



Frances Yee
Manager
Regulatory Compliance
Gas Operations

6111 Bollinger Canyon Rd.
4th Floor
San Ramon, CA 94583

925-328-5733
Fax: 925-328-5591
Internet: FSC2@pge.com

January 13, 2014

Mr. Mike Robertson
Gas Safety and Reliability Branch
Consumers Protection and Safety Division
California Public Utilities Commission
320 West 4th Street, Suite 500
Los Angeles, CA. 90013

Re: State of California – Public Utilities Commission
General Order 112-E Audit – PG&E’s De Anza Division

Dear Mr. Robertson:

The Safety and Enforcement Division (SED), Gas Safety and Reliability Branch (GSRB) of the CPUC conducted a General Order 112-E audit of PG&E’s De Anza Division, from July 8-12, 2013. On November 21, 2013, the SED submitted their audit report, identifying violations and findings. Attached is PG&E’s response to the CPUC audit report.

Please contact Redacted for any questions you may have regarding this response.

Sincerely,

/S/
Frances Yee

Attachments

cc: Aimee Cauguiran, CPUC
Terence Eng, CPUC
Dennis Lee, CPUC
Liza Malashenko, CPUC

Redacted
Redacted
Bill Gibson, PG&E
Jane Yura, PG&E

**General Order 112-E Findings
CPUC Inspection Report, dated November 21, 2013
De Anza Division**

INSPECTION INFORMATION

Inspection Dates	Finding	CPUC Contact	CPUC Phone #
July 8-12, 2013	Internal Review	Terence Eng	(415) 703-5326

INSPECTION FINDING

CPUC Finding	<p>A. PG&E's Internal Audit Findings</p> <p>Prior to the start of the audit, PG&E provided SED its findings from the internal review it conducted of the De Anza Division (Division). Some of PG&E's internal review findings are violations of PG&E's operations and maintenance standards, and are therefore, violations of Title 49 Code of Federal Regulations (CFR), §192.13(c). Please provide an update on any items pending as of July 8. Table 1 lists all of the violations that PG&E found in its internal audit.</p> <p>Table 1: Findings from PG&E's Internal Review</p> <table border="1"> <thead> <tr> <th>Topic</th> <th>Code Violation</th> <th>Finding(s)</th> <th>Instances</th> <th>Completed</th> </tr> </thead> <tbody> <tr> <td rowspan="3">Leak Survey Distribution</td> <td>192.723(b)(2)</td> <td>5-year map leak survey exceeded compliance due date by 8 months</td> <td>1</td> <td>Yes</td> </tr> <tr> <td>192.723(b)(2)</td> <td>5-year services leak survey exceeded compliance due date due to CGI</td> <td>22</td> <td>Yes</td> </tr> <tr> <td>192.723(b)(2)</td> <td>5-year maps leak surveyed after discovering the record of hard copy maps were missing making them 8 months out of compliance</td> <td>2</td> <td>Yes</td> </tr> <tr> <td rowspan="2">Leak Repair</td> <td>192.13(c)</td> <td>No record of USA number when required</td> <td>17</td> <td>N/A</td> </tr> <tr> <td>192.13(c)</td> <td>Leaks with late action</td> <td>9</td> <td>Yes</td> </tr> <tr> <td rowspan="5">Regulator Stations</td> <td>192.13(c)</td> <td>Late B inspection</td> <td>2</td> <td>Yes</td> </tr> <tr> <td>192.739(a)</td> <td>Late A inspection</td> <td>1</td> <td>Yes</td> </tr> <tr> <td>192.13(c)</td> <td>Pressure (As found and As left) documentation issues</td> <td>2</td> <td>Yes</td> </tr> <tr> <td>192.13(c)</td> <td>Missing pressure recorder sheet</td> <td>2</td> <td>Yes</td> </tr> <tr> <td>192.13(c)</td> <td>Maintenance not completely documented on initial setting of new regulator</td> <td>1</td> <td>Yes</td> </tr> <tr> <td>Valves</td> <td>192.13(c)</td> <td>Valves not properly maintained (lubricated)</td> <td>2</td> <td>Yes</td> </tr> <tr> <td rowspan="2">Instrument Calibrations</td> <td>192.13(c)</td> <td>Missing record of calibration for T&R instruments</td> <td>10</td> <td>Yes</td> </tr> <tr> <td>192.13(c)</td> <td>Leak Survey maps missing a record of</td> <td>22</td> <td>Yes</td> </tr> </tbody> </table>				Topic	Code Violation	Finding(s)	Instances	Completed	Leak Survey Distribution	192.723(b)(2)	5-year map leak survey exceeded compliance due date by 8 months	1	Yes	192.723(b)(2)	5-year services leak survey exceeded compliance due date due to CGI	22	Yes	192.723(b)(2)	5-year maps leak surveyed after discovering the record of hard copy maps were missing making them 8 months out of compliance	2	Yes	Leak Repair	192.13(c)	No record of USA number when required	17	N/A	192.13(c)	Leaks with late action	9	Yes	Regulator Stations	192.13(c)	Late B inspection	2	Yes	192.739(a)	Late A inspection	1	Yes	192.13(c)	Pressure (As found and As left) documentation issues	2	Yes	192.13(c)	Missing pressure recorder sheet	2	Yes	192.13(c)	Maintenance not completely documented on initial setting of new regulator	1	Yes	Valves	192.13(c)	Valves not properly maintained (lubricated)	2	Yes	Instrument Calibrations	192.13(c)	Missing record of calibration for T&R instruments	10	Yes	192.13(c)	Leak Survey maps missing a record of	22	Yes
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			calibration for various dates		
Corrosion Control	192.807		Corrosion reads taken by non-OQ employee	171	Yes
	192.807		10%er reads completed by non-OQ employee	72	Yes
	192.807		Resurveys completed by non-OQ employee	13	Yes
	192.13(c)		CPA not resurveyed within required timeframe	17	Yes
	192.465(a)		Bi-Monthly P/S Reads exceeded 2-1/2 Months	1	Yes
	192.13(c)		Missing pre/post restoration rectifier read	28	Yes
	192.467(d)		Casings not read (some due to missing vents/wires)	58	Yes
	192.467(c)		Contacted casings read	6	No, Pending
	192.13(c)		Action plans late, not completed or corrective actions not noted	25	Yes
	192.13(c)		Missed taking a read on a newly installed anode	1	Yes
	192.465(a)		Less than 10% of the total 10%er population monitored in one year	4	Yes
Atmospheric Corrosion on Exposed Spans	192.481(a)		Inspections of exposed pipe were missed or late	5	Yes

