

PUBLIC UTILITIES COMMISSION

505 VAN NESS AVENUE
SAN FRANCISCO, CA 94102-3298



January 13, 2014

Ms. Jane Yura, Vice President
Pacific Gas and Electric Company
Gas Operations – Standards and Policies
6121 Bollinger Canyon Road, Office #4460A
San Ramon, CA 94583

GA2013-25

SUBJECT: General Order 112-E Gas Audit of PG&E's Peninsula Division

Dear Ms. Yura:

On behalf of the Safety and Enforcement Division (SED) of the California Public Utilities Commission, Terence Eng, Fred Hanes, Sikandar Khatri, Wai-Yin Chan, and Nathan Sarina conducted a General Order 112-E audit of Pacific Gas and Electric Company's (PG&E) Peninsula Division (Division) from October 28 through November 1, 2013. The audit included a review of the Division's operation and maintenance records for the years 2010 through 2012, as well as a representative field sample of the Division's facilities. SED's findings are noted in the Summary of Inspection Findings (Summary) which is enclosed with this letter. The Summary reflects only those particular records and pipeline facilities that SED inspected during the audit.

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 and observations noted in the Summary. Pursuant to Commission Resolution ALJ-274, SED staff has the authority to issue citations for each violation found during the audit. SED will notify PG&E of the enforcement action it plans to take after it reviews PG&E's audit response.

If you have any questions, please contact Terence Eng at (415) 703-5326 or by email at terence.eng@cpuc.ca.gov.

Sincerely,

A handwritten signature in blue ink that reads "Michael Robertson".

Michael Robertson
Program Manager
Gas Safety and Reliability Branch
Safety and Enforcement Division

Enclosure: Summary of Inspection Findings

cc: Frances Yee, PG&E Gas