



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

November 19, 2013

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 San Francisco 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 San Francisco Division, from June 8-12, 2012. On October 4, 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] at [Redacted] or [Redacted] for any questions you may have regarding this response.

Sincerely,

/S/
Frances Yee

Attachments

cc: Aimee Cauguiran, 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 October 4, 2013
San Francisco Division**

INSPECTION INFORMATION

Inspection Dates	Finding	CPUC Contact	CPUC Phone #
October 8-12, 2012	Internal Review	Aimee Cauguiran	(415) 703-2055

INSPECTION FINDING

CPUC Finding

A. PG&E's Internal Audit Findings

Prior to start of the audit, PG&E provided the results of their internal audit of the San Francisco Division's (Division) records. Many of PG&E's internal audit findings are violations of PG&E's own standards, and therefore a violation of Title 49 Code of Federal Regulations (CFR) §192.13(c) or §192.605(a). Other issues found are violations of Title 49 CFR 192 as shown in Table 1.

We note that the Division corrected several of the findings, while some were addressed during their subsequent scheduled maintenance. Please provide updates on items that were still pending corrective actions as of the last day of the audit.

Table 1: PG&E's Internal Audit Findings

	GO-112E Section or 49 CFR Part 192	Topic	# of Violations	# of Violations Corrected	# of Pending Corrections (as of 10/12/2012)
1	192.723(b)(1) and 192.723(b)(2)	Distribution Leak Survey (2009-2010) – Missed or Late Surveyed	19	19	0
2	192.706	Transmission Leak Survey- semi-annual (Late survey)	2	2	0
3	192.605(a)	Distribution Leak Repairs (2011) – Soap test not indicated on form when needed, missing P/S reads, missing USA info	236	0	236
4	192.703(c)	Distribution Leak Repairs - Late repair	2	2	0
5	192.503(a)	Pressure test after repairs	1	1	0
6	192.605(a) and 192.467	Casings not monitored annually	13	13	0
7	192.465(a)	Missed rectifier read	1	0	1
8	192.605(a)	Yearly P/S location not established, missing signature on maintenance sheet, missing pre/post rectifier reads, no actions noted for P/S over -1600mV, missing calibration records for P/S electrode	12	12	9 (2011 GTS review)
9	192.605(a) and 192.739(a)	Late B inspection, chart recorder calibration missing, Station diagrams needing updates; Regulating station maintenance – NOP/MAOP limits	42	42	0
10	192.749	Missing confined space forms (Regulator Stations)	47	47	0
11	192.743(a)	Missing relief capacity calculations	2	2	0

Definitions: NOV – Notice of Violation
FR – Field Review
AOC – Area of Concern

**General Order 112-E Findings
CPUC Inspection Report, dated October 4, 2013
San Francisco Division**

12	192.605(a)	Valves – Did not lubricate valve, plat maps needs update, missing information on valve card, maintenance forms not initialed and dated, Emergency zones not reviewed annually	2577	2577	0
13	192.625(f) and 192.13 (c)	Missed odorant tests	6	6	0
14	192.727 and 192.605(a)	Deactivation of facilities (cannot locate record for deactivation in 2011)	1	0	1
15	192.619(a)	MAOP record for Bayview HP system does not support MAOP pressure rating	1	1	0
16	192.605(a)	Emergency Liaison missing record (2009/2010), Leak survey records not completed correctly (2011), MAOP review documents not completed correctly (2011), Deactivation records not completed corrected	159	159	0

PG&E RESPONSE

Please see Attachment A for an update of the actions taken or to be taken to correct the findings from the internal review. For the items listed in Table 1 above, actions are as follows:

Item #3:

- Preventative action to prevent recurrence for all 236 findings noted in Table 1 above, a tailboard briefing with San Francisco Division Gas M&C personnel will be held by December 6, 2013 to review leak repair and documentation requirements.
- Corrective actions will be as follows:
 1. A review of each of the 158 leak repair locations with no documentation of a soap test will be made by February 28, 2014 to confirm that a subsequent leak survey has not found any indication of gas. If any leak repair location has not yet been subsequently leak surveyed, a post repair check will be performed by February 28, 2014 to ensure no indication of gas exists.
 2. Each of the 61 external corrosion leak repair locations with no pipe-to-soil potential reading taken will be visited by February 28, 2014 and a pipe-to-soil potential reading will be taken at the nearest service riser or Electrolysis Test Station (ETS) to determine adequate cathodic protection.
 3. For the 17 leak repair A-forms with no USA ticket number listed, PG&E is only addressing with preventative action, as noted above, because the excavation and

Definitions: NOV – Notice of Violation
 FR – Field Review
 AOC – Area of Concern

**General Order 112-E Findings
CPUC Inspection Report, dated October 4, 2013
San Francisco Division**

repair has been performed well beyond the expiration date of USA tickets.