PG&E RESPONSE

The one pending finding from PG&E's Internal Review Summary was disposition of six casing locations with reads indicating a potential contacted casing. PG&E has a centralized program for investigating and remediating contacted casing managed by Corrosion Engineering Department. Attachment A is a letter from the Corrosion Engineering program manager confirming that these six locations are included in PG&E's contacted casing remediation program.

ATTACHMENTS

Attachment #	Title or Subject
A	Contacted Casing Update Letter

ACTION REQUIRED

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Action To Be Taken	Due Date	Completion Date	Responsible Dept.
No further action required.			

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July 8-12, 2013	NOV – 1	Terence Eng	(415) 703-5326

INSPECTION FINDING

CPUC Finding	<p>B. Audit Findings and Violations</p> <p>1 <u>Title 49 CFR §192.13(c) states:</u></p> <p style="padding-left: 40px;"><i>“Each operator shall maintain, modify as appropriate, and follow the plans, procedures, and programs that it is required to establish under this part.”</i></p> <p>1.1 PG&E’s Standard O-16, Corrosion Control of Gas Facilities, states in part:</p> <p style="padding-left: 40px;">1.1.1 Page 7: <i>“These yearly read locations do not have an “anniversary month,” but shall be read at least once during each calendar year.”</i></p> <p style="padding-left: 80px;">A. The Division failed to take a reading at the following two yearly test locations in 2011.</p> <p style="padding-left: 120px;">1. Cathodic Protection Area (CPA) 3350-11: Redacted</p> <p style="padding-left: 120px;">2. CPA 3350-11: Redacted</p> <p style="padding-left: 80px;">B. The Division failed to take a reading at the following two yearly test locations in 2012.</p> <p style="padding-left: 120px;">1. CPA 3409-01: Redacted</p> <p style="padding-left: 120px;">2. CPA 3350-11: Redacted</p> <p style="padding-left: 40px;">1.1.2 Page 7: <i>“A “Rectifier Test and Site Evaluation” form (Attachment A of Numbered Document O-11.1, Form FO-11.1-A) shall be completed to ensure that rectifiers are functioning correctly and that there are no safety violations.”</i></p> <p style="padding-left: 40px;">The Division did not follow or complete Form FO-11.1-A as required in the following instances.</p> <p style="padding-left: 80px;">A. CPA 3411-35, Rectifier #504 at Redacted In 2012, the Division did not verify that the rectifier enclosure was locked or if the PG&E equipment identification sticker was installed. In addition, the Division did not</p>
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	<p>inspect the rectifier for any openings, exposed wires, or internal corrosion.</p> <p>B. CPA 3411-50, Rectifier #207 at [Redacted] In 2010, the Division recorded a ground resistance of 40 ohms but did not install a second ground rod as required when ground resistance is over 25 ohms.</p> <p>C. CPA 3411-50, Rectifier #207 at [Redacted] In 2011, the Division recorded a ground resistance of 52 but did not install a second ground rod.</p> <p>D. CPA 3411-50, Rectifier #207 at [Redacted] In 2012, the Division did not record the ground resistance.</p> <p>E. CPA 3348-01, Rectifier 542: For each year from 2009 through 2012, the Division did not record the AC line breaker or fuse size.</p> <p>1.1.3 Page 11: <i>“If the CPA restoration work is (or is expected to be) over 30 days, the “CPA Follow-Up Action Plan” form (Attachment B) must be used and developed within 30 calendar days from the date the CPA is found below adequate levels of protection, as defined by the current 49 CFR 192, Subpart I. Please note that action plans shall also be established and maintained for short-term remedial actions that are in place for over 30 days. The action plan shall list and document the extenuating circumstance(s) to the extent known, the cause of the CPA problem (to the extent the cause is known), the desired solution(s), the actions needed to implement the solution, the estimated time to take those actions, and the employees who will perform those actions.”</i></p> <p>The Division did not use or develop a CPA Follow-Up Action Plan form within 30 days from the dates the following CPAs were found to provide inadequate levels of cathodic protection:</p> <p>A. CPA 3411-05, 503 North Cascade Terrace, Sunnyvale: The Division recorded a pipe-to-soil (P/S) read of -396 mV on 10/5/11. The Division did not create an action plan until 11/2/12, exceeding the maximum 30 day interval.</p> <p>B. CPA 3411-18, 19816 Beekman, Cupertino: The Division recorded a P/S read of -541mV on 10/5/12. The Division did not create an action plan as of the start of this audit, exceeding the maximum 30 day interval.</p>
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C. CPA 3412-27: The Division recorded P/S reads of -774mV at 290 Dillon Ave. and -723 mV at 186 Dillon Ave. on 11/24/09. The Division created an action plan on 4/2/10, exceeding the maximum 30 day interval.

