marking activities were not completed within the required timeframe.

QUESTION 11718.02: Will the "updated historical late ticket numbers" referenced in PG&E's December 20, 2017 statement show an upward adjustment of the late ticket numbers in each category identified in response to question 1? If not, please identify any category that will see a downward adjustment.

RESPONSE 11718.02: PG&E is continuing to assess its IrthNet reporting logic to identify actions that could be taken on a ticket that cause it to be misclassified. As those conditions are identified, the number of instances at issue may change.

QUESTION 11718.03: Please provide a list identifying each past data request response that PG&E plans to update and/or revise. Please provide an explanation for each update or revision.

RESPONSE 11718.03: Because PG&E's review of the data in consultation with Bates White and, as previously discussed with SED, the Guidepost review are ongoing, PG&E is still in the process of determining the responses that may need to be updated or revised beyond the data discussed above.

QUESTION 11718.04: Please provide, in chronological order, all communications (including emails, messages, reports included Joel Dickson, John Higgins, Jesus Soto, or Nickolas Stavropoulos related to the following:

a. Intentional under-reporting of late tickets
b. Falsification of locate and mark records
c. Any instances of intentional under-reporting of late tickets
d. Any instances of potential falsification of locate and mark records
e. Prior to the Guidepost investigation, matrices for counting late tickets that differed from the matrix PG&E used to count late tickets.
f. Prior to PG&E's own internal Guidepost investigation, approaches for counting late tickets that differed from the approach that PG&E used to count late tickets.

RESPONSE 11718.04: On February 16, 2018, Charles Middlekauff from PG&E and Darryl Gruen from SED agreed to modify this request. That agreement was reflected in a series of e-mails and on February 19, 2018, PG&E provided to SED a red-line version of this request. PG&E and SED agreed to the following revised version.

> *Please provide, in chronological order, all communications from January 1, 2012 through December 31, 2017 (including emails, messages, reports and other documents) on which John Higgins, Jesus Soto, or Nickolas Stavropoulos were included related to the following:*
>
> a. *Intentional under-reporting of late tickets*
> b. *Falsification of locate and mark records*
> c. *Any instances of intentional under-reporting of late tickets*
> d. *Any instances of potential falsification of locate and mark records*
> e. *Prior to the Guidepost investigation, matrices for counting late tickets that differed from the matrix PG&E used to count late tickets, where the communication contains (matri! /10 (option! or alternative!)).*
> f. *Prior to PG&E's own internal Guidepost investigation, approaches for counting late tickets that differed from the approach that PG&E used to count late tickets, where the communication contains (matri! /10 (option! or alternative!)).*
>
> *In addition, PG&E and SED agreed to include the following request to Question 11718.04:*
>
> *Please provide, in chronological order, all communications from January 1, 2014 through December 31, 2016 (including emails, messages, reports and other documents) on which Joel Dickson was included related to the following:*
>
> a. *Intentional under-reporting of late tickets, where the communication contains (falsify falsification false).*
> b. *Falsification of locate and mark records, where the communication contains (falsify falsification false).*
> c. *Any instances of intentional under-reporting of late tickets, where the communication contains (falsify falsification false).*
> d. *Any instances of potential falsification of locate and mark records, where the communication contains (falsify falsification false).*
> e. *Prior to the Guidepost investigation, matrices for counting late tickets that differed from the matrix PG&E used to count late tickets, where the communication contains (matri! /10 (option! or alternative!)).*
> f. *Prior to PG&E's own internal Guidepost investigation, approaches for counting late tickets that differed from the approach that PG&E used to count late tickets, where the communication contains (matri! /10 (option! or alternative!)).*

Based on this agreed to revision, PG&E is producing documents responsive to these requests to SED. PG&E and SED also agreed that the document production would be on a rolling basis and would be completed by February 26, 2018. Provision of these documents does not reflect a determination that the document indicates any employee's knowledge of falsification or intentional under-reporting of locate and mark records or late tickets, but rather reflects PG&E's effort to provide documents that relate to the topics identified in the data request and our discussions with SED as areas of SED's interest.

QUESTION 11718.05: Please identify the first date PG&E became communicated internally about falsification of late tickets. Please provide that communication

.**RESPONSE 11718.05:** PG&E is separately providing email correspondence from a variety of custodians that includes correspondence relating to instances in which an 811 ticket was reported in PG&E's IrthNet system as timely based on actions taken in the IrthNet system other than the completion of the ticket within the time required by California Government Code Section 4216, including correspondence (to the extent any such correspondence exists) responsive to SED's requests regarding the falsification of locate and mark records. Provision of these documents does not reflect a determination that the document indicates any employee's knowledge of falsification or intentional under-reporting of locate and mark records or late tickets, but rather reflects PG&E's effort to provide documents that relate to the topics identified in the data request and our discussions with SED as areas of SED's interest. These documents are being provided in response to Question 11718.04 above. In addition, PG&E will provide the results of the independent review currently being conducted by Guidepost Solutions LLC regarding these issues.

QUESTION 11718.06: Did anyone employed by PG&E authorize the method of PG&E's late ticket counting that PG&E intends to revise to reflect "updated historical late ticket numbers and any other information based upon those numbers"? If so, please identify all such employees and the communications they issued to make such authorizations.

RESPONSE 11718.06: PG&E has identified instances in which PG&E personnel and/or contractors took actions on an IrthNet ticket that caused the system's then-current reporting logic to classify the ticket as timely when it was not completed within the required timeframe. PG&E will provide the results of the independent review currently being conducted by Guidepost Solutions LLC regarding these issues.

QUESTION 11718.07: Did PG&E have a practice, procedure, policy or other PG&E document in place that authorized the method of PG&E's late ticket counting that PG&E intends to revise to reflect "updated historical late ticket numbers and any other information based upon those numbers"? If so, please list all such practices, procedures, policies and PG&E documents, and provide them.

RESPONSE 11718.07: PG&E policy did not authorize employees to take actions in the IrthNet system that were designed to result in a ticket being classified in IrthNet as timely when it was not actually completed within the time required by California Government Code Section 4216. To the extent that any such activity occurred as a matter of practice, PG&E will provide the results of the independent review currently being conducted by Guidepost Solutions LLC regarding these issues.

ATTACHMENT 54

From:	Weeck, Bobbie
To:	Carroll, Jeffery
CC:	Dickson, Joel
Sent:	12/12/2014 10:40:59 AM
Subject:	Late tickets

Jeff,

After reviewing my late tickets I found a common theme. The locators were under the impression that by adding a note to the excavator before the due time that would stop it from going late. I spoke to my group to let them know what they need to do is always respond to the excavator by either negotiating a new start time or schedule a field visit.

Bobbie Weeck
Diablo/Mission L&M Supervisor
925-674-6438 (Office)
925-250-8274 (Cell)

ATTACHMENT 55

From: Dickson, Joel
To: Gas Ops GTDO Locate and Mark Supervisors
CC: Weeck, Bobbie; Carroll, Jeffery; Yang, Jenny
Sent: 7/28/2016 8:56:57 AM
Subject: Operations Morning Briefing Call *ACTION*

Team, I am not sure if all of you are familiar with the Daily Operations Briefing Call that happens each morning at 0730. During that call Mel Christopher Sr Director Gas Control walks through the previous day's activities around dig ins, safety, field response, OEC activations etc. This morning for the first time since we have been a centralized locate & Mark organization we were called out for not marking out a Electric Line crew pole replacement job in Stockton. The end result was a dig in that resulted in a response which was covered during this mornings call.

Over the last few months we have seen our AFDI rate/ ticket increase at an alarmingly high rate. Frankly it's disappointing and as I review the cause of the AFDI it boils down to something we didn't do; didn't sweep area before leaving, closed ticket from office in error, hooked up to wrong service or worst yet simply didn't follow procedure that we all understand to be accurate. The end results are we have began a decent back to where we were a few years ago where we are seen as untrustworthy, unskilled and simply going through the motions. WE ARE BETTER THAN THIS!!!!!!

Moving forward, every AFDI that we know to be our responsibility the supervisor (YOU) will be required to report out on facts of AFDI and actions to be taken on ops briefing call. That means 0730 we are on call prepared to discuss incident and what the facts are related to the incident. Currently the only voice on this call is mine or Jeff's. Worse yet our M&C partners are very happy to report out on how they did well and the locate department continues to be the reason we are having dig ins.

I want to end by noting we have come a long way and we are definitely better today than we were a few years ago. Everything I have asked our Sr Leaders for; resources, money, training, tools etc we received. The responsibility to competently manage those resources with a high degree of quality and efficiency is all ours, know one else's... The folks who can change our current trajectory is staring you in the mirror every morning, YOU!!

My ask, I need each of you to refocus yourselves and your teams to laser focus on quality, safety and compliance. No more not following procedures, no more gaming the late ticket metric, no more refusing to complete end of day reviews. Today and everyday afterwards we must be committed to turning our negative trend around AFDI, resource management and process adherence to positive. Take immediate action, don't wait. Don't except mediocre performance from yourself or your employees. If needed you are empowered to remove OQ's temporarily or permanently from locators who refuse to get on board with where we are going. Additionally, if you want to restrict closing of tickets from office to Sr.'s or restrict closing tickets from office all together YOU ARE EMPOWERED TO MAKE THAT CALL!!! We trust you and your judgement. Nothing will change if you allow things to sty the same. The company, gas ops, electric ops our customers are all depending on YOU!

Work safe and please remember, greatness starts and ends with you choosing to take the challenge.

Joel

Sent from my iPad

ATTACHMENT 56

STATE OF CALIFORNIA

PUBLIC UTILITIES COMMISSION

--oOo--

In re:)
)
PRE-FORMAL INQUIRY INTO)
PG&E'S LOCATE AND MARK)
PRACTICES AND PROCEDURES.)
________________________________)

EXAMINATION UNDER OATH OF

KATHERIN MACK

____

Monday, June 19, 2017

REPORTED BY: SANDRA BOSTOW, CSR# 5770 (SF-130840)

I N D E X

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Exhibit 2	E-mail to [redacted], 3/15/17, Subject: Seq# 13: 364841 for PGEBFD	154
Exhibit 3	E-mail to [redacted], 3/15/17, Subject: Seq# 7: W612000634 for PGESAL	154
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--oOo--

--o0o--

Examination Under Oath of KATHERIN MACK, taken by the State of California Public Utilities Commission at 505 Van Ness Avenue, San Francisco, California, commencing at 10:08 a.m., on June 19, 2017, before SANDRA BOSTOW, CSR No. 5770, pursuant to Subpoena.

--o0o--

A P P E A R A N C E S

FOR THE STATE OF CALIFORNIA PUBLIC UTILITIES COMMISSION:

PUBLIC UTILITIES COMMISSION LEGAL DIVISION
505 Van Ness Avenue
San Francisco, California 94102-3298
415.703.1973
By: DARRYL GRUEN, Attorney at Law
DIG@cpuc.ca.gov

ALSO PRESENT:

SIKANDAR KHATRI, PH.D, P.E.
Senior Utilities Engineer
State of California Public Utilities Commission
Gas Safety and Reliability Branch

and

WAI YIN "FRANKY" CHAN
Utilities Engineer
State of California Public Utilities Commission
Gas Safety and Reliability Branch

SAN FRANCISCO, CALIFORNIA; MONDAY, JUNE 19, 2017

10:08 A. M.

--o0o--

KATHERIN MACK,

____

called as a witness, who, having been first duly sworn, was examined and testified as follows:

--o0o--

EXAMINATION BY MR. GRUEN

BY MR. GRUEN:

Q. All right. On the record.

Good morning. My name is Darryl Gruen. I am the counsel for the -- the staff counsel for the California Public Utilities Commission representing the Safety and Enforcement Division today, and I have a few questions.

And just if I could ask you, Ms. Mack, if you could please identify and spell your name for the record.

A. Katherin Mack; K-a-t-h-e-r-i-n, M-a-c-k.

Q. And your address, please.

A. [redacted]

Q. Great. Okay. Ms. Mack, can I refer to you as "Ms. Mack" or do you prefer "Katherin"?

A. Either one is fine.

Q. An examination under oath is just like a deposition except that there's no underlying proceeding here, so that's why PG&E does not have any right to have counsel here or, in your case, anyone else. And it's why we were able to still treat this like a deposition except it's called an examination under oath. But we do not know yet where we are going to go with this information right now at this point.

As I said, we are not yet in any formal proceeding, but we could use this information later in a formal proceeding if we choose to do so.

Do you understand that?

A. Yes.

Q. All right. When I ask questions, it's important to provide truthful and complete answers to them.

Please answer my questions directly. I may ask certain questions very broadly, which will give you a chance to add to your answers or answer as broadly as you wish in those cases, as broad as the question is, but please keep your questions directly responsive to the questions that I ask.

Do you understand?

A. Yes.

Q. If you do not understand my question, either because I've not articulated it well or I've poorly phrased it, either ask me to repeat it or just say you do not understand the question. Please do not speculate or guess about what the question is.

Do you understand that?

A. Yes.

Q. Okay. Did you receive a subpoena to appear today at the California Public Utilities Commission and talk to us today?

A. Yes.

MR. GRUEN: And I'd like to hand a copy of the subpoena to the court reporter. And mark this -- it's been marked already as Exhibit 1, and ask I'd that it be identified as Exhibit 1.

(Whereupon Deposition Exhibit 1 was
marked for identification.)

BY MR. GRUEN:

Q. And so that subpoena, just with that I'm just clarifying that you understand that you're here under compulsion of subpoena and witness fees. And that means we have a statutory authority to issue the subpoena to compel the attendance of employees for PG&E to testify if necessary and produce documents as part of our supervisorial authority over utilities such as PG&E. This means you're not here voluntarily and the information you provide us is not voluntary. You're answering questions because we are requiring it.

Do you understand this?

A. Yes.

Q. Okay. Did you receive a letter from me last week?

A. Yes.

Q. Great. And the letter I sent cc'd Mr. Jonathan Pendleton, PG&E's attorney.

Do you recall that?

A. Yes.

Q. And do you recall that letter identifying certain requirements that prohibit PG&E, as a California natural gas utility, from retaliating against any employee who reports in good faith unsafe conditions to the commission?

Do you understand this requirement of PG&E?

A. Yes.

Q. Okay. And just for the record, that letter that I sent stated in part we are not asserting that PG&E has retaliated against you, as we have no information at this time suggesting this has happened. However, the CPUC will do everything in its power under the law to ensure there is no retaliation against you for any information you provide to the CPUC.

This letter to you also stated that we take very seriously our legal duty and prerogative to protect persons who provide information to the CPUC needed to promote safety, the public interest, or both.

Do you understand this?

A. Yes.

Q. Do you have any questions about what this means?

A. No.

Q. And while we do not know at this point of anything PG&E has done to threaten retaliation or actually retaliate against you, we are prepared to monitor whether PG&E has done or will do that. If you feel that you're being threatened for retaliation or actually retaliated against by anyone at PG&E, you can inform us, the Safety and Enforcement Division, promptly of the nature of the threats or actual retaliation.

Do you understand?

A. Yes.

Q. Okay. We talked off the record beforehand that you are entitled to have your attorney present or PG&E's attorney present, but that you do not need to have your attorney, your personal attorney, or PG&E's attorney present, and PG&E is not entitled at this point to have their attorney present for today.

Do you understand that?

A. Yes.

Q. And I understood you to say, just before we started on the record today, that you do not want to have an attorney present with you today.

Did I understand that correctly?

A. Yes.

Q. Okay. And just to clarify: I understood that to also mean specifically you didn't want an attorney for PG&E to be present today.

Is that accurate?

A. Yes.

Q. And I also understand that you do not want to have a personal attorney here with you today.

Did I understand that correctly?

A. Yes.

Q. Great. Okay. And I also understand you've chosen to not have anyone else from PG&E present with you today.

Did I understand that right?

A. Yes.

Q. Okay. So with that bit of background out of the way, a little bit more questions, other background questions, that I wanted to ask.

Have any non-attorneys spoken with you about the topics identified in the subpoena, prior to coming today?

A. Say that again.

Q. Anyone who is not an attorney, has anyone spoken with you or communicated with you about the topics that were in the subpoena?

A. Nobody has come to me. I mean, I've spoken to people about it, but nobody came to me and asked me questions about it.

Q. Okay. And has anyone talked with you about the examination under oath that you're having today?

A. PG&E's attorney had a meeting with me.

Q. Any non-attorneys, I should say.

A. No.

Q. Okay. So any non-attorneys that you talked about regarding the subpoena -- any non-attorneys that you spoke with, when you said earlier that you spoke with some people about the examination?

A. Friends, just to say I've got this coming up, that kind of stuff.

Q. Okay. Anyone at PG&E who wasn't an attorney?

A. Let's see. At PG&E not an attorney. Donnie Chu was in the room when the attorney spoke with me.

Q. I can't ask you about any --

A. Okay. I had understand.

Q. I can't ask about any communications you had with a PG&E, and if the PG&E attorney was in the room --

A. Oh, okay.

Q. -- then I can't ask you about that as well. So that's a good point.

A. Okay.

Q. Okay. Anyone else that you spoke with without a PG&E attorney present?

A. I spoke to Vanessa White just to ask her if she got the same subpoena I did.

Q. Yes.

A. And that was about it.

Q. That was about it, okay.

A. Yeah.

Q. Okay. Has any non-attorney suggested said or implied that you should give answers today in a way that protects PG&E? Again, without an attorney present.

A. No.

Q. Okay. All right. Let me ask you some questions about locating and marking, if I can.

A. Okay.

Q. Are you familiar with the term "locating and marking"?

A. Yes.

Q. Okay. And what does that term mean to you in the context of PG&E's natural gas system?

A. It means to locate and mark our facilities to the public, put marks on the ground so contractors know where our facilities are.

Q. Okay, great. And when you say "contractors" in this case, are you referring to excavators?

A. Yes.

Q. People who are digging?

A. Excavators, yes.

MR. GRUEN: Off the record for a second.

(Off the record from 10:18 until 10:18.)

MR. GRUEN: Back on the record, please.

Q. And so regarding -- Okay. Moving forward, you just identified before we went off the record the term "locating and marking" and explained what that term means to you.

So just moving forward: As a general point of understanding, when we use the term "locating and marking" for purposes of this examination under oath, you will understand that term to be defined in the way that you just mentioned?

A. Yes.

Q. Okay, great. And when I ask questions today about locating and marking, I'm specifically asking about matters relating to PG&E's natural gas system.

Do you understand that?

A. Yes.

Q. Okay. What is the term used to describe someone who goes out on behalf of PG&E and locates and marks its underground equipment within an identified excavation area?

A. Can you repeat that question?

Q. Sure. The term used to describe someone who goes out to identify PG&E's underground equipment within the area identified by the excavator, what's the term used to describe the person who does that?

A. A locator.

Q. Thank you.

Okay. If I could ask you some information about your background, your personal background, while working at PG&E. I shouldn't say "personal," I should say professional background while working at PG&E.

Okay. As of March 23, 2017, I understand from PG&E that you had worked at PG&E for 15 years and were hired on March 7, 2002.

A. March 2.

Q. March 2, 2002. Okay. And the rest of that statement is accurate?

A. Yes.

Q. All right. Thank you.

And, again, this is information I've received from PG&E. It's information that's in the subpoena as well. If I've misstated any of this, if you could confirm that it's either accurate or if I've misstated it, if you could correct the information.

A. That might have been the 7th. I'm sorry. It might have been the 7th.

Q. Okay. But it's approximate?

A. Yeah, the year is right and the month is right for sure.

Q. The year and the month is right, so that's just --

A. They probably know more about that than I do, so.

Q. Just give me a chance to finish, if you would, and I'll --

A. Okay.

Q. But let's just say for the record: If I understand right, you were hired in the month of March 2002.

Does that sound accurate?

A. Yes.

Q. Great. All right. Regarding titles that I understand from PG&E you held relating to locating and marking and the dates I understand you began holding those titles, in the following statement can you confirm or correct the accuracy of those statements.

On May 1, 2013 -- and, again, if you don't recall exactly, if you want to clarify that it was approximately right, that's fine as well. On May 1, 2013, you started with the position title of systems integrity supervisor in the Damage Prevention department.

Is that correct?

A. Yes.

Q. On November 4, 2013, you started with the position of systems integrity supervisor in the Systems Integrity department.

Is that accurate?

A. Yes.

Q. Okay. On January 12, 2015, you started with the position title of distribution superintendent locate and mark for the Locate and Mark South department.

Is that accurate?

A. Yes.

Q. On August 8, 2016, you started with the position title of business process analyst principal for the Locate and Mark department.

Is that correct?

A. Yes.

Q. As of February 27, 2017, you started in the position titled supervisor quality assurance in the Quality Assurance Distribution department.

Is that correct?

A. Yes.

Q. And is this the title that you currently hold?

A. Yes.

Q. And is this title related to locating and marking?

A. No.

Q. What was your role as systems integrity supervisor in the Damage Prevention department?

A. Can I ask a question?

MR. GRUEN: If we can go off the record for a moment.

(Off the record from 10:24 until 10:24.)

MR. GRUEN: Okay. Let's go back on the record.

Q. While we were off the record Ms. Mack clarified to me that this does not cover all of her experience in the Locate and Mark department.

Could you add to that the other titles and experience that you have had at the Locate and Mark department, please.

A. So when I started, I was a locate and mark person in 2005, and I performed that task for five years.

Q. Okay.

A. And in 2010 I received the job supervisor for Locate and Mark Leak Survey in the East Bay. And then I believe in 2012 I took the position of supervisor for Locate and Mark in Sacramento, Vacaville.

Q. Okay.

A. And then the system integrity supervisor. So that's the complete locate and mark history.

Q. Okay, great. Thank you.

Okay. So going back to 2005, then, you've been at PG&E approximately 15 years.

Do I have that right?

A. Yes.

Q. Okay. So we're talking approximately 12 of those years you served in roles relating to locating and marking.

Do I have that right?

A. Yes.

Q. Okay, great. I'm going to ask you generally if you could discuss briefly your roles in each of the positions relating to locating and marking, if you would. And if you could start at the beginning, when you said you were a locate and mark person in 2005 for about five years. If you could start there and then continue on through the positions we've identified.

A. Okay. So as a locator I performed the locate, received the tickets, and went out and performed the locate for gas and electric.

Q. Okay. And did you focus on any particular area of PG&E's service territory?

A. I was in Stockton, mostly in Stockton.

Q. Okay, great. Okay. And continuing to 2010, when you were a supervisor for the Locate and Mark area in the East Bay, can you talk about that.

A. So I supervised folks that performed locate and mark, and some of them performed leak survey, so the two tasks were under me. And I supervised that for about two years.

Q. Okay. Did the leak survey work have anything to do with the locate and mark work, or were those two separate duties?

A. I mean, they were two separate duties. Some of the employees were, you know, OQ to do both, but it's really two separate things, yeah.

Q. Okay. Thank you.

And in 2012 your role was supervisor for Locate and Mark in Vacaville.

Did I understand that right?

A. Sacramento/Vacaville.

Q. Can you talk about your role in that position.

A. So there it was just strictly locate and mark. Again, supervise the employees. Pretty much the same tasks. Responsible for performance and, you know, getting the work done, things like that.

Q. I should ask: Both for 2010, the job you held in the East Bay in 2010 and then Vacaville/Sacramento in 2012, were you supervising locators directly?

A. Yes. I think I had a clerk at that time, but that's it.

Q. Okay. Continuing to May 1, 2013: The systems integrity supervisor in the Damage Prevention department, could you talk about your role there?

A. So that was a process owner, locate and mark process owner position. So responsible for, you know, the process of it. I think during that time we worked on the manual, the locate and mark manual.

Q. And what staff did you -- I see you had the role of supervisor as well. At least that was in your title.

A. I didn't supervise anybody at that time, though.

Q. Okay. Continuing on to November 4, 2013, systems integrity supervisor in the Systems Integrity department, what was your role in that position?

A. So I don't think that was in systems integrity. I think that was moved back to the Locate and Mark department. So I kept my same title, but there was a reorg at that time and the Locate and Mark department moved under Joel Dickson, so the whole Locate and Mark department went under him. So I kept my title, but it wasn't in the System Integrity Management department.

Q. Okay. And what was the title? Just to clarify: What was the title?

A. System integrity manager, but it was then again a single contributor. I did not supervise anybody.

Q. Okay. Was it called the Damage Prevention department as well?

A. Yes, it was.

Q. As of November 4, 2013, when you --

A. Yes.

Q. -- it was still called that?

A. Yes.

Q. And did you remain systems integrity supervisor in the Damage Prevention department until you began your next role in January 12, 2015?

A. Yeah. The role was a little different because I wasn't the process owner. Now I was responsible for going into areas that were struggling and helping maybe training new supervisors or, you know, that kind of thing.

Q. And for clarification: When you say "process owner," what does that mean?

A. So at that time we had process owners. There's been a few reorgs since then. So basically you're responsible for, you know, you're the kind of in between person for the Locate and Mark department and making sure we have procedures and processes and kind of the in-between leadership kind of thing.

Q. So you would recommend procedures or changes to procedures as part of your role?

A. Absolutely, yeah.

Q. Relating to locate and mark?

A. Um-hum, yeah.

Q. And you said -- I'm sorry. I didn't catch it. You switched at a certain point from process owner to, I think you said, supervisor.

Is that right?

A. Well, I kept the same title, system integrity management, whatever that was. I kept that same title, but when the reorg happened and I was no longer under Integrity Management, I was under the Damage Prevention department, at that point I was no longer process owner. I worked under Joel just to help clean inefficiencies or work on the process or go to struggling areas or fill in for supervisors when we didn't have a supervisor. Those were some of the roles that -- and trained supervisors. That's kind of things that I did in that role.

Q. And you talked about the reorg where you served under Joel Dickson. And just for the record, I'm going to try to spell his name and see if I get it correct. And please correct me.

I believe J-o-e-l is his first name, and D-i-c-k-s-o-n is his last name. Does that spelling seem accurate to you?

A. Yes.

Q. Do you recall the approximate date that the reorganization happened that you just mentioned?

A. It was probably the same time you see the change in my position there in your title.

Q. Okay. So approximately November of 2013?

A. Yes.

Q. Okay. And then on January 12, 2015, the title of distribution superintendent locate and mark for the Locate and Mark South department, can you talk about your role in that position.

A. So I supervised the supervisors. I believe there were nine of them, if I recollect correctly. It was from San Francisco down to the Santa Maria area.

Q. Okay. And approximately how many supervisors would you say you supervised at that time?

A. I think about nine.

Q. And do you have a general sense of how many staff those supervisors supervised?

A. Anywhere from 12 to 20.

Q. Okay. If my math is right, nine supervisors times if we approximate at 15, we're talking about maybe 130 or 140 people who either answered to you or answered to people who answered to you?

A. Yes.

Q. Does that sound right?

A. Yes.

Q. Maybe give or take as an approximate?

A. Yeah.

Q. All right. And then on August 8, 2016, the title of business process analyst principal for the Locate department, can you talk about your role there.

A. Yeah. PG&E had a new process called SGO, and so it was about bringing visibility for the different entities that PG&E has. And locate and mark was next on the list to have that happen, so I was appointed to try to work with the SGO team to make that happen.

Q. Okay. And the term "SGO," what does that stand for?

A. Super Gas Ops.

Q. Okay. And what was the role of the Super Gas Ops team?

A. So we defined a process for how we get work, and then it's to bring visibility when we didn't have enough or we had too much or, you know, there were issues not being solved. So we developed a -- you know, you'd have a morning report, you know, with the supervisor and the employees. And so it was about visibility and developing a reporting mechanism so it would bring visibility to leadership and everybody, really, about the work that needed to get done.

Q. Okay. Did you supervise anyone during that time?

A. No.

Q. Who did you report to at that time?

A. Well, I mean, I think on paper I still reported to Joel Dickson. But in reality he had referred many times that I was really under Anne Beech, and I did report to her.

Q. What was Anne Beech's role?

A. She was the manager for the SGO team.

Q. Okay. Did the SGO team report directly to PG&E executives?

A. Yes.

Q. Okay. Part of why I'm asking this is because what I'm gleaning from the dates and roles as you've talked, it seems to me as if during your time at PG&E you gained an increasing amount of responsibility --

A. Yes.

Q. -- in each role.

A. Yes.

Q. That's accurate. Okay.

And if I understand right, the title of business process analyst and principal for the Locate and Mark department, that was your last position relating to locate and mark before you became the supervisor quality assurance in the Quality Assurance Distribution department.

Is that right?

A. Yes. And that's for electric.

Q. That's for electric?

A. My current position.

Q. The current position that I just mentioned is electric?

A. Um-hum.

Q. Understood. What was the last date of your role as business process analyst principal for the Locate and Mark department, approximately?

A. Sometime in February.

Q. Of this year?

A. Yes.

Q. Okay.

A. Actually, wait a minute.

Yeah, sometime in February.

Q. Okay.

A. Maybe it was January. I'm not sure.

Q. That's an approximate?

A. It was this year January or February.

Q. Approximately January or February of this year?

A. Um-hum.

Q. And do you have a sense of how long, how much time between when you ended your role, your last role in the Locate and Mark area, and then began your current position? How long was there between those two times, approximately?

A. I'm sorry. What's the question?

Q. When you ended -- When you finished your role as business process analyst principal for the Locate and Mark department, the last day you were there, and then the first day that you started as a supervisor of quality assurance in the Quality Assurance Distribution department on the electric side, how long between those two dates?

A. Probably 40 days. I'm guessing about 40 days.

Q. So approximately 40 days?

A. Yeah.

Q. Okay. Thank you.

Were you -- Were you were told why -- Were you given notice -- Well, let me ask you this. I'm sorry.

Did you choose to leave, yourself? Did you choose to voluntarily leave your position as business process analyst principal for the Locate and Mark department?

A. No.

Q. So PG&E instructed you to leave that role?

A. Yes.

Q. Did they explain why?

A. No. Part of the affordability package.

Q. Part of the affordability package. That's what they told you?

A. Um-hum.

Q. Did they explain what that meant?

A. No. There was a phone call that just explained it to the whole company, a company phone call that said there was going to be approximately 450 people laid off. And then I got a phone call from Joel telling me to meet him. And I met him, and he said, Basically you're laid off; do you have any questions?

Q. Okay. And when you say "Joel," that's Joel Dickson?

A. Yes.
Q. Who was your supervisor at the time?
Or, I'm sorry. You said Anne Beech was.
A. Yes.
Q. But it sounds like Joel may have had a role in decision making about your laying off.
A. Yes. I was still under him. Technically on paper I was still under him.
Q. Okay. Were you told -- Were you given any notice before that conversation that you had that you would be -- that your time -- your position as business process analyst principal for Locate and Mark department would end?
A. No.
Q. And when did that -- How long before your position ended as business process analyst principal for the Locate and Mark department did you have that conversation with Joel Dickson?
A. Repeat that.
Q. Sure. You talked about a conversation with Mr. Dickson telling you that you were laid off, I think is what you said, approximately?
A. Um-hum.
Q. And then your position as -- Maybe I'll shorthand this. The principal for the Locate and Mark

department. That's what I mean when I say "business process analyst principal for the locate and mark department." Maybe I'll use the word "principal" as shorthand for that.

Does that make sense?

A. Yes.

Q. So the time between when Mr. Dickson said to you that you're laid off and your position as the principal ended, how long between those two?

A. It was that day. You know, basically collect all of your things. Included in the package they gave you 60 days to try to find another position within the company.

Q. Okay. Okay. So you were -- And, I'm sorry, I'm missing it at this point. What was the date, approximately? You said, I think, January or February was the last day of your job as principal?

A. I think that must have happened around January 17, because my final day would have been March 17, so that's 60 days. So it must have been around mid January when that happened.

Q. Okay. And then you found the February 27th position on the electric side within that 60-day period that you mentioned?

A. Yes.

Q. Okay, good. So you were told you were part of the laid off -- You were told that you were not to work in the Locate and Mark department as principal anymore -- using that shorthand term -- and you weren't given any notice about it.

Did you have any job evaluations that gave you a poor performance during your time as locate and mark, any of your work in the locate and mark?

A. It was one.

Q. Okay.

A. And it was under one area at one time.

Q. Okay. Was that early on in your tenure at PG&E or late?

A. No, it was when I was superintendent. I had gave some resumés to one of my supervisors, it was like two or three resumés, of folks. We were struggling to hire people in our Cupertino area, and I gave them three resumés, and one of them was [redacted]. And PG&E has a policy about not hiring -- but I thought at the time I gave it to them, I thought you just couldn't have anybody work directly underneath you. But I later found out you couldn't have anybody in your whole chain, and I just didn't know that, because the policy had changed I think the year before, and I just didn't know that it had changed.

So Joel had put that in a, you know, performance review that, you know, that I shouldn't have done it. But I just didn't know. It wasn't intentional, you know. So that's the only thing I've ever had in a record anywhere.

Q. Okay. And approximately when was that, what year?

A. I think that was in 2015.

Q. Okay.

A. Yeah.

Q. Okay. And PG&E, after noting that, did PG&E do anything else after putting that in your job performance evaluation?

A. No. I mean, Joel said he had this project for principal, that he told me don't worry about it, trust him -- those were the exact words, I do believe -- and to go over and work on this project and do a good job, and, you know, that was it.

Q. Okay. And even after the note in your job evaluation about what happened, your role as principal, was that still an increase in responsibility from 2015?

A. It was an equal. Principal is equal to superintendant manager. It's the same level. It just means you don't have employees working for you. You have a project instead.

And even though I never did see it on paper, I did have meetings with Anne Beech, who did rate me, and she rated me meeting targets. So it was never an issue with that, that I was informed of.

Q. Okay. And so all of your -- So your other job evaluations working in locate and mark, other than the one you identified, you were identified as meeting targets?

A. Yes.

Q. Were you ever identified as exceeding targets?

A. Yes.

Q. Were you regularly identified as exceeding targets?

A. Most of the time. More times than not.

Q. Okay. Did PG&E ever recognize your performance for exceeding targets or meeting targets in any other way other than your job performance evaluations?

A. Yes. I mean, that's how I begin training other supervisors and going into problem areas. And, you know, they considered me -- I usually was their SME. I usually was their person that -- I did the court appearances for anything in locate and mark. I helped pen the book, locate and mark manual book. So, yeah, there were lots of things like that.

Q. And just for the record for clarification: By

"SME" you mean "subject matter expert"?

A. Yes.

Q. Okay. And when you say you penned the book, you wrote a number of the locate and mark procedures for PG&E?

A. Well, I mean, it was a group of us, it wasn't me, but we worked together to get that done.

Q. Writing together drafting the locate and mark procedures?

A. Yes. I would write something out, and then we had a team that would sit there and take what I wrote and say -- you know, they would actually bring it to life. So that's kind of -- and then they'd send it back to me and say, okay, is this -- they called it the skunk works. So that's what we did to get the manual done.

Q. Okay. Got you.

And PG&E -- Well, strike that.

Okay. If I can, I'd like to come back to that later, but let me table that set of questions for now and ask you, if I can, about what I understand the term to be "tickets." And I'll ask you to clarify a little bit and maybe just get some background information.

So could you explain just for the record, in the context of locating and marking, what the term "ticket" means.

A. So excavators, whenever they're going to do it, they're required by law to call a USA. They call 811, and a ticket is created. And we have a second party that sends us the ticket information into words that we understand and creates a ticket in a program. Locators then are assigned tickets based on folders and workload, and they perform the work that's on there, which is locating of the gas and electric and fiberoptic.

Q. Okay. And the tickets -- So the tickets, in essence, are records of locate and mark efforts? Is that an accurate way to characterize, or is it incomplete? Please correct me.

A. No, that's correct. Absolutely.

Q. Okay, good. And so -- Bear with me for a moment.

Are you familiar with the requirements sometimes referred to as the one-call law? Have you heard that term used before?

A. Yes.

Q. And are you familiar with the requirements of the one-call law?

A. Yes.

Q. Okay. Can you briefly describe what that law requires with regards to tickets.

A. So PG&E is required to go out and mark their facilities. The one call, the excavators have one number to call so that all underground facility owners get the request. We're required to belong to it, as a utility company. And different utility companies pay into that, including PG&E. And that's the program developed. And I know I said that kind of mixed up but --

Q. I'll just parse it a little bit. I understood. I'll wait until you're done, but I understood what you were saying there.

A. Okay.

Q. And let me just ask you specifically: Is it true that within two working days PG&E is required to provide positive confirmation that they addressed a ticket?

A. Yes.

Q. And that's under the one-call law requirement?

A. Yes.

Q. Okay. And are you familiar with the term "positive response" as I just used it?

A. Yes.

Q. Okay. And in your experience what does "positive response" mean?

A. Well, in our manual we describe it according to the law: To either locate the facilities within the time period or to arrange something with a contractor, excavator. You know, if they have long jobs or something or we can't make it, we need to communicate with them and work it out with them when is a feasible time for both parties to perform that.

Q. Okay. And what happens if PG&E cannot send a locator out to the excavation area and mark underground facilities within the two-day requirement we just talked about?

You said that they can make arrangements. You may not have used that word, but I think I understood you to say they can make arrangements with the excavator to come out another time. Is that allowed to happen?

A. Yes, yes.

Q. Okay. And what if they cannot reach the excavator in order to change the time that they would come out to mark the facilities? Are they required to come out within the two-day period from when the call was made?

A. Yes.

Q. Okay. What's the -- Just another terminology question. What is the term that's used to describe when a PG&E locator is supposed -- the time or date when a PG&E locator is supposed to come out and do the marking, locate and mark the underground facilities in an excavation area?

A. Sorry. Can you repeat that.

Q. Yeah. The date or time when a locator is supposed to come out in order to do the locating and marking.

A. It's the due date.

Q. Okay. So I'm just trying to get some terminology we can use to move forward.

A. Okay.

Q. So if I use the term "due date," you'll understand the time when the locating and mark person, the locator, is required to come out and mark the excavation area.

Does that make sense to you?

A. Yes.

Q. Okay. So just to clarify: The term "due date," the due date has to be two days from when the excavator called -- I'm sorry, two working days from when the excavator called 811, under the one-call law; right?

A. Yes. Last year. Now the law has changed, but yes.

Q. And can you say more? How has the law change?

A. Well, now you can't call at 2 o'clock and have it at 2 o'clock the next day. It actually gives them a full day to perform the locate.

Q. Okay. So they get an extra day, if you will?

A. Well, yeah. It's not due at 2 o'clock. It can be due 7 o'clock the next day, so they get that full day to perform the locate.

Q. Okay. So let's say they call at 2:00 on Monday, or let's say 1:30 on Monday afternoon. Then they get until --

A. I believe it's the end of the day, yeah.

Q. Okay. So if an excavator calls by the end of, let's say, business working hours on Monday, when does the -- if no other arrangements are made, when would the locator have to come out?

A. In this year it would be the 48 hours after. So the ticket is not going to be due at 2 o'clock, it'll be due at the end of the day. So they get that whole day. Just because you call at 11:00 doesn't mean it has to be marked by 11:00. They would get the full day to mark the ticket.

Q. I think I follow you. So if the excavator called at 1 o'clock in the afternoon on Monday today, PG&E would have until the end of the business day on Wednesday, not 1 o'clock on the afternoon on Wednesday, to send the locator out to locate and mark.

A. Yeah. That started this year. I'm not sure of the exact date, but yeah.

Q. And prior to the change in law, PG&E -- if an excavator called at 1 o'clock today, then PG&E would be required to come out by 1 o'clock in the afternoon on Wednesday?

A. Yes.

Q. Okay. Thank you.

Okay. And that's just -- We are just talking about now the due date, when the due date is for the locator to come out and mark the area; is that right?

A. Yes.

Q. Okay. All right. In your experience have there been times when PG&E has been unable to meet the due date?

A. Yes.

Q. Okay. And when that happens, when PG&E is unable to meet a due date on a ticket, what is the term that's used to then describe the ticket?

A. Well, they are supposed to renegotiate a new start date.

Q. Okay. Understood. So they are supposed to renegotiate a start date. And that means -- If they renegotiate a start date, what does that mean?

A. Well, it should mean that they've made contact with the excavator and that they've agreed upon a new start date. "Mutually agreed upon" is the term.

Q. Okay. And if they either can't mutually agree with the excavator upon a new start date or they don't reach the excavator and the locator can't meet the due date, what's the term used to describe the ticket at that point?

A. Well, it should either be a late ticket or -- a late ticket or they go do it. I mean, that should be the only two options.

Q. Okay. And then regarding the term "late ticket," let me ask this. You say those should be the only two options. Are there other things that PG&E has done that you're aware of?

A. Well, yes.

Q. Can you elaborate upon that.

A. I think we have had quite a few audits and research that showed that there was a number of ways that the system -- I mean, the locators were doing other things other than what the procedure required.

Q. Okay. Meaning that the locators were not following the procedures?

A. Right. They would either renegotiate and not really speak to anybody, or three times and close the ticket out was another thing that we saw. I mean, there's other ones that they would use, some of the other dropdowns that the system might not pick up that it's a late ticket when using that.

Q. I think I understand the things that you've mentioned, but let me just clarify to make sure.

The first thing that you mentioned was changing the -- would that be changing the due date without getting mutual agreement with the excavator?

A. Yes.

Q. And so would a ticket reflect -- Let me ask it this way. Did you see tickets that reflected that PG&E changed the due date past that two-day requirement we were talking about, but did not get mutual agreement from the excavator?

A. Yes.

Q. What would those tickets say, for example, in your recollection?

A. You mean what were the dropdowns?

Q. Yeah, what were the dropdowns?

A. It may have said "renegotiate new start date." It might have said "No response from excavator." It might have said "Phased ticket."

Q. And those were all dropdowns that could be just options that could be -- information at that could be input into the ticket, is that right, when you say "dropdown"?

A. Yes.

Q. All right. And each of those you've seen examples that showed that PG&E attempted to change the due date without getting mutual agreement from the excavator?

A. Yes.

Q. Do you have an idea of how many times that happened?

A. No.

Q. Okay.

A. Hundreds.

Q. Hundreds, okay.

A. Probably. Thousands. I mean, it depends on what year you're talking about. I can't give you a number.

Q. Okay. And the reason that you can't give me a number -- And I'm not asking for a precise number, by the way. But the reason that you can't give me a number is because it happened so often?

Is that why?

A. Yeah.

Q. Let me restate that. The reason that you can't give a number is because it happened more times than you were able to count?

A. Well, I mean, I never went into each yard and, you know, said -- you know, every month and said this is happening this often every single day, you know, all the yards individually. So I wouldn't be able to give you an exact number of that.

But I just know as a trainer, when I would go into the yards or performance improvement person or whatever, we would see it. And we also got reports from the QC department that it was happening, so.

Q. Okay. When you say you had got reports from the QC department, can you identify the people that did that reporting?

A. Jennifer Burrows' team.

Q. How do you spell -- Jennifer is J-e-n-n-i-f-e-r?

A. Yes.

Q. And how do you spell her last name?

A. B-u-r-r-o-w-s.

Q. B-u-r-r-o-w-s?

A. Yes.

Q. Okay. Thank you.

And what was the name of the team that she oversaw?

A. Quality Control. "QC" we called them. Now it's Quality Management, QM department.

Q. Okay. Did anyone else report those kinds of tickets where the due dates were changed without reaching mutual agreement from the excavator, that you're aware of?

A. I mean, I think myself, other supervisors, other employees, Stephen Walker. He was our person for the program.

Q. Okay.

A. Yeah. I'm not sure who else.

Q. Okay. And when you say other supervisors and other employees, I understand that you may not remember everyone, but do you have an idea of how many people would have -- would report this problem?

A. Well, no. I mean, it was a struggle. I think the supervisor's employees would feel pressure to not have late tickets. So when you look at the underlying root cause, it's not like you have employees running around who just want to falsify a document. It's that you have such pressure put on late tickets that I think that was part of the root cause. But, you know, they would know better, I'm sure.

Q. All right. Now, regarding the report, who would receive those reports that you mentioned that Jennifer Burrows' team provided?

A. Myself, Joel Dickson, John Higgins, the north superintendent. Anybody from either -- Supervisors themselves received the report.

Q. So the report was --

A. Jeff --

Q. I'm sorry. Go ahead.

A. Jeff Carroll was the north superintendent.

Q. Okay. So the report was made fairly widely known within PG&E, those managers who had supervisorial authority over locate and mark.

Is that accurate?

A. Yeah. And I think those were just the ones that they audited. So, you know, if they audit only a hundred people a year, or whatever the number is, that's the only tickets that they're looking at, so.

Q. Okay. Okay. When you talk about audits, were there -- were there annual audits of these -- that picked up these problems that we're identifying? And by "problems" I mean changing due dates without getting mutual agreement from excavators.

A. I mean, there were just maybe the supervisor oversight, the supervisors would catch it. I would certainly catch it when I would look at tickets.

I don't know if it would be an annual report, but I believe it's just the QC department, that they would pick it up when they're auditing a particular employee and they're looking at the tickets and then they might see it. Or perhaps Stephen Walker might be. I mean, I don't know.

Q. Okay. And the Quality Control department -- I'm trying to get at the term "audit" that you're using, what that means in this context.

So would we see a report that had identified a number of tickets that had had their due dates changed without mutual agreement from excavators, or would there be memos sent by Jennifer Burrows' team, or what would those audits look like?

A. So they had a monthly report. They would have a report that went out on the particular locate. So what the quality control does is, they randomly select an employee, and then they would go out and they would check five tickets that they had located sometime in the last seven days.

I might be getting a little of this wrong, but this is the gist of it.

They would look at those tickets and decide whether they were handled correctly or not. And Jennifer's team might pick up on the fact that, okay, the note, you know, it was improperly phased maybe, like it wasn't -- because phasing was described in our manual as, you know, something like would take a whole block or more, a job that's going to take you more than, you know, one day to complete. That's what qualified as a phased ticket. But maybe it was a single house and an employee phased it. So that would put up the red flag to say, Hey, you know, you phased this ticket and you didn't get to it in a couple of days, and then you just located it, so it's not really a phased ticket. Or maybe they would see the renegotiated dropdown used and maybe they would realize they hadn't spoken to who they spoke to. Maybe that information wasn't in the ticket, you know, to properly -- or it would say "left a message," something like that, as opposed to a true mutual negotiation of a new start date.

So those types of things would be red flags to the QC department for our team. And then we would get that notification in a report. I would get it and Joel would get it, the report. And then there would be a monthly report and then, you know, yearly.

Q. Okay. And did the reports have a title? What would they be called?

A. I can't think of it offhand.

Q. If we wanted to ask for certain reports that you just described, how would you recommend that we identify them so that when we ask for them, PG&E would know what we're talking about?

A. The QC reports for locate and mark.

Q. Okay. Thank you.

And just on phasing, I think I followed, but I want to be sure I'm getting it right.

Would phasing be where a locator had started -- Actually, maybe if I could just ask you to explain what phasing is.

A. So, I mean, the intent of phasing a ticket is an excavator, they're going to go put, you know, a water main down two blocks or three blocks or something. Right? And they're not going to do all that work in one day. So at that point the locator -- and it doesn't behoove even us or PG&E to go out and just mark up the whole two blocks when they're going to be using power washers, they're going to be digging here. So, you know, we work and coordinate with the excavator to say, Okay. Where are you starting at? How much are you going to get done each day? I'm going to stay ahead of you. So that's phasing a ticket. I'm only going to give you what you need each day or maybe every two days, whatever the agreement is between the two of them. That's phasing a ticket.

Q. Okay. So as long as there was mutual agreement between the excavator and PG&E in the case of phasing, they're okay in terms of properly doing -- meeting their due dates or locators coming out.

Am I getting that right?

A. Yes. It still has to be mutually agreed upon, yes.

Q. But in the case of phasing, if an excavator wasn't reached or didn't mutually agree upon rescheduling a due date, would PG&E -- would the ticket be late then?

A. It should be.

Q. And I should say that's assuming that PG&E is not coming out to mark within the two days; right?

A. By law it would be considered late.

Q. Okay. So were there instances where there was a phased ticket, PG&E didn't get mutual agreement, didn't get agreement by the excavator to change the due date later than the two-day requirement, and PG&E didn't come out in time to meet the two-day requirement?

A. Yes.

Q. Okay. So there were some phased late tickets. Am I stating that right?

A. Yes.

Q. Is that the right way to say it? Maybe that's not the right term.

If you want to clarify a better term that might be used within PG&E -- I'm gleaning you know what I mean by that term, a late ticket on a phased locate and mark --

A. Yes.

Q. -- but is there a better term to use that you would suggest?

A. No, I think that's true. I mean, we can have late tickets on any dropdown, so that's one of the dropdowns we might use. But definitely if we didn't get mutual agreement, it should be late. I think they struggled sometimes to get ahold of excavators, you know, to work something out, or at times it was used inappropriately.

Q. When you say "it was used inappropriately," meaning either the excavator didn't agree to change the due date and PG&E still didn't come out within the two days, and then they would record that they had come out on the ticket; that they had changed the due date and left a voice message, for example?

A. Well, so I think it's the way that it's handled. I think when they phase a ticket, it doesn't get recorded as being late, because the system picks it up as this is a phased ticket, so it never gets recorded as being late, you know. But by law I guess you'd say that's supposed to be not phased unless you have mutual agreement to phase it.

So I think sometimes two things happened. I think it might potentially be phased incorrectly so it doesn't get picked up as a late ticket, and it also might be phased and unable to get ahold of the contractor, which truly may be a phased ticket on a long job, that it's going to be phased but they still couldn't get ahold of the excavator to mutually agree on where are you starting, what's happening with this, do you want to have a meeting and let's go over the job. That kind of thing, I could see that happening too, where you could say that's a late ticket as well. But eventually it would get met and, you know, phased appropriately, I would think.

Q. Okay. Any instances that you're aware of where the excavator -- let's just talked phased tickets for a second -- where the excavator said, No, I want you to come out, I'm not agreeing to change the start time -- or change the due date -- excuse me -- I'm not agreeing for that, and then PG&E didn't come out within the two days.

A. Yeah, I'm sure that did happen. I know the struggles that locators would have. They just didn't have enough people to get the work done and, you know, they just couldn't get out there in time. And the contractor would say, Well, I'm starting without you. And I think they would do their best to move people around and try to get out there.

Q. Okay. And in those instances are you aware of situations where the ticket was recorded as not late?

A. I don't think any phased tickets got recorded as late.

Q. No phased tickets were recorded as late?

A. I don't think that they would ever get recorded as late, because they would be picked up, the due date would be changed to a later date. So unless, you know, they totally missed that date, generally speaking, the date was moved out to another date.

Q. Okay. Okay. You did say that earlier, but I didn't quite catch it, but I think I'm getting it now.

A. I mean, a phased ticket could go late if they didn't do it by the next date that they changed it to. I guess that would be picked up as a late ticket. But generally they move it out.

Q. Do you know how many phased tickets -- Let me ask this. Any idea how many late phased tickets there are? Even though they're not recorded as late, how many phased tickets are actually late in the field?

A. I have no idea.

Q. Okay.

A. Now, you mean by the standard of they didn't have mutual contact?

Q. Yes.

A. I have no idea.

Q. Okay. But you know that symptom exist?

A. Yes.

MR. GRUEN: Okay. Why don't we take a ten-minute break. If we could go off the record.

(Off the record from 11:19 until 11:30.)

MR. GRUEN: Back on the record.

Q. Before we were off the record we were talking about phased tickets. So I understood you to say that a phased ticket wouldn't be recorded as late.

Did I get that right beforehand?

A. Correct.

Q. How would you know if a phased ticket wasn't late by looking at the ticket?

I'm sorry. How would you know if a phased ticket was late by looking at the ticket?

A. Well, I think I understand you to say beyond just the data -- Okay. So if they phased it correctly and all the information is there and it's phased, the new date would be in there. And then, you know, if they went past that without putting in another, that would be one way of a late ticket if it was phased.

But if it was used incorrectly or something like that, that would be another way. So say it was phased, but yet there wasn't really mutually agreed upon information in there, that would not be there as far as, "Met with John."

In our manual it tells them how they're supposed to document a phased ticket. You know, so if that information wasn't there, you know, as far as the mutual agreement, a conversation and a phone number of who they spoke to, that would be one way.

Q. Okay. But there are -- I think I'm hearing you say that there are practices where the phone conversation with an excavator were not shown in the phased late ticket.

A. Correct.

Q. Or in the phased ticket, I suppose -- Yeah, I suppose it is phased and late, it's just not shown as phased and late. And if it is late, it's not shown that it's late.

A. Right. So the only way a phased ticket would be shown as late is if the new due date they put in there that they were going to meet with the contractor or that new due date, whatever it was, if that date went past, then that would reflect a late ticket.

Q. Okay. And would there be the two dates shown in that instance: the initial due date and then the revised due date?

A. No.

Q. So if a date was revised on a phased ticket, you'd only see the revised due date?

A. Correct.

Q. I see. Could a phased ticket have the due date revised many times?

A. Yes.

Q. And it would only show the last one?

A. If you were running a report for it, yes. But if you opened up the ticket itself, you would see all the history. That's all there.

Q. Okay. Okay. And if a due date was shown as -- Let's just take an example. Today's date is the 15th -- or, I'm sorry, the 19th. I should know that. Excuse me.

Today is the 19th of June. Let's say that the due date was today, but that PG&E on a phased job did not complete the phase that was due June 19th until, let's say, June 21. Would that information that they didn't get out and locate and mark the phase that was due on June 19th, would that information be shown on the ticket?

A. Only if they did nothing to the ticket. But chances are, because that's going to come up as due or they are going to see that in their folder or whatever, they are going to put another -- extend it again. Then it would not show up as late. If they did absolutely nothing to the ticket, you know, then it would show up as a late ticket.

Q. Are you familiar with that situation that I just described -- I'm talking hypothetically, but a situation just like I described where the locator comes out after the due date for a phase, and then the due date after the locator goes out is revised to show that the locator wasn't late?

A. Well, that's not quite what would happen, I don't believe.

Q. Okay.

A. So, you know, I think that the locator would have to renegotiate that ahead of time. So if the ticket was phased and due today, you know, at 12 o'clock, then the locator would have to go in prior to 12:00 and either perform it or extend it.

Q. Got it. But the locator might extend it before 12:00 today. If 12:00 today was the due date and due time, the locator, if he or she couldn't make that due date, the locator could come in at 11:59 and change the due date?

A. Yes. What they are supposed to do is make a contact with the excavator and say, Hey, I can't get there by this date. Can I have an extra day? Or work something out with them. That's what they are supposed to do.

Q. But there are cases where they didn't reach the excavator and would still change the due date?

A. Yes.

Q. Okay. And that's true on phased tickets as well?

A. Yes.

Q. Okay. You mentioned something earlier, too, beforehand, and I don't want to lose sight of it, and I'm going to try to state it back to you, but please correct me on it.

I think you were talking about -- I'm not on phased tickets anymore. But on a ticket where they would contact -- PG&E would contact the excavator several times and try to reach the excavator, and if they couldn't reach the excavator they would close out the ticket.

Did I get that right?

A. Yes, I have heard of locators doing that. And I think they did it to prevent a ticket from being late. Originally what that was intended for is, there is in the law, okay, if you can't get ahold of an excavator three times, you know, you make three attempts and then close the ticket out. But the intent of that is to, say there's something wrong, like a wrong address or bad information, or, you know, it says north and it can't possibly be north. So when there really needs to be some communication; right? I mean, that's the intent of that. It's like, Okay, I can't get ahold of you and I'm not understanding what you want me to do. Maybe there's no USA marks or maybe he can't find them. There could be a lot of reasons where we would need to communicate with the excavator.

Q. Okay.

A. But there should be some reason you need to communicate other than, okay, I just can't get to the ticket, I'm going to close it out because I don't have the time to get to it.

Q. Okay. Are you familiar with instances where the information seemed accurate and PG&E reached out to the excavator several times, couldn't reach the excavator, and then closed out the ticket?

A. Yes.

Q. Do you have an idea of how many times that's happened?

A. No.

Q. Were there instructions to do that?

A. No, I don't know where they got the

instructions to do that. I think, I mean, I was told by a locator that the supervisor had given them that direction.

Q. You were told by the locator that their supervisor had given them that direction?

A. Yeah. Or sometimes it would be, My senior told me to, or My supervisor told me to. I think the locators or supervisors felt pressure to try to not have late tickets.

Q. Do you know which supervisor it was who gave the direction?

A. I don't believe it was just one.

Q. Okay. Can you tell me who it was?

A. I'd rather not.

Q. Okay.

A. Is that an option?

MR. GRUEN: Let's go off the record for a second, please.

(Off the record from 11:39 until 11:42.)

MR. GRUEN: Why don't we go back on the record.

Q. While we were off the record we just discussed the importance of sharing names of people so that we can ask questions of people in PG&E regarding safety. And I understood Ms. Mack to identify Mr. Stephen Walker as a person we can ask questions regarding supervisors or someone who may know supervisors who instructed to call several times and then close out a ticket if an excavator wasn't reached.

Did I capture that right?

A. I just think he was closer to it than I was. He worked with the program as far as closing the tickets. He had eyes on it. He kind of knew the struggles. He worked in the war room for late tickets that was created. And I think he would have a better idea about, you know, what supervisors did or didn't do when it came to closing tickets.

Q. Okay. Understood. Thank you for sharing that.

Do you know, is this a fairly recent practice that PG&E has -- that some at PG&E have started doing, that if you don't reach an excavator after trying several times, that you close out the ticket?

A. Yeah, I think it pretty much started over the last, you know, three or four years.

Q. Okay.

A. I think we went from -- I know there's a report there that we went from, you know, thousands of late tickets to almost nil.

Q. Okay. Three or four years. Do you have a sense of why that practice began?

A. All of a sudden there was pressure to focus on locate and mark. Back when I was a locator, you got your tickets, did what you could, and turned the rest back at the end of the day. And I think it was a different -- it was a game changer at some point or another for locate and mark. There was a goal of zero late tickets and, you know, there was pressure on them to not have any, you know, and I think heads would roll, so to speak, if there were late tickets in any division. So I think they just began to do workarounds, is my thought on it.

Q. Okay. And a goal of zero late tickets, was that something -- was that goal of having zero late tickets something that was -- What was the genesis of that goal?

A. It was a metric for all supervisors, and for every division it was on their performance; you know, one of their goals on their performance reviews. I think that started in 2014; '13 or '14. Probably around '13.

Q. And -- Go ahead. I'm sorry.

A. There was probably a little focus on it prior to that. You know, I think part of it, I mean, they tried to take an approach of, you know, improving efficiencies. So, you know, I think that was part of it.

And we needed to make a lot of efficiencies. Not every division was functioning the way that they could be. You know, some divisions could have gotten more work done. So I think that was part of it.

Q. Okay. Was there -- When the goal of zero late tickets was put on job performance evaluations, was there another goal put on the job performance evaluations about following the locate and mark requirements, the safety requirements?

A. No. I mean, there were some safety goals, but they were more around MVIs and injuries and things like that. I don't remember a goal around that.

Q. Okay. And you said MBIs [sic]. Can you say what is an MBI [sic]?

A. MVI, motor vehicle incident.

Q. Okay. So motor vehicle incident isn't related to locate and mark, it's a different area; is that right?

A. Well, if a locator gets into a motor vehicle accident, it goes into the safety report.

Q. I follow. Okay.

A. I mean, there were goals around -- not goals, but expectations to meet PG&E's core values and things like that, so certainly that would fall under the category of doing what you're supposed to be doing.

Q. Okay. Were you ever -- In your experience as a supervisor, were you ever told that you were not meeting the goal of zero late tickets?

A. Yes.

Q. When?

A. Well, I mean, any time we -- I don't know that anybody, at that point early on when I was a supervisor, had zero late tickets, so that would have been a conversation on a weekly call, you know, that we had.

I mean, it's quite a while ago since I was a supervisor, but we had weekly performance calls, and they would go over the weekly locate and mark report that talked about, you know, if you had any MVIs or any injuries or any late tickets or if you had at-fault dig-ins. Those were covered on a regular report. And later as superintendent, they would have been covered monthly or maybe even weekly at that point, too.

Q. Okay. Were any of your job performance evaluations marked as not meeting the goal of zero late tickets?

A. I don't think we had a zero late ticket, when I was supervisor, on a metric. That didn't come until later.

Q. Okay. And was there a policy that was -- Are you aware of a policy that required the goal of putting

the late tickets in performance evaluations?
A. A policy to do that? No.
Q. How did that goal get put into job evaluations?
A. We got our goals from Joel Dickson, and he gave them to us.
Q. Okay. So Joel Dickson put the goal of zero late tickets in the job performance evaluations?
A. Yeah.
Q. Okay. Was that for all the supervisors?
A. Yes.
Q. Okay. Was that for locators as well?
A. They didn't really have goals because they're union employees. It's different. They had expectations to follow procedures, and they would be coached and counseled, obviously, if they had a late ticket, but it was more about following procedure. Because procedure says they're supposed to make a phone call.
Q. Go ahead. Sorry.
A. You know, we did try to put in place some other things. Try to get help making phone calls. I came up with a process of utilizing our clericals to say, Hey, you know, here is a secondary, you know, way that we can try to not have late tickets. Let's get the clericals involved, because the locators are out in the field trying to just make it ticket to ticket. Can the

clericals make the phone calls for us? Just another way of trying to get those phone calls made and appropriately documented.

Q. Okay. Did you ever see any -- Oh, I know what I want to get at. There are some -- I just want to ask you a couple of questions that get at this overall idea about if it's doable to have zero late tickets, if it's doable to meet that goal of having zero late tickets. And I think the nature of the questions, you'll see, are asking about the number of late tickets approximately.

And then also I want to just ask about PG&E's locate and mark budget, if you will, to get an idea, an overarching understanding, of, you know, is it possible, given the budget, to actually have zero late tickets with the amount of resources that PG&E set aside.

So that's the understanding. Do you understand that basic goal that I'm getting it?

A. Yes.

Q. Okay. So here are the questions.

Well, let me just ask you generally first: Do you have an idea of how many late tickets PG&E had during your time as a supervisors for locate and mark?

A. No, I don't remember.

Q. Okay. Do you have an idea of the number of late tickets PG&E would have had for the given year, say, in 2013?

A. I know it went from thousands to very, very little, a handful, a hundred, or something like that. During the timeframe that they were fully focused on late tickets, they opened up the war room, so Stephen Walker would be making phone calls to contractors, because he was responsible if there was a late ticket.

Q. Okay. When you say that PG&E focused on late tickets and they opened up the war room, what approximate time are you talking about?

A. I believe that was 2015. Wait, '16. Yeah early 2016.

Q. Okay. When you talked about going from thousands to hundreds of late tickets, when would the thousands of late tickets have been and when the hundred?

A. I think we had thousands, probably, prior to 2013. And then, you know, there was a focus -- you know, I think more and more every year there was more of a focus on late tickets, what that meant to get a late ticket and how serious it was to get a late ticket probably around then, 2013, and every year getting more emphasis on it. And I think that was true for the whole Locate and Mark department. They made a lot of improvements as well over those years, too, so.

Q. And when you said the hundred or hundreds of late tickets, do you have a sense of timing when that would have -- what date or what year that would have been?

A. I mean, I think probably it took a detour -- I mean, got less and less every year the more emphasis was placed on it. But probably for sure 2015 and '16 really improved, but, you know, I think it was a steady thing every year.

Q. Okay. So from 2013 to 2014 there would have been a significant decrease. Would that be accurate?

A. Yeah. Probably starting even in 2012, you know.

Q. Okay. And each year you would have seen a --

A. Yeah.

Q. -- a significant decrease to get to the hundred tickets or several hundreds of tickets --

A. Yeah.

Q. -- by 2015 or 2016?

A. Yeah.

Q. Okay. What about PG&E's budget, the corresponding budget during those years to spend on locating and marking? Do you have an idea of PG&E's budget and the amount of money they spent each year?

So let's start with -- You described tickets as maybe starting about 2013 or so, if I understood right. So maybe if we start the budget about that year as well. Do you have an idea of was there a change in the budget for locating and marking going from 2013 to 2014?

A. Well, I mean, there was a lot of increase in ticket volume over the years in part due to, you know, the work that PG&E had done about getting 811 out there. So we saw a drastic increase, fluctuation in tickets, too.

So I think they also saw improvements in how efficient they were in getting the work done. So I think it was a combination. But I think the budget, you know, was based on one thing, but we didn't always get the budgeted amount.

And then the other piece of that is that the work fluctuates. So, you know, during the months of, you know, say October, November, December -- maybe not even October -- maybe November, December, January, February you don't have as much work. So really, you know, PG&E one year added contractors to help get that work done during the peak season, which really helped. But then budget crunch happened and then they took away all of the contractors.

Q. What time are you talking about where they added? Was that October, November, December, January of the 2013-2014 year?

A. I don't know. Overall, you know, like I would say that we would -- I think the contractors came on, I want to say, '14, you know, maybe. I think prior to that we utilized other parts of PG&E to help get the work done. You know, maybe we used construction people that were OQ'd, or maybe we used leak survey people. We tried to use people within PG&E, but I think around 2014 we brought in contractors because the increase in the volume was just huge.

Q. Yeah. And you used the term "OQ'd." Is that "operator qualified"?

A. Yes.

Q. Okay. Thank you.

And then was there -- So I heard you say there was a budget crunch and that some contractors came on in 2014, but then they had to stop or they stopped hiring the contractors or stopped bringing them on to do locate and mark work.

Did I get that right?

A. Yeah. And I would be careful for me not to say dates, because I don't remember exactly. I just know the process was we would get them and then lose them, not because we didn't need them but because -- I mean, sometimes it would be, okay, we're done with them, but a lot of times it would happen because we did -- they would just say no, no more contractors, and it wasn't based on the workload.

Q. Okay. Did PG&E spend less money on locating and marking in 2014 than 2013, do you know?

A. No, I don't know.

Q. Okay. You talked about the number of -- I think when you said PG&E was having 811, getting the message out about 811, were the total number of tickets going up?

A. Yes.

Q. And that was starting around 2013 or so?

A. Yeah. Yeah, definitely.

Q. Okay. Were the total number of late tickets also increasing?

A. No. Late tickets were going down steadily every year.

Q. Okay. So you were having -- Starting in 2013 were the total number of tickets increasing each year through 2016?

A. Yeah. I think they may have stabilized a little bit more in '16.

Q. Did PG&E staff up internally, having more locators?

A. We added 60 employees one time, but part of that was for standby, not just locate and mark.

Q. Okay. So they were doing other things as well?

A. As well, yeah. But they did add employees, you know, at one point.

Q. Okay. And you told me not to ask about dates. I'll accept that on its face. Tell me maybe an approximately idea. Was that in maybe the 2013?

A. For what?

Q. For when PG&E had people on standby to help on locate and mark.

A. No, standby is another program.

Q. Oh, I see.

A. So 60 bodies was in part for locate and mark and part for standby, where they stand by on their transmission lines when people are digging around it. So it's a combination of those two positions.

Q. Okay. I follow.

A. I and believe that was in 2015 --

Q. Okay. And how --

A. -- but that's an estimate.

Q. An estimate. I understand.

Do you have an idea of how much time those 60 bodies would spend on locating and marking?

A. Well, not all of them were locators. Some of those positions went to standby. And we hadn't had an increase in bodies for a long time. So I'm not sure how many stayed with locate and mark.

Q. Okay. Do you have an idea -- We talked about an increase in the total number of tickets from 2013 on. Do you have a general idea -- and this is just an estimate -- of the total number of tickets starting in 2013 each year?

A. I don't remember.

Q. Okay. When you say there was an increase, are we talking about maybe several dozen or hundreds or thousands, or --

A. Thousands, yeah. We had a big jump in one of those years and then another jump, and then we kind of leveled out. So I think there were two years where we were really, you know, hit hard by the increase in tickets.

Q. And that was maybe '14 or '15 or so? Or which years was the jump?

A. I think it was '14 and '15; maybe even '13, yeah.

Q. Maybe '13, maybe '14 and '15 approximately?

A. Yeah. I'm sure someone has those numbers.

Q. Sure. We can ask follow-up, but this gives us an idea, which is helpful. I understand this is estimates to the best of your recollection, so --

A. Yeah.

Q. -- and that's still fine.

In 2013, 2014, and 2015, those same years, you also noted -- I just want to be clear -- that there was a decrease in the late tickets those same years, right, from one year to the next?

A. Yes. We had a report out that would give us that. We reported every year or every month what the late tickets were, and they were definitely slowly going down.

Q. Do you have a sense in those same years, 2013, '14, and '15, about the locate and mark spending? Did it stay about the same, go up, go down from one year to the next?

A. You know, I think that we asked for more money every year based on that, but sometimes we'd get it and sometimes it would be taken away and moved to other, you know, factions of the company. So I'm not exactly sure what we ended up with, if it was more or less. But, you know, you always asked for what you felt you needed to get it done based on ticket volume, predicting a certain amount of increase or decrease based on from last year and go from there.

Q. Okay. Thank you. If we can, let's move on to a different piece.

I think just regarding instructions, I think you mentioned Mr. Joel Dickson, but are you aware of anyone within PG&E instructing that there be zero late tickets?

A. Other than Joel Dickson?

Q. Well, first of all, do I have Joel Dickson correct? I want to be sure that I state correctly my understanding from before.

Did Joel Dickson instruct that there be zero late tickets at any time?

A. Yes.

Q. Okay. Do you know when he did?

A. Phone calls to me, you know, saying zero is the number, zero is the number. Or, you know, if somebody would get a late ticket, I would get a phone call, you know, saying --

Q. Let's -- Go ahead. I'm sorry.

A. I would get a phone call, you know, saying -- discussing that late ticket. Or the supervisors themselves might get the phone call discussing that late ticket.

Q. When you said you'd get a phone call, or the supervisor, who would they get the phone call from?

A. So it depends. So it might come from me, because Joel just called me; or it might come from Joel.

I've heard of it both ways.

Q. And you would get a number of phone calls from Joel Dickson telling you to report zero late tickets or have zero late tickets?

A. Well, it's not -- It wouldn't be reports of late tickets. It would be, Zero is the number, or Why did they have a late ticket? Do I need to fire them? Stuff like that. It was that kind of phone call. It was when it happened, when the late ticket had already happened.

Q. Oh, what to do once the late ticket happened?

A. Well, no, it's not what to do. It's, Why is it happening, why does he have a late ticket, why are they not on top of this? So the ticket had already gone late, and this was the phone call asking why that had happened. So it might go to me or straight to the supervisors.

Q. Okay. I see. Did anyone else report -- Did anyone else have those phone calls with you?

A. I never had those phone calls from anybody except for Joel.

Q. Did you hear from other supervisors who had phone calls from anyone else except for Joel Dickson?

A. Unless it was me or Jeff Carroll, the other north superintendent.

Q. What's the spelling of his name?

A. C-a-r-r-o-l-l.

Q. Okay. When you received calls from Mr. Dickson, were you pressured to not have future late tickets?

A. Yes, absolutely.

Q. Can you say more? What was the nature of those conversations?

A. Well, I mean, it's not like I documented conversations or anything. But the best that I can remember, there would be times, you know, it would be like, What do I have to do? What's wrong with that person? Do I need to fire them? Just conversations like that. That was kind of the general thing of it. You know, What's going on. I don't know, things like that.

Q. Okay. How often -- Can you give an ideas of how often you remember those conversations happening?

A. No, I don't remember.

Q. Okay. Do you remember when the conversations started?

A. Me getting them from Joel, probably as superintendent. I think when I was system integrity management I had Jeff Carroll over me, so I never received phone calls from him like that at all.

Q. Okay.

A. I don't remember ever, yeah.

Q. Okay.

A. I might be sent to a yard that was having late tickets, to try to figure out what's going on and try to make improvements --

Q. Okay.

A. -- by Joel or Jeff --

Q. Okay.

A. -- but --

Q. Okay. Would Mr. Dickson -- when he called you to talk about these late tickets, I mean, would he call you on a weekly basis about this, or is this more of a monthly thing?

A. Whenever it would happen that, you know, he would get a report on it or something. Maybe get an e-mail the ticket went late, or maybe it was on a report, or maybe it was on a QC thing, or maybe it was on this -- they have this monthly report out, you know, the keys report that goes out. It might have been on there. There's a number of ways that they're reported up, you know. I think it depends on how he heard it and when he heard it.

Q. And I'm gleaning this might have been a somewhat regular occurrence, then, where he would speak to you about late tickets, depending on all the different ways that he heard about them?

A. Yes.

Q. Okay. Did he ever threaten you with consequences if you didn't get the late tickets to stop?

A. Well, I mean, he certainly threatened me by way of the supervisor saying, Hey, can he handle that job? Do I need to fire him? Something like that. Threatening me would be like, I'm counting you on you to, you know, do your job. You know, those kinds of threats.

So it wasn't like he would say, Oh, if you don't have zero late tickets, I'm going to fire you. It wasn't that he said that to me. But it was more like, you know, I need you to get this done, and zero is the number, and, you know, Why isn't this happening? That kind of thing. Or threatening the supervisors.

Q. So when you heard those statements, did that raise concerns for you regarding your job?

A. Absolutely.

Q. Can you say more.

A. Well, I think that, you know, there was, you know, expectations to have zero late tickets. And, you know, I think that Joel wanted, you know, the locate and mark team to meet their goals. And I think that, you know, anybody not meeting those goals would be let go or moved or encouraged to leave, for sure, yeah.

Q. Do you think that you were eventually let go because of not having zero late tickets?

A. No.

Q. Okay.

A. I think that there was a whole other situation that I think kind of led into it. But, I mean, I think that when it came to the SGO project, I think that the relationship with Joel started to kind of sour a little bit. I mean, I was trying to make some changes for the team. It was an opportunity to make improvements and to try to dig into root causes.