Item #7:

- Upon further review, this internal review finding was determined not to be correct. The cathodic protection area for which this finding was noted is protected galvanically and therefore does not have a rectifier.

Item #8:

- Properly documenting cathodic protection maintenance items will be reviewed with San Francisco Division Corrosion Mechanics by December 6, 2013.

Item #14:

- The service cut-off was found subsequent to the Internal Review Summary being generated. It was determined to be properly documented and filed.
- A tailboard briefing with San Francisco Division Gas M&C personnel will be held by December 6, 2013 to review documentation requirements of deactivation gas distribution facilities per work procedure TD-9500P-16

ATTACHMENTS

Attachment #	Title or Subject
A	Updated Internal Review Summary

ACTION REQUIRED

Action To Be Taken	Due Date	Completion Date	Responsible Dept.
Conduct tailboard briefings of 1) leak repair requirements, 2) Gas Std O-16 Corrosion Control requirements, 3) Odor Intensity reading requirements, 4) TD-9500P-16 Deactivation requirements	December 6, 2013		San Francisco Division M&C
Finalize review of 158 leak repair locations to confirm that subsequent leak survey has found no leaks.	February 28, 2014		San Francisco Division M&C
Take pipe-to-soil readings at nearby riser or ETS of 61 external corrosion leak repair locations without readings	February 28, 2014		San Francisco Division M&C

Definitions: NOV – Notice of Violation
 FR – Field Review
 AOC – Area of Concern

**General Order 112-E Findings
CPUC Inspection Report, dated October 4, 2013
San Francisco Division**

INSPECTION INFORMATION

Inspection Dates	Finding	CPUC Contact	CPUC Phone #
October 8-12, 2012	NOV – 1	Aimee Cauguiran	(415) 703-2055

INSPECTION FINDING

CPUC Finding	<p><u>B. Areas of Violations</u></p> <p>1. Title 49 CFR §192.605(a) states in part:</p> <p style="text-align: center;"><i>“General. Each operator shall prepare and follow for each pipeline, a manual of written procedures for conducting operations and maintenance activities and for emergency response.”</i></p> <p>PG&E UO Standard S4110 requires recheck of existing Grade 3 leaks during the next scheduled leak survey. The interval shall not be less than 6 months or greater than the next required scheduled leak survey.</p> <p>a) The Division did not have records of rechecks for the following Grade 3 leaks on Plat 2-E01:</p> <ul style="list-style-type: none"> • Leak # 07204811 – [Redacted] San Francisco: Initially found in 2007, but no record of recheck during the annual surveys in 2008 and 2009. • Leak # 07204851 – [Redacted] San Francisco: Initially found in 2007, but no record of recheck during the annual surveys in 2008 and 2009. • Leak # 08208541 – [Redacted] San Francisco: Initially discovered in 2008, but no record of recheck during the annual leak survey in 2009. • Leak # 04206921 – [Redacted] San Francisco: Discovered in 2004, but no record of recheck during the annual leak survey in 2009. • Leak # 08204281 – [Redacted] Initially found in 2008, but no record of recheck during succeeding annual leak surveys. <p>b) The Division found the following leaks during its accelerated leak survey on 6/16/2009:</p>
--------------	--

Definitions: NOV – Notice of Violation
 FR – Field Review
 AOC – Area of Concern

**General Order 112-E Findings
CPUC Inspection Report, dated October 4, 2013
San Francisco Division**

	<ul style="list-style-type: none"> • Leak #09900701 at Redacted San Francisco • Leak #09900621 at Redacted San Francisco • Leak #09900611 at Redacted San Francisco 	
	<p>The Division included the leaks in the list of open leaks that it scheduled to recheck for Plat 3-A08, which recently was 5-year leak surveyed on 5/5/2012. During the recent survey, the Division noted the leaks were “not on map”, and thus the Division did not recheck the leaks. The Division later discovered that the leaks should have been included in the list of open leaks for the adjacent Plat 3-A09, which it leak surveyed in May 2012. The next 5-year leak survey for this plat is scheduled for 2017. Thus, the Division missed rechecking the leaks at the interval specified in PG&E Standard S4110.</p>	