1.1.4 Page 11: *“The action plan shall be updated in intervals not exceeding 30 calendar days by an employee knowledgeable of the restoration work and reviewed by the operating supervisor, until the CPA restoration work is completed and the CPA shows adequate levels of protection.”*

The Division updated CPA Follow-Up Action Plan forms at intervals exceeding 30 calendar days in the following instances:

A. CPA 3474-06, [Redacted] (bi-monthly): The Division updated the action plan at intervals exceeding 30 days on multiple occasions as indicated in Table 2.

Table 2: CPA 3474-06 Late Action Plan Reviews

Date of Review	Date of Subsequent Review	Interval (calendar days)
10/17/2012	12/17/2012	61
12/17/2012	2/18/2013	63
2/18/2013	4/17/2013	58
4/17/2013	6/17/2013	61

B. CPA 3412-27, 186 and [Redacted] (annuals): The Division updated the action plan on 5/5/10 and subsequently on 6/11/10, 37 days later.

C. CPA 3473-14, [Redacted] (yearly): The Division discovered a P/S reading of -618 mV on 11/5/09 and restored the area to -969 mV on 5/11/11. The Division did not update its action plan from 12/5/10 to 5/11/11, spanning an interval of 157 days.

1.2 PG&E’s Work Procedure WP4133-02, Cathodic Protection Area Assessment/Resurvey Procedures for Gas Distribution, page 1 states in part:

“Review CPAs, as defined in this work procedure, at least once every 6 nominal years.”

The Division reviewed the following CPAs at intervals exceeding 6 nominal years.

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	<p>A. The Division reviewed CPA 3348-01 in 2005 and subsequently in 2012.</p> <p>B. The Division reviewed CPA 3348-07 in 2005 and subsequently in 2012.</p> <p>C. The Division reviewed CPA 3348-10 in 2005 and subsequently in 2012.</p> <p>1.3 PG&E’s Form F4133-03-3 requires a check for the following during each CPA Resurvey:</p> <p>1.3.1 <i>“Color-coded overall map with all closeout data, including the P/S locations, rectifier locations, and boundary points.”</i></p> <p>The following CPA maps did not include one or more P/S locations.</p> <p>A. CPA 3473-12: The Division did not clearly identify 6 yearly P/S locations on the map.</p> <p>B. CPA 3473-14: The Division did not clearly identify a combination of two bi-monthly and nine yearly P/S locations on the map.</p> <p>C. CPA 3411-39: The Division did not clearly identify yearly P/S location at Redacted on the map.</p> <p>D. CPA 3411-40: The Division did not clearly identify bi-monthly P/S location at Redacted on the map.</p> <p>E. CPA 3411-02: The Division did not clearly identify yearly P/S location at Redacted on the map.</p> <p>1.3.2 <i>“The color-coded maps must contain a legend and the corrosion mechanic’s initials and date.”</i></p> <p>The map for CPA 3411-29 does not contain a legend.</p> <p>1.4 PG&E’s Procedure TD-4412P-07, Patrolling Pipelines and Mains, page 5, states in part:</p> <p>a. <i>“As soon as practicable after the observation is made, the M&C supervisor EITHER:</i></p> <ul style="list-style-type: none"> • <i>Dispatches ground patrol personnel to the location of the observation to evaluate the</i>
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	<p><i>situation via a targeted ground patrol and to document the reported observation on the "Ground Patrol Report". (The process for conducting ground patrols is outlined in Section 4.3.)</i></p> <p>OR</p> <ul style="list-style-type: none"> • <i>Provides a copy of documentation to the PPFO, indicating that the observation does not require additional follow up. (The supervisor keeps the original documentation locally.)</i> <i>b. If applicable, the M&C supervisor directs the appropriate follow-up action(s)."</i> <p>The Division did not perform follow-up actions as required in the following instances.</p> <p>A. During the 12/5/12 inspection of the exposed span at location(2) 10" DFM's [Redacted] a surveyor discovered that a 6" x 3" section was missing wrap, and that a 5" x 5" rock was impaling and penetrating the wrap. After informing his/her supervisor, the Division did not direct follow-up action resulting from the patrol observations.</p> <p>B. During the 12/18/12 patrol of Route V-8805-23, [Redacted] a surveyor discovered dead vegetation within the right-of-way of the pipe. The Division did not direct follow-up action resulting from the patrol observations.</p> <p>1.5 PG&E's Utility Standard S4540, Gas Pressure Regulation Maintenance Requirements, Page 2, requires a Class A Inspection at least once each calendar year at intervals not to exceed 15 months to the date from the previous Class A or Class B inspection.</p> <p>1.5.1 PG&E's Utility Work Procedure WP4540-01, District Regulator Station Maintenance, page 4, states in part:</p> <p><i>"Operational and diagnostic testing for a Class A Inspection must follow the instructions below...</i></p> <p><i>Using an approved analog or digital differential pressure gauge, perform a filter differential pressure test and record the pressure reading."</i></p> <p>The Division failed to perform a filter differential pressure test and record the pressure reading at the following regulator stations during the indicated year.</p> <p>A. Regulator Station A-20, Year 2011</p> <p>B. Regulator Station A-26, Year 2011</p>
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	<p>C. Regulator Station A-26, Year 2012</p> <p>D. Regulator Station A-28, Year 2012</p> <p>E. Regulator Station B-06, Year 2011</p> <p>F. Regulator Station B-04, Year 2013</p> <p>1.5.2 PG&E's Utility Work Procedure WP4540-01, District Regulator Station Maintenance, page 5, states in part:</p> <p><i>"Test the regulator for lock-up using the long/short line technique."</i></p> <p>The Division failed to test for regulator lock-up at the following regulator stations during the indicated year.</p> <p>A. Regulator Station A-20, Year 2011</p> <p>B. Regulator Station A-26, Year 2011</p> <p>C. Regulator Station A-26, Year 2012</p> <p>D. Regulator Station A-28, Year 2012</p> <p>E. Regulator Station B-06, Year 2011</p>
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PG&E RESPONSE