And I think I really wanted to try to work out the late ticket thing. Instead of saying, Hey, hey, no late tickets, let's look at the root cause and see how many people does it take to get this done, and why are the employees putting notes in the ticket. They feel pressure. You don't have bad employees out there. You have employees trying to meet the expectations. And if they are not reasonable expectations, there's going to be workarounds.

And so I did a report with one of the SGO teams. I went through some tickets. I did just a random selection. I picked like three yards and I looked at tickets, printed those out. We put a presentation together. We showed him -- Well, first I had a meeting with Anne Beech, and the contractor that was working on the SGO project, [redacted], we put this process together because we really wanted to get that resolved in SGO. We wanted that to be one of the top things, is that they really gave them the manpower to get their work done. We wanted to show that the root cause was that the bottom line is manpower.

And so we put this together, we showed it to Anne Beech and her boss Vince. And they approved us showing it to him. They approved us showing him the report. And then we sat Joel down and showed him the report, and he was very upset. And he said, "What am I supposed to do with this, Katherin?" I remember that. And then he went back to Anne Beech and told her that he did not want to meet with me or [redacted] ever again, that he wanted to meet with her present. And I felt like, you know, it was stuff he just didn't want to hear and know about.

Q. Okay.

A. [redacted] actually put the report together. It was a contracting team he worked with to do those kinds of things, to work on this SGO project for improvement.

Q. Okay. And he was a contractor for PG&E. Do you remember part of his role in looking at SGO improvement was also to work with you on locate and mark improvement as well?

A. Yes. He was assigned to the locate and mark project with me. We started out with 60 items, and I really tried to pick things that would have the hugest benefit for the locate and mark team. And I think that that report was kind of the turning point, you know, in -- I didn't have anything to do with him and it was just like two months, three months, four months later that I was let go, so.

Q. I see. What was the name of the report?

A. What report?

Q. The report -- Maybe I'm using the wrong word. The presentation or the one that spawned the meeting with Anne Beech and [redacted] that was approved by Vince that you gave to Joel Dickson.

A. I don't remember what the name of the report was off the top of my head. It was a presentation on late tickets, just to kind of show that -- you know, because I think the QC department had gone to Joel and said, Hey, you know, we're still doing this. So Joel had a phone call and said, Oh, don't do that anymore, with the locate and mark supervisors, to say, That's not what I promote, I don't want anybody falsifying tickets or anything like that. I want you to do the procedure. And so he did a phone call with that.

So by putting this presentation together, I wanted to show him that him just getting on the phone and just saying that isn't going to stop the problem. Because the root cause is you don't have enough people to get the work done, and you still have a goal of zero late tickets. It doesn't compute. And then you take away contractors that they need to get the work done. You know, it's impossible.

Q. Yeah.

A. And I think that. Anyway.

Q. Please continue if you want to say more on that.

A. No, I think that's it. I think that was a turning point for it. You know, especially when he said that, "What am I supposed to do with that?"

Q. This is what Joel said to you?

A. To me, and [redacted] was in the room too.

Q. And this was after you gave the presentation that you were just talking about that Anne Beech had looked at and that Anne's supervisors had approved?

A. Had approved us showing it to Joel. And then later they were like, Well, we didn't give you approval. But we absolutely had approval. We showed it to them and they approved to show it to Joel.

Q. Okay. Your point about the bottom line being manpower, and I heard you talk about achieving the goal of zero tickets and that without the manpower that doesn't compute.

I'm hearing you say -- and this is just for the record, I'm remembering that we are on the record -- that there wasn't enough people in order to achieve the goal of zero tickets that you were told to achieve.

A. Absolutely not.

Q. Okay. Why do you say that?

A. Well, I think part of it is the nature of the work. The locate and mark, the tickets fluctuate daily. So it was great when they decided, okay, here's contractors, utilize these for the times that you need them. But when you take that away, there's no way to handle the fluctuations.

You know, they put in place, Oh, call the surrounding areas to see if they have extra people. But they're bogged down too. So there was no way to get that done without the fluctuation or the ability to have contractors to meet those peaks and valleys of your locates. And if you have no way to meet them, no resources to bring in contractors when you're heavy, you can't possibly have zero.

The other way that you can't have zero is say it truly is a phased job and you can't get ahold of the contractor in two days. You're not going to go out there and mark three, four blocks of services and mains and everything in two days. It's not possible unless you put all your crews on that one job. So you're going to have a late ticket. And I think that's okay. I mean, it may not be legally, but I'm saying the way the business ran, you should have just let the ticket go late. Zero is not the number. You're going to have the phased tickets.

You know, generally the locators would have good relationships with the contractors. They are working with them. They know you've got a water job going on out there. Maybe the water guy already sent an e-mail out saying, Hey, I'm going to have a utility meeting in two weeks. Here is the date I'm going to meet all of the utility companies out there on this date. So that lots of thing happen for phased jobs that you may not be able to get ahold of a contractor in two days. I'm saying that is one way that is totally reasonable, but you're going to have a late ticket, but it's explainable. But that's okay. I think it's okay. Just to tell the truth and be okay about it and put the information there. And, yeah, if somebody -- if the federal government wants to come in and ask you, you say, Yeah, here is what happened, you put the note in there. And zero is not the number. The number is what it is, you know.

And then the second part of that is, you don't have enough people to get the work done. You know, when you given contractors and take contractors away based on a budget rather than on what the work really needs to be to get done, or you give a budget and you take the money away and you already know you need it, then that's another way. You're going to have late tickets when you do that.

I think there was a lot of pressure on the locate and mark people and that they would leave. We could not keep locate and mark supervisors or employees because of the stress for locate and mark.

Q. Okay. Do you want to say more on that?

A. No.

Q. Okay. I'll ask a few clarifications.

Let's see. Okay. The last thing that you mentioned, that you could not keep locate and mark people because of the stress, I'm gleaning there was a lot of pressure on locate and mark people to achieve a zero late ticket goal.

A. Yes.

Q. Okay. And I'm hearing you say that it just wasn't possible to achieve that goal given the fluctuations in the workload.

Is that right?

A. Yes.

Q. And I'm also gleaning that on an individual level the locate and mark people would see that it wasn't possible to achieve a goal of zero late tickets even for their workloads; right?

A. Yes.

Q. That's true?

A. Yes.

Q. And was there pressure -- Would there have been pressure on each of them to achieve zero late tickets?

A. I think there was more pressure than just that. I think it was zero late tickets, it was zero at-fault dig-ins. So a locator could not mark something wrong and have it be their fault.

I think also the amount of work they were expected to get done. There was like pressure on minutes per ticket or pressure on how many tickets you should get done in a day. I think all three of those were stressful for locators --

Q. Okay.

A. -- and supervisors.

Q. Okay. Supervisors too.

A. And even Stephen Walker, I mean, the pressure for late tickets from him. Because he would get phone calls from Joel as well if there were late tickets. Because in 2015 he was kind of held responsible for that. '15 and '16. Probably more '16, though.

Q. Held responsible for what? I'm sorry.

A. Late tickets. So Joel opened up the war room, is what they called it, for late tickets. So Stephen, he had to come to Bishop Ranch -- and I was in there too for a while -- and monitor all the tickets and make sure we had zero late tickets.

Q. Okay.

A. He would call supervisors. If one was about to go late, he would call the supervisor or call the locator or call somebody to try to get them to you, you know, take care of the ticket.

Q. And when you say at Bishop Ranch and the monitoring of the tickets, being sure to have zero late tickets, would that mean getting the locators out in time or getting agreement from the excavators to have -- to avoid having a late ticket? Or would there be something else done in order to get to the zero late tickets?

A. Well, I think his first option was to call the supervisor. If he couldn't get ahold of the supervisor, he would try to call the locator if he knew. You know, he was pretty familiar, he'd had been working for a long time in the program and with the locators.

Q. This is Stephen Walker?

A. Stephen Walker. And then, if nothing else, he was supposed to make phone calls, but I know that always didn't happen.

Q. Okay. And I think you mentioned earlier, I think you used the word "falsify tickets," so I'm going to follow that. And please correct me if I'm not getting that right.

But did you mention the word "falsifying tickets" earlier?

A. Well, I don't know if I used the term "falsify." What I'm saying is inappropriately document.

So if you, you know -- I think the first time I saw it from Stephen Walker was we were doing a dig-in reduction program. So we'd go into a division and get people together and go out in the field. We tried to coordinate with like different crews and supervisors from other things, and work together to go out in the field to look for people digging without USAs or maybe they're digging unsafely. And Stephen came and he would print out tickets for us. And in the morning I happened to see him, and he was making notes on tickets. And I said, Hey, you're making notes on the tickets, you're not making phone calls. He said, I don't have time to make phone calls.

So that's the first time I saw it. And then later, when somebody went to relieve him, the direction was to that person to make the notes. And, you know, I said, Don't do it. And this was 2016, I think. And I said, Don't do it. Either call the supervisor, let the ticket go late, or make the phone call yourself, but do not make a note on the ticket, do not use the dropdown "renegotiated," or any other way, if you haven't actually mutually renegotiated the ticket.

So that's just kind of like the pressure, you know, I think that they all felt to do it.

Q. Let me ask it this way. So you saw -- you saw tickets have their due dates rescheduled without mutual agreement from the excavator?

A. Yes.

Q. And that was at the Bishop Ranch meeting or --

A. The first time I saw it from Stephen was in the Monterey office. And then I had asked, you know, then. I kind of knew at that point that he wasn't really making the phone calls. And I think he just felt the pressure, you know.

Q. When was that when you saw that the first time?

A. I don't remember. It was -- I mean, that would have been in 2016 when we were doing the dig-in reduction thing whenever we were in Monterey. I just don't remember exactly. I just remember sitting over there and he was making notes and there wasn't a phone. I mean, that's kind of what caught my eye, there wasn't a phone there. And I said, Hey, you're making notes without phone calls? And he said, It's not up to me to make those phone calls, the supervisors need to, or something. Or he didn't have the time. I don't remember the exact conversation. And that's when I kind of found that he was doing it. And then his relief had mentioned it to me, and I'm like, Don't do it, don't do it. So that was just another way.

Q. I get you. Just a couple of questions.

Was Stephen making the notes directly on the tickets?

A. Yes. Renegotiated them.

Q. And he wasn't -- When he was making the notes about renegotiated, that means that he was changing the due dates on them?

A. Yes.

Q. And he was doing that without contacting the excavators?

A. Yes.

Q. Okay. And do you know if anyone else was contacting excavators instead of him?

A. No. I mean, I think he would make them -- he would still make the phone call to the supervisor or the locator and tell them, Hey, you got this ticket, you know. And I wasn't involved in that, so I don't really know, but I understand that to be probably his process and that he would expect it to be addressed. It wasn't like, I'm going to make this note on it and it's not going to be addressed. I think he was just trying to delay it so it wouldn't be late, and then he would get ahold of the supervisor and address the ticket.

Q. And when he got ahold of the supervisor, do you know what happened -- Let me ask, because some of this is you talking about him speaking with the supervisor.

Were you there hearing him having any of the conversations with the supervisors about this?

A. I was in the war room quite a bit, so I would hear him call a supervisor and say, Hey, you're about to have a ticket go late. Or Hey, you need to address this ticket number. So I did hear him make phone calls to the supervisors or to the locators if he couldn't get ahold of a supervisor. I did hear him make those phone calls to them.

Q. And when he did that, when you heard him make those the phone calls, were those the times, while he was making the calls about a ticket going late, where he would change the start times -- or change the due dates, rather?

A. So I think when he would do it was when he couldn't get ahold of the supervisor in time for the ticket to not go late, or, you know, if he felt he wasn't going to be able to get ahold of them in time, or maybe it was after hours, or maybe it was 6 o'clock in the morning and the ticket was due at 7:00.

You know, a lot of times when those tickets were due at 7:00 in the morning, you know nobody is going to get to them. Somebody should have made those phone calls the day before.

Q. And why do you think he did that? When you say you think that's when he did he that, why do you think -- why are you thinking that? Are you sure that that happened?

A. I'm positive that happened.

Q. Okay. I just want to clarify, because you said "I think that's what he did."

A. No, I'm positive that's what happened.

Q. Okay. Understood.

A. In two ways. Like I said, in the way that I saw him do that. And the second way was by his relief. I mean, they were instructed to do the same thing. So I think that that definitely happened. And, you know, I think it was another workaround, another way to not get late tickets.

It's like the same thing as the locators putting notes in that they don't -- It's all about getting that zero late tickets. And I think Stephen got put in an impossible situation. Here, he's responsible -- there's one of him, and he's responsible for all, you know, 600,000 tickets that come into PG&E. And if one of them goes late, at that time in 2016, I think he felt like it was his butt on the line or his job on the line if he got a late ticket. Because at that point I think Joel put him -- you know, he was now that layer. Instead of calling, you know, me about the ticket or calling, you know, the supervisor, I think Steven started taking some of that heat for a late ticket, as the administrator of IRTH. It was kind of like, that's your job now, no late tickets kind of thing.

Q. And the administrator of IRTH, are you referring to IRTHNet?

A. Yes.

Q. What does IRTH stand for again? That's

I-R-T-H; is that right?

A. Yes.

Q. And just generally, as I understand it through our communications with PG&E, I understand that that is the database that's used to keep the tickets, to collect the tickets and keep them.

Is that right?

A. Well, they're kind of like our -- It would be like getting a bottle of water and somebody else does your labeling. It's like a secondary person that USA calls them in, but they're not necessarily in our format. So IRTHNet takes those, puts those in folders for us. They sort them by how we direct them to.

You know, it's kind of like our organizer, our file system, our everything. So we give them direction. We use their program. It's their program that the tickets go into, and then we tell them how within their program we want to see them: by divisions, by folder, you know.

Q. Yes, I follow. Okay. Thank you.

In terms of -- You mentioned Stephen's relief, and I think you heard from them that they were doing a similar practice to what you saw Steven do.

A. They weren't doing it. They came to me and asked about that, that that was the direction that they were told.

Q. Okay. They told you that they were told -- they were given direction to change the due dates on the late tickets even if they hadn't reached the excavators or the people contacting excavators?

A. Yes.

Q. Okay. Did you have an idea of -- Do you have an idea of how many times this happened?

A. How many times?

Q. How many times the due date was changed without reaching the excavator.

A. I have no idea.

Q. Okay.

A. I know the backup person did not do it.

Q. Okay. From your experience seeing Stephen and talking with Stephen, do you think -- do you have a sense of whether they were talking about dozens of times or hundreds of times or thousands of times?

A. I don't know. My guess would be probably hundreds for Stephen, and then it goes down the line and gets more and more, based on, you know, the locator probably did it thousands, the supervisor. So it's like the food chain. The locator missed it and didn't make the note, so then the supervisor would probably try to catch it. Then if that didn't catch it, then it would be Stephen trying to catch it. So it's kind of like filtered up. How many dropped through the crack. That's basically what it would equate to, I think.

Q. Okay. Do you think -- So in terms -- I don't want to ask if you think.

Would each ticket that was identified as late have this happen where they would have this start time changed at a certain point?

A. Yes.

Q. Okay.

A. And they'd still miss a few, but it wouldn't be near as many as when you have all those layers trying to catch them.

Q. Okay. And that was -- Just for clarity: This was the start time that would get changed without receiving mutual agreement from the excavator; right?

A. Yeah.

Q. So when you talked about the layers, was there a process put in place in order to change the due dates without having mutual agreement?

A. No.

Q. Okay. But instructions were given to a number of people to do this?

A. Well, I mean, I think that that was -- I mean, that's difficult because, I mean, it's not like there was a procedure written to do that. The procedure was just the opposite. But I think workarounds happen. So to say where they all come from, you know, they just happened because if zero is the number, you're going to get workarounds and they start to happen. If you're going to get in trouble for something, if you're worried about losing your job, if you're worried about, you know -- I think that's why Stephen did it. I think he was afraid for his job. I think that's why the supervisors did it, and I think that's why the locators did it. You know, I think there was just pressure.

Q. Do you have an idea how many people might have done this?

Let me ask you this way. Based on what you saw, how many people would have changed the due date without reaching the excavator?

A. I don't know. I think the majority.

Q. The majority of the locators and the majority of their supervisors?

A. Yeah. I think there were probably some that maybe wouldn't, and then somebody else would do it for them; you know, seniors in place to catch them. So that's another layer. So they have the locators, then every yard has a senior locator, so I'm sure they would do it if not -- but, like I said, we did put a process in place to try to catch them, saying, Hey, your clerk can make phone calls for you. I mean, that was one thing I actually worked on, to try to get it done the right way, to get the phone calls made, say, Hey, when you get overloaded, use your clerk, let them help you make the phone calls.

Q. And was that input received? Was that input received by the people under your supervision?

A. Yes.

Q. Did they try to do that?

A. I think some of the yards were successful at it. I think some of the clerical team was onboard and worked closely with the locators and they did do that. I think others did not, you know. I don't think some of the clerical team was as resourceful or as connected or, you know.

Q. In your experience with what you observed, was the clerical team -- where it was tried to have the clerical team call the excavators and ask for mutual agreement to change the due dates, was that enough to meet the number of tickets and to --

A. No. No, because, you know, I think a lot of them, you know, the contractors that call the tickets in, they're going to work. And that would happen sometimes. And then I've actually heard locators say, Hey, you can't start work if I don't have marks on the ground, so I don't care if your 48 hours is due or not, you can't start without marks on the ground.

So, you know, I think, no, it wasn't enough to get the work done. So I think they still felt like, Well, if I can't get there, I can't get there.

Q. Okay. Do you want to say more on this?

A. No.

Q. Okay. Let me just do a time check quickly. I see that it's almost a quarter to 1:00, and I wonder if we can go off the record for a moment.

(Off the from 12:42 until 1:47.)

MR. GRUEN: If we could go back on the record, please.

Q. Okay. So we've just finished our lunch break and we're back on the record now.

Ms. Mack, I wanted to follow up a little bit. Before lunch you mentioned a couple of points about a meeting in which you gave a presentation about late tickets and you talked about manpower, and I think you talked about a presentation that was given authorization from Anne Beech, that you were given authorization to present to Joel Dickson, about the issue of late tickets and the limited manpower and that there wasn't enough manpower in order to avoid having late tickets.

Am I getting that right?

A. I mean, I can't remember the whole presentation, but definitely it was all surrounding late tickets and the fact that they were still being documented incorrectly.

Q. Okay. So then Joel Dickson was told in that meeting that there were start times -- or, excuse me, due dates on the late tickets that were changed without agreement from excavators?

A. Yes, without proper notation.

Q. Without proper notation. Okay. And did he say that this was okay as a practice to continue?

A. No.

Q. Okay. What did he say in response to this?

A. He just said, "What am I supposed to do with this, Katherin?"

Q. Did he tell you to stop?

A. No. That was the whole meeting. He left.

Q. Did the practice that you told him about, the incorrect tickets and the incorrect due dates, did that change in any way after your meeting?

A. So I didn't look at it after that, but I have continued to hear from different people, you know, certain locators, that they're still doing that.

Q. Okay. To your knowledge did Joel Dickson instruct people to change the due dates on late tickets without getting agreement from excavators?

A. No.

Q. To your knowledge did Joel Dickson provide instructions that left PG&E employees with no choice but to change the due dates on late tickets without getting agreement from excavators?

A. I think he did. I think, you know, because of the pressure and the way he was. I mean, we had several meetings. In fact, one of them, because of the inappropriate behavior from him, we actually met with John Higgins. I think it was five of my supervisors met with him to try to discuss what kind of behavior they were getting from Joel, to try to get it to stop.

Q. And did you inform Joel Dickson that his instruction was leaving PG&E employees with no choice but to change the due dates on late tickets without getting agreement from excavators?

A. I think my instruction to him was: Just because you're telling them not to, you're not getting to the root cause, and people are going to continue to do this because they don't have enough manpower to get the work done. So, you know, you can't always get ahold of the contractors, so you're leaving them with no alternative when you say zero is the number.

Q. Leaving them without an option other than changing the due dates on the late tickets without agreement?

A. Yeah. I feel like they felt they couldn't get a late ticket and I think that, you know, feeling that way is what caused them to do that.

Q. Did you hear PG&E employees who were recording the tickets tell you that they felt like they no option?

A. Absolutely.

Q. And by "no option," that means no option but to change the due dates on the late ticket without getting agreement from the excavators?

A. Or phase them inappropriately or close them out. It's not always changing the date. It's could be calling them three times and then closing the ticket out without locating it, as no response from excavator, when they should have just gone out and located. There was no reason that they really needed to contact them other than to say, I can't get to it. And then the contractor has to re-call that ticket in, and then they get another 48 hours.

So I think there's different ways that that happens besides just changing the date, is all I'm saying. But I don't think it's the locators' fault or the supervisors. It travels downhill from, you know, leadership.

Q. Did you tell Joel Dickson about the input you were getting from the locators about these problems that you just mentioned?

A. Oh, yeah. But he -- I don't know, he just -- I don't know, he just never felt that that was the issue. I don't think he -- I don't know. I can't speculate what he thought.

I did bring it to John Higgins' attention, and John said, he told me, I never want anybody to do that. So I don't know if it generated -- the pressure generated above Joel or started from Joel. Because John Higgins was his boss, and I never got that information or direction from John Higgins.

Q. But you said you talked with John Higgins.

A. I did.

Q. And John Higgins was Joel Dickson's direct supervisor at the time?

A. Um-hum.

Q. Okay. And you said "Yes" to that, just for the record?

A. Yes.

Q. And just for clarification: You told John Higgins that Joel Dickson's instructions was leaving PG&E employees with no choice but to change the due date without agreement from excavators?

A. What I said was, We're not addressing the root cause. The root cause is that we don't have the manpower and the procedure, you know, doesn't allow for it, and they felt stressed or nervous or, you know, like they couldn't get a late ticket. We talked about that, you know, that this is what's going to happen if we do that and don't provide them with the manpower.

Q. And what did John say in response to that when you identified that root cause?

A. I think both times that I had that conversation with him it was around, you know, I certainly am not directing anybody to do that. I don't know where that's coming from. I mean, that's what he said to me, so I don't know.

Q. Did he indicate to you in any way that that root cause was okay to continue?

A. Well, you know, what I do know is that they never received the manpower to get the work done, no matter what we did. So I don't know. I just think that no matter what we said to people, no matter what report there was, no matter what came out, it didn't change those things that were happening.

Q. And John Higgins never told you -- In response to both times you identified the root cause with him, he never told you that had to stop?

A. No. I think, I mean, it was not a long conversation, but the conversation was, you know, It certainly wasn't my intent, something like that. I don't remember the exact verbiage.

But, you know, I think the team meeting that they had at breakfast where supervisors came in and discussed with him, I think that was some more of, you know, them trying to inform -- and that was directly from them trying to inform John that, Hey, the pressure, the way we're dealt with is not okay, being threatened to be fired or being threatened with this, even if it's, you know, not "I'm going to fire you," but you do everything that says they're going to fire you, then you know.

Q. You told John Higgins this, what you just mentioned to me?

A. Yes. Both of my supervisors, they discussed inappropriate behavior from Joel and the pressures and the way they were treated.

Q. Which supervisors?

A. I believe there was about five of them there. I want to say it was Shawn Oliviera, Scott Murphy, Ron Yamashita, somebody from the north. I would have to go back to my calendar. I'm not sure of all the names, but there was around five or six supervisors. And I know there was one from the north too, not just the south.

But it wasn't just about tickets. It was the overall threatening kind of behavior that people felt.

Q. From Joel?

A. Yeah.

Q. Okay. Just so I get the names right: Shawn Oliviera is S-e-a-n, O-l --

A. S-h-a-w-n, I do believe.

Q. O-l-l-i --

A. O-l-i-v-i-e-r-a. I'm not exactly sure.

Q. Okay. Scott Murphy: S-c-o-t-t, M-u-r-p-h-y?

A. Yes.

Q. Ron Yamashita: R-o-n, Y-a-m-a-s-h-i-d-a?

A. -- -t-a.

Q. Y-a-m-a-s-h-i-t-a?

A. Yeah, um-hum.

Q. Okay. Thank you.

A. I'm trying to think of who else was there.

Q. Take your time.

A. I'm trying to think of who was there from the north. I just can't remember at the moment who else was there.

Q. Okay. Do you recall some of the north supervisors, just not who was necessarily there, but I'm just wondering if that might jog your memory.

A. I can't remember.

MR. GRUEN: Let's go off the record for just a moment.

(Off the record from 1:59 until 1:59.)

BY MR. GRUEN:

Q. If at any time the names come back to you, please feel free to jump in and let us know.

Okay. And I think just so I'm clear: The staffing or the manpower you described after you discussed root cause with John Higgins, you didn't see any changes in manpower made available for locating and marking?

A. No. I mean, the only time I remember the increased staffing was the one increase that we got, and I do believe that that conversation was afterwards. I mean, there was always conversations about manpower, but those two particular conversations that I can think of with John were -- I think those were after that manpower conversation.

Q. The manpower increase was after the conversation you had with John?

A. No, I think that was prior.

Q. The manpower increase was prior to the two conversations you had with John?

A. Yeah.

Q. Okay. Do you remember approximately when you had the conversations with John about root cause?

A. No, I don't. I really don't.

Q. Okay. Do you remember approximately the date that you gave the presentation to Joel that Anne Beech approved?

A. No. It would be on my calendar, but I don't remember exactly when that was.

Q. Approximately?

A. So it would have been maybe July. I mean, I'm totally guessing, though.

Q. Of which year?

A. Of last year.

Q. Okay.

A. No, it wouldn't have been July. It would have been later than that.

No, July of last year.

Q. But you're confident it was last year?

A. Yes, because it was while I was on the SGO project, which I was on last year from February until the end of the year. So it was definitely last year.

Q. Okay. While you were on the SGO project.

Did others on the SGO team work on the presentation with you?

A. [redacted] is the one that put it together.

Q. [redacted], okay.

A. So what happened, you know, we're trying to take the top things and really fix it for the locators and the supervisors. And when he went out into the field, that was one of the things he caught too. He's like, you know, If we do nothing else, we have got to fix this late ticket and this manpower thing. And I was like, That's a tough one. And he said, Well, let's see what we can do. And I said okay.

So we put this presentation together and we thought, well, if we hit it from all avenues, if we show them that the late ticket thing is still going on, if we show what will happen if it continues. And then the third approach was what it really takes to get the tickets done. We thought then, okay, it's another way.

But, you know, I kind of knew in my heart it wasn't going to do anything, because I've put together numerous things to try to show that over the years. It's just, you know, like I said, when we got extra help, it wasn't necessarily about the manpower but about the budget, you know, and they can take it away any minute. But --

Q. Yeah, go ahead. I'm sorry.

A. I just said "but." I don't know. I don't think it really helped.

Q. Okay. You mentioned Vince before lunch as Anne Beech's supervisor? I think I heard you say Vince.

A. Vince Gateo.

Q. How do you spell his last name?

A. G-a-t-e-o.

Q. Did he authorize the presentation as well?

A. Yes. Both of them saw it and approved us showing it to Joel.

Q. And what is Vince Gateo's professional relationship to John Higgins -- sorry, to Joel Dickson?

A. Peers. I believe Vince reported directly to John or directly to even higher up than him. I can't really remember the reporting mechanism. Either to John or one level up.

Q. But you're confident in Joel and John being peers?

A. Yes. They are both directors.

Q. Yes, understood. Thank you.

Did Vince or Anne give you any negative feedback about the presentation?

A. No.

Q. Did they tell you to change it in any way before you presented it to Joel?

A. I don't remember any changes.

Q. Okay. Who do Vince and Joel directly report to, or who did they directly report to at the time of the presentation?

A. I know Joel reported to John Higgins. But Vince, I can't remember if he reported to John Higgins or if he reported directly to Jesus Soto. I'm not really sure. I just can't remember.

Q. Okay. To your knowledge was anyone instructing Joel Dickson to have a goal of zero late tickets?

A. I never saw his goals.

Q. Okay. Then you don't know if Joel Dickson was ever instructed to give others instructions to change due dates without getting agreement from excavators?

A. No.

Q. You don't know that?

A. Um-hum.

Q. And to your knowledge was anyone instructing Joel Dickson to issue instructions that would require changing due dates on tickets without getting agreement from an excavator?

A. I don't know.

Q. You don't know, okay.

To your knowledge was anyone pressuring Joel Dickson in any way to issue instructions that would require changing due dates on tickets without getting agreement from an excavator?

A. I don't know.

Q. Are you aware of instances provided by PG&E to meet the goal of zero late tickets?

A. Well, I mean, if it's on a metric and it's on your performance, you know your bonus is based on meeting your goals, so I would have to say yes.

Q. Okay. And if you exceeded the goal of having zero late tickets, if you met the goal of -- Let me start over, excuse me.

If you met the goal of having zero late tickets on your performance evaluation, would that impact your bonus?

A. It would be meeting one of the goals. There are other goals on your performance, but that's one of them, so you would have met one of them. So it definitely would impact it whether you --

Q. Would your bonus depend on meeting all of your goals on the performance evaluation?

A. Yes.

Q. Okay. And if you didn't meet all of the goals, would you get a bonus?

A. Yes. It's just a matter of how much bonus you'd get.

Q. So meeting each goal -- the amount of your bonus depended on your meeting each goal?

A. Yeah. So it's in boxes. So you're either in a lower box, a middle box, or a high box, you know, all the boxes. And so, you know, you meet all your goals and everything is going well, you're going to be in an upper box. Maybe you didn't meet -- maybe you met most of your goals but not all of them, whatever, then you might be in a middle or lower box depending what the circumstances are.

I mean, one thing is not supposed to affect everything, per HR. And I think, based on -- That's not always true, though.

Q. Okay. Could you -- Could the boxes also apply if you exceeded your goals on a performance evaluation?

A. Yes. I mean, the high box is exceeding your goals.

Q. Okay. I see. That's what it means?

A. Yeah, that's exceeding. Just meeting would be just middle. You'd have to exceed your goals to be in the upper box.

Q. I see. Okay.

And if you exceeded your goals or got in those upper boxes, would that impact your bonus as well?

A. Yes.

Q. And was each upper box that you got considered

a factor in the amount of bonus that you received?
A. What box you're in? Absolutely, yes.
Q. Okay. So in the case of meeting the goal of zero -- meeting or exceeding the goal of zero late tickets, that would be a factor in the amount of bonus that each supervisor or employee received?
A. Potentially.
Q. Potentially. Why not concretely?
A. Well, because I think if, I mean, you're put in the box based on your supervisor and, you know, I think how they rate it, you know, how they look at it is part of it too, so.
Q. So go ahead. I'm sorry.
A. So, I mean, that's why I say it could impact it or could not. Because I think if you had a lot of late tickets, you're not going to be in the high box for sure. I mean, that's part of it. But maybe there were just a few, you know. A supervisor might -- I mean, a superintendent or a director might be able to look over it, but it just depends on who's rating; right?
Q. Yes, I follow.
And so I think from your last point I gleaned that there's some subjectivity in whether you've met or exceeded your goals.
A. Yes.

Q. And would a supervisor then be able to determine how much bonus you got, depending or her or his judgment about whether you met or exceeded your goals?

A. Can you repeat that?

Q. Yeah. I didn't word it very well.

Let me just ask it concretely. If Joel Dickson, for example, decided that someone met their goals regarding zero late tickets, could he have a say in how much bonus they got?

A. Oh, absolutely he had a say in that. I can use myself as an example. So according to HR, with PG&E, one thing is not supposed to be a deciding factors in your whole overall evaluation.

Q. Okay.

A. But when we had that situation with me that we discussed, where I gave a resumé to them and they said Oh, hey, you're not supposed to hire people beneath you, right, well that's one thing that happened, but it totally affected my whole -- I got no bonus because of that one thing, even though I'd succeeded in every other category.

That's an example where it's subjective. So if Joel decides that that one thing matters, then that one thing matters, and there will be no bonus. That's why I say subjective. It's not supposed to be one thing, according to HR, but it happened.

Q. I think I understand what you're saying there. But in your case you did not receive a meet expectations for the goal for zero late ticket and you did not receive an exceeds expectations for the goal of late tickets, but you met all the other goals on your performance evaluation, and for that performance evaluation in that case you received zero bonus; is that correct?

A. No, I didn't say zero tickets. I was talking about another one. I said myself with the issue of giving the resumés. So with that instance I said, okay, they used that one thing to say you're not getting it.

So I'm saying it's up to Joel and his discretion whether he's going to take that one thing or not. Even though HR says one thing is not supposed to matter, it's up to Joel to decide, you know. We might try to convince him a supervisor deserved it even though they had late tickets, but if he decides, you know, they had too many, I don't think he's really doing his job if he had that many late tickets, he's not managing his work well, then, no, he's not going to be -- you know, it's almost a matter of how much we can convince him or show him or whatever.

Q. Okay. So regardless of what the performance evaluation shows, is there discretion about how much bonus to give a supervisor?

A. Yes.

Q. So you could have an exceeds expectation on every box, you could have the upper box for every goal and get no bonus?

A. No, there's going to be -- I mean, if you're actually rated like that, you know, you're going to get -- exceeds, you're going to be in the upper box.

But, generally speaking, if somebody doesn't want you to be there, whether it's your supervisor or your superintendent, one of those boxes is not going to be in that upper box. There's going to be some reason, you know.

Q. Okay. Do you know of any supervisor who reduced an employee's bonus because of their evaluation on the zero tickets goal, zero late tickets goal?

A. Not necessarily. Not in particular, no.

Q. Okay. Was there any -- Generally speaking, do you know if the zero late tickets goal impacted people's bonuses?

A. Oh, yeah, because it was goal. So if one of the supervisors had an area where there was a lot of late tickets, that would certainly be in the discussion of when they're talking about -- you know, in the calibration.

Q. Can you speak to how much of an impact the zero late tickets goal had on people's bonuses.

A. I wouldn't know. I wouldn't really know.

Q. Would Joel Dickson be able to answer that?

A. Yeah, I'd think he would know.

Q. Okay. Who else had discretion about the zero late tickets goal and what box to check about that goal, meeting or exceeding expectations or not meeting expectations? Which supervisors would check that box?

A. I'm not sure what you mean by "check that box."

Q. Which supervisors would fill out the performance evaluation for meeting or exceeding the zero late tickets goal?

A. I would be filling out for all my supervisors where I think they fall, and then Jeff Carroll would be filling out the ones for the north side, where they fell. And, of course, Joel would be filling out mine and Jeff's for ours.

Q. And yours, the way Joel filled out yours and Jeff's depended on how well your supervisors did in meeting their zero late tickets goal?

A. In part.

Q. What else?

A. I mean, it was our goal, too. We had a lot of other goals. It wasn't just that one goal.

Q. Yes, I follow.

But for that zero late tickets goal, what else did that depend on?

A. That was the only goal, zero late tickets. For that. It was a goal in itself, as far as I remember. I don't remember anything else there.

Q. Okay. Are you aware of other incentives provided by PG&E to meet the goal of zero late tickets?

A. Well, so I mean I don't think it's looked at in just the one thing, you know. I mean, there's incentives for doing well, you know, so I think it's just a part of it. It's not just one part, so.

Q. Okay, good.

Were you ever discouraged from -- Let me ask it this way.

Was any supervisor, to your knowledge, ever discouraged from instructing PG&E personnel not to change the due dates without agreement from the excavator?

A. Say that again.

Q. Was any supervisor instructed from another supervisor, say, someone higher up at PG&E, was anyone instructed -- Let me say it again.

Was anyone discouraged from instructing PG&E personnel to not change the due dates?

A. Well, I mean, I know after there was a meeting, so I think this all came up -- I think Jesus Soto went to a yard and was doing a field visit, and the discussion came up. And Jesus brought in Stephen Walker and had a meeting with him to talk about it. And Stephen was very honest to say, Yeah, this happens all the time. And I think Jesus -- this is what I heard -- had a conversation with Joel. And Joel did have a phone call with the supervisors to say, Hey, you guys shouldn't be doing this, you know. And that was, I think, late last year, you know, probably from in November or December. And I'm guessing about the timeframe. So I think that happened late in the year.

Q. So let me clarify. So Jesus met with Stephen Walker. And Steven was saying there's this problem with tickets getting changed, the due dates on tickets getting changed?

A. Well, I mean, Jesus was asking about it, yes. So Stephen told him, Yes, this happens. I mean, I wasn't in the meeting. I don't know exactly what was said, but I know that that was the end result, because Stephen was working with me, because I was on the SGO project, because we were talking about creating better reporting mechanisms. And Stephen said well, I just met with Jesus, and he wants some kind of report developed regarding, you know, renegotiated start dates, or something like that, to bring more visibility to that.

Q. How did you learn about this meeting?

A. From Stephen.

Q. Stephen told you that he spoke with Jesus?

A. Um-hum.

Q. And did Stephen tell you that in his meeting, in his conversations with Jesus, he was instructed to not change the due dates?

A. No, I don't have any knowledge of that.

Q. Okay. Okay. But Stephen told Jesus that there was a problem where some of the due dates on late tickets were being changed even though there wasn't agreement from contractors, from the excavators?

A. Yes, to my knowledge that's what Stephen had -- Yeah.

Q. And it's your knowledge because that's what Stephen told you he said to Jesus?

A. Yeah. I don't know how open he was with him. I mean, I know Stephen was in the same boat as the locators. I mean, he felt all the pressure that they felt, he was always worried about his job and what was going to happen to him, so.

Q. After Stephen told you this, about this conversation he had with Jesus, did you notice any changes in the practice, anything different from the practice of changing the due dates without agreement from contractors? Did that stop?

A. No. I think they started changing more over to the call them three times and close them out, no response from excavator.

Q. Okay. When did Stephen tell you about his conversation we just discussed, with Jesus?

A. I don't remember exactly when he told me about it. It had to be sometime between -- I'm really guessing. I really don't remember the date. Sometime at the end of last year sometime.

Q. But you're confident it was last year?

A. Oh, yeah. Absolutely, yes.

Q. And you're confident about the point that after Stephen told you about his conversation with Jesus, then the practice started of calling the excavators several times and then closing out the ticket?

A. Um-hum. I think that was happening before that, but to a lot less degree. So I think it just became the new way to not have late tickets. And it wasn't -- I mean, I was already on the SGO team, so I wasn't in any direct supervision to supervisors at that point. I just heard about, Hey, that's the new way.

Q. From Steven?

A. No, from some locators. And I tried to tell them, You guys, you just can't do that, you know. And so -- but --

Q. Go ahead. I'm sorry.

A. It just, you know, it's like, Well, that's what I'm directed to do by my supervisor. So I'm like, Okay, but, you know what, when it comes down to it, you have to look at your procedure. What does your procedure tell you what to do? If you follow that procedure, that's what's going to keep you out of trouble.

Q. And when you say "follow that procedure," are you talking about PG&E's procedure to not change due dates without mutual agreement from the excavator?

A. I'm talking about the manual, the locate and mark manual, which gives them that direction exactly what they're supposed to do. There's a whole process in there for that. We did that to help, I mean, to give them direction: Okay, if you can't get ahold of them, then have your clerk make phone calls, call your supervisor, do those things.

But it didn't help because they didn't have the manpower to get the work done, so.

Q. Okay. Are you aware of any instruction provided from management -- anyone, supervisors, directors, Jesus, Nick Stauropolous -- to instruct that the locators call several times and then, if there was no response from the excavator, to close out the ticket?

A. I think -- I mean, I don't know where that came from, other than I do know that it did happen at a supervisor level, so supervisor to their employees. Because I did question a couple locators that asked me about it or commented on it, and I asked them about it and they said, That's what my supervisor told me to do. So I assume it came from a supervisor level.

Q. Do you know which supervisor?

A. Not off the top of my head.

Q. Okay. Was it in the north or the south?

A. I think it came from both sides.

Q. Okay. Did you identify that problem to anyone else within the company, within PG&E?

A. I'm trying to think who. Stephen Walker was familiar with that practice. And the other people, I don't remember anybody in particular.

Q. Okay. But you did identify it to supervisors?

A. Yeah. But the thing is, then I think by that time I don't think anybody wanted to listen to that. Because, you know, I don't know, it's like I'm beating a dead horse kind of thing, if you know what I mean. It's like --

Q. Were you out of your role, were you doing locate and mark work by the time you identified that problem?

A. I found out about that, I think, when I was on my -- after they'd laid me off. That's when I found out about it, so.

Q. Okay. Do you know if anything was done to stop that problem from happening, aside from you instructing people not to do it?

A. No. It's still happening.

Q. It's still happening. Okay.

Do you have an idea how widespread the problem is?

A. No, I don't know. I'm not in contact with all the supervisors like I was before. A few of them I am, but not many. So I know it still happens, but I don't know how bad it is.

I would imagine that happens more in yards that don't have enough people to get the work done. So it probably is impacted by how much work comes in and how many employees you just lost. Whenever the manpower is low, that's where it's going to be the most prevalent.

Q. Okay. And your imagination is based on your experience, including that experience that you had in the report? You're imagining that problem would be the greatest where the manpower shortage is based on your experience, your ten-plus years of experience doing locate and mark work?

A. Yes.

Q. Let me just switch questions. I have another set of questions I'm looking at.

Do you recall a meeting scheduled in about September of 2015 with the regulatory affairs group regarding the gas distribution records Order Instituting Investigation?

A. It wasn't an audit, it was an OII?

Q. Yes. In this case I'm asking specifically about the Order Instituting Investigation, or OII, just for the record, regarding PG&E's gas distribution records.

A. What was the timeframe again?

Q. Approximately September 2015.

A. Not offhand.

Q. Do you remember if I mention the name Sumeet Singh? Do you remember a meeting in the fall of 2015 with Sumeet Singh regarding the gas distribution records OII?

A. In 2015?

Q. Yes.

A. I don't remember.

Q. Do you remember anything related to a conversation regarding the gas distribution records OII?

A. Well, if you have more information, I mean, I was involved in a lot of OIIs, because I was their SME for dig-ins and things. So unless you have -- If you tell me what it was about or what the records were requesting, then I would know what you're talking about.

But I was the SME, so I did every OII requested. So I was on the Bakersfield field dig-in, Fresno dig-in. I would have to know what they were requesting.

Q. Okay. I follow.

Let me ask this. I get your point. Were you ever asked your opinion as to whether PG&E practiced safely as a company?

A. No.

Q. Did you ever give anyone your opinion about whether PG&E practiced safely as a company?

A. To internal or external?

Q. Internal.

A. I'm sure I had lots of conversations about that.

Q. I'm getting in part the presentation you made. Would it be safe to say that that was -- the presentation that Anne Beech authorized to give to Joel Dickson -- was about one area where PG&E's safe practices were in question?

A. Yes.

Q. Okay. And the timing of that meeting, remind me approximately the time of that meeting, if you don't mind.

A. I'm thinking it was probably sometime around July of last year.

Q. Okay. July of last year?

A. July, August, somewhere around -- because I know I was already on the SGO team, so it had to be sometime between June and September. Sometime between that timeframe it had to have been.

Q. Okay. And you were let go from your last locate and mark assignment in approximately January or February?

A. Yeah.

Q. Okay.

A. January 16th. I had 60 days to still be on PG&E's books, but I was not on PG&E's property or working for anybody. I was supposed to be looking for other work.

Q. Okay. So between September and January -- correct me on this -- I had understood earlier this morning that you mentioned that the meeting, the presentation, had to do with your being let go from your locate and mark assignment where you were let go in January.

Did I understand that correctly?

A. I think that it was a part of it. I think it was part of the downward -- how Joel -- I think it hurt my relationship with Joel to give him that presentation.

Q. Okay.

A. I think it was a piece of it, but I don't think it was everything. I think Joel was just, you know -- I think he was looking for somebody else, you know, by that point. He didn't say that to me because, I mean, it went from, Trust me, I've got your back, I'm going to take care of you, to I'm letting you go.

Q. So what changed?

A. I think, you know -- I think he wanted me to drive what he wanted to drive. And, you know, especially on that SGO project I was driving, you know, the improvement that needed to come from the field. I presented him with 60 items, you know. And I knew they wouldn't all be approved, but I was hoping for the top ones. But the number one that we wanted was late tickets and manpower, and they were both taken out of it, you know.

Q. You mentioned -- Go ahead. I'm sorry. Do you want to say more?

A. No. Like I said, I think it was part of it. To answer your question, I think it was piece of it. You know, he really likes yes men, you know, and I wasn't. And, you know, I really tried to drive efficiencies and drive what he wanted as direction, what was good for the whole company for sure. But at the same time there's a balance between, you know, when you're driving something that's really not the root cause and not going to help anything. And I think he didn't want to dig deep into any of that kind of stuff. You know, he's just like, Make it go away, Katherin; make it go away, that kind of thing.

Q. What else do you think led to your being let go from the locate and mark group?

A. I don't know. I mean, there was nothing ever said to me about my performance on SGO, never ever said to me on anything else. It was never anything, so there was no reason for it. He just said that they eliminated my position.

Q. What kind of performance evaluation did you get for your work on the SGO team?

A. I was rated meeting expectations.

Q. And that went through the end of last year;

right?

A. So that was my mid-year review. So I didn't get an end-of-the-year review, because that would have happened right around February or March. That would have happened right around February or March, so instead of getting that, I got a, you know, package instead.

Q. A package?

A. Laid off.

Q. Okay.

A. So that happened January 16th. Your other performance review would have happened after that.

Q. I see.

A. So I never got the end-of-the-year review.

Q. I follow. The last one that you got was the middle of the year?

A. Yes. And that was meeting expectations.

Q. Okay. I follow.

So I think I'm hearing this, but you weren't ever given any indication that your work did not meet expectations?

A. No.

Q. Okay. And we're talking about your work on the SGO team specifically?

A. Right, right.

Q. Okay. And I think you said PG&E did not tell you why you were specifically reassigned away from the locate and mark team. I understand they told you that your position was discontinued --

A. You mean when I was laid off?

Q. Yes.

A. They were eliminating positions, and I know that was a director's choice, so it was Joel's choice.

Q. So did they lay off anyone else in the locate and mark group with your level of responsibility?

A. There was one other manager that was let go.

Q. Who was your peer?

A. Who was my peer, yeah.

Q. Okay. Anyone else that was -- any other supervisors who were let go?

A. No, huh-uh.

Q. All the rest were locate and mark?

A. Um-hum.

Q. What is the name of your peer who was let go?

A. His name was -- I'll have to think about that a minute. He was somebody else that Joel didn't appreciate. I'll have to think about his name.

Q. Okay. How long had that supervisor been working for PG&E, do you know?

A. I think they had been working about five years.

Q. Okay.

A. David. I'll think about it. David something.

Q. Okay. Okay. Got it.

Let me ask you about -- Let me switch gears. Bear with me a moment.

Okay. Are you aware of other manners in which PG&E has not properly followed locate and mark requirement or procedures?

A. Say that again.

Q. Yeah. Other ways where PG&E has not followed locate and mark requirements.

A. Yes.

Q. Okay. I wonder if you could list them briefly, and maybe we'll explore them as we have time today.

A. Okay. Calibration records would be one.

Q. Okay.

A. Contractors using equipment that's not approved.

Q. Okay.

A. There were employees that were not OQ'd, contractors that were not OQ'd, that were performing locate. I mean, it's such a huge question because things come up all the time.

Q. It is. It's one of the broadest questions that I have in mind for today. I mentioned there would be broad ones, and I appreciate your point about how huge a question it is.

I think let me ask you --

A. I mean, just to think about it, I've worked for the company in the Locate and Mark department for twelve years, so that's a long time, yeah.

Q. I appreciate you've no doubt seen a tremendous amount there.

Okay. One of the things that we understood from our conversation with PG&E was that there was a problem with excavators who were doing pole replacement who would call 811 and that PG&E, I understand, had a memo in place to not respond to those particular tickets, that the gas -- specifically the gas locators would not respond to tickets for excavators who were replacing electric poles.

Does that sound familiar to you?

A. Yes.

Q. Okay. And could you -- Are you familiar with approximately how long that practice had been going on, to not respond to the excavators who were replacing electric poles?

A. Well, I know there was a memorandum. I've read it. That was signed 2009. I don't know if it was going on prior to that or not, but I do know that I did see the memorandum. And I can't remember the name of the contractor, but they wouldn't go locate and they would close them out. And they were auto-closed, so locators, the supervisors, never saw those tickets. So the program in IRTHNet was set to auto-close any ticket from that contractor.

Q. So it was set up to close a ticket that was made by the contractor who was digging to replace electric poles?

A. I don't know if it was replacing electric poles, but they were doing some work around electric poles. I don't remember the exact work. Guidewires, and I don't remember all that it was about. Reinforcement, pole reinforcement, I think it was, or something like that.

Q. I see. Okay.

So did the memo instruct PG&E locators to not respond to tickets on electric pole work?

A. Yeah, it said we would not locate them. That was the agreement, that we won't go out and locate them.

Q. Were there dig-ins?

A. Yes.

Q. By the electric pole contractors?

A. Um-hum. I can remember a few of them happening.

Q. Did anyone ever get hurt?

A. I don't recall. Don't know. I never heard about anybody get getting hurt.

Q. Do you have an idea how many dig-ins there were?

A. No. I mean, I can remember at least a couple. I don't remember -- Truthfully, I don't know. I'm not in every yard, so I wouldn't be able to tell you that. But I do remember a couple of dig-ins where our gas pipe was close to the pole.

Q. Okay. And this was all over? Was this in urban neighborhoods where this was happening, or out in the countryside?

A. Oh, it was all over the place. City, state, didn't matter where it was.

Q. Okay. Is PG&E still doing this practice?

A. I haven't been involved in that since February, so I couldn't speak to after February. But prior to that, yes.

Q. Prior to February they were?

A. Last time I heard, yeah. I have not heard anything up until then that that was changing. I know it came up. At the end of last year I heard some rumblings about it, because there were other contractors wanting that same agreement. And I do remember Simon Van Oosten, who is our methods and procedures person, they came up with a process sometime in 2016 where, if somebody wanted to deviate from the PG&E process, they had to fill out a form and turn it in, and then it would get either assigned on or make a special arrangement to that, and I think those went to him.

Q. Do you happen to know the spelling of Simon Van Oosten's name?

A. V-a-n, O-o-s-t-e-n, and it's two separate words. It's actually "Van Oosten," I think.

Q. Glad I asked. Thank you.

Off the record for a second.

(Off the record from 2:47 until 2:47.)

MR. GRUEN: All right. Back on the record, please.

Q. Can you identify any excavators who would be able to tell the Safety Enforcement Division, tell us, our staff, that PG&E rescheduled a start time without their agreement?

A. Off the top of my head, I'm sure there's hundreds. I have no idea.

Q. Okay. Is there -- are there any that stick out? I'm not asking you to list the whole names of the hundreds of people, but if there are any ones that are memorable to you, even if it's a couple or three.

A. I just -- I don't know. I mean, I think most of them would have it happen to them at one time or another, but I don't know. I really don't know.

Q. Okay. So regarding the rescheduling of the due dates without agreement from the excavators, we've talked about that a little bit. When that's happened, are you aware of any dig-ins happening?

A. Well, I don't really know off the top of my head. I know that we have had contractors go out and go ahead and start digging, you know, even though we had done that.

Q. Okay. And you didn't get word from locators or others that there was a dig-in on --

A. Well, I mean, you know, so I don't remember a report that came out with that as a cause, but it doesn't mean that there isn't one. But a lot of times, I mean, there might be multiple causes of a dig-in, so I don't know. Like I said, the Damage Prevention Team handles all the dig-in data, so they would really know more about that.

Vanessa White's team handled all the dig-in data. She would know about that. And Stephen Walker would definitely know about folks, contractors, that called in complaints, because he's the one that gets the complaints from contractors. They go directly to him. So he would know about contractors complaining about that kind of stuff.

Q. Okay, good.

Let's assume for the sake of this next set of questions that there was a dig-in. I know you don't know, but it's just to get to the next set of questions, which you might know about.

So let's assume the following, and then I'll ask you the questions. PG&E changes the due date to a later time. PG&E doesn't have agreement from the excavator to do that. There's a dig-in. Again, I know you don't know, but just saying that.

Are you aware of PG&E filing a claim against an excavator in that instance?

A. I don't know. I mean, because I think that that would -- it depends on how it was investigated.

Q. Okay.

A. You know, if it was digging without marks or, you know, did they close it as no response from excavator. I just don't know. I have no idea.

Q. Okay. All right.

I think you mentioned Vanessa White's name a couple of times in this proceeding or for this today, so I'm going to ask you a couple of questions.

So you know Vanessa White?

A. I do. I've worked with her. I used to supervise her.

Q. Did Ms. White approach you and tell you that she will not falsify locate and mark records?

A. She approached me. And she was Stephen Walker's backup, and she did approach me and told me what Stephen had told her what he was doing and that she was supposed to do it. And I told her not to. I said, You need to follow procedure. Don't do it. And so she said, Okay, she wouldn't. But she was worried. She was afraid she was going to get in a lot of trouble if there was a late ticket, and she would get in trouble from -- I don't know if I was supervising her at that point or not. Andy -- I can't think of his last name -- and Joel Dickson, she really was afraid she would end up losing her job or get into trouble or she didn't know what would happen to her if she let the tickets go late if she didn't get ahold of a contractor, get ahold of a supervisor, and figure out what to do. And I told her, Don't worry about it. Just do the right thing.

And she did. And that's when we were talking and she said, And here it comes. And I said, Aren't you so glad you didn't do that? Just saying.

Q. I see. Did you suffer any consequences for telling her not to -- not to change the due dates?

A. I don't think she ever told anybody that I told her that.

Q. Um-hum. Do you know if she suffered any consequences for not changing the due dates?

A. I know that she mentioned one time Joel was really mad at her. I don't really remember the whole conversation about what happened. She could speak to that herself.

Q. Okay. But what you're telling me now is based on what you heard her tell you?

A. Yeah, yeah.

Q. Okay. When Ms. White told you that she was getting pressure, if I'm saying that fairly, to not change the start times, did she tell you who she was being pressured -- who was giving her that pressure?

A. I think it's more like Stephen told her that she needs to do it, and then I told her not to. And then I think the pressure was she was going to have a late ticket and get into trouble. I think that's where the pressure came from.

Q. Okay. Got it.

A. You know, getting a phone call from Joel. Or she always felt like her job was -- like everybody else, felt like your job is on the results of today, you know, what I do or don't do.

Q. Okay. What role did you have with PG&E when you had that conversation with Ms. White?

A. Gosh, I'm not sure if I was already on the SGO team. I think I was already on the SGO team by then.

Q. Okay. So last year?

A. Yeah, it was last year. I'm guessing, though. But I think so. I'm pretty sure I was already with SGO, because I wasn't in the reporting mechanism to go talk to Stephen about it or anything like that.

Because if I would have been with the locate and mark team, I would have been, you know, maybe having that conversation with Stephen. But it wasn't my team, so I had to be SGO.

Q. If I could try to refresh your memory, would it have been closer to the earlier part of the year or the later part of the year?

A. I think it was towards the earlier part of the year, yeah. She might know more because that was her first time having to backfill, so she would probably be a lot fresher about dates.

To me it was just a conversation. I don't remember the dates, so.

Q. Okay. Did she work for you at the time you had the conversation?

A. I don't think so. That's why I think I was with SGO.

Q. Oh, yeah, right.

A. Yeah. I wasn't with that team.

Q. All right. Got you.

Did anyone else come to you and say they were getting pressure to change the start times, the due dates, without getting agreement from contractors? Anyone else at PG&E tell you that?

A. Well, I think there's a difference between being -- I mean, did anybody come and say somebody told them exactly to do that? I don't remember anybody else doing that. Maybe a locator here and there. I think most people it was the pressure of zero late tickets and being told you can't have a late ticket, feeling that pressure to do it rather than the other. But I think some locators were told to be sure they made notes on the tickets. I think our seniors throughout the system probably did that more than anybody.

Q. When you say "notes on the tickets," you mean notes to show that the tickets were not late?

A. Yes.

Q. And, I'm sorry, you said after that, who was it that was pressuring?

A. I think the seniors had a lot to do with that. Because when we talk about those layers, the locators then the seniors. So if the locator is not doing it, the senior is going to be doing it. If the senior's not doing it, then the supervisor is going to do it. If the supervisor isn't going to do it, then Steven is going to do it. You know, I think people wanted to do the right thing and make the phone calls, but I think they couldn't always get ahold of somebody.

Q. Yeah. So with that layering you just identified in mind, I mean, PG&E still has some late tickets. How so?

A. Some still fall through the cracks. There's Saturdays and Sundays. If a ticket is due on Saturday and nobody is working Saturday and the locator didn't catch it on Friday, you know. Maybe a supervisor is on vacation. Maybe a senior didn't pay attention. Because there's always going to be the small things that still happen no matter what you plan for, you know.

Q. Okay.

A. But I think they don't have hundreds and hundreds of late tickets.

Q. Okay. Do you have any reason to think that PG&E retaliated against you for some of the locate and mark -- any of the concerns that you identified regarding locate and mark?

A. I believe Joel Dickson retaliated against me for a lot of reasons, I mean, all throughout my career working for him, I think, off and on. I think he relied on me a lot to go fix things, but at the same time he always looked at me -- he always called me John Higgins' girl. One time he called me names, quite a few times, and it was inappropriate. He was disrespectful off and on. I think there's a lot of retaliation because him and John didn't get along, and I think I took the brunt of that sometimes for that. And I think Joel is all about make-it-happen, make-it-happen kind of thing; and I was like, Yeah, I want to make that happen for you, but these are the things we need to fix to make that happen. And I think that's not always what he wanted to hear, so I think definitely he retaliated against me. And I think the last straw was when I showed him that report. I think he took that as -- He was very upset with me for showing me that.

Q. The report that Anne Beech authorized?

A. Yeah. I think that was the last straw for him, I really do. In a room he would not address me at all even though I was giving presentations and telling him where we were at and giving him updates.

Q. That was all after the presentation that you just mentioned?

A. Yeah. I mean, [redacted] talked about it. You know, he's like, Whew, that was not good. And I said, I told you. You know, I kind of knew ahead of time. I think he really wanted to kind of fix it, and I always wanted to fix it, but I was kind of getting the wind blown out of me a little bit. And he kind of gave me a little more energy that, okay, let's try to get it fixed. No, it was not good.

Q. Did [redacted] suffer any consequences after doing the presentation that Anne Beech authorized?

A. He was a contractor, so there was nothing for him to -- He doesn't work for PG&E and, you know, his team, like I said, it had nothing to do with his team or anything, so I really don't know.

Q. What about Anne Beech or Vince Gateo? Did they suffer any consequences after the presentation, that you know of?

A. I don't think so. I think it was just me. I think I'm the one that showed it to him, and he didn't want to hear that and didn't appreciate it. So I don't know.

Q. You mentioned earlier this wasn't the first time that you identified the manpower problem. You'd said it many times before, but I'm hearing now that this was the first -- this was the source of retaliation from Joel.

What was different about this particular presentation from others?

A. I think because by then there had been lots of conversation about it, a lot more from higher up, you know. I think that there had been lots of conversation about this action. And I think -- For him, I think that it was, okay, you know, you can't say it's not happening. You know, I think -- And he didn't like it.

I mean, that's just what I think. I think he just felt like I put him in a spot where you can't say that I didn't show you this. It's not a conversation. It's not, here, you know. I think it was just more serious for some reason. I think because maybe Jesus had already had that meeting with Steven, and it's like, Okay, you know this, come on. And I think that really pissed him off. I just think it did, you know.

Q. And just remind me again. So I think you're talking about September or so of last year when you gave the presentation.

A. No, I think it was sometime between July and August.

Q. Okay.

A. I'm guessing, though. I'd have to look at the calendar.

Q. Okay. It's approximate.

And then the conversation between Stephen and

Jesus was approximately when?

A. Well, I know it happened before that, I think. I mean, it was coming up. People kept bringing it up for the last three years, four years. I mean, you hear about it here, you hear about it there. It's not the first time it's come up about, you know, we don't have the people to do the work, the tickets aren't being documented right. It came up in QC and all over the place. And I think that was like -- I think he could no longer do the, okay, this isn't happening or, you know, say a phone call with the supervisors and tell them not to do it. It's like, I don't know. You'll have to ask him why.

Q. Okay. Is there anything factually -- I get the changes that you've identified. Anything factually that you would point to to suggest the retaliation that you've seen? Anything in writing that you received, anything regarding a performance evaluation, any way that you were physically treated, anything that shows that you were let go as a result of that presentation?

A. So I don't -- I don't know that I have anything exactly like that, but I can tell you that I went to John Higgins about the bad treatment, I went to HR about the bad treatment over the course of the three years that I worked for Joel. And I know John believed it.

It wasn't just me that had problems with Joel. There was other people that had problems with Joel.

And I think that John did step in, because Joel all of a sudden did kind of like, he brought in like a counselor. He brought in this counselor and had all his supervisors come to a meeting -- we were managers. Other managers had issues with Joel as well, and they would talk to me about it. And one of them said he felt like a whipping dog. The other one said -- So I said, it wasn't just me. But at that meeting people were encouraged to have open, honest communication, let's fix this.

And then she like called me on the phone and she was, you know, really trying to get me to talk to her. So I did, you know. I kind of opened up a little bit, and then come to find out afterwards she was a friend of theirs. It was supposed to be this outside person they brought in to fix this problem, you know, and then telling us confidentiality and everything over the phone. And then we find out later -- After we kind of opened up to her especially over the phone about things he had said to me, and then find out she's their personal friend, coach, mentor. And that's inappropriate, you know. And so then I kind of opened up some things about how he talks to me and --

Q. Joel?

A. Yes. So, like I said, I don't think it was just one thing, but I think it was overall, you know, lots of things like that that I was kind of reporting and I discussed with HR and I tried to have meetings with them, and nothing seemed to help, so, you know.

Q. How many meetings do you remember having with HR?

A. Maybe two, you know. It just didn't seem to help.

Q. And this was after the presentation that Anne Beech authorized?

A. No, that was before that. That was before I was ever with SGO. That was back then. And then I even had a conversation with John. I had a conversation with our old VP about it, you know.

Q. Who was that?

A. Before John Higgins. I'll have to think of his name.

And I always hear he manages different upward than he does downward. I'm like, okay, I get that, but look at all the people that are complaining about this. It's not just me. It's other managers, it's other people, it's other lower people. It's inappropriate. But I don't know that that's all a CPUC thing.

Q. Well, do you recall -- When you said he said things, inappropriate things, this may be difficult, but for purposes of seeing -- and again this is just seeing if there's retaliation -- can you recall the sorts of things that he said?

A. The sorts of things that he said. I used to take some notes. I have some things documented that he said to me, you know, calling me Sarah Palin, calling me East Coast Girl, calling me just stuff like that, you know. And then holding me accountable for things that had nothing to do with me, that would be the north, in Jeff's area. But the two of them were friends for years and years, like 20 years.

He would go have me fix things over there or, you know, hold me accountable for Steven Walker. I don't know how many times he told me to go fire Steven Walker. And I didn't supervise him, Jeff supervised him. So just a whole lot of things like that.

Q. He asked you to fire Steven Walker?

A. Well, it wasn't like fire him. It's like you better start documenting firing him, like making Stephen's life miserable, you know, and then walk in like he's his best friend. I don't know that this has anything to do with CPUC.

MR. GRUEN: Let's go off the record for a second.

(Off the record from 3:11 until 3:14.)

MR. GRUEN: Can we go back on the record, please.

Q. Okay. I want to ask one other thing at the moment, and then we'll go off the record briefly and I just want to see if my colleagues can remind me if I'm missing anything.

At the outset of the day you very carefully and helpfully went through a number of the different roles that you held, the different titles that you held doing locate and mark work and then the different roles that you did. And you talked about, at the time, the increase in responsibility that you took on over the years as you continued to work for the locate and mark group. And I think I mentioned I'd get back to it. We got to a certain point there, and I wanted to just maybe finish a few other questions on that.

Do you recall me talking -- us talking about that?

A. Yes.

Q. Okay. So if you wouldn't mind, remind us of your current title?

A. I am supervisor for the Electric Compliance department.

Q. Okay. As a supervisor for Electric Compliance, do you have the same level of responsibility that you did in your last role for the locate and mark group when you were the principal?

A. No. It was a demotion.

Q. It was a demotion. And it was switching from gas, natural gas, and locate and mark matters to electric?

A. Yes.

Q. Did PG&E ever explain why they demoted you?

A. Well, PG&E laid me off and I had 60 days to try to find a job within the company. So it's considered a volunteer demotion because, had I not found another job within the 60 days, I wouldn't be working for PG&E at all. And so I took the job because it was available and open and I met the qualifications and felt fortunate to have a job.

Q. Understood. And has anyone ever explained to you -- Has anyone considered offering you a job at the same level of responsibility as what you hold -- as the last title that you held in the locate and mark group? Has anyone told you about that?

A. No, because it was up to me to find a job, so I just had to search the openings. And because PG&E had laid off 450 people, you know, I don't think that that was an option.

Q. Did PG&E lay off, to your knowledge, anyone else with your level of experience within the company?

A. I don't know.

MR. GRUEN: Okay. Let's go off the record a second, please.

(Off the record from 3:18 until 3:23.)

(Whereupon Examination Exhibit 2 through Exhibit 4 were marked for identification.)

MR. GRUEN: Back on the record. Thank you.

Q. Ms. Mack, I'm going to hand you a few documents, and these have already been marked as Exhibits 2, 3, and 4. If you could look at the first document I handed you had.

So first if you could look at Exhibit 2. If you could clarify for us on page 2 of Exhibit 2, do these -- First of all, does Exhibit 2 look familiar to you as a ticket, as we've discussed?

A. Yes.

Q. Okay. And just for clarification, I see the subject line of Exhibit 2 is identified as "SEQ# 13: 3684841 for PGEBFD." This is sent Wednesday, March 15, 2017, at 3:44 p.m.

Does that look accurate to you, what I just read?

A. Um-hum.

Q. Okay. And if you look on page 2, just some clarification of terms. So we see about almost halfway down on this page under "Ticket History," then there's a date 9/8/2014 at 12:51 p.m., and it says "Received."

What does "Received" mean there?

A. So the ticket was received by a registration code PGE, so it was called in 9:48 and then we received it 12:51.

Q. Yeah. And it's interesting, it's called -- I'm sorry. Go ahead.

A. Let me just look. It expires -- Yeah, so that's when it was received and put into the folder.

Q. Okay.

A. "Ticket History." Was there a previous ticket or something? 9/8. It began --

MR. GRUEN: Can we go off the record for a moment.

(Off the record from 3:26 until 3:29.)

MR. GRUEN: If we could go back on the record.

Q. So back to Exhibit 2 on page 2. While we were off the record we clarified that I understood -- and Ms. Mack, you can correct me if I'm mistaken -- but on page 2, the date 9/8/14, 12:51, is the date and time that PG&E actually received this call in, this ticket;

is that right?

A. Yes, in Eastern Time.

Q. So it's interesting that this is Eastern Time but PG&E is in the Pacific time zone.

A. Yes. Something with the last update that this just started happening with the new way that they list things with USA. I don't know, but it did just start happening this way.

Q. Okay. And then moving down on page 2, we see, "9/8/2014, Put in Folder."

Do you see that?

A. Um-hum.

Q. Does that mean --

A. So that's the IRTHNet program and their process of how we've asked them to distribute it. So it was placed into the locator's folder.

Q. Okay. So that means it was assigned to a locator?

A. Assigned to a locator, yes.

Q. I see. And then "9/8/2014, Assigned," the next item down, do you see that?

A. I see 9/8, 9/8, and then 9/19.

Q. Yes. The last one with the word "Assigned," what does that mean after the last 9/8 entry?

A. So put in a folder and then assigned. It just means it's open for a locator to work it, they can see it, it's there.

Q. So essentially it's the same thing as "Put in the Folder"?

A. Yeah. They started a new process where they were moving it over, so it's just assigned, yeah.

Q. As you mentioned, the next entry is 9/19/2014 at 10:23 a.m.: "Responded."

Do you see that entry?

A. Um-hum, yes.

Q. What does that mean?

A. "Responded" means a locator went in there and did something.

Q. Okay. And under that 9/19 entry do you see where it says "Details: Notification of New Start Time (Ongoing) added by Bakersfield Area 1," and then a few lines down from that it says "Method of Contact: Voicemail"?

Do you see all that?

A. Yes.

Q. What does that mean?

A. So what this means is that the locator went in there and put it in as ongoing and put a new start time at 12:54, that it was going to be 12:54 that afternoon. Because this ticket was due at 7:00 a.m. If you look at page 1, "Work Begins: 9/19/14 at 7:00 a.m." So had he not put a note in there, this ticket would have been late. So he put a note in there that it was going to get done, that the new start time was at 12:54 instead of 7:00 a.m.

Q. Okay. So in this case he missed the start time -- he missed the due date on the original ticket by about five hours?

A. Well, that's not telling you when he actually went out there. That's just telling you that somebody put a note in there, delayed it so it wouldn't be late.

Q. Oh, I see. So in that case --

A. This is kind of what we were talking about earlier. There was no mutual agreement, it was just somebody went in a ticket and delayed it because somebody probably thought he would be there at 12:54 for some reason. That's the time they delayed it to so that the ticket wouldn't be late. So now it's not going to be late until 12:54.

Q. And when the ticket was initially received on 9/8/2014 at 12:51 p.m., when would the normal due date have been created from that?

A. So the due date is going to be 48 hours, or whenever the contractor says. So this contractor, he was doing a good job and called it in, you know, 11 days early. So he actually gave us 11 days to get out there and perform locate. He called it in on the 8th but said, I'm not going to start work until the 19th. And it's a single address.

Q. Okay. So how do you know that he called 11 days in advance, instead of PG&E changing the due date in this case?

A. Well, so this part is called in by the excavator.

Q. You're pointing to the first page of the exhibit?

A. First page. So the first page is when it was called in, the very first line there, 9/8 at 9:50, that's when he called in. And it's normal notice, so that's just you've got your full 48 hours to locate it.

This is all put in prior to us receiving it. So he says saying, I'm going to begin work on 9/19 at 7:00 a.m.

Q. You're pointing to the "Work Begin" line. So this say 9/19, 7:00 a.m. That's a military time?

A. Yes, military time.

Q. Okay. So the first thing you pointed to was the very first line in the message of the e-mail that says a number of things and starts "9/8/14 at 9:50:00" military time. Okay. So that to you means that he called in on 9/8/2014 at 9:50 and notified PG&E that the work would begin on 9/19 at 7 o'clock?

A. Um-hum.

Q. Okay. And then on page 2 you have the start time, the 9/19/2014 line, where it says "Details: Notification of New Start Time (Ongoing)." There was a change to the new start time to 12:54 p.m.; is that right?

A. Um-hum.

Q. Okay. And so the method of the contact, in that line below, is voicemail?

A. Um-hum.

Q. So that wasn't a mutual agreement to re-set that start time. Is that what that means?

A. Right.

Q. Okay.

MR. KHATRI: This says "located by [redacted] [redacted]," so is that the person putting that information in for new start time, or somebody else?

THE WITNESS: It could be the senior or it could be the locator that's making the phone call. It could be one or the other.

BY MR. GRUEN:

Q. And the ticket wouldn't show which?

A. No. You would have to know who the senior was in that regard and who the locators are.

MR. KHATRI: One more question. It say it begins 9/19, 7 a.m., and this is Pacific time, our time. And they responded. This is Pacific time, our time. And the times on the page 2 are the Eastern times, so 7:00 is 10:00, but they responded at 10:23.

THE WITNESS: I'm sorry. What?

MR. KHATRI: So it says 7:00 a.m., which is our time. And then the second page says 9/19/2014 10:23 a.m.

THE WITNESS: Okay. So that's --

MR. KHATRI: 10:23 makes it more than, it doesn't make it late.

THE WITNESS: So he might have back-dated the ticket, so if he didn't catch it in time. Because that's when it got uploaded. The 10:23 is when it was uploaded. So one of two things happened. Either he didn't synch it right away, or he did it at 10:23 and back-dated the times. One of the two things happened.

MR. CHAN: Can we say that the time arrived that they noted there, it's possible that's the time he made the phone call and leave the voicemail. If we look at the entry, look at time arrived on the document, 6:53 a.m. That would be before 7:00 a.m.

THE WITNESS: Well, he puts in those times, though. That's not solid.

So what makes me think that, if you look at the locate time over there in parentheses, 9:54:51, I mean, it kind of makes it look like he probably did it around 10 o'clock and then back-dated this. But I don't know. You'd have to --

BY MR. GRUEN:

Q. So your thing on this is that the due date was missed by a short --

A. This is a late ticket.

Q. It's a late ticket.

A. Well, by more than that. Because when did they actually perform the locate?

So they actually --

Q. You're turning to page 3 now on the exhibit?

A. So this is actually a very good example. Because what happened is, they went ahead and dug without us. So the locator goes out there. This says responded at 2:42.

Q. Where are you looking?

A. So if you look on page 3, and the locator closed it out as "excavated before marked." So we didn't get ahold of the contractor, we left a voice message, and they went ahead without us. They went out there, didn't see any marks, and they dug.

Q. I see what you're saying. It shows here on page 3 of Exhibit 2 the "9/19/2014, 2:42 p.m., Responded," and the Details say "Excavated Before Marked."

That's the basis for what you just said?

A. They closed it out with: I went out there and the work was already done. I mean, he could have called him. There's lots of things he could have -- I don't know how he decided it was excavated before marked. He could have drove out there and seen the work was done or he could have called, or whatever. There's no way of knowing because he doesn't say here.

I mean, it doesn't say he phoned anybody. So they're supposed to put notes whenever they have a conversation. That's part of the procedure. So it almost looks like they drove out there and it was already done.

MR. CHAN: May I ask one more question to what you just said. So the time arrived time, time depart can be edited by the locator; is that correct?