PG&E RESPONSE

<p>a) PG&E agrees with this finding.</p> <p>Documentation for the leak rechecks was not completed as specified in PG&E’s leak survey standards. The locations of all five of these Grade 3 leaks have been subsequently leak surveyed as recognized in the CPUC report and no indication of gas was found. These leaks have been “zeroed out” in PG&E’s leak management system (IGIS). This means that they are no longer considered to be leaks. In January of 2012, PG&E revised its process to include rechecking of new Grade 3 leaks within 15 months. This was communicated throughout the Maintenance & Construction and Mapping organizations, including the need to provide open leak logs to leak survey personnel prior to conducting leak surveys to ensure that Grade 3 leaks are checked at the time of the leak survey. To ensure continued understanding of these requirements to provide leak survey personnel with open leak logs prior to conducting leak surveys, a refresher tailboard briefing will be provided to San Francisco Division leak survey and mapping personnel.</p> <p>b) PG&E agrees with this finding that the May 2012 leak survey of Map 3-A09 did not include the list of these open leaks to reference. However, no indication of gas was found at these three locations during the May 2012 leak survey and the 2009 leaks have therefore been “zeroed out”.</p>
--

ATTACHMENTS

Attachment #	Title or Subject
None	

Definitions: NOV – Notice of Violation
 FR – Field Review
 AOC – Area of Concern

**General Order 112-E Findings
 CPUC Inspection Report, dated October 4, 2013
 San Francisco Division**

ACTION REQUIRED

Action To Be Taken	Due Date	Completion Date	Responsible Dept.
Conduct refresher tailboard briefing on requirements to have open leak logs provided prior to conducting leak surveys	December 6, 2013		San Francisco Division M&C and Mapping Dept.

Definitions: NOV – Notice of Violation
 FR – Field Review
 AOC – Area of Concern

**General Order 112-E Findings
CPUC Inspection Report, dated October 4, 2013
San Francisco Division**

INSPECTION INFORMATION

Inspection Dates	Finding	CPUC Contact	CPUC Phone #
October 8-12, 2012	NOV – 2	Aimee Cauguiran	(415) 703-2055

INSPECTION FINDING

CPUC Finding	<p><u>B. Areas of Violations</u></p> <p>2. 49 CFR § 192.747(a) states:</p> <p style="text-align: center;"><i>“Each valve, the use of which may be necessary for the safe operation of a distribution system, must be checked and serviced at intervals not exceeding 15 months, but at least once each calendar year.”</i></p> <p>The Alternate Means of Control (AMC) established for Valves 8004 and 8025 include Valve 8054, which does not have a maintenance record showing that the Division has maintained the valve and it is operable. This is a violation of 49 CFR §192.747(a).</p>
--------------	---

PG&E RESPONSE

<p>PG&E agrees with this finding.</p> <p>A Gas Mechanic was sent to perform and document maintenance of V-8054 on January 4, 2013 (See Attachment B). The Gas Mechanic verified that the valve was accessible, operable, and properly labeled. The previous maintenance record for this valve was lost. This valve continues to be scheduled for annual maintenance in the SAP Preventative Maintenance program.</p> <p>The inoperable valves V-8004 and V-8025 have been replaced. V-8004 was replaced in December of 2012 (See Attachment C). V-8025 was replaced with V-8061 in September of 2012 (See Attachment D).</p> <p>To prevent recurrence, San Francisco Division Gas T&R and local engineering will provide a tailboard briefing to ensure that designating an alternative means of control (AMC) of an inoperable valve needs to select other existing operable emergency valves.</p>

ATTACHMENTS

Attachment #	Title or Subject
---------------------	-------------------------

Definitions: NOV – Notice of Violation
 FR – Field Review
 AOC – Area of Concern

**General Order 112-E Findings
CPUC Inspection Report, dated October 4, 2013
San Francisco Division**

B	Valve Maintenance for V-8054
C	Valve Maintenance for V-8025
D	Valve Maintenance for V-8061