<p>1.1.1.</p> <p>A1 & A2) PG&E agrees with this finding. The 2011 SAP printout for Cathodic Protection Area (CPA) 3350-11 incorrectly listed Redacted three times, rather than the three separate yearly read locations: Redacted Sunnyvale. Each of the three separate locations were read in 2012. (See Attachment B) The locations for each yearly read within this CPA have been entered in the SAP maintenance tool and each location is now scheduled for a specific month.</p> <p>B1) PG&E respectfully disagrees this finding. The read was completed on November 2, 2012. (See Attachment C) PG&E apologizes for not having all the documents available at the time of audit.</p>

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B2) PG&E agrees with this finding. (See Attachment A) This is the same CPA as A1 & A2 above, and the preventative action noted above also applies to this location.

1.1.2

A) PG&E respectfully disagrees with this finding. CPA 3411-35 Rectifier #504 test and site evaluation was performed on June 13, 2012, and all fields on the form were completed. (See Attachment D)

B-C) PG&E agrees with these two findings. The second ground rod was installed on July 12, 2013. (See Attachment E)

D) PG&E agrees with this finding. See Attachment F for the 2013 Rectifier Site Evaluation form and the recorded ground rod resistance. To prevent recurrence, PG&E will be deploying mobile devices to capture maintenance activities electronically, throughout division operations by the summer of 2014. Programming the entry of maintenance activities into SAP will have validations that will not allow for preventative maintenance to be prematurely or inadvertently closed when corrective actions are required.

E) PG&E respectfully disagrees with this finding. The AC line breaker or fuse size for each year is documented on the Rectifier Site Evaluation Form. (See Attachment G)

1.1.3

A-B) PG&E agrees with these findings. The below -850 mV recording of these two annual read points did not trigger corrective orders and therefore CPA Action Plans were not created within 30 days as specified in Gas Standard O-16. See Attachment H showing the pipe-to-soil reads are now above -850 mV. To prevent recurrence, PG&E will be deploying mobile devices throughout division operations by the summer of 2014 to capture maintenance activities electronically. Programming the entry of maintenance activities into SAP will have validations that will not allow for preventative maintenance to be prematurely or inadvertently closed when corrective actions are required.

C) PG&E agrees to this finding. To prevent recurrence, the SAP maintenance scheduling tool will be programmed to generate a corrective order every 30 days after a pipe-to-soil reading is recorded below -850 mV. The corrective order will need to be completed describing the actions taken within the past 30 days. This programming revision is expected to be in place by May 30, 2014.

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1.1.4

A-C) PG&E agrees with these findings. De Anza Division failed to update the CPA Action Plans every 30 days as required in Gas Standard O-16. To prevent recurrence, the SAP maintenance scheduling tool will be programmed to generate a corrective order every 30 days after a pipe-to-soil reading is recorded below -850 mV. The corrective order will need to be completed describing the actions taken within the past 30 days. This programming revision is expected to be in place by May 30, 2014.

1.2

A-C) PG&E disagrees with these findings. The completion of the CPA file review forms for all 3 CPAs were completed on January 30, 2006, and then again on April 30, 2012. (See Attachment I)

The requirement to conduct a CPA review at a specified interval is found only in PG&E's Gas Standard O-16, and is not specified in state or federal code. PG&E defines "At least once every 6 nominal years" to mean within the sixth year, by December 31, 2012 in these cases.

1.3.

1A-E) PG&E agrees with these findings. De Anza Division Corrosion Department will add all closeout data including identifying P/S locations, bi-monthly and yearly reads on these CPA Re-survey maps by March 30, 2014.

2) PG&E agrees with this finding. The Re-survey map for CPA 3411-29 will have a legend added by March 30, 2014.