THE WITNESS: So if it's the senior or supervisor, they can change those times. If it's the locator themselves, they can only adjust the time that they arrived, they can't change the time they completed. But if it's the senior, then they can.

MR. CHAN: Okay. And the time in the bracket, after locate time in the top sentence, that time cannot be edited; is that correct?

THE WITNESS: Yeah, I think that's the one that's solid. Yeah, this is a little bit different than what I'm used to looking at; but, yeah, I think that's it.

MR. CHAN: Okay.

MR. GRUEN: Franky, just for the record, where were you looking, which page?

MR. CHAN: Both on page 2 and page 3 in the "Detail" sentence. The notification of new start time on page 2, at the end there was a bracket after "locate time" and then, according to Katherin, that time cannot be edited by the locator. Sounds like --

THE WITNESS: I would verify all this with Stephen Walker, because it's been a while since I've been with the group. So he can verify that.

But this is definitely a late ticket because of, you know, the conversation.

MR. KHATRI: Was it renegotiated as a new start time?

THE WITNESS: It won't show up as a late ticket because they renegotiated it. Well, they used that dropdown. So it's not going to appear on a late ticket.

BY MR. GRUEN:

Q. Where does it show that it was renegotiated?

A. So the "Details" on page 2, it says "Negotiation of a new start time." It doesn't mean they had a conversation. It just means that's the dropdown they used.

Q. Oh, that notification of new start time?

A. That was the dropdown we've kind of been talking about.

Q. And those words mean renegotiated?

A. Yes. It's supposed to mean -- "Notification of new start time" is supposed to mean I had a conversation, mutually agreed upon new date and time. And it does say in our manual you can't use a voicemail. That's not a renegotiated.

Q. Okay. Is voicemail, so you're referring to the "Method of Contact" right below the "Notification of New Start Time" in Exhibit 2, page 2?

A. Um-hum.

Q. Right?

A. Um-hum.

Q. Okay. Where it says "Method of Contact: Voicemail," is that an option for a dropdown in the dropdown menu?

A. No. They typed that in.

Q. Okay.

A. Because it's not considered a method of contact. It's not considered -- you have to speak to somebody.

MR. KHATRI: It's interesting, PG&E has the dropdown option. When they do new start time, they have three options, as we remember. It's phone contact, field meet, and the voicemail. They have three options, dropdown options.

THE WITNESS: But voicemail is not an option for renegotiate.

BY MR. GRUEN:

Q. Okay. Bear with me a second.

A. So in a QC, like we talked about earlier --

Q. Yes.

A. -- this would be considered a late ticket and the QC would pick up on that if they were to happen to look at this ticket. And they would consider that minus whatever points on your QC report.

Q. Okay. Bear with me just a moment.

Let's go off the record for a second.

(Off the record from 3:45 until 3:57.)

MR. GRUEN: Back on the record.

Q. So while we were off the record we were talking a little about the late ticket and also about that I understood Ms. Mack to identify to us that on page 1 there's "Nature of Work" here, which is "Auger to replace power pole."

So I understood her to identify that this was a PG&E contractor to do pole work on the electric side who did not wait for the locator to come out before starting excavation.

Did I understand that right?

A. Yes.

Q. And the basis for that, for saying that, was several things, as I understood. First of all, it was on page 2 there's a "Notification of New Start Time" under 9/19, 10:23 a.m., and there's a "Method of Contact: Voicemail" under that entry. And then under the "Notes" there, under that entry, "New start date/time communicated to excavator."

And then there's another entry that you identified that shows that the excavator started work. Where was that one?

A. Page 3 under like the fourth thing down, 9/19 at 2:42 p.m., "Excavated Before Marked."

Q. I see. So all of those things then indicate to you that you had a PG&E pole contractor who called in a ticket, and then PG&E left a voice message but did not get mutual agreement from that contractor, and they moved the due date.

So the ticket was late; is that right?

A. In the eyes of the law, yeah; but not on paper. It's not going to show up as late.

Q. It's not going to show up on paper as late, but in the eyes of the law it's late.

And then you had a PG&E electric pole contractor who started the excavation before the PG&E gas locator arrived to mark PG&E's underground gas equipment.

Did I understand that right?

A. Yes.

Q. And then you were talking about, I think, the -- you were you talking about certain procedures off the record and how the -- I guess the genesis of certain of the procedures. And maybe before I get myself in much hot water, I'll leave it to you to continue on that vein, if you don't mind.

A. So this was excavated before marked, and it's a PG&E contractor, so we would just -- I would question why we have a contractor who's out there digging for us without any marks on the ground. And that, you know, he got notification of this. On that last line there it shows positive response was sent to him, [redacted], that he excavated before marked.

Q. Okay. And so names of the excavator under the "Details" entry, on page 3 the last entry, that basically identifies the excavator who would have excavated before the locator got out?

A. So it is the excavator that called in the ticket. So if you look at the first line, so when the excavator calls in the ticket, they give 811 their choice of how do I want, you know, an e-mail. And that's what they chose, that person right there.

So if you look at the caller, it's the same person as the caller. So you know that that person called it in and also got the e-mail that he excavated before marked.

Q. Okay. Okay. And you mentioned this particular contractor would be a PG&E contractor?

A. It is.

Q. How do you know that?

A. Well, if you look on the first page, it says, "Nature of Work: Auger to replace pole." And the very next line says "Done for: PG&E," and there's a job number there. So it is a "done for: PG&E."

Q. Okay. Thank you.

Let me go off the record for a second.

(Off the record from 6:03 until 6:04.)

MR. GRUEN: Back on the record.

Q. Off the record, Ms. Mack, I understood you to say that there was one large pole contractor who worked for PG&E. And PG&E had decided that for that contractor that tickets -- that calls that were placed for those tickets for that contractor, PG&E did not need to -- the gas locators did not need to respond to that locator.

Did I get that part right?

A. Yeah. That was regarding your earlier question about you mentioned the memo that came out. That's the 2009 memo, and I don't remember the contractor's name offhand.

Q. Okay.

A. But there was a memo that said that they did not have to go out and locate those tickets called in by them. So those tickets were all auto-closed and the locators never saw them.

But this is not one of those. So what I don't know is maybe we started getting more work and there was more of them and we needed more. And that memo was never created for anybody that I know of. But they did come up with a process to do that, and they had to fill out a form, because it actually went against the procedure. And Simon Van Oosten would get those forms and either approve or deny that process, and then they'd let us know. But they were auto-closed and the locators never saw them.

Q. And I think I'm gleaning this ticket is an example of one, and perhaps several, contractors who were doing pole work would call in and PG&E locators would respond?

A. Yes.

Q. Okay. And do you have an idea as to why -- what the rationale was for having the difference between one contractor and not responding and responding to certain other pole contractors?

A. You mean as far as the memo?

Q. Yes.

A. I have no idea. It was 2009, so I didn't even know it existed until much later. And at some point I became aware they were being auto-closed, and we did question why they were being auto-closed, and they shared that they had an agreement. So I'm not sure why that came about.

Q. Do you know if anyone raised concerns with auto-closing those tickets?

A. Oh, yeah. That was brought up several times by the locators and by other folks, too, yeah, whether it should or should not be. And I don't know if it's still in place because it might have changed since I was involved with the team. So Steven Walker would know.

He knows the ins and outs of everything that is happening in IRTH and what gets closed and what doesn't. He would be much more up-to-speed on that than myself.

Q. Okay, good. Thank you. That's helpful.

At the risk of your referring me to Stephen, I'll ask you another question or two.

A. Okay.

Q. Do you have a sense of how many tickets were created and auto-closed?

A. I think it was thousands, but I couldn't give you a number. Again, PG&E has those reports. They do them every month. They can give you exactly how many tickets were auto-closed in the last -- I mean, our reports go back with IRTH as early as 2000 -- Well, there's two different programs. So with IRTH it goes back to 2010, and they have not gotten rid of anything, so they have all of that. And then prior to that PG&E had its own program that was just like IRTH, but we kind of borrowed it and used it. And that would go back to 2005, so they're available.

Q. Okay, good. Why don't we, if we have a little bit of time -- Bear with me a moment.

So to quickly get these on the record, Exhibit 3, so that one, just to identify it quickly, the subject line says, "SEQ# 7: W612000634 for PGESAL," and the date it was sent, Wednesday, March 15, 2017, at 11:40 a.m.

Do you see all that?

A. Um-hum.

Q. Okay. So this one on page 1, do you want to walk us through the process on this one.

A. Sure.

Q. Okay.

A. So the contractor called the ticket in on 4/29 at 10:25. They're stating the work begins on 5/2 at 7 o'clock. Then it looks like they said that they were going to hand dig to replace asphalt. PG&E did stop that procedure of closing tickets less than 12 inches last year, so they could no longer do that, so they should be locating all these.

So the area was, let's see, on Lockwood Lane and Graham Street.

Q. Where are you looking that you see that?

A. The very bottom on the first page tells you the location Lockwood Lane and the cross-street is Graham Hill, and they did say they put the white paint out and everything.

Q. I see. Yes.

A. So it was put in the folder on 5/11.

No, that's just a response to excavator. I take that back.

5/2 the locator responded. I've got the wrong page here. Oh, there it is. I'm missing a page.

Q. Oh, excuse me. I probably didn't sort them properly.

A. All right. Now we're back in business here.

Q. Okay.

A. So it was put in the folder on 4/29, which makes much more sense.

Q. Okay.

A. And then 5/2 a locator or senior or somebody went in and made a note "Notification of New Start Time," and this is just exactly like the other ticket, they left a voicemail, which is against the procedure.

And then they're saying that they put it to 5/3, renegotiated it to 5/3, which the ticket was due 5/2 at 7 o'clock. And then at 6:48, so a day later.

And then the locator went out there on 5/11. So this is another late ticket, because the locator didn't go out there until 5/11 and it was excavated before marked.

Q. And the locator didn't go out there until 5/11. You're looking on page 4, the time arrived?

A. Yes. So he renegotiated it to 5/3. Well, he left a voicemail. And then on 5/11, which is the next one, he goes back out there and it was excavated before marked, so it was never touched between 5/3 and 5/11.

Q. So they left a voicemail and rescheduled the due date from 5/2 to 5/3?

A. Yeah.

Q. And then they didn't go out until 5/11?

A. Right. That's what this says.

Q. Okay. And when they got out there, the site was already excavated?

A. Yes.

Q. Do you know, is it possible that -- Never mind. I don't have any other questions on this.

Anything you want to add?

A. And again you see the positive response was sent to CalValleyConstruction.com, who was the company.

Q. Okay, great. I follow you, yeah.

What does the -- I have one question that occurs to me. On page 4, where it says "work is completed per [redacted]," what does that number mean?

A. Where are you at?

Q. Page 4 of my badly sorted document. But it says page 4 at the bottom. And under the "Notes," the very last entry: "This site was excavated before being marked by PG&E," and then "work is completed per [redacted]."

A. So "[redacted]," that tells me that the locator called [redacted], and [redacted] said, Hey, it's 5/11, that work is already done. I did that back on 5/2 probably. But that's who he spoke to. He spoke to [redacted] at [redacted]

Q. Oh, that's his phone number.

A. That is the contractor, the excavator. He spoke to [redacted] at the excavator.

Q. I follow. Okay. I see.

A. And on page 4 it tells you the locator, "located by [redacted]." So that tells you what locator did that. If you look at page 4 at the top, it's always going to give you the locator's name.

Q. Okay. I see. I follow. Okay, good. That's helpful.

And if we could do Exhibit 4 quickly. Well, take your time, please. I think we have a bit more time until we run out today.

I'll hand these over to the court reporter.

And then Exhibit 4, do you want to walk us through that. Let me just identify it quickly for the record. This one has the subject line "SEQ# 8: W612001130 for PGEFNO - Distribution," sent Wednesday, March 15, 2017, 11:45 a.m.

Ms. Mack?

A. Okay. So this ticket was called in. It was due on 5/3 at 13:45. A little bit more happened here. So at 5/3 at 7:47 the ticket was already closed. So I don't see that you have here that page.

Q. 5/3 at 7:45. Let's be sure.

A. So a locator tried to go in there and put "facility marked." So he tried to say, I already marked it, but it was rejected because the ticket was already closed. So somebody had closed the ticket out.

Q. Okay. How do you know that?

A. So if you look on page 2 where it says 5/3, just above your mark here, "Response Rejected" right there.

Q. Yes.

A. Facility located, but they're saying the response was rejected because the ticket was closed. So by the time the locator got out there to locate it, somebody had closed it for whatever reason. It could have been cancelled. You have to look at the closed piece and see how it was closed.

Q. And how would you look at the closed piece to see why it was closed?

A. So you'd have to pull up that ticket and look at the other entries for it. So that tells me there was another entry. And I was looking for it through here to see if it was here, but all I see are attempts to deliver to the -- to the contractor.

Q. Okay.

A. This is strange. Where is that first page?

So then if you look on these pages, they were unable to deliver it to the contractor. So then what it's doing, it's trying to attempt to notify all these people at PG&E. So ticket went to [redacted]. Ticket went to -- it couldn't go to DLF4, it failed. And these are all people set up to receive notification. And then [redacted] got the message.

Q. You're looking on page 3 in the bottom half?

A. Page 3. That's all the people that it went to.

Q. Okay.

A. And then again here it keeps trying to send it to some of these people. So then RXY5 --

Q. This is on page 4 in the middle.

A. -- they received the notification.

Q. Okay. So it just says "Ticket successfully send to RXY5@pge.com." Okay.

A. So you see it was delivered to VXWH. I think that's Vanessa White. S1wr2pge.com, that's Stephen. So it went to all these people. I'm not sure why it's attempting to notify all these people. It's very strange. I mean, Stephen would know more about what's going on with this.

But bottom line is it was closed and prior to the locator getting there, and it doesn't really say here -- you don't have the information about closing the ticket, so I can't tell you. You would have to print out that piece.

Q. What are the different ways that the ticket could have been closed?

A. So it could have been closed because the caller called it in and cancelled it. They could have done that. Somebody else could have made a phone call to the person and they said, Oh, I don't need it anymore. I mean, there's a lot of reasons people close tickets, you know.

Q. Okay. Is there a reason that PG&E could have closed the ticket without the input from the excavator?

A. Yes. Well, I mean, so at times they've used the three calls to close a ticket that they can't get to. We talked about that way that shouldn't be used but I know it is.

And the second way is if it's bad info, like it's got the wrong address or, you know, for some reason they can't perform the locate due to bad directions, bad info, no white marks. So all of those things that they need to perform the locate, if one of those things are not there, then they might close it as no response from excavator, and that would close the ticket.

Q. Okay.

A. Work already excavated before marked, the ticket gets closed. So those are kind of some of the ways.

Q. So then -- Thank you. Then we have -- Just to identify this: I think it's similar to the other two tickets that you identified, but on page 2, under the last entry 5/3/2016 at 4:50, it says "Responded" and then under "Details," "Notification of New Start Time" and "Method of contact: Voicemail." Would that be another late ticket without agreement from the excavator?

A. Yes.

Q. Okay. All right. Here on page 3 also it says under "Notes," toward the middle of the page, "New start date/time negotiated with excavator. See new start time above."

So this is under -- I see that it looks like this is for -- this also happened on 5/3. So I'm confused looking at this, because I see on the one hand there's a notification of new start time through voicemail, and there's also the note that there was a new time that was negotiated with the excavator.

A. No, so what that's saying is that negotiated with excavator, see time above. But that's inappropriate because it's voicemail. So he didn't really negotiate it with the excavator, he left the excavator a message.

So under "Notes" that's just a note of what he did up here.

Q. You're pointing to the top of page 3?

A. It's really the bottom of page 2, so you have to look at those as all one action. So this is all one action.

And under the "Notes" he's saying that he negotiated with the excavator, but he really didn't, because he left a message, and locators are taught and the manual says that voicemail is not a form of contract.

Q. Why would he have put in "New start date/time negotiated with excavator" when in fact he had left a voice message?

A. Well, you'll have to ask him that. But my thought is that he knows he needs to speak with the excavator, but what he's saying here is that he left a voicemail. So I don't know why he did that. He didn't negotiate it.

Q. But you're confident that in this case he left a voicemail and didn't negotiate with the excavator, as opposed to not mistakenly saying that he left a voicemail?

A. Well, I mean, anything is possible.

Q. Anything is possible but unlikely, given what you've identified, the history of --

A. Well, yeah, and the fact that they couldn't deliver this. I mean, like I said, I don't know why it was closed. I have no idea.

Q. Have you seen other tickets like this that say both "voicemail" and then "new start time," "time negotiated with excavator" like this?

A. Yes, um-hum.

Q. Have you seen a lot of tickets like this?

A. Yes.

Q. So when you said to me earlier moments ago that he left a voicemail but he negotiated -- that he incorrectly put in "time negotiated with excavator," that's based on your experience looking at a number of similar tickets like this where PG&E -- where the ticket showed a changed start time without agreement from the excavator?

A. Yeah, especially when you see the next comment is "excavated before marked." I mean, if an excavator really had a conversation with you and agreed to wait, they are not going to go out there and dig. They are going to wait. Because otherwise they are going to say, No, come out here, I'm going to be digging. Because there's no reason for them to tell you they'll wait and then not wait, because you have to get there in 48 hours. So there's no reason for them to do that. That says to me that they didn't negotiate it. That makes sense to me.

Q. Okay. Did you hear instructions from managers to put in notes, where it says "New start date/time negotiated with excavator" when in fact a voicemail was left?

A. No. I'm not clear on why that says that. I don't know.

Q. Okay. But you did see a lot of tickets --

A. Yeah.

Q. -- that showed that same thing?

A. If I had to throw a guess out there, it would be because of QC. If they get QC'd the note is written properly, because what it says in the procedures is that they are supposed to document who they spoke to and the phone number. That was my guess why they put it, but they would know more than I about what they're doing.

MR. GRUEN: Okay. Go off the record for a second.

(Off the record from 4:27 until 4:27.)

MR. GRUEN: Thank you, Ms. Mack. Thank you very much for your time and insight today. The Safety and Enforcement Division is very, very grateful.

And again just to mention, we have some action items we will follow up on. If there's anything that you recall that didn't occur to you during the time of our discussion today, the examination under oath today, you can reach out to Ken Bruno at Safety Enforcement Division and let him know. And I will also suggest to him that he follows ups with you on a couple of matters we mentioned earlier on the record.

THE WITNESS: Okay.

MR. GRUEN: Off the record.

(The examination was concluded at 4:28 p.m.)

--oOo--

CERTIFICATE OF REPORTER

I, SANDRA BOSTOW, Certified Shorthand Reporter No. 5770, hereby certify that the witness in the foregoing deposition was by me duly sworn to tell the truth, the whole truth and nothing but the truth in the within-entitled cause;

That said deposition was taken in shorthand by me, a disinterested person, at the time and place therein stated, and that the testimony of the said witness was thereafter reduced to typewriting, by computer, under my direction and supervision;

I further certify that I am not of counsel or attorney for either or any of the parties to the said deposition, nor any way interested in the event of this cause, and that I am not related to any of the parties thereto.

DATED: June 30, 2017.

Sandra Bostow

SANDRA BOSTOW, CSR No. 5770

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ATTACHMENT 57

PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

--o0o--

PRE-FORMAL INQUIRY INTO)
PG&E'S LOCATE AND MARK)
PRACTICES AND PROCEDURES)

EXAMINATION UNDER OATH OF STEVEN WALKER

TAKEN ON BEHALF OF

PUBLIC UTILITIES COMMISSION

STATE OF CALIFORNIA

June 21, 2017

9:00 a.m.

505 Van Ness Avenue, Second Floor

San Francisco, California

Reported by: DONIELLE DEL CARLO, CSR No. 10476

Appearances:

For Public Utilities Commission:

STATE OF CALIFORNIA
PUBLIC UTILITIES COMMISSION
LEGAL DIVISION
By: DARRYL GRUEN, ESQ.
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San Francisco, California 94102
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Also Present: SIKANDER KHATRI, Ph.D., P.E.
Senior Utilities Engineer
State of California
Public Utilities Commission
Safety and Enforcement Division

WAI YIN "FRANKY" CHAN
Utilities Engineer
State of California
Public Utilities Commission
Safety and Enforcement Division

--o0o--

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INDEX OF EXHIBITS

Exhibit No.	Description	Page
Exhibit 1	Subpoena to Appear and Provide Testimony Under Oath Public Utilities Code Sections 311(a), 314(a)	07
Exhibit 2	Email From: Agt_comm@irth.com Sent: March 15, 2017 11:40 AM To: [redacted] Subject: Seq# 7: W612000634 for PGESAL	78
Exhibit 3	Email From: Agt_comm@irth.com Sent: March 15, 2017 11:45 AM To: [redacted] Subject: Seq# 8: W612001130 for PGEFNO - Distribution	79
Exhibit 4	Email From: Agt_comm@irth.com Sent: March 15, 2017 3:44 PM To: [redacted] Subject: Seq# 13: 36481 for PGEBFD	79

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SAN FRANCISCO, CALIFORNIA; June 21, 2017

9:00 a.m.

---o0o---

STEVEN WALKER

called as a witness by PUBLIC UTILITIES COMMISSION, STATE OF CALIFORNIA, who, having been first duly sworn, was examined and testified as follows:

EXAMINATION

BY MR. GRUEN:

Q Okay. All right. Would you please state your name for the record?

A It's Steven Walker.

Q And would you spell your name?

A S-t-e-v-e-n, W-a-l-k-e-r.

Q Okay. Thank you.

And your address, please?

A [redacted]

[redacted]

Q And would you prefer we call you "Steven" or "Mr. Walker"?

A Steven's fine.

Q Steven, my name is Darryl Gruen. I'm staff counsel at the Legal Division at the California Public Utilities Commission. I should say I'm also joined here by Sikander Khatri, who's an engineer with the Safety Enforcement Division and Franky Chan --

MR. CHAN: Wai Yin "Franky" Chan.

MR. GRUEN: Wai Yin Franky Chan, W-a-i, Y-i-n.

MR. CHAN: Correct.

MR. GRUEN: And then last name Chan.

MR. CHAN: Correct.

MR. GRUEN: Also an engineer with the Safety Enforcement Division.

MR. CHAN: Correct.

MR. GRUEN: And I'm doing the examination under oath on behalf of the Safety and Enforcement Division of the Commission. Sikander and -- should I use Franky or Wai Yin --

MR. CHAN: Franky is fine.

MR. GRUEN: -- may both ask questions. They may chime in at certain points.

Okay. As a bit of background about today, an examination under oath, the term I just mentioned to you, is just like a deposition where I'll ask questions, and in this case it's relating to the topic of locate and mark, and it's like a deposition, in that, there's no underlying proceeding, which is why PG&E does not have a right to have an attorney here, but why we're able to have this like a deposition.

But we don't know yet where we are going to go with the information that we learn at this point. We're not in any formal proceeding, as I just mentioned, but we can use this information later on in any formal proceeding if we choose to do that. Do you understand?

A Yes, I do.

Q Okay. When I ask questions it is important that you provide truthful and complete answers to them. Please answer my questions directly. I may ask certain questions very broadly at some point which will give you a chance to add to your answers or answer as broadly as I ask, but please keep your answers directly responsive to the questions I ask. Do you understand?

A Yes.

Q And as you're doing here, if you would wait until I finish my questions before you provide your answers, and I'll also do my best to wait until you've finished your answers, including taking some time, by the way, if you need to think, take some time to think about your answers, I'll wait until you're finished before I ask my next question, okay?

A Okay.

Q And if you do not understand my question, either because I have not articulated it well or because I've poorly phrased it, either ask me to repeat it or just say you do not understand the question. Please do not speculate or guess about what the question is, okay?

A Okay.

Q Okay. Did you receive a subpoena to appear today?

A Yes.

Q Okay. And I'd like to -- I have a copy of the subpoena that you received, and I'd like to ask that it be marked as Exhibit 1. I'm handing it to the court reporter.

(Exhibit 1 marked
for identification.)

MR. GRUEN: Okay. You can see the subpoena if you want to see it. It's the same.

A I have a copy of that. Yeah, verify.

Q Okay.

A Yeah. It's the exact one I received, yeah.

Q Okay. So the subpoena I just showed you, and the one you brought that you identified as a match, you're under compulsion of that subpoena to appear here today and witness fees.

At the Commission we have statutory authority to issue the subpoena to compel the attendance of PG&E employees to testify and produce documents, that's our regular utility authority over utilities such as PG&E.

What that means is you're not here voluntarily and the information you provide us is not voluntary. You are answering questions because we are requiring it. Do you understand that?

A Yes, I do.

Q Okay. Did you also receive a letter from me last week?

A I got an email, yes.

Q And the email, do you remember seeing an attachment to the email?

A Yes.

Q Okay. And do you recall the email that you just mentioned that I cc'd Mr. John Pendleton, PG&E's attorney?

A Yes.

Q Do you recall that attachment, I'm going to refer to it as a letter, the attachment to the email we just talked about?

A Yes, I do.

Q Okay. Within that letter do you recall identifying certain requirements that prohibit PG&E as a California natural gas utility from retaliating against any employee who reports in good faith unsafe conditions to the Commission?

A Yes, I do.

Q Okay. And for the record, I'm going to quote a couple of pieces from that letter, and just ask you directly if you understand those things.

A Okay.

Q So the letter stated in part, We are not asserting that PG&E has retaliated against you, as we have no information at this time suggesting this has happened; however, CPUC -- which is the Commission -- will do everything in its power under the law to ensure there is no retaliation against you for any information you provide to the CPUC. Do you recall that?

A Yes.

Q The letter to you also stated -- attachment to the email that you referenced also stated, quote, We take very seriously our legal duty and prerogative to protect persons who provide information to the CPUC needed to promote safety, the public interest or both, end quote. Do you remember that?

A Yes, I do.

Q Do you understand what those means?

A I do.

Q Do you have any questions about those statements?

A No.

Q Okay. And while we do not know anything at this point that PG&E has done to threaten, retaliate or actually retaliated, we are prepared to monitor if PG&E will do that, if you feel you're threatened with retaliation or actually retaliated against by PG&E for the information you share with us, you can inform us promptly of the nature of the threat or the actual retaliation. Do you understand?

A Yes, I do.

Q And I would suggest if you do notice any of that, if you can contact Ken Bruno. Do you know Mr. Bruno?

A I do not.

Q If need be we can introduce you and he can be available for any contact on this matter.

And I understood before we went on the record, let me just say, you're entitled to have your attorney present, but you do not need an attorney, and PG&E is not entitled to have their attorney present. Do you understand that?

A Yes, I do.

Q And I understand just from off the record just before we started that you have chosen not to have anyone else from PG&E present today; is that correct?

A Correct. I would like to reserve the right to make a phone call if needed, if I felt I needed to but.

Q Okay. Let me be clear as well that any question I ask about today is not meant to ask about communications you have had with a PG&E attorney.

A Okay.

Q Even if a PG&E attorney was present or included in a communication with someone else who wasn't an attorney. So if you were in a group, and there was a PG&E attorney there, and you were talking that's an example.

If you had an email communication with someone and the attorney was on the email thread for the communication that was sent, any of those examples, if the attorney was included in a communication with someone else, I'm not asking questions about those kinds of communications, and I'm instructing you not to tell me about such communications. Do you understand?

A I do.

Q Okay. With that in mind, have any non-attorneys communicated with you about the topics identified in the subpoena today without an attorney present?

A No.

Q Okay. Regarding the conversation with these non-attorneys, have any of them communicated with you about the examination under oath you are doing today?

Again, without an attorney present.

A No.

Q Okay. Has any non-attorney coached or advised you generally about goals to achieve coming in here today?

A No.

Q Has any non-attorney suggested, said, or implied, in any way that you give answers in a way that protects PG&E?

A No.

Q Has anyone threatened you with retaliation for sharing safety related information today?

A No.

Q Okay. Has anyone suggested or replied that you would be retaliated against if you shared safety information today?

A No.

Q Okay. Got that out of the way.

Let me ask some information just about terms. This -- the point of asking these questions is just to get a general understanding of some terms so that we have a common understanding so that I can use the terms, and we'll have them defined at the outset and anyone who reads the transcript will know what we're talking about. Are you familiar with the term "locating and marking"?

A Okay.

Q What does that term mean to you in the context of PG&E's natural gas system?

A We identify our underground facility for the purpose of excavation, third party, second party and our own work.

Q And when you say "third party" and "second party," can you explain what those terms mean?

A Homeowners, contractors, and then people doing work for PG&E.

Q Okay. And those would all be -- the homeowners and contractors doing work are all people who are planning to do excavation?

A Yes.

Q And would those people call in to inform PG&E that they were planning to excavate within PG&E service area?

A Yes. We call 811. USA North, and actually USA South, and we receive the USA tickets to request for markings.

Q And you raise a point about USA North and USA South. There's -- PG&E service area is covered by both of those services?

A Primarily USA North. There's very few tickets we receive from USA South, but we still do two locations in the southern most area.

Q Okay. What are those two locations, do you happen to know?

A The division would be -- actually, it's San Luis Obispo and Ridgecrest, like Bakersfield area.

Q Okay. Thank you. All right.

So moving forward, when we use the terms "locating" and "marking" for purposes of this examination under oath, you'll understand that term to be defined in the way that you just mentioned?

A Yes.

Q And when I ask questions today about locating and marking, I'm specifically asking about matters related to PG&E's natural gas system, the locating and marking of PG&E's underground natural gas equipment. Do you understand?

A Yes.

Q Okay. A couple other terminology questions. What is the term used to describe someone who goes out on behalf of PG&E and locates and marks its underground equipment with an identified excavation area?

A A locator.

Q And are you familiar with the term "ticket" in the context of locating and marking?

A Yes.

Q And what is a ticket?

A They use ticket, underground service alert ticket.

Q And what does the term "ticket" mean?

A Ticket is a request for marks or for us to come out and identify facilities, if present, in the excavation area or proposed excavation area.

Q And the request for the identification are made by the excavators, whoever wants to do the excavating?

A Correct.

Q Including homeowners and second and third parties you mentioned?

A Yes.

Q Are you familiar with the term "due date" in the context of locating and marking?

A Yes.

Q And what does that term mean?

A Due date is typically the work start time. It can be up to 14 days out from when the ticket was created or called in, but usually the standard is, you know, 48 business hours after the ticket's been created.

Q Okay. And when you say it's up to 14 days and usually 48 hours, can you offer clarification about when each of those deadlines or due dates apply?

A Yes. So typically if there is no specified work start time for the excavation, it will just default to the 48 business hours. Which is a standard. By law an excavator can give up to 14 days advance notice before digging.

Q Okay. And -- yes. Okay. I follow.

And when you say the 48 hours and 14 days, just to identify the time that the clock starts on that period, what starts the 48-hour period for example?

A Once the ticket's received by us. I guess ticket creation. We receive a matter of seconds after the ticket is created usually.

Q And the ticket is created how?

A At the call center, 811, USA North, and it's transmitted electronically to us via IRTHNet, which is a third party application we use for ticket management.

Q Okay. And is the ticket created at the call center by an excavator calling into the call center?

A It could be a phone call or they could do it manually online.

Q And once one of those two things happen the ticket is created to the call center and passed on to PG&E?

A Yes. Correct.

Q Via IRTHNet?

A Yes.

Q Thank you.

Are you familiar with the term "late ticket" in the context of locating and marking?

A I am.

Q What is a late ticket?

A So late ticket, as I see it, are defined -- in IRTHNet is a ticket that is passed or responded to beyond its work start time.

Q When you say "work start time," is that the same thing as due date that we talked about before?

A Yes. Typically. Typically, yes.

Q Can you say when it would not be the same thing as start time in a due date?

A So there's -- when USA North -- not to get too deep into the weeds of it -- when USA North switched over to their ticket formatting in April of last year, they created a new ticket type, which is called a "remark ticket." It's signified by an "N" in UtiliSphere. That ticket type specifically will put the due time back at the original ticket's work start time.

For example, the original ticket was called in last month, and the remark, they are asking for re-marks, say yesterday, the ticket we got yesterday would be due last month because the work start time is the same on the original ticket. If that makes sense, so.

Q Let me see if I follow.

A Yeah.

Q That sounds a bit confusing to me, but let me see if I get it. If someone called in a ticket initially, let's say they call in a ticket one month ago from today, and the start time is 48 hours, and then that would mean that the due date is 48 hours after the ticket was created and received by PG&E, that initial ticket, right?

A Correct.

Q Then if they then call back, the same excavator calls back today and says I want PG&E to do the same work on that job that I called in last month, then there would be a start time that would go back to the same time as the due date from last month, am I following that correctly?

A Correct. Because the due date is the work start time. Work started last month.

Q Okay.

A So the ticket we received today requesting re-marks would be due in the past.

Q Okay. I follow.

A Yeah.

Q Thank you.

Why would someone call in a second time for the same piece of work asking to locate and mark the same site?

A By law the excavator is responsible for maintaining the marks throughout their excavation, but in high traffic areas, areas where the substrate is maybe dirt and construction site, you'll lose marks, flags get pulled out, things like that, so if they are continuing excavation, and they need the marks to be refreshed, they will call in specifically requesting re-marks.

Q Okay. So in that case, what you just described, that would be a case in which the locator went out, properly identified and marked the area within the required time?

A Yes.

Q And then something happened where the mark disappeared, either the paint rubbed off or the flags got knocked out, something, so that the mark could no longer be seen, and then there would be a request for the locator to come back out and re-identify?

A Correct.

Q Okay. I follow. Thank you.

In terms of -- so I think the situation you just described is not a situation in which there would be a late ticket, am I following that right?

A Correct. I mean, how we operate on those specific ticket types is there's a manual due time override, basically in IRTHNet, which automatically will kick it out 48 hours from when we received it, so that would be our due time on it.

Q Okay.

A But within the comments of the ticket is when the re-marks are required to be done by. So if they are requesting it a week, they give us a week to go out and mark, that's when the tickets actually due, and it could go late if we don't re-mark it within that week.

Q Okay.

A But to us the clock in IRTHNet only goes out 48 hours because it's a manual override based off of the original ticket's work start time.

Q Let me clarify a couple of things.

So if the excavator does not specify a time that they want the locator to come out and mark, then the default requirement would be 48 hours for the locator to come out and locate and mark; is that right?

A Correct.

Q And let's focus on that for just a moment. Because I think all of the stuff we're talking about is situations where we're not talking about late tickets in the situations you just described, am I following?

A Yes.

Q Okay. So let me just focus on a couple of other terms and get those out there, and then we'll go into a bit more.

What is -- are you familiar with the term "renegotiated ticket" in the context of locating and marking?

A Yes.

Q What is a renegotiated ticket?

A Ticket where the work start time has been renegotiated with the excavator.

Q And by "renegotiated" that means what?

A Either pushed out at a later start time or date.

Q And does a renegotiated ticket require that PG&E reach and achieve mutual agreement with the excavator in order to change the due date of the ticket?

A Yes.

Q Okay. Can a ticket be renegotiated without receiving mutual agreement from the excavator?

A Yes, it is possible.

Q How so?

A By selecting a -- a response for that which is notification of new start time, and selecting one of the drop-downs of method of contact, one of which would be voicemail, phone call, or field meet.

Q Okay. And so in that situation, in that instance you're talking about -- when you say it's possible to do that, you're saying it's possible to create a ticket that shows that the ticket has been renegotiated through the methods you just described, right?

A Correct.

Q Is that -- is the practice of rescheduling the due date on a ticket without mutual agreement, is that -- is there a requirement to not do that to your knowledge?

A Could you restate that?

Q Sure. Let me state it positively, and I think it might get at it.

A Yeah.

Q Is there a requirement to receive mutual agreement from the excavator in order to reschedule the due date on a ticket?

A Yes.

Q Okay. So, for example, if you rescheduled the due date on the ticket simply by leaving a voicemail, although a ticket allows for that in the drop-down box, there's a requirement not to create a renegotiated ticket to do that practice; is that right?

A Correct.

Q Okay. I follow. Thank you.

But if a ticket, if there is mutual agreement between PG&E and the excavator, if PG&E contacts the excavator, reaches them and they mutually agree to change the due date, that is a successful renegotiation of the due date on the ticket as required, correct?

A Correct.

Q Okay. Thank you.

All right. With that, let me ask you about your background, your professional background at PG&E, if I can.

A Mm-hmm.

Q Okay. And I'm going to state these things that I understand because PG&E has given me this information. So this is my understanding that I have. If I misunderstood anything or it's inaccurate please correct me.

A Okay.

Q According to PG&E, on May 5, 2014 you started with the title Gas Systems Administrator in the Locate and Mark Department, and that title is current as of March 23, 2017; is that accurate?

A Correct.

Q Do you still hold that title today?

A I do.

Q What is your role in that position?

A I'm the sole administrator for UtiliSphere, the IRTHNet Ticket Management Program. I facilitate adding users, creating the folders, managing the ticket process.

Q Okay.

A For PG&E.

Q Great.

You know, you reminded me, you used a couple of terms that -- and you defined one which is helpful. Let me go back to a couple of terms to clarify. I think you're using the terms UtiliSphere and IRTHNet interchangeably; is that right?

A I am. So IRTHNet is the --

Q Please.

A Earth Solutions is the third party company, UtiliSphere is the specific application. The reason why we just use IRTHNet is because there's different versions of UtiliSphere.

Q Yeah.

A You have the mobile app which we utilize on the phones and then the desktop mobile on a tablet device.

Q And can you describe, what is -- what does IRTHNet do?

A It's just ticket management software. It allows us to receive the tickets, assign them appropriately based off geographical locations, and facilitates the positive response between us and the excavator.

Q Okay. And the -- the assignments, you mentioned folders earlier, can you explain what a folder is?

A Folder would represent -- it's a geographical area. What we do is we upload shape files, which is just a basic quadrant in a geographical location, and we can give that a name, like a folder name, and it's typically one locator assigned to one folder, they'll work all those tickets in that area.

Q Okay. Can one locator also be assigned to more than one area?

A Yes.

Q So that means more than one locator would be handling the tickets in that area?

A Correct.

Q And that would be an area that's high density or a lot of tickets that are called in?

A Correct.

Q Okay. I follow.

Is IRTHNet also used as a repository for the tickets?

A Yes. A system of record.

Q Okay. Great.

How far back does IRTHNet have tickets?

A We have the ability right now to go back to -- 2009 is when we switched over to using their servers.

Q Okay. Okay. Okay. Good. Let me go back to your background information. I may stumble upon a few other terms that I'll ask about. But continuing on with background.

Have you held any other titles related to locating and marking while at PG&E?

A I have not.

Q Have you held any titles, any other positions related to locating and marking outside of PG&E?

A No, I have not.

Q Okay. When did you start work at PG&E?

A I started working at PG&E as a contractor in 2012. I want to say November of 2012 is the best I can recall.

Q Okay.

A Until I was hired on as a full-time employee in May of 2014.

Q Okay. All right. I think I understood you to say, and please correct me, that a late ticket is one in which you -- and I mean the requirement for late ticket now, when I say "late ticket," is one in which PG&E does not have a locator who goes out to an excavation site that's been called in by an excavator and does not get mutual agreement from that excavator to change the due date, am I following that right?

A That's not correct.

Q Okay.

A Late ticket is a ticket that has not been responded to before its due time. We may not have facilities there, but we would respond as such and send positive contact or positive response to the excavator.

Q So when you say "responded to," someone in PG&E might determine that there are no underground facilities and simply respond to the ticket and say there's no need for a locator to go out and mark and locate the area?

A Correct.

Q And if that doesn't happen then would a locator need to go out and locate and mark the area?

A Yeah. If facilities are present, yes.

Q If facilities are present, and there's been a call from an excavator?

A Correct.

Q Let's assume that there are facilities present, as you just described.

A Okay.

Q Let me back up. Let's assume that there has not -- that no one has said that there aren't facilities present, okay? And PG&E doesn't get mutual agreement from the contractor and PG&E doesn't go out, send a locator out to locate and mark the identified excavated area, would that be a late ticket?

A Not quite. Not as the definition as you've stated it. It could be we've responded to the ticket without marking it. There may be facilities present, but for whatever reason we could not get access to that site.

Q Okay.

A Say consider a locked gate, dog in the yard, for whatever reason we couldn't get access, and we tried to contact the excavator to gain access, that would fit a responded to, not late, not marked facilities present as you stated.

Q Okay. Let's say that those things haven't happened.

A Okay.

Q There's not a locked gate, there's not a dog present, there's no reason that the locator cannot access the property.

A Okay.

Q You follow that?

A Yes.

Q So we're adding that to the hypothetical I just gave you.

A Okay.

Q In that circumstance, with all the other things being true, and I can restate them if you can't remember.

A No, I follow.

Q Would that be a late ticket in that circumstance?

A Yes.

Q And similarly, all of the things we discussed in the hypothetical being true, now change the point we've got someone who said -- at PG&E who said there are no facilities present, okay? So take that out of the equation. For all tickets in which PG&E has not said that -- I'm sorry. For all tickets in which PG&E has said there are facilities present.

A Mm-hmm.

Q Okay. Same thing, you can get access, the locator can get access to the property, they've gotten a call in, there's no mutual agreement to change the start time, would that also be a late ticket?

A Yes.

Q All right. One other term that you mentioned to clarify, and I appreciate you mentioning them, I think you mentioned a response.

A Yes.

Q Is that -- can you clarify what that term means?

A So response is we've got a set list of selected responses a locator can use when responding to a ticket. Each one has its own set of uses or circumstances to use it, and each one is configured to send a positive response that correlates with what happened in the field or why they selected that response.

Q And by "positive response," is that a communication with the excavator?

A Correct. Positive response, to define the term here, would be a communication from us to the excavator based off the response used on the ticket. And that can be sent one of three ways.

Q Yes.

A And that is determined by the excavator when they call in the ticket what their preferred method of contact is.

Q What are the three ways?

A It could be a fax, a phone call, or an email.

Q Okay. Okay. All right. Back to late tickets regarding -- okay.

You have in mind what we discussed that makes a ticket late?

A Mm-hmm.

Q Are there situations in which there was a late ticket as we described, but the ticket, the actual ticket in IRTHNet was shown as not late?

A Yes.

Q Okay.

A Yes.

Q What are those situations? What are the examples, in your experience, of tickets that you've seen that are shown -- were shown to not be late when in fact the ticket was late?

A The first example that comes to mind would be if a locator phased a ticket. Phasing is done to -- you respond as a phase ticket, if you've got a job that is very large and cannot complete it in one day's time, but a -- you've provided marks to a certain point, and you'll phase that ticket out to where you'll return the

next day, you typically communicate with the excavator to stay ahead of their crew.
Q Okay. So there's a phased ticket and that's one example?
A One example. If somebody phased it unnecessarily, say it's a single service to an address, rather than, you know, a block job, and they phase that before the ticket was due.
Q Yes.
A To keep it from going late.
Q Okay. Other examples?
A Renegotiating a ticket unilaterally, renegotiating a start time unilaterally.
Q Okay. And by "unilaterally" what do you mean?
A I would say by leaving a voice message saying they were going to have to push out the work start time without a mutually agreed upon time with the excavator.
Q Okay. Could unilaterally also mean reaching the excavator and the excavator not agreeing to change the due date?
A It could.
Q Have you seen that situation?
A I've never seen that myself.
Q Okay. Have you heard of others talking about that situation?

A I have not.

Q Other examples?

A The only other one that comes to mind would be inclement weather. If it was used when it was raining, and then it stopped raining, and they put inclement weather. Because you can't put paint down on the ground when it's wet, but if it was say a break in the rain and they responded as inclement weather.

Q So if there was a break in the rain, and then the locator tried to get out there while it was dry, and maybe they were unable to because the weather was spotty or uncertain --

A Correct.

Q -- that would be an example of inclement weather?

A Correct.

Q So then it would be reported as the locator couldn't get out to identify because of the weather?

A Correct.

Q And in that situation what would PG&E do in order to -- what would PG&E do in order to properly locate and mark?

A They would have to, after the rain has let up, you would have to renegotiate that start time.

Q Okay.

A A phone call to the excavator explaining you couldn't mark because of the rain, and when you could be out there next.

Q Okay. Okay. Let me ask a bit more background about each of those three examples. You said those are the three that come to mind.

A Yes.

Q Those are the three -- for clarification, if I understood right, where there's a requirement, under the requirement the ticket would be late, but the ticket isn't actually shown to be late, did I get that right?

A Correct.

Q Okay. Going to the phased ticket situation, the first example you just described. Are there -- are phased tickets -- are there -- are there jobs that would not be phased, would not need to be phased, excuse me, but were identified as phased on the ticket?

A Yes.

Q Okay. And how do you know if a job needs to be phased?

A It's typically a block job or the excavation, the proposed excavation area is very large in an area, urban area with many facilities, say a major intersection, they want from sidewalk to sidewalk, everything done. Those are typically -- you know that

that's going to take a locator longer than he has allotted that day.

Q Okay.

A The example I gave earlier was a single service at an address, marking the service off of a main to a house, that typically would not require to be phased.

Q Okay.

A I could give other examples if you need, like stump grinding, coring for a sign post.

Q Mm-hmm.

A Those are examples of things that would not need to be phased.

Q And have you seen phased tickets for those sorts of jobs?

A Yes.

Q Okay. Did you see an explanation as to why?

A No. Typically it's an after the fact thing. You would see something phased and then responded to as no conflict.

Q Okay.

A That's the give away. Typically our procedure says you're not supposed to phase unless you've provided some markings.

Q Okay.

A So to phase and say there's nothing there after the fact.

Q Okay. To say that there's nothing there after the fact would mean what?

A It was phased improperly.

Q Phased improperly.

Does that mean that the information about -- on the ticket that was shown that the ticket was phased was inaccurate?

A Not that it was inaccurate -- in essence, yes, I guess. They used an improper response.

Q Okay. And when you say "improper response," can you clarify what that means?

A Yeah. The response used on the ticket did not meet the criteria of what was there in the field.

Q Okay. Let's say that there was an improper response or you mentioned inaccurate information, showing that the ticket was phased when in fact it should not have been. Am I stating that fairly?

A Yes.

Q Okay. Let's -- do you have that scenario in mind?

A Mm-hmm.

Q When would that information about that phasing get recorded on the ticket?

A When the response is entered by the locator.

Q Okay. Have you seen any situations where a ticket was about to be become late, and it was not phased, and then it became phased just prior to becoming late?

A Yes.

Q And what -- did the phasing -- by phasing it did that mean that the ticket was no longer late?

A It would no longer show late in UtiliSphere.

Q It would no longer show late in UtiliSphere.

How many times did you see that in your experience, if you can estimate?

A It was pretty prevalent back in 2012, 2013. I'd see it, say, a good handful of times. I don't have an exact number that I've seen it.

I wasn't typically reviewing those types of improper responses. We have a QA group that does quality assessments on -- random assessments on locators that would be looking for those types of findings.

Q Okay. When you say "a handful," would you say that's dozens of tickets that you saw that were like that?

A I would say dozens.

Q Okay. Not hundreds but dozens?

A Not hundreds, no.

Q Okay. Over how long a period?

A Do you mean timeframe wise?

Q I do.

A From 2012, when I was a contractor, when I started late 2012, through, I want to say, mid 2015.

Q Okay. And then after mid 2015 it stopped, you stopped seeing those tickets?

A I wouldn't say it stopped. I saw a major dropoff in improper responses.

Q Do you know why?

A Communication. The supervisors would tailboard with the locators that you need to use the proper responses, and it's because if they would get a finding on a QA assessment they could lose points, and they would fail their assessment.

Q Okay. Do you know if -- if a ticket was about to become late, would you be notified of that?

A Yes.

Q How would you be notified of it?

A I have an email notification set up in UtiliSphere.

Q Okay. So each time you received an email, did you ever see -- after receiving an email in UtiliSphere, did you ever see a ticket go from not being phased to then being phased?

A No. So once I get the notification, I would alert the area supervisor for that ticket. If that ticket wasn't on the next day's late ticket report, I didn't look -- you know, I wouldn't go back and look at an email -- you know, to get from an email I received the previous day.

Q Okay.

A If it was on the late ticket report, I would sure enough pull it up, verify that it was actually late, and then notify the supervisor.

Q You mentioned supervisors would get notified. Do you know if supervisors, superintendents, directors, executives, were made aware of this -- I'm going to use the word practice, and you tell me if that's inaccurate, but this -- it's for lack of a better word, but this way of changing a ticket to phased so that it didn't show as being late?

A Yes.

Q Which? Which of those?

A So supervisors would know based off of QA findings. Superintendents would know, I think, based off of the communication from the supervisor. Director I want to say yes. Once it had become an issue where we had seen multiple instances of it, the director would have been notified.

Q And you say would have been notified?

A Yeah.

Q Is there a process in place by which the director would be notified?

A Through -- well, it all kind of stems to the QA findings. Because if you have somebody failing based off of something there it becomes a targeted metric.

Q Yes.

A Then yes, that's brought up to director level.

Q Okay. Were you directly aware of -- I'm following you that the supervisors and the superintendent and the director would have been notified. Are you aware that they were?

A Yes.

Q In all instances?

A In all instances.

Q How do you know that?

A When you say "all instances," I thought you meant in -- for the three types of -- is that what you were referring to?

Q Yes. Just for the record, that's right. And let's just clarify so we're on the same page.

We're talking about the situations on phase tickets, renegotiating unilaterally, and inclement weather, all situations where there was actually a late ticket, but it wasn't shown to be late on the actual ticket?

A Yes.

Q Okay. Go ahead, please.

A So when that would come up in a QA finding, and the QA group is counting that as a late ticket, I report out on the late tickets which are in UtiliSphere which are specifically not responded to beyond its due time.

Q Okay.

A There's a discrepancy. QA saying we're finding instances of this, late tickets, this is how many we have, I'm only seeing this many in IRTHNet, that is when we had to explain to the director what's causing that discrepancy.

Q Okay. And when you say "explain to the director," who is that?

A Joel Dickson.

Q So when you observed that discrepancy -- how often would you observe the discrepancy, by the way?

A It wasn't so much as how often, it's when it was discovered as a discrepancy at that point we had to investigate and say why are we seeing late tickets on a QA thing that aren't showing up in UtiliSphere.

Q And when did you first observe late tickets on

the QA side without seeing them showing in UtiliSphere?
A I want to say late 2015.
Q Okay. And how long did that continue?
A Through the first few months of 2016, I want to say, up 'til March or April.
Q And how -- how often would you learn -- I get that it sounds like you would see that there was a discrepancy that you just described, but would you get reports periodically or how did it -- how did you become aware of the discrepancy?
A I would not receive reports, but I was asked to investigate how come we're not seeing the late tickets in IRTHNet that we're getting on the QA findings.
Q And who asked you that?
A It would be the superintendent and director.
Q Okay. Which superintendent?
A I want to say Jeff Carol.
Q Okay. What about Katherin Mack, would she ask you as well?
A Yeah. At the time Katherin would have been involved in that as well.
Q And Joel Dickson as well?
A Yes.
Q Anyone else who would have asked you?

A No.

Q Each time you were asked by Joel or Jeff or Katherin to explain the discrepancy, that's when you would look for them, am I following that right?

A Correct.

Q And then you would get back to them and explain and give them your best explanation you could as to why you were seeing the discrepancy?

A Correct.

Q And what would you explain to them?

A Looking at -- starting in, I want to say, January of 2016, I started looking daily at the previous day's late ticket report. I'd run it every morning, I would see what was on there, I could look up each ticket number and see what happened on it.

Again, if it was responded to, and properly, those don't hit the report, so I wasn't seeing these specific instances, but I would see other false positives on late tickets and could elaborate on that if you would like.

Q Yeah. I think so. Let me just clarify terms. It would help if you'd elaborate, but if you bear with me just a second to be sure.

You said "false positives," but you also mentioned if there was an accurately recorded late ticket that was not what you were reporting, right? In that instance?

A Can you clarify? I'm sorry.

Q Yeah. Let's just be sure we're on the same page here, if I may.

So the discrepancies that you were talking about were the discrepancies between what was actually a late ticket but not shown to be a late ticket in IRTHNet, right?

A Correct.

Q And that's what you would be reporting to Joel, Jeff and Katherin, do I understand that right? You would be explaining the discrepancy between those things?

A Yes.

Q But if there was a late ticket, for late tickets that were actually late, and also shown to be late in IRTHNet, would those also be part of your report to Joel, Jeff and Katherin?

A That's what I actually reported out on daily, the ones that were shown to be late in IRTHNet. The only time I would be looking up something like that was a specific request to look at a specific ticket.

Q I follow. Okay. Thank you for the clarification.

A Yeah.

Q Let's -- if you don't mind, and I want to just flag and note for your mention of the words "false positive" because I think that's a different point here, but you were asked daily, you said where there was an actual late ticket, and it was that very late ticket was shown to be late in IRTHNet, in situations like that you were asked to report on those on a daily basis?

A Correct.

Q Okay. How many of those would you see on average per day?

A One or two maybe in the beginning. When I'm saying "beginning," I'm saying January of 2016 when I started tracking it there was maybe five or six a day.

Q Okay.

A To where it quickly went down to one or two to some we go a whole month without any.

Q When did the decrease in frequency first happen?

A Starting the first months of 2016.

Q Okay. And you're talking about -- just the universe of time you're talking about would be when you started working in your role as a permanent PG&E employee starting in 2014; is that right?

A Yeah. 2014 I wasn't pulling a late ticket report daily and scrubbing through ticket numbers to see what went on. That didn't really start on -- until I said about January of 2016.

Q Okay. You started scrubbing the late ticket information in January 2016?

A Correct.

Q And were you looking for late ticket information? Even though you weren't scrubbing it, were you still looking for late ticket -- accurately recorded late ticket information prior to that?

A Not actively.

Q Okay.

A If requested to look up a specific ticket, yes. But not -- no.

Q Okay. So you were reporting the late ticket, the accurate late ticket information, if I can call it that.

A I follow you.

Q And by that, just for the record, I mean an actual late ticket that was shown to be a late ticket?

A Mm-hmm.

Q Are we on the same page?

A Yes.

Q Okay. And that you were reporting on a daily basis starting in January 2016?

A Correct.

Q And have you continued doing that through to today?

A I have.

Q And just remind me when you started noticing a decrease in the frequency of late tickets.

A I'm going to say the first two months of 2016. Say like February-March of 2016.

Q Okay. How many tickets -- could you estimate how many tickets that were late, actual late tickets, that were observed in January of 2016 that you saw?

A I can't recall.

Q Approximately?

A Just for January. But I would say maybe somewhere around 12.

Q That's an approximation?

A An approximation.

Q That's your estimate?

A Yes.

Q And when you saw the decrease, I think you said February?

A Yeah.

Q How many -- how many would you estimate that you saw in February?

A Like four.

Q Okay. And in March?

A Down to two. I'm just approximating here. It would go down. And then we'd have months with zero and then maybe four to -- I think there ended up being a total of, I want to say, 46 total late tickets in 2016 that were shown late.

Q And this is for PG&E's entire service area?

A Correct.

Q How many -- do you happen to know how many total tickets in 2016 PG&E had?

A Total tickets, and this is completely different from tickets worked, total tickets was somewhere around 800,000, upwards of that. Tickets that actually had facilities worked or required us to respond was somewhere around 550,000. 550.

Q 500,000 or 550,000?

A 550,000.

Q Okay. Do you know what the budget was on locate and mark?

A I do not.

Q Okay. Do you know how those numbers compare to 2015?

A I think 2015 was higher. We actually had a slightly higher volume in 2015, if I recall.

Q Of late tickets?

A Oh, of late tickets, yes. Yes.

Q It was higher, the number of late tickets?

A Much higher.

Q Approximately how many late tickets did you observe in 2015?

A I couldn't accurately estimate. I know it was a lot higher.

Q Okay. And how about the total number of tickets and then the total number of tickets worked, do you have an estimate on that?

A Slightly higher. I think we peaked in 2015 almost 900,000 tickets received, somewhere over 600,000 tickets worked.

Q Approximately how many -- do you know how many -- I'll say personnel, and by that I mean PG&E employees and contractors -- people who were qualified to be locators as well as locate and mark personnel, how many were there in '16?

A 2016.

Q Do you know?

A I don't know an accurate count. I could approximate 150.

Q And do you know, were they all working full-time?

A Full-time employees would be. I don't know about contractors.

Q What I'm trying to get at is just a comparison of the number of hours worked comparing 2015 with 2016, do you have an idea of that? So it's not really -- I'm not really so interested in the number of total employees and contractors versus that -- I'm just trying to get a general estimate, understanding of the number of hours worked on locating and marking in 2015 versus 2016, if you have an estimate?

A I really don't. I'm not an analyst. I don't really deal with the number of employees and dollars and that stuff, just basically ticket volume.

Q Okay. Good.

Renegotiating unilaterally, so that would be another example of a ticket that was in fact late but not shown to be late; is that right?

A Correct.

Q Okay. And when you started -- going back to when you started in 2014, can you give an idea how many of those kind of tickets you saw personally in 2014?

A I didn't see any personally in 2014, but I do know that that response, motivation of start time didn't even exist in the system until November of 2014. It was added in at that time so you're not -- I'm sorry, 2012. So you're saying 2014, correct? I'm sorry, I misunderstood.

Q I'm saying 2014 because that's when I understand you started at PG&E as a permanent employee. So if you know before that that's useful to know, if you want to start with 2012.

A I know the response was added in 2012 in November as a response in the system.

Q Okay.

A I don't know how many. I never really tracked a specific response.

Q Okay. Why do you know that they were unilaterally renegotiated tickets?

A When we had, like I said, the QA findings and discrepancy of what they considered late versus what was shown late in Earth, I looked up specific tickets that they had sent over, and seeing that it was renegotiated with no notes or no -- the method of contact would be voicemail saying left message, cannot locate until, you know, whatever such and such date.

Q Okay. So you would see that on a given ticket here or there?

A That I was asked to look at, yes.

Q Okay. Okay. So you would -- now and again you'd see tickets that had information on them that would show they were renegotiated unilaterally?

A Correct.

Q And did you see those on an ongoing basis would you say, would that be a fair way to say it?

A Yes.

Q Have you seen those on an ongoing basis through to today?

A Not -- last time I've seen a specific ticket that was renegotiated unilaterally would probably have been the very beginning of 2017.

Q Beginning of this year?

A Yeah. Beginning of this year.

Q Okay.

A I saw one specific ticket -- to be very specific, I saw one ticket, I think, in January that was -- used notification of new start time with left message with excavator.

Q Okay. Do you know the -- do you know unilaterally renegotiated tickets to still be entered into the system?

A Could you be a little more -- the way you asked it.

Q Do you know if they still --

A I know they can, I wouldn't say that I know they're doing it today. Yeah.

Q Okay. And they can because there's still the drop-down menu that allows them to?

A Correct.

Q Okay. Why is there the drop-down menu that allows them to do that, do you think?

A The drop-down that says method of contact with voicemail, and this, I've learned, with previous data requests from Sikander, was that in 2012 the Locate and Mark Handbook says that that is not a method, an acceptable method as a unilateral contact. If there was a previous discussion, and you were leaving a voice message that referenced the previous discussion, you could put voicemail, but as a unilateral renegotiation is not an acceptable method.

The reason that's still there is PG&E does not have the ability to remove that ourselves. It could only be done through UtiliSphere, the back end, you know, there -- it would take coding work or whatever, you know.

Q Okay.

A Enhancement.

Q Typically speaking, there's still the two drop-down menus separately, one that shows that you left a voicemail and one that shows that you changed the due date?

A Not a drop-down. So you have a drop-down for you response selection.

Q Okay.

A Which you would say notification of new start time, and when you select that there's mandatory fields you have to complete, which is the name of the who you spoke to, the phone number of that person, and then the method of contact.

Q Mm-hmm.

A Which could be voicemail, field meet or phone call.

Q Okay. So it's allowed then to show that you notified for a new start time, or a new due date, and then after you indicate that it's possible to enter that you left a voicemail?

A Correct.

Q I follow.

A The reason it's still there is, as I said, you can leave a voice message referencing a previous discussion, so that would still be considered correct as long as the notes specify that, who you spoke to, the date and time, and that you're referencing the previous re -- not unilateral -- renegotiated start time.

Q Okay.

A Bilateral is the one I was looking for.

Q Yeah. Bilateral. If you want to just use, so

I'm understanding it, the new due date that was created by PG&E and the excavator reaching each other and coming to an agreement, that's what you mean by "bilateral"?

A Correct.

Q Okay. Let's see, if you left -- if a ticket showed that someone was reached and you came to an agreement to change the due date, would it also show, properly show that there was voicemail on the drop-down box?

A I don't understand the question as it was asked.

Q Yeah. Thank you. I don't think it was worded very well. Let me see if I can say it a different way.

A Okay.

Q I'm trying to imagine a ticket and someone clicking on the drop-down menu that they left a voicemail for the excavator and then also saying that they reached the excavators and renegotiated the due date. Does that -- have you seen a ticket like that?

A I have.

Q Okay. Have you seen that -- how often have you seen a ticket like that?

A Not very.

Q Okay. Okay. Dozens of times? Hundreds of times? Less than dozens of times?

A Less than dozens of times.

Q Okay. So maybe a dozen or so?

A Yes.

Q Go ahead.

A I was going to say the instance that comes to mind where I can recall one is the contact information for the excavator could have been from a company out of state or another part of the state and work's being done in the opposite ends. The person that the thing was renegotiated with was the foreman on site. The positive response being sent back to an officer in Bakersfield for a job in Burney or something like that, in that instance. I had a conversation with foreman on site leaving a voice message for whoever called the ticket in in the office as the renegotiate start time.

Q Okay. So in that instance, let me just see if I understand, did someone from the PG&E actually reach the foreman?

A Yes. It could be the foreman, it could have been a contractor working for a homeowner, those instances.

Q So there was both a voice message left and an agreement with someone who was authorized to agree?

A Correct. You can't say you had a field meet with the caller if it was a foreman for, you know, a company excavating for a homeowner, something like that. It doesn't happen that often.

Q Are there situations where that information would be included, you'd have a drop-down menu, that the drop-down menu would show a voice message left, and then the notes would show notification of changed due date and -- and there was no contact with the excavator?

A It would have -- the notes would have to say when and who they renegotiated with.

Q All right.

A If that makes sense.

Q I think it does. Let me --

A So if the person that was renegotiated was not the caller or contact listed on the ticket, if that makes sense.

MR. GRUEN: Okay. Let's go off the record for a moment.

(Recess taken from 10:19 a.m. to 10:26 a.m.)

BY MR. GRUEN:

Q A few more questions about unilateral renegotiation of tickets the way you use the term. Do you remember how we were talking about it?

A Yes.

Q When was the first time you saw a ticket being renegotiated unilaterally?

A First time?

Q Do you recall?

A 2015.

Q Approximately when, do you remember?

A Mid year.

Q Okay. Was that also the first time you became aware of it?

A Yeah. Yeah.

Q You didn't hear from someone else about it?

A No. It was kind of a -- we were trying to figure out why we had more late tickets on a QA report than what we did in IRTHNet.

Q Okay. Did you raise the issue to the attention of others within PG&E?

A Yes, I did.

Q And who did you tell?

A Well, it would have been -- started with the superintendents, Katherin Mack, Jeff Carol, and then eventually reporting out to the director, Joel Dickson.

Q Okay. Did you see any changes as a result of that to the number of unilaterally renegotiated tickets after you raised it to their attention?

A I didn't really have insight into it as a trackable metric. It was basically when asked to investigate a specific ticket, I would pull that ticket up in UtiliSphere and look at it and determine that.

Q Okay. So you couldn't tell?

A I couldn't tell.

Q Okay.

A No.

Q Yeah. A couple of QA questions. "QA," by the way, means Quality Assurance?

A Quality Assurance Group, yep.

Q So the Quality Assurance Group was checking in this case for discrepancies between the tickets that were shown to not be late but were actually late?

A Yes. I mean, they were specifically looking at a subset of tickets which were tickets worked, facility marked tickets.

Q Okay.

A And determining if the responses used were correctly used. And so, in an instance of that, either phasing or renegotiating, and properly, that would be something they would mark against, but only specifically looking at a subset of facility marked tickets.

Q What's the bigger set that they were looking at?

A So in the universe of all tickets received that's the much higher number rather than just specific last response of facility marked.

Q Okay.

A They do that because it's a random assessment. They are bringing it from the thousand. They are trying to assess at least every locater once in the system throughout the year. So they would do a subset of what was actually marked. Because they're also verifying that the marks were correct, you know, all of the scopes. It's a long list on the QA.

Q I see.

A Yeah.

Q And this was not a -- was the subset of marked tickets a complete set of all marked tickets or was it a sample of all the marked tickets that they were examining?

A Pulling from the full set of marked tickets, but it was a random assessment. So you're looking at a random locator and then pulling a random from all of their tickets that were in that subset, if that makes sense.

Q By "random locator," they would pull a job that -- a given locator had done to locate and mark?

A Correct.

Q So it wasn't a complete set of all of the jobs, all the locate and mark jobs that they were looking at?

A No.
Q It was a sample?
A Yeah.
Q And similarly, were they -- would they have found all of the discrepancies between tickets shown to not be late but tickets that were actually late?
A If I understand correctly.
Q We were talking earlier -- let me rephrase it.
A Okay.
Q I don't want to leave any misunderstanding, so let me try.
A Okay.
Q We were talking earlier about the discrepancies, as I understood it, and there were discrepancies that you saw between tickets that were actually late, but then the number of tickets that were shown as late in IRTHNet were fewer?
A Mm-hmm.
Q And so you were -- you had identified there was a discrepancy in those numbers?
A Yes.
Q And the source of that information to identify the discrepancies was from the QA team; is that right?
A Correct.
Q Okay. So did the QA team find all of the

discrepancies that we're talking about?

A They found all of them in question, yes.

Q How do you know?

A If I received it they found it. Maybe I wasn't understanding your question correctly. Did they find every instance?

Q Yeah. I think in order to get to the numbers that showed the discrepancy. Let me reword it because I think that the question is confusing, and I want to be very clear about it.

In order to find the discrepancy, the numbers that they gave you, could they have found each instance where there was a late ticket, but it wasn't shown to be a late ticket?

A Not through a sampling, no.

Q That's what I'm asking about. Thank you.

Would you have an idea of what percentage of the late -- the tickets that were actually late but not shown to be late, what percentage of the total number they would have found?

A I couldn't put an accurate guess on that. I do not know.

Q Okay. Okay. Yeah.

Do you know why there was a need to report a late ticket each day starting the beginning of

January 2016?

A I do know, yes.

Q Why is that?

A They created -- when I say "they" -- so after we identified the issue, late tickets and trying to get that under control, Joel Dickson established a late ticket war room, so to speak, which basically had me figure out a way to report daily out by division how many late tickets were in the system for that division, and then brainstorming on how to combat that, which I then came up with the late ticket notification via email in UtiliSphere.

Q Okay. Let me be sure I understand. The war room was -- the purpose of the war room was to reduce -- or combat, I think, was the word you used.

A Yes.

Q -- the total number of late tickets?

A Correct.

Q And when did the war room start?

A January of 2016.

Q It started in January of 2016?

A Yeah.

Q I see.

Whose idea was it to have the war room?

A That was Joel Dickson.

Q Let me ask you, if you would, for a moment -- bear with me. If you take a few moments to recall your time in the war room, and I assume you were there.

A Yes.

Q And just think about your -- your experience being in the war room for a moment, how long was the war room in place?

A From start to finish I'm going to say three full months.

Q Through March?

A Yeah.

Q Through end of March approximately?

A Correct.

Q Can you describe the war room to me?

A It was just a conference room at Bishop Ranch and gas headquarters for PG&E.

Q And did the war room serve any other purpose other than combating late tickets?

A No.

Q Okay. Who did you see in the war room?

A Just myself primarily. On days that I couldn't be there for whatever obligation, Vanessa White would go in and update the white board.

And when I say "white," it was just a white board like this, that was a visual representation there for Joel to come in and look at and see based off of the late ticket report that I was running daily.

Q And the late ticket report up on the white board there would appear the different late tickets you had found?

A Correct.

Q Okay. And what would -- so it was you and Vanessa and Joel would come into the war room at times?

A Yeah.

Q And Joel would see the late tickets; is that right?

A That's correct.

Q How often were you in the war room?

A Almost everyday for those three months.

Q Okay. Was Vanessa there with you regularly?

A Not regularly. Basically she was my fill-in if I couldn't be there.

Q Okay. How often was Joel there?

A Almost everyday. At least walking by. If not coming in sticking his head in.

Q Okay. Anyone else from PG&E supervisors or superintendents?

A Katherin Mack would come in occasionally.

Q Okay.

A Didn't see much of Jeff Carol in there.

Q Okay. So in order to combat the late tickets, as you mentioned.

A Mm-hmm.

Q What would you do?

A So part of my time there was spent on thinking of ways to help mitigate the issue. I set every locator up with a late ticket notification email that was set to email them when a ticket came within, and I think we decided one hour.

It would be different, I guess, for different areas. Some people requested two hours before a ticket came due to receive an email notification.

Q Okay. So you were notifying the locators of the late tickets. Did you do anything else?

A Then it was advising the way to run the daily report because, as I said before, I had to scrub false positives from it to get accurate counts, so. And I'll elaborate on that now.

Q Please.

A In UtiliSphere what we say that shows late and is late is anything that shows a response time beyond its due time. That's just basic black and white. If that's the case it will show up on the report. What false positives I began to find and realized is that if a locator adjusted the locate time accidently rather than the new start time, if you look at it when they are doing it on their tablet, it's just you're scrolling down, and there's a thing you can hit and adjust the time.

If they accidently did that to the locate time rather than a new start time, it would push it out and look like they located it three days in the future.

Obviously it wouldn't make sense looking at it, but that would show up in the report so I could look at it and say obviously this is not late, I would say obviously she pushed out the start date. I say she. He. So I would remove those false positives, the ones that weren't actually late but showed up late on the report.

Q That showed they were late?

A Correct.

Q How would you know it was late?

A I could see a whole auto response history. When it was entered, who did it. They changed the locate time incorrectly to a future date, and that's when I could see.

Q Okay. If they put in a future time as the locate, would you know what the actual time of the locate was?

A Yes, you would.

Q How would you know?

A It's in the response audit history. You can see the action time of when it was done.

Q And in cases where there were the false positives you just described, did the history show that in certain cases the response time was after the due date and due time?

A The -- yes.

Q So those were still late tickets in those cases?

A Yes.

Q How many of those would you estimate that you noticed?

A A handful.

Q Okay.

A Right now I think we're at like 34 late tickets for 2017. That's from January 1st of this year to present day.

Q Okay. So was there communication from people in the war room with excavators themselves?

A I myself have, yes. Yep.

Q And was that a part of what the war room did was to reach out to excavators in the case of tickets that were about to become late?

A Correct.

Q And would -- would all the excavators be -- were all the excavators reached?

A Not always. And so -- and I can only speak for myself, I'm really the only one that was doing that, I would -- if I couldn't reach an excavator, I would notify the supervisor for that area's ticket.

Q Yes.

A And have them reach out, continue to reach out to the excavator.

Q And if the excavator couldn't be reached and PG&E had to go out and locate because there was underground equipment.

A Mm-hmm.

Q And the locator couldn't get out within the required time, in that instance were any of the due dates changed on the tickets?

A Not in that instance, no.

Q Okay. Were any due dates changed on the tickets without getting agreement to change them from the excavator?

A I would have to say yes on that. I myself personally have renegotiated tickets based off a conversation with the supervisor who spoke with the excavator.

Q The supervisor told you that they spoke with the excavator, and you -- based on that conversation you recorded a change --

A Correct.

Q -- in the due date?

A Correct.

Q Did you record on the ticket that the supervisor told you that they had spoken with the excavator?

A Yes. I would have put the supervisor's name and everything in there.

Q Okay. Any instance --

Let me ask this, did anyone receive instructions to have no late tickets that you're aware of?

A Yes.

Q Did you receive those instructions?

A I did.

Q From whom?

A Joel Dickson.

Q Anyone else?

A Reiterated through the superintendent.

Q Okay. How many times were you told not to have late tickets by Joel?

A A dozen. It was a hot topic at that time.

Q Were you left with instructions that left you no choice but to record late tickets without getting agreement from excavators to do that?

A Yes. In the instance that I had previously stated where it was through another party, either a clerical or supervisor who had a conversation.

Q Okay. So the only instances where you changed the due dates on a late ticket is when you first heard from someone at PG&E that they had communicated and gotten agreement with the excavator; is that right?

A Correct.

Q And in those instances each time you recorded who you heard --

A It would have been a supervisor 99 percent of the time, yes. Other times would have been if I talked to somebody on clerical staff.

The whole reason for me doing it is supervisors are out in the field quite a bit too, and they can't always be in front of a computer to, you know.

Q Okay. Let me just finish that question and be sure we're talking on the same thing because I didn't quite finish.

A Oh, I'm sorry.

Q That's okay. We've been doing a lot today, and you've been being very responsive and patient waiting. I just want to be sure for the record it shows up that we're finishing the question and you're sure of the question I'm asking.

A Okay.

Q Okay. So, in that case, for each time that you changed the due date on a ticket that was about to become late, you had received a phone call from someone within PG&E that told you they had received agreement from the excavator to do that, did I get that right?

A Correct.

Q Okay. And I think you said 99 percent of the time that was true?

A I said 99 percent of the time it was the supervisor.

Q Okay. I follow.

A Okay.

Q What about the other one percent?

A Clerical staff or somebody in that yard that answered the phone.

Q Okay. How many tickets did you do that for?

A A handful. Maybe a dozen, two dozen.

Q Okay. Would you do that -- when you spoke with the person who communicated with you that they had spoken with the excavator and PG&E whether it was a supervisor or a clerical staff, at what point would you change the due dates on the ticket after that, would you do it immediately or would you wait a day?

A Immediately.

Q Okay.

A Immediately.

