#### PUBLIC UTILITIES COMMISSION

505 VAN NESS AVENUE SAN FRANCISCO, CA 94102-3298



April 9, 2015

GA2014-08

Mr. Sumeet Singh, Vice President Pacific Gas and Electric Company Gas Asset and Risk Management 6111 Bollinger Canyon Road, Room 4590-D San Ramon, CA 94583

SUBJECT: General Order 112-E Gas Distribution Inspection of PG&E's San Francisco Division

Dear Mr. Singh:

On behalf of the Safety and Enforcement Division (SED) of the California Public Utilities Commission, Paul Penney, Frankie Chan, Sikandar Khatri and Joel Tran conducted a General Order 112-E safety inspection of Pacific Gas & Electric Company's (PG&E) San Francisco Division (Division) from August 11-22, 2014. Also present at the audit were Rex Evans and Michael Thompson of PHMSA. The inspection included a review of the Division's records for the period of 2012—2013 and other associated records. Representative field samples of the Division's facilities were also inspected. SED staff also included field observations of a selected individual performing a covered task.

SED's findings are noted in the Summary of Inspection Findings (Summary) which is enclosed with this letter. The Summary reflects only those records and pipeline facilities that SED inspected during the inspection.

Within 30 days of your receipt of this letter, please provide a written response indicating the measures taken by PG&E to address the violations, concerns and recommendations noted in the Summary. Pursuant to Commission Resolution ALJ-274, SED staff has the authority to issue citations for each violation found during the inspection.

If you have any questions, please contact Paul Penney at (415) 703-1817 or by email at Paul.Penney@cpuc.ca.gov.

Sincerely,

Kenneth Bruno

Program Manager
Gas Safety and Reliability Branch

Safety and Enforcement Division

Enclosure: Summary of Inspection Findings

cc: Larry Berg, PG&E Gas Regulatory Support Mike McLaughlin, PG&E Gas Regulatory Support Larry Deniston, PG&E Gas Regulatory Support

## **SUMMARY OF INSPECTION FINDINGS**

#### I. Probable Violations

# A. PG&E's Internal Audit Findings

Prior to the safety inspection, PG&E provided SED staff with its findings from the internal review it conducted of San Francisco Division.

Table 1 lists all of the findings from PG&E's internal review. Some of PG&E's internal review findings are violations of PG&E's standards, and are therefore violations of Title 49 Code of Federal Regulations (CFR), §192.13(c).

SED staff noted that all of the findings were corrected prior to the inspection.

Table 1: PG&E's San Francisco Division Internal Review

Item	Finding Description	# of findings	# of Pending Corrections (as of 8/22/14)	Remediation Date
	1. Missing Pipe/Soil read (When any BG,			
	Bare Steel Pipe is Exposed): 1a) 2012: 4			
	(6011210241;6012201101;6012201451;60			
1	12206001)	4	0	1/2/13
	1. Odor Intensity Tests Not Conducted		<del></del>	
	Weekly (once within a week, not to exceed			
	14 days)		•	April and
2	1a) 2013:2	2	0	Dec., 2013
	1. Bi-Monthly P/S Reads Not Read 6 time Each Calendar Year or Exceed 2-1/2			
	months			
	1a) 2012: 27			
	(2325-A; 2325-B; 2315-A; 2315-B; 2319-			
	A; 2419-A; 2319-B; 2328-A; 2330-A;			
	2330-B; 2331-A; 2331-B; 2331-C; 2331-D;			
	2404-A; 2404-B; 2404-C; 2404-D; 2405-A; 2405-B; 2419-B; DFM#3; DFM#4;			
3	DFM#7; PENN; PENN-B; 2327-A)	27	0	2012
	2. No Written action plan is developed and			2012
	in file of all corrective work requiring more			
	than 30 days to complete. Action plans are			
	documented on From FO-16-B, CPA			
	Follow-Up Action Plan.			9/9/13
4	2a) 2013:3			6/26/13
4	(2416-B; 2418-A; 2419-A)	3	0	8/13/13
	3. Annuals not being read timely. 3a) 2014 review identified 8 instances			8/25/14
	where annuals existed and had not been			through
5	read for multiple years.	8	0	8/30/14

Table 2: PG&E's San Francisco Division Internal Review (continued)

Item	Finding Description	# of findings/ Violations	# of Pending Corrections (as of 8/22/14)	Remediation Date
	1. Deactivation Records Not Reviewed Within Req Time Limits: 1a) 2012: 2			11/13/13 And
6	(1133-5 Mission St;1420-22 23rd St)	2	0	5/1/14

#### B. SED Findings

1. Title 49 CFR §192.13(c) states: "Each operator shall maintain, modify as appropriate, and follow the plans, procedures and programs that it is required to establish under this part."