To prevent recurrence of these omissions on CPA Re-survey maps, the De Anza Division Corrosion Supervisor will ensure CPA Re-survey maps for De Anza Division are complete as CPA Re-surveys by December 31, 2014.

1.4

A) PG&E agrees with this finding. Project Management (PM) corrective order #41923014 was created on July 9, 2013 to complete this work. The work to re-coat the exposed pipe is scheduled to be completed by October 1, 2014 (See attachment J).

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B) PG&E disagrees with this finding. Action was taken by a corrosion mechanic to send field notations to Pipeline Patrol Process Owner (PPPO) per the work procedure quoted above, indicating that no follow-up action was required. A leak survey of the pipeline was also conducted on July 11, 2013, with no gas indication at this location. (See Attachment K)

1.5

1A- F) PG&E agrees with these findings. De Anza Division failed to record an “As Found” and an “As Left” filter differential pressure at the regulator stations during the indicated year. (See Attachment L)

2A-E) PG&E agrees with these findings. De Anza Division failed to record an “As Found” and an “As Left” regulator lock-up test at the regulator stations during the indicated year. (See Attachment L)

To prevent recurrence, De Anza Division T&R supervisor will review PG&E’s revised Utility Work Procedure TD-4540P-01, Maintenance of Regulator Stations with De Anza Division Gas T&R Department. Since the audit, TD-4540P-01 has been revised to stress the importance of recording all “as-left” equipment settings.

Also to prevent recurrence, PG&E will be deploying mobile devices throughout division operations by the summer of 2014 to capture maintenance activities electronically. Programming the entry of maintenance activities into SAP will have validations that will not allow for preventative maintenance to be prematurely or inadvertently closed when corrective actions are required.

ATTACHMENTS

Attachment #	Title or Subject
B	CPA 3350-11 Maintenance Reports
C	CPA 3409-01 Maintenance Report
D	Rectifier 504 Site Eval Form
E	Rectifier 207 Site Eval and Corr Order
F	2013 Rectifier 207 Site Eval
G	Rectifier 542 Site Eval Form
H	Restored P-S Read Records
I	CPA Reviews
J	DFM Re-wrap Order
K	Patrol and LS Documentation
L	Reg Station Maintenance Reports

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ACTION REQUIRED

Action To Be Taken	Due Date	Completion Date	Responsible Dept.
1.3 Complete CPA Re-survey Maps as required by WP 4133-02 for CPAs 3473-12, 3473-14, 3411-39, 3411-40, 3411-02, 3411-29	March 30, 2014		De Anza Division Corrosion
1.3 Complete CPA Re-survey Maps as required by WP 4133-02 for remaining CPAs	December 31, 2014		De Anza Division Corrosion
1.4 Re-coat DFMs at Permanente Flood crossing	October 1, 2014		De Anza Division Corrosion
1.5 Review the recently revised TD-4540P-01 Maintenance of Regulator Stations, emphasizing recording "As Left" conditions with De Anza Gas T&R Department	February 15, 2014		De Anza Division Gas T&R

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July 8-12, 2013	NOV – 2	Terence Eng	(415) 703-5326

INSPECTION FINDING

CPUC Finding	<p>B. Audit Findings and Violations</p> <p>2 <u>Title 49 CFR §192.481(a) states in part:</u></p> <p><i>“Each operator must inspect each pipeline or portion of pipeline that is exposed to the atmosphere for evidence of atmospheric corrosion, as follows. If the pipeline is located onshore, then the frequency of inspection is at least once every 3 calendar years, but with intervals not exceeding 39 months.”</i></p> <p>Location (2) 10” [Redacted] was inspected for atmospheric corrosion on 6/16/06 and subsequently on 3/30/10, exceeding an interval of 3 calendar years.</p>
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PG&E RESPONSE

<p>PG&E agrees with this finding.</p> <p>This exposed span location (two 10-inch mains) has been inspected again on December 5, 2012.</p> <p>To prevent recurrence, PG&E’s Asset Management team has scheduled all division-maintained exposed pipelines in SAP Preventative Maintenance tool as of December 2012. The maintenance for these exposed spans has been established in the SAP Preventative Maintenance tool for December of 2015.</p>
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ATTACHMENTS

Attachment #	Title or Subject
None	

ACTION REQUIRED

Action To Be Taken	Due Date	Completion Date	Responsible Dept.
No further action required.			

Definitions: NOV – Notice of Violation
 AOC – Area of Concern

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INSPECTION INFORMATION

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July 8-12, 2013	NOV – 3	Terence Eng	(415) 703-5326

INSPECTION FINDING

CPUC Finding	<p><u>B. Audit Findings and Violations</u></p> <p>3 <u>General Order 112-E, Section 143.2 states:</u></p> <p style="padding-left: 40px;"><i>“Valve Maintenance – Each valve, the use of which may be necessary for the safe operation of a distribution system, must be inspected, serviced, lubricated (where required) and partially operated at intervals not exceeding 15 months, but at least once each calendar year.”</i></p> <p>The Division did not partially operate critical main valve 3350-H3A in 2010.</p>
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PG&E RESPONSE