ACTION REQUIRED

Action To Be Taken	Due Date	Completion Date	Responsible Dept.
Conduct tailboard briefing on proper AMC designation	December 6, 2013		SF Division Gas T&R and Local Engineering

Definitions: NOV – Notice of Violation
 FR – Field Review
 AOC – Area of Concern

**General Order 112-E Findings
CPUC Inspection Report, dated October 4, 2013
San Francisco Division**

INSPECTION INFORMATION

Inspection Dates	Finding	CPUC Contact	CPUC Phone #
October 8-12, 2012	NOV – 3	Aimee Cauquiran	(415) 703-2055

INSPECTION FINDING

CPUC Finding	<p><u>B. Areas of Violations</u></p> <p>3. 49 CFR § 192.747(b) states:</p> <p style="text-align: center;"><i>“Each operator must take prompt remedial action to correct any valve found inoperable, unless the operator designates an alternative valve.”</i></p> <p>The Division personnel found Valve # 859 inoperable on 3/4/2010. The Division created an AMC on 4/13/2011, which is eight months after PG&E published Gas Information Bulletin TD-4430B-001 on 8/26/2010 and 13 months after the Division identified the valve as inoperable in March of 2010. This is a violation of 49 CFR §192.747(b) for failing to take prompt remedial action either by correcting the valve found inoperable or designating an alternative valve upon discovery of the inoperable valve.</p>
--------------	---

PG&E RESPONSE

<p>PG&E agrees with this finding. After the August 2010 publication of Gas Information Bulletin TD-4430B-001, which establishes an Alternate Means of Control (AMC) for inoperable valves, San Francisco Division did not immediately apply it to valves that were previously determined to be inoperable. The valve has since been repaired (See Attachment E). All AMC forms are now filled out and reviewed by engineering personnel for the appropriate alternate valve designation and appended in the Emergency Shutdown Zone binder.</p> <p>To prevent recurrence, San Francisco Division Gas T&R and local engineering will provide a tailboard briefing to ensure that designating an alternative means of control for inoperable emergency valves is processed promptly.</p>
--

ATTACHMENTS

Attachment #	Title or Subject
E	Valve Maintenance for V-859

ACTION REQUIRED

Definitions: NOV – Notice of Violation
 FR – Field Review
 AOC – Area of Concern

**General Order 112-E Findings
 CPUC Inspection Report, dated October 4, 2013
 San Francisco Division**

Action To Be Taken	Due Date	Completion Date	Responsible Dept.
Conduct tailboard briefing on the prompt completion of Alternate Means of Control form for inoperable valves	December 6, 2013		SF Division Gas T&R and Local Engineering

Definitions: NOV – Notice of Violation
 FR – Field Review
 AOC – Area of Concern

**General Order 112-E Findings
CPUC Inspection Report, dated October 4, 2013
San Francisco Division**

INSPECTION INFORMATION

Inspection Dates	Finding	CPUC Contact	CPUC Phone #
October 8-12, 2012	FR – 1	Aimee Cauguiran	(415) 703-20555

INSPECTION FINDING

CPUC Finding	<p><u>C. Field Review</u></p> <p>1. Regulator Station 113 at Redacted</p> <p>The Division maintenance record indicated that it was concerned regarding the condition of the piping at the regulator station from 2010 to 2012. SED inspected the regulator station and verified the condition of the pipe at the station, which appeared to have significant atmospheric corrosion and may need a sandblast to properly clean the pipe prior to painting.</p>
---------------------	--

PG&E RESPONSE

<p>PG&E agrees with this concern.</p> <p>A corrective work order ticket was created in February 2013 (See Attachment F). Regulator Station DR113 was sandblasted and painted in March of 2013. Please see the April 20, 2013 photograph of the freshly painted station piping (Attachment G).</p>

ATTACHMENTS

Attachment #	Title or Subject
F	DR113 Corrective Work Order Ticket
G	April 2013 picture of DR113 station piping

ACTION REQUIRED

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

Definitions: NOV – Notice of Violation
 FR – Field Review
 AOC – Area of Concern

**General Order 112-E Findings
CPUC Inspection Report, dated October 4, 2013
San Francisco Division**

INSPECTION INFORMATION

Inspection Dates	Finding	CPUC Contact	CPUC Phone #
October 8-12, 2012	FR – 2	Aimee Cauguiran	(415) 703-2055