Q Okay. So by "immediately" you mean you'd be on the phone and as soon as you hung up the phone, you would change?

A Correct.

Q You would enter, you would pull up the ticket, find the ticket and immediately right after you hung up the phone change the due date?

A Correct.

Q Do you know of others who changed the due dates on tickets without getting agreement from excavators?

A I do not.

Q Okay. Do you know which tickets -- can you identify the tickets where you had the practice of contacting the supervisors or speaking with them and then changing the due dates, which tickets were those?

A Ticket numbers you're asking?

Q (Nods.)

A I could find them. I don't know of any off the top of my head. I think actually that data was provided through one of the requests.

MR. GRUEN: Was it -- can we go off record a moment?

(Discussion off the record.)

MR. GRUEN: While we were off the record we talked about a way to just be sure that Safety and Enforcement Division is properly identifying the tickets where Steven said he spoke with someone else at PG&E, heard from that person that they got agreement from the excavator to change the due date, and then immediately changed the due date, and so we're going to ask a data request just to that effect, just to be sure we have -- we're looking at the right set of tickets.

I also understand from Steven that he already provided the information to us, but we're just going to ask it to be sure we're identifying the right information when we look at it.

BY MR. GRUEN:

Q Did I capture that right, Steven?

A Yes.

Q Okay. Remind me of when you -- excuse me. Do you know when Joel Dickson was informed of late tickets that -- tickets that were about to become late but did not because they were changed to phased?

A I don't recall the specific date or timeframe.

Q Do you have an approximate, an estimate?

A It would have been right around the time of the war room going up.

Q And when would -- I'm sorry. Did you tell Joel Dickson about that issue?

A Yes.

Q When did you tell him approximately?

A I want to say around March of that year, 2016.

Q Okay. So toward the end of --

A Yeah.

Q -- the war room experience?

A Yeah.

Q Okay.

A That's my best approximation.

Q So after the war room you were still seeing phased tickets that were about to become late but then were not showing as late because they were changed to phased?

A Correct.

Q And you let Joel know at that time toward the end of the room, at the end of the war room?

A That sounds right, yes.

Q Okay. And did you see anything -- did you see that change once you told him about it?

A I'm sorry. Could you repeat that? Sorry.

Q Yeah. Once you told Joel about tickets that were about to become late but were phased, in order to not be shown as late, did you see that stop happening?

A I didn't have insight into it on that level. I wasn't looking specifically at that -- like I said, my focus was on tickets that were shown as late in UtiliSphere.

Q Yeah. That's okay.

When -- did you talk with Joel Dickson about the term -- and I'll use the term "unilateral renegotiation" because I think you used it before, you know the term I'm talking about, right?

A Yes.

Q Did you talk with Joel Dickson about unilateral renegotiation of tickets?

A Not really, no.

Q Okay. Do you know if others raised that to his attention?

A Not for a fact. I had conversation with one supervisor that may have mentioned that they brought it up to him.

Q Which supervisor, please?

A I want to say Ron Yamashita.

Q And approximately when did you talk with Ron?

A It would have been right around that time as well. I'm going to say March of 2016.

Q And after you spoke with Ron, did you see a decrease in the number of renegotiated, unilateral renegotiated late tickets?

A I did not notice a decrease in, yeah.

Q Okay. Did you notice an increase in the number of unilateral tickets?

A Neither an increase or decrease.

Again, not to say that I was looking and didn't notice it, I didn't really have the insight into that.

MR. GRUEN: Okay. All right. Okay. I think this might be a good -- bear with me a moment. Can we go off the record?

(Recess taken from 10:56 a.m. to 10:59 a.m.)

MR. GRUEN: While we were off the record, we clarified the information in which there was a change in the due dates made on tickets based on communications that Steven had with others in PG&E. The information we received, while we did receive it, we didn't receive the name of the person who communicated with Steven to tell him that the excavator agreed to the change in due date.

BY MR. GRUEN:

Q Did I capture that right?

A Yes. Yes.

Q Do you want to add to it if I missed anything?

A I guess it would have been the name of the person who responded to the ticket.

Q Okay. Good. That's helpful. Thank you.

A Yes.

Q I think we better ask it just for the additional name of the person who responded to as well as the name of the person who communicated with you for those tickets?

A Yeah.

Q Okay. So we'll follow-up with that. And you can provide us with that information?

A Correct.

Q On a ticket when a person renegotiated a start time, or changed a due date, if I can use that term, would the ticket show who the person was, who the person on behalf of the excavator was that gave the agreement?

A Yes. It would be in the notes of the ticket.

Q Okay.

A So the audit, the response audit would show --

Q Okay.

A -- there.

MR. GRUEN: Okay. Good. Let's go off the record briefly.

(Exhibit 2 marked

for identification.)
(Exhibit 3 marked
for identification.)
(Exhibit 4 marked
for identification.)

MR. GRUEN: Before I hand them to you let me clarify them so they are clear on the record. We've just had marked Exhibits 2, 3 and 4, and I'll just identify them as I see them and ask you to confirm if that looks rights to you.

THE WITNESS: Okay.

MR. GRUEN: I'll hand you the exhibits and ask you whether you believe that's accurate. I'll give you a chance to review this and take as much time as you need to review it, and then I'll ask you some questions about what some of the information on here means. I see at the top of the first page of it what is marked as Exhibit 2 in the subject line. Do you see that?

A Yep.

Q I see the letters "SEQ# 7: W612000634 for PGESAL." And it is sent Wednesday, March 15, 2017, 11:40 a.m. Does that look accurate to you?

A That is accurate.

Q Thank you.

For Exhibit 3, the subject says, "SEQ# 8:

W612001130 for PGEFNO - Distribution" sent Wednesday, March 15, 2017, 11:45 a.m. Does that look accurate to you?

A That is accurate.

Q Okay. Exhibit 4, "Subject: SEQ# 13: 364841 for PGEBFD" sent Wednesday, March 15, 2017, 3:44 p.m. Does that look accurate?

A That is accurate, yeah.

Q Okay. And so if we go back to Exhibit 2 on the first page you want to take a moment to review that?

A No, I'm good.

Q I'll walk you through the information and you can take as much time as you need when I ask, but on page 1 at the top, the first line of the subject, the text of the email where -- actually, first of all, does this look familiar to you as a ticket?

A Yes.

Q And at the top of the ticket it says "[redacted] [redacted]." Do you see that?

A Yes.

Q Do you know who that is?

A Yes, I do.

Q [redacted], who is that?

A He works for Gas Ops Support dealing with inquiries from CPUC and respond.

Q Yeah. And in the text the top line I was referring to I see that it says, 04/29/16 10:25. What does that -- what do those numbers mean to you?

A That's a received date when this ticket was received by us.

Q Okay.

A Or I'm sorry at the call center.

Q Okay.

A Yeah.

Q Do you see where -- is there a time?

A I'm sorry. Let me clarify. That is received by us.

Q Okay.

A Received by PG&E. The PGESAL reg code received the ticket at that date and timestamp.

Q Oh, okay.

A Yes.

Q I see.

PGESAL identifies the date and time when PG&E received the ticket?

A Correct.

Q I follow.

And the work, the work begins line -- do you see that several lines down where it says "Work begins," there's a line that starts there?

A Yep.

Q And it says 05/02/16 at 07:00. You see that?

A Yes.

Q So what does that mean?

A The work start time was May 2nd at 7:00 a.m.

Q Okay. And that would either have been 48 hours after the ticket was called in and PG&E received it or it would have been --

A No. This is a short notice ticket. So this is an --

Q Okay.

A An exception from the 48-hour rule. So if you look at that first line that we referenced previously.

Q Yes.

A You see at the end there the SHRT NEW PLY LREQ, the end of that first sentence.

Q Yes.

A It's letting you know that's a short notice ticket. The "SHRT" signifies the short notice, ending of that first thing, that's letting you know that's a short notice ticket. The SHRT signifies the short notice. So it's actually coming due before 48 hours. It may be two days, but it won't be due until almost 10:30 that day. They are saying it's starting at 7:00 a.m., so it's actually coming due before 48 hours, business hours.

Q Okay. So let's see. Just trying to do my math. 04/29, April 29 at approximately 10:30, you've got April 30th, May 1st and May 2nd. So that's --

A We don't know without looking at a calendar, if that's over a weekend.

Q I get that. I get you. Likely it was because otherwise it's more than 48 hours, so perhaps there was a weekend and/or a holiday in there.

A Correct. That's what I would guess.

Q Okay. And can you talk about the -- you talked about the short new policy requirement, so is that a requirement for PG&E to come out if the excavator is saying they need the site to be identified in less time than 48 hours?

A Yes.

I just want to clarify. That's not what that really means there. The "SHRT" notifies what time the ticket time is. It's a short ticket. "NEW" just means it's a new ticket, the "POLY" means it was submitted with a polygon for the excavation area, "LREQ" is locating required.

Q Okay.

A It's requiring a locate.

Q Okay.

A But yes, the requirement for a short notice ticket is no different from a regular ticket.

Q Okay.

A Other than we are -- we try and get to it before it's -- it's under -- they are asking for a locate under the regular 48 business hours, and if we can accommodate that we will.

It's not an emergency ticket, which is a different subset that we would have to respond, and we have two hours to locate or respond within on an emergency ticket.

Q I see.

How would an emergency ticket be identified?

A E-M-R-G where it says S-H-R-T, and so you know it was an emergency ticket.

Q Okay. So this was a request for PG&E to come out in less than 48 business hours, but PG&E -- is that right?

A Correct.

Q But PG&E is not required to come within the 48 business hours, it's merely a request not a requirement, right?

A Correct.

Q I see.

Now, even where there's a request to come out within less time than 48 business hours, does the 48-hour requirement still apply?

A Yes, it does.

Q Okay. Continuing on to page 2 of Exhibit 2.

A Mm-hmm.

Q Bear with me a moment.

Okay. Yes. So under the Ticket History (All Times in Eastern Time) you see, we see 04/29/2016 1:26 p.m. Ticket Delivered. Do you see that?

A Yes.

Q What does that mean?

A That means that it sent this ticket via email.

Q Uh-huh.

A To a specific individual. The locator, which is right underneath that, it says it was "successfully sent to [redacted]." I don't know who that is by name, but it was successfully sent to them at that time, which is just a few seconds after we received it, 40 seconds later. Not even 40 seconds later.

Q It's 40 seconds, what you've done there is a calculation I see. It's interesting because on page 1 when PG&E received it was 10:25 a.m.?

A Correct.

Q But then on page 2 the ticket was delivered at 1:26 p.m., but I see above it it says all times eastern time.

A Eastern time, correct.

Q So on page 2 they are using eastern time, but on page 1, it seems like they are using the Pacific time; is that right?

A That's correct. The reason for that is that this is ticket text. This is what we receive from the call center here in California on local time.

Q Okay.

A That doesn't change the ticket text. What they receive is what they receive. This is processing stuff that's done on servers in Ohio, so it's all calculated on eastern time.

Q I see.

A But if you do the calculation it was 10:26 a.m. and 20 seconds, about 37 seconds after we received it.

Q Okay. So is this -- for purposes of understanding, it's not all times in eastern time on the entire ticket, only what's shown under the heading ticket history?

A Correct. So everything that's ticket text, which is basically above, you know, it ends right after the sent to that's everything -- that's the actual ticket. Everything else below that is audit history and that's going to be captured in eastern time because it's recorded on servers in Ohio.

Q I see.

Okay. Let's look on page 3 rather than -- and if we go to -- you see page 3 it's marked at the bottom?

A Yes.

Q And there's an entry toward the top of page 3 that's May 2, 2016 at 9:55 a.m. Do you see that?

A Yes.

Q Is that part of the ticket?

A No. So this is local time. It would have been recorded in local time because that's what was entered, the time what was entered. The stuff before was a automatic email process that was sent from a server, so I guess it's not all in eastern below that.

Q Okay.

A So I misspoke when I said everything below isn't. I guess it depends on the action and what was recorded action versus a time of a communication on eastern standard time.

Q I think I understood what you meant there.

A Okay.

Q In that, let me see if I got it. We're looking on page -- if we go back to page 2 it says "Ticket History" as a heading, and then in parentheses next to it it says "All Times in Eastern Time." So I'm wondering if you were saying all times in eastern time only applies to all subheadings under the ticket history heading?

A Yes.

Q And then unless it says next to a heading "All Times in Eastern Time," it's going to mean pacific time; is that accurate?

A I want to say yes. I'm not absolutely positive because there's different things that are recorded here, so like under response history it's going to show the new start time as requested in local time. Pacific time. It's the, like, responded that's going to be eastern standard time. So time arrived, time departed, that's all local time as entered. If that make sense.

Q I think it does, but let me be sure. Unless it says another time zone, it's going to mean a local time zone, is that -- am I saying that too broadly?

A Yes, I believe so.

Q So if there's another time zone that applies, how would you know if it wasn't explicitly stated on a heading?

A I guess that's a good question. I believe, if that is the case they do call that out, I'm only seeing that here on the once.

Q Yes.

A For this example I think that's it, that is -- no, no. Because look it. You see all the tickets put in folder, all that stuff is all eastern time.

Q Right. So you're looking on page 2 under the heading "Ticket History" where it says "All Times in Eastern Time"?

A "All Times in Eastern Time," yep.

Q And all subheading would be eastern time?

A Would all be eastern time, correct.

Q But as soon as you get to the next heading, it doesn't say all times in eastern time anymore, would that mean that those times are in pacific?

A No. That would be eastern as well. It's only under the response header, which is in eastern time, that these are local times.

So like I was saying before, the new start time, the arrive time, time departed, are all, that's what was entered by the locator, and these are -- basically everything that's listed there is entered on the ticket itself by the locator local time. All these headers are showing in eastern time.

MR. GRUEN: Let's go off the record a second.

(Discussion off the record.)

MR. GRUEN: While we were off the record, we further discussed the timestamps and whether they were eastern time or pacific time, and Steven clarified with me that there are some of both, and I think I understood based on his experience he's able to tell when timestamp is eastern and when it's pacific.

I also understood that more of the timestamps are eastern time than are pacific, and I'm still on the learning curve to figure out the difference when a time is eastern and when it's pacific, and Steven went out of his way to explain it to me in some detail, and I appreciate that.

What we agreed to off the record we will assume a time on the ticket is eastern time, and if it's not Steven will clarify that as we ask about a specific time.

BY MR. GRUEN:

Q Did I capture all that right?

A That is correct.

Q All right. So with that in mind, if we go to page 3 of Exhibit 2, I believe. If you could go there.

A Mm-hmm.

Q And this we talked about briefly off of the record as well, and if we could clarify it on the record here under -- there's an entry 05/22/2016 at 9:55. Do

you see that?
A Yes.
Q On page 3?
A Yes.
Q And under "Details" it says, "Notification of New Start Time." Do you see that?
A Yes.
Q And the method of contact was voicemail there several lines down. Do you see that?
A Yes.
Q And then in the notes it says new start time, I'm sorry, "New start date/time negotiated with excavator." Do you see that? That's at the bottom of the page I'm reading. Do you see that?
A Yes.
Q Is it possible to leave a voicemail and negotiate a new start time and start date with an excavator?
A It's possible, yes.
Q How so?
A It's a drop-down. The method of contact is selected by the locator at the time of entering the response.
Q I understand your answer to mean physically on the ticket you can use the drop-down of voicemail and

also include on the ticket in note saying that there was a new start date and time negotiated with the excavator, am I capturing that right?

A Correct.

Q Okay. And then the actual action, separate from what's possible to enter on the ticket, is it possible to have left a voicemail for the excavator and also negotiate a new start date or time with the excavator?

A Not by PG&E's standard.

Q Okay.

A I don't know if you want me to elaborate or not.

Q Please do.

A Okay. So what I look at here when I see this ticket is it's a short notice ticket for one. It's not even subject to the, you know, the work start time because it's not even a full 48 business hours. A locator probably showed up on site at 6:46 a.m. is when he arrived, work was to start at 7:00 a.m., no crew on site, nothing there. He called, tried to get a hold of them saying, hey, where are you starting. He didn't get a hold of the excavator. Obviously work is not starting at 7:00 a.m., left him a voice message as such saying I'll be out tomorrow morning, call me back.

Who knows what his message is. There's horrible notes here, but, as I said, the notes is just a standard comment. That is even a drop-down, too. He actually didn't even type that. It was a drop-down of a standard comment saying "New start time."

What he should have -- also, the note, too, does not get sent to the excavator. So the excavator does not receive that. He just received the positive response message saying new start time was renegotiated.

Q Okay. So would this then be an example of a late ticket in your mind?

A No. And I know in the sense of speaking by the law, right? Positive response was sent to the excavator before the ticket was due. Also, it's not subject to the 48-hour. This isn't even a full 48 hours of the start time on this. It's a short notice ticket in particular.

Q Let's just be sure we have the math right on that. And your point -- I see your point that it's a short notice ticket and you explained that.

A Yep.

Q On --

A So if he had 48 hours, even if there was no weekend in there, it wouldn't have come due until 10/25 on that date not 7:00 a.m. because that's when it was received.

Q So it was received April 29, let's assume there was a weekend in there.

A Yep.

Q Okay. So I don't think April and early May have holidays.

A No. This would have been weekend is probably what it would have been. I could look at it on the calendar, go back to 2016 and look.

Q I suppose so. But let's assume there was a weekend somewhere around here.

A Okay.

Q Just for the sake of discussion here. So April 29th the ticket was created at 10:25. May 2nd there was a notification of a new start time. So by my math April 30th is one day, May 1st is two days, May 2nd is three days?

A Yep.

Q Okay.

A It wouldn't have been a short notice if it was -- you know what I mean? That that's why I assume there was a weekend there.

Q There was a request for short notice, but in fact there's a three-day notice?

A If it was three days, and it was short notice, it would have been a normal notice ticket. The reason that it's short it shows me that it was probably over a weekend. They are starting on a Monday at 7:00 a.m. is probably what's going on.

MR. GRUEN: Let's go off the record.

(Discussion off the record.)

MR. GRUEN: So while we were off the record we discussed some details and Steven shared some insights about the nature of the ticket and we're going to try and capture those now.

On page 3 starting with the entry 05/02/2016 9:55 a.m. Responded, the details say, "Notification of new start time" and the "Method of Contact" was "Voicemail," and the new start time is listed as May 3, 2016 at 6:48. Does that all look accurate?

A That is absolutely correct.

Q Okay. And I understood you to say off the record that the locator came out at the time arrived entry, at May 2, 2016 at 6:46 a.m., and then left at the time departed entry of May 2, 2016, 6:48 a.m.; is that accurate?

A Correct.

Q So in that case given that there was a weekend in between, that would not have been a late response, correct?

A Correct.

Q And then moving on, the voicemail, the method of contact voicemail, just to clarify on page 3, so as I understood off the record, the method of contact voicemail was left by the locator for the excavator, and that means the locator dictated a new start time of May 3rd at 6:48 a.m. without getting agreement from the excavator. Am I right on that?

A We're speculating at that point in time. The notes does not state a previous discussion or anything like that, but only with what we have here to go off of I would say yes, it was a unilateral dictated start time.

Q By the locator?

A By the locator.

Q Which means there wasn't agreement by the excavator to the start time?

A We can't see here in the details.

Q There's no indication that the excavator agreed to the new start time.

A Okay.

Q So with the new start time of the next day, May 3rd?

A Yep.

Q We see the notes at the bottom of page 3 saying new start time, time negotiated with excavator, right?

A Yes.

Q But based on what you just told me, it appears there was no new time negotiated with the excavator, did I understand that right?

A That is right. So I'll add that that is a standard comment. It's not that the locator actually typed that out, he just selected from the drop-down notification of new start time, it auto populates that whole sentence. Two sentences.

Q Did the locator have to auto populate the notes?

A He did not, no.

Q And was there an option for the locator to input other notes to suggest to --

A Yes.

Q So the locator could have indicated that he unilaterally dictated without the excavator agreeing that he change the start time?

A Yes.

Q I should say he or she.

A He or she could have elaborated to the agreement, yes.

Q Continuing on to the very, very bottom of that page where it says May 11, 2016, 12:09 Responded. So if we compare the May 11, 2016 date -- do you see where I'm referring by the way?

A Yes.

Q If we compare that with the new start time of May 3, 2016, does that mean that the locator did not come back out at the new start time that he unilaterally dictated?

A That's what this suggests, yes.

Q So given that piece of information, is this a late ticket in your mind?

A Yes. Yep.

Q Okay.

A If he did not respond by the new start time it would be considered late.

Q Okay. And then continuing on to page 4 where it says "Notes" at the very bottom, "This site was excavated before being marked by PG&E." Do you see that?

A Yes.

Q So that means that by the time the excavator (sic) arrived out that the excavation had been completed?

A That's it.

Q So the excavation was done before the time it was located and marked?

A By PG&E, yes.

Q By PG&E. Okay. Thank you.

Moving on to -- if I could get that back from you.

A Yeah.

Q And I'll hand this over to the reporter.

Continuing on with Exhibit 3, we've already marked that and authenticated it earlier. So maybe you can walk us through this. This one on page 1 -- give me a moment. You want to walk us through this one?

A Sure.

Q Go ahead.

A So this was received on 04/29/2016 at 1:30 p.m.

Q Yes.

A For PG&E -- reg code "PGEFNO" which is Fresno.

Q Okay.

A It's just a normal status ticket, it's not an emergency short notice, normal ticket the first version of it.

Q Okay.

A It says works begins on 05/03/2016 at 1:45. So that's the normal 48 hours right there.

Q Okay.

A I'm sorry. Actually, same thing. That's the same weekend thing, but it's gone to the right time at 1:45 rather than, you know, 7:00 a.m. that day.

Q Okay.

A So that's a normal 48 business hours. That's it as far as ticket text.

Q Okay. What about on page 2, where on -- looking toward the bottom, May 3rd, we have "Details: Notification of New start Time" and "Method Of Contact: Voicemail"?

A Mm-hmm.

Q You see where I'm looking?

A Yes.

Q And on page 3, again, in the notes we see new time -- I'm sorry. "New start/date time negotiated with excavator." Do you see that?

A Yes.

Q So is this another instance of inputting that a voicemail was left and a new date was negotiated, but in fact the excavator did not agree to change the due date?

A It's what this appears, yes.

Q Okay. And when -- I'm sorry. Just for my reference, when did the excavator come out and do the locating and marking -- I'm sorry. When did the locator come out and mark?

A I do not see on this one when the locator came out and marked on this. This looks like an instance where the ticket was actually closed with this response.

Q I see.

Are you looking -- the response was rejected because the ticket was closed on page 2?

A Yes.

Q Okay.

A So what happened was he responded to it with the renegotiation but closed the ticket.

Q Yes.

A It looks like he -- and he did that at three -- I'm sorry, 1:50 p.m., but then actually showed up at 4:47 that same day and marked it, tried to add the response it's already marked, but it was rejected because he already closed it that day.

Q And just for clarification you're using pacific time for those times in that case?

A Yeah.

Q Okay. Is it clear to you why he closed the ticket?

A No. I would say it was -- I mean, it's definitely not procedure. It looks like a training issue with this locator.

Q Okay. Is it common to see a ticket closed without explaining why?

A No. Not at all. This instance, or when you renegotiate, like -- could we go back to Exhibit 2?

Q Sure.

A Just to show you the difference.

Q Sure.

A If you'll look at page -- yeah, sorry. Page 3 of Exhibit 2, right next to "Notification of New Start Time" it says "Ongoing."

Q Yes.

A In parentheses.

Q Okay.

A That means a response was entered, but the ticket was left open. This does not have that, so he actually closed the ticket with this response in error. That's not procedure.

Q Okay.

A That's never supposed to happen, you know, according to procedure.

Q Okay.

A He went back and later tried to close it with facility marked, which shows me that he wasn't even aware it was closed. So he --

Q Where are you looking?

A I'm sorry. On Exhibit 3, page 2 where it says, "05/03/2016 7:47:07 PM: Response Rejected."

Q Yes.

A Fresno 6 attempted to add response facility marked by the same locator, the response was rejected because the ticket was closed.

Q Okay.

A He closed it in error originally. He went back to close it the right way and didn't realize that it was already closed.

Q I see. Okay.

He notified the excavator the new start time on May 3, 2016 at 4:50 p.m. eastern time and he put a new start time --

A Correct.

Q -- for later that day.

Okay. I'm struggling with this because it went to military time, it looks like.

A Correct.

Q So he went from 4:50 p.m. eastern time to 15:30, which is 3:30 p.m. eastern time?

A Correct. He responded at 1:50 pacific time, so the new start time is in pacific time as well because, again, that's the details that was entered by him, so he's trying to do it at what would be --

Q 3:30?

A 3:30, yeah, on 05/03.

Q And then at 4:47 on 05/03 he closed the ticket?

A Correct. Well, attempted to close it again to be accurate.

Q Okay.

A He never should have closed it that original time. It looks like he did so in error.

Q When you say he closed it that original time, when had he originally closed it?

A The same, 1:50 p.m.

Q Where does it show at 1:50 p.m.?

A It shows it in 4:50 p.m., so it's in eastern, the notification of new start time, the bottom of page 2.

Q Okay. When you say "notification of new start time," that's the equivalent to closing it?

A Yeah. He responded as a complete response rather than an ongoing. You should never do that as a complete response. It should always be ongoing.

Q Is the notification of a new start time considered the same thing as closing a ticket?

A No. It's a response, but you should never close a ticket with that response.

Q Okay. So the response, if it says complete response it's closed?

A If it doesn't say ongoing it means it was a complete response.

Q I see.

A If it has ongoing in parentheses it was response entered but tickets left open.

Q And that's what you showed me in Exhibit 2?

A Exactly.

Q I follow.

Okay. So you infer it's closed when it doesn't say?

A Ongoing, yep.

Q Okay.

A You can select and enter an ongoing complete response for every response. You should never use complete for this one. Obviously he did it.

Q Where does it say "complete," the word "complete"?

A It doesn't. It doesn't say complete. It's either -- it shows ongoing in parentheses or it's assumed complete.

Q And you're using your experience and knowledge of PG&E to state that?

A And also seeing that he tried to respond to it and close it, but he couldn't because it was already closed, so we knew it was closed when he entered that original response.

Q Which is why you're saying when you see the entry at May 3, 2016 7:47 p.m. that the response was rejected because the ticket was closed, that's a second closing of the ticket?

A Trying to close it a second time and this is the only other entry on it, so he closed it at that time.

Q Okay.

A And you can tell that by there's no denote in parentheses of an ongoing response.

Q Would this have been sent to QA, this ticket?

A Not sent. They obviously are only looking at facility marked tickets and a subset, a random sampling, so it doesn't get sent to them, if they would have pulled this up in a random sampling, they definitely would have assessed it as a late ticket.

Q Okay. Okay.

A And it dinged him for improper use of a response.

Q And is this improper use of a response, is this also incorrect information that's put in the ticket then?

A I wouldn't say incorrect information.

Q Just information that's not following PG&E procedure?

A Correct.

Q I follow. Okay.

Let's go on to Exhibit 4, please.

A You want this one back?

Q Yes. Please. Thank you.

A Yep.

Q Okay. And do you recall this one? I believe we had identified this together a short while ago when I handed out the exhibits initially, but we can go through it again if that's helpful to refresh your memory.

A No, I'm fine.

Q Okay. So -- you know, I think I should ask just to be sure, are these Exhibits 2, 3, and 4, I'll hand them back to you, are they all familiar to you as PG&E tickets?

A I don't remember these specific tickets, but they are PG&E tickets from looking at them, yes.

Q Okay. Great.

A Yeah.

Q Thank you.

So continuing with Exhibit 4. Okay. We have here the -- on the first page I see it's a normal notice, so it's not a request for expedited treatment?

A Correct.

Q And the work begins at -- I'm sorry. The request was received by PG&E September 8, 2014 at 9:50 a.m.; is that right?

A That is correct.

Q Okay. And that's looking at page 1, right?

A Yes.

Q Work begins according to the excavator at 09/19/2014 at 7:00 a.m., correct?

A That is correct.

Q So in this case the excavator gave more than the required 48 hours?

A It looks like 87 hours, yeah.

Q Okay. I see. You're looking right by the work begins the notice prompt that says "087 hrs"?

A Correct. So they said they could call them in up to 14 days in advance. So this is one of those that's in between the 48 and 14 days.

Q I follow you. Okay.

A Yeah.

Q And then moving down to the nature of the work, do you see that?

A Yes.

Q And it says -- does that say -- there's some abbreviations there, but does that say, Auger to replace power pole?

A That's exactly what it stands for.

Q Okay. Continuing on to page 2 of Exhibit 4. We have at 09/19/2014, 10:23 a.m. notification of new start time ongoing. So they didn't close the ticket in that case, you've taught us from Exhibit 2.

A Yeah.

Q Am I getting that right?

A Yes, that's correct.

Q Okay. And the new start time was 09/19/2014 at 12:54. Okay.

So the notification of the new start time was done through the response at 10:23 a.m.; is that right?

A In eastern time, yes. It would have been 7:23 local time.

Q Okay. So, in other words, the notification of the new start would have been 23 minutes after the excavator said the work began, correct?

A Yes. That is correct.

Q Okay. So the notification was late?

A Yes. This is late, would have shown as late in Earth.

Q Okay. And the method of contact was voicemail. Do you see that?

A Yes.

Q And does that mean that the notification of new start time would have been issued without an excavator agreeing? To you.

A I can't infer that from looking at it. The note says, "New start date/time communicated to excavator," but that's all it says. He also added a positive response note which is additional message to excavator. Any questions call [redacted] at phone number that's stated as the very first thing on the top of page 3. I don't know if the voicemail was that he left the message there with [redacted], referencing a previous conversation or not, it's not clear in the notes.

Q Well, if he had received agreement from the excavator, would he have noted that on the ticket?

A Should have, yes. Yeah.

Q When you say "should have," was he required to per PG&E procedure note that on the ticket?

A Yes.

Q And he did not?

A He did not.

Q So -- okay. Continuing on to page 3 at September 19, 2014 2:42 p.m. responded, and the details say "Excavated before marked." Do you see that?

A Yes, I do.

Q What does that mean to you?

A At -- would that be 11:42 local time on 09/19, we went out to the site and saw that it had been already excavated.

Q Okay.

A Prior to PG&E marking.

Q So 09/19/2014?

A So it shows that he did go back out prior to the new start time which could have been unilaterally dictated.

Q Yes. Okay.

Prior to the start time when you say could have been unilaterally dictated it's that -- if it -- if he was receiving mutual agreement to change the start time, he was supposed to note it on the ticket per PG&E procedure, correct?

A Correct.

Q But he did not do so here?

A He did not here.

Q Okay. Another question about this ticket. You remember on page 1 we talked about auger to replace power pole --

A Yes.

Q -- is the nature of the work?

And it says done for PG&E under that. Do you see that?

A Yes.

Q So this was PG&E's contractor then; is that right?

A That is correct. It was a third party -- I'm sorry. Call it a second party ticket because it's a third party contractor doing work for PG&E.

MR. GRUEN: Okay. Do you want to take a break? Let's go off the record.

(Recess taken from 12:14 p.m. to 12:21 p.m.)

BY MR. GRUEN:

Q Okay. On page 1 of Exhibit 4, you have Exhibit 4 in front of you?

A Yes.

Q Exhibit 4 where we were talking about the nature of work auger to replace power pole done for PG&E. Do you recall that? You see that there?

A Yes.

Q This was a PG&E contractor who did this work?

A Yes.

Q And I think you mentioned the term "second party contractor," is that what this is?

A Second party ticket. So it's a third party contractor doing work for us. We consider a second party, per se, as a third party contractor doing their own work is a third party ticket.

Q So it's a second party ticket because it's a contractor that did work for PG&E?

A Yes.

Q So this second party ticket, that means that the second party or the PG&E contractor called in the ticket?

A Yes.

Q And we discussed earlier, you remember, that the details showed this was excavated before marked?

A Yes.

Q So does that mean that a PG&E third party contractor came in, called in, created the ticket, PG&E received the ticket, and then began excavation before a gas locator came out to identify the underground gas equipment?

A That is correct.

Q Have you seen that occurrence happen before?

A Yes.

Q Commonly so?

A I wouldn't say commonly, but I have seen other instances.

Q How often?

A Not very often. Again, I use the term "handful of times," probably, you know, under a dozen.

Q Okay. I want to ask you more generally about tickets created by PG&E's power pole contractors. Are you familiar with that?

A Yes.

MR. GRUEN: Have you seen -- bear with me a moment. Off the record for just a minute.

(Discussion off the record.)

BY MR. GRUEN:

Q Did you ever see tickets created by PG&E contractors who were doing work on PG&E's electric poles?

A Yes.

Q And that would -- the ticket we just discussed was an example of one of those, wasn't it?

A Yes.

Q Did you ever see tickets like those get deleted automatically from IRTHNet?

A Deleted. You can't delete anything from IRTHNet. So I think your terminology is -- I think you're asking something other than what you're saying. Can we clarify that a bit?

Q Yeah. Let's just maybe unpack materials then a little bit.

A Yeah.

Q Was there an example of -- have you seen an example of a ticket created by a PG&E contractor that was created but not entered into IRTHNet?

A No.

Q Okay. You said it's not possible to delete a ticket that's created in IRTHNet?

A That is correct.

Q Okay. Are you aware if PG&E had a policy to not respond, have locators respond to its power pole contractors who call in a ticket?

A Yes. Yes.

Q Okay. And in those cases were the tickets still created?

A Yes.

Q And the tickets were left in IRTHNet?

A Yes.

Q And how were the tickets addressed, were they closed?

A They were closed by auto process.

Q I see. What does that mean?

A So when a ticket is -- was called in by the third party.

Q Yes.

A Contractor to do work on PG&E's power poles, if it was a pole test and treat ticket, which actually is not excavating. They were not digging. They're actually drilling into the pole to determine for rot or something like that, they would use a specific verbiage of nature of work. So where it says "nature of work," it would say tested treat wood power or utility pole. It's very specific verbiage. That would hit a keyword which would process it to a pole test and treat folder, which upon folder placement would respond and close the ticket out as PG&E response not required.

Q Does -- I see.

And that was for all test and treat?

A For all.

Q Jobs on power poles?

A I'm sorry.

Q Go ahead.

A All test and treat that had that verbiage. If there was something above and beyond what the normal test and treat process was, if they had to grind or dig in concrete, drill or something like that, they would call in a ticket that had different verbiage for that, and that would work like a normal ticket.

Q Remind me what the verbiage was that did not get a normal response?

A Test and treat wood utility pole.

Q Utility pole. Okay.

And you said in those instances, test and treat of wood utility pole did not mean digging?

A Yeah. Under those normal conditions would not require excavation.

Q Okay. Were those conditions in which those tickets can require excavation?

A Those tickets would be called in with a different nature of work that would work like a normal ticket. It wouldn't get auto processed.

Q Okay.

A Anything above and beyond a normal test and treat would have to be called in with a separate description of work.

Q Okay. So are there any tickets for excavation related to excavation of power poles that would have been auto processed in the way that you described?

A Not that I'm aware of, no.

Q Okay. Bear with me.

Were there any other instances of digging that required -- were there any other tickets created for instances of digging that were auto processed in the way you described?

A Yes.

Q Okay.

A Well, let me put it this way. So not that required -- I want to word this correctly. So not asking for PG&E to respond.

Q I'm sorry?

A So a ticket would be called in for -- you would say excavator calls in one ticket to USA, it gets sent to everybody that has facilities underground, and you could see on every ticket each reg code it was sent to.

For example, the one on Exhibit 4 was sent to Bright House Networks, California Water Service of Bakersfield, the City of Bakersfield, Pacific Bell and PG&E District Bakersfield. So they can call in a ticket specifically requesting any other of the facility companies to respond not all of them. So they can say specifically calling in a ticket saying Pacific Bell please come out and re-mark, we would receive that ticket, it's not a -- a no re-mark ticket is another example. We've already responded and we've provided marks. They are calling in just to keep a valid USA ticket. That could be auto processed.

Q Why would other utilities be required to respond and locate and mark for a test and treat wood utility pole if there was excavation happening?

A That's a good question. It gets sent to them regardless. Just because they have facilities in that area, whether it's in their -- if they have anything in that proposed excavation area, it's not really excavating, right?

I think for a power pole that is being excavated on, or they are doing exploratory work, it's basically a 2-foot thing, basically box around that pole. Typically the only thing they are going to have there would be a communication company because we lease the poles for telephone but.

Q Okay. So there could be circumstances where there was some excavation going on for those companies to respond to, is that what I'm understanding?

A Correct.

Q But PG&E wouldn't respond in that instance?

A PG&E wouldn't -- if we didn't have anything there, if they are not excavating actually, they are not excavating specifically, not disturbing the soil.

Q I think maybe I'm not clear because I think I heard that there was some excavation going on which would prompt other utilities to respond in the case of power pole treatment. Did I misunderstand that?

A It would be a different ticket, I guess. You're specifically talking about the test and treat wood utility pole ticket, right?

Q Yes.

A Yes. Nothing else that would auto process those tickets. I've kind of lost my train here. The original question you asked.

Q You want to go off the record for a second?

A Yeah.

(Discussion off the record.)

BY MR. GRUEN:

Q Off the record we just clarified a couple of the differences between when other utilities will come out to do excavation work but not PG&E, and we talked about it both generally as well as for test and treat utility pole instances, did I capture that accurate?

A Except you said come out and excavate, but meaning come out to mark, I think, is what you meant to say.

Q Thank you. I did mean come out to mark. Thank you. It's close to lunch.

A Yep.

Q Thank you. Okay.

Here's my question, why would a PG&E contractor who is doing test and treat wood utility pole call 811 if they are not going to dig in the first place?

A So that's a good question. I don't know the answer to that as far as why they are calling them in. I believe it's the -- because I don't fully understand the nature of work of wood test and treat. I believe they drill into the pole to test for rot. If they find something underneath the pole then they may actually go and drill into concrete based off of that finding. I believe that's how it works.

Q So if they go -- if they find rot and drill into the concrete, isn't that digging?

A Yes. At that point, and they would have to call in a follow-up ticket.

Q And would PG&E auto close those?

A No. That would be a separate nature of work. It wouldn't catch the auto processing flag. So it would be exploring, you know, digging for pole rot, and I don't know what that verbiage is, but it's separate nature of work from the normal test and treat that would get auto processed.

Q And then PG&E would respond?

A Just as any other ticket.

Q Just as any other ticket?

A Yes.

Q Just for the record where there was the need for the PG&E power pole contractor to dig into the concrete?

A Correct.

Q Okay. Does PG&E do this practice anymore?

A No, we do not.

Q When did PG&E stop auto correcting?

A Fairly recently. It was this year. I want to say two months ago.

Q And why did they stop doing it?

A Direction from senior leadership. I don't know who made the decision, but we just had to go out and respond to each of these tags. So my involvement was just turning off the auto processing role. I don't know what was discussed above that.

Q Okay. That was two months ago, you said?

A Maybe a month and a half.

Q Okay. Let's go back to the examples. The locating of a phase ticket 3, negotiating unilaterally in the inclement weather that you discussed, I think very early in the morning.

In the case of locating the phase ticket, was this putting information about a phase ticket on the ticket when in fact it was not a phased job?

A Can you restructure that? I just want to make sure I'm understanding it correctly what you're asking.

Q Was it putting inaccurate phasing information on the ticket?

A You could use the response, response to a phase ticket when in fact the ticket was not requiring a phasing, if that's what you're asking.

Q Well, requiring a phasing. I think I'm -- are there instances where you'd show -- you'd do a phase job if it wasn't required?

A No. I mean, by standard, no.

Q And so if it's not required, and you indicate that it's a phase job, isn't that information on the ticket then inaccurate?

A Yes.

Q And was the information put on -- was that inaccurate information for a phase job included in order to avoid the ticket showing up as late?

A Could be, yes.

Q Did you see instances where that was the case?

A I've seen that, yes.

Q How often?

A I don't know if you're looking for number of tickets or times of.

Q Both.

A Both. I've seen that one quite a bit. I would say dozens of times.

Q Okay.

A And it was primarily in the earlier years in question.

Q What years were those?

A 2014, 2015.

Q Okay. The reason I'm asking, we covered this earlier a little bit.

A Yeah.

Q But wanted to get at -- with that in mind, any other techniques that you noticed, you've seen, where inaccurate information was placed on a ticket in order to avoid it showing as late, have you seen any instances like that?

A Other than the responses that I kind of called out earlier on, that's it.

Q So the locating phase ticket, the renegotiating unilaterally, and the inclement weather, those are cases where you saw inaccurate information included?

A Correct.

Q In order for the ticket to be voided as late?

A Correct.

Q How many instances did you see it for renegotiated unilaterally approximately?

A I couldn't put a number of it. Same. I would say dozens of times.

Q And from 2012 to -- what were the years, I'll just ask you that?

A Yeah. Through the years 2012 to 2015.

Q Inclement weather?

A Inclement weather wasn't even added until 2016, maybe late 2015. I don't recall the time, but it's a fairly new response.

Q So inclement weather would show -- inclement weather would show in instances where the weather was not permitting you to locate and mark, isn't that what you said earlier?

A That's correct.

Q Why would you put inaccurate information on a ticket with inclement weather when PG&E couldn't properly locate and mark?

A It's not that it's inaccurate, it's that the -- you're -- by using inclement weather, you're not specifically stating when you can come out and mark. I understand you not knowing when it's going to rain, but if you respond like that you're not giving yourself a time to follow up by.

So in reality, in all reality, it should be renegotiating a start time based off the inclement weather.

Q Okay.

A By using it as a catch all, inclement weather, you're just giving yourself an unlimited amount of time until it's sunny out, I guess, or the ground dries up to respond to that ticket.

Q Did you see cases identifying inclement weather where in fact the weather was not inclement?

A No.

Q That's not what I was seeing.

A I would see it was using inclement weather while it was raining and then not responding as soon as it was clear again. Maybe, you know, another couple days after it had dried up. Because they are catching up on a backlog of tickets from when it was raining.

Q Okay.

A If that makes sense.

Q So if there's inclement weather and PG&E can't get out within, let's say -- let's use the 48-hour requirement.

A Yep.

Q For example, you have that in mind, where PG&E has to get out within 48 business hours of the time that the ticket is called in, and then there's inclement weather that prevents PG&E from coming out, let's say, on the second day, and then it stops raining, when in that instance would PG&E be required to come out and locate and mark?

A I would say that first day that you're able to. It should be positive contact with the excavator saying when they can come out because of ticket volume being based off it being rain.

Q Okay.

A So we can't mark in the rain. They can still dig in the rain. That's their prerogative if they want to dig in the rain, but they are still not supposed to dig without marks.

Q Right.

A If we are unable to put paint on wet ground, we can't mark. So, you know, at that first instance where the weather's clear, we should be making contact with them to dictate when they will be out there. So when I said as an instance of that, if the first day it's sunny comes out and we're not making contact that could be used as an instance of a late ticket.

Q Would inclement weather being put in a case to avoid a ticket showing as late if it was about to come up as late?

A No. Not in that regard. Not saying that it's inclement weather when it's not inclement out, I just meant it could lead to late tickets because you're not following up as soon as weather permits, if that makes sense.

Q Okay. So it's a little bit different from the locating phase ticket and the renegotiating unilaterally, in that, it's not inputting inaccurate information to avoid a late ticket like the other two, am I getting that right?

A That's correct, yeah.

Q Okay. Let me ask you about -- go back to the point about being told that there will be no late tickets. Do you remember that?

A Yes.

Q Okay. Were you ever provided incentives for putting false information on tickets or -- you didn't say that you put false information on tickets, so let me strike that and restate.

Do you know of others who are provided incentives or encouragement in any way from others at PG&E for putting false information on tickets?

A No. Incentives, no.

Q Okay. What about specifically changing the due dates on a ticket without agreement from the contractor, from the excavator, any incentives to do that?

A No.

Q Okay. No bonuses or anything --

A No.

Q -- for anyone that you're aware of?

Are you aware of job performance, did your job performance evaluation have a goal that included no late tickets?

A Yes.

Q Okay. Did your job performance evaluation have a goal to follow the locate and mark requirements?

A No. Not me specifically. I'm not a locator. I'm not, you know, operator qualified for marking procedure, but yes, I mean, following procedure as it dictates handling the tickets, yes.

Q There was a goal to follow procedure regarding handling of tickets for your job?

A Yes.

Q What do the goals say?

A Not specifically a goal, but just to make sure that the system is robust and functions properly. I mean --

Q Okay.

A Nothing specific around the handbook of locate and mark or anything like that. I'm not a locator per se, so.

Q Okay. Did the -- did you receive poor marks for not -- for not achieving the goal of having no late tickets?

A No. I did not, no.

Q What marks did you receive on that goal in each of the evaluations?

A I was just kind of graded on the overall success of the group of locate and mark as a whole. My involvement with that was purely of an administrative thing, so it wasn't really up to being timeliness of marking tickets just making sure that the notifications for late tickets and all that stuff is working properly.

Basically my role in it was to assist the supervisors down to the locators making sure that they could effectively respond to tickets on time, in a timely manner.

Q Okay.

A If that makes sense. There's nothing specifically says they had late tickets and I was penalized at all.

Q Were you in any way pressured, did you receive any pressure from anyone within PG&E to not have late tickets?

A Yes.

Q How so?

A The directive was zero is the only number and driving to that goal. When we first looked at it in 2015 when the late tickets were, you know, much higher in volume, it was originally communicated to us that we were going to drive a, what was it, 10 percent reduction in the number, and then instantly a month later was zero is the only number.

Q And why the change, was it explained to you?

A It was not explained to me at that level. We're a compliance organization. We need to be in compliance with the law, 4216.

Q The Government Code?

A The Government Code 4216.

Q Could you realistically given what you have seen with the late tickets coming in, was that doable to achieve the goal of no late tickets?

A In my personal opinion, no, at the time because of the levels we were staffed at.

Q And when you say the levels you were "staffed at" at the time, you mean there weren't enough PG&E personnel or contractors to handle locating and marking?

A That is correct.

Q And why is that your personal opinion?

A The ticket volume had grown year over year from 2012, 2013, 2014, 2015, fold over fold, you know, operating with the same -- you know, we had been promoting 811, all the ads, billboards, stickers, everything. We got a lot more tickets called in each year, but operating with the same amount of people that we had back at the lower ticket volumes.

Q Okay. And when you say "operating with the same amount of people," that was continuing year?

A Yeah.

Q Year in and year out?

A Correct.

Q Okay. Until what year?

A It was right into the end of 2015, early 2016 we brought in contractors to do the -- alleviate the immediate need.

Q And how long were the contractors there?

A They are still there to a certain extent. Most of them now are performing different functions.

Q How many of them?

A I don't have the number accurately off the top of my head.

Q Okay.

A I want to say it's somewhere around the same, 40.

Q As were brought in initially?

A Yeah. I don't know for certain. I'm sorry.

Q Okay. So given the instructions to have no late tickets, but not the manpower to achieve that goal, do you know of anyone who input false information to show a ticket as not late when in fact it was?

A Not specifically, no. Again, the using responses to buy time was discovered as a -- you know, I think the way that you refer to it is improper use of responses to stop the clock on a ticket basically. From showing in Earth, that is. So people were getting the tickets responded to to have it not show as late in Earth.

Q Okay. And if it's properly responded to, why is it -- I'm sorry. Why does it not show up as late in Earth in that instance?

A Earth is very black and white in its definition of late, which is a ticket that has not been responded to beyond its due time.

Q So you can change the due time to avoid that problem?

A Yeah. Not necessarily changing the due time. When you say that it's kind of an improper way to explain it.

Q Okay.

A Nobody's changing the due time. The due time stays the same as it is on the text of the ticket.

Q Okay.

A It is what it is. It never gets changed. You can renegotiate a start time telling them you're going to show up at a later date and time than what's stated on the due time on the ticket.

Q I'm glad you said that, because if you renegotiate the start time, then both the original due date and the renegotiated due date will both appear on the ticket; is that right?

A No. In the new -- only in the ticket audit history would you see new start time, but that doesn't ever change any of the ticket text, and as UtiliSphere shows it's only looking at the work start time, which is how it dictates a due time. So once you've responded to that, if you responded before the actual due time, even if it's to renegotiate a new one, it stops the clock on that ticket, and it wouldn't show as late because you've responded to it before it was due originally.

Q And by responding in this case, it's changing or renegotiating a start time?

A Renegotiating a start time, that's correct.

Q But that's not actually responding by communicating with the excavator?

A It is in a sense that it does send a positive response message. We either email them, fax them or phone call them to let them know PG&E is -- said they are going to be out at a later date and time.

Q I follow.

But it's not actually -- it's not reaching the excavator for communication necessarily?

A Necessarily. And it's not a unilateral agreement necessarily every time.

Q And if it was receiving mutual agreement from the excavator, then, that would also show on the ticket in that instance, right?

A Correct. It would say phone call or field meet, and the notes would have who they spoke to and the date and time and what was agreed upon.

MR. GRUEN: Okay. Okay. You want to go off the record.

(Luncheon recess taken at 1:00 p.m.)

--o0o--

06/21/17 AFTERNOON SESSION 2:01 p.m.

EXAMINATION (resumed)

--o0o--

BY MR. GRUEN:

Q Hi, Steven. So we're back after lunch, and a couple of follow-up questions on some of the topic areas we discussed this morning for you. Okay. A couple of questions.

Remember we were talking about the discrepancies where the QA would find certain tickets that were late, but weren't shown as late in IRTHNet or UtiliSphere, do you remember us talking about that?

A Yes, I do.

Q Okay. What period of time did those discrepancies -- were those discrepancies noted?

A It would have been 2016 to current day.

Q Okay.

A Just for January of 2016 to --

Q Okay.

A To today.

Q All right. And are those records available that show the discrepancies that we're talking about?

A Yeah. I would say so. I mean, QA findings, I have seen it listed somewhere. I don't personally have it, but we can get that.

Q What are the records called so we can ask for them?

A QA late ticket. If you say that we know. Yep.

Q Okay. Good.

Of who in management hears about those discrepancies?

A It would be the -- I guess first would be the superintendent and supervisors.

Q Okay.

A I don't know the frequency that that stuff gets reported up, but eventually director would, you know, be privy to that.

Q Okay. And that would have started also in January of 2016?

A Yeah. Or very shortly thereafter, first few months of January.

Q In 2016?

A Yep.

Q And in response to those discrepancy reports, was any action taken?

A Yeah. And that was the investigative -- you know, them pulling specific tickets to have me look at it to see why are we getting these considered late, and it just determined that QA is looking deeper than just what IRTHNet is saying it's responded to past due.

In all these instances that we were discussing they either phased a single service incorrectly or something like that and tallied that as a late.

Q Okay. So were any measures taken to correct the discrepancies in the way that followed PG&E procedure and avoided inaccuracies?

A Yes.

Q And what corrections were taken?

A I don't know how they refer to it as a coach and counsel, or PD, which is like positive discipline or something. It's, you know, basically a written or verbal discussion on correct procedure, and if it was found to be again then it gets down to a written -- you know, if there's a specific list or set process to follow in that instance when you're dealing with IBEW employees, union employees, you have to go through the verbal, and written, and then you could discipline based off of those two things.

Q And who would give the verbal and written communications in that cause?

A Supervisor would be direct with the employee.

Q And what would happen if the discrepancies continued under that employee's watch after a written communication happened by a supervisor?

A I'm not exactly sure. I don't have any direct reports, so I'm not familiar with the process other than hearing how it goes, but I believe at that point it's grounds for termination. I guess it depends on the severity of it in the sense that like this would be, I think, grounds for termination.

If it was something more than a training issue, you know, once we've been trained and we document that we've been trained on that, you sign off on it, and if you continue to do that then you would be terminated.

Q Okay. Okay. Remember how you were talking about the goal of zero late tickets?

A Mm-hmm.

Q And the process developed to combat late tickets, the war room specifically, do you recall talking about that?

A Yes.

Q Okay. Did Joel Dickson approve that process of starting a war room?

A I believe so.

Q I think you mentioned it was his idea, wasn't it?

A Yeah, I believe so.

Q And when the war room started, did you continue to see findings from the QA Department indicating that the locator used an improper response?

A Could you ask that again? I'm sorry. Make sure I'm hearing you right.

Q I think the question is when, when the war room started to happen, did the QA Department still continue to show the discrepancies?

A Yes. I believe so, yes.

Q Okay. And did the discrepancies tailor off once the war room happened or?

A Definitely saw a reduction. I wouldn't say completely tapered off.

Q Okay. And when the war room also -- once the war room started, was there a change in -- or rather a decrease, when the war room started, was there a decrease in creating phasing tickets to avoid them from becoming late?

A I don't know. I didn't receive any direct reports from QA, so again, I'm not really privy to that information other than being asked to research specific tickets.

Q What about when the war room started, was there a decrease in renegotiated due dates by the -- unilaterally?

A I can't say that for certain either.

Q Okay. What about when the war room started, was there a decrease in improper use in the weather inclement response, that is, the use of the inclement weather in order to avoid a late response?

A I'm not absolutely positive, but I don't think inclement weather was even around when the war room was there. I think it came after.

Q Okay.

A So it was a response that was added prior.

Q Okay.

A Yeah.

Q You mentioned that a late ticket was a hot topic at the time that Joel Dickson started a war room, I believe. Is that accurate?

A That is correct.

Q Do you know why it was a hot topic?

A They just switched gears as far as focusing on what goals were for that year and being in compliance. Obviously was it driving, reducing late tickets, and I think it originally started out being pitched to us to a 10 percent reduction to overnight being zero is the only number.

Q And you aren't privy as to why that changed from a 10 percent goal, and by 10 percent I assume you mean 10 percent of the current late tickets can move forward 10 percent, can now be late moving forward?

A I think from previous total as month to month, so comparing January of 2015 to January of 2016.

Q Okay.

A And 10 percent reduction for each month but.

Q 10 percent reduction?

A Yeah.

Q I follow.

A Yeah.

Q Each month.

So, in other words, if there were 100 late tickets, for example, in December of 2015, then you would have -- 90 tickets would be the goal in January of 20 -- what did I say, 2017?

A Yeah. It was 15 versus 16, but yeah.

Q Ninety?

A You've got it.

Q One hundred in one month, 90 would be the goal in the next month, and then 10 percent of the 90 the following month, and then it would be -- so what, 81 the following month and so forth?

A Correct.

Q Okay. Okay. And that was a change to zero, but you weren't told why?

A Just that that's it. I keep on going back to we're a compliance organization, that's what I was specifically told, compliance organization, be compliant with Government Code 4216.

Q But at the same time there wasn't the staffing increase?

A Correct. They had to build a case for a head count increase.

Q You gave your opinion before that it wasn't done to achieve a zero, zero late ticket goal with a zero increase in staff given the number of late tickets that you had seen; is that right?

A That's correct.

Q Did you tell that to management?

A Yeah. I think that was brought up by most of the supervisors. We felt that was the case, and they started building the case for getting increased head count, I think, right away, but the gears were slow to turn in that whole process and getting people on board.

Q Who specifically was told about the difficulty, or perhaps, not lack, the fact that it -- let me restate.

Who received input that it was not possible to achieve zero late tickets with the current staffing?

A What I was privy to would have been the superintendent in conversation with all of the supervisors making that assertion and then what happened above that I don't know. If it made its way up to director, I assume it did because they built a case for head count. We did get an increase, so.

Q An increase in contractors?

A Contractors coming in, yep.

Q Temporarily?

A Temporarily we did increase full-time employees now, gosh, almost double, but.

Q Let's break down time for a second.

A Okay.

Q So the case was made for an increased number of staff at what point?

A I don't really recall the specifics of when.

Q Okay.

A It did take a while. I don't know if that was June of 2016 or.

Q When you talked about the superintendent and supervisors, the case being made for more staff, were you privy to -- were you in a meeting where that was discussed?

A Yeah. I would say it was probably a supervisor all hands meeting.

Q And when was that approximately?

A Met towards the beginning -- well, so that's when the edict came down of zero is the only goal, that would have been very early in 2016 or, I think about it, maybe even late 2015.

Q Okay. And shortly after the edict, the all hands meeting happened that said it's not possible to meet this goal where there was -- was it unanimous in that meeting?

A No. Just a little bit more. It was more of a bite your tongue than everyone was griping after the fact about how-do-they-expect-us-to-do-this kind of mentality.

Q And the supervisors were in the room at that point?

A Yeah. I'm sure it got brought up. If not in the room individually by each of the supervisors.

Q Why are you sure?

A That was the whole talk of what started the head count. We had to build a case, I guess, for senior leadership to increase staffing. So they started asking us things like what was the whole -- you know, how many more tickets have we received this year as opposed to last year at the same time and all that, so.

Q And when was that case built?

A That's what I was saying. I think it was sometime around -- you have a completed case, I'm thinking, sometime around June of 2016 or something.

Q Okay.

A That's not positive, but that's my best guess as to when.

Q Okay. And did the zero late ticket goal change after that case was built?

A It did not.

Q Was -- and staffing, the 40 contractors that you talked about, when were those brought on?

A Sometime around shortly thereafter, July 2016, I want to say.

Q And those you don't know if they were full-time?

A I think they are full-time.

Q Locate and mark?

A Yeah. Locate and mark. Some of them may have been performing standby, I don't know.

Q And when were they let go?

A Just phased out at the beginning, completely by, I think, November of 2017. 2016.

Q I follow you.

A Yeah.

Q Okay. And after they were phased out, did the goal of zero late tickets continue?

A Yes.

Q Is it still in place today?

A It's still in place today.

Q Has there been a resumption in -- has there been any staffing increase since the 40 contractors were let go?

A Yes. Yes.

Q And when was that?

A Fairly recently. Right when we got the contractors off boarded we opened up a lot of full-time employee positions. The problem with that is that contractors are good to go when you get them.

Full-time employees have to go through the whole training process, so the 80-hour ride along, they go to the school, and then it's probably three months before they are up to where they are locating confidently on their own. You know, you're working with somebody else for the first few months.

Q And just to clarify, approximately when were the positions listed as open?

A I'm not quite positive on it. I wouldn't feel comfortable wagering a very viable guess at that. I don't really deal with the head count or on boarding.

Q Are people being brought on board now?

A There's still some open. I think we're still shy by probably about 15 from meeting what our approved head count is.

Q I get your discomfort, but maybe just at a general level, are we talking about earlier this year or?

A Yeah. It was a process basically from, you know, the end of 2016 to the -- you know, through February of this year.

Q That the positions were listed?

A Yeah. Yep.

Q How many positions approximately?

A I want to say I don't know. Approximately, I'm going to guess, like 60. I don't know if those are all full-time employees or were supplementing with some contractors. Right now we're specifically -- we're only -- the goal is only utilize contractors for standby purposes. We do have some now that are actually providing locate and mark services, so.

Q Okay.

A The goal was to get all of those positions filled with full-time employees.

Q So were the employees that -- are the employees that you're talking about to be hired to focus exclusively on locate and mark?

A I'm sorry. Could you repeat that, which timeframe are we talking about?

Q The most recent hiring.

A No. Those are specifically for standby. If we are utilizing a couple for immediate need, like I said, the process of filling a full-time employee can take months to achieve, so in areas where it was really required we do have some contractors doing locate and mark, but they are specifically brought on for standby.

Q And "standby" means what?

A Standby is the process by which we have to monitor an excavation when it's within 5 feet of a critical facility -- let's say a transmission line, a high pressure line, something like that.

Q Does that include locating and marking?

A We have to locate it, but standby is completely separate. We locate and mark. At the time that we mark the facilities we field meet with the excavator letting them know when they propose excavations within 10 feet, and we indicate to them whenever you're digging within 5 feet, when you use the 5 feet buffer, we have to be present on site to watch the excavation and that's what standby is mark.

Q So that's not the same thing as locate and mark?

A No. It's different.

Q So the positions you were talking about most recently were not locate and mark positions?

A Correct.

Q Have there been any efforts in -- since the contractors were let go -- the 40 contractors were let go, who were working on locate and mark, have there been any hirings or contractors brought on board to focus on locate and mark specifically?

A Yes.

Q Okay. When?

A That entire time. I think from when the positions were opened to now. We still have open positions that we're interviewing for, but I would say from November of 2016 to current day.

Q And approximately how many would you estimate have been brought on board?

A I don't know. If I had to guess I would say somewhere around 30.

Q Full-time?

A Yeah.

Q Focusing only on locate and mark?

A Correct.

Q Okay. Do you know about a super gas ops project for improvement of the damage prevention program in 2016?

A Yes.

Q Can you tell us more about it?

A Super gas ops was -- it's a group that goes around, it's focusing on improvements, process improvements, for each line of business. They started on locate and mark, and I'm trying to think of when they actually started -- we just finished complete roll out pretty recently, I want to say about March, or maybe, yeah, maybe March or beginning of April.

Q Meaning that there was focus by the super gas ops group on locate and mark at approximately March or early April?

A Yes. Yep.

Q And they just started focusing on --

A No. That's where it finished. They started last year in 2016. I don't remember the exact start date, but it just completed a complete roll out for locate and mark in, I want to say, about April. I was just on baby bonding, I came back, and it finished very shortly after that.

Q What was the final report? What was the final product?

A There was eight improvements, so I should have them all memorized but. So late tickets was one. Polygon restructure, which is what you were saying about the folders, redoing those. Obviously more head count from the original folders that we had.

I'm drawing a blank now on all these things, but I should know them all. It was the changes to procedure with the new senate bill.

Q What bill was that?

A 686.

Q The locate and mark bill?

A Yeah. Basically it changed a lot of stuff.

Q That was Senator Hill's sponsored bill; is that right?

A I don't know. I should probably know that too, but yeah.

Q That's okay.

A It was just this previous year, and so a lot of these changes are going into effect this year.

Q Okay.

A They covered that, they covered standby procedures, or like the field meet that determines the standby, there was some enhancements to UtiliSphere around renegotiated visibility, being able to see the new start time in the ticket summary. That was a big thing. You're talking about for once you renegotiate it, being able to meet that renegotiated date was difficult because there was no visibility into that new date, and your tickets -- having to go into each ticket and read through how we did in the ticket audit to see that.

Q Okay.

A I'm kind of blanking on the rest here.

Q What was the report, the title of the report?

A And then there was huddle report, which was -- a huddle report, which is a daily huddle with the supervisors and the crew, daily crew.

Q And it would have started approximately when?

A April of this year or so. When the roll out happened. In each division one at a time.

So there was a pilot. In the beginning we had a pilot in three areas, and then it went from one division to the next, so people got it all different times. So starting back in the beginning, the first group that got it, and then the last one just got it, as I was saying, probably the beginning of April.

Q Okay. So if we ask for the huddle report, we should --

A No. The huddle report was one of the changes that SGO brought. I don't know if there's a report per se for all of SGO.

Q Yeah.

A They are tracking obviously the implementation of the stuff. I don't know what they call that.

Q How would we identify each of the items that you just described?

A SGO has that. They could definitely provide a map of process improvements.

Q Okay.

A Yep.

Q So if we asked for a map of process improvements, we should receive the SGO report that focuses on the different locate and mark issues from this year?

A Exactly.

Q Okay. Thank you.

Okay. From this morning do you remember we were talking about -- I believe you mentioned that when a ticket was about to become due, it was about to become late, you would call supervisors and perhaps others within PG&E in an effort to get an update or find out the status of the ticket. Do you remember talking about that?

A Yes.

Q Okay. In that instance, what if you were not able to reach anyone to get an update before the ticket came due, the due date in time?

A The ticket would go late.

Q The ticket would go late?

A Yep.

Q Okay. Okay. What if you learned after the ticket went late if you heard back from one of the supervisors or the people you contacted?

A That really wouldn't change anything. The ticket would be late unless that the locator was on site and sunk up, ran a sync of his device and everything was dated before. You know, obviously pictures are uploaded, his response.

So even if -- so a locator will enter all of his information on his tablet, and it could be timely and on time, but it looks late to everybody else until he syncs the data up into the cloud or whatever, then it will show back that it was responded to.

Q On time?

A Yeah. But if that wasn't the case there wouldn't be really anything you could do about it, it would be a late ticket.

Q Okay. If there was a late ticket would there be a reflection on you or your performance for showing a late ticket?

A Not really, no. For each late ticket that we have, the supervisor's supposed to email the superintendent that's responsible for them and explain what happened, what went wrong, and so to -- if it was a breakdown of the thing. If it ever came to a point where -- my role in it was basically I was the last ditch effort to get in touch with somebody to help them communicate or renegotiate a time. So kind of a hail Mary pass, if you would.

It wasn't really incumbent upon me to do anything to keep that thing going other than try to notify and get somebody in contact with the excavator before it went due.

Q Would you hear about it? If a ticket went late would you hear about it from a supervisor, a superintendent, or the director?

A I would probably hear from the superintendent asking me why they weren't notified if, you know, they heard about it and I hadn't. But I'm the one that pulls the late ticket report each morning, so usually I know what's going on. I can look up the ticket and discern what happened.

If I can't from looking at it, just wondering what happened I will contact that supervisor, ask them, basically notify them, if they weren't notified already of it, ask what happened and have them email the superintendent with an explanation and what steps were done to correct it.

Q Okay. When the locator -- you recall us looking at some of the exhibits that showed the tickets earlier before lunch?

A Yes.

Q Okay. And you were familiar with them generally as tickets but didn't identify any of them as specific tickets that you recalled?

A Yes.

Q Just for clarity, but they were still tickets.

Okay. And do you recall where the method of contact was shown as voicemail?

A Yes.

Q Is there an option to show the time that the voice message was left?

A No. It's kind of considered that's at the time of the response. It has method of contact, which is, you know, voicemail, field meet or phone call, then it has you put the name of the person you spoke to and their phone number. There's no specific time attached to that voicemail. It's assumed you tried contacting right before you respond to the ticket.

Q Are there situations where you leave the voicemail after you -- after the response time?

A Possibly. Now that you mention that, I mean, it's not impossible, but it's not -- I don't think that's common practice.

Q Have you seen it happen?

A No, I haven't.
Q Okay.
A Yeah.
Q Possible that the voicemail would be left after the due date?
A Possible.
Q Have you seen it?
A I have not.
Q Okay. Have you heard of others mentioning that?
A No.
Q Have you heard of others doing that?
A No.
Q Okay. Regarding the goal of zero late tickets again?
A Mm-hmm.
Q Are you aware of anyone within PG&E instructing to do whatever was needed to be done to reestablish a start time on a ticket?
A No.
Q Or maybe I should use the term "renegotiate" a time on -- a start time on a ticket?
A I understood what you meant.
Q Okay.
A But -- within procedure, yes, but not -- and

not encouraging to manipulate an improper response to stop the clock, no.

Q What about reestablishing a start time on a ticket without getting agreement from the excavator, were there any instructions to do that?

A No. Not to my knowledge, no.

Q Was there any pressure to do that?

A I would have to answer yes, that there was pressure to keep a ticket from going late. I'm not saying -- procedurally, yes.

Q Let me ask this, were there any instructions that came that would leave an employee with no choice but to change the due date without getting agreement from the excavator?

A Can you ask that again? I want to make sure I'm clearly hearing you.

Q Were there any instructions within PG&E that would leave someone with no choice but to change the due dates on a ticket without getting the agreement from the excavator to do that?

A I would say no, there were no instructions from PG&E to do that, but yes, there was pressure to do it that I could see that would lead to them utilizing what means were available to them to do it.

Q And what kind of pressure?

A If that make sense.

Q I do follow you, yes.

A Okay.

Q Thank you.

And what pressure are you referring to?

A Pressure to lose their job, be fired, be reprimanded, it gets to that point. It was a pretty heavy thing that was laid down from supervisors, and they just reiterated and hammered to the locators we don't want to get any late tickets, we don't want to be on that report, we don't want to be on that report in the morning.

Q Were the supervisors hearing it from their direct supervisors as well?

A Superintendent and directors.

Q Was that coming from the superintendent to the directors to the supervisors and to the locators?

A Yes.

Q And why do you know that?

A As aside, this sounds funny, but there was an actual slide in the slide deck from SGO that had a picture of Joel that had the caption that said no late tickets, and that --

Q That's what you're referring to?

A Yes.

Q Who else saw that slide?

A Basically everybody in SGO. All of the locators.

Q All of the locators?

A And their supervisors.

Q And their superintendents as well?

A Yes.

Q Would Joel have received instruction to pass on to the rest of the locate and mark group as well to provide that pressure?

A I don't know for certain. I have to imagine it would come from above. I don't know if he just was dreaming up, you know, that metric to make our organization look good. I don't know. I would assume it came from him.

Q Okay. Do you know if PG&E management, and by "management" I mean the people you identified, the supervisors, superintendents, director, were aware of the exercise of changing due dates without getting an agreement from an excavator?

A I would have to say yes, at a certain point.

Q Let me just be clear what yes means because that was a long question.

A Okay.

Q You know that this management was aware that people within PG&E were changing due dates on tickets without getting agreement from the excavators; is that right?

A Let me reestablish. Because you can't change a due date, but they were renegotiating start times using that response unilaterally, yes, that came out of the QA discrepancy findings.

Q Okay.

A So everyone would have been aware at that point.

Q And after the QA discrepancy finding there was still the goal to have no late tickets without an increase in manpower; is that right?

A The manpower was being worked on, like I say, building a case to increase head count. It's not an overnight thing that you can just hire somebody off the street and they are locating the next day, so.

Q Did you hear from anyone who was threatened with consequences from others at PG&E if they did not renegotiate due dates without getting agreement from excavators?

A It's a tough one in the sense that I recall a specific conversation, but I have the feeling that yes, that was the case. If that makes sense. I don't --

Q I follow what you're saying. Let me pars it a little bit and see if I can understand. I get that it's a tough one.

A Yeah.

Q What gives you the feeling that that was happening?

A Just the sense of urgency around it. Working with the locators, talking to them on daily basis. I can't get a late ticket, I can't be on the list, don't want to get fired, that kind of mentality, and so, I mean, they didn't -- it didn't just come out of thin air.

Q Okay.

A Did I hear a specific threat? No.

Q Were you ever threatened with consequences from others at PG&E if you allowed late tickets to be accurately recorded?

A No.

Q Were you ever threatened with consequences from others at PG&E if you did not renegotiate due dates without getting agreement from an excavator?

A No.

Q Okay. Were you pressured from others at PG&E to renegotiate due dates without agreement from excavators?

A I would have to say yes.

Q But you didn't do that. You said that earlier, right?

A No. There was definitely pressure from keeping tickets to go late.

Q What was the pressure?

A Again, an overall sense of people fearing for their job really, being -- not wanting to be on a report or a list, you know, that gets reported out beyond that call.

Q Do you know of anyone who lost their job for not succumbing to that pressure?

A Not to my knowledge, no. I was aware of people being let go but not for a specific reason. Again, I'm not really privy to that information, but people talk, you know.

Q Did you ever feel intimidated or threatened by others at PG&E if you were going to allow late tickets to be accurately recorded?

A I wouldn't say threatened. Again, I would fall back to the pressure of that but not necessarily threatened.

Q Okay.

A Again, I'm coming from a strict administrative role in this. I was kind of, like I said, a catchall. I wasn't specifically tied to a division or a set of locators.

Q Okay.

A Yeah.

Q Let me ask you, can you identify any excavators who would be able to tell us that PG&E renegotiated a start time without their agreement?

A Two names come to mind.

Q Please.

A West Valley Construction.

Q Okay.

A Knife River construction.

Q Okay.

A Is the only two that come to mind. I just know of specifically myself being called by them. My number was on file with 811, so if they wanted to complain to PG&E they could get my number.

Q Okay.

A And having talks with the people at those companies about us not responding timely.

Q Okay. And do you remember who spoke to you on behalf of West Valley?

A No, I don't. The name [redacted], I'm not sure if I got that right, for Knife River, I believe. [redacted], I believe.

Q What's your best effort at spelling his last name?

A [redacted]

Q Okay.

A I could have it completely wrong, but that's --

Q We'll work with that.

A All right.

Q I appreciate you saying that. It will save us some work, I think. Just to guess.

Rescheduling a due date on a ticket, leaving a voice message, we've talked about that unilateral renegotiation. Are you aware of any dig-ins on those kind of tickets?

A No.

Q Did you hear others mention hearing dig-ins on those kind of tickets?

A No.

Q So you didn't hear anything about PG&E pursuing recovery from claims resulting from those kind of tickets?

A No.

Q I think you mentioned Vanessa White earlier, right?

A Mm-hmm.

Q What was your professional relationship with her?

A Vanessa was hired on -- so we actually both started out as contractors. When I first met Vanessa we were both kind of peers working as contractors for -- she got hired on before I did for -- under the damage prevention umbrella. She worked with David Applebaum at the time, and like around dig-ins, metric stuff like that. Then once I got hired on, you know, I was the IRTHNet administrator, she was kind of tabbed as somebody I could train with some admin rights to cover for me when I wanted time off.

Q Okay. You mentioned your paternity leave?

A Exactly.

Q It was during that time?

A Even before that. It was the very first instance when my wife and I got married and went on our honeymoon, so.

Q Okay.

A Yep.

Q Did you hear Ms. White ever say that she will not falsify locate and mark records?

A No.

Q Or that she -- or anything like that that she refused to falsify locate and mark records or tickets?

A Nothing either way on that, yeah. And on the aside I was surprised she even got subpoenaed for questioning. She had little to absolutely no knowledge on any of the stuff. She was my surrogate in the war room basically updating the white board as needed when I couldn't be there in person, that was pretty much her involvement in the whole thing.

Q Okay. Let's go back to the phasing and unilateral renegotiations. So those were just examples that we talked about, inaccurate information to avoid late tickets, am I stating that fairly?

A That's correct.

Q Okay. Do you think those sorts of practices are safe?

A No.

Q Were you ever asked your opinion as to whether PG&E was doing locating and marking safely in these ways?

A No.