<p>PG&E agrees to this finding.</p> <p>This valve was inspected but not operated on April 22, 2010. On April 26, 2011, the valve was repaired and operated. An Alternative Means of Control (AMC) form was not completed per PG&E’s Gas Information Bulletin TD-4430B-001 once the valve was determined to be inoperable.</p> <p>To prevent recurrence, PG&E will be deploying mobile devices throughout division operations by the summer of 2014 to capture maintenance activities electronically. Programming the entry of maintenance activities into SAP will have validations that will not allow for preventative maintenance to be prematurely or inadvertently closed when corrective actions are required.</p> <p>The De Anza Division Gas T&R group received a tailboard reminder on November 27, 2013 on how to process valves determined to be inoperable (See Attachment M).</p>
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ATTACHMENTS

Attachment #	Title or Subject
M	AMC Processing Review

ACTION REQUIRED

Action To Be Taken	Due Date	Completion Date	Responsible Dept.
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Definitions: NOV – Notice of Violation
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Deploy mobile devices to record valve maintenance activities	July 31, 2014		Mobile Solutions – Gas Asset & Risk Management
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July 8-12, 2013	AOC – 1	Terence Eng	(415) 703-5326

INSPECTION FINDING

CPUC Finding	<p>C. Observations and Concerns</p> <ol style="list-style-type: none"> The plat map for CPA 3473-14 incorrectly indicated a section of main on Basin Way as isolated between sections of plastic.
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PG&E RESPONSE

<p>PG&E agrees with this concern, and has updated the plat map for Cathodic Protection Area (CPA) 3473-14 to indicate that this section of steel main is part of CPA 3473-14. (See Attachment N) This steel main on Redacted Redacted</p>

ATTACHMENTS

Attachment #	Title or Subject
N	Corrected plat map for CPA 3473-14

ACTION REQUIRED

Action To Be Taken	Due Date	Completion Date	Responsible Dept.
No further action required			

Definitions: NOV – Notice of Violation
 AOC – Area of Concern

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INSPECTION FINDING

CPUC Finding	C. Observations and Concerns L2. Plat maps for CPAs do not clearly distinguish between bi-monthly ETS locations and Annual ETS locations (e.g. CPA 3411-31, CPA 3473-14).
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PG&E RESPONSE

<p>PG&E agrees with this concern and believes it is helpful to be able to quickly distinguish between types of pipe-to-soil read types while viewing the Cathodic Protection Area (CPA) map.</p> <p>De Anza Division Corrosion Department will code the types of pipe-to-soil reads on the resurvey maps found in all the distribution CPA folders, with an expected completion date of December 31, 2014.</p>
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ATTACHMENTS

Attachment #	Title or Subject
None	

ACTION REQUIRED

Action To Be Taken	Due Date	Completion Date	Responsible Dept.
Distinction type of P/S reads on distribution CPA Resurvey maps	December 31, 2014		De Anza Division Corrosion

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July 8-12, 2013	AOC – 3	Terence Eng	(415) 703-5326

INSPECTION FINDING

CPUC Finding	<p>C. Observations and Concerns</p> <p>3. SED discovered a transposing error between handwritten notes and PG&E's Systems Applications and Products (SAP) database. Handwritten notes dated 9/26/12 for casing DACP17110 indicated a -913 mV P/S potential, and -53 mV casing-to-soil potential. The SAP database incorrectly indicated a -913 mV casing-to-soil potential and 53 % LEL (lower explosive limit) for this casing.</p>
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PG&E RESPONSE

<p>PG&E agrees with this concern.</p> <p>PG&E reviewed the handwritten notes with the employee taking the measurements. The values have been corrected in the SAP database and are as follows: Casing Potential = -53 mV Carrier Pipe Potential = -913 mV %LEL = 0% (gas-in-air taken at vent outlet)</p> <p>See Attachment O.</p>

ATTACHMENTS

Attachment #	Title or Subject
O	SAP Corrected Report

ACTION REQUIRED

Action To Be Taken	Due Date	Completion Date	Responsible Dept.
No further action required.			

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July 8-12, 2013	AOC – 4	Terence Eng	(415) 703-5326

INSPECTION FINDING

CPUC Finding	<p>C. Observations and Concerns</p> <p>4. On the Standard Cathodic Protection Maintenance Reports for CPA 3412-27, the Division incorrectly listed yearly location Redacted</p>
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PG&E RESPONSE

<p>PG&E agrees with this concern.</p> <p>PG&E has made this correction CPA 3412-27 Maintenance Report (See Attachment P).</p>

ATTACHMENTS

Attachment #	Title or Subject
P	CPA 3412-27 Maintenance Report

ACTION REQUIRED

Action To Be Taken	Due Date	Completion Date	Responsible Dept.
No further action required.			