INSPECTION FINDING

CPUC Finding	<p>C. Field Review</p> <p>2. The following locations had pipe-to-soil (P/S) readings that did not meet the -850mV criterion:</p> <ul style="list-style-type: none"> • Cathodic Protection Area (CPA) 2504: Bimonthly location at [Redacted] San Francisco -530mV • CPA L-132C: ETS at [Redacted] San Francisco: The P/S reads were fluctuating between -500mV and -900mV, but appeared to settle at around -700mV.
--------------	---

PG&E RESPONSE

<p>Cathodic Protection Area (CPA) 2504 was rechecked during its bi-monthly read on October 15, 2012 (See Attachment H). The pipe-to-soil reading at [Redacted] was -1024mV. This reading is consistent with the bi-monthly read trends in the months of August, October and December 2012. Trouble shooting in the area was performed with no indication of any contact issues. It is not uncommon to observe low pipe-to-soil readings due to temporary contacts, such as a bicycle resting on a meter set and shorting the electrical insulation, and subsequent troubleshooting determines no indication of inadequate cathodic protection.</p> <p>CPA-L132C was part of a system of transmission mains that were in the process of being downrated (converted to distribution). This project was lengthy and costly due to the size of the main involved. An insulator was in the process of being installed in the time-frame of the October 2012 field visit. Additional anodes were also installed as part of this project. This piping is now part of CPA 2411. Pipe-to-soil readings were confirmed to be “up” (providing an adequate level of cathodic protection of more negative than -850mV reading) after all work was completed in the area and insulator installation in June of 2013. See Attachment I.</p>
--

ATTACHMENTS

Attachment #	Title or Subject
H	2012 CPA 2504 Maintenance Report
I	2013 CPA 2411 Maintenance Report

Definitions: NOV – Notice of Violation
 FR – Field Review
 AOC – Area of Concern

**General Order 112-E Findings
CPUC Inspection Report, dated October 4, 2013
San Francisco Division**

ACTION REQUIRED

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

Definitions: NOV – Notice of Violation
 FR – Field Review
 AOC – Area of Concern

**General Order 112-E Findings
CPUC Inspection Report, dated October 4, 2013
San Francisco Division**

INSPECTION INFORMATION

Inspection Dates	Finding	CPUC Contact	CPUC Phone #
October 8-12, 2012	AOC – 1	Aimee Cauguiran	(415) 703-2055

INSPECTION FINDING

CPUC Finding	<u>D. Areas of Concern/Recommendations</u>
	<p>The Division installed new regulators at Regulator Station 113 located at [Redacted] on 12/22/11. However, there was no record of “As Left” regulator settings or a note showing that the Division conducted a lock-up check after it installed the regulators. SED recommends that at a minimum, the Division should indicate in its records the “As Left” settings for the new regulators as a reference for its personnel who will be performing maintenance on the station subsequent to the new installation.</p>

PG&E RESPONSE

<p>PG&E agrees with this concern. All in-service regulator stations are to have the Regulator Station Datasheet TD-4540P-01-F01 completed and on file for Gas T&R department personnel to reference. This form requires that regulator station setpoints be noted (See Attachment J). All equipment must be checked for proper operation prior to being placed in service. This includes regulator lock-up. A tailboard reminder to ensure that the regulator setpoints for newly installed regulator stations be recorded will be given to the San Francisco Division Gas T&R Department by December 6, 2013. To ensure these items are documented, the next version of Gas Standard TD-4540S, Gas Pressure Regulation Maintenance Requirements, will specify what documentation is required when stations are first put into service.</p>

ATTACHMENTS

Attachment #	Title or Subject
J	Regulator Station Datasheet

ACTION REQUIRED

Action To Be Taken	Due Date	Completion Date	Responsible Dept.
Provide reminder to Gas T&R to record the regulator setpoints at newly installed	December 6, 2013		San Francisco Division Gas

Definitions: NOV – Notice of Violation
 FR – Field Review
 AOC – Area of Concern

**General Order 112-E Findings
CPUC Inspection Report, dated October 4, 2013
San Francisco Division**

regulator stations			T&R
Issue documentation requirements for stations first put into service in next version of TD-4540S	Target November 2014		Codes and Standards

Definitions: NOV – Notice of Violation
 FR – Field Review
 AOC – Area of Concern