Q Did you ever tell anyone at PG&E if they were doing locating and marking safely when you were talking specifically about those things?

A No.

Q Let me restate that a little bit.

Did you ever tell anyone that those sorts of things were unsafe?

A Don't think I had a conversation about it being safe or unsafe at all, no.

Q Okay.

A Can I go back and correct that for the record?

Q Sure.

A I'm trying to recall. I had conversations with supervisors on the side saying, hey, you know, we're aware this is definitely not right. I don't recall any talking about safe or unsafe about it, but I do recall people having conversation that it was an improper procedure that was definitely not per standard.

Q And the standard you were referring to was a safety standard?

A PG&E's Damage Prevention handbook which is safety, that's all in there.

Q Okay. So that would be --

A Yeah. Safety is paramount in basically everything you do that's why I was thinking about that and saying, you know, obviously everything we talk about it's because of safety, but I never specifically said this is an unsafe practice, but I had an aside conversation with supervisors saying it's definitely not a proper practice or procedure according to damage prevention handbook, so.

Q Who did you hear that from?

A I'm thinking Ron. It comes to mind that I had a conversation with him discussing it.

Q When was that?

A I couldn't tell you with any degree of accuracy.

Q A year ago? A couple weeks ago?

A About a year ago, yeah.

Q Approximately?

A Yep.

Q Okay.

A It had to have been prior. I would guess shortly after the war room wrapped up. So mid year last year. About a year ago exactly.

Q And to your knowledge, did any -- did those practices change after your conversation with Ron?

A No. No.

Q Okay. I just want to get on the record maybe if you could confirm, provide us with the names of people who could confirm the information you've told us about today, and I'll flag the pieces that I'm asking about.

A Okay.

Q So the information about creating phase tickets to avoid them from becoming late, who else would be able to give information on that from PG&E?

A You're looking for specific examples of that would be the QA group.

Q Okay.

A Which Vince Whitmer is a name. I think he kind of oversees the QA group. He's like a QA supervisor.

Q Okay. And what -- yes. You just answered my question before I asked it.

A Vince Whitmer.

Q How do you spell his name?

A V-i-n-c-e, Whitmer, W-h-i-t-m-e-r.

Q Regarding the pressure that people felt about losing their jobs that you just described, if they did not meet the goal of having zero late tickets, who would be able to confirm that information?

A Just about any supervisor.

Q Okay. That's enough of an answer to the question.

A Yeah. Yeah.

Q You can elaborate if you want to but that gives us an idea.

A I would let you guys chase that one down, yeah.

Q Regarding the unilateral renegotiation on tickets to avoid them being late?

A Would be the same as Vince, would be the same person for those and the phasing of it.

Q Okay. How about regarding not -- PG&E not properly following locate and mark procedures and requirements?

A That's a tough one. I mean, it's such a broad thing. I don't really know who to pin that to.

Q Okay.

A Yeah. I mean --

Q Okay. And I'm speaking -- well, I think it relates back to specifically changing the due dates without getting the agreement that that -- that specifically that didn't follow procedure?

A That's the same as unilateral renegotiation. One in the same, so.

MR. GRUEN: Were you -- let's go off the record for a second.

(Recess taken from 2:57 p.m. to 3:05 p.m.)

BY MR. GRUEN:

Q I think I have maybe just a question or two.

A Okay.

Q It could be more, but I don't -- well, we'll see.

Just regarding -- again, I'm going to be clear, I'm not asking you about communications with attorneys.

A Mm-hmm.

Q But did you speak to anyone at lunchtime about the deposition?

A Nobody at PG&E at all.

MR. GRUEN: Okay. All right. I think that with that I want to thank you very much for your time and insight, and you're cooperation today for coming to be here. Recognize I say thank you and you're required to be here, but still, we appreciate you being here and taking time under a somewhat lengthy examination under oath out of your busy -- your busy work schedule no doubt, so we appreciate that very much.

THE WITNESS: Glad to be here.

MR. GRUEN: All right. Can we go off the record, please.

(Whereupon, the deposition concluded at 3:06 p.m.)

---o0o---

I declare under penalty of perjury the foregoing is true and correct. Subscribed at

____________________________________, California,

this _______ day of __________________ 2017

____

Steven Walker

CERTIFICATE OF REPORTER

I, DONIELLE DEL CARLO, a Certified Shorthand Reporter, hereby certify that the witness in the foregoing deposition was by me duly sworn to tell the truth, the whole truth, and nothing but the truth in the within-entitled cause;

That said deposition was taken down in shorthand by me, a disinterested person at the time and place therein stated, and that the testimony of the said witness was thereafter reduced to typewriting, by computer, under my direction and supervision;

I further certify that I am not of counsel or attorney for either or any of the parties to the said deposition, nor in any way interested in the event of this cause, and that I am not related to any of the parties thereto.

DATED: July 7, 2017

DONIELLE DEL CARLO, CSR No. 10476

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ATTACHMENT 58

PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

--o0o--

PRE-FORMAL INQUIRY INTO
PG&E'S LOCATE AND MARK
PRACTICES AND PROCEDURES

EXAMINATION UNDER OATH OF VANESSA WHITE

TAKEN ON BEHALF OF

PUBLIC UTILITIES COMMISSION

STATE OF CALIFORNIA

June 20, 2017

9:00 a.m.

505 Van Ness Avenue, Second Floor

San Francisco, California

NONCONFIDENTIAL PORTION (Pages 1-73, 82-151)

Reported by: DONIELLE DEL CARLO, CSR No. 10476

Appearances:

For Public Utilities Commission:

STATE OF CALIFORNIA
PUBLIC UTILITIES COMMISSION
LEGAL DIVISION
By: DARRYL GRUEN, ESQ.
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Also Present: SIKANDER KHATRI, Ph.D., P.E.
Senior Utilities Engineer
State of California
Public Utilities Commission
Safety and Enforcement Division

WAI YIN "FRANKY" CHAN
Utilities Engineer
State of California
Public Utilities Commission
Safety and Enforcement Division

--o0o--

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WITNESS: VANESSA WHITE

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- - -

INDEX OF EXHIBITS

Exhibit No.	Description	Page
Exhibit 1	Subpoena to Appear and Provide Testimony Under Oath Public Utilities Code Sections 311(a), 314(a)	06
Exhibit 2	Email From: Agt_comm@irth.com Sent: March 15, 2017 11:40 AM To: [redacted] Subject: Seq# 7: W612000634 for PGESAL	43
Exhibit 3	Email From: Agt_comm@irth.com Sent: March 15, 2017 11:45 AM To: [redacted] Subject: Seq# 8: W612001130 for PGEFNO - Distribution	43
Exhibit 4	Email From: Agt_comm@irth.com Sent: March 15, 2017 3:44 PM To: [redacted] Subject: Seq# 13: 36481 for PGEBFD	43

(Exhibit 5 designated confidential and bound under separate cover.)

Exhibit No.	Description	Page
Exhibit 5	Facility: Distribution; Folder: Cinnabar 6; Assigned to CIN6	74

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SAN FRANCISCO, CALIFORNIA; June 20, 2017
9:00 a.m.
---o0o---

VANESSA WHITE

____

called as a witness by PUBLIC UTILITIES COMMISSION, STATE OF CALIFORNIA, who, having been first duly sworn, was examined and testified as follows:

EXAMINATION

BY MR. GRUEN:

Q All right. Thank you. Good morning, Ms. White. Would you prefer me to call you "Vanessa" or "Ms. White"?

A Vanessa.

Q Okay. I'll do my best. If I do refer to Ms. White just correct me.

So, Vanessa, I'm going to give you a little bit of an introduction here about some of the -- some of the context and background about what we're doing today.

So my name is Darryl Gruen. I'm staff counsel at the Legal Division at the California Public Utilities Commission, and I'm doing the examination under oath today on behalf of the Safety and Enforcement Division, which is also within the California Public Utilities Commission.

An examination under oath is just like a deposition except that there is no underlying proceeding, which is why PG&E doesn't have any right to be here, and which is why we're able to have this like a deposition at the same time. But we do not know yet where we are going to go with this right now.

In other words, we don't know if we're going to have a formal proceeding or a formal investigation later on. We're not in any formal proceeding right now as I mentioned. Do you understand all of that?

A I do.

Q When I ask questions it is important that you provide truthful and complete answers to them. Please answer my questions directly. I may ask some questions very broadly which will give you a chance to add to your answers, but please keep your answers directly responsive to the questions I ask. Do you understand that?

A I do.

Q And if you do not understand my question, any question that I ask today, either because I have not articulated it well or because I have poorly phrased it, or for any other reason, either ask me to repeat it or say that you do not understand the question. Please do not speculate or guess about what the question is. Do you understand?

A I do.

Q Okay. Did you receive a subpoena for you to appear today?

A I did.

MR. GRUEN: Okay. And I have a copy of the subpoena that we served on PG&E for Vanessa White to appear today, and I'm handing that to the court reporter, and I'd ask that that be marked as Exhibit 1.

(Exhibit 1 marked
for identification.)

MR. GRUEN: Go off the record for just a moment.

(Discussion off the record.)

BY MR. GRUEN:

Q And, ma'am, you are here under compulsion of subpoena and witness fees. We have a statutory authority to issue the subpoena to compel the attendance of employees of PG&E to testify and to produce documents as part of our jurisdiction or our regulatory authority over utilities such as PG&E.

This means you are not here voluntarily and the information you provide us is not voluntarily. You're answering questions because we are requiring it. Do you understand that?

A I do.
Q Okay. Did you receive a letter from me last week, do you recall?
A An email.
Q An email, yes. An email with a letter attached to it?
A I don't recall. I just remember seeing -- oh, I did. The whistleblower one, yes.
Q Yes, that's right.
A Yes, I did.
Q That's okay. Take your time to answer. It's okay.
And I was going to ask something to help refresh your memory, but it sounds like you do remember.
A I do.
Q And the letter I sent cc'd Mr. Jonathan Pendleton, PG&E's attorney. Do you recall that?
A I do.
Q And do you recall that letter identifying certain requirements that prohibit PG&E as a California natural gas utility from retaliating against any employee who reports in good faith unsafe conditions to the Commission?
A I do.
Q Okay. And do you understand this requirement

of PG&E as I explained?

A I do.

Q Okay. Just for the record, let me restate a couple of the things in that letter. The letter stated, quote, in part, quote, We are not asserting that PG&E has retaliated against you as we have no information at this time suggesting this has happened; however, CPUC will do everything in its power under the law to ensure there is no retaliation against you for any information you provide to the CPUC.

The letter also stated, the letter to you also stated that, We take very seriously our legal duty and prerogative to protect persons who provide information to the CPUC needed to promote safety, the public interest or both.

Do you recall the letter saying that?

A I do.

Q And do you understand that?

A I do.

Q Okay. Do you have any questions about what that means?

A No.

Q Okay. And while we do not know at this point of anything PG&E has done to threaten retaliation, or actually retaliate against you, we are prepared to monitor whether PG&E has done or will do that.

If you feel you are being threatened for retaliation or actually retaliated against by anyone at PG&E, you can inform us promptly of the nature of the threat or the actual retaliation. Do you understand that?

A I do.

Q Okay. And you are entitled to have your attorney present or a PG&E attorney present, but you do not need an attorney, and PG&E is not entitled to have their attorney present today.

And off the record I asked you, just before we started I asked if you wanted to have your own personal attorney or a PG&E attorney present and you said that you did not, did I understand right?

A That's correct.

Q Okay. And you have also chosen, if I understand right, not to have anyone else from PG&E present today, do I understand that right as well?

A That's correct.

Q Okay. The questions I'm asking now are about communications with -- that you've had prior to today with non-attorneys.

A Okay.

Q And when I say "non-attorney," it means either. So I'm not asking about conversations you've had with a PG&E attorney or your own attorney.

A Okay.

Q If you've had any. I'm also not asking about conversations you had where a PG&E attorney was present. So if there was a group of you and there was some non-attorneys, and even one PG&E attorney present, I'm not asking about that, okay?

A Okay.

Q So with that, regarding the conversations with these non-attorneys, has anyone talked with you about the examination under oath you are doing today?

A Yes.

Q Okay. Who was that?

A Katherin Mack.

Q Okay. And what did she say?

A She just said, you know, to be honest, it's a good thing for PG&E, so the best thing is to be honest and don't worry about retaliation.

Q Okay.

A And then I also spoke to Jorge Gil Blanco, and he also said just go there, be honest, stay calm, don't be nervous, it will be okay.

Q Okay. Anyone else, any other non-attorneys?

A I also let my supervisor Dane Lobb know, and we were talking more about logistics, parking, how to get here, what time to leave. And then I also let my manager Andy Wells know.

Q Okay.

A And he -- I'm sorry. One second.

Q Take your time.

A He basically said, you know, should be easy, you just go there, you speak the truth, answer then you'll be out of there and it will be done, so.

Q Okay. Good.

And just for the record, is there anyone else by the way?

A I spoke to Steven Walker yesterday.

Q Okay.

A And really we were just saying -- I told him mine's today and his was tomorrow, and that was the end of the conversation.

Q Okay. All right. And just for the record, I think you mentioned five people. I'm going to try and get them all, but if I miss them, I just want to get spellings of names for the record.

A Okay.

Q So Katherin Mack, I think I've been taught properly on that one, let me give that one a try and you can correct me if I get it wrong.

A Okay.

Q Katherin Mack. Katherin is K-a-t-h-e-r-i-n. No "E" at the end.

A Correct.

Q Mack, M-a-c-k.

A Correct.

Q Jorge Gil Blanco. Let me try. J-o-r-g-e is his first name. Gil Blanco, I'm not sure if it's one word or two.

A Two.

Q Two words. G-i-l, and then the next word B-l-a-n-c-o.

A Mm-hmm. Yes.

Q The others, Steven Walker is -- I think he spells his first name with a p-h; is that right?

A No.

Q It's a "V"?

A Correct.

Q Okay. S-t-e-v-e-n. And Walker the common spelling?

A Correct.

Q And then the others you'll have to help me with.

A Dane Lobb. It's D-a-n-e, and then L-o-b-b.

Q Okay.

A And then Andy Wells, A-n-d-y, or it's Andrew, Andrew Wells, and then W-e-l-l-s.

Q Okay. Thank you.

Have any of those people -- and that's the complete set of people, non-attorneys who you've spoken with, right?

A I'm sorry. One more. [redacted]

Q Okay. You don't have to talk to me about your conversation with [redacted], but I appreciate you sharing it. I should clarify I'm asking specifically. Maybe [redacted]?

A Yes.

Q He is?

A He is, yes.

Q Did you talk to [redacted] -- give me just a second.

A Okay.

Q I'm not going to ask you questions about what you spoke -- what you said to [redacted].

A Okay.

Q But thank you for sharing that.

A Okay.

Q Has any non-attorney that you spoke with suggested said or implied that you give answers today in a way that protects PG&E?

A No.

Q Okay. Has anyone that you've spoken with threatened retaliation against you for sharing safety related information today?

A No.

Q Has anyone suggested or implied in any way that you will be retaliated against if you share safety related information today?

A No.

Q All right. With that, now that that's out of the way.

A Okay.

Q If we could, if I could ask you a couple of questions just as basic background. Just the idea here is to get a common understanding for the record of certain terms that I'll then use throughout the day.

A Okay.

Q To ask about, and we'll have just a general understanding what that means.

So the first term, are you familiar with the term "locating and marking"?

A Yes.

Q What does that term mean to you in the context of PG&E's natural gas system?

A So when a PG&E employee goes into the field for -- if a contractor's called for a certain job site, they hook up, locate where gas or electric facilities are, and then mark it out with spray paint or flags or whiskers.

Q Okay. And moving forward, when we use the terms "locating and marking" for purposes of this examination under oath, you will understand that term to be defined in the way that you just mentioned?

A Yes.

Q Okay. And when I ask questions today about locating and marking, I'm specifically asking about matters related to PG&E's natural gas system unless I specifically say otherwise. Do you understand that?

A Yes.

Q What is the term used to describe someone who goes out on behalf of PG&E and locates and marks its underground equipment within an identified excavation area?

A Locator.

Q Okay. All right. I may come back to a couple of terms a little bit later, but with that, that's helpful. Thank you.

If I could ask you a little bit of information about your professional background at PG&E and now.

A Okay.

Q I'm stating these facts because I understand them from PG&E. This is some of the information PG&E has given and that was included in the subpoena, so I want to clarify that I've understood the information correctly.

A Okay.

Q As of March 23, 2017, you had worked for PG&E for two years in total; is that accurate?

A I believe I started in April of 2015 as a permanent employee.

Q Okay. Okay. And you worked full-time?

A Yes.

Q From April of 2015 until today?

A Yes. Other than my maternity leave, yes.

Q Okay. And how long were you off for your maternity leave?

A Six months.

Q Okay. And you said that was 2015 you started?

A Yes.

Q Okay. Take your time.

A Sorry.

Q It's okay.

A I believe it was 2014.

Q Okay. Did you take time off in 2015, does that sound right?

A No.

Q Okay. When did you take time?

A Starting in July of 2016.

Q Okay. All right. So in 2014, 2015, 2016 and this year, I understand that you held various titles in PG&E's departments dealing with matters related to locating and marking?

A Yes.

Q Is that accurate? Okay.

And on April 14, 2014, I understand from PG&E that, you started with the position title of Distribution Specialist in PG&E's Damage Prevention Department?

A Yes.

Q Okay. What was your role in that position?

A For the most part, I work on damage claims where we bill third parties and second parties for damage caused to our underground facilities.

Q Okay.

A But, at the same time, I also cover for Steven Walker if he's on vacation, and then when he was on paternity leave.

Q Okay. And just a bit of clarification. So when you did bill work for damage claims, did you --

what was -- can you say a little bit more about what your role was? Did you handle the billing? Did you figure out if there was a damage claim to be had? Both?

A Yes. So basically we gather all the documents, make sure it's, in fact, billable, review our investigations, and basically gather everything to substantiate that claim.

Q Okay.

A And then we take that and send it to our invoicing team who will generate that invoice and send it to the contractor.

Q Okay. Just a clarification about the word "damage." As an attorney I have an understanding, a particular understanding of what that word means. Does that mean, and I just want to clarify here, does that mean when you talk about damage, are you talking about physical damage to PG&E's system as a result of an excavation that hit PG&E's system or?

A That's correct.

Q Or is there any other meaning that you mean by damage in this case?

A No. About -- I'm sorry, but our team also does above ground damage, vehicles to risers, that type of damage, but still damage to our infrastructure.

Q So physical damage to infrastructure?

A Correct.

Q And then the billing, if you billed an excavator, or someone who damaged that infrastructure, whether it was above ground or below ground, you would be seeking to recover money for -- to repair or replace the infrastructure that was damaged?

A That's correct.

Q Okay. Is there anything else to the meaning of the word "damage" that you understand?

A No.

Q Okay. Good. Thank you. All right.

And then you mentioned about covering for Steven Walker when he was on paternity leave.

A Yes.

Q Okay. Did -- when you covered for him, what was your role at that point?

A To basically monitor late tickets to try to prevent late tickets from occurring. Generate a late ticket report. I would also help locators if they were having issues in UtiliSphere.

Q Okay.

A Sometimes tickets come in and they are not assigned to a certain folder, so the locators have access to that, and so I would have to do research and figure out which folder that ticket belongs to.

Q Okay.

A And I would add new locators to UtiliSphere.

Q Okay.

A And I believe I mentioned sending a late ticket report, but I would also send that to the director.

Q Mm-hmm.

A And if there was a late ticket notify the superintendents as well as the locate and mark supervisor.

Q Okay.

A I believe that is it.

Q Okay. And if anything else occurs to you in that role, please feel free to bring it up later, even if it occurs to you as you're answering a question or if I'm asking just wait for me to finish the question and then feel free to jump in and adjust, remind us that you remembered another piece of that role.

A Okay.

Q Let me ask a couple of clarification questions about some of the things you just mentioned.

You mentioned that you helped monitor in UtiliSphere, that's a term -- just to clarify for the record, what is UtiliSphere?

A When a contractor calls in a ticket to USA

North it gets sent to UtiliSphere IRTHNet, and that's where our PG&E internal employees are able to view those tickets and work them.

Q Okay. So is UtiliSphere, or IRTHNet, you're using those two terms interchangeably?

A Yes.

Q Okay. And UtiliSphere, does UtiliSphere contain all of the tickets that PG&E would have?

A I believe it cuts off after so many years. I don't know if the archive is, but it contains all the tickets currently.

Q Okay. Would it contain all of the tickets for a given calendar year?

A Yes.

Q So in -- for example, in 2016 on December 31st of 2016 UtiliSphere would have all the tickets dating from January 1, 2016 to December 31, 2016?

A Yes.

Q Okay. Thank you.

And you mentioned about looking at which folder a ticket belongs to, if I understood correctly.

A Yes.

Q When you use the term "folder," can you tell us what that means?

A So locators usually have a certain folder that they work out of. Of course, they cover for somebody if somebody's out, but they look in that folder and it's usually for a certain area, say Cupertino, sometimes there's borderlines where a ticket's right in the middle so we don't know whether to send it to Cupertino or, I don't know, Santa Clara, so I have to determine which one that goes to.

Q Okay. So a folder then contains all of the tickets that are assigned to a locator?

A More so assigned to that folder, and then a locator can be assigned to that folder, but it can change.

Q Okay. Let me ask a couple clarifications about that.

A Okay.

Q So could one locator have tickets in more than one folder?

A It is possible.

Q Okay. And so folders describe the tickets that are assigned to a particular geographic area like Cupertino?

A That's correct.

Q And then the locators who are assigned to work -- in that example, locators who are assigned to work in Cupertino would check that folder and be assigned tickets that are in the Cupertino ticket folder, for example?

A That's correct.

Q Okay. Does it work any other way other than that for folders?

A Not to my knowledge.

Q Okay. You talked about adding new locators to UtiliSphere?

A Correct.

Q Did you see in your experience, your time working with UtiliSphere, were there -- how many new locators would you say were added in that time while you worked on UtiliSphere?

A It's hard to say. I don't know if they were necessarily new locators or a locator helping another area out to where I had to add them to that folder.

Q If you don't know that's okay to say.

A I don't know.

Q Okay.

A Yeah.

Q Okay. You talked about -- I understand you to talk about reporting, generating a late ticket report.

A Yes.

Q Okay. So what would the late ticket report contain if you generated one?

A It would contain all the late tickets. So I would do it on a weekly basis, so it would be all the late tickets for that week, the previous week, the locator that that ticket was assigned to, and -- I'm sorry, the locator that ended up responding to that ticket, the amount of time that it was late, and I believe compared to the previous year. Yes. Tickets compared to the previous year.

Q And so was each late ticket report prepared for each locator then? Let me restate that.

Each locator had one late ticket report or was it grouped differently?

A It was grouped differently.

Q Okay.

A It would be based on what we consider divisions across our territory.

Q Okay.

A And so there's a total of 19 divisions, and so it would be based on division.

Q Okay. Was anyone responsible for handling tickets within each division, was there one person who would be assigned to oversee the late tickets within each particular division?

A The locate and mark supervisors are

responsible to make sure. So they are responsible for their division.

Q Okay.

A And then locators are responsible, I should say, for their folder, but it's ultimately up to the supervisor.

Q Okay. So each late ticket report that was generated, who would that be sent to?

A It would go to [redacted].

Q Okay.

A And she would create another report with that, and then I would also send it to Joel Dickson Monday mornings, and he was the director.

Q The director of?

A Compliance programs but locate and mark is in that.

Q Okay. So if you could spell [redacted] and Joel's names for the record, please.

A [redacted] [redacted] [redacted] how does she spell it? [redacted], and her last name is [redacted].

Q Okay.

A Joel Dickson, J-o-e-l, D-i-c-k-s-o-n.

Q Okay. And what was [redacted]'s title?

A I believe she's a locate and mark analyst.

Q And Joel's title?

A He was director of compliance programs.

Q Okay.

A Or gas compliance operations programs, I believe.

Q Okay. So the locate and mark -- all the locate and mark duties were under Joel Dickson's purview?

A At the time, yes.

Q At the time. And what time was that?

A I believe he just transferred to a new position maybe a month, two months ago.

Q Okay. So at the time that you were generating late ticket reports and doing your role as distribution specialist in PG&E's Damage Prevention Department starting April 14, 2014, Joel Dickson was the director at that time. Does that sound right?

A 2014. I'm sorry. You were talking about 2014.

Q That's okay. I'm clarifying.

A Okay.

Q Let me ask it this way, do you know approximately the time when you worked in -- on locate and mark issues while Joel Dickson was the director?

A Yes. '16 and '17.

Q Okay. Great.

What was [redacted]'s role?

A She -- she does reporting for locate and mark, so she would generate for our -- I believe it's a compliance deck. She would have late tickets as well as staffing.

Q Okay.

A Minutes per ticket, items such as that. I don't work too closely with her but.

Q Okay. And that also was in 2016 and 2017?

A That's correct.

Q Okay. All right. Good. Let me continue on about a couple other titles I understand you had with PG&E, and I'll ask you similar -- like we just did I'll ask you about your roles.

A Okay.

Q So I understand from PG&E on October 23rd, 2014, you started with the position title of Distribution Specialist in PG&E's Damage Claims Department; is that correct?

A That is correct. The only thing is my positions pretty much stayed the same. I believe they went through changes in the naming of the position.

Q Okay. I'm glad you said that because it looked to me as if the title on April 14, 2014 and

October 23, 2014 were shown to be the same titles except that it was the Damage Prevention Department and the Damage Claim Department.

A Yes.

Q So your role didn't change then?

A My role didn't change.

Q Just the name of the department did?

A Yes.

Q Did the role of the department also change at that time?

A I don't think it changed. I didn't even realize that it changed.

Q Okay.

A I guess they changed it, but my position's remained the same since I was hired on permanently.

Q And let me clarify, too. Did the people who you reported to change?

A There's been changes in leadership but not necessarily a change. Only going to Joel Dickson. Yes. Our group did go to a different director.

Q Okay. Did your direct supervisor change on October 23, 2014?

A Twenty-third. I believe at that time somebody became a permanent supervisor. When I started with the group it was a new group, so.

Q Okay.
A I can't recall. I'm sorry.
Q Did Joel Dickson become director of the Damage Claims Department on October 23, 2014? Let me reword that. Let me reword that.
Did Joel Dickson become the director for who you worked for on October 23, 2014?
A No, I believe it was after that.
Q Okay. Okay. All right. On December 1, 2014, you started with the position title of Damage Prevention Awareness, and the word -- the words that PG&E gave were SPC, SR, and they said it was in PG&E's Damage Claim Department, so it looks like the same department but a different title there?
A Yes.
Q Does that sound right?
Okay. First of all, I'm going to ask you what does the letters SPC, SR mean?
A Specialist senior.
Q And would that have been a promotion?
A That's correct.
Q So you were promoted on December 1, 2014?
A I believe that it was around there, yes.
Q Approximately?
A Yes.

Q Okay. What was your role in your promoted position?

A So still dealing with damage claims. I took on a little more financial stuff trying to make sure our team stayed on budget and the lead for our team.

Q Okay. Okay. Good.

So PG&E said you started with the same title of Damage Prevention Awareness. I'm going to assume it's Specialist Senior, they use the same letters, in PG&E's Damage Claim Department on August 14, 2016 and January 21, 2017, and also held that title as of March 23, 2017. Is that all correct?

A Yes.

Q Okay. So would you have continued on, would you have kept the same role in all of those positions as when you first started in the position of Damage Prevention Awareness Specialist Senior?

A For the most part. Some things, of course, fall off or go to a different team, but overall my position has remained the same.

Q Okay. Did you -- just to be clear, did you take on any new duties related to locate and mark?

A No.

Q Okay. Okay.

A I'm sorry.

Q Take your time.

A I used to work closely with Katherin Mack, so I would go with her to different divisions and meet with the supervisor and look at their tickets and what they could do to improve. I've sat down with a couple locators, assisted her, and she was going over tickets and ways they could better take pictures or note the tickets.

Q Okay.

A And I believe that's it.

Q And when you say you worked closely with Katherin Mack and sat down with locators, approximately when did you start doing that?

A I believe that was near the end of 2015.

Q Okay. And you continue to do that now?

A No. No.

Q Okay. When did you stop doing that? Approximately.

A Approximately the beginning of 2016.

Q Okay. Okay. So you continue to work on locate and mark matters now in your current position?

A Occasionally. It's not an everyday, every week thing. I usually back up Steven. Or sometimes locators will email me, and I'll just help him out and take care of it, but I don't consistently work on late tickets.

Q Okay. When did you start working only occasionally and backing up Steven on locate and mark matters?

A For the most part, it's always just been a backup. I started out as a contractor in 2013, and so I was assigned to locate and mark.

Q Okay.

A When I became permanent, I was more so focused on damage claims and just helping out. When possible when Katherin was with our team I tended to focus more on locate and mark.

Q Okay.

A For the most part, I've never been a permanent employee of locate and mark just more so helping out.

Q I see. So when Katherin Mack left the team, when was that approximately?

A I believe it was the beginning of 2016. When I first started as a contractor she was there and then she -- she stayed with locate and mark, but I went and started working for David Applebaum in Damage Prevention.

Q Okay.

A And then she came back in, I want to say, 2015.

Q She came back in 2015?

A I'm sorry. I'm probably making that confusing. When our group was aligned with Joel Dickson's, our groups were working more closely together, and then when David Applebaum no longer worked for PG&E, Katherin Mack became our manager. I believe that was 2015.

Q Okay.

A And that's when I started helping more with locate and mark.

Q Okay. When Katherin Mack became your manager?

A Correct.

Q In 2015, you started with locate and mark, becoming more active on locate and mark?

A Correct. Still working with the claims. That was still my primary role, but I assisted more with locate and mark.

Q Okay. And you continued to assist more with locate and mark while Katherin was -- Katherin Mack was managing the locate and mark group?

A Managing locate and mark and the damage claims group, yes.

Q Okay. And just so I'm clear, Katherin Mack left the locate and mark and Damage Claims Group approximately when to your recollection?

A I believe 2016.

MR. GRUEN: Okay. Let's go off the record for just a moment.

(Discussion off the record.)

BY MR. GRUEN:

Q And when Katherin Mack left locate and mark and Damage Claims Group in 2016, did you continue to work on locate and mark matters after that?

A Not as much. Just backing up and covering for Steven Walker occasionally when he would go on vacation or need help with something.

Q Okay. Why the change? Were you told why there was a change in your role after Katherin Mack left?

A I believe Katherin was just trying to expose me to more within PG&E. Also, she was always so busy. She always had a lot on her plate, so I would try to help out. I was never assigned to locate and mark, so it was more just helping out.

Q So would Katherin asked you to help out in her role as managing the locate and mark and damages group, she would ask you to help out while she was managing?

A Yes. For some of the reports, because she was responsible for both of them, I would help compile all the data. It just made sense for one person to do it all rather than it coming from different groups.

Q Okay. And then when she left she would have stopped asking because she's no longer the manager?

A Yes.

Q And the new manager didn't ask you to do the same kind of work that Katherin Mack had done?

A No. Things were split up differently.

Q Okay.

A I believe a lot of the reports that she was having to generate and items she was having to do, they weren't necessarily populated the same way.

Q Okay. Let me -- you can help yourself to some water, if you like.

A Thank you.

Q Let me ask you a different set of questions relating to late tickets.

A Okay.

Q So back to terms again first, and just clarifying the definition of the terms, your understanding of what they mean, could you explain for the record in the context of locating and marking what the term "ticket" means?

A A ticket is a request for utilities to come out and locate and mark a designated area for underground facilities.

Q And what causes a ticket to be created?

A A contractor or homeowner will call in, USA North, or I believe it's Data Alert South, requesting that.

Q And that's when the contractor or the homeowner is preparing to dig?

A That's correct.

Q Okay. And I think you mentioned late tickets earlier?

A Yes.

Q So what makes a ticket late?

A If -- if the locator does not get into a ticket, get to a ticket, locate and mark it or negotiate a new start time for the time, for the time that it's due.

Q Okay. And when in relation to when the excavator or homeowner calls in the ticket to create it, when is the ticket due?

A Two business days.

Q Okay. And is that -- was that the case when you were working on locate and mark matters?

A Yes.

Q Is it still the case now to your knowledge?

A Yes.

Q Okay. Okay. Okay. So just so I understand, if a locator does not come out within two business days of when a contractor or homeowner calls 811 to create a ticket, then the ticket is late unless it's renegotiated. Do I understand that right?

A Yes. Or they are able to address it from the office, but the ticket needs to be responded to, yes.

Q And can you clarify what you just said? If it's handled from the office, what does that mean?

A Yeah. Sometimes they can look at a ticket from the office and look at our maps and determine that our facilities aren't there, so then they'll close it out.

Q I see.

Of the -- okay. So in that instance someone is making a factual determination that it's not necessary for a locator to go out to the site in order to determine and locate and mark PG&E facilities?

A That's correct.

Q And then a ticket would reflect that someone had made that determination that it's not necessary to go out and identify facilities before closing the ticket out?

A That's correct.

Q Okay. Thank you.

Okay. You mentioned the term "renegotiated."

So clarification just about that term. What is a renegotiated ticket?

A My understanding is if a locator can't get to a certain ticket when it's due, they need to call that contractor and try to renegotiate a time, and then if that is done they need to put in the ticket who they spoke to, their phone number, and when that took place, and what they agreed upon.

Q And that's okay to do if PG&E can reach the contractor or homeowner who called in the ticket and rescheduled the time to come out then PG&E can have more than the two days in order to come out and locate and mark?

A That's correct.

Q Okay. What if PG&E cannot come out within the two-day time period that we just talked about, and they cannot reach the contractor or the homeowner or the person that called in the ticket to dig, if they can't reach them then what -- what happens with the ticket, does it become a late ticket?

A I'm sorry. Are you asking what they should do?

Q Let me clarify. That's fine. Let me restate it.

A Okay.

Q I want to be clear for the record. Let me describe a scenario in fact. Let's just say today, what's the date today, June 20, let's say that a contractor calls 811 today and given the two business days, as I understand it, PG&E would have until June 22, two days from today in order to send a locator to locate and mark that -- the contractor's identified digging area, is that right so far?

A Yes. Unless it's a large job they could do sections, but yes.

Q Okay. Let's just assume it's not a large job for purposes of this discussion.

A Okay.

Q I appreciate the clarification.

And let's assume further that for summaries and the locator needs to go out there, it's not identified as no -- as a no visit by -- within the office, so a locator needs to come out and locate and mark?

A Yes.

Q Do you understand?

A Yes.

Q And let's further say that the locator cannot come out within the required two days, so in this case cannot come out by June 22nd, okay, and let's also assume that the locator cannot reach the contractor who called in the ticket in order to try to renegotiate the ticket.

A Yes.

Q I'm not asking what they should do in that instance just what happens. What happens? What does happen with the late ticket or with the ticket, does it become late?

A Sometimes.

Q Okay.

A It depends how that ticket is processed. If the ticket is processed -- if there's some kind of response put in that ticket it's not counted as late.

Q Okay. And by "response," what does that mean?

A There could still be a message put in that ticket saying negotiated a new start time or there could be a response saying face ticket, if there's a response on that ticket it won't create an alert showing that that ticket is late.

Q Okay. And at a response that says renegotiated start time, what would that -- in order to include that in a ticket, what would have to happen?

A A locator or somebody who has access to IRTH would have to go into that ticket, and then respond to that ticket. There's a drop-down usually with canned responses.

Q Okay. IRTH, you're talking about IRTHNet?

A Correct.

Q Which is the same as UtiliSphere that you referred to earlier?

A Yes.

Q Okay. So in order to input that the ticket was renegotiated, would a -- in the example you just described, would PG&E first need to reach the contractor and get agreement from the contractor to change the time by which the locator must come out?

A They should but it's not required. To put that response in there you don't need to have that information.

Q Okay. What information do you need to have to put that response in there?

A You could just put that response. You don't need to put -- to type in any information. They should, but it's not required to put that response in that ticket.

Q Okay. Let me just clarify. When you say "They should but it's not required," is there a procedure that sets forth them having to -- sets forth PG&E having to identify a ticket as renegotiated? I'm sorry. For PG&E to identify a ticket as renegotiated, is there a procedure that says that they are to call the contractor who called in the ticket?

A To my understanding, yes.

Q Okay. So there's a procedure that sets them out for them to follow?

A Yes.

Q Okay. And clarification about the term "renegotiated." If a ticket is renegotiated, what does that mean?

A It means that the locator contacted that contractor or homeowner to -- to agree upon another date and time for them to -- for the locator to get there, locate it and mark it.

Q Okay. And that would mean -- getting agreement would mean that the locator would have reached the contractor or the homeowner?

A Yes.

Q And would have gotten some sort of verbal agreement that they could then record into the ticket to say that they could -- that they renegotiated the time by which they should come out?

A Yes.

Q Okay. Let me just maybe flag one other term. When -- what's the term you use to describe when the time by which a locator is supposed to come out and locate and mark an area?

A Due. Due time. Ticket due time.

Q Ticket due time. Maybe I'll try to use that to be more concise.

So a due time or a ticket due time. In your experience has the ticket due time been changed without first getting agreement from the contractor or the homeowner who called in the ticket?

A Yes. The due time on the ticket actually doesn't change, but the ticket -- the notes in the ticket will prevent it from showing up as late, and that has been -- that has been once put into ticket without having negotiated a new start time.

Q When you say the ticket time hasn't been changed, let me see if I can just show you an example of a couple of tickets here.

A Okay.

MR. GRUEN: If you'll bear with me just a moment. Can we go off the record?

(Discussion off the record.)

(Exhibit 2 marked
for identification.)

(Exhibit 3 marked
for identification.)

(Exhibit 4 marked

for identification.)

BY MR. GRUEN:

Q While we were off the record I handed a couple of -- asked a couple of exhibits to be marked, and I'll identify them, and I handed Vanessa copies of the three exhibits. So let me for the record mark these and identify. So No. 2 I have identified as subject "Seq# 7: W612000634 for PGESAL." The sent line is Wednesday, March 15, 2017, 11:40 a.m.

Exhibit 3 the subject is "Seq# 8: W612001130 for PGEFNO - Distribution." And this was marked as sent Wednesday, March 15, 2017, 11:45 a.m.

And Exhibit 4 the subject is identified as "Seq# 13: 36481 for PGEBFD" sent Wednesday, March 15, 2017, 3:44 p.m.

Okay. Thanks for bearing with us while we got that clarified.

Looking at what you have in front of you marked as Exhibit 2, if you could look at the first page there and toward the top of the page where it says "PGESAL 00024 USANW 04/29/16 10:25," what does that date mean to you?

A The date that the ticket was called in.

Q So in this case that means it was called in April 29, 2016 at approximately 10:25 a.m.?

A Yes.

Q Okay. And then below that it says "Work Begins: 05/02/16 at 7:00" a.m. Do you see that?

A I do.

Q And what does that date and time mean to you?

A The due time.

Q So that would be the time -- by "due time," that's the time that the person who called in to create the ticket would have said that they need PG&E's locate and mark person to come out; is that right?

A Yes. Or the two business days.

Q Or the two business days, yeah. And I don't have my calendar to see if there was a weekend in between, so point well taken about the two business days.

Okay. If you turn to page 2 of Exhibit 2, let me also ask you to -- are you -- I should have asked this at the beginning of showing you this ticket, but are you familiar with this as a ticket?

A Yes.

Q Okay. Are you familiar, just if we can go to Exhibit 3, are you familiar with that as a ticket that you described?

A Yes.

Q And Exhibit 4, are you familiar with that as a ticket that you talked about earlier?

A Yes.

Q Okay. Thank you.

Back to Exhibit 2. All right. Do you see where it says "Ticket History"?

A Yes.

Q In the middle of page 2, and it says, "All Times in Eastern Time." Do you see that?

A I do.

Q And right below that does it say April 29, 2016 at 1:26 p.m.?

A Yes.

Q Okay. And it shows the ticket was delivered --

A Yes.

Q -- at that point.

Okay. And I see a number of other entries under Ticket History there. And without going through each and every one, okay, so you have in mind that the -- from the first page the work was -- the due date for the work was May 2, 2016 at 7:00 a.m., right?

A Yes.

Q Okay. And if you turn to page 3, do you see May 22, 2016 at 9:55 a.m. it says "Responded"?

A Yes.

Q And then the details, "Notification of New Start Time (Ongoing.)" Do you see that?

A Yes.

Q And that's under the May 22, 2016 entry, right?

A Yes.

Q And the method of contact is voicemail. Do you see that as well?

A I do.

Q The notes at the bottom, "New start date/time negotiated with excavator"?

A Yes.

Q What do those things mean to you?

A So this ticket was responded to as negotiating a new start time. They did that by leaving a voicemail. It's showing that they are for the time departed. My understanding is that that's showing that that's the time that they finished that, the 05/02/2016 at 6:48 a.m.

Q Okay. And that's under the May 2, 2016 entry as well that we've been talking about?

A Yes.

Q Okay.

A So then a note was put in the ticket, new start date and time negotiated with excavator, but the ticket reflects that they did that by leaving a voicemail.

Q So is it possible to negotiate a new start date and time with an excavator by leaving a voicemail?

A No.

Q So why would the ticket reflect that then?

A That's the way they did it so the ticket wasn't late, but you can't negotiate by leaving a voicemail. But as I said previously, you can still put this response in the ticket without actually speaking to the contractor. Not that that's the way you should negotiate a new start time, but that is the way you can respond to -- that's the way sometimes it's done so that a ticket's not late.

Q And when you say sometimes that's the way that it's done so a ticket's not late, we talked about earlier that there's a procedure that says that you are to call and get mutual agreement with a contractor or a homeowner in order to -- before you reschedule the due time --

A Yes.

Q -- for a ticket.

And if you don't do that then the ticket's late, correct?

A Unless you find another way to respond to it on time, yes.

Q Unless you find another way to respond to it on time.

But if you don't respond to it on time within that two-day period, and you don't get agreement from the person who called in the ticket, is the ticket late?

A Yes.

Q Okay. And in this case, if you left a voicemail rather than getting agreement from the excavator, and you included in here that there's a notification of a new start time by leaving a voicemail, would that make this ticket late?

A Technically, yes.

Q Okay. Okay. I think what I'm struggling with, too, is you said earlier it's not possible to have a voicemail and a time negotiated with an excavator at the same time. So if you can't do those two things and they are both included on the ticket, which one's true?

A What I meant was following procedure, you can't negotiate if you're not talking to somebody to renegotiate that new start time, but you can put a response in the ticket stating that.

Q Okay.

A Actually, that's not negotiating a ticket, a new start time. Is that clear?

Q I think I get it. But let me be sure.

A Okay.

Q So if you're contacting an excavator, you at PG&E -- when I say "you," I mean someone who's with the Locate and Mark Department -- is responding to an excavator on a ticket for PG&E, and they are leaving a voicemail for that excavator asking to change the due date to postpone it, they can't do that and also negotiate -- say that they are negotiating a new time with the excavator, can they?

A Correct.

Q Okay. Okay. Do you want to add to that? Take your time if you want to add more.

A It's hard to explain. I mean, those responses can be in here, but that's not the way you should negotiate a start time for a new ticket.

Q Why not?

A Because you need to have an agreement with the contractor excavator, and by leaving a voicemail you're not getting their agreement.

Q Okay. If we could go on to the next exhibit that you have, and this one is -- for the record, it's marked as Exhibit 3. Do you see it in front of you?

A Yes.

Q Okay. And here we have, again, toward the top the date of April 29, 2016 at 13:30. Do you see that?

A I do.

Q And I assume by 13:30, that's military time?

A Yes.

Q So that would have been 1:30 p.m.?

A Yes.

Q Okay. Is that pacific time or eastern time by the way, do you happen to know?

A I do not.

Q Okay. That's okay.

Continuing down on this one on page 1, you see it says work begins on May 3, 2016 at 13:45?

A I do.

Q So this means in this case the ticket was called in and created April 29, 2016 at 1:30 p.m.?

A That's correct.

Q And the person who called in the ticket reported that work -- that the due time was May 3, 2016 at 1:45 p.m.?

A Correct.

Q Okay. And continuing to page 2 where it says "ticket history," all times in eastern time -- let me just back up. That's why I asked you, and I noticed that the All Times in Eastern Time was mentioned on the other ticket as well?

A Yeah.

Q I don't know if this is a relatively new thing. It's interesting to me we're talking about -- it's says all times in eastern time, but yet we're talking about the site being in the pacific time zone which is why I asked.

A Yes.

Q Okay. So I'm just noting that for the record that it says that.

Okay. Under that entry where it says "Ticket History (All Times in Eastern Time.)" Do you see where it says April 29, 2016 4:30 p.m. received?

A I do.

Q It's interesting, too, because I see here that they are now using conventional timing on the second page instead of military time on the first page.

A Yes.

Q But just as a matter of clarification do you see what I'm talking about?

A I do.

Q Okay. Okay. And under this Ticket History entry that we just identified continuing toward the bottom of the page, May 3, 2016 at 4:50 p.m. it says "Responded." Do you see that?

A I do.

Q And under that, again, we have an entry, "Details: Notification of New Start Time," and the new start time is May 3, 2016 at -- if my math is right -- 3:30 p.m.?

A Yes.

Q Does that look right?

A Yes.

Q And the method of contact was voicemail. Okay. So would this also be a late ticket then?

A To my understanding, yes.

Q Okay. Why?

A Based on the locator putting the method of contact as voicemail, they didn't speak with the excavator or contractor to negotiate that start time.

Q Okay. And continuing on page 3, do you see where it says "Notes" toward the middle of the page?

A Yes.

Q "New start date/time negotiated with excavator. See new start time above."

A Yes.

Q So again, we have a situation where there was contact via voicemail as shown on page 2. Do you see that?

A Yes.

Q And then a new start time negotiated with excavator that's shown on page 3?

A Yes.

Q And as with the prior ticket, those two things are not both possible to have; is that right?

A Correct.

Q Okay. Until your experience based on looking at these, those two indications, which do you think would have been true? Since both aren't possible. Would it have been that PG&E left a voicemail with the excavator or would it have been that PG&E reached the excavator and negotiated a new start time and a new start date? Or do you know?

A Based on the response on the ticket, it would seem that the locator left a voicemail.

Q Okay. And why do you say that it would seem that the locator left a voicemail rather than reached the excavator and negotiated a new start date and time as shown on page 3 of this?

A Based on page 2 where it says "Method of contact," it says "Voicemail."

Q Okay. Okay. So you would look to the method of contact as the definitive thing to figure out how PG&E, or if PG&E communicated with the excavator?

A Yes.

Q Bear with me a moment. Thank you.

If we could continue to the next exhibit. Okay. And this is the exhibit that you have marked as Exhibit 4 in front of you.

A Yes.

Q Okay. For this one I'll ask a similar question first, but I wanted to touch on something else. So if you turn to page 2, again, you have Details: Notification of New Start Time, Method of Contact voicemail. Do you see that?

A I do.

Q And that's under the heading "Ticket History" and the subheading September 19, 2014 at 10:23 a.m. you responded. Do you see that?

A I do.

Q Okay. So in this case, in this case, what does that suggest to you?

A That a new start time was negotiated.

Q And how?

A Through -- well, method of contact says voicemail.

Q Okay. Okay. So by using the word "notification," does that mean that PG&E would have contacted the excavator, left a voicemail, and told them they are changing the start time without getting agreement from the excavator?

A I don't know.

Q What would that mean to you?

A My understanding is they left a voicemail leaving a new start time.

Q Okay. Toward the bottom of that you see notes. Do you see on the very last line of page 2 where it says "Notes"?

A Yes.

Q And it says, "New start date/time communicated to excavators"?

A Yes.

Q And what does that mean to you?

A That they let the excavator or contractor know the new start date and time.

Q Okay. After leaving a voicemail notifying them of the new start time then?

A It's my understanding it's on that voicemail they left. Left the new start date and time.

Q Okay. Let me just be clear on that last point. The new start date and time communicated to the excavator in that notes was done through voicemail then?

A To my understanding, yes.

Q Okay. Thank you.

Let me ask you about on page 1 of Exhibit 4 that you have in front of you.

Turning back to that, do you see where it says "Nature of work auger to" -- well, let me say it how's it's worded here. "Auger to REPL PWR POLE." Do you see that?

A Yes.

Q What does that mean to you?

A Auger to replace power pole.

Q Okay. So when you see auger replaced power pole, would that be a PG&E power pole?

A Yes.

Q So would it have been a PG&E contractor who called in this ticket then?

A Yes.

Q You're certain of that?

A I'm -- based on the ticket it showed that the contractor that called it in was doing it for PG&E, for a PG&E job.

Q Okay. I appreciate that. Where do you see that?

A Where it says "Done for." Right under "Nature of Work" it says "Done for."

Q Okay. Understood. Yes.

Can you turn to page 3 of that exhibit, Exhibit 4?

A Yes.

Q Under the entry 09/19/2014 at 2:42 p.m. it says "Responded." Do you see that?

A I do.

Q Okay. And under that the first line it says "Details: Excavated before marked." Do you see that?

A I do.

Q What does that mean to you?

A It means that when the locator went to the job site to locate and mark, the site appeared to be excavated, the contractor had excavated already.

Q So that means that a PG&E power pole contractor called in the ticket, and the locate and mark person on the gas side of PG&E came out to do the locating and marking after leaving a voicemail?

A Yes.

Q And by the time the locator on the gas side reached the site that was called in, the PG&E contractor had already begun, or had already completed rather, the excavation. Do I understand that right?

A Yes.

Q Okay.

A The locators, though there are electric locators, but the locators also mark electric facilities too not just the gas.

Q Yes. But in this case we're talking about the gas locators, right, who are locating the underground gas equipment?

A They'll also locate underground electric.

Q Okay. They'll do both?

A Yes.

MR. GRUEN: Okay. Okay. Understood. That's helpful. Let me see what time it is. Could we go off the record for a moment.

(Recess taken from 10:23 a.m. to 10:43 a.m.)

BY MR. GRUEN:

Q Before we were off the record we were going over the tickets that you have in front of you, and we discussed, as I understood it, some discussion about voice messages or voicemails being left for the excavator for PG&E, and then notes of either notification of new start time or things that suggested renegotiated due dates; is that correct?

A Yes.

Q Are you aware of other examples of tickets that have similar features to the ones we've just recounted in Exhibits 2, 3 and 4?

A Yes.

Q And by having similar features that they would have, the method of contact would have been shown as leaving a voice message and then also being shown as

renegotiated due date?
A Yes.
Q In your experience working on locate and mark issues, do you have an idea of how many tickets would have shown those characteristics?
A I do not.
Q Okay. Would -- without asking for an exact number, even an estimate, do you think it would have been dozens of tickets or hundreds of tickets or potentially thousands of tickets, can you give an idea there based on your experience and observation?
A Over the course of the last few years or.
Q Over the course of the time you worked on the locate and mark group. I'm talking about tickets that you observed. Any work that you did at PG&E related to locate and mark?
A I actually don't know. I never did the procedure to see -- they don't come across my desk to where I would look at that.
Q Okay. Even in the time that you saw, just that you would see in your day-to-day work, do you recall approximately how often you would see tickets like this with a message left and renegotiated start time?
A None. Because I don't go back and look to see

how the response was for the tickets. When I covered for Steven, when a ticket was coming to within 15 minutes, I would receive an email saying ticket coming due, and then I was responsible to reach out to the supervisor or the senior locator to let them know a ticket's coming due, and they needed to respond, and that I would keep refreshing to make sure that ticket was responded to. So once a message was put there it wouldn't show up on my screen anymore.

Q Okay. And -- are you okay?

A Sorry.

Q That's okay. We can go off the record if you need.

A I'm okay. Thank you.

Q You're welcome.

Your point about the ticket coming due within 15 minutes, where you would get a prompt on your screen, did you say?

A Yes.

Q So the actions that you took you would be required to contact others to let them know about the ticket coming due, and then there would be steps that had to be taken to avoid it, the ticket becoming late; is that right?

A Yes.

Q Okay. Can you talk about those steps, what steps would have to happen to avoid a ticket for them to be coming late?

A They would have to respond to the ticket, put a response in the ticket so that the response time was before the due time. Whether that be locate, negotiate a new start time, I believe there's a list of options.

Q And would that be the case even if a locator could not go out and locate and mark the site by the due date and due time?

A Can you restate that?

Q Sure. So I understood you to say that you were talking about the due date would be rescheduled to avoid the ticket from becoming late. Did I get that part right?

A Yes.

Q Would the due date be rescheduled even if the locator did not get out to the site to locate and mark it?

A I have seen that happen, yes.

Q Okay. And have you also seen it happen where the due date was rescheduled without reaching the excavator to get mutual agreement to reschedule?

A Yes.

Q Okay. Do you have an idea how many times you've seen it happen where the due date was rescheduled without getting agreement from the excavator first?

A Personally I've only seen that happen probably about five times.

Q And why only five?

A Well, one, when I was training with Steven we were instructed that we need to have no late tickets, and so -- sorry.

Q That's okay.

A So we would reach out to the supervisor, the senior locator, and if a ticket was coming due within a couple of minutes, a response was put there to stop the ticket from showing up late.

Q And what -- what would the response say to stop the ticket from showing up late?

A The one I have in mind I believe it was new start date and time, the response that's on the tickets we reviewed.

Q Okay. So if there was a new response date and time put in after that new date, response date and time was put in, would you be able to see -- if you hadn't seen the ticket before, let's say I was looking at it with new eyes, would I be able to tell the start -- the new start time had been changed?

A In that ticket I don't know if it listed a new start time, but you could see that response, yes, but just like the responses on here, but I don't know if the new date and time was put in there in the ticket I'm thinking about.

Q Okay. So the ticket that you're thinking about, would that mean that the -- and the new ticket that you're thinking about, how would someone like me who hadn't been involved in the process before be able to tell that the due date had been changed?

A You could pull export from IRTH, and I believe one of the columns can be, you know, a response, and then you would have to filter by the new start date and time.

Q Would it show on the ticket, would I be able to tell just from looking at the ticket itself that the due date had changed?

A Yes. Just by looking for that same response on the ticket.

Q And the response, in the instance you're saying, what did the response say?

A I believe it said new start date and time.

Q Okay. I see.

A Yes.

Q Okay. You mentioned earlier you were instructed to have no late tickets. Who instructed you to do that?

A When I covered for Steven Walker, Andy Wells, my manager, said that we can't have late tickets on our watch, but also that I didn't hear it directly from Joel.

Q Okay.

A But -- how should I word this? But any time there was a late ticket there was a big deal where it had to go all the way up to him, and when I was covering I've had, I believe, three late tickets, and so I received a call from my manager, Andy Wells, because he got a call from Joel.

Q Okay. So just so I understand, anytime you received a late ticket on your watch, you would get a call from Andy Wells, and you understood that Andy was calling you, when he called you he was also receiving a call from Joel Dickson?

A Yes.

Q And what -- in those instances where you had a late ticket and you received a call from Andy Wells, what did he tell you?

A He said that basically it made us look bad because we're covering that desk, and prior there were late tickets, and he didn't really understand the process because he's not really involved in locate and mark, so I let him know why I had those late tickets because there was certain things being done that I didn't feel comfortable, so I refused to put a note if the ticket when I saw it coming due, and so he didn't realize that that was taking place, so from my understanding he went and told Joel what the situation was.

Q Okay. And you said you refused to put late tickets, you refused to not identify late tickets when they came in, did I get that right?

A Yeah. So I would do steps as far as contacting the locate and mark supervisor and trying to get a hold of the senior locator to have them respond to a ticket, but I wasn't going to put a note in the ticket to prevent it from coming late if I didn't really call the contractor. So that's why they ended up coming late.

Q Okay. You mentioned the instructions to not have late tickets that you received from Andy?

A Yes.

Q Did you receive instructions from anyone else to not have late tickets?

A When I was training with Steven to cover for him, he said, you know, there's so much -- not in his exact words, but there's so much focus on late tickets, we even had a war room with just all the late tickets laid out, and he said that if there was a late ticket he would get a call, and I believe he said Joel would get on to him, and so he showed me what he would do, but he said if you don't feel comfortable with that, I leave it up to you, and so I spoke with Katherin and let her know, and she knew that there was this big focus on not having late tickets, and I was letting her know I don't feel comfortable putting a response in it if I don't really respond to it, and she said whatever you do don't do that, that's not the procedure, you need to make sure you handle it the right way. If it comes late that should be PG&E realizing that they need more staff to address those tickets.

Q Okay. And anyone else who gave you instructions to not have late tickets?

A No.

Q Okay. Okay. Other than instructions, did you feel any pressure from anyone in PG&E in any way to not have late tickets?

A Yes. Even though Joel didn't directly speak to me I knew that it was -- if I had late tickets while I was covering I felt like it looked bad on me like I wasn't doing my job properly. He never directly spoke to me, but there was just so much focus on all the tickets being responded to on time.

Q What made you feel that if there was a late ticket on your watch that you weren't doing your job properly?

A Well, just basically after I had those -- those late tickets to receive a call from my manager who usually doesn't see anything to do with locate and mark to give me a call and ask me why I had late tickets.

Q Okay.

A So obviously there was a conversation between him and our director, Joel.

Q Why is that obvious?

A Because the report that I sent for late tickets went to Joel to report out on a morning call.

Q Okay. Okay. Did you have any other reason to feel that it was a bad reflection on you if it was a late ticket?

A No. Other than just Andy saying it looks bad on our team.

Q Okay.

A Yeah.

Q Let me ask you this, did you have any goals in your job performance evaluations that stated -- any goals that stated that you were to have zero late tickets?

A No.

Q Okay. Any bonuses or any incentives that were linked to achieving having zero late tickets for you?

A No.

Q No. Okay.

So you were just -- you just were either instructed directly or informed that -- you were instructed directly by Andy, or were informed or learned through Andy, that Joel Dickson was pressuring to not have late tickets, am I stating that right?

A Yes.

Q Okay. Any other pressure you felt to not have late tickets that we haven't identified already?

A Not necessarily for me, but because [redacted] [redacted] just, you know, having conversations with him, knowing the pressure on him to respond to the tickets.

Q So you're familiar -- you okay?

A I'm fine, yes.

Q Anytime you want to go off the record and clear your throat or take some water, please feel free.

A Thank you.

Q So you heard from other locators about pressure to not have late tickets?

A Yes.

Q What other locators?

A Well, [redacted].

Q Okay. Others as well?

A I know I have, but I'm trying to think. I can't remember who I spoke to at this time, but if it comes up I'll let you know.

Q Okay. Were you ever concerned -- did you ever feel intimidated or threatened with retaliation if you did not have zero late tickets?

A No.

Q Were you ever retaliated against for not having zero late tickets?

A No.

Q If that changes you can let us know.

A Okay.

Q If you do feel or you see that there are means of methods used for retaliating against you in exchange for identifying late tickets you can tell us. I would suggest that you reach out to Ken Bruno.

A Okay.

Q Who I believe you --

A Yes.

Q -- know who he is?

A Yes.

Q Okay. Let me ask you -- oh, just out of curiosity, you mentioned -- so I followed the communication that Andy Wells had with you and that you learned about Joel Dickson as well communicating about zero late tickets. Was there any communication about anyone above Joel who had provided instructions to not have late tickets?

A Not to my knowledge.

Q Okay. Or anyone above Joel who was providing pressure to not have late tickets?

A Not to my knowledge.

Q Okay. And the time that you're talking about is when you were providing relief for Steven Walker; is that right?

A Yes.

Q And what time was that again?

A It was in 2016.

Q Okay.

A I believe it was in April.

Q Okay.

A I believe it was in April.

Q When you received calls from Andy Wells?

A Yes.

Q Was it at any other time?

A No.

Q How times did you receive calls from Andy

Wells regarding the instruction not to have late tickets?

A Twice.

Q And remind me how much longer you continued to provide relief for Steven Walker.

A So I did it in April while he was on vacation. I believe there was a couple of days maybe in May or June, and then a few weeks in 2017, February and March 2017.

MR. GRUEN: Okay. Let me ask you to -- let me identify this as Exhibit 5.

(Exhibit 5 marked
for identification.)

MR. GRUEN: And this is -- I'll note that this is confidential provided by PG&E pursuant to Penal Code Section 583.

So anything we discuss here, while this transcript is confidential, I'm identifying it for the record. So anything we are saying here, if it's later disclosed as part of an investigation, this part of the transcript should be redacted and kept confidential.

THE WITNESS: Okay.

MR. GRUEN: I'm just noting that for the record even though I'm talking to you as I say it.

(The following testimony has been designated

Confidential and bound under separate cover.)

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(NonConfidential transcript resumes.)

BY MR. GRUEN:

Q Okay. Are you aware of any late tickets where an excavator began excavating and there was a dig-in on PG&E's facility?

A I came across them. I can't tell you one offhand, but I have came across those.

Q Okay. And what does the term, just clarification of the term "dig-in," what does the term "dig-in" mean to you?

A If a contractor or homeowner is excavating and then damages our underground facilities.

Q Okay. And so when I asked if there was a dig-in on a late ticket, what do you understand that to mean?

A I understand that to be that the locator did not respond to the ticket on the -- before the due time, and then the contractor dug into our underground facility.

Q Okay.

A For that same location dealing with that ticket.

Q And the contractor dug in to the facility after the required due time?

A Correct.

Q And before the locator arrived to locate and mark the identified excavation area?

A Yes.

Q You say you're familiar with that. What makes you familiar with those types of situations?

A So when I process our damage claims, I review all the documents, and so part of that is sometimes also reviewing the USA ticket, and based on the time that the dig-in occurs, you know, I compare that to when the ticket's due or if the facilities were marked by the locator.

Q And do you have a sense of how many times approximately you saw dig-ins on late tickets as we've discussed?

A I'm sorry, I don't. More than a handful though.

Q More than a handful. Would you say dozens?

A Yes.

Q Hundreds perhaps?

A I'm going to say that I've reviewed -- no.

Q But dozens?

A Yes.

Q And in cases where there is a dig-in on a late ticket as we've discussed, has -- have you seen PG&E

pursue a claim in those -- in any of those instances?

A Yes.

Q Okay. How many times approximately?

A I honestly don't know. Our process has changed, but when I first started we were invoicing those, but I don't know a number.

Q Okay.

A I can't even give an approximate number.

Q Okay. Approximately when did you see PG&E pursue claims when there was a dig-in on a late ticket the way we discussed?

A 2014-2015.

Q In 2014 and 2015 that's when you observed this?

A Yes.

Q Okay. Again, I'll ask you, would you say of the dozens of times do you have a general sense, an approximate sense of how many times this occurred?

A I'm sorry, I don't. I don't.

Q That's okay. Do you recall which jobs this occurred on?

A I don't.

Q Okay. Of the claims that PG&E issued for dig-ins on a late ticket, okay, did PG&E successfully collect money on any of those claims?

A Not that I know of.

Q Okay. Okay. And why is that, do you know?

A After we invoice a claim it goes to a different team, the Nonenergy Collection Unit. They also review the documents and they speak to the contractor. So if the contractor disputes that and they see that, I believe a lot of times they've canceled that invoice.

Q Okay. Okay. So you're basing that on the process that PG&E can dispute a claim that PG&E makes for dig-ins on a late ticket, and if the contractor disputed the claim then in those instances where PG&E made a claim, PG&E dropped the claim?

A I'm not positive.

Q Okay.

A I used to go to that office and work every now and then, and I recall them going back and forth with different contractors, not just with that scenario, but if they saw that PG&E played some part in I've seen them cancel claims. So I can't be certain that all those claims are canceled, but based on seeing how they handled other claims it's a possibility.

Q Yeah.

A And I -- for the larger claims, our attorney, I know that he wouldn't -- he didn't want to handle any of those claims, he didn't want to go after a contractor if PG&E played a role.

Q And I'm not going to ask you any questions about the communication between your attorney and what happened, but I appreciate you mentioning that. I did ask generally. Just because I want to recognize the attorney/client privilege.

A Oh, I'm sorry. I'm sorry.

Q No, that's okay. That's okay.

But just for purposes of -- of moving forward, if there is anything that an attorney discussed with you for PG&E I'm not asking -- I'm just clarifying, I'm not asking about that.

A Okay.

Q Let me ask you this though, of the non-attorneys who would be aware of PG&E pursuing claims for an excavator dig-in on a late ticket the way we've discussed it.

A So when we get our claims it's in a -- one of our systems, and so the locate and mark supervisors will put that ticket is billable, so I believe the locate and mark supervisors.

Q Okay. And who specifically, which locate and mark supervisors would know?

A Back then there's been so much turnover in supervisors, I don't -- are you talking about for those years?

Q Yes.

A I don't know.

Q Okay.

A Yeah, I don't know.

Q Who did you speak to in the claims department when you were looking at -- when you were looking at the claims? You said you spoke to -- to the claims department when you were talking about claims for a dig-in on a late ticket. Who did you speak to back then?

A Not necessarily a late ticket, but where PG&E played a part, I used to call to [redacted].

Q Okay. How do you spell her name?

A I believe it's [redacted].

Q Okay.

A And then [redacted].

Q Okay. Anyone else?

A She's the one that stands out to me.

MR. GRUEN: Okay. Okay. Let's go off the record.

(Discussion off the record.)

BY MR. GRUEN:

Q You talked about getting instructions not to have late tickets earlier. Are you aware if those instructions required others -- let me ask it differently.

Are you aware if those instructions left anyone with no choice but to falsely put in information that tickets were not late?

A No. Not directly. I didn't hear anybody instruct a person to falsify records.

Q Okay. Okay. So I hear you saying that there were no direct instructions to falsify records.

A Yes.

Q Did I get that right?

A Yes.

Q Okay. I understand your point.

Were there any instructions that left others with no choice but to falsify tickets?

A I believe that there's so much pressure on them to not have late tickets that some of them feel that there's no choice. But I don't know if -- I've never heard anybody tell them that there's going to be consequences if they had late tickets, and therefore they falsified records. I just have seen the pressure put on locators and the supervisors and then Steven Walker who handles UtiliSphere.

Q Okay. And you've seen the pressure put on how, how was the pressure put on?

A Like I said, I was talking about that big board room, and Joel would come in to make sure we had no late tickets, we had to do report put outs. Just speaking with [redacted], knowing that he feels pressure to have all the tickets in his folder located on time, even though it's very difficult because the amount of tickets, and it's only so many people handling them, it just -- it looks bad on that supervisor, on that locator if there's late tickets.

Q And when you said it looks bad on that supervisor, that locator, I think you were under the impression it's looked bad on you as well you said earlier?

A Yes.

Q What makes you say it looks bad?

A You'll get a phone call, you'll have to explain what you're going to do to prevent them next time.

I know for me when I would see a late ticket come I would -- I feel hesitant to call the supervisor and give him a heads up, hey, you had a late ticket, just so you know I have to let Joel know. You might want to call him first. I haven't heard anything directly from somebody, but I don't know how to explain it. I just feel that pressure maybe because all the reports we have to do and all the conference calls concerning it.

Q So the calls and the communications with management about having to report late tickets is not just you. You saw others or heard from others, either locators or other people in the locate and mark, had to do this as well?

A Yes.

Q Okay. When you say that there are others who may feel they have no choice but to falsify records, did anyone express that to you or something that would give you that impression?

A Yes.

Q Who?

A Steven Walker.

Q Okay. And what did he tell you?

A I can't remember exact conversation, but when I was training to cover for him he was letting me know that he can't have late tickets, and I believe he said that Joel got on to him about it, so, you know, he reaches out to the supervisor and then he keeps checking the ticket, and if it's, you know, a minute coming due then he'll put a response in there, in the ticket.

Q A minute coming due meaning the 15 minute prompt that you receive? What does a minute coming due mean?

A Yes. He'll receive the prompt saying 15 minutes, he'll receive an email saying 15 minutes a ticket's coming due, so try to reach out to the supervisor so keep checking the ticket to see if a response was put in there of something located, and when it got down to when a minute before the ticket was actually due, I believe that's when he used to put a response in there.

Q Okay. Was it a requirement to put a response before the ticket came due? When you received that 15-minute prompt, were you ever instructed to put in that there was a change in the due date?

A No, I wasn't.

Q Okay. Was Steven, to your knowledge?

A I don't know.

Q Okay. When Steven told you about the pressure that he received, as I understood it.

A Yes.

Q That he had no choice but to falsify records, can you say what else was -- did he say to you that left you with that impression?

A I believe it was, you know, that Joel had called him, and he just -- I can't really remember exact conversation, I just remember we had this board room that he had to work in for a couple of months and all the late tickets were there, everybody -- the focus was on late tickets, and from what I can remember I believe he said he got a call from Joel, and it's -- you know, when your director's calling you it's nerve racking.

Q Okay. And the war room that you just mentioned, what were the approximate dates that the war room happened?

A I honestly can't remember. I know for sure it was before July of 2016. I'm thinking it's near the end of 2015, but I can't be certain.

Q Okay. And you said, if I understood correctly, that the focus of the war room was to not have late tickets?

A From my understanding, yes.

Q Okay. And how did the war room make efforts not to have late tickets?

A They put things in different steps. So the locators would be notified, I don't know if it was like an hour and a half before a ticket was coming due, and then a clerk would be notified, and then the supervisor would be notified.

And when I say "notified" an email was coming to them saying a ticket's coming due, and then at the

15-minute mark Steven Walker would get that email notification, and then there was this white board where everyday you had to populate how many tickets came in for that day, how many were late, what division that occurred in, and I believe how many contractors we had or something along those lines.

Q Okay. And in your experience doing relief for Steven Walker, approximately how often would you receive that 15-minute prompt that a ticket was coming due in your recollection?

A I believe I received five or seven a day.

Q Okay. And what would be the typical response, what would you -- what would you do in order to address those prompts?

A I would try to call the locate and mark supervisor first.

Q Okay.

A If I couldn't get a hold of him or her, I would try to get a hold of the senior locator. Again, if I couldn't get a hold of them I would send out an email letting them know a ticket's coming due -- I'm sorry. Let me restate that.

I would send out an email. The email I received I would forward to them. I would check again to see if it wasn't -- I would make the phone calls and if I couldn't get a hold of anybody I would try again.

Q Okay.

A And then sometimes what I would do is I would pull up a ticket from the same folder to see who a locator was that responds to that area and then try to get a hold of that person.

Q Okay. And then if you couldn't reach any of those people what would you do then?

A Just keep watching the ticket, and if it was overdue then I would have to report it the next day.

Q That happened -- how often would you say that happened while you were providing relief for Steven Walker?

A I think probably on five or six tickets.

Q Okay. So do you know if Steven was under -- would have done the same process you did when you were providing relief for him in order to address those 15-minute prompts?

A I believe he would send the email, and I think he would give a phone call. I'm not too sure all his steps, but he would try to get a hold of the locate and mark supervisor as well.

Q And what would he do, do you know what he did if he could not reach any of those people?

A He in the past had responded to the ticket, put a note in the ticket.

Q And what did the note say?

A I believe it said new start date and time.

Q Okay. And you saw this, you saw him put in notes like this?

A Yes.

Q And in those instances do you know if he had, or anyone had, reached the excavator to mutually agree on a new start time?

A From my knowledge, no, nobody had.

Q Okay. Can you identify how many times that happened that you saw or knew about?

Let me restate that.

How many times did you observe that to happen approximately?

A I believe three.

Q Okay.

A Maybe three.

Q Okay. Do you remember which tickets?

A I do not.

Q Okay. Do you remember approximately when the tickets were?

A No. No.

Q Okay. But this was watching Steven input the notes into the ticket?

A Yes.

Q And how do you know that the excavator was not called to -- in an effort to get an agreement?

A I didn't see him on the phone.

Q Okay.

A I didn't see him make a phone call.

Q So he would have been on the phone at the time he put in the note as a matter of practice?

A Or right before, yes.

Q Right before. I see.

Was this the time when the war room was happening or was it outside the war room?

A I believe one of the times was when he was in the war room. Another time I was training with him in San Francisco, and I believe we were at lunch and he did it on his phone.

Q Okay. How do you know he did it on his phone?

A We were talking about it. He was saying -- because we were talking about how he can't even put his phone down, even during lunch he was having to check for late tickets, and from what I could remember he said he had to respond to it really quick because it was coming due.

Q And did he tell you that he was putting a note to say that the due date had -- that he was changing the due date?

A Not in those words. He said that he was -- how did he word it? I didn't remember how he worded it, but my understanding was that he was putting a response in the ticket so it wasn't going to be late.

Q Okay. And you didn't see him call the --

A That's correct.

Q -- excavator to get an agreement to change the date --

A I did not.

Q -- in that case?

And would he have called the excavator in that case right before putting in the note on his phone?

A Yes.

Q Okay. Okay. Did you -- I think I'm understanding that you and Steven, you provided relief for him, and then Steven would have provided that kind of input on IRTHNet for tickets in order to change due dates and whatnot. Are you aware of anyone else who would serve in that role as well?

A [redacted] She -- well, as far as covering for Steven, she was supposed to be my counterpart in covering. She didn't end up really covering for him, but she went through the training. She sat in as well.

Q How do you spell [redacted]'s name?

A [redacted]

Q She sat and watched him working on tickets on IRTHNet?

A Yes.

Q Okay. Did you talk with [redacted] about notes, putting in notes about changing due dates without contacting the excavators and getting mutual agreement?

A I did.

Q And did she tell you that she observed any due date changes without excavators agreeing?

A No. She was -- during the time when Andy Wells called me about the late tickets, we were both supposed to be covering, and so it was -- I forgot what day it was, but we had discussed that we were both upset that it reflected on us when I feel like we were following proper procedure, and so she even stated that she wasn't going to put a response in there just to prevent a ticket from coming late.

Q She said she wasn't going to put a response to change the due dates to prevent the ticket from coming in late?

A Correct.