Definitions: NOV – Notice of Violation
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July 8-12, 2013	AOC – 5	Terence Eng	(415) 703-5326

INSPECTION FINDING

CPUC Finding	<p>C. Observations and Concerns</p> <p>5. The pipeline span at [Redacted] was cut-off and removed in 2007. During the audit, SED and PG&E visited the location and confirmed that no PG&E pipeline spans existed. Division records indicate that a mechanic patrolled the pipeline span on 12/7/10. The mechanic indicated no issues in pipe condition, including a check mark for 'OK' under tab "Pipeline marker or sticker in plain sight and in good condition." If the Division removed the pipe in 2007, what was the mechanic inspecting in 2010 that had a PG&E pipeline marker or sticker in plain sight?</p>
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PG&E RESPONSE

<p>PG&E agrees with this concern.</p> <p>The pipeline span in question was deactivated in 2007. Please see attached plat maps showing the 2007 deactivation (Attachment Q). This exposed span location was not removed from the schedule to be inspected for atmospheric corrosion, and therefore visited in 2010 as noted above. PG&E's inspector confused other exposed piping facilities underneath the bridge and incorrectly recorded satisfactory gas piping conditions. It is uncertain why the mechanic noted that a PG&E pipeline marker was visible.</p> <p>This span was removed from the Atmospheric Corrosion exposed mains master list on July 11, 2013. In addition, this exposed span location was removed from the SAP Preventative Maintenance tool.</p>
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ATTACHMENTS

Attachment #	Title or Subject
Q	Plats 3411-F3 –F4

ACTION REQUIRED

Action To Be Taken	Due Date	Completion Date	Responsible Dept.
No further action required.			

Definitions: NOV – Notice of Violation
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INSPECTION INFORMATION

Inspection Dates	Finding	CPUC Contact	CPUC Phone #
July 8-12, 2013	AOC – 6	Terence Eng	(415) 703-5326

INSPECTION FINDING

CPUC Finding	<p><u>C. Observations and Concerns</u></p> <p>6. The Division incorrectly documented several valve positions.</p> <p>A. The Division incorrectly documented the ‘as found’ and ‘as left’ valve position of Valve 3411-E6C in 2010 and 2011 as Closed.</p> <p>B. The Division incorrectly documented the ‘as found’ and ‘as left’ valve position of Valve 3411-E6G in 2010 and 2011 as Open.</p> <p>C. The Division incorrectly documented the ‘as found’ and ‘as left’ valve position of Valve 3411-E6E in 2010 and 2011 as Open.</p> <p>SED recommends listing the valve position during normal operations on the cover page of the maintenance data sheet when applicable.</p>
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PG&E RESPONSE

<p>PG&E agrees with this concern.</p> <p>PG&E revised the Valve Maintenance Record to specify the normal valve position. (See Attachment R)</p> <p>De Anza Division Gas T&R has discussed this error, and the need to seek approval and record the reason for a valve to be found or to be left in a position other than its normal operating position.</p>

ATTACHMENTS

Attachment #	Title or Subject
R	TD-4430P-04-F01

ACTION REQUIRED

Action To Be Taken	Due Date	Completion Date	Responsible Dept.
No further action required.			

Definitions: NOV – Notice of Violation
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INSPECTION FINDING

CPUC Finding	<p>C. Observations and Concerns</p> <p>7. The Division created the following work orders in Table 3, but had not completed the work as of the end of the audit. SED would like an update on the status of these work orders.</p> <p style="text-align: center;">Table 3: Valves With Work Orders</p> <table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th>Valve</th> <th>Work Order #</th> <th>Created</th> <th>Status</th> </tr> </thead> <tbody> <tr> <td>V-3411-H7A</td> <td>41669314</td> <td>3/30/12</td> <td>Open</td> </tr> <tr> <td>V-3348-H7</td> <td></td> <td>5/21/12</td> <td>Open</td> </tr> <tr> <td>V-3349-I4G</td> <td>41682113</td> <td>2011</td> <td>Plan to replace in 2014</td> </tr> </tbody> </table>	Valve	Work Order #	Created	Status	V-3411-H7A	41669314	3/30/12	Open	V-3348-H7		5/21/12	Open	V-3349-I4G	41682113	2011	Plan to replace in 2014
Valve	Work Order #	Created	Status														
V-3411-H7A	41669314	3/30/12	Open														
V-3348-H7		5/21/12	Open														
V-3349-I4G	41682113	2011	Plan to replace in 2014														

PG&E RESPONSE

<p>PG&E replaced valve V-3411-H7A on August 21, 2013. See Attachment S. PG&E replaced valve V-3349-I4G on August 27, 2013. See Attachment T.</p> <p>The middle row in Table 3 above is not an emergency valve. It is an ongoing gas service overbuild on Plat Map 3348-H7. The customer built a new structure that enclosed the gas meter and riser. Currently, we are still working with the customer to resolve this issue. See Attachment U.</p>

ATTACHMENTS

Attachment #	Title or Subject
S	V-3411-H7A
T	V-3349-I4G
U	Gas Service Order

ACTION REQUIRED

Action To Be Taken	Due Date	Completion Date	Responsible Dept.
Work with customer to resolve service overbuild	March 31, 2014		Local Engineering

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INSPECTION FINDING

CPUC Finding	<p>C. Observations and Concerns</p> <p>8. Valve Maintenance Record Forms indicated that the following five January Cycle valves were critical main valves requiring annual maintenance: 3410-D3A, 3350-F3C, V0.82, V6.6, and V1. The Division claimed that they were not critical main valves requiring annual maintenance. Please provide an explanation for the discrepancy.</p>
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PG&E RESPONSE

<p>Prior to 2013, De Anza Division has not considered these valves to be emergency valves. These valves are not part of an emergency shutdown zone, nor or they necessary in an emergency, and therefore had not been included in the division’s valve maintenance plan.</p> <p>At the beginning of 2013, these valves were observed on operating maps, and because of their designations, a decision was made to include them in the valve maintenance plan, and begin to maintain them annually. Gas T&R personnel completed Valve Maintenance Records but did not explain why 2013 was the first record of service history.</p> <p>De Anza Division will continue to keep these valves in its annual valve maintenance plan.</p>

ATTACHMENTS

Attachment #	Title or Subject
None	

ACTION REQUIRED

Action To Be Taken	Due Date	Completion Date	Responsible Dept.