And,

PG&E's Utility Procedure TD-4133P-01, Section 5 (Troubleshooting and T&R Restoration), Step B.CP.37 requires the gas distribution specialist and corrosion mechanic to escalate the process when restoration takes longer than 30 days. This requires that the steps in Section 6 [Escalation of Overdue Actions (CPA Down Longer Than 30 Days)] be followed. Section 6, Step B.CP.48 requires a corrosion mechanic to fill out a CP action plan that must be updated at least once every 30 days. The details for the non-compliances are as follows:

On 2/3/2012, two low pipe-to-soil reads were discovered by a corrosion mechanic in CPA 2405\_A during routine CP reads. The two monitoring locations were 61 Minerva St, San Francisco [Bi-monthly ETS], and "3' N/S/L Niagara 19' E/W/L Howth, San Francisco" [Bi-monthly ETS]. The CPA was restored on 4/3/12. As noted above, if the CPA is down for 30 days, a written CPA action plan must be created and updated at least once every 30 days. Although actions to restore the CPA are identified in the SAP printout, a written CP action plan was not found for this CPA.

On 12/9/2013, a low pipe-to-soil read was found by a corrosion mechanic in CPA 2405\_B during routine CP reads. The monitoring location was described as: "12' E/W/L ILLINOIS 25' S/S/L 22ND STREET, SAN FRANCISCO" [Bi-Monthly ETS]. Trouble shooting activities were required by 1/9/2014; however there were no troubleshooting activities or corrective actions documented in the SAP log until 1/30/2014. As noted above, if the CPA is down for 30 days, a written CPA action plan must be created and updated at least once every 30 days.

2. Title 49 CFR §192.491 states: "Each operator shall maintain records or maps to show the location of cathodically protected piping, cathodic protection facilities, galvanic anodes, and neighboring structures bonded to the cathodic protection system. Records or maps showing a stated number of anodes, installed in a stated manner or spacing, need not show specific distances to each buried anode." [Underline Added]

As required by this code section, records or maps of anode locations shall be maintained. However, PG&E did not have documentation on the maps to show anode locations for CPAs 2106 or 2207. If PG&E has other records that indicate the locations of anodes on isolated steel sections of pipe in these two CPAs, please provide a copy of them. Also, please indicate how PG&E will ensure compliance with this code section going forward.

3. Title 49 CFR §192.747(a) states: "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."

While reviewing emergency isolation zone valve maintenance for 2012 and 2013, SED engineers noted that certain valves were not in the maintenance spreadsheet provided. PG&E personnel stated that certain valves are maintained with the regulator station maintenance folders. For those valves listed below and being maintained with the regulator stations, please provide the maintenance records showing the 2012 and 2013 maintenance of these valves. Also, please confirm which valves were already being maintained at the time of the audit and those that were missed and have now been added to the maintenance schedule.

Zone	Valve Number
SF-SFH-009-B	339
SF-SFH-021-C	449
SF-SFH-045-C	1405
SF-SFH-049-C	930
SF-SFH-235-C	263

4. Title 49 CFR §192.803 states under qualification:

"Qualified means an individual has been evaluated and can: (a) Perform assigned covered tasks; and (b) Recognize and react to abnormal operating conditions."

SED engineers asked for Operator Qualification (OQ) records for JXVY. He did repairs and joining in 2013. OQ records were provided, including plastic qualification records. They show that JXVY was not qualified to do "electro-fusion", but he performed "electro-fusion" during the leak repair of a leak (Leak Number 60-02-50237-1). PG&E personnel confirmed that JXVY was not qualified for this repair. We have two follow-up questions: (1) did JXVY do any other "electro-fusion" repairs while he was unqualified? If so, please provide a listing of these repairs by leak number; (2) what remedial actions will PG&E preform for each of the identified leak repairs?

#### II. Concerns and Recommendations

- 1. Title 49 CFR §192.463(a) requires operators to provide cathodic protection consistent with one or more of the applicable criteria in Appendix D, and Title 49 CFR §192.465(d) requires operators to take prompt remedial action to correct deficiencies found. Please provide documentation verifying that PG&E has restored cathodic protection levels to one or more criteria identified in Appendix D for the following locations.
  - 1.1 724 San Bruno: -670mV (10%'er)
  - 1.2 32 Lupine: -650mV
  - 1.3 44<sup>th</sup> and Pacheco: -800mV (Bi-monthly)
  - 1.4 38<sup>th</sup> and Rivera: -750mV (Bi-monthly)
  - 1.5 4th and Welsh: -800mV
  - 1.6 4th and Bluxome: -580mV
  - 1.7 Myra and Sherwood: -650mV
  - 1.8 460 Eucalyptus (Bi-monthly, ETS): ~400-600mV
- 2. Two monitoring points in CPA 2106 (Rutland and Tioga) have been out of compliance for 2.5 years. Those points are: "14' W/E/L DELTA, 1' N/N/L Leland (White wire)" [San Francisco; bi-monthly] and #149 Ankeny, [San Francisco; Bi-monthly ETS]. As noted in our discussion

with PG&E personnel, the reason for the length of time to restore the CPA is multiple contacts and insulation problems. PG&E personnel indicated that they have been continuously working on restoring the CPA. Please update us on PG&E's progress to date and an estimated date to bring the CPA into compliance (if known).