Q And that's true even when she didn't get agreement from -- that's true particularly when she didn't get agreement from the contractors to change the due date?

A Correct.

Q Okay. Okay. You mentioned -- I think you talked about this a little bit earlier, but I want to be sure I get it. You mentioned Katherin Mack?

A Yes.

Q You know her?

A I do.

Q She was the manager in the locate and mark group for a period of time?

A Yes.

Q And did you approach Katherin Mack and tell her you will not falsify locate and mark records?

A Yes. I brought my concern to her, and let her know what was going on, and she basically told me absolutely not. Do not. Do not do that. And I just wanted to hear it from somebody above me that, you know, I was doing the right thing, so I went to her.

Q Did you tell anyone else that you will not falsify locate and mark records?

A Andy Wells.

Q Andy Wells?

A And I believe I told Steven, too, that I wasn't going to do that.

Q Let me ask, what did Katherin say to you when you told her you would not falsify locate and mark records?

A That no, you don't do that, that's not procedure. Basically when you do that you're putting your name on it. That's not the way we respond to tickets, and if we can't get to it that should be PG&E's way of knowing that we need more staff.

Q And what did Andy Wells say when you told him you would not falsify locate and mark tickets?

A He said, yeah, don't do that. He didn't know that was going on, and he took that knowledge to Joel.

Q Did he take that knowledge to Joel?

A I don't know. I believe he did. Just basically to explain why I had late tickets while I was covering. I don't know what the conversation was though.

Q Okay. And approximately when was that that you had that conversation with Andy?

A I believe that was in April of 2016.

Q Okay. Did you see any changes regarding the pressure that you talked about earlier, after your conversation, on yourself or others to -- that we talked about leaving others with no choice but to falsify locate and mark records?

A There was still pressure to have no late tickets, but I did notice when I covered in February or March of 2017, I had more late tickets, and I didn't get that phone call.

Q Okay. Let me just restate that. I think -- I didn't understand you to say earlier that there was instructions that left people with no choice but to falsify locate and mark records. I think I understood you to say that there were instructions that left people with no choice but to not have late tickets. Did I get that right? I want to make sure I get that right. I don't want to misstate what you told me.

A I'm trying to think about the correct way to word it.

Q Okay.

A People -- people in PG&E feel like they can't have late tickets. They weren't giving guidance to falsify records, but there is that pressure to not have any late tickets, and without the correct amount of staff to address those tickets, I feel like they are kind of left with no choice. Am I getting that right?

Q I'm following you. I am following you.

And would that be because the choice would be to either falsify the locate and mark tickets to show that they were not late or to show as you described earlier a bad reflection on themselves?

A Correct.

Q Okay. And that bad reflection was the way you described earlier today?

A Correct.

Q Okay. Do you know if -- did you tell any managers, Katherin Mack, Andy Wells, Joel Dickson, when you learned that locate and mark tickets were being falsified, did you tell them about this?

A Yes.

Q Who did you tell?

A Katherin Mack.

Q And what did she say?

A I'm trying to recall our conversation. From what I can remember, I believe she said she already took it to leadership, but basically for me not to play a role in that. I don't recall our exact conversation, but I believe she did say she took it already, you know, above her, and I shouldn't falsify records.

Q And did anything change in terms of the pressure to avoid late tickets or that we discussed earlier?

A No.

Q Okay. Your conversation with Steven Walker about this.

A Mm-hmm.

Q When you approached Steven Walker and told him you will not falsify locate and mark records, you mentioned that earlier.

A Yes.

Q Just moments ago. What did Steven Walker say in response?

A I believe -- I believe he -- in fact, before I told him that he said, you know, this isn't something you have to do. I said, Well, I'm not going to do that, and he said, well, that's probably a good thing from what I can remember.

Q Did Steven Walker stop falsifying locate and mark records after you talked with him?

A The last time I spoke to him he ended up -- I ended up covering for him, but when he got back the process had changed, yes. As far as him putting in those notes.

Q Okay.

A So basically when he got back from vacation he was no longer to put in the notes in the USA tickets.

Q No longer to put in notes showing changed due dates without getting agreement from the excavator?

A Correct.

Q Okay. And approximately when was that?

A I believe it was around April. I think I covered for him a week or two weeks in April, so I'm thinking around that time.

Q 2016?

A 2016.

Q Mm-hmm.

A I believe that's when that all happened.

Q Bear with me a moment.

Anyone else you spoke to about not falsifying locate and mark records?

A Not that I could recall.

Q Are you aware of others who falsified locate and mark records?

A Yes.

Q Who else?

A Well, I just reviewed tickets where it was responded to as a phase ticket.

Q Okay.

A Knowing that it was a way of getting a response in there so the ticket wasn't late, and also speaking to [redacted] I was informing him, you know, don't do that.

Q Okay.

A And then he let me know that when he was hired on I believe that was his instruction from his leadership to put in that response.

Q To put in the response to change the due date without reaching -- without getting agreement from the excavator?

A I believe the response was to be a phase ticket.

Q Okay.

A So it doesn't necessarily change the date, but it -- it's like he responded to the ticket so it's not late.

Q Okay. By phasing it?

A Correct.

Q Were there cases -- let me just -- another term you mentioned, "phase ticket," you mentioned it a while back. Can you --

A My understanding a phase ticket, say you have a large job, but, you know, it's too large to do all in one day, so you do sections of it and usually try to stay ahead of the contractor and you negotiate, and you negotiate with that, or you discuss that to make sure that you guys are in agreement so they are not excavating it before you, but you're staying ahead of where they need to excavate.

Q So how would a phase ticket have been created in order to change the due dates without getting agreement from the contractor?

A Well, if you put a response in the ticket, no matter what response, from my understanding it's like you respond to that ticket so it will never show up as being late when we run our reports. So you're not supposed to do that. I mean, that's not a negotiated start time, and you're not preventing that ticket, but it's preventing it from showing up late.

Q And is it preventing it as showing up late for the entire ticket or just for certain phases?

A The entire ticket.

Q So you're changing the due date for the ticket without getting agreement from the contractor, it's just that in that case it happens to be a phased one, but you're still doing the same thing as a non-phased ticket. In that case as you're describing you're changing the due date without getting agreement from the contractor or the excavator?

A Correct. Correct.

Q Okay. I follow.

Who else do you know of, who else did you -- who else do you know of who falsified late locate and mark tickets?

A I don't know anybody offhand where I've seen them do it. More so when I'm doing my review of damage claims and seeing those tickets and knowing the things to look for.

Q Mm-hmm.

A But I'm unable to tell you a name without doing research.

Q And what would be the nature of the research that you would do to figure out if someone was falsifying a locate and mark ticket?

A I would probably do an export of the tickets and maybe pull like certain responses, like negotiate a new start date, phase tickets, and review those tickets.

Q Okay. So can you -- pretend I'm ignorant, which I am in this case, so my colleagues may have a better understanding but I don't. So can you -- as if I know nothing, which is true in this case, what would -- what would you do to do this research to tell if someone was falsifying?

A I would go into UtiliSphere, do an export of tickets for, say, a certain year, you could request certain fields, I would need to look at fields to see exactly which ones to request or play around with it a little bit, but one of the fields would be the response or I think it's --

Q Go ahead.

A Thank you.

Q Sure.

A I believe I could do?

Q The witness just took several of the exhibits from me to review them in order to help explain the instructions. Is that --

A Correct.

Q All right.

A I believe I would -- one of the fields I would pull, I think they have a note, and then I would filter my notes for new start date and time or phase tickets, and when I have my data I would filter by those certain ones and go into IRTH and research those tickets to see if in fact it was negotiated or for the ones that are phase tickets did it need to be phased.

Q And how would you tell if a ticket needed to be phased?

A If it's a large job they should still put in the ticket. You could send notes to the excavator and you should put who you spoke to and what your agreement was, you know, we're going to work from, you know, "A" Street to "B" Street, and then we'll follow up and do this next block.

Q In your experience, are there tickets that did not need to be phased that were?

A Yes.

Q Why was that?

A So there weren't late tickets.

Q Okay. How often did you notice that happen?

A I don't have a number, but I've seen it quite a bit.

Q Dozens of times?

A Yes.

Q Hundreds of times?

A Over the course of years, yes.

Q Thousands of times?

A No.

Q Okay. Is there a threshold that determines when a ticket should be phased versus not?

A Not to my understanding, but if it's a single address house there shouldn't be a need to phase it.

Q Okay. So you can look at certain facts to figure out how big the locate and mark job would be?

A To my understanding, yes.

Q Okay. And the facts on the ticket, like the address, for example?

A Correct.

Q Would give you an idea of whether it needed to be phased or not?

A Yes.

Q Okay. I see. The phase ticket, in the cases where a phase -- a ticket was phased when it didn't need to be, was it done in order to avoid the ticket from being late?

A Yes.

Q I think you said that.

A Yes.

Q I just want to be sure I understood it.

A Yes.

Q How do you know it was done in order to avoid the ticket from being late?

A I've heard that that's one of the ways to prevent late tickets, but also it -- I'm kind of -- in a way I'm assuming if you're looking at a ticket and it's coming due right before that they put in the response phase ticket, and nothing was done say it was a single address, that's the only reason why they would do that to my knowledge.

Q Okay. Do you know who phased a ticket when it was not necessary in order to avoid having a late ticket?

A I do not know a name offhand. I vaguely remember when I would go to -- when I would go with Katherin to the different divisions to meet with the supervisor her making it clear that that's not acceptable, that's not how you respond to a ticket. I can't remember what division we were in. I don't know if it was San Jose or De Anza, but I remember her saying that to everybody.

Q Okay. Let me just understand. So I think I get it, but the phase ticket would have the due dates renegotiated or re -- they were changed without reaching the excavator, right?

A No. So when you have a ticket that's coming due, if you put a response in there it's like you responded to it on time no matter what response you put in there. So if you put in a phase ticket, to my understanding, it's showing that that ticket was responded to, it was responded to on time. If you do it before the due time it was responded to on time.

So you don't even have to put in a new start date and time. That information won't necessarily be in there if it's a phase ticket.

Q So do phase tickets have due dates then?

A Once you respond to it, no. But there should be an agreement with the contractor. If you really do phase a ticket there should be an agreement, like, oh, I'm marking here, and then on 05/22 I'll mark this section, and then on 05/24 I'll do the next section. There should be that.

Q Okay. And then would -- did you notice where phase tickets had those dates dated like you just identified without having reached the excavator?

A You mean without a response going to the excavator, but I've seen the notes in the ticket?

Q Yes.

A Yes. There was some confusion in the beginning where some locators thought that if you put a note in the ticket it automatically goes to the contractor, and so when I was with Katherin she had to educate them on there's a section that says "Notes to excavator," and you have to put those same notes in that area so the contractor has knowledge of that as well.

Q Okay. So the contractor would see certain notes in the ticket?

A Correct.

Q When they were put in by PG&E?

A Yes.

Q Does -- so in the case where we looked at notes and it said notification of contractor to change dates, something to that effect, do you remember that?

A Yes.

Q Would the excavator have seen that?

A Not unless it was in the section for notes to excavator. Usually right under notes there should be another section that says "Notes to excavator," and if you put notes there then that will go to them.

Q And then just so I'm sure it's just by interceding it into the ticket filed that makes it go to the excavator or does something else have to be done to get those notes to the excavator?

A I believe it's just you put it, you put the notes in that ticket, yeah, and then it will go.

Q All right. But even if you -- using the example that you described, let's just say a phase ticket -- I'm forgetting the exact way you described it, but let's say we've got a phase ticket with three phases, for example, and the first phase is two days from today, and the second is four days from today, and the third is six days from today, I realize that takes us into the weekend, but let's just assume that it doesn't just for sake of discussion and that those are all business days.

In that case, the first phase if you're not getting out within the two days of when the ticket is called in, you're still missing, you're still late on the first phase, aren't you?

A Yes.

Q So would the phase tickets avoid that problem by phasing dates differently?

A So once you put a phase ticket in there you don't have to put a date as long as you put it before the due date that ticket -- it appears to be on time even if you don't.

Q Go ahead. I'm sorry.

A So as long as you put that response in there it's like you responded on time. You never put -- you could agree upon dates with a contractor and put that in the notes, but you're not changing that due date.

Q Okay. So I think I'm getting it. The phase tickets you could simply change the due dates and it wouldn't appear late, right? Do I have that part right?

A Correct. It's more so like agreement upon it with the contractor, but you're not necessarily changing the due date. The original due date is still that due date.

Q Okay.

A And then you could let the contractor know, like, say you go out there before that date and you phase the ticket, and then you tell them okay tomorrow -- or were you excavating, and they say well, tomorrow I'm going to excavate here, so they know to get out there and take care of it.

Q Okay.

A As long as you put that response in there, whether you -- it actually has to be phased or not, that ticket is going to be late.

Q I see. Even if you phase the ticket after you've missed the due date?

A No. So if say you put a phase ticket in there after this date, after the due date, then the ticket will show it's late.

Q Okay.

A So the phase tickets would happen -- would be created right before the due date came about.

Q Okay. I follow.

Did you tell anyone else at PG&E about phase tickets being created to avoid being late?

A I believe I mentioned it to David Applebaum, who's no longer with the company, and I don't recall what, if anything came of it. I think I mentioned it to him because I handle damage claims, and I saw that on one of them. But I can't remember.

Q Okay. Anyone else that you remember?

A No.

Q Okay. Were there -- are you aware of any claims that PG&E made on phase tickets that were created to avoid being late?

A I believe there was one I could recall. You know, I can't remember.

Q Take your time.

A Yeah. I believe there was one that I -- that was invoiced and the locator ended up going out there and marking, but still it was -- the first response was a phase ticket without any -- any notes.

This was a while ago, so I don't remember the facts, but I think it stands out because it bugged me that there was just generic responses in there.

Q Mm-hmm.

A But I can't tell you an exact -- an exact ticket that -- the one I'm speaking of.

Q Okay. But you recall this ticket -- just focusing on it, you recall the ticket being phased so that it was not shown as late, and then also seeing a claim, PG&E making a claim on the ticket because there was a dig-in on that ticket?

A Correct.

Q Okay.

A For this one, though, I believe it was -- ended up being located later, prior to the damage occurring, but that initial response was a phase ticket.

Q Okay. I see.

Did PG&E admit fault, any fault in that case, do you know?

A Not that I recall.

Q Okay. Do you recall the approximate time of that one?

A I believe sometime in 2014, near the end of 2014, but I don't know an exact --

Q Okay. Do you recall anything else about the ticket? The location? Street? City? Excavator?

A I don't, no.

Q Okay. Okay. Again, if you recall, if that one occurs to you during the interview as we continue, please feel free to -- to let us know.

I'm just wondering if there's anything I might be able to do to refresh your recollection on that. Sometimes I remember just talking through something it helps me kind of jog my memory.

A You know, it's hard because I review so many claims so they start to, you know, get jumbled together, and I'm worried that I'm going to give you false information.

Q Okay.

A But yeah. I'm sorry.

Q I appreciate that. That's okay. I appreciate your recognizing the importance of getting true and accurate information here.

A Okay.

Q And complete information.

So let me ask you, did you take notes about observing anyone at PG&E falsely creating locate and mark tickets or falsely putting false information on locate and mark tickets?

A No.

Q Okay. I want to ask you a little bit about, just in the aggregate, your understanding of the number of late tickets in certain years, as well as the number of total tickets, and then your understanding of the budget spent on locate and mark. So this goes a little bit to what you mentioned earlier where Katherin had mentioned to you that there isn't enough, there aren't enough staff in order to handle all of the tickets. Do you recall talking about that?

A Yes.

Q So we haven't talked about the total number of late tickets yet or total number of complete tickets, I'm sorry, total number of tickets, just sheer tickets, but I want to ask about all of that. So let's see, you started with locate and mark matters in 2014, right?

A I started as a contractor in 2013.

Q You started as a contractor in 2013. Okay. Go ahead.

A And then 2014 I was hired on permanently.

Q Maybe if we go back to 2013. Do you know approximately how many late tickets PG&E had in 2013?

A I don't know.

Q Okay. Do you know approximately how many total tickets PG&E had in 2013?

A No.

Q Okay. How about 2014, do you know approximately how many late tickets in that year?

A No.

Q How about the total number of tickets that year?

A Not offhand, no.

Q Okay. Do you know in any of the subsequent years, '15, '16, or '17, later total?

A I don't know an exact number. I remember, what was it, like, 1,500 late tickets. I can't remember. Was it 2015? Maybe 2016. But there was a lot.

Q Do you know whether generally that was an increase or decrease from 2014?

A I don't know.

Q Okay. And do you know in 2016, the year after, was there an increase or a decrease in the number of tickets compared to 2015?

A I believe there was an increase in tickets, and then a decrease in late tickets.

Q And there you're comparing 2015 to 2016?

A Correct.

Q So sticking with 15 to 16 comparison, do you know if there was a change in the total amount of budget that was spent on locating and marking?

A There were though to be more staff for locate and mark, but I don't know if it went through.

Q So you don't know if there was more staffing?

A Correct.

Q Okay. Did you oversee work with locators during your time at PG&E?

A Yes.

Q And did you hear locators talk about being pressured to not have late tickets?

A In one of the meetings, yes.

Q Which meetings?

A It's one of the ones with Katherin Mack. She used to go to the different divisions and check on her teams.

Q Okay.

A And go over procedures, tickets per minute, things like that.

Q And what did the locator say?

A I can't remember which one, but they were just -- but in general they were talking about just the workload and having a difficult time addressing all the tickets in a timely manner or when the tickets are due.

Q Okay. To your knowledge, did that discussion prompt any false information to be put on tickets?

A No.

Q Okay. Do you know if any locators were reprimanded or disciplined for having late tickets?

A I don't know if any locators were, no.

Q Okay. Do you know if anyone else in the locate and mark group was reprimanded or disciplined for having late tickets?

A I know it reflects on the locate and mark supervisors. I'm not too sure what comes of it, but it is -- you know, they are spoken to about it. I just don't know what those conversations entail.

Q Okay. Were you ever disciplined or reprimanded for having late tickets or were you just talked to as mentioned before?

A Yeah. Just talked to.

Q Okay. Were you ever asked your opinion as to whether PG&E was doing anything unsafe?

A Not that I can recall.

Q Okay. Were you ever asked your opinion about whether PG&E's locate and mark practices were safe?

A Not that I can recall.

Q Did you ever share your opinion with managers or others about the safety or safety concerns with locate and mark practices?

A I just brought my concerns about phase tickets and negotiating new start time, and kind of the things that could come after that, to Katherin and then [redacted] [redacted].

Q Okay. And what did Katherin say in response when you raised it to her attention?

A I believe that was the same conversation where she, you know, stated that she took it, you know, to leadership, made them aware of the problem, and that we needed, you know, more staff for locate and mark, and that she was trying to fight for that.

Q Okay. And did you see any changes with regards to locate and mark practices after you raised that point to Katherin Mack's attention?

A Not based on our conversation. She was adamantly working on that prior to -- prior to that trying to get more staff and trying to educate her -- her personnel on the right way to address tickets.

Q Okay. And were -- so if -- am I gleaning right she requested that more staff be provided for locate and mark?

A From my understanding, yes.

Q And was her request granted, do you know?

A I don't know.

Q Okay. Let me ask you about -- you recall one of the exhibits was talking about auger, a power pole that we discussed?

A Yes.

Q Are you familiar with PG&E's locate and mark practices in response to excavating by power pole contractors?

A I might be. I know a little bit.

Q Okay.

A But I think I would need a more direct question.

Q Okay. It can be more direct. So the exhibit that we looked at that talked about augering, and then there was a late response to the augering around the power pole, and by the time the locator arrived the site was already excavated?

A Yes.

Q Do you recall that?

A Yes.

Q Okay. Do you recall other such instances like that?

A No.

Q Okay. Do you recall -- did you see -- in your experience, did you see tickets where a locator on the gas side was responding to a ticket created by a power pole contractor for PG&E?

A Yes.

Q Okay. And do you know if those tickets, if all of the tickets created by PG&E's power pole contractors were -- were kept?

A Do you mean located?

Q No. I mean created. Or do you know if any were automatically deleted before they could be kept in the IRTHNet system?

A Oh, I believe in the past some of the tickets were auto processed.

Q Auto processed?

A Where they were closed out, but there's still a record of them.

Q Okay. Can you say more? How does that work?

A So I believe with certain terminology on the ticket you could create kind of rules for them. So from my understanding I believe some of the ones that were like a pole test and treat ticket were auto processed to be closed.

Q Okay.

A I don't know if that's still occurring, but I believe that was a couple of years ago.

Q When you say auto process to be closed, does that mean that the ticket was closed out before a locator would go out to mark the underground gas equipment?

A That's correct.

Q Do you know why that was?

A I don't know.

Q Okay. Was that a policy or a procedure or a requirement?

A I don't know. I just recall seeing some tickets.

Q Okay. All right. Do you have an idea how many tickets you saw that were auto closed?

A I don't. I don't recall.

Q Okay.

A I mean, I remember seeing one recently that wasn't auto processed, and I was a little confused. Because I don't work with UtiliSphere a lot, but somewhere along the lines the rules had changed, and so I had called Steven about that.

Q Okay.

A But I think there was -- I don't know, I think there was a lot though.

Q Okay. What makes you say you think there was a lot?

A I think one of our -- well, from seeing one of the things as pole test and treat, and I remember doing an export and there was a lot of those, and in the past I know that those weren't -- they were auto processed, so I'm assuming that all of those were closed.

Q Okay. Was there some sort of algorithm or something created that caused the system to auto close?

A Yeah. There's something that they do in UtiliSphere to auto close those based on those words.

Q Okay. So someone issued instructions for these certain power pole tickets that were created by PG&E to be auto closed?

A Correct.

Q Do you know -- can you say more about that?

A I don't know.

Q Okay.

A I just know that that direction would have came from somebody above us to.

Q Okay. Okay. Okay. Others of the tickets that were created by the power pole contractors were not auto closed such as the exhibit I just showed you, right?

A Yes.

Q So did you see tickets that were not auto closed, a number of those, like the exhibit I showed you?

A I may have. They didn't stand out to me so I don't.

Q Do you know why certain tickets were auto closed from power pole contractors or PG&E personnel and others were not?

A I believe it's the type of work they are doing around. I think, like I said, the pole test and treat I don't really know what that entails, but I believe based on whatever that is those ones were closed.

Q Okay. Okay. And you said you don't know if that's still going on, the auto close practice?

A To my knowledge, it's not going on anymore.

Q Okay.

A Recently I just got a ticket that wasn't closed, so I had called Steven to see why.

Q Okay. Okay. And what did he say?

A He said things have changed.

Q Okay. Okay. Are you aware of any other manners in which PG&E has not followed locate and mark procedures?

A No.

Q Okay. Are you aware of any other ways other than what we've talked about where PG&E employees have falsified locate and mark records?

A No.

Q Okay. A couple of follow-ups. Do you know of -- let me go back to the electric pole question.

In cases where there were -- where some of the tickets created by the electric pole contractors or PG&E personnel -- am I getting that right, by the way, that it was also PG&E personnel who would also create the electric tickets or would it just be the contractors or do you know?

A I believe it's our second party contractors.

Q Okay.

A But I think in some instances that PG&E called -- calls in the tickets on behalf of the contractors. I'm not too sure if it's for those tickets in particular though.

Q Okay. And second party contractors means?

A Contractors working on behalf of PG&E.

Q But not PG&E personnel directly?

A Correct.

Q Okay. Okay. In cases where some of the contractors -- let's just say in cases where power pole tickets for excavation work around poles a ticket was created and then auto closed, in that situation are you aware of any dig-ins that happened?

A I believe there have been some, but I can't remember any facts, but I'm almost certain there have been some.

Q Why?

A Because I remember thinking I don't see -- see many of those type of dig-ins.

Q Take your time.

A Yeah. I'm almost positive there have been some, but without having my records in front of me, I can't give any facts behind it.

Q Okay. Are you trying to recall, we were just sitting for a moment, it looked like you might have been trying to recall a dig-in on a -- on this kind of auto close ticket.

A Yes.

Q And I'm wondering if you're maybe remembering something but not sure.

A I feel like I remember something but I'm not sure.

Q Okay. All right. If you were to run, do a research, a piece of research on that question to find whether there had been dig-ins on auto close tickets, what would you do to figure that out and check?

A I would probably review all of our dig-ins. And I'm trying to think of how.

Probably just a quick ways I know, it's probably Osmose is one of our third parties that deals with full test and treat, so I would just look up to see if they had any dig-ins and then review their ticket.

Q Osmose?

A Osmose. I believe it's Osmose.

Q How do you spell their name?

A O-s-m-o-s-e.

MR. GRUEN: Can we go off the record for a minute?

(Discussion off the record.)

BY MR. GRUEN:

Q Can you identify any excavators who would be able to tell us about PG&E rescheduling their due date without them giving agreement?

A I believe West Valley, West Valley Construction.

Q Okay.

A And perhaps ARB.

Q "A," Apple, "R," Ralph, "B" boy?

A Correct.

Q Okay. Anyone else?

A I'm trying to think of all of the contractors who have called me. Those are two that stand out.

Q Okay. When you say you were trying to think of all of the contractors who have called you, have you received calls from contractors that -- that suggest to you PG&E renegotiated a start time without their agreement?

A Yes.

Q How many calls would you say you have received?

A Not in particular to a certain ticket. John Higgins, we met a group of contractors, you know, a few meetings, and John Higgins, he basically had me create a direct line to me so he could give it to those contractors so if they were having any problems with PG&E or needed anything addressed to give me a call.

Q Okay.

A So I've had a couple of meetings with West Valley Construction, and I believe they were the ones who had -- we were just talking about different issues, and I believe that was one of their issues.

Q Okay. They met with you in person to tell you this?

A Yes. We were talking about numerous things but.

Q That was one of them?

A Mm-hmm.

Q Okay. What does "ARB" stand for, do you happen to remember?

A I don't.

Q Okay. Do you have an idea of how many contractors have called you to tell you about PG&E renegotiating a start time without their agreement?

A I believe to call me for that direct issue, I believe it's just -- well, it just came up. They didn't necessarily call me for that particular reason but that issue did come up.

Q Uh-huh.

A I haven't had any contractors that have called me just for that.

Q Okay.

A I've spoken to my contractors just about a claim, but for that specific incident I believe those might be the only two that I've talked to about that.

Q I understand that maybe they didn't call for that issue, but how many contractors would you say have talked with you about it and that issue came up in the course of the conversation, the issue about PG&E renegotiating a start time without their agreement? I'm just asking for an estimate.

A For me specifically talking to them I believe just around three or four. But no, PG&E's been trying to meet with different contractors to rebuild our relationship with them, and I think at one of the meetings that came up, and there was, I don't know, maybe six contractors, seven contractors there.

Q Okay. And go ahead, I'm sorry.

A Yeah. I believe they brought that to our director's attention. I just -- it's hard for me to remember.

Q Okay. Do you remember -- I want you to try to remember the meeting, if you can, where you had the six or seven contractors. Do you remember approximately when it was?

A Let's see, one of them I was pregnant, so.

Q Okay.

A I think I was going out in -- going on maternity leave in two months so.

Q Okay.

A Maybe May. May of 2016. Yeah, I believe around there.

Q And do you remember the -- do you remember which contractors were at the meeting?

A I might be confusing some of the names, but I think one of them was Preston Pipelines.

Q P-r-e-s-t-o-n?

A Correct.

Q Okay.

A I can't remember. One of the meetings, I don't know if it was that one in particular, but we had similar meetings, but one was Knife River.

Q That's the name of a construction firm?

A Yes.

Q Okay.

A There's more. I just have to think of their names.

Q Take your time.

A I'm having a hard time remembering their names. I do remember that they are UCON members, what are they, United Contractors, they are all members of.

Q Okay.

A I'm sorry. I'm drawing a blank.

Q That's okay. Take your time. Do you want to take a little more time to think about it?

A Yeah. I think that's all I can remember right now.

Q Okay. Let me ask you to -- do you happen to remember the names of the people who were representing those firms in the meetings?

A Not offhand, no. I believe I have some business cards at my desk, but I don't -- or I might have an email from one of them or two of them.

Q Okay. Would the email have been around the time of that May 2016 meeting?

A For that one I believe so. I believe I emailed one of the contractors regarding filing a claim against PG&E, so I sent him the documents, and I believe it has his information on there.

Q Okay. You said that this contractor had a claim against PG&E in that case?

A Correct.

Q Okay. Do you know if PG&E paid that claim?

A I don't know.

Q Okay. Do you still have the email?

A I might. I'm really bad at keeping stuff. I usually delete my emails, but it's possible that I saved it. I could check.

Q Yes, please. What I think we'll do is just -- what we will do is communicate with John Pendleton.

A Okay.

Q And ask him -- just mention that you noted it today. I'm going to take that back to my client, too, to just confirm, but that's the approach I'm thinking of is talking with John.

A Okay.

Q And if we can produce the email that you identified today.

A Okay.

Q So we'll let you know through him.

A Okay.

Q Okay. We've covered a bit today. Which other people at PG&E would be able to confirm the information that you've given today? So specifically regarding PG&E giving instructions to not record late tickets?

A Well, Andy Wells should remember that conversation.

Q Yep.

A [redacted]

Q Okay.

A Steven Walker.

Q Okay.

A I believe if you talk to any of the locate and mark supervisors they should have that knowledge as well.

Q Okay. How about the specific question about changing the due dates without getting agreement from the contractors?

A Do you mean them doing that or?

Q Yes. Yes. I mean, people at PG&E doing that, who else would be able to confirm that?

A Steven Walker.

Q Okay.

A Katherin Mack.

Q Okay.

A Again, I believe all the locate and mark supervisors have seen that.

Q Okay. What about the information you gave us about falsification of locate and mark tickets, who else would be able to confirm that?

A I believe if you speak to locators they are the ones who are actually processing the tickets.

Q Okay.

A Do you want names in particular or?

Q Please.

A Well, [redacted]. I'm drawing a blank on names now. I know them but.

Q Take your time.

A Can I tell you locate and mark supervisor's name? There's Travis Huston.

Q How do you spell Travis Huston's last name?

A H-u-s-t-o-n.

Q Okay.

A Oh, Frank Inarte, I-n-a-r-t-e.

There's so many locate and mark supervisors, I just -- we have a list at the office, and so I can't --

Q And you think all of them should be able to talk about this?

A About late tickets and negotiating new start date and time, yes.

Q Would they all be able to talk about

negotiating new start date and time without getting agreement from excavators, do you think?

A I think they have came across that, yes.

Q Okay. What's the name of the chart that you mentioned that lists all the locate and mark supervisors?

A I don't know if there's a chart -- I mean, I don't know the name of it. Steven Walker had created just a list of locate and mark supervisors.

Q Okay.

A Doesn't necessarily have a name, though.

Q Okay. So if we were to ask PG&E please provide a list of all the locate and mark supervisors, I would probably get this list that Steven Walker created?

A Yes. Yes.

Q Who else would be able to tell us about excavators who expressed concern about changed due dates without agreeing? Who else within PG&E would be able to tell us about that?

A I don't know. Jorge Gil Blanco is our digging investigator, and so I know some of those investigators have built relationships with the contractors, and so I'm assuming that some of these contractors felt comfortable expressing that type of stuff to them, but I don't know for certain.

Q Okay. So Jorge might be able to give us an idea of who the excavators were or who the dig-in excavators were?

A Correct.

Q Okay. Who else would be able to talk about -- to confirm what you told us or talk independently about PG&E renegotiating due dates without excavator agreement and also having the dig-ins?

A Jorge and his team.

Q Okay.

A Yeah.

Q Okay. And who else within PG&E would be able to talk to us about claims that resulted from those dig-ins on rescheduled late tickets without the agreement of a excavator?

A I don't know names offhand. Employees at our Nonenergy Collection Unit, they do review or process the claims that we have against contractors, so they might have a way to search for those or have some, you know, that they remember. I don't work too closely with them anymore so I don't know. There's been transition.

Q Okay.

A But Krystal Gonzales, the one I gave you her name earlier, she used to work there in that department.

Q Is she still at PG&E?

A She's still at PG&E that I know.

Q Okay. Very good.

Anyone else that you can think of?

A Not that I know of.

MR. GRUEN: Okay. Okay. Can we go off the record for a minute.

(Discussion off the record.)

BY MR. GRUEN:

Q Just a few follow-up questions.

How many tickets on average can a locator do in one day?

A It really depends.

Q Okay.

A Fifteen, 20 if they are smaller jobs. [redacted] spent all day at one job. So it just depends on the size of the job.

Q It could range from one to about 15 depending?

A Yes. I think.

Q That's an estimate?

A Yes.

Q How would you research renegotiated tickets without agreement for the new start time that have resulted in dig-ins?

A You know, I don't know. That's more of a manual process going through every -- going through the dig-ins and then having to research the ticket.

Q Okay.

A Yeah, I don't know an easy way to do that, but you would have to review the dig-ins and then subsequently research the USA ticket and read the notes.

Q Is it a manual process then --

A Yes.

Q -- of figuring out, just physically culling through all the tickets to figure out which ones are dig-ins, or is there a way to do a query for dig-ins?

A It's probably better, since there are less dig-ins than there are tickets, to go through the dig-ins first and then match up.

Our data we now try to put the USA ticket number, so it's, I guess, to probably pull those tickets and research it that way.

Q And you can't do a query for the dig-ins then? Or can you? Like can you do a search, like a Google type of search where you type something into a search engine or is there a way to avoid having to manually search through each ticket to tell if there's a dig-in?

A Yeah. So we have an Excel spread sheet that has our dig-ins, and so it's just pulling up those and searching by those with the USA ticket.

Q I follow. So you can cross reference that list of dig-ins with each ticket and see if the ticket was late for that dig-in?

A Correct.

Q What's the name of the list that has all of the dig-ins?

A MDF. Or master dig-in file.

Q And does the master dig-in file have all the ticket numbers in there as well?

A We try to put that but not necessarily.

Q Okay. Does it have some other authenticating factor? Did I say that right? Authenticating factor, something that would uniquely identify that dig-in?

A Oh, so basically on this master dig-in file it will have most of the facts of the dig-ins so the contractors, the address, if they had a USA ticket to our knowledge, and the root cause.

Q Okay. Is there something that would -- on that master dig-in file that you could use to cross reference and match that ticket?

A If it has a USA ticket and we were able to locate it will have that ticket number.

Q Okay. I follow. How many entries are in the master dig-in file approximately?

A It's quite a bit. Maybe -- I'd say maybe 8,000.

Q Okay. And how far back do the entries go?

A 2014.

Q And --

A Or 2013. 2014 or 2013. I should know. I work on it, so.

Q Okay. Somewhere in that timeframe?

A Yes.

Q Okay. And is there -- of those entries in the master dig-in file, can you suggest a way to research the tickets that would match that entry to tell if they were late? What's the most efficient way you can suggest to research that and still get accurate answers?

A Basically filter first to see if there was a USA ticket, and then pull those numbers, and I think that would be a manual process.

Q Do you have a sense of how long it would take to do something like that?

A I don't know what that population would be, but it's taking that ticket number and then going into UtiliSphere and reading just like we were reading this to see. So it could be time consuming.

Q Okay. So someone would have to look at each of the approximately 8,000 tickets that corresponded with the dig-ins on the master dig-in file, the dig-in entries?

A I think so. I'm trying to think if there's an easier way but.

Q Yeah.

A I think you would have to do it that way.

Q Okay. And we can ask and see if there are others who may be able to think through other ways to but this is very helpful.

A Okay.

Q Thank you.

A Mm-hmm.

Q I was provided off the record a list of PG&E locate and mark supervisors, and I'd just briefly like to run through these with you and see if these seem accurate, and if these -- this group of people who I list will be able to speak to the instructions not to record late tickets, and also -- excuse me, to record in late tickets without agreement from excavators.

A Okay.

Q So I'll ask you both questions for each one.

So I see the division Central Coast Los Padres, Rob Bush.

A Yes.

Q Is that a locate and mark supervisor that you deal with?

A Yes.

Q And do you know if he would be able to tell us about late tickets?

A Yes.

Q And would he be able to confirm information about late tickets without agreement from excavators?

A I don't know.

Q Okay. How about Frank Inarte? I think you mentioned him earlier.

A I believe he can.

Q He can tell us about both things, both late tickets --

A I believe so, yes.

Q -- and without agreement from excavators?

Your understanding that he --

A I'm sorry, what do you mean? Like complaints from excavators or just that --

Q Just the internal process within PG&E about recording late tickets and also recording late tickets without agreement from excavators, can he tell us about that?

A Yes.

Q I'll ask you too since you mentioned it. Can he talk about -- would he be able to tell us about other excavators who can -- who have approached PG&E and expressed concern about renegotiated start times without getting agreement?

A Not to my knowledge.

Q Okay. [redacted], in Diablo?

A I'm not familiar with him. He might be newer.

Q Okay. Donny Humphrey in the East Bay?

A Yes.

Q You're familiar with him?

A Yes.

Q Or her. Him?

A Mm-hmm.

Q And would he be able to speak and confirm some of the information mentioned about late tickets?

A I believe so.

Q Would he be able to confirm information about late tickets without agreement from excavators?

A I don't know.

Q Okay. Would he be able to -- any of these people I mentioned, would they be able to confirm information about falsifying tickets?

A I believe Frank Inarte only because that's [redacted] [redacted]'s supervisor.

Q Okay.

A I believe when he came on board he tried to change, you know, get things going the right way.

Q Okay.

A The other locate and mark supervisors I've worked with a little bit, but I wasn't there for everything that they've seen.

Q Okay. Same questions, but I'll just go through if you have the questions in mind, those three questions, late tickets, late ticket without agreement from supervisors, and then falsification of locate and mark records.

A Okay.

Q Would any of the following people be able to confirm the information you told us about?

Ron Yamashita in Fresno?

A Late tickets.

Q Okay. Any others?

A Not that I know of.

Q Mike DeJarnett. That's capital D-e-j-a-r-n-e-t-t in Kern?

A Late tickets.

Q Not the others?

A Correct.

Q Johnny Soto, J-o-h-n-n-y, S-o-t-o, in Mission, do you know him?

A I'm not familiar.

Q Okay. Adam Mayfield, M-a-y-f-i-e-l-d, in North Bay?

A Late tickets.

Q And the other two?

A I think just late tickets.

Q Okay. Daniel Greathouse in Peninsula, do you know him?

A I do. I know late tickets. He also used to be an investigator for our dig-ins, so he might have more knowledge than the other two.

Q [redacted], Sacramento?

A Late tickets. She's been around for a while, so I think she would know about the other two as well.

Q Okay. Scott Murphy, San Francisco.

A Yes to all three.

Q Okay. Travis Huston, I think you mentioned his name before.

A Yes.

Q In San Jose?

A Yes. I think he might be in Sacramento now.

Q Okay.

A But yes. I think to all three.

Q Okay. Jason Gambill, I have last name G-a-m-b-i-l-l, Sierra North Valley?

A Late tickets. I don't know about the other two.

Q Bobby Weeck, W-e-e-c-k, Sonoma Humboldt?

A Yes to all three.

Q Tamara McCallan, T-a-m-a-r-a, last name M-c-C-a-l-l-a-n, Stockton?

A Late tickets.

Q Not the other two?

A Not that I know of.

Q Okay. Mitchell Smith, M-i-t-c-h-e-l-l, Smith, Yosemite?

A Late tickets. I don't know about the other two.

MR. GRUEN: Okay. Off the record.

(Discussion off the record.)

MR. GRUEN: Vanessa, thank you very much for your time and insight today. We very much appreciate your time. We recognize that you're required to be here and give us the information you have because you were subpoenaed, but we also recognize the cooperative approach that you've taken to answer our questions, and very much appreciate that.

THE WITNESS: You're welcome.

MR. GRUEN: Thank you. Off the record.

(Whereupon, the deposition concluded at 1:16 p.m.)

---o0o---

I declare under penalty of perjury the foregoing is true and correct. Subscribed at ___________________________________, California, this _______ day of __________________ 2017

____

Vanessa White

CERTIFICATE OF REPORTER

I, DONIELLE DEL CARLO, a Certified Shorthand Reporter, hereby certify that the witness in the foregoing deposition was by me duly sworn to tell the truth, the whole truth, and nothing but the truth in the within-entitled cause;

That said deposition was taken down in shorthand by me, a disinterested person at the time and place therein stated, and that the testimony of the said witness was thereafter reduced to typewriting, by computer, under my direction and supervision;

I further certify that I am not of counsel or attorney for either or any of the parties to the said deposition, nor in any way interested in the event of this cause, and that I am not related to any of the parties thereto.

DATED: July 7, 2017

DONIELLE DEL CARLO, CSR No. 10476

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ATTACHMENT 59

PACIFIC GAS AND ELECTRIC COMPANY
Gas Operations Data Response

PG&E Data Request Index No.:	11481		
Request Date:	11-16-2017	Date Sent:	12-05-2017
Requesting Party:	CPUC-SED		
External Requester:	Wai-Yin "Franky" Chan	PG&E Contact:	Mike Bradley

PG&E is providing this response pursuant to Public Utilities Code §583 because this response and/or the attached documents contain information that should remain confidential and not be subject to public disclosure as it contains one or more of the following: critical infrastructure information that is not normally provided to the general public, the dissemination of which poses public safety risks (pursuant to the Critical Infrastructures Information Act of 2002, 6 U.S.C. §§131-134); sensitive personal information pertaining to PG&E employees; customer information; or commercially sensitive/proprietary information. This information is highlighted yellow below and, if feasible, in the referenced attachments.

See attached declaration supporting confidential designation ("Index 11481_Confidentiality Declaration.pdf").

QUESTION 11481.01: Please confirm that there were allegations of falsifying information on an Underground Service Alert (USA) ticket by PG&E's Quality Management Department, including but not limited to the Asset Management Team, between January 1, 2012 and December 31, 2017 (hereafter called, "allegation".)

a. Please break down the total number of such allegations by month, and division.
b. Please provide the communications showing each such allegation, including the documentation underlying that allegation.
c. Did PG&E investigate each such allegation to determine whether it was true? If so, please provide the following:
    i. Identify the total number of investigations conducted in response to these allegations.
    ii. Identify the department(s), including PG&E personnel or contractors, who conducted the investigations.
    iii. Identify the total number of allegations that were found to be true.
    iv. Identify the total number of allegations that were found to be false.
    v. Identify the total number of allegations that did not reach an outcome as to whether they were true or false.
    vi. Please provide all the documents (i.e. reports, emails exchange, employee log sheets, etc.) that are associated with the outcome or the communications of the outcome to all the parties. Please be sure to organize each set of documents so that it is marked to correspond with each identified investigation.
d. Please provide the total number of such allegations that were not investigated.
    i. For each such allegation that was not investigated, please explain why it was not.
    ii. Please provide all documentation showing the reasons for not conducting such investigations.
    iii. Please break down the total number of such allegations by month, and division.

e. Did PG&E accept any of these allegations as true without conducting an investigation? If so, how many? (Please break down by month.)
   i. For each such allegation PG&E accepted as true, what was PG&E's basis of accepting each allegation?

RESPONSE 11481.01: As detailed in PG&E's response to Question 11481.02 below, PG&E has retained Guidepost to conduct a non-privileged investigation into late ticket under-reporting issues. As part of its work, Guidepost will be reviewing whether there were allegations of falsifying information on USA tickets made by PG&E's Quality Management Department, including but not limited to the Asset Management Team, between January 1, 2012 and 2017, as well as any PG&E investigations in response to such allegations. PG&E will supplement its response to this data request after Guidepost has issued its final report.

QUESTION 11481.02: Please confirm that there were falsified USA tickets by PG&E between January 2012 and the date of this data request in 2017 (falsified tickets). If this is confirmed.

a. How many of these falsified tickets were there during this period? Please provide a breakdown of such falsified tickets by month and division.
b. How many of these falsified tickets would have become late if they had not been falsified?
   i. Please provide a breakdown of such falsified tickets by month and division.
c. Please list all of the ways in which such tickets were falsified. (Eg-Phasing a ticket.)

RESPONSE 11481.02: As conveyed to SED via telephone conversations on November 8 and November 13, 2017, PG&E recently obtained input from its locate and mark (L&M) personnel regarding what appear to be instances of intentional under-reporting of late tickets during the specified time period. PG&E obtained this information as part of discussions related to implementation of improvements to its Irthnet database. These improvements are designed to close gaps that can result in a late ticket appearing to be on time for recordkeeping purposes, when in fact the ticket was still in process past its required due date and should have been identified as late (so called "field late" tickets, as described in PG&E's Response 10707.08 Supp02, delivered to SED on June 6, 2017). These Irthnet improvements became operational on November 17, 2017.

The information obtained from PG&E's L&M personnel was obtained informally and preliminarily, and has not yet been confirmed. Depending on the outcome of the investigation, PG&E believes it may be sufficient to constitute potential "falsification of records" or "other instances of deception" under the Commission's Gas and Electric Safety Citation Program (D.16-09-055). Given the apparent overlap between a self-report on this issue and SED's ongoing L&M preliminary investigation, PG&E contacted SED in part to obtain guidance on whether a self-report would be appropriate or whether PG&E should provide the information on potential falsification to SED as part of the L&M preliminary investigation. PG&E's understanding is that SED recommended providing the information in a data request response as part of the L&M preliminary investigation.

PG&E plans to review the information it has received of intentional under-reporting of late tickets as part of the investigation currently being conducted by Guidepost. PG&E has retained Guidepost to conduct a non-privileged investigation of the late ticket under-reporting issues as part of PG&E's ongoing Gas Operations Special Attention Review (SAR) on L&M issues, which began in May 2017. See attachment "*Index 11481-02_L&M SAR Initiative Slide Decks_CONF.zip*" for SAR slide decks pertaining to this project; see attachment "*Index 11481-02_L&M SAR Action Plan 11-1-2017.pdf*" for the most recent SAR action plan.

- Note, attachment "*Index 11481-02_L&M SAR Initiative 5-10-2017_CONF.pdf"* is designated confidential because it contains Third-Party information subject to non-disclosure or confidentiality agreements on pages 9-13. This information is outlined in red in the attachment.
- Note, attachment "*Index 11481-02_L&M SAR Initiative 6-13-2017_CONF.pdf"* is designated confidential because it contains Third-Party information subject to non-disclosure or confidentiality agreements on pages 15, 16, and 21-25. This information is outlined in red in the attachment.

Guidepost's final report is expected in the First Quarter of 2018.

PG&E has invited SED to participate in weekly investigation update calls led by Guidepost, in which PG&E's court-appointed Monitor also participates. PG&E welcomes SED's participation in these calls.

a. PG&E intends to develop this information as part of the Guidepost investigation and will supplement its response to this data request after Guidepost has issued its final report.
b. Please see PG&E's response to Q2a above.
c. Please see PG&E's response to Q2a above.

QUESTION 11481.03: SED understands that the metric used by PG&E's Locate and Mark Department was based on the information in the IrthNet system. Please confirm this is true.

a. At any point between 2012 and 2017, did PG&E's Quality Management Department, including but not limited to the Asset Management Team, have a metric for counting late tickets that was different from the metric used by PG&E's Locate and Mark Department?
    i. If so, Please provide the details of the metric.
b. Was the metric communicated to PG&E management, officers, or its Locate and Mark Department at any time from 2013 to 2016?
    i. If so, by whom?
c. If the metric was communicated to any PG&E management, officers, or its Locate and Mark Department at any time from 2013 to 2016, was the metric ever used as PG&E's count of late tickets?
    i. If so, please provide the count of late tickets based upon the metric dating back to 2012, broken down by month and division.
    ii. If not, why not?

RESPONSE 11481.03:

a. Quality Management (QM) uses information from IrthNet as part of its process when conducting post field assessments of completed field marked tickets. QM selects tickets using a random sampling process, selecting from field marked tickets by work center, work type, excavator, and locator. A QM field assessment will include a review of field markings to determine if markings were completed in adherence to PG&E standards and procedures. The assessment also includes a review of the ticket for accuracy, completeness, and whether the ticket was completed on time.

   QM does not have a specific late ticket metric similar to Locate & Mark (i.e. a late ticket metric generated by IRTHnet logic). Late tickets reported by QM are part of their overall field assessment.

    i. See part a of this response.
b. Late tickets identified by QM through field assessments were communicated by the Manager and Supervisor of QM to PG&E management, officers, and the L&M Department.

        i. See part b of this response.

- c. Field Late Tickets identified by QM through field assessments were not included in PG&E's count of late tickets, which was based on the IrthNet late ticket report.
    - i. Not applicable.
    - ii. QM reports the result of their field assessments, which include various types of findings including late tickets. QM's reporting is not specific to late tickets.

QUESTION 11481.04: PG&E provided a spreadsheet with late ticket data in one of its data request response to SED. The spreadsheet has a title of "Index 10707-08_2012 - Feb 2017 Total Late – Division".

- a. Please provide a description of how PG&E counted the late ticket data that were provided in the spreadsheet.
- b. Does this set of data have any relationship with the metric for late ticket data counting that PG&E's Locate and Mark Department used in the period of 2013 to 2016?
- c. If so, please explain the relationship with that metric.
- d. Does this set of data have any relationship with the metric for counting late ticket data from PG&E's Quality Management Department from 2013 to 2016?

RESPONSE 11481.04:

- a. Late ticket reporting[1] as shown in attachment "*Index 10707-08_2012 - Feb 2017 Total Late – Division*" was provided from IrthNet. The late ticket reporting identified any tickets that had not yet been processed and had not been completed by the required work start date or within 48 hours.
- b. The data presented in "*Index 10707-08_2012 - Feb 2017 Total Late – Division*" (see part a of this response) is the same data used by the Locate & Mark Department to report late tickets from 2013-2016.
- c. See part b of this response.
- d. No; late ticket results reported by the Locate & Mark organization are generated from IRTHnet as described in part a of this response. Late ticket results reported by Quality Management are from findings identified through the field assessment process as described by part a of Response 11481.03.

QUESTION 11481.05: Please provide the performance evaluations of Mr. Joel Dickson during his time as Director Gas Operations Compliance Programs (Director).

RESPONSE 11481.05: Joel Dickson was the Director of Gas Operations Compliance Programs from November 12, 2013 to March 19, 2017. PG&E is still collecting the evaluations for these years and will provide them as soon as possible.

QUESTION 11481.06: Please identify each performance evaluation of Mr. Joel Dickson during his time as Director that included a goal of zero late tickets.

RESPONSE 11481.06: PG&E is still collecting this information and will provide it as soon as possible.

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[1] As noted in PG&E Response 10707.08, delivered to SED on April 19, 2017, late ticket data are only available in IRTHnet for 60 days. Since January 2016, PG&E has collected this data from IRTHnet to generate its late ticket statistics. For late ticket data prior to January 2016, PG&E utilizes the Organizational Reporting Initiative (ORI), which is a repository for portions of IRTHnet data and SAP data.

QUESTION 11481.07: Was the goal of zero late tickets in Mr. Dickson's performance evaluations as Director in any way linked to financial incentives or penalties? If so, how?

RESPONSE 11481.07: PG&E is still collecting this information and will provide it as soon as possible.

QUESTION 11481.08: Did anyone else working in PG&E's Locate and Mark Department have a performance evaluation goal related to:

a. Achieving zero late tickets?
b. Reducing the total number of late tickets?

RESPONSE 11481.08: Please refer to the follow responses previously provided to SED for information pertaining to the L&M organization and personnel goals pertaining to late tickets:

- Response 10707.16 (delivered to SED on April 19, 2017)
- Response 10707.16 Supp01 (delivered to SED on June 12, 2017)
- Response 10707.18 (delivered to SED on April 19, 2017)
- Response 10707.18 Supp01 (delivered to SED on June 12, 2017)
- Response 11038.01 Supp01 (delivered to SED on August 18, 2017)

ATTACHMENT 60

PACIFIC GAS AND ELECTRIC COMPANY
Gas Operations Data Response

PG&E Data Request Index No.:	10895 Update		
Request Date:	05-31-2018	Date Sent:	06-29-2018
Requesting Party:	CPUC		
External Requester:	Wai-Yin "Franky" Chan	PG&E Contact:	[redacted]

QUESTION 10895.02: I have attached an USA ticket as an example. Please see the attached "USA 459722_CONF". Using PG&E's query for the on-time and late ticket, does this ticket fall into the category of on-time because it was responded (10:21:05AM) before the "work begins" time (11:30:00AM)?

RESPONSE 10895.02: The USA ticket indicates PG&E submitted a positive response, "No Response From Excavator", on 11/05/2014 at 10:20:00 AM, prior to the work start date of 11/05/2014 at 11:30 AM, therefore, this ticket would not be considered late in IRTHnet.

RESPONSE 10895.02 Supp01: Ticket No. 459722 is an example of a ticket that was not counted as late in IRTHnet but, consistent with the conservative nature of the Bates White logic, was counted as late in Bates White's May 2, 2018, Report. Although the positive response "No Response From Excavator" was entered prior to the work start date, the notes do not contain the additional evidence, in addition to the response, that the Bates White logic required for such a ticket to be counted as timely.

ATTACHMENT 61

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ATTACHMENT 62

CONFIDENTIAL - GENERAL ORDER 66D AND DECISION 16-08-024

Released, September 2018

DIRT

Damage Information Reporting Tool

2017

Analysis & Recommendations

Volume 14

This report may be referenced as the DIRT Annual Report for 2017.

Dear Damage Prevention Stakeholders,

As you will see, the 2017 DIRT Report has a new look and feel. CGA's Data Reporting & Evaluation Committee has worked closely with a new consultant, Green Analytics, to use new data analysis methods and bring a fresh perspective and to this very important damage prevention tool.

For the fourth year in a row, the number of events submitted into DIRT increased, with more than 411,000 records submitted for 2017. This is an increase of approximately 5 percent over 2016. After consolidating multiple reports on the same event and filtering out near-misses, total damage reports for 2017 were 316,422.

One of the committee's goals with the new report is to provide additional details on the data and the analytical methods employed, particularly for the annual estimate of total U.S. damages. A detailed appendix is included with specific information on the new methodology and approach for 2017. The new approach estimates an increase in total U.S. damages from 2015-2017 with a levelling-off of damages per one call transmissions and damages per dollars of construction spending during the same time frame. So, although we are seeing an annual increase in damages in recent years, the overall rate of damages has remained stable when taking construction activity into consideration.

We have made significant improvements to the DIRT online interactive dashboard, which now includes enhanced data visualizations and powerful sorting and filtering capabilities. The new dashboard features allow users to analyze damages in a variety of ways, including by facility types in individual states, and the ability to quickly create customized charts for these types of data.

One of the primary objectives in CGA's 2018 strategic plan is to "develop information and analysis designed to enhance our members' ability to implement effective damage prevention processes and programs." With this in mind, I encourage our stakeholders to use the report and online dashboard to identify opportunities for improvement. This may include the identification of audiences for targeted outreach, development of new or revised Best Practices, identification of new technology solutions or strengthening legislation in your state.

There is no question the data included in the DIRT Report plays an important role in helping us reduce damages to underground infrastructure. Please take this opportunity to review your damage and near-miss data collection practices for improvement opportunities. If you're not collecting key DIRT fields such as root cause, type of excavator, equipment and work performed, I would ask that you consider educating your personnel and/or change your internal processes start collecting this data. Improved data quality will enhance our annual DIRT analysis and will improve stakeholders' ability to assess their own success and identify opportunities.

I want to thank everyone who works diligently to make the DIRT Report a key tool in helping stakeholders determine how to best protect underground utilities, the people who dig near them and their communities.

Be safe,

Sarah K. Magruder Lyle

Sarah K. Magruder Lyle
President & CEO
Common Ground Alliance

TABLE OF CONTENTS

Also visit the 2017 DIRT Dashboard at

commongroundalliance.com/dirt-dashboard

TERMINOLOGY USED IN THIS REPORT

Damage—Any impact or exposure that results in the need to repair an underground facility due to a weakening or the partial or complete destruction of the facility, including, but not limited to, the protective coating, lateral support, cathodic protection, or housing for the line, device, or facility.

DIRT—Damage Information Reporting Tool.

Event—The occurrence of downtime, damage, and near miss.

Facility Affected—The type of facility that is involved in a damage event: distribution, service/drop, transmission, or gathering.

Facility Damaged—The facility operation that is affected by a damage event: cable TV, electric, natural gas, sewer, water, etc.

Known Data—DIRT data, excluding unknown data. Unknown data depends on the DIRT field but usually is denoted as “unknown,” “unknown/other,” or “data not collected.”[1]

Near Miss—An event where damage did not occur but clear potential for damage was identified.

Root Cause—The predominant reason that the event occurred. For purposes of DIRT, the point where a change in behavior would reasonably be expected to lead to a change in the outcome, i.e., avoidance of the event.

Transmissions—The number of notices of intent to excavate sent by one call centers to their member facility operators, including those sent directly to locating vendors on behalf of members. Each incoming notice of intent to excavate generates outgoing transmissions to several members, such as electric, gas, cable TV, water, sewer, telecommunications, etc.

Unique Events—The number of events remaining after identifying and consolidating multiple reports of the same event.

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[1] As part of the revisions to the DIRT form effective January 1, 2018, Data Not Collected is removed from all fields where it was an option.

INTRODUCTION

The Damage Information Reporting Tool (DIRT) is an initiative of the Common Ground Alliance (CGA) through the Data Reporting & Evaluation Committee. It is a system for gathering data regarding damage and near-miss events from excavation activities related to buried facilities. An event is defined in the CGA DIRT User's Guide as "the occurrence of downtime, damages, and near misses." DIRT allows industry stakeholders in the U.S. and Canada to submit data anonymously to a comprehensive database. The database is used to identify the characteristics, themes, and contributing factors leading to damages and near misses. Such findings are summarized in an annual DIRT report. This report provides a summary and analysis of the damage events submitted in 2017.

The number of events reported via DIRT for the U.S. and Canada in 2017 totalled 411,867. After consolidating multiple reports of the same events[2] and filtering out near misses, the number of reported damages was 316,442, comprised of 10,644 in Canada and 305,799 in the U.S. (Table 1).

Table 1—Reported events, near misses, and damages in Canada and the U.S., over time

	2015	**2016**	**2017**
Reported Events (total entered in DIRT)	363,176	390,366	411,867
Reported Near Misses (unique events)	9,485	6,093	1,588
Reported Damages (unique events)	278,861	317,869	316,442

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[2] See the 2015 Annual DIRT report for a description of the method used to match and weight multiple reports of the same event. Also see the May 2016 and July 2016 Monthly Updates (http://commongroundalliance.com/media-reports/cga-monthly-updates).

2017 DIRT Highlights

Most reported damages (52%) are the result of Insufficient Excavation Practices. Approximately a quarter of the damages (24%) resulted from Notification Not Made to the One Call Center, and approximately 17% are due to locating issues.

The leading type of excavator involved in damages is Contractor at about 61%. Occupants and Farmers make up about 5%. For reports where a root cause is provided, 78% involving Occupants with hand tools are due to No Notification to the One Call Center. For Contractors with backhoes, it’s about 21% due to No Notification to the One Call Center, with Excavating Practices making up about 43%.

A refined approach to estimating the total annual damages in the U.S. results in an estimate of 439,000. This approach was applied retroactively to 2015 and 2016, resulting in revised estimates of 378,000 and 416,000, respectively.

What Is New for 2017?

- A new approach to data characterized as “unknown” increases transparency and informs readers of the significance of unknown data and the implications for drawing conclusions about larger data trends. Specifically, unknown data is included in datasets where it constitutes a significant portion of the total. This approach also clearly demonstrates areas in the data collection process where efforts to reduce unknown data are most needed.
- To allow for year-over-year comparisons with a high degree of confidence in trends in the data, a subset of data from stakeholders that have consistently submitted over time was extracted from the larger dataset and used to demonstrate trends from 2015 to 2017. Focusing on this subset ensures that changes from one year to the next reflect actual changes in damages rather than potentially being due to an increase, decrease, or different combination of entities reporting through DIRT.
- A section titled “Understanding the Data” educates readers on where uncertainties lie in the DIRT dataset and how such uncertainties have been addressed in the DIRT report.
- A consistent approach was used in the organization of the sections presenting the DIRT data, including an overview of the dataset under consideration (i.e., root cause, reporting stakeholder, excavator type, facility damaged), followed by cross-tabulations demonstrating how the data fields intersect and relate to each other (e.g., root cause by reporting stakeholder, facilities damaged by root cause). This is followed by presentations of the data over time (2015 to 2017).
- A calendar heat map shows the timing of damages with analysis contrasting combinations of root cause, type of excavator, and equipment by weekdays and weekends.

- A section on Call Before You Dig (CBYD) Awareness relates damages by occupants with CBYD and 811 services awareness and use. Trend lines are included for the 2017 and 2018 awareness surveys demonstrating U.S. regions where use and awareness of such services are lagging.
- A conclusion section summarizes key trends and articulates recommendations for improvements to DIRT for future consideration.
- A detailed technical appendix (Appendix A) describes a refined approach used to establish substantially reporting states and the statistical analysis undertaken to build the predictive model to estimate total damages for the U.S. for 2015 to 2017. Results of the statistical analysis are presented along with comparisons of damages for substantially reporting states with the larger DIRT dataset. In general, the comparisons demonstrate that the substantially reporting states dataset is a strong representation of the larger DIRT database.

2017 ONLINE DIRT DASHBOARD

A redesigned interactive dashboard available allows users to interact with the complete DIRT dataset, run queries, and extract trends of interest to users. Key features of the interactive DIRT analysis tool include the following:

- State summaries and interactive visualizations
- Easy comparisons between states
- Temporal damage trends over the year
- Interactive maps
- Root causes and associated excavation information (type of excavator, work, and equipment)

Online Dashboard URL:

commongroundalliance.com/dirt-dashboard

UNDERSTANDING THE DATA

The DIRT database has grown and improved since data collection began in 2004. The DIRT data is a rich source of industry intelligence on damage and near-miss events from excavation activities related to buried facilities. Despite this, uncertainties remain that limit the ability to draw firm conclusions on the trends in damage events over time and across jurisdictions. There are four reasons for this:

1. Reporting to DIRT is voluntary in many jurisdictions.[3]
2. In some cases, details pertaining to damage events are unknown or not collected, which translates into unknown data in the DIRT database.
3. Reported data is not a complete census of damage to all buried facility operators.
4. There is limited knowledge of the population of companies or entities performing excavation work that might cause damages.

These considerations result in the following issues that must be kept in mind while interpreting the data:

1. Some jurisdictions contain more comprehensive data than others. Thus, the damages reported via DIRT are not necessarily a reflection of the actual total damages that take place in a given jurisdiction in a particular year.
2. Changes over time may be due to variations in the number and combination of entities reporting damages, or from actual increases or decreases in the number of damages.

To allow stakeholders to draw firm conclusions about the trends in damage events, two subsets of data were extracted from the DIRT database: damages for substantially reporting states and damages for consistently reporting stakeholders. The reporting states dataset contains reported damages from states at the high end of the spectrum for reporting events via DIRT. This dataset is used to predict total damages for the U.S. in a given year, the results of which are presented in the *Estimating Total Damages* section of this report. The consistently reporting stakeholders dataset is described in detail next.

Consistently Reporting Stakeholders

The consistently reporting stakeholders dataset focuses on entities that have consistently reported events via DIRT over time. Because use of DIRT is voluntary, it is difficult to interpret trends in damages over time because changes may be caused by an increase or decrease in actual damages, or by more or fewer stakeholders employing the database in any given year. Feedback from DIRT users and stakeholders has indicated that year-over-year comparisons at the level of aggregation presented in Table 1 should therefore be undertaken with caution.

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[3] Although some state's laws and/or rules require reporting all or some specific facility type events to DIRT, compliance may not be 100%.

To allow for year-over-year comparisons with a higher degree of confidence that changes reflect differences in actual damages rather than shifts in reporting, it is useful to examine annual damages reported for the subset of stakeholders that have employed DIRT on a consistent basis. Consistently reporting stakeholders are comprised of those companies that reported into DIRT during 2015, 2016, and 2017. Table 2 presents total reported damages over time along with those from the consistently reporting stakeholders.

Table 2—Reported damages and total damages for consistently reporting stakeholders in Canada and the U.S., over time

	2015	2016	2017
Reported Damages	278,861	317,869	316,442
Reported Damages for Consistently Reporting Stakeholders	275,885	307,336	295,141
Reported Damages Attributed to Consistently Reporting Stakeholders	99%	97%	93%

As shown in Table 2, consistently reporting stakeholders account for the clear majority, albeit a decreasing amount, of reported damages. Subsequent sections employ the consistently reporting stakeholders dataset to demonstrate temporal trends in the DIRT data. Given the high percentage of total reported damages captured by the consistently reporting stakeholders, readers can be confident that the trends over time are a solid representation of changes in actual damages.

A Note About Unknown Data

Consideration was also given to the proportion of any given dataset that was characterized by unknown data entries. In cases where the unknown data was deemed to have an insignificant impact on the overall trend in the data (i.e., the unknown data does not skew overall data trends), it is excluded from the data presented in the report. However, in cases where the unknown data does have a significant impact on the overall trend in the data, it was left in the dataset and is presented in this report along with known data. This is a different approach than used in past years, when all unknown data was excluded from the DIRT report. Including the unknown data where it plays a significant role in the data trend serves two important purposes:

1. It improves transparency about what is known and what is unknown and can highlight the areas where improved reporting will enhance overall understanding of the damages.
2. Suppressing unknown data where it accounts for a significant proportion of reported damages can lead to misinterpretation of overall trends in damages. Allowing unknown data to remain allows the reader to be more cautious when interpreting such variables.

To establish whether to include or exclude unknown data, each dataset was graphed so as to distinguish between the known and unknown data. An example of this is shown in Figure 1, which demonstrates the breakdown of root causes. The figure differentiates between all data (known plus unknown, in blue) and only data with known root causes (green). When the unknown data is filtered out the contribution of the known causes to the total shifts only slightly. With the unknown data excluded, Failure to Use Hand Tools, Failure to Maintain Clearance, and Facility Marking or Locating Not Sufficient increase by a mere 1–2%. No Notification Made to the One Call Center and Other Excavation Practices Not Sufficient increase as well by just 3–4%.

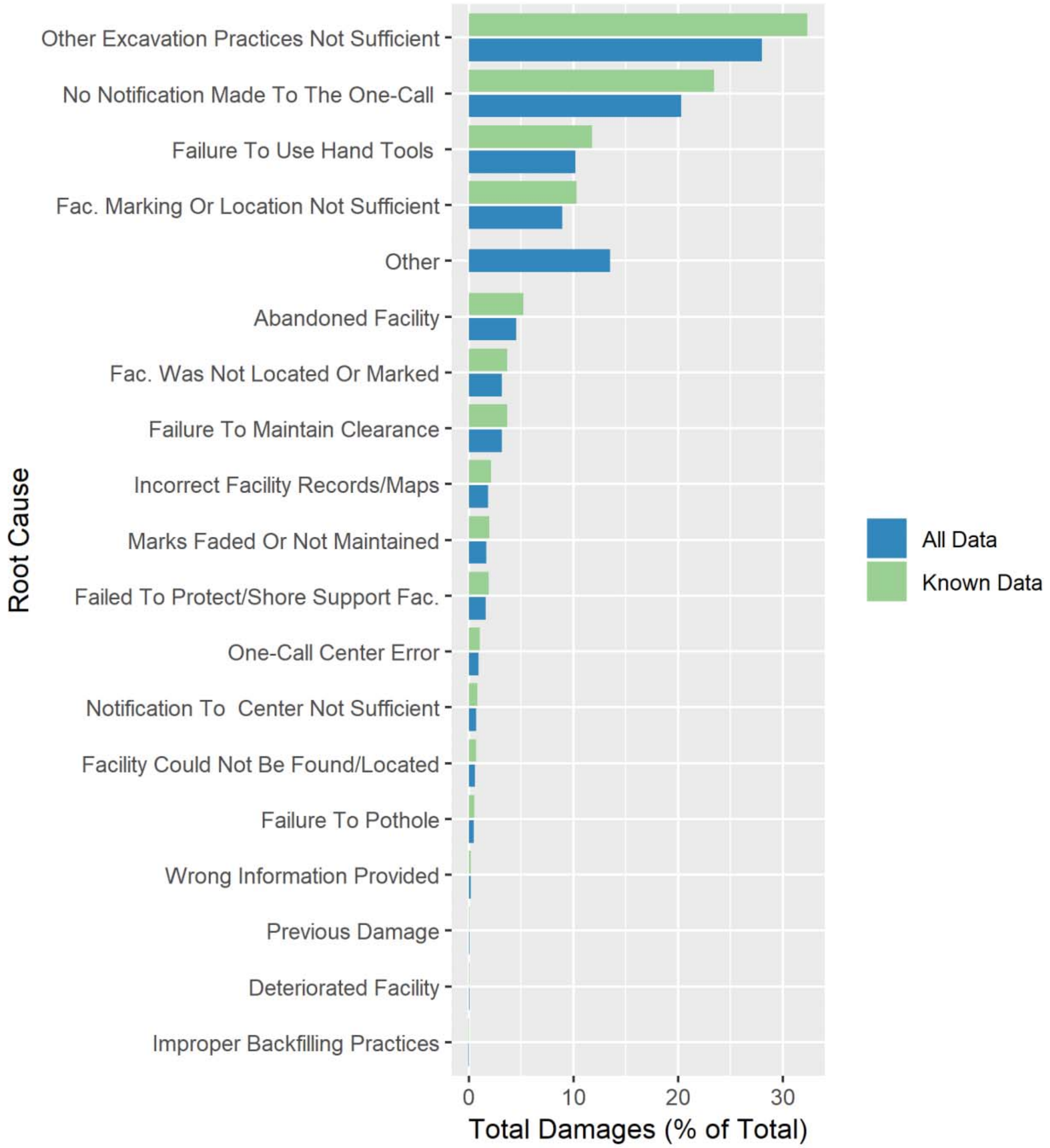

Figure 1- Root cause of reported damages in Canada and the U.S., 2017

Root cause is an example where the unknown data has a relatively insignificant impact on the overall trend in the data. This was also the case for facilities damaged, where most reported damages involved telecommunications with or without the unknown data included. Thus, for root cause and facilities damaged, this report presents only the known data. For the excavator type dataset, unknown data was relatively significant (48%), and so for this dataset it is included in the trends presented in this report.

Data Quality Index

The data quality index (DQI) is a measure of the completeness of DIRT reports. Starting with a theoretical score of 100 (i.e., information is provided for all fields within DIRT), points are subtracted when *unknown, other, or data not collected* are used. This allows stakeholders to identify opportunities to improve reporting in the future. Figure 2 demonstrates the trend in the DQI for 2016 and 2017 across reporting stakeholders. The lowest DQI scores are associated with Excavators (DQI of 49) and One Call Center (DQI of 43). All other DQI scores exceed 50. Note that the average DQI for 2017 is down from 2016 by 5 points (from 68 to 63).

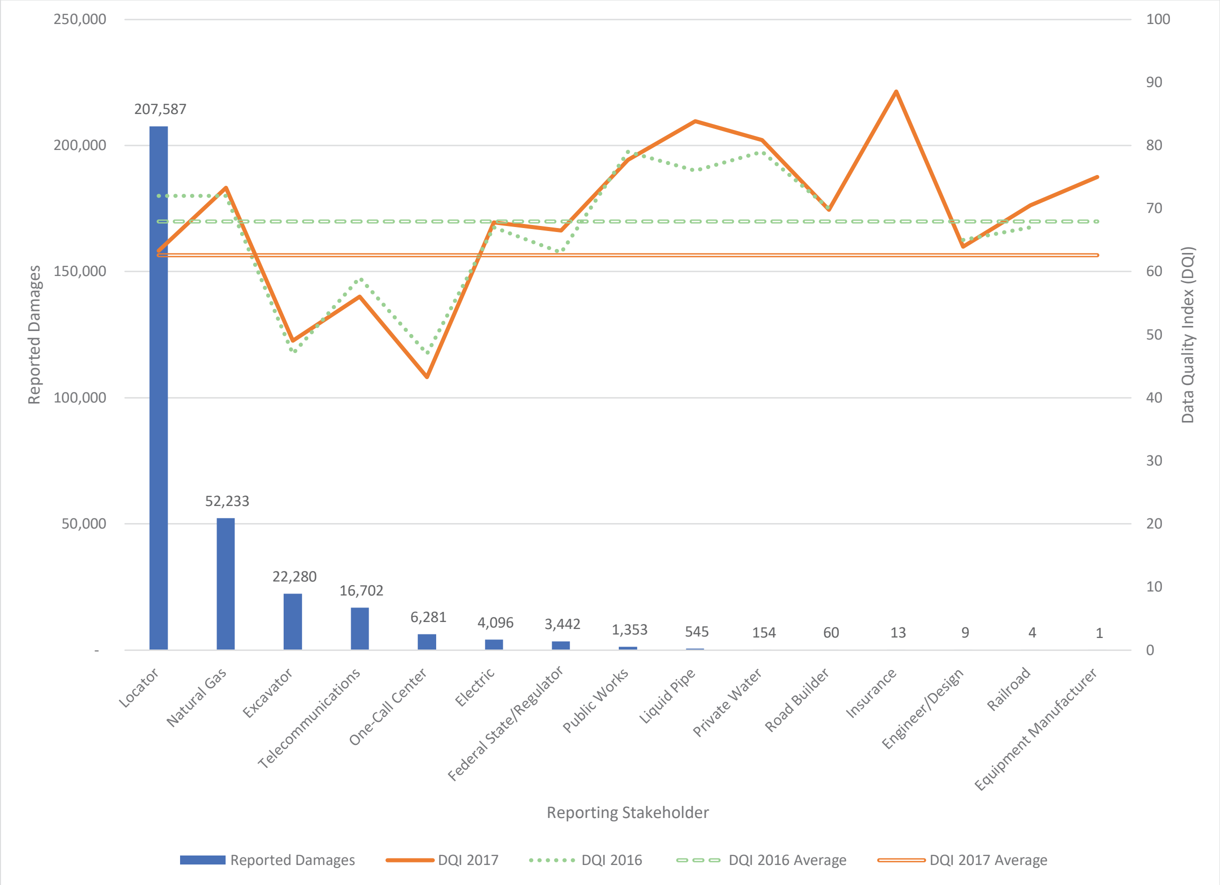

Figure 2-Data Quality Index by Reporting Stakeholder

ESTIMATING TOTAL DAMAGES

Each year, the damage reports entered into DIRT are used to estimate the total number of damages for the U.S. As noted previously, damages are reported to DIRT on a voluntary basis and thus do not necessarily reflect the total number of damages that take place in a given year. A new approach (described in detail in Appendix A) was employed to generate an improved estimate of total damages occurring in the U.S. in 2017. As a result, the 2017 estimate was not directly comparable with the estimates in previous DIRT reports. The new approach was therefore retroactively applied to the 2015 and 2016 datasets.