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INSPECTION FINDING

CPUC Finding	<p><u>C. Observations and Concerns</u></p> <p>9. PG&E’s Standard O-16, Corrosion Control of Gas Facilities, page 6 states in part:</p> <p style="padding-left: 40px;"><i>“Gas distribution test locations selected for monitoring cathodic protection effectiveness shall be at locations where the level of protection is the lowest for that CPA or shall be at locations where the loss of effective CP in the CPA would be detected.”</i></p> <p>In 2011, a mechanic designated a new test location in CPA 3349-19 approximately 0.5 miles away from an existing test location, effectively nulling the existing test location. It is unclear if the Division performed an analysis to ensure the new test location is where the level of protection is the lowest for that CPA or at a location where the loss of effective cathodic protection in the CPA would be detected.</p>
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PG&E RESPONSE

Although Gas Standard O-16 does not designate who has authority to designate test locations or change test locations within a distribution cathodic protection area, the Corrosion Mechanic assigned to the CPA has the best understanding of determining the test locations that represent cathodic protection effectiveness for the entire CPA. Corrosion Mechanics do occasionally change test location points based on changing field conditions such as deactivation of gas facilities or inaccessible read locations (e.g., aggressive dog). Confirmation of effective test locations is done periodically by resurvey of distribution CPA’s every six years per WP-4133-02 “Cathodic Protection Area Assessment/Resurvey Procedure for Gas Distribution”.

ATTACHMENTS

Attachment #	Title or Subject
None	

ACTION REQUIRED

Action To Be Taken	Due Date	Completion Date	Responsible Dept.
No further action required.			

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INSPECTION FINDING

CPUC Finding	<p>C. Observations and Concerns</p> <p>10. During SED’s field inspection, SED and PG&E discovered a yearly P/S potential reading that did not meet the -850 mV criteria (-683 mV) at [Redacted]. [Redacted] SED also discovered a gas leak (confirmed by a soap test) originating from the customer side piping just downstream of the customer meter. Please provide SED a status report on the action the Division performed to address the leak and restore the cathodic protection to an adequate level at this location.</p>
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PG&E RESPONSE

<p>Upon observation of the leak on the houseline during the CPUC audit, PG&E shut off service to this customer. The customer was informed and made repairs. A Gas Service Representative (GSR) was dispatched on July 16, 2013, confirmed that the houseline was not leaking by following PG&E Utility Standard TD-6434P-01 Gas Leak and Odor Investigation and conducted a clock test of the houseline at the meter set. The GSR then restored gas service. See Attachment V.</p> <p>As of December 9, 2013, the pipe-to-soil reading at [Redacted] is -1167 mV. (See Attachment W) The reason for the delay in recording the adequate pipe-to-soil reading is that De Anza Division Corrosion Department failed to create a corrective order when the read was taken during the July audit. De Anza Division Corrosion Department has since discussed the need to create corrective orders when inadequate pipe-to-soil readings are observed.</p>
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ATTACHMENTS

Attachment #	Title or Subject
V	7-16-13 Field Activity Print-out
W	2013 CPA 3411-39 Maintenance Record

ACTION REQUIRED

Action To Be Taken	Due Date	Completion Date	Responsible Dept.
No further action required.			

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INSPECTION FINDING

CPUC Finding	<p><u>C. Observations and Concerns</u> 11. During SED’s field inspection, SED discovered atmospheric corrosion on the Division’s facilities at 190 S Murphy Ave, Sunnyvale.</p>
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PG&E RESPONSE

<p>PG&E agrees with this concern.</p> <p>On July 16, 2013, a Gas Service Representative eliminated the atmospheric corrosion condition by replacing the meter set. (See Attachment X)</p>

ATTACHMENTS

Attachment #	Title or Subject
X	7-16-13 Meter Set Installation

ACTION REQUIRED

Action To Be Taken	Due Date	Completion Date	Responsible Dept.
No further action required			

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INSPECTION FINDING

CPUC Finding	<p><u>C. Observations and Concerns</u></p> <p>12. The Division recorded the presence of atmospheric corrosion at Redacted Redacted during its patrol in 2012. During SED’s field inspection at that location, SED discovered atmospheric corrosion not on PG&E facilities, but on the customer side piping.</p>
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PG&E RESPONSE

<p>PG&E agrees with this concern.</p> <p>PG&E does not consider this atmospheric corrosion as a potential safety hazard, and has determined the most expeditious course of action to keep this houseline piping in satisfactory condition is to prime and re-paint the piping. This work was completed on January 10, 2014. (See Attachment Y)</p>
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ATTACHMENTS

Attachment #	Title or Subject
Y	Picture of houseline painted

ACTION REQUIRED

Action To Be Taken	Due Date	Completion Date	Responsible Dept.
No further action required			

Definitions: NOV – Notice of Violation
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