- 3. While doing field work, SED engineers noted that it appeared valve V212 was paved over. This valve is located in CPA 2207 at 4<sup>th</sup> and Welsh. Please update us on the status of this valve.
- 4. While doing a random non-monitored pipe-to-soil read at 757 Portola Street, we noted that the riser appears to be non-corrodible. However, the map shows a steel riser. Please confirm that the riser is non-corrodible and that a map change has been made if the latest map is not up to date.
- 5. Title 49 CFR §192.481 states:

"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:	Then the frequency of inspection is:	
Onshore	At least once every 3 calendar years, but with intervals not exceeding 39 months	
Offshore	At least once each calendar year, but with intervals not exceeding 15 months	

As noted during our compliance review of this code section, PG&E has a global program to identify and correct non-compliances with this code section. The global program was identified in PG&E's response to data request #16 (SF\_082 Self Report Update – Corrosion; SF\_082 Att 1 – Corrosion Control Self-Report; SF\_082 Att 2 – Corrosion Program Summary). These follow-up questions are related to the Corrosion Program Summary. They are:

- 5.1 How many Can't Get In (CGI) locations are there in San Francisco?
- 5.2 Has PG&E gained access to each of the CGI locations? If not, how many locations still need to be inspected?
- 5.3 How many of the CGI locations had atmospheric corrosion that needed to be remediated?
- 5.4 For calendar years 2012 and 2013, how many locations were not in compliance with the maximum 39 month time interval where the cause was not a CGI?

### 6. Title 49 CFR §192.465(e) states:

"After the initial evaluation required by §§ 192.455(b) and (c) and 192.457(b), each operator must, not less than every 3 years at intervals not exceeding 39 months, reevaluate its unprotected pipelines and cathodically protect them in accordance with this subpart in areas in which active corrosion is found. The operator must determine the areas of active corrosion by electrical survey. However, on distribution lines and where an electrical survey is impractical on transmission lines, areas of active corrosion may be determined by other means that include review and analysis of leak repair and inspection records, corrosion monitoring records, exposed pipe inspection records, and the pipeline environment."

#### Title 49 CFR §192.603(b) states:

"Each operator shall keep records necessary to administer the procedures established under § 192.605."

This is also a follow-up to the corrosion issues identified in PG&E's response data request #16 related to cathodically unprotected pipe (Item #6 from the SF\_082 Att 1 - Corrosion Control Self-Report). The questions related to this self-identified violation are as follows:

- 6.1 Has PG&E created standards and procedures related to evaluation and monitoring of unprotected steel pipe? If so, please provide a copy of all relevant procedures.
- 6.2 Has PG&E completed its evaluation of unprotected steel pipe in the San Francisco Division? If not, when does PG&E expect to complete its evaluation?
- 6.3 How many steel sections in the San Francisco Division have been cathodically protected as a result of the evaluation?
- 6.4 How many steel sections have been replaced in the San Francisco Division as a result of the evaluation?

#### 7. Title 49 CFR §192.465(a) states:

"Each pipeline that is under cathodic protection must be tested at least once each calendar year, but with intervals not exceeding 15 months, to determine whether the cathodic protection meets the requirements of § 192.463. However, if tests at those intervals are impractical for separately protected short sections of mains or transmission lines, not in excess of 100 feet (30 meters), or separately protected service lines, these pipelines may be surveyed on a sampling basis. At least 10 percent of these protected structures, distributed over the entire system must be surveyed each calendar year, with a different 10 percent checked each subsequent year, so that the entire system is tested in each 10-year period." [Underline Added]

The follow-up questions are related to PG&E's response to data requests #13 and #14 from the audit. The questions are:

- 7.1 In its response to the data requests, PG&E indicates that the main reason for no previous reads is the Isolated Steel Service Program (ISSP) program. Does this mean that the 10%'ers were created (i.e., by installing a plastic main) greater than 10 years ago, less than 10 years ago, or a combination of the two? If it is a combination of the two, please identify which addresses from the two spreadsheets were created greater than 10 years ago.
- 7.2 Some rows from the 2012 and 2013 spreadsheets have no reads listed, instead they have N/A's listed across the rows. Does this mean that the 10%'ers no longer exist? Please explain.