Substantially reporting states are those that lead in employing DIRT to report their annual damages. A similar subset of the DIRT database has been used in past years' reporting. This year, the definitions and criteria for identifying eligible states were refined to improve confidence in the chosen states. Table 3 lists the 10 qualifying states along with their reported damages over time.

Table 3—Reported damages from substantially reporting states, 2015 to 2017

State	**2015**	**2016**	**2017**
Colorado	12,863	12,660	6,786
Connecticut	597	561	562
Florida	8,570	10,661	21,877
Georgia	20,554	37,562	29,655
Illinois	18,529	21,293	19,256
Kansas	6,403	4,650	5,476
New Mexico	2,227	1,431	1,479
Pennsylvania	7,211	7,983	8,878
Texas	45,624	53,899	45,384
Virginia	1,715	4,273	4,877
SUBSTANTIALLY REPORTING STATES TOTAL	124,294	154,974	144,230
TOTAL DIRT REPORTED DAMAGES	278,861	317,869	316,442
Reported Damages Attributed to Substantially Reporting States	45%	49%	46%

Table 4 presents the estimates from the previous approach (2015 and 2016) and the new approach (2015, 2016, and 2017). With the new approach, the estimated damages for 2017 are 439,000, which lies within an estimated range of approximately 320,000 to 715,000.

Table 4—Key performance indicators for total estimated damages in the U.S., over time

	2015	2016	2017
Total Estimated Damages (U.S.) Previous Approach	317,000	379,000	Not Applicable
Total Estimated Damages Updated Approach	378,000	416,000	439,000
Total Estimated Transmissions	199.9 M	221.9 M	234.9 M
Total Estimated Damages per 1,000 Transmissions Updated Approach	1.89	1.88	1.87
Damages per million dollars of construction spending	0.354	0.351	0.359

The new approach leads to mid-point estimates for 2015 and 2016 that are higher than those published in the DIRT reports for those years. Please note however that while the revised retroactive mid-point estimates are higher than the original estimates, they do fall with the range of those estimates.[4]

A similar approach was used to estimate the total number of one call transmissions. Using data from the one call centers that did submit the information to the CGA's One Call Systems International database (or provided it separately), estimates for the missing one call centers were calculated and added. The net result of these revised estimates is that the ratio of Damages per 1,000 Transmissions is declining slightly each year.

The increased estimates of U.S. damages for 2015 and 2016 are the result of two key factors:

1. A more sophisticated modeling approach that is better suited to the type of data contained in the DIRT database.
2. A refined approach to defining substantially reporting states.

The primary objective of estimating total damages for the U.S. is to demonstrate trends over time. For this reason, it was important to apply the new approach to previous years. While the new approach provides an improved estimate, it is important to note that the updated approach is probably still

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[4] See Exhibit 1 of the 2016 DIRT Report.

underestimating total damages for the U.S. They do, nonetheless, provide a sense of how damages are trending over time. The consecutive years of data also allow for comparisons with other time trend data such as construction spending (Figure 3).

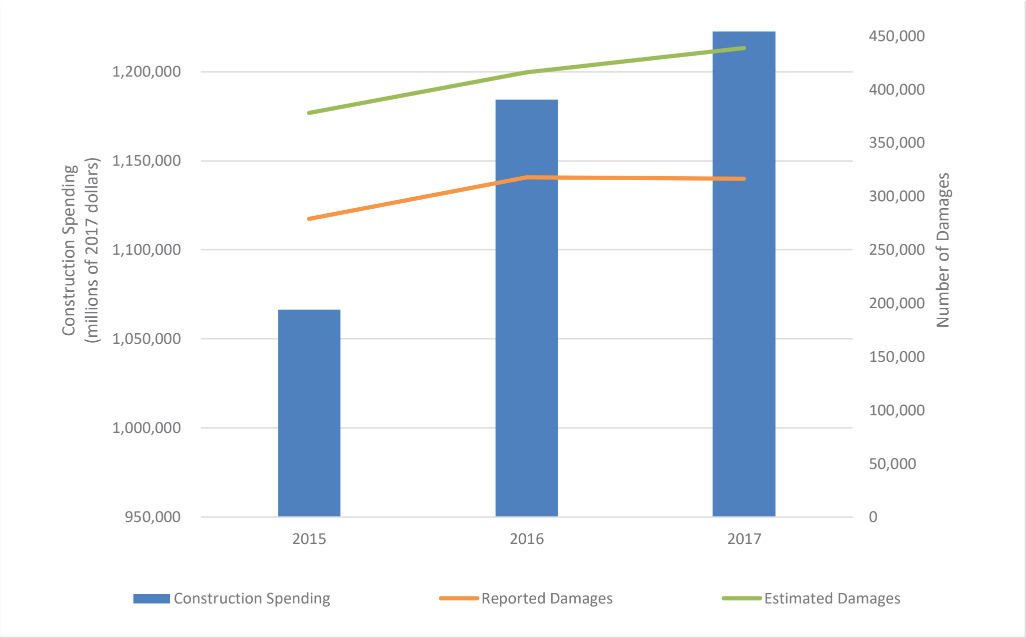

Figure 3—Comparison of reported and estimated damages with construction spending

DATE AND LOCATION OF DAMAGES

The clear majority of reported damages in 2017 occurred during the work week (Monday to Friday). Across all states, 279,760 reported damages occurred during the work week and 26,038 occurred on weekends. The same trend was observed for Canada, with 9,789 reported damages occurring during the work week and 854 on weekends. Figure 4 illustrates the distribution of reported damages by month and day for 2017. The majority of damages occur in the months of June, July, August, and September. In 2017, 50% of the reported damages occurred during these four months. The highest number of damages were reported for the month of August with 11%. For types of excavators excluding from Occupants, more than 90% of damages occur on weekdays. For Occupants, it's approximately 73% weekdays and 27% weekends. Hand Tools are the type of equipment for 13% of damages occurring on weekdays but 24% on weekends. For Backhoes, it's 32% of damages on weekdays and 26% on weekends.

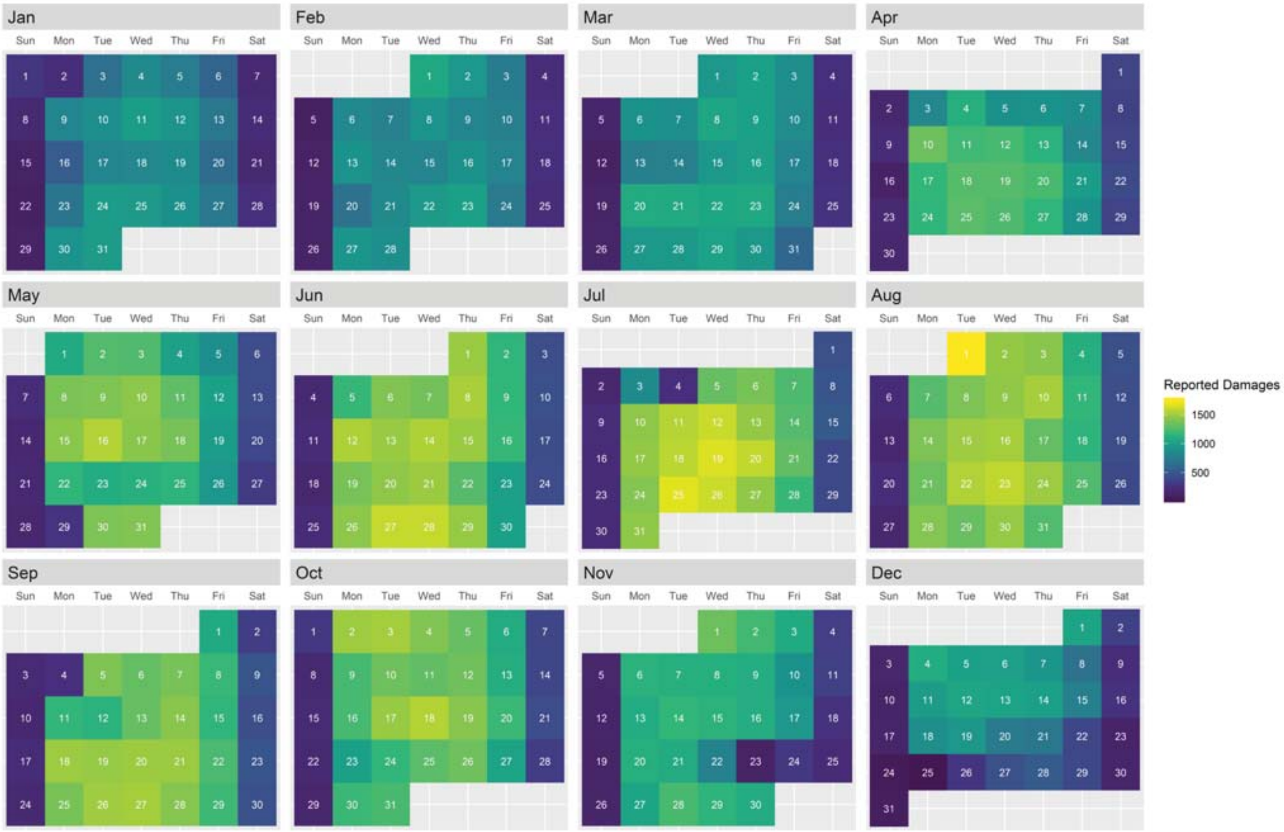

Figure 4—Heat calendar of total damages in Canada and the U.S. by month and date, 2017

Figure 5 displays ranges of damages by location as reported via DIRT. Because participation in DIRT is voluntary and varies by state, the damage ranges indicated may not provide a complete picture of damages and damage prevention efforts. Specifically, higher damages may indicate a higher level of voluntary reporting rather than a higher level of actual damages. As a result, Figure 5 should be interpreted as an indication of which states and provinces are providing damage reports and not an assessment of which are experiencing the most damages.

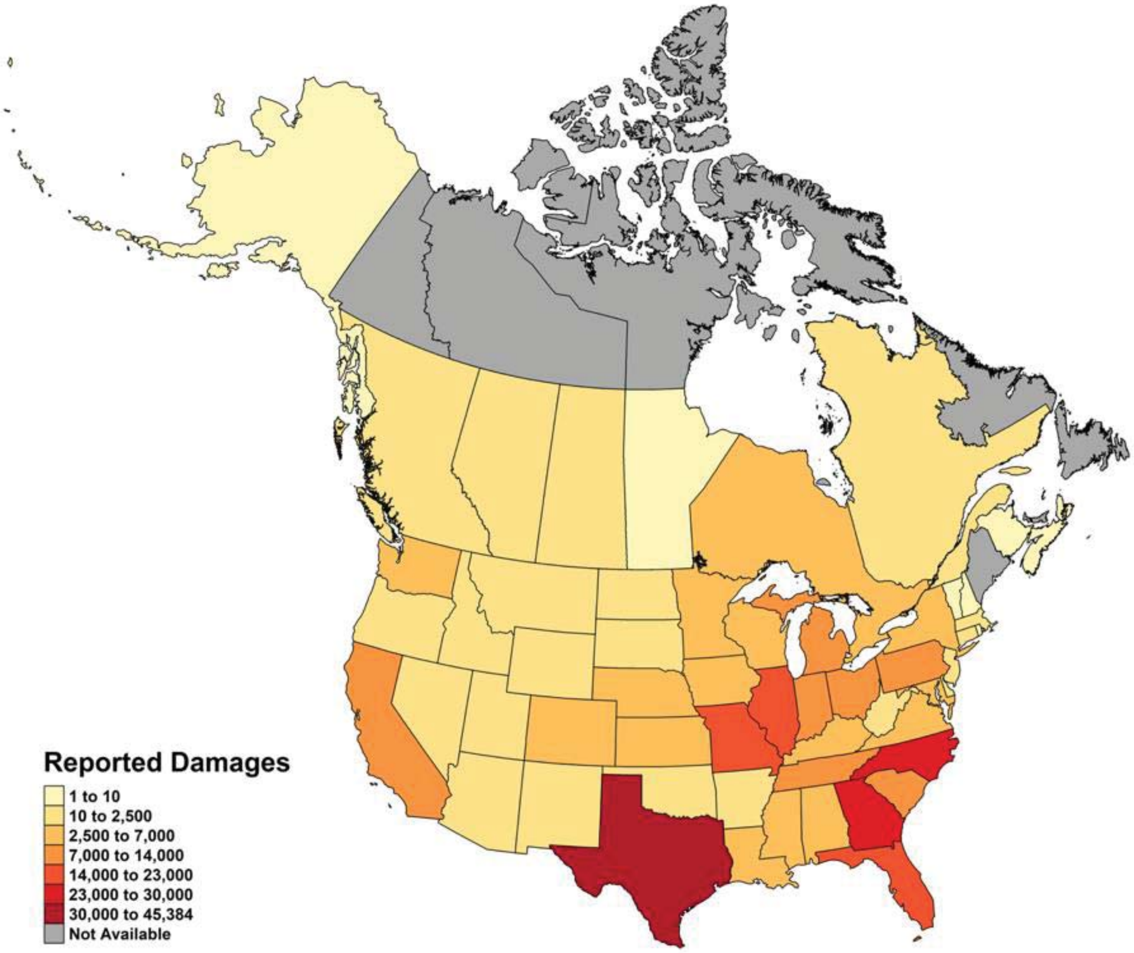

Figure 5—Map of reported damages, 2017

REPORTING STAKEHOLDERS

The reporting stakeholders are the entities collecting the information into DIRT. Note: As part of the revision to the DIRT form effective January 1, 2018, “Reporting Stakeholder” is changed to “Original Source of Event Information.” Figure 6 summarizes damages for 2017 by reporting stakeholders for Canada and U.S. combined. The stakeholder reporting the highest number of damages is Locator (207,587 or 66% of events) followed by Natural Gas (52,233 or 16% of events). See Appendix B for a detailed breakdown of damages by all reporting stakeholders.

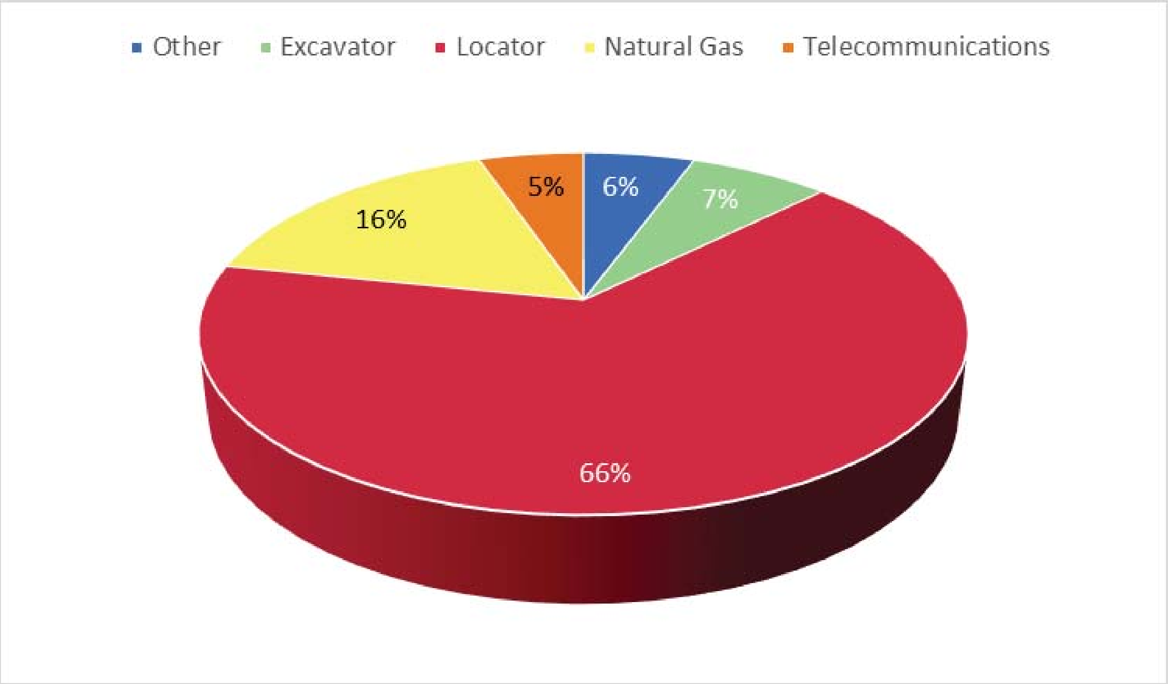

Figure 6—Damages by reporting stakeholders in Canada and the U.S., 2017

Reporting Stakeholder Over Time

To allow for a comparison of reporting stakeholder over time, Figure 7 presents data for consistently reporting stakeholders. As can be seen in this figure, Locator has been by far the most significant reporting stakeholder over the last three years, with year-over-year increases in the number of reported damages. Note: As part of the revision to the DIRT form effective January 1, 2018, One Call and Insurance will be removed as selections.

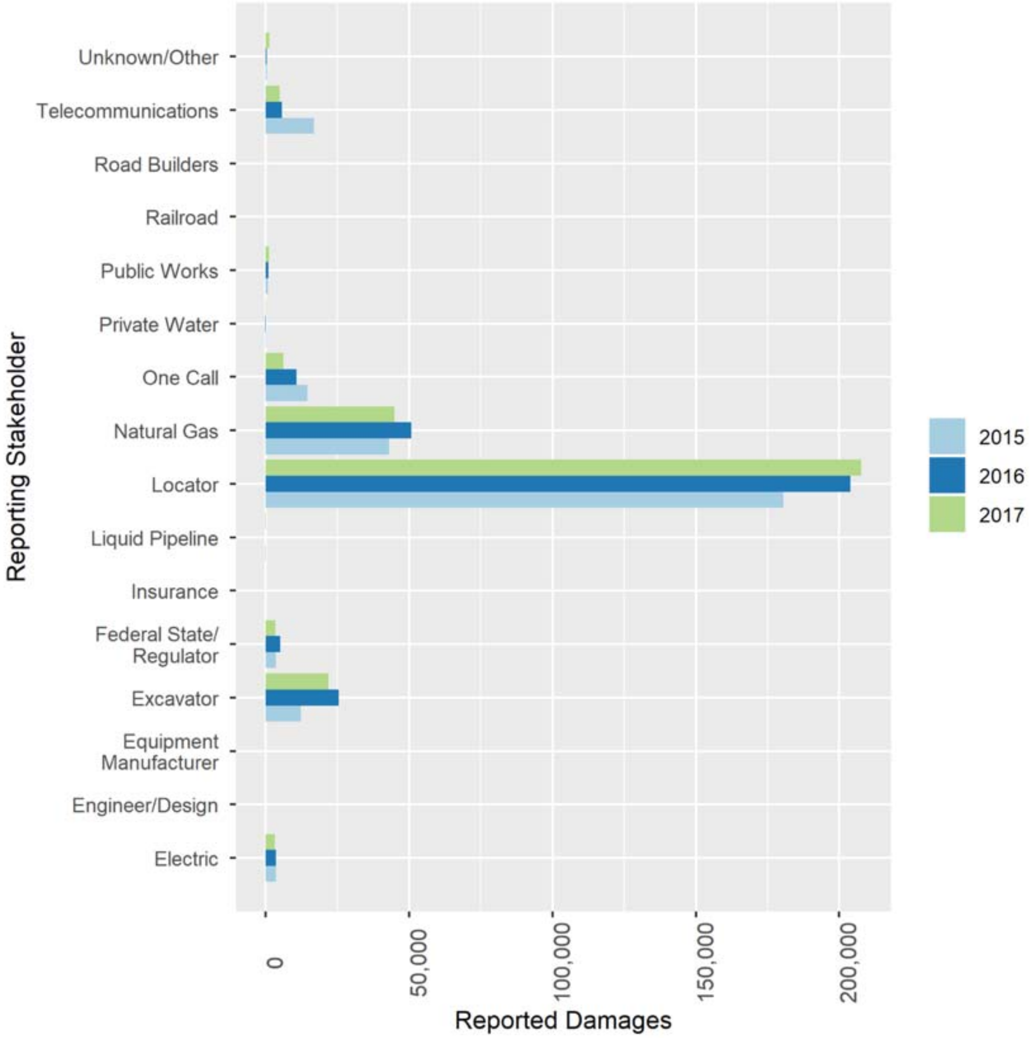

Figure 7—Reported damages by reporting stakeholder for consistently reporting stakeholders in Canada and the U.S., over time

ROOT CAUSE

This section of the report presents data trends for root cause. Because the unknown data related to root cause is relatively small (see *Understanding the Data*, A Note About Unknown Data), the data and trends in this section are centered around the known data.

Figure 8 demonstrates the breakdown of root cause for damage events. The most commonly listed root cause in 2017 was Other Insufficient Excavation Practices[5] (32%). This was followed by No Notification *Made to the One Call Center* (24%).

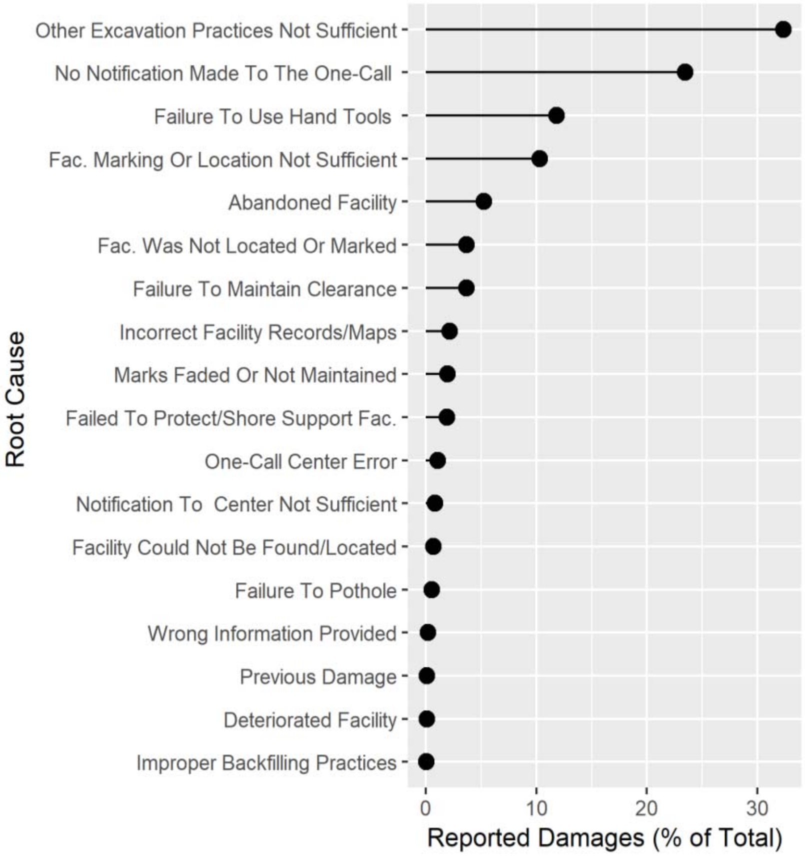

Figure 8—Reported damages by root cause, known data, in Canada and the U.S., 2017

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[5] This root cause is intended to be a last resort after considering the other more specific excavation-practice choices, such as Failure to Maintain Clearance, Failure to Pothole, or Marks Faded or Not Maintained.

Root Cause by Group

To provide a higher-level overview of the root causes, the Data Committee groups root causes into major groups as per Table 5, demonstrating that the leading root cause group is Excavation Practices Not Sufficient. This group accounts for 142,980 damages. See Appendix C for grouping definitions.

Table 5—Reported damages by root cause group, known data, in Canada and the U.S., 2017

Root Cause Group	**Total Damages**
Excavation Practices Not Sufficient	142,980
Notification Not Made	64,189
Notification Practices Not Sufficient	5,645
Locating Practices Not Sufficient	46,056
Miscellaneous	14,758
Total Damages[6]	273,628

The significant contribution of Excavation Practices Not Sufficient to total damages is also demonstrated in Figure 9. Over half of the plot is attributed to this root cause group.

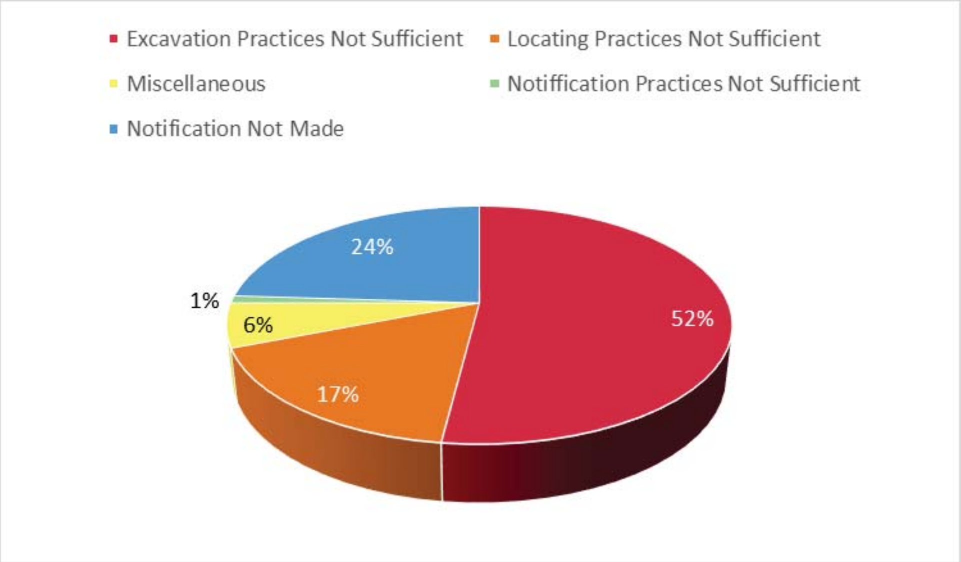

Figure 9—Reported damages by root cause group, known data, in Canada and the U.S., 2017

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[6] Total reported damages (after consolidating multiple records of the same event) were 316,442, of which 42,814 had an unknown for root cause, leaving 273,628 with known root causes.

Root Cause by Reporting Stakeholder

Figure 10 shows some significant differences in the root cause group percentages by reporting stakeholder (with total damages (*n* = xx) by reporting stakeholder labeled at the top of the figure). When interpreting the graph, this number should be considered. Where *n* is low, the distribution of root causes by that reporting stakeholder provides little insight because the number of reported damages is insignificant. For instance, the number of damages provided by Engineer/Design, Equipment Manufacturers, Insurance, Railroad, and Road Builders are likely too small to draw any solid conclusions. Figure 10 demonstrates that Natural Gas and Telecommunications have very similar distributions. For Excavators, Locating Practices Not Sufficient is by far the most reported root cause group, whereas for Locators it's much lower. One call centers also report a relatively high percentage of Locating Practices Not Sufficient. This may be caused by several one call centers that take "damage tickets" from excavators and submit them as DIRT reports.

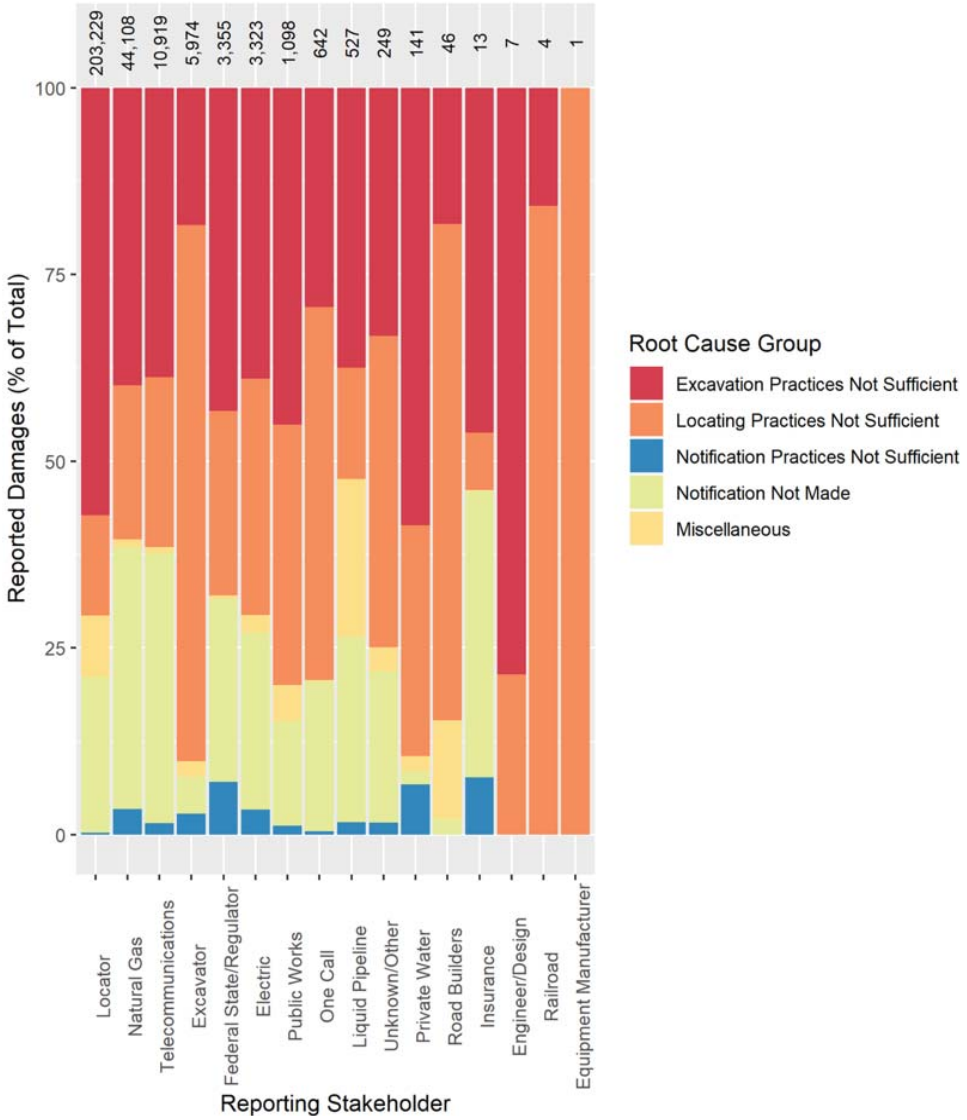


Figure 10—Root cause groups to total damages by reporting stakeholder, known data, in Canada and the U.S., 2017

Root Cause Over Time

To allow for a comparison over time, Figure 11 presents root cause groups for consistently reporting stakeholders. Here, both known and unknown data are presented. The most frequently cited root cause groups in the last three years are Notification Not Made and Excavation Practices Not Sufficient. Although Excavation Practices Not Sufficient declined as a root cause between 2016 and 2017, Notification Not Made increased. It is encouraging that Unknown/Other continues to trend downward.

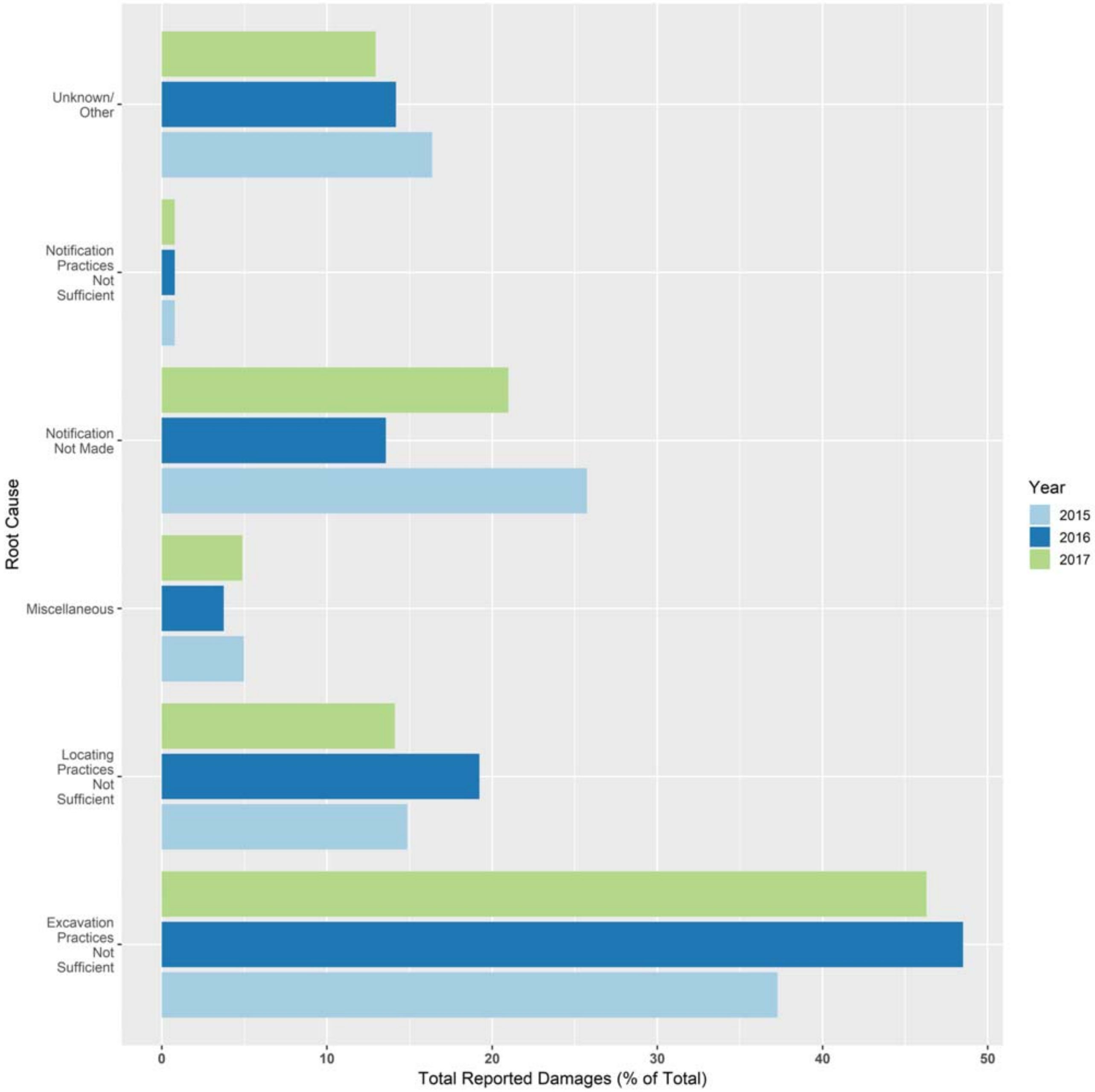


Figure 11—Root cause by group for consistently reporting stakeholders, in Canada and the U.S., over time

The Notification Practices Not Sufficient group covers events where an 811 notice was made (or attempted) but something went wrong, such as a wrong description of the work site that led to no marks at the actual work site, or an excavator did not provide sufficient advance notice in accordance with the local rules or began work before the marks were completed. These typically account for around 1% of the total damages. As part of the revision to the DIRT form effective January 1, 2018, the root causes are revamped to more easily capture such scenarios.

Because the total must always add to 100%, a decrease in one group will be offset by an increase in another. It appears that the distribution of root cause groups for 2017 is similar to that of 2015 and prior years, and 2016 may have been an anomaly, especially regarding Notification Not Made.

Past DIRT reports can be accessed at

http://commongroundalliance.com/media-reports/dirt-reports

EXCAVATOR TYPE

This section describes the type of excavator, type of work performed, and type of equipment involved in damages. Figure 12 presents damage information by excavator type clearly demonstrating the significant involvement of Contractors (32%). The high number of unknowns is also obvious at 54%. This is an indication of the strength of the data for excavator type, which, when compared to root cause data, appears to be relatively more uncertain.

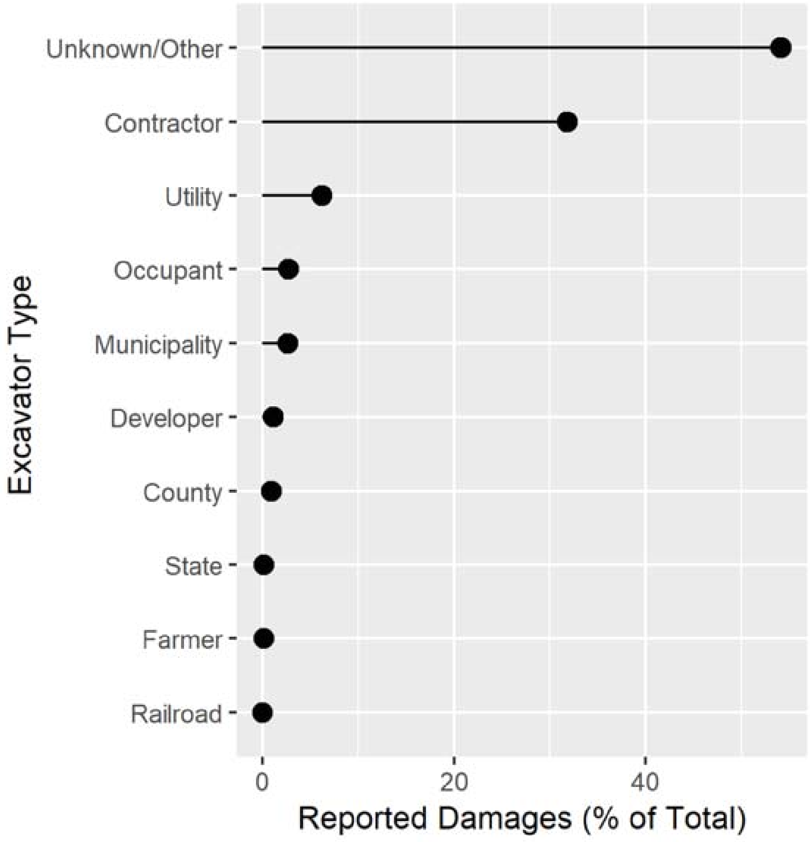


Figure12—Total damages by excavator type, all reported data, in Canada and the U.S., 2017

Because of the significant contribution of unknown data to the excavator dataset, in the sections below, unknown excavator type data is included in the presentation of the data unless otherwise noted.

Excavator Type by Type of Work Performed and Equipment Used

For this section of the report, data for excavator type, work performed, and excavation type (i.e., equipment used) was cross-tabulated with and without unknown data. Appendix D shows the top 20 combinations of excavator type, work performed, and equipment used ranked by number of reported damages. The appendix highlights the large proportion of unknown data in the excavator dataset (120,152 damages in the DIRT database are associated with an unknown excavation type). Table 6 demonstrates the top 10 combinations of excavators, work performed, and equipment used, excluding combinations with one or more unknown data points. The leading combinations with known data are Contractors doing Sewer or Water work using Backhoes/Trackhoes.

Table 6—Top 10 combinations of excavator, work performed, and equipment used, known data, in Canada and the U.S., 2017

Excavator	Work Performed	Equipment Used	Reported Damages
Contractor	Water	Backhoe/Trackhoe	4,812
Contractor	Sewer	Backhoe/Trackhoe	4,624
Contractor	Cable TV	Trencher	2,555
Contractor	Water	Trencher	2,376
Contractor	Electric	Backhoe/Trackhoe	2,262
Contractor	Sewer	Trencher	2,219
Contractor	Natural Gas	Trencher	2,104
Contractor	Natural Gas	Backhoe/Trackhoe	2,056
Contractor	Fencing	Auger	1,709
Contractor	Bldg. Construction	Backhoe/Trackhoe	1,627

Figure 13 demonstrates the relationship between excavator and work performed groups graphically. See Appendix C for grouping definitions. The significant number of damages attributable to Contractors across a range of work performed is evident as is the significant number of damages associated with unknown excavators.

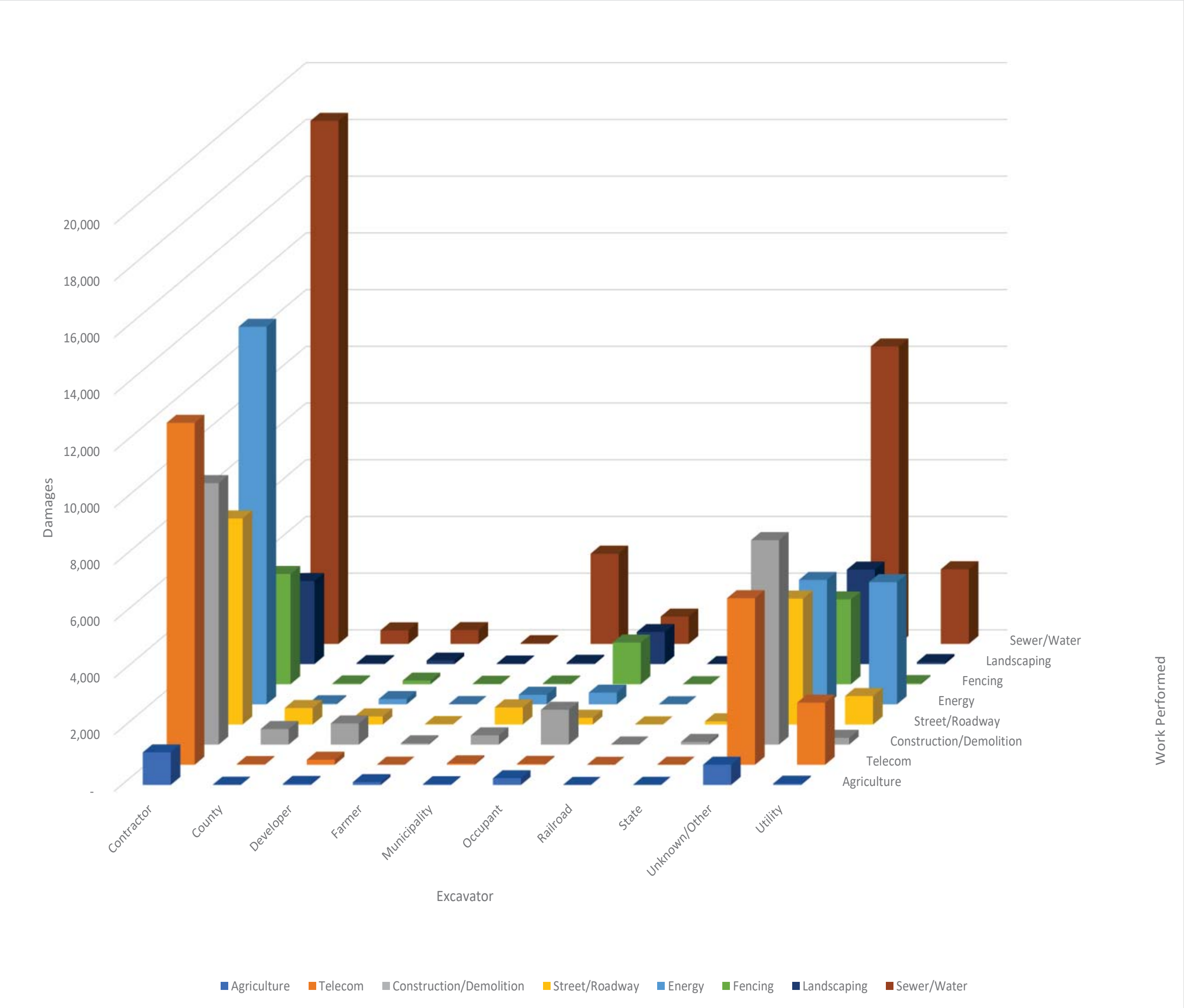


Figure 13—Reported damages by excavator and work performed in Canada and the U.S., 2017

The relationship between type of equipment used by excavators can also be examined graphically (Figure 14). A similar trend can be seen here, with a significant number of damages attributable to Contractors across a range of equipment types.

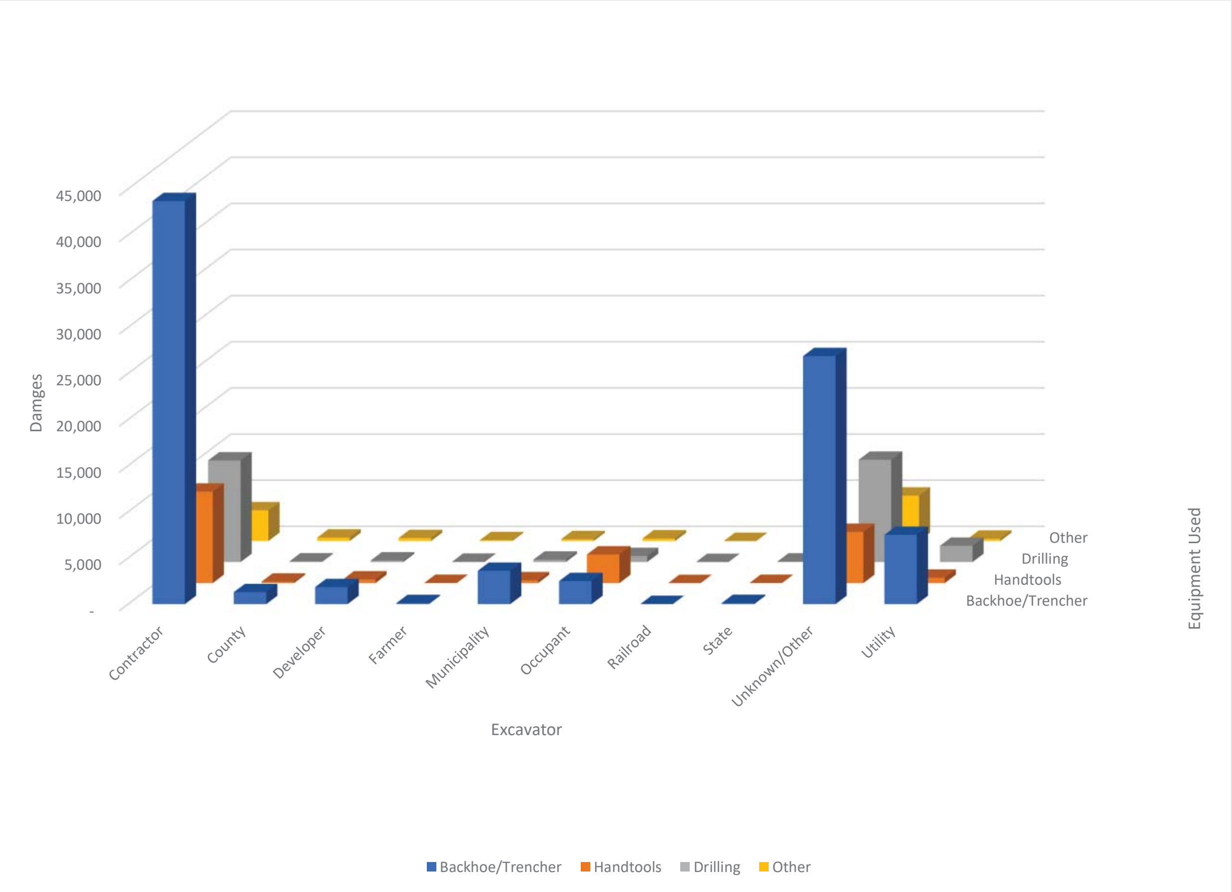


Figure 14—Reported damages by excavator and equipment used in Canada and the U.S., 2017

Excavator Type by Root Cause

Figure 15 shows the root cause groups by type of excavator involved. As can be seen in the figure, Excavation Practices Not Sufficient (shown as the red bars) is the leading cause of damages for most excavator types in 2017.

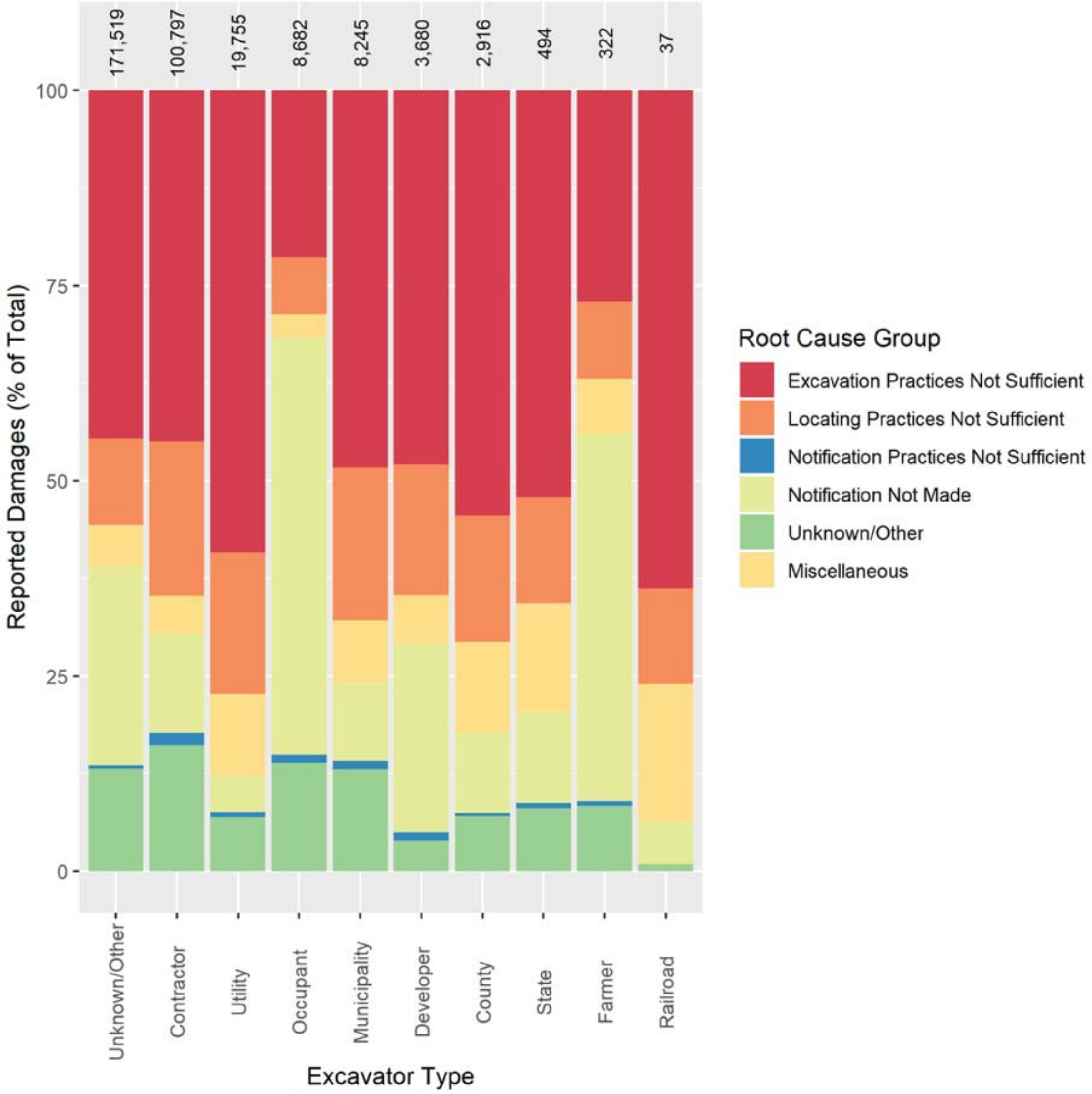


Figure 15—Damages by excavator type and root cause group, all reported data, in Canada and the U.S., 2017

Excavator Type Over Time

Figure 16 shows the trend in damages by excavator type over time, focusing on consistently reporting stakeholders. Between 2015 and 2017, Contractor and Unknown/Other have remained the main excavator types with the contribution of the unknown data increasing from 2016 to 2017 and Contractor declining over the same period.

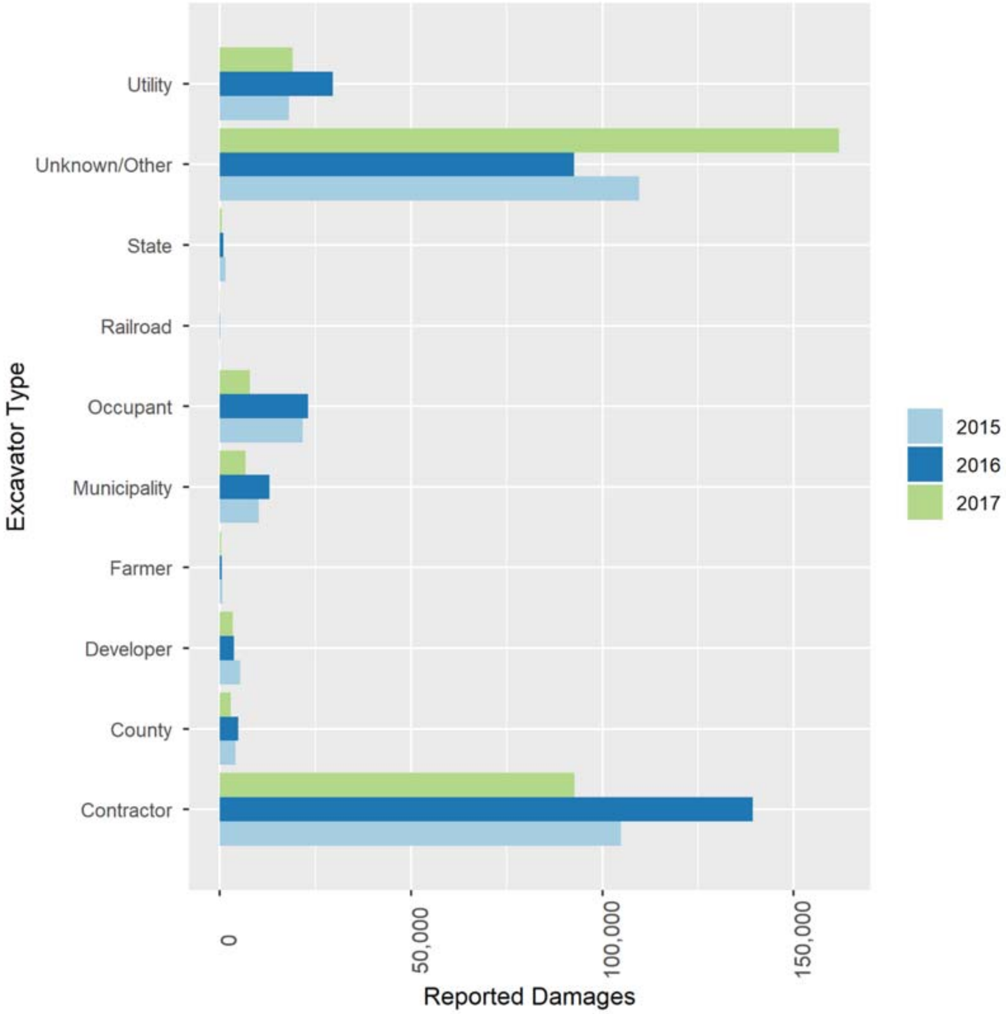


Figure 16—Damages by excavator type for consistently reporting entities in Canada and the U.S., 2015 to 2017

FACILITIES AFFECTED AND DAMAGED

Figure 17 shows reported damages by facility damaged for known data (unknown data is excluded due to the relatively low contribution—about 5% of all reported damages). In 2017, the most commonly damaged facility was Telecommunications (49%). This was followed by Natural Gas (28%) and Cable Television (11%).

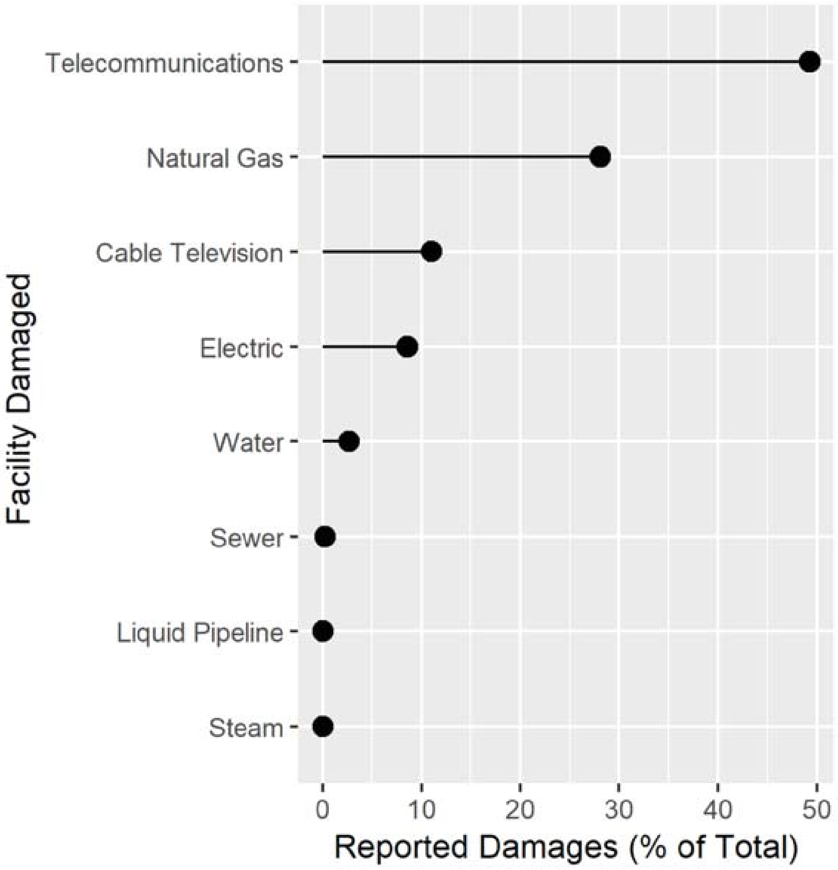


Figure 17 - Reported damages by facility damaged, known data, in Canada and the U.S., 2017

The type of affected facilities includes Distribution, Service Drop, Transmission, and Gathering. Figure 18 demonstrates the relationship between facilities affected and facilities damaged. The majority of reports involve Telecommunications and Natural Gas Service/Drops and Distribution.

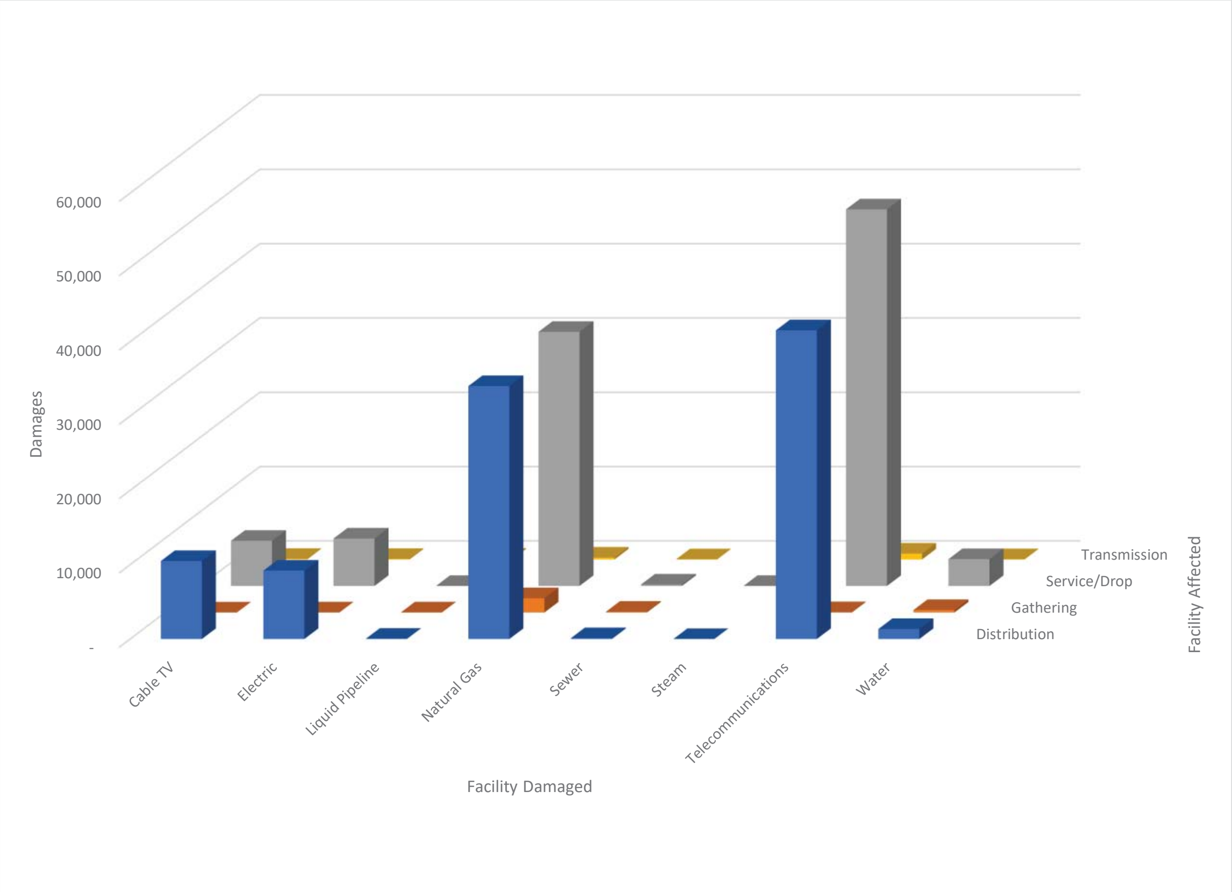


Figure 18 - Reported damages by facility damaged and facility affected, known data, in Canada and the U.S., 2017

Facilities Damaged by Reporting Stakeholder

The type of facility damaged varies by reporting stakeholder. Excavators report 91% (10 of 11) of damages to Steam, 50% of damages to Sewers, 30% of damages to Water, and 10% of damages to Electric Facilities. Locators report 81% of damages to Telecommunications and Cable Television, 69% of damages to Electric Facilities, 50% of damages to Water, and 33% of damages to Natural Gas Facilities. Liquid Pipeline and Natural Gas reporting stakeholders do the most self-reporting of their own damaged facilities. Liquid Pipeline stakeholders entered 74% of the damages to Liquid Pipelines, while Natural Gas stakeholders reported 59% of the damages to Natural Gas Facilities.

Facilities Damaged by Root Cause

Figure 19 demonstrates the relationship between damaged facilities and root cause. Excavation Practices Not Sufficient is the dominant root cause for most damaged facilities (Cable Television, Natural Gas, Electric, Telecommunications, Water). For Liquid Pipelines, Notification Not Made is the dominant root cause.

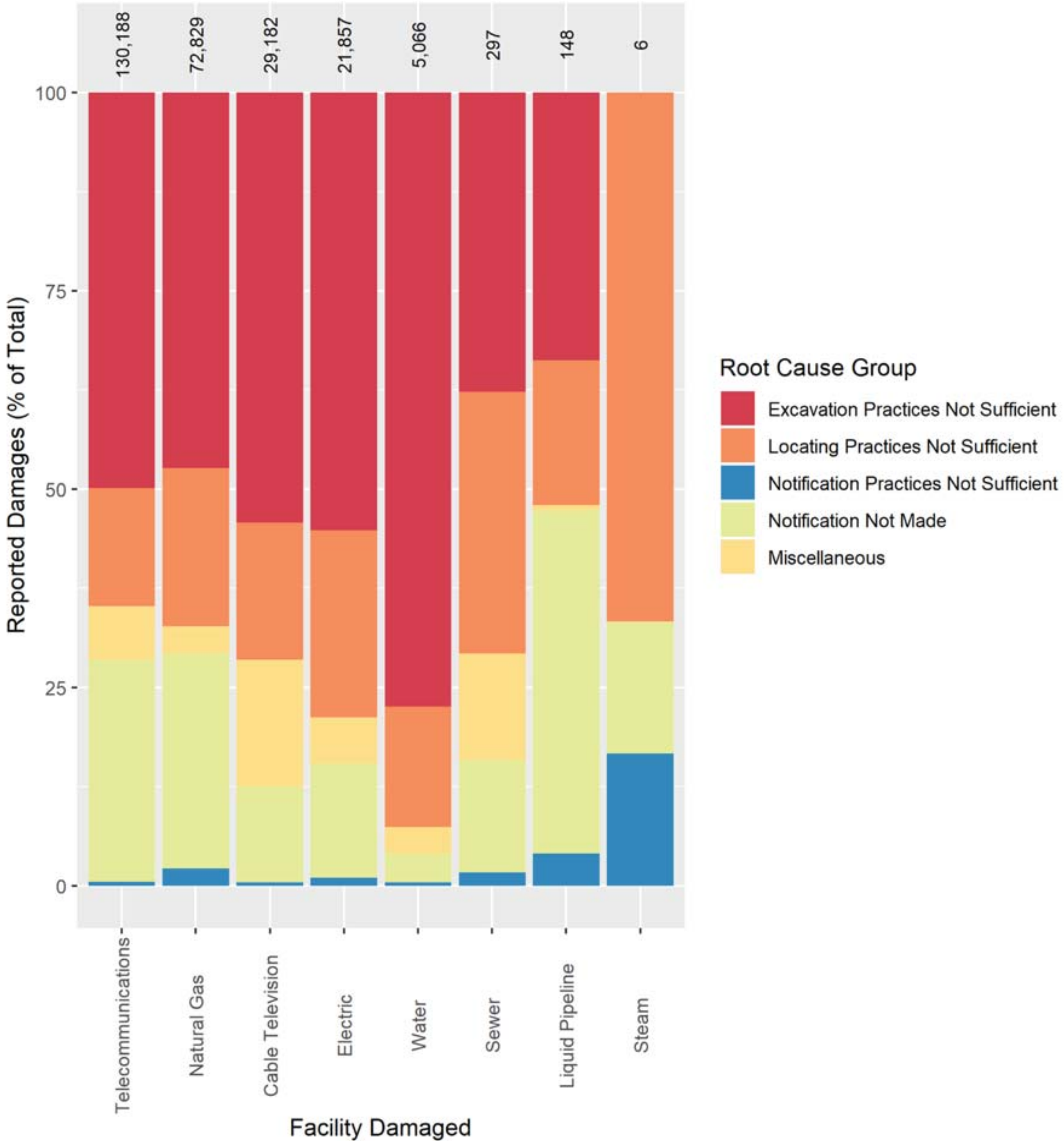


Figure 19—Reported damages to facilities damaged by root cause, known data, in Canada and the U.S., 2017

Facilities Damaged Over Time

Facilities damaged for consistently reporting stakeholders over time is presented in Figure 20. Here, known and unknown data are presented. The figure demonstrates the significant contribution of damages to Telecommunications and Natural Gas in the last three years, with an increase in reported damages to Telecommunications between 2016 and 2017 and a decrease in reported damages to Natural Gas over the same period. The decline in the contribution of unknown data between 2016 and 2017 is a promising trend.

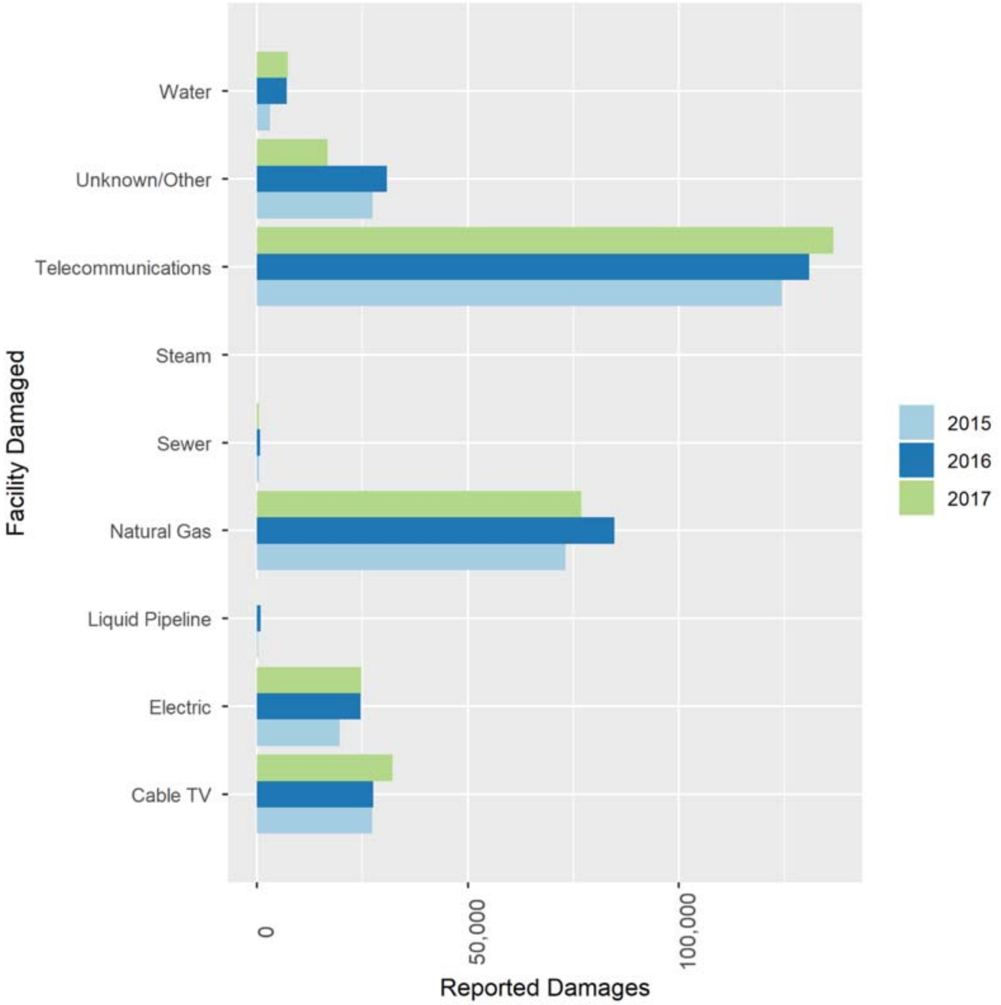


Figure 20—Reported damages by affected facilities for consistently reporting entities, in Canada and the U.S., 2015 to 2017

CALL BEFORE YOU DIG AWARENESS

Each year a national survey is conducted to test the use and awareness of call before you dig (CBYD), including 811, services. The survey focuses on census regions within the U.S. as shown in Figure 21.

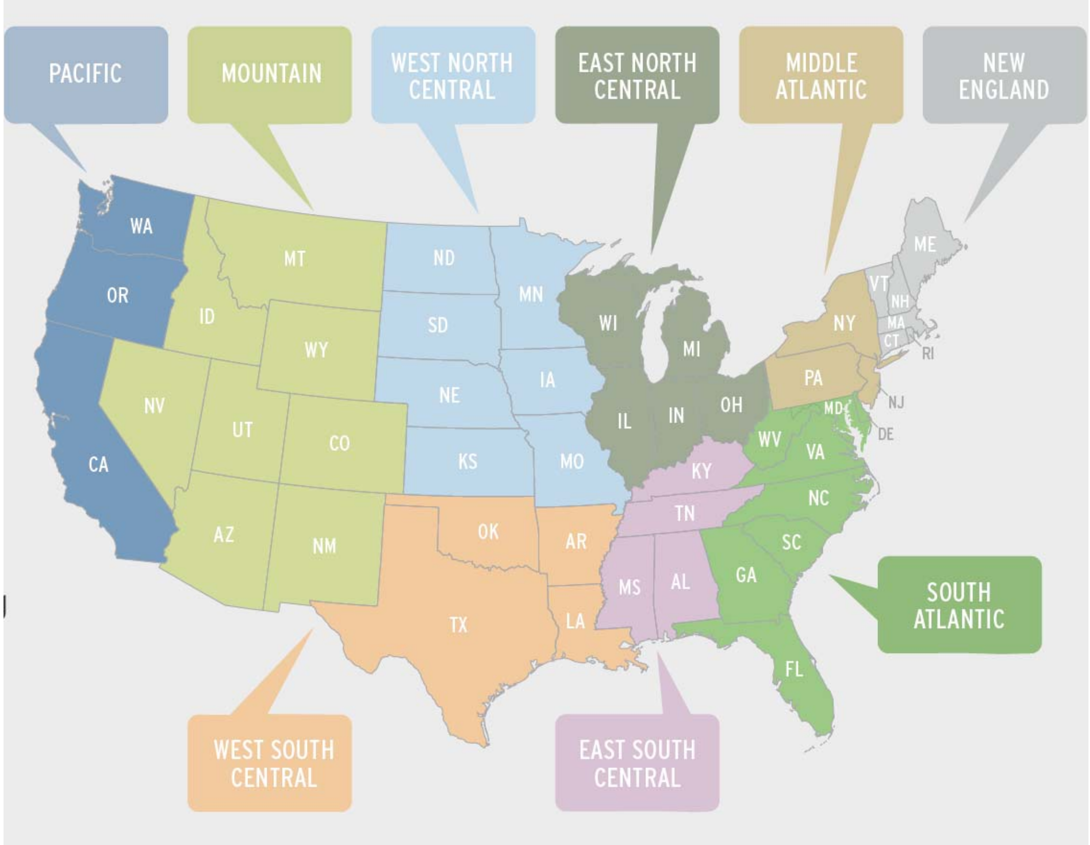


Figure 21—Census regions used in the annual call before you dig survey

This section of the 2017 DIRT report considers the trends in CBYD use and awareness from the 2017 and 2018 surveys in relation to reported damages on a regional basis. Figure 22 presents survey results, along with the trend in reported damages for residential stakeholders (excavator type labeled Occupants in the DIRT database). This is the most relevant stakeholder group in relation to the survey, which is focused on the general population and is thus unlikely to capture a high proportion of damage prevention industry stakeholders.

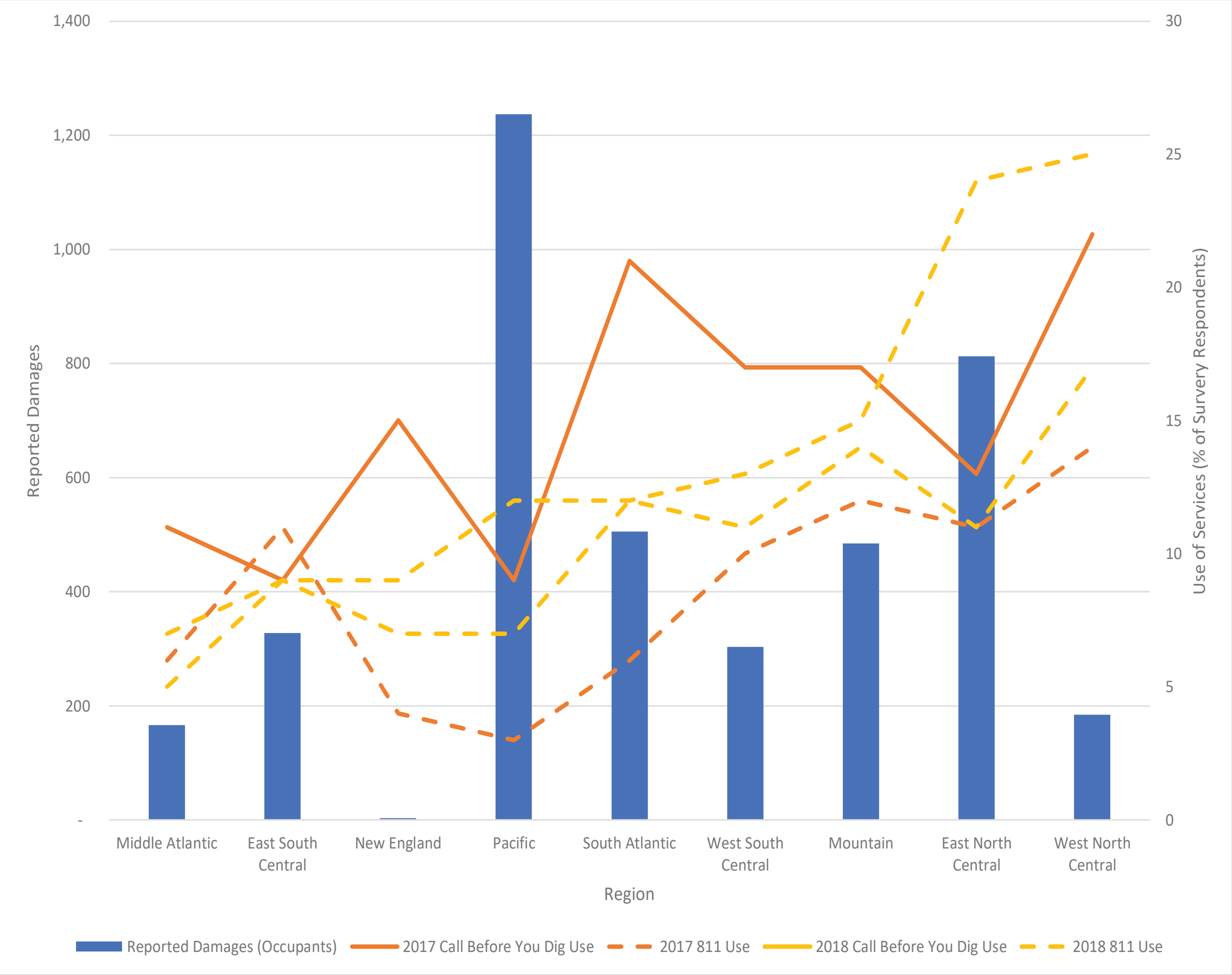


Figure 22—Use of CBYD and 811 services in 2017 and 2018 in relation to 2017 damages with Occupant as excavator type

Ideally, one would like to see an inverse relationship between damages and use of CBYD services; the lower the damages, the higher the use of CBYD services and vice versa. Such a relationship is indeed observed in several census regions (i.e., Pacific, South Atlantic, West North Central, and West South Central).

Figure 23 demonstrates survey results for awareness of CBYD services in relation to damages due to Notification Not Made. Here again one would hope to see an inverse relationship between the two sets of variables, such that lower damages due to Notification Not Made correlate with higher awareness of CBYD services, and vice versa. This relationship appears to exist in West North Central, East South Central, West South Central, and Middle Atlantic.

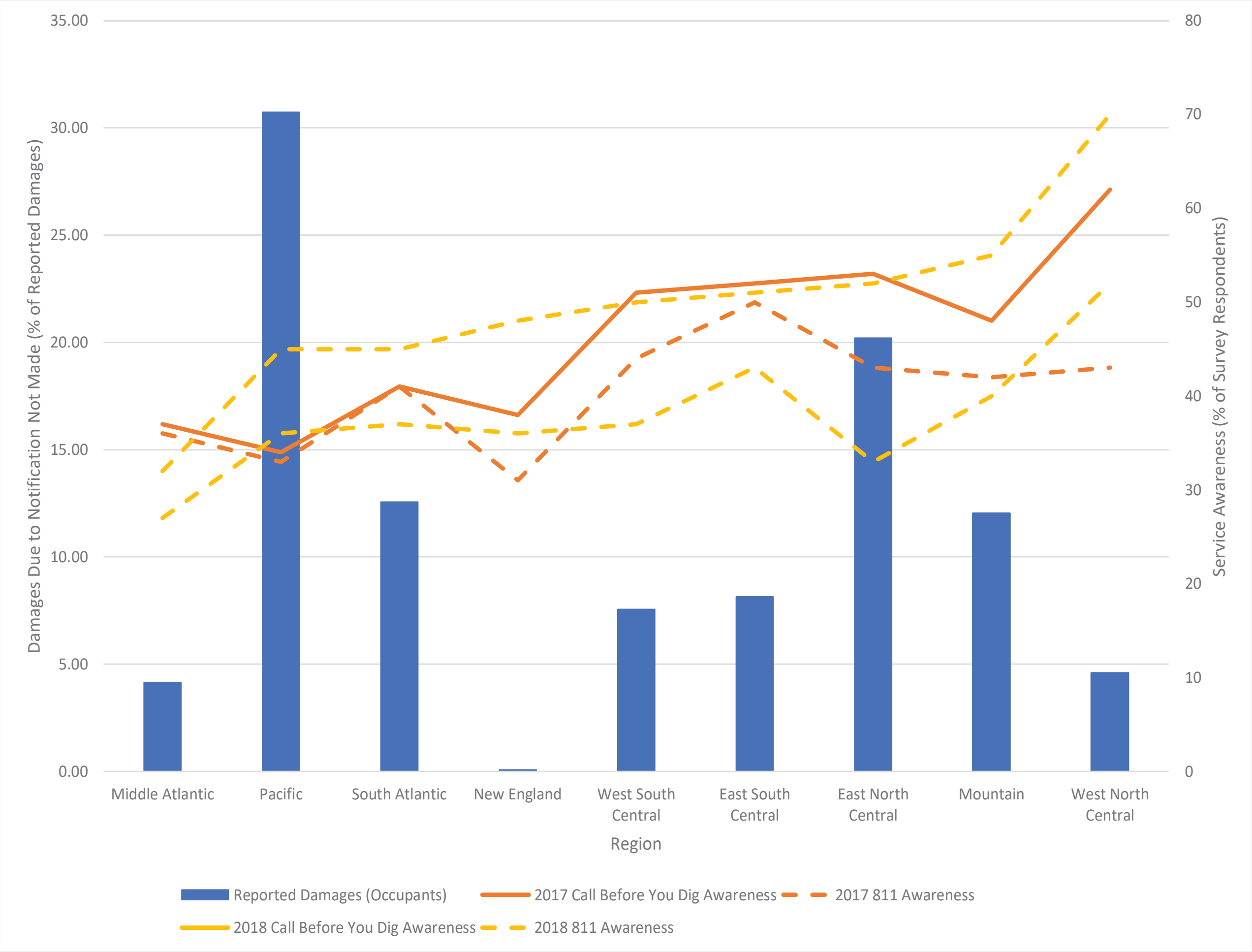


Figure 23 - Awareness of CBYD and 811 Services in 2017 and 2018 in relation to 2017 damages due to Notification Not Made

CONCLUSION

This report summarizes the damage data submitted via DIRT in 2017. Damage data is presented over time and geographically. Cross tabulations of the data demonstrate the relationships between key variables (e.g., root cause of reported damages by reporting stakeholder). The DIRT database is a highly useful source of data and information pertaining to damage events in Canada and the U.S. The details contained within the database are critical for guiding education, awareness, and damage prevention initiatives.

To ensure that maximum value is derived from each event entered into DIRT, efforts should be directed toward minimizing the amount of "unknown" data entries. This is particularly a concern for excavator type where the proportion of the unknown data is significant. Investing in training and awareness around DIRT and how to use it may reduce the amount of unknown data, allowing for more informed conclusions to be drawn on data trends and characteristics in the future.

To inform conclusions on the extent to which stakeholders are employing DIRT, it would be useful to have a reliable estimate of the size of the potential user base that exists in Canada and the U.S. Knowing the total potential user base could have a significant impact on understanding and interpreting the trends and characteristics of the DIRT data.

Because submissions to DIRT are largely undertaken on a voluntary basis, it is difficult to interpret trends in reported damages over time. Changes from one year to the next may be due to a change in actual damages or due to a change in the number and combination of stakeholders employing DIRT. To allow for comparisons in damages over time with a high degree of confidence, this year's report presents time trends for consistently reporting stakeholders—stakeholders that have been employing the database on a consistent basis over the last three years. The damages reported by the consistently reporting stakeholders represent a significant portion of the total damages reported through DIRT. This means that the trends in damages over time from the consistently reporting stakeholders are a solid representation of the trend in total damages. This also implies that a high proportion of stakeholders that were reporting in 2015 are still reporting in 2017. Furthermore, the difference between the two datasets (total reported damages versus damages reported by consistently reporting stakeholders), is minimal but has increased since 2015. The increase could be attributed to either a decline in damages from the consistently reporting stakeholders, or a growing number of other stakeholders reporting through DIRT.

In 2018, a refined approach was employed to identify the subset of states deemed to be substantially reporting damage events. The new resulted in 10 states qualifying as substantially reporting. These states were used to estimate the total number of damage events taking place in the U.S. for 2015, 2016, and 2017.

APPENDIX A: ESTIMATE OF TOTAL U.S. DAMAGES

Green Analytics, in consultation with the Data Reporting and Evaluation Committee, developed a model to estimate the total number of facility damages in the U.S. and to provide insight into the relationships between key variables. The modeling process used is summarized in this section.

Damages reported to DIRT are voluntary and for many states, under-reported. As a result, the total reported damages in the DIRT database do not reflect the actual number of damages that occur in the U.S. By relying on states that are substantially reporting actual damages, statistical methods can be used to estimate damages for the states with less adequate reporting. In this way, an estimate can be made of the total number of damages in the U.S. To start, a subset of states where damages are deemed to have been substantially reported was established. This subset was then used to develop a predictive model as outlined in the following sections.

Substantially Reporting States

The first step in the process was to establish a consistent method to identify a substantially reporting state. While actual damages are unknown for all states, for the purpose of guiding this assessment, a target of reporting at least 70% of actual damages was defined.

To establish whether a state meets this threshold, a certainty scoring process was employed. Damages were divided into seven groups according to the facility damaged: cable tv, electric, liquid pipeline, natural gas, sewer, telecommunications, and water. For each facility damage group, states were ranked on a scale and assigned points as follows: 'Likely or definitely substantially reporting' = 1 point, 'Maybe substantially reporting' = 0.5 points, 'Definitely not substantially reporting' = 0 points. Weightings were determined largely through expert opinion and by considering the following variables:

- Percentage reported via Virtual Private DIRT applications
- The existence of damage reporting legislation
- The combination of reporting stakeholders

Points for each state were then summed across damage facility groups. The total possible score for a given state was seven points. The initial scoring was then verified through a series of one-on-one discussions with subject matter experts in the individual states. Through those discussions, several state scores were adjusted and refined. Ten states, listed below, scored more than four of the seven points. For the purpose of producing a predictive model, two cut-offs for what qualifies as a substantially reporting state were explored:

- 4 out of 7 points, capturing the top 10 states
- 4.5 out of 7 points, capturing the top 5 states

Table A1 - Substantially reporting states and their score

State	Score
Georgia	6.5
Pennsylvania	5.5
New Mexico	5.0
Illinois	4.5
Kansas	4.5
Colorado	4.0
Florida	4.0
Texas	4.0
Virginia	4.0
Connecticut	4.0

While this new process has yielded some excellent new insight into which states are “substantially reporting,” it is possible that even those states chosen may not have achieved the benchmark goal of 70% reporting. However, the process does establish a continuum of states, from low to high, of DIRT reporting that reflects damages occurring in those states. Through the process, there was a general consensus that sewer and water damages are under-reported everywhere, and natural gas and telecommunications are fairly well represented.

Statistical Method

The predictive model was built using data associated with the two cut-off levels (4 of 7 points and 4.5 of 7 points). Predictive models were developed independently for the 2015, 2016, and 2017 years. The conceptual framework assumes that damages are broadly influenced by the total number of excavations, conditions at the work site, rules governing excavation in the state, and behavior/experience/competence (Figure A1). Data for the first three categories were available; however, no data was available for behavioral/experience/competence factors.

A Poisson regression model, with standard errors adjusted for the panel data structure, was used to develop the predictive model. The Poisson regression is a generalized linear model that is typically used to understand and model count data, such as the number of damage events in a state that is contained within the DIRT database. This model yields estimates of the percentage change in damages given a range of independent (or explanatory) variables.

The modeling exercise involved running a series of Poisson models to explore which independent variables had a statistically significant influence on the count of damages in a given state and month. In general, the modeling process involved adding all potential predictor variables to an initial model. Model coefficients deemed insignificantly different from 0 by a t-test were then iteratively dropped from this initial specification. Thus, the final model used for predictive purposes included only significant coefficients.

Two different model specifications were initially run: 1) a model with linear quantitative variables and nominal variables; and 2) a model with linear and quadratic quantitative variables as well as nominal variables. The specification with quadratic variables accounts for potential non-linear relationships. For this specification, the modeling process proceeded by first adding quadratic variables for certain quantitative predictors to the linear model independent of other quadratic variables. If the relationship was statistically significant, then the quadratic variable was considered a candidate for the final model. Though the quadratic specifications yielded certain informative results, the analysts chose not to use them for predictive purposes because they generated unreasonable estimated damage counts.

The same procedures were used to run models for the two sets of substantially reporting states. However, in this appendix only the larger dataset of 10 states is presented because this data is more representative of all 50 states (although the trade-off is that the damage counts reported for the larger set of data may be more under-reported). Furthermore, certain estimated damage counts based on the smaller set of substantially reporting states were unreasonably large. For these reasons, the 10 states were used as the substantially reporting states in the main body of the report. However, damage estimates should still be treated as an underestimate because it is known that DIRT data used in the modeling process does not capture the actual total number of damages.

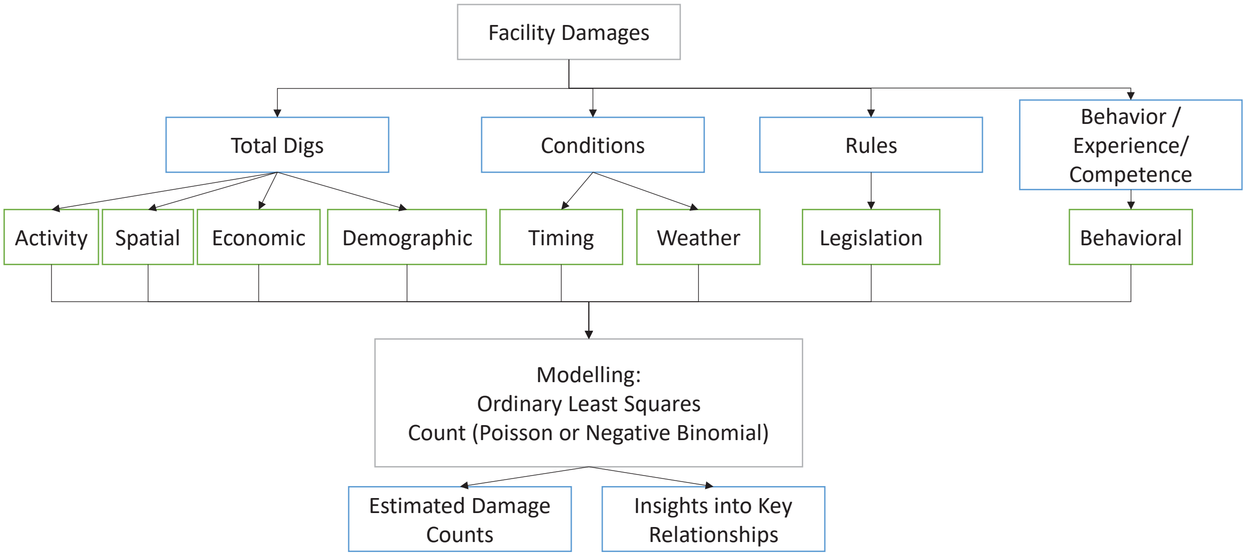


Figure A1: Conceptual framework of damage counts and possible outputs of modeling process

Data

The dependent variable in the model is the weighted damage count, rounded to the nearest integer. The dependent variable in the model is structured such that each observation represents the number of facility damages in a particular state ***s*** and month ***t***. The potential independent variables representing each data category in Figure A1 are summarized in Table A2. The analysts made efforts to match the resolution of each independent variable to that of the dependent variable. However not all data was available on a monthly basis. For the final set of independent variables, the analysts attempted to focus on variables representing activity rather than value (e.g., number of building permits rather than the value of permits, or employment in an industry instead of its gross domestic product).

Table A2 - Variables considered (Type categories correspond to those in conceptual model)

Type	**Variable**
Activity	▪ Total construction spending in state by month ▪ Construction employment in state by month (total and per capita) ▪ Outgoing transmissions from one call center(s) in state in the year[a] ▪ Total residential unit construction in state by month ▪ Gross domestic product for construction by state and month (per capita and total) ▪ Gross domestic product for utilities by state and month (per capita and total)
Weather[b]	▪ Mean precipitation in state by month ▪ Mean temperature in state by month
Time	▪ Rough indicators of season (Winter: Jan, Feb, Mar; Spring: Apr, May, Jun; Summer: Jul, Aug, Sep; Fall: Oct, Nov, Dec) ▪ Aggregate of rough indicators of season corresponding to spring and summer versus fall and winter (cannot enter model at same time as other season indicator variables)
Population	▪ Total population in state (2017) ▪ Population change from 2016 to 2017 ▪ Population density in state (2017)
Legislation	▪ Tolerance zone in inches ▪ Hand dig, vacuum, or soft excavation within tolerance zone (hand dig clause)
Spatial	▪ Area of state in kilometers[c]
Economic	▪ Unemployment rate in state by month ▪ Total employment in state by month ▪ Gross domestic product for all industries by state and month

[a] Transmissions were not reported for certain states. In these cases, a model was developed to impute the missing observations. Transmissions for certain other states were only partially reported. To be conservative, the analysts did not impute these observations.

[b] Weather data were available from the NOAA National Climatic Data Center for all states except Hawaii. For Hawaii, the analysts estimated mean monthly temperature and precipitation using data from the state's weather stations.

[c] The area variable was causing unrealistic estimated damage counts for the state of Alaska in certain models, so this variable was dropped from the analysis.

Before running the models, variance inflation factors (VIFs) were calculated and used to check for high correlation between independent variables, a situation known as multi-collinearity that affects the interpretation of coefficients and can impact predictions based on the model. The VIFs indicated that multi-collinearity is a problem when all independent variables are included (Table A3). Variables with the highest VIF scores were iteratively dropped.

Table A3: Checking for multicollinearity variance inflation factors[a]

Variable	2017		2016		2015	
	Initial	Reduced	Initial	Reduced	Initial	Reduced
Population	17,239		15,517		21,189	
Employment	14,521		16,245		25,784	
Construction employment	641		936		1,995	
Population change	71		232	5	385	
Construction employment per capita	62	2	74		85.72	5
Hand dig clause	60		50	5	47	4
Total residential unit construction	45		67		49	
Transmissions	44	1	22	7	24.76	3
Tolerance interval	31		16	6	15	3
Unemployment rate	25	2	8	5	7	4
Population density	13	2	11	2	11	2
Total construction spending	12	6	19		4	3
Mean temperature	11	4	20	5	9	7
Winter (Jan, Feb, Mar.)	7	6	Omitted	5	Omitted	7
Fall (Oct, Nov, Dec.)	4	3	9	4	5	4
Spring (Apr, May, Jun.)	2	2	4	2	5	2
Summer (Jul, Aug, Sep.)	Omitted	Omitted	8	Omitted	7	Omitted
Mean precipitation	2	2	2	2	2	2
Mean VIF	1,929	3	1,955	4	2,919	4

[a] Rounded to the nearest integer

The analysts used a rule of thumb of a VIF score of 10 as a cut-off value for when to stop dropping variables. Although there were still some issues after removing the most collinear variables, multicollinearity was much less of an issue. Note that different sets of data have different issues with collinearity, so the same set of variables was not used for each year.

Results

Table A4: Regression results for the final count models of facility damages

Variable	**Poisson Count Coefficients**[a]		
	2017	2016	2015
Constant	4.58841*** (0.4610575)	5.146535*** (0.2155254)	8.301317*** (0.8659892)
Construction spending total			0.00000517* (0.00000306)
Population change		-0.00000383*** (0.00000146)	
Population density			-0.0042612** (0.0021191)
Transmissions	0.0000000524*** (0.00000000819)	0.000000172*** (0.0000000372)	0.000000113*** (0.0000000141)
Spring and summer	-0.3651772** (0.1504601)	-0.2838454*** (0.0988685)	
Mean temperature	0.032051*** (0.0071174)	0.0268825*** (0.0051069)	0.0166688*** (0.0018208)
Total employment in construction per capita			-111559.3*** (39309.74)
Hand dig clause		-1.152784*** (0.2592687)	-1.636223*** (0.3911967)
Model statistics			
N	120		
Log pseudolikelihood	-16,195.66	-7,608.79	-7,654.93
Pseudo r2	0.76	0.91	0.88

***, **, * the coefficient is significantly different from 0 at the 99%, 95%, and 90% levels of significance, respectively

[a] Coefficient with the corresponding robust standard errors in brackets

Table A4 presents the best models for the top 10 substantially reporting states for the 2015, 2016, and 2017 data. Model fit, as indicated by the pseudo R^2 measure, was best for 2016, followed closely by 2015 and then more distantly 2017. For 2017, the models suggest that damages increase with increases in outgoing transmissions and the mean monthly temperature for the state—there are fewer damages in spring and summer relative to fall and winter. For 2016, the models indicate that damages increase with outgoing transmissions and the mean monthly temperature for the state (similar to 2017). However, for 2016, the results suggest that damages decrease with population declines (from 2015 to 2016), are lower for spring and summer relative to fall and winter, and are lower for states with a hand dig clause. In terms of 2015, the model suggests that damages increase with the total amount of money spent on construction, outgoing transmissions, and mean monthly temperature in the state. Conversely, damages in 2016 are lower in states with higher population density and higher per capita employment in construction and in states with a hand dig clause. These results are largely expected. For instance, it is sensible that damages increase with outgoing transmissions because transmissions reflect dig activity; or that damages decrease during the spring and summer months because excavating conditions are likely better in this period relative to fall and winter. While this may seem counter to the calendar heat map, note that the calendar is highlighting that more damages happen in the summer, which is largely because there is more activity in the summer. The regression model, in contrast, is examining the relationship between variables holding all other variables constant. In other words, holding activity constant, there are fewer damages during the spring and summer. The negative coefficients observed for population change and construction employment per capita in the 2016 and 2015 models, respectively, are not expected.

Using these regression results, all other state total damages can be estimated by applying the value of each variable from each state and then aggregating to estimate total U.S. damages (Table A5). This process assumes that reported damages in the defined substantially reporting states approximate total actual damages in those states and that the estimated relationships in Table A4 hold for the states not included in these models. Though there is variation from year to year, the estimated damages are not terribly different from 2015 to 2017.

Table A5: Estimated damage counts for the united states (top 10 states), rounded to the nearest 1,000

Year	**Estimated Total U.S. Damages**
2017	439,000
2016	416,000
2015	378,000

To examine the strength of the relationship between the data for the substantially reporting states and the broader DIRT database, the substantially reporting state dataset was compared with the broader database for a number of key variables. Results of that examination are presented below for reporting stakeholders, root cause, excavator type, and facilities damaged. In general, the examination revealed that the substantially reporting state dataset is a strong representation of the larger DIRT database.

Reporting Stakeholder for Substantially Reporting States

Table A6 illustrates the percentage of reported damages for all states in relation to those for the substantially reporting states. The data exhibits a high degree of alignment between all states and the substantially reporting states. In both cases, Locator, Natural Gas, and Excavator are the dominant reporting stakeholders.

Table A6 – Reported damages for all states in relation to the substantially reporting states, 2017

Reporting Stakeholder	**Percentage of Reported Damages—All States**	**Percentage of Reported Damages—Substantially Reporting States**
One Call	3.18	0.00
Electric	0.52	0.38
Engineer/Design	0.00	0.00
Excavator	10.87	12.32
Insurance	0.00	0.00
Liquid Pipeline	0.15	0.20
Locator	64.67	66.08
Equipment Manufacturer	0.00	0.00
Natural Gas	14.27	13.63
Private Water	0.02	0.01
Public Works	0.30	0.30
Railroad	0.00	0.00
Federal State/Regulator	2.07	2.98
Road Builders	0.02	0.02
Telecommunications	3.47	4.00
Unknown/Other	0.47	0.07

Root Cause for Substantially Reporting States

Root cause data for the substantially reporting states is presented in Table A7 along with root cause data for all states. As was the case with the reporting stakeholder data, the root cause data for the substantially reporting states is a strong representation of the dataset for all states. The percentage of damages attributed to any given root cause for all states is comparable to that for the substantially reporting states.

Table A7 – Root cause for all states in relation to the substantially reporting states, 2017

Root Cause Group	Percentage of Reported Damages—All states	Percentage of Reported Damages—Substantially Reporting States
Excavation Practices Not Sufficient	52.3	53.7
Notification Not Made	24.5	22.8
Notification Practices Not Sufficient	0.99	0.99
Locating Practices Not Sufficient	16.8	16.7
Miscellaneous	5.39	5.8

Excavator Type for Substantially Reporting States

Table A8 presents excavator type data for all states in relation to the same data for the substantially reporting states. Here again, the distribution of damages across excavator types for the substantially reporting states is consistent with that for all states.

Table A8 – Excavator type for all states in relation to the substantially reporting states, 2017

Excavator Types	Percentage of Reported Damages—All states	Percentage of Reported Damages—Substantially Reporting States
Contractor	31.85	28.12
County	0.92	0.78
Developer	1.16	1.15
Farmer	0.10	0.06
Municipality	2.61	2.42
Occupant	2.74	1.93
Railroad	0.01	0.02
State	0.16	0.11
Unknown/Other	54.20	58.93
Utility	6.24	6.48

Facilities Damaged for Substantially Reporting States

Table A9 considers facilities damaged for substantially reporting states in relation to that for all states, demonstrating once again the strong alignment between the two datasets. In both cases, the majority of damages occur to Telecommunications and Natural Gas.

Table A9—Facilities damaged for all states in relation to the substantially reporting states, 2017

Facilities Damaged	Percentage of Reported Damages—All states	Percentage of Reported Damages—Substantially Reporting States
Cable Television	10.45	10.20
Electric	8.12	7.73
Liquid Pipeline	0.05	0.05
Natural Gas	26.58	20.68
Sewer	0.24	0.36
Steam	0.00	0.00
Telecommunications	46.64	50.67
Unknown/Other	5.38	7.20
Water	2.54	3.10

APPENDIX B:
DAMAGES BY REPORTING STAKEHOLDER

Table B1—Reported damages by reporting stakeholder, complete dataset, 2017

Reporting Stakeholder	**Reported Damages**	
	Reported Damages	Percentage of Total
One Call	6,281	1.98
Electric	4,096	1.29
Engineer/Design	9	0.00
Excavator	22,280	7.04
Insurance	13	0.00
Liquid Pipeline	545	0.17
Locator	207,587	65.60
Equipment Manufacturer	1	0.00
Natural Gas	52,233	16.51
Private Water	154	0.05
Public Works	1,353	0.43
Railroad	4	0.00
Federal State/Regulator	3,442	1.09
Road Builders	60	0.02
Telecommunications	16,702	5.28
Unknown/Other	1,684	0.53
Total Damages	316,444	

APPENDIX C: GROUPINGS USED IN REPORT

Table C1—Root cause groupings used in this report

Group	Root Cause
Excavation practices not sufficient	Marks faded or not maintained
	Failure to maintain clearance
	Failure to use hand tools where required
	Excavator dug prior to verifying marks by test hole (pothole)
	Excavator failed to protect/shore support facilities
	Improper backfilling practices
	Other excavation practices not sufficient
Locating Practices Not Sufficient	Facility was not located or marked
	Facility marking or location not sufficient
	Incorrect facility records/maps
	Facility could not be found/located
Unknown	Data not collected
	Other
Miscellaneous	One call center error
	Deteriorated facility
	Abandoned facility
	Previous damage
Notification Practices Not Sufficient	Wrong information provided
	Notification to one call center made but not sufficient
Notification Not made	No notification made to one call center/811

Table C2—Work performed groupings used in this report

Group	Root Cause
Agriculture	Agriculture
Construction/Development	Construction
	Site Development
	Grading
	Drainage
	Driveway
	Demolition
	Engineering
	Railroad
	Waterway
Energy	Natural Gas
	Electric
	Steam
	Liquid Pipe
Fencing	Fencing
Landscaping	Landscaping
Sever/Water	Sewer
	Water
Street/Roadway	Roadwork
	Curb/Sidewalk
	Storm Drainage
	Milling
	Pole
	Traffic Signals
	Traffic Signs
	Street Lights
	Public Transit
Telecom	Telecommunications
	Cable TV

APPENDIX D: EXCAVATION INFORMATION

Table D1—Top 20 combinations of excavator, work performed, and equipment used, including unknown data, in Canada and the U.S., 2017

Excavator	Work Performed	Equipment Used	Unique Damages
Unknown/Other	Unknown/Other	Unknown/Other	120,152
Contractor	Unknown/Other	Unknown/Other	22,596
Utility	Unknown/Other	Unknown/Other	8,510
Contractor	Unknown/Other	Backhoe/Trackhoe	5,343
Contractor	Water	Backhoe/Trackhoe	4,812
Unknown/Other	Unknown/Other	Backhoe/Trackhoe	4,750
Contractor	Sewer	Backhoe/Trackhoe	4,624
Unknown/Other	Water	Trencher	4,321
Municipality	Unknown/Other	Unknown/Other	3,295
Unknown/Other	Sewer	Trencher	3,196
Unknown/Other	Unknown/Other	Hand Tools	2,963
Unknown/Other	Cable TV	Trencher	2,565
Contractor	Cable TV	Trencher	2,555
Contractor	Water	Trencher	2,376
Contractor	Electric	Backhoe/Trackhoe	2,262
Contractor	Sewer	Trencher	2,219
Unknown/Other	Fencing	Auger	2,162
Contractor	Natural Gas	Trencher	2,104
Unknown/Other	Landscaping	Boring	2,081
Contractor	Natural Gas	Backhoe/Trackhoe	2,056

Figure D1 depicts the relative contribution of known and unknown data to reported damages by excavator, work performed, and equipment used. The circle on the left represents the percentage of damages for which all three variables (excavator, work performed, and equipment used) are unknown (38%). The center of the three circles on the right represents the portion of the reported damages where all three variables are known (25%). The intersections between two of the variables (excavator and work performed; excavator and equipment; equipment used and work performed) represent the portion of damages where two of the three variables are known (i.e., for 4% of damages, excavator and work performed are known; for 12% of damages, work performed and equipment used are known; and for 4% of damages, equipment used and excavator are known). The outer percentages (not overlapping) represent the portion of damages where only one variable is known (i.e., for 12% of damages, excavator is the only known variable; for 1% of damages, work performed is the only known variable; and for 4% of damages, equipment used is the only known variable).

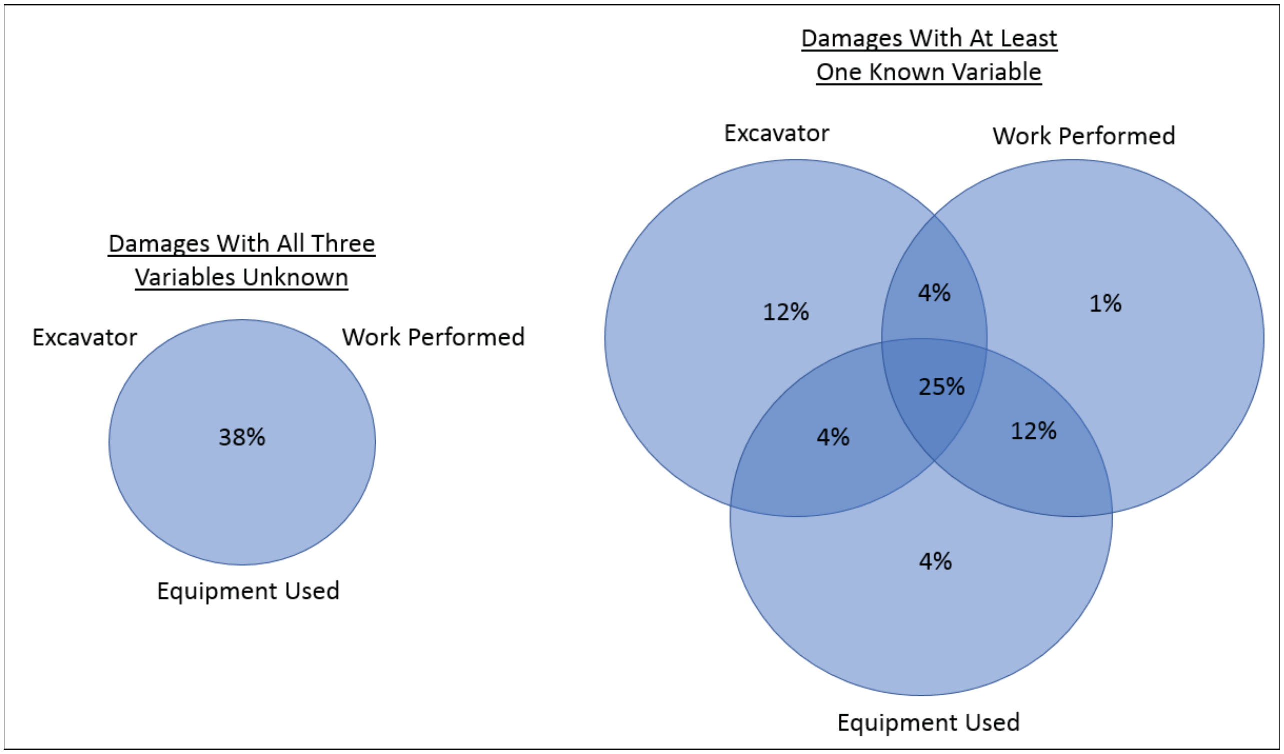
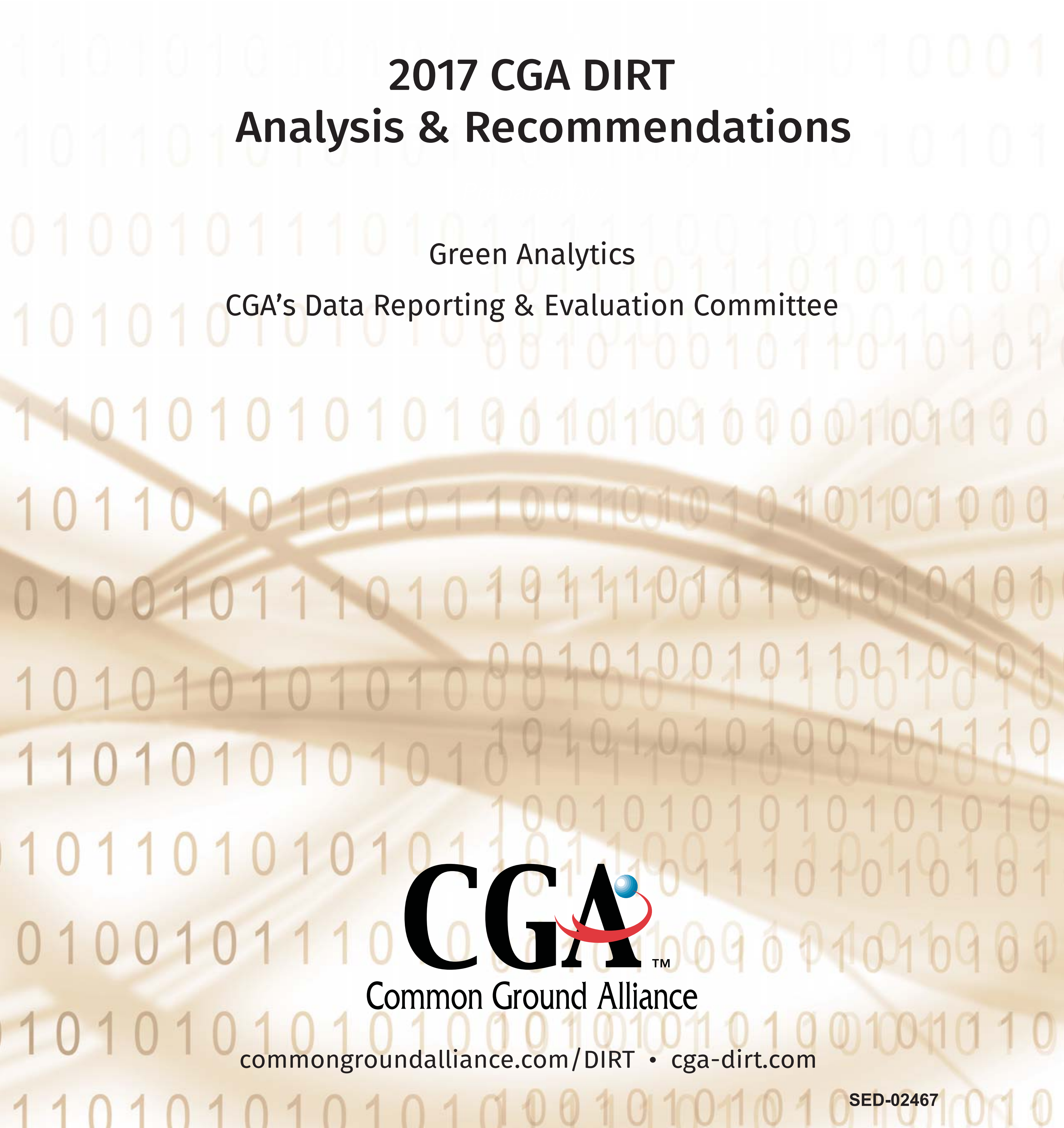


Figure D1—Percentage of damages by excavator, work performed, and equipment used, known and unknown data



2017 CGA DIRT
Analysis & Recommendations

Green Analytics

CGA's Data Reporting & Evaluation Committee

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ATTACHMENT 63

PACIFIC GAS AND ELECTRIC COMPANY
Gas Operations Data Response

PG&E Data Request Index No.:	12211		
Request Date:	06-18-2018	Date Sent:	07-27-2018
Requesting Party:	CPUC		
External Requester:	Darryl Gruen	PG&E Contact:	Jon Pendleton

PG&E's responses to the following SED data requests are intended to comply with the Instructions provided on March 6, 2018. PG&E has no objection to SED's instructions that restate Commission Rules of Practice and Procedure, such as the duty of candor, since PG&E is required to follow such rules regardless of such instructions. Also, please note that PG&E has not Bates-labeled or indexed the attachments to its responses below, as the attachments are not voluminous, but has instead labeled each attachment with the applicable Index/Attachment Number.

Per the Instructions, PG&E has provided the name of the person(s) answering each request, their title, the name and title of the person to whom they report, and contact information. For responses where PG&E is still gathering the information and a full response is still pending, PG&E will provide the name of the person(s) answering for those requests, their title, the name and title of the person to whom they report, and contact information once complete.

Question	Responded By	Title	Contact	Reports To	Title
1	Jason Klemm	Director, Gas Field Services South	J1Ks@pge.com	Melvin Christopher	VP, Gas T&D Operations

PG&E notes this response and/or the attached documents contain information that should remain confidential and not be subject to public disclosure as it contains one or more of the following: critical infrastructure information that is not normally provided to the general public, the dissemination of which poses public safety risks (pursuant to the Critical Infrastructures Information Act of 2002, 6 U.S.C. §§131-134); sensitive personal information pertaining to PG&E employees; customer information; or commercially sensitive/proprietary information. This information is highlighted yellow below and, if feasible, highlighted yellow or outlined red in the referenced attachments.

See attached declaration supporting confidential designation ("Index 12211_Confidentiality Declaration.pdf").

QUESTION 12211.01 Another follow up item from the June 1 SED meeting was to provide available detail on the 195 dig-ins associated with late tickets, including information on how we determined that marks were already on the ground for 164 of the 195 dig-ins.

RESPONSE 12211.01: Based on further review and analysis of available documentation associated with the 195 dig-ins described in Response 11836.10 (a) Supp01 (delivered to SED on May 2, 2018) and Response 11836.10 (a) Supp02 (delivered to SED on May 11, 2018), PG&E believes that, of the 195 dig-ins, 38 dig-ins involved a late response which either may have contributed to the incident, or there is insufficient evidence to determine whether the late response may have contributed to the incident. For the other 157 dig-ins, although PG&E responded late to the USA ticket, PG&E's records indicate that it marked the delineated excavation area prior to the dig-in occurring, and therefore the dig-in was caused by a different issue (e.g., inaccurate marking by PG&E of its facilities, or use of improper excavation equipment or methods by the excavator), not the late ticket. 38 dig-ins is different from the number provided in Response 11836.10 (a) Supp01 and Response 11836.10 (a) Supp02 (which indicated 31 of the 195 dig-ins, rather than 38). The reason for this updated number is that PG&E was able to locate additional source records which allowed for a more thorough analysis of each event.

PG&E's detailed review process involved: (1) gathering relevant available documents (including records from IrthNet, SAP, DiRT Investigation job file folders, Riskmaster) for each dig-in; (2) reviewing all of these documents together for each dig-in and applying a consistent hierarchy of reliability for the different types of records, discussed further below; and (3) sorting the events into three categories based upon this records prioritization:

1. Those that demonstrated markings before the dig-in event (**ruled-out**) (157);
2. Those that demonstrated no markings before the dig-in event (**potential**) (30); and
3. Those that were inconclusive due to inadequate or potentially conflicting records (**unknown**) (8).

In assessing the reliability of the different records, PG&E prioritized records that, based on PG&E's judgment and experience, provide the best contemporaneous record of the timing of the various events. The reliability of available records was prioritized as follows:

1. USA ticket photos (pre dig-in photos)
2. USA ticket notes
3. DiRT Investigation Reports, which may include witness interviews, a summary of physical evidence, post dig-in photos, and a determination of fault
4. Damage Claims packages, which may include data about the dig-in asset inspection and repair information, post dig-in photos and USA marking information
5. Other supporting documentation (for example, Riskmaster)

Attachment "*Index 12211_195 Dig-Ins Associated with Late Tickets_CONF.xlsx*" lists each of the 195 dig-ins, and categorizes them into one of the three categories (ruled-out, potential, or unknown). It also indicates which source record(s) PG&E relied on for the categorization decision for each dig-in. PG&E is in the process of reviewing the records for confidentiality, and will produce them on a rolling basis when complete. Please note the following:

- See attachment "*Index 12211-01_Supporting Documentation Batch 1_CONF.zip*" for a partial submission of the records that PG&E is providing with this response. Note, the folders in this zip file contain the records reviewed for each dig-in and correspond to the unique identifier listed in column A ("Line Item") in attachment "*Index 12211_195 Dig-Ins Associated with Late Tickets_CONF.xlsx*."
- See attachment "*Index 12211_Batch 1 Attachment List.xlsx*" for a list of folders, the attachments contained in each folder, and their confidentiality designations. The file names of attachments containing confidential information are highlighted yellow within the spreadsheet.
- Attachment "*Index 12211_195 Dig-Ins Associated with Late Tickets_CONF.xlsx*" is designated confidential because it contains customer-specific data. This information is highlighted yellow within the attachment.

PG&E would like an opportunity to walk through the data with SED to provide more detailed explanations for the determinations and to answer questions, and will contact SED to identify possible dates for a meeting or call.

ATTACHMENT 64

From: Pendleton, Jonathan (Law) <J1Pc@pge.com>
Sent: Tuesday, October 16, 2018 3:47 PM
To: Gruen, Darryl <darryl.gruen@cpuc.ca.gov>
Subject: Locate and Mark: Follow up to 10/12/18 update call regarding dig-ins on late tickets

Hi Darryl,

As we discussed during our call on October 12, the following is a summary of PG&E's ongoing efforts (updated as of today, October 16) to reevaluate its gas dig-in data and revise the number of dig-ins on late tickets during the period of January 1, 2012 through February 28, 2017.

1) Additional dig-ins identified to date that may have a USA ticket number:

- So far, we have identified 1,838 additional dig-ins that, based on information in the two main databases (the Master Dig-in File ("MDF") for 2013-2017 and GQI/SAP for 2012), could potentially have a USA ticket number. That does not mean that they do have a USA ticket number; it means only that there is some indication in the databases that they could. We are in the process of researching those further.
    - That 1,838 consists of 959 from the MDF and 879 from the GQI/SAP.
    - If all of the relevant fields consistently indicate that there is no USA ticket number, we are not identifying that dig-in as meriting further research. But if one of the fields is inconclusive, or for example says "yes" or "unknown" for whether the dig-in has a ticket number, we are flagging it for additional research.
- We have also asked Bates White to analyze the databases using its more automated search tools, and to identify additional dig-ins that could merit further research. Bates White is using a variety of search tools. It is looking, for example, for entries that contain certain terms that could indicate the possibility of a USA ticket, or strings of numbers that could have been attempts to enter a ticket number. We thus expect that Bates White will identify more dig-ins that could have a USA ticket number, and we will research those further as well.

2) For the additional dig-ins we've identified that may have a USA ticket, number of USA tickets found so far:

- We are still in the process of reviewing these and have a multi-step process to look for USA ticket numbers for them. It requires searching several different sources of information, on a dig-in-by-dig-in basis, to see if other sources of information have ticket numbers.

- At this point, we have worked through 648 of the 1,838 dig-ins. We have identified potential ticket numbers for 536 of those.

- If the ticket number actually appears on the Bates White late ticket list, we will undertake a more detailed file review in connection with determining whether we can rule out whether the lateness contributed to the dig-in. In that review, we also could conclude that the ticket number was not actually associated with that dig-in and would conclude a USA ticket was not obtained by the excavator.

3) Using the newly identified USA tickets, number of additional dig-in on late tickets confirmed to date:

- We have (thus far) identified 1,838 additional dig-ins that merit further research, have finished looking for ticket numbers for 648 of those, and have found potential ticket numbers for 536. Of those 536 tickets, all 536 have now been checked against Bates White's late ticket list.

- Of the 536 tickets that have been checked against Bates White's late ticket list, Bates White has found 29 dig-ins that are associated with late tickets, making the 195 dig-ins on late tickets now 224.

- We are in the process of reviewing those 29 dig-ins to determine whether we can rule out that the lateness contributed to the dig-in.

4) Expected completion of our search for additional USA tickets:

- As I mentioned, some of this involves very labor-intensive, dig-in-by-dig-in review of multiple databases. In addition, because we have asked Bates White to identify additional dig-ins that could have USA tickets, we do not know the full size of the project yet and are trying to take an over-inclusive approach.

- I suggest we set up regular update calls on approximately a weekly basis to discuss our progress and answer any questions SED may have.

5) Expected completion of our cross-check against the late ticket database:

- Once we identify USA ticket numbers, it is relatively quick to check them against Bates White's late ticket list.

- Once we have checked them against the late ticket list, for those that appear on the late ticket list, we then undertake a detailed file review (which we have described previously at our September 11, 2018 meeting) to determine if we can rule out whether the lateness contributed to the dig-in.

6) Other steps PG&E plans to take to achieve a high level of confidence in our revised dig-ins on late tickets total:

- All of the steps I summarized above are focused on dig-ins for which there is some indication that the dig-in could potentially have a USA ticket number, even if the original databases we used do not appear to contain a ticket number.

- We have also asked Bates White to help us devise a strategy to look at dig-ins for which the databases do not have any indication that the dig-in may have a ticket number (i.e., those in the MDF that indicate "No" in the "USA ticket: Yes/No" column). That is, for dig-in entries in these files that across the board give no reason to think there is a ticket number, is there work we can do to assess the reliability of that data, such as via a statistically significant sampling approach?

Please let me know if you have any questions regarding the summary provided above. Also, for our next update call, please let me know if it would be helpful to set up Web Ex access and include SED staff, PG&E Gas Operations personnel, and [redacted] [redacted] from Bates White.

Thanks,

Jon

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ATTACHMENT 65

PACIFIC GAS AND ELECTRIC COMPANY
Gas Operations Data Response

PG&E Data Request Index No.:	12369		
Request Date:	08-08-2018	Date Sent:	10-23-2018
Requesting Party:	CPUC		
External Requester:	CPUC-SED	PG&E Contact:	Jon Pendleton

PG&E notes this response and/or the attached documents contain information that should remain confidential and not be subject to public disclosure as it contains one or more of the following: critical infrastructure information that is not normally provided to the general public, the dissemination of which poses public safety risks (pursuant to the Critical Infrastructures Information Act of 2002, 6 U.S.C. §§131-134); sensitive personal information pertaining to PG&E employees; customer information; or commercially sensitive/proprietary information. This information is highlighted yellow below and, if feasible, highlighted yellow or outlined red in the referenced attachments.

See attached declaration supporting confidential designation ("Index 12369_Confidentiality Declaration.pdf").

QUESTION 12369.01: Provide the start date of the Corrective Actions in addition to the due date (where possible)

RESPONSE 12369.01: PG&E is currently updating the draft Locate & Mark Compliance Plan provided with its August 2, 2018 letter to Director Malashenko and will include the start dates of the Corrective Actions as part of that updated Plan. PG&E expects to provide its updated draft Plan to the Safety and Enforcement Division by the week of October 29, 2018.

QUESTION 12369.02: Provide late ticket benchmarking results from AGA SOS (already provided results as part of June 1 meeting materials, but provide separately along with an explanation of the benchmarking effort)

RESPONSE 12369.02: PG&E has been informed that the AGA SOS benchmarking results, which AGA advises are unaudited and not normalized, are copyrighted and proprietary to the AGA and are subject to a confidentiality agreement for all participants. Therefore, AGA has not authorized any release. PG&E previously presented a summary of these results to SED in a redacted format as part of the L&M meeting held in San Ramon on June 1, 2018 and can arrange a further meeting to discuss the results if helpful to SED's preliminary investigation.

QUESTION 12369.03: Provide data on dig-ins/1000 tickets since 2012, along with industry benchmarking information

RESPONSE 12369.03: Please refer to the table below for PG&E data on excavation damages per 1000 tickets from 2012 to 2017 (using the 12-month rolling average for December) and year-to-date through July 2018.

Year	Month	12-Month Rolling Average
2012	December	2.53
2013	December	2.75
2014	December	2.42
2015	December	2.11
2016	December	2.02
2017	December	1.89
2018	July	1.74[1]
[1]This represents a 12-month rolling average of data from August 2017 through July 2018		

PG&E's results for dig-ins per 1000 tickets were in the [redacted] for 2012 and 2014 through 2017 based on AGA industry benchmarking information and were in the [redacted] for 2013. PG&E has received permission from the AGA to share these quartile results for PG&E alone. However, AGA advises that the detailed AGA quartile information is of limited usefulness for comparison purposes in that it is not audited or normalized. For instance, certain One-Call Centers limit the maximum size of a USA ticket to a smaller area than others, such that a single "ticket" is defined differently across regions of the country. Likewise, operators may define a "dig-in" differently. AGA also advises this information is copyrighted and proprietary to the AGA and is subject to a confidentiality agreement for all participants. Therefore, AGA has not authorized any release.

- Note, portions of Response 12369.03 contain third-party information subject to a confidentiality agreement. This information is highlighted yellow above.

QUESTION 12369.04: Explain our efforts to begin tracking 2nd party and 1st party dig-ins/1000 tickets

RESPONSE 12369.04: PG&E investigates, documents, and tracks all dig-ins (damage to PG&E underground infrastructure). 1st Party dig-ins are defined as any PG&E at fault event, which causes damage to PG&E underground infrastructure. PG&E at fault events include Locate and Mark related errors, mapping errors, and when a PG&E crew damages PG&E underground infrastructure. 2nd Party dig-ins are when a PG&E contractor damages PG&E underground infrastructure. In addition to the normal procedure undertaken for all dig-ins, 1st and 2nd Party dig-ins are subjected to additional review. PG&E submits all 1st and 2nd Party dig-ins for review to the Corrective Action Program (CAP). The CAP team conducts an analysis of each Dig-In Reduction Team (DiRT) submission and makes recommendations for corrective action as needed. The corrective action is designed to prevent future dig-ins based upon lessons learned from the submission. All dig-ins are included in a weekly report prepared for gas operations leadership. Weekly reporting includes comparisons to prior year reporting and the AGA benchmarking metric.

QUESTION 12369.05: Provide locator of the quarter criteria

RESPONSE 12369.05: PG&E's Locator of the Quarter was established in 2018 in an effort to recognize Locate and Mark personnel who demonstrate their commitment to damage prevention. The criteria is dependent on supervisor or peer nomination and recognizes employees who demonstrate a commitment to both quality and safety. The following are a few examples of the criteria PG&E uses in selecting nominees for Locator of the Quarter:

- Recognized accuracy in locating
- Exemplary customer service
- Community involvement or service
- Participation on special projects or committees that help move our organization forward
- Innovation or extra effort that benefits our work in damage prevention

Please see attachment "*Index 12369-05_Locator of the Quarter.pdf*" for an example of this recognition.

ATTACHMENT 66

PACIFIC GAS AND ELECTRIC COMPANY
Gas Operations Data Response

PG&E Data Request Index No.:	12071.01 Supp01		
Request Date:	05-10-2018	Date Sent:	06-15-2018
Requesting Party:	CPUC		
External Requester:	Darryl Gruen	PG&E Contact:	Jon Pendleton

QUESTION 12071.01: With respect to the letter dated May 2, 2018 from PG&E Vice President Gas T&D Operations Mr. Mel Christopher, addressed to Safety and Enforcement Division Director Ms. Elizaveta Malashenko, ("May 2, 2018 letter") including the attached documents (including Guidepost Investigation Report: Locate and Mark Pacific Gas and Electric Company; Bates White Economic Consulting Late Ticket Logic and Count Prepared for PG&E), please answer the following:

a. Does PG&E accept as true all of the facts provided in the letter and attached documents?
b. Does PG&E agree with the opinions or conclusions provided in the letter and attached documents?
c. If the answer to questions 1a or 1b are anything other than an unqualified "yes", please identify all facts and opinions that PG&E disputes. Please be sure to quote the page disputed statement or passage, and provide the correct report and page number.
d. For each statement PG&E identifies as disputed in response to question 1c, please provide PG&E's assertion of how each disputed fact would be accurately restated.
e. For each statement that PG&E disputes in response to question 1c, please provide a complete explanation.

RESPONSE 12071.01: The following responses relate only to the Bates White report provided to the Safety and Enforcement Division (SED) on May 2, 2018. As discussed, PG&E anticipates providing responses relating to the Guidepost report by June 15, 2018.

a. Yes; PG&E agrees with the methodology developed and applied by Bates White to determine the number of late responses to USA tickets between 2012 and February 2017, and the resulting annual late ticket counts. As detailed during Bates White's presentation to SED on June 1, 2018, and as indicated in Mel Christopher's May 2, 2018 letter to SED, the development of rules to assess the timeliness of close to 4 million tickets necessarily requires the drawing of lines that reasonably but sometimes imperfectly fit the vast range of scenarios that are reflected in the various fields and notes contained in those millions of tickets. The logic that Bates White applied was intentionally conservative, so as to attempt to avoid counting late tickets as timely. As Bates White noted during its June 1, 2018 presentation, application of this conservative logic in some instances resulted in tickets being counted as late due to insufficient information in the "Notes" section of the ticket response, even though PG&E believes some of these tickets in fact may have been timely. See attachment *"Index 12071-01_20180530 Late Ticket Logic-BW.pptx"* for the slide deck of Bates White's June 1, 2018 presentation. PG&E supported the development of logic in this manner and believes its results are reliable, while recognizing that any automated attempt to apply a single set of rules and criteria to millions of tickets and their various fields and notes will be imperfect.

b. Yes; please see response to Question 1.a above.
c. Not applicable.
d. Not applicable.
e. Not applicable.

RESPONSE 12071.01 Supp01:

a. The Guidepost Report discussed gaps and issues in PG&E's Locate and Mark program. As the presentation to the Safety and Enforcement Division (SED) on June 1, 2018 demonstrated, PG&E is taking significant steps to address these gaps and issues. Guidepost was hired by PG&E to provide an independent, third-party review of the facts. This was primarily accomplished through interviews and a review of documents, as well as reviewing information provided to SED in data requests. PG&E was not present during the Guidepost interviews, and thus cannot agree or disagree with Guidepost's recitation of the events referenced or statements made during those interviews. We presume Guidepost accurately reflected what people told them during these interviews. We agree the numbers of late tickets reported out of IRTHNET were incorrect. To address this, PG&E has identified seven key issues related to late tickets, and is undertaking corrective actions to address each of these issues. As indicated above, the corrective actions that PG&E is taking were outlined in PG&E's June 1st presentation to SED. PG&E can provide more detailed information about these corrective actions if needed by SED.
b. See response to Question 1.a above.
c. See response to Question 1.a above.
d. See response to Question 1.a above.
e. See response to Question 1.a above.

ATTACHMENT 67

PACIFIC GAS AND ELECTRIC COMPANY
Gas Operations Data Response

PG&E Data Request Index No.:	12581		
Request Date:	10-26-2018	Date Sent:	11-16-2018
Requesting Party:	CPUC		
External Requester:	Wai-Yin (Franky) Chan	PG&E Contact:	[redacted]

QUESTION 12581.01: In PG&E's territory, from 2012 to the end of February of 2017, for each year please provide the total number of dig-ins.

RESPONSE 12581.01: Please see table below for total gas dig-ins (All Parties).

Year	2012	2013	2014	2015	2016	Jan/Feb 2017
Total Gas Dig-ins (All Parties)	1,531	1,815	1,667	1,764	1,812	151

QUESTION 12581.02: In PG&E's territory, from 2012 to the end of February of 2017, for each year please provide the total number of third party dig-ins in which an excavator called 811 and opened a ticket.

RESPONSE 12581.02: Please see table below for 3rd Party gas dig-ins with valid USA ticket numbers.

Year	2012	2013	2014	2015	2016	Jan/Feb 2017
3rd Party Gas Dig-ins With Valid USA Ticket[1]	590	707	501	699	757	57

[1] Subset of Responses 12581.01 and 12581.04

PG&E is continuing to review its dig-in databases to determine whether additional dig-ins had valid USA ticket numbers. PG&E is working with external consultant Bates White as part of this effort.

QUESTION 12581.03: In PG&E's territory, from 2012 to the end of February of 2017, for each year, please provide the total number of dig-ins per one thousand tickets.

RESPONSE 12581.03: Please see table below for the total number of dig-ins per one thousand tickets.

Year	2012	2013	2014	2015	2016	Jan/Feb 2017
Total Gas Dig-ins (All Parties)	1,531	1,815	1,667	1,764	1,812	151
Total Gas Tickets[1]	739,077	640,735	671,313	788,901	858,972	123,308

Year	2012	2013	2014	2015	2016	Jan/Feb 2017
Total Gas Dig-ins (All Parties) per 1,000 Tickets	2.07	2.83	2.48	2.24	2.11	1.22

[1] Fiber tickets included until 2016

QUESTION 12581.04: In PG&E's territory, from 2012 to the end of February of 2017, for each year, please provide the total number of third party dig-ins per one thousand tickets.

RESPONSE 12581.04: Please see table below for total number of third party dig-ins per one thousand tickets.

Year	2012	2013	2014	2015	2016	Jan/Feb 2017
3rd Party Gas Dig-ins	1,469	1,741	1,621	1,694	1,734	144
Total Gas Tickets[1]	739,077	640,735	671,313	788,901	858,972	123,308
3rd Party Gas Dig-ins per 1,000 Tickets	1.99[2]	2.72[2]	2.41[2]	2.15[2]	2.02	1.17

[1] Fiber tickets included until 2016

[2] Dig-in rates used in this response are based on what is known about dig-ins for previous years as of October 5, 2018. Data in prior Response 12369.03 differs as dig-in rates used in it were rates reported to PG&E Governance and Reporting and PG&E Board of Directors based on what was known at end of the corresponding year. In addition, the rates from Response 12369.03 are also used as reference when quoting historical performance for trend analysis and in submission for benchmark and quartile ranking. Reasons for rates changing after the reporting period include PG&E discovering damages not reported by damaging party or damages reported to PG&E after the year in which dig-in occurred.

QUESTION 12581.05: Please make sure that the numbers provided in response to questions 1 to 4 are consistent with PG&E's own "Keys to Success" reports. Please refer to the Keys Report, including page number that contains the information provided in response to questions 1 to 4.

RESPONSE 12581.05: Responses 12581.01-.04 differ than the Keys to Success reporting as the data at the time of reporting was based upon PG&E's knowledge at that time. Data provided in the Responses 12581.01-.04 are based upon PG&E's knowledge as of October 5, 2018.

Note, the PG&E Keys to Success report is generated each month with contributions from each organization within Gas Operations. The report does not require a standard format or the inclusion of specific information, and the information provided is at the discretion of each organization head. Organization of the data has changed during a year or from month to month depending or organizational needs and/or leadership changes. Keys to Success Reports are internal tracking tools and are not intended as external reporting documents.

Note, the Keys to Success for the months of January 2012 – March 2012 were not stored historically as one compiled document but were instead retained as individual files reflecting the individual discussion topics.

QUESTION 12581.06: Please provide PG&E's definition of dig-in, as it is used in response to questions 1 to 4.

RESPONSE 12581.06: A dig-in refers to any damage (impact or exposure) that results in a repair or replacement of an underground gas facility as a result of an excavation. A third-party dig-in is damage caused by someone other than PG&E or a PG&E contractor.

QUESTION 12581.07: Please provide the document that shows PG&E's definition of a dig-in that is used in response to questions 1 to 4.
RESPONSE 12581.07: The Common Ground Alliance (CGA) defines dig-ins and damage as such: "Damage: Any impact or exposure that results in the need to repair an underground facility due to a weakening or the partial or complete destruction of the facility, including, but not limited to, the protective coating, lateral support, cathodic protection or the housing for the line device or facility."

"Excavate or Excavation: Any operation using non-mechanized or mechanized equipment, demolition or explosives in the movement of earth, rock or other material below existing grade."

The AGA defines dig-in as "When buried gas facilities are damaged by excavators". The AGA glossary can be accessed at: https://www.aga.org/natural-gas/glossary/d/.

Please see also the following attachments:

Attachment	Description
Index 12581-07_2013 Metric Summary - Dig Ins.pdf	2013 Metric Summary – Dig-In Rate per 1,000 USA Tags
Index 12581-07_2014 Metric Summary - Gas Dig-ins.pdf	2014 Metric Summary – 3rd Party Gas Dig-In Rate per 1,000 Tickets
Index 12581-07_2015 Metric Summary - Gas Dig-ins.pdf	2015 Metric Summary – 3rd Party Gas Dig-In Rate per 1,000 Tickets
Index 12581-07_2016 Metric Summary - Gas Dig-ins.pdf	2016 Metric Summary – Gas Operations
Index 12581-07_2017 Metric Summary - Gas Dig-in Rate.pdf	2017 Metric Summary – 3rd Party Gas Dig-In Rate per 1,000 Tickets

QUESTION 12581.08: Please identify all the instances PG&E modified their definition of dig-in.
RESPONSE 12581.08: PG&E uses the definition of a dig-in as provided in an annual Metric Summary (see Response 12581.07). The Metric Summary identifies what shall be counted as a dig-in and what is to be excluded. The definition used for each year is noted below and includes the modifications of how a dig-in was reported. The Metric Summary was initiated in 2013.

2013 Metric Summary:
A dig-in refers to any damage (impact or exposure) that result in a repair or replacement of underground facility as a result of an excavation.
This metric does not include PG&E dig-in to third party (e.g. water) and PG&E to PG&E dig-ins in the total count of third party dig-ins per 1,000 because PG&E benchmarks this metric (dig-in/1,000 USA tags) with other utilities and the standard industry benchmark includes third-party dig-ins on owned facilities.

2014 Metric Summary:
A dig-in refers to any damage (impact or exposure) that result in a repair or replacement of underground facility as a result of an excavation.
This metric does not include PG&E dig-in to third party (e.g. water) and PG&E to PG&E dig-ins in the total count of third party dig-ins per 1,000 because PG&E benchmarks this metric (dig-in/1,000 USA tags) with

other utilities and the standard industry benchmark includes third-party dig-ins on owned facilities. Electric dig-ins are also excluded, as are USA tickets in Los Padres Division, which only has electric facilities

2015 Metric Summary:
A gas dig-in refers to any damage (impact or exposure) that results in a repair or replacement of underground gas facility as a result of an excavation. A third-party dig-in is damage caused by someone other than PG&E or a PG&E contractor
This metric does not include PG&E dig-in to third party (e.g. water), PG&E 2nd party (PG&E's contractors) and PG&E to PG&E dig-ins in the total count of third party dig-ins per 1,000 because PG&E benchmarks this metric (dig-in/1,000 USA tags) with other utilities and the standard industry benchmark includes third-party dig-ins on owned facilities. Electric dig-ins are also excluded (by excluding Transmission Electric tickets), as are USA tickets in Los Padres Division, which only has electric facilities. The IRTHnet folders excluded are UET (Electric Transmission), PGE01 (Los Padres), and PGESLO (San Luis Obispo, a portion of Los Padres Division).

2016 Metric Summary:
A dig-in refers to any damage (impact or exposure) that result in a repair or replacement of underground gas facility as a result of an excavation. A third-party dig-in is damage caused by someone other than PG&E or a PG&E contractor.
This metric does not include PG&E dig-in to third party (e.g. water), PG&E 2nd party (PG&E's contractors) and PG&E to PG&E dig-ins in the total count of third party dig-ins per 1,000 USA tickets. Electric dig-ins are also excluded, as are USA tickets in Los Padres Division, which only has electric facilities and electric transmission tickets. The IRTH folders excluded are UET (Electric Transmission), PGE01 (Los Padres), and PGESLO (San Luis Obispo, a portion of Los Padres Division).

Damage to above ground infrastructure such as meters or risers is excluded.

2017 Metric Summary:
A dig-in refers to any damage (impact or exposure) that result in a repair or replacement of underground gas facility as a result of an excavation. A third-party dig-in is damage caused by someone other than PG&E or a PG&E contractor.
This metric does not include PG&E dig-ins to third parties (e.g., water), PG&E 2nd party dig-ins (i.e., PG&E's contractors performing work for PG&E) and PG&E 1st party dig-ins (i.e., PG&E to PG&E) in the total count of third party dig-ins. Dig-ins caused by PG&E contractors while performing work for parties other than PG&E are considered third party.
Electric dig-ins are also excluded in the third-party dig-in count, as are USA tickets in Los Padres Division (which only has electric facilities), electric transmission tickets, and fiber tickets. The following IRTH folders are excluded: PGE01 (Los Padres), PGESLO (San Luis Obispo, part of Los Padres Division), PGEUET (Electric Transmission), and PGEFIB (Fiber).
Also excluded from the third-party dig-in count are the following:

- Damages to above-ground infrastructure, such as meters and risers.
- Pre-existing damages (e.g., due to corrosion).
- Damages occurring during the reporting year that are reported to PG&E after the close of STIP reporting for the reporting year.

Additional Changes:
Additional changes to the definition of a dig-in were reflected in PG&E's documents as listed below.

As of February 3, 2016, with the publication of a revision to TD-4412P-05, "Excavation Procedures for Damage Prevention," and TD-5811M, Locate and Mark Handbook, Rev.2, the internal Company definition for dig-ins to PG&E infrastructure aligned with the American Gas Association, as follows: "When buried gas facilities are damaged by excavators," and "When buried PG&E facilities are damaged by excavators." Damage is defined as follows: Includes breaks, leaks, nicks, dents, gouges, grooves, or other damage to underground lines, conduits, coatings, or cathodic protection. (See CGC §4216.4[c].)" PG&E continues to report information on dig-ins to reflect the breakdown of each as provided in Response 12581.07**.**

QUESTION 12581.09: Does PG&E represent that the numbers it provided in response to questions 1, 2, 3, 4, and 5 are accurate?
RESPONSE 12581.09: PG&E represents that the numbers provided in response to Questions 1-5 are accurate based upon company knowledge regarding these gas dig-ins as of October 5, 2018.

PG&E is continuing to review our dig-in databases to determine whether additional dig-ins had valid USA ticket numbers. PG&E is working with external consultant Bates White as part of this effort.

QUESTION 12581.10: What methodology did PG&E use for counting the dig-ins it provided in questions 1 to 4?
RESPONSE 12581.10: For 2012 Dig-ins to gas infrastructure, PG&E utilized data reported in the 2012 GQI file. For 2013-2017 dig-ins to gas infrastructure, PG&E utilized data reported in the Master Dig-in File.

QUESTION 12581.11: What methodology does PG&E use for identifying dig-ins and third party dig-ins?
RESPONSE 12581.11: In most cases, PG&E is notified of a dig-in by a 911 operator. When PG&E Gas Dispatch receives a 911 notification, they deploy a Gas Service Representative who responds, makes the situation safe, and collects field intelligence. Other notifications of a dig-in originate from the damaging party, inspectors, or when discovered by PG&E personnel. PG&E personnel have discovered previously un-reported dig-ins during routine maintenance and or inspection work. When PG&E receives a report of a possible dig-in, then a Dig-in Reduction Team (DiRT) investigator is requested. In most cases, the DiRT investigator successfully identifies the third party responsible for the dig-in as part of their investigation. Determination of fault is based on an evaluation of a totality of factual circumstances. Responsibilities are shared between an operator (PG&E) and an excavator. Criteria that may indicate the operator has contributed to the dig-in include mismarking an underground facility within a clearly marked delineated area; failing to mark its underground facilities within the delineated area for the USA ticket; or issuing a "no conflict" USA positive response in a delineated area where a facility exists. Criteria which may indicate that an excavator has contributed to a dig-in would include digging without a valid USA (this includes never obtaining or working on an expired USA ticket), digging before a site is marked, and or not using reasonable care when digging near utilities.

Please see also Response 12581.10.

QUESTION 12581.12: Are there third party dig-ins that can happen and are not reported to PG&E?
RESPONSE 12581.12: Yes.

QUESTION 12581.13: If the answer to question 12 is yes, under what circumstances?
RESPONSE 12581.13: If a digging party or excavator regulated by California Govt. Code (CGC) section 4216 fails to notify PG&E as required by CGC section 4216.4(c), or other first responder agencies, then the dig-in may not be included in the count until such time as PG&E becomes aware of the damage.

QUESTION 12581.14: SED has attached page 77 of PG&E's "Index 10707-13_2016-01_Keys To Success_CONF". Under the "Benchmarking" section, it states that "Consulted with Common Ground Alliance on industry definition for dig-ins/damages to ensure alignment with our definition."

a. Please provide the background of the statement above.
b. Was the industry definition of dig-ins/damages aligned with PG&E's definition?

RESPONSE 12581.14: Please see responses below:

a. Common Ground Alliance (CGA) supports the alignment of stakeholders throughout the utility industry in an effort to instate common practices for damage prevention processes and programs. PG&E's methods and practices for dig-in data analysis are based on the work of the CGA in this area.
b. Yes.

PG&E definition:
" A gas dig-in refers to any damage (impact or exposure) that results in a need to repair or replace an underground gas facility due to an excavation. A third party dig-in is damage caused by an entity other than PG&E or a PG&E contractor."

CGA definition:
"Damage: Any impact or exposure that results in the need to repair an underground facility due to a weakening or the partial or complete destruction of the facility, including, but not limited to, the protective coating, lateral support, cathodic protection or the housing for the line device or facility."
"Excavate or Excavation: Any operation using non-mechanized or mechanized equipment, demolition or explosives in the movement of earth, rock or other material below existing grade."

AGA definition:
"When buried gas facilities are damaged by excavators," and "When buried PG&E facilities are damaged by excavators." Damage is defined as follows: "Includes breaks, leaks, nicks, dents, gouges, grooves, or other damage to underground lines, conduits, coatings, or cathodic protection. (See CGC §4216.4[c].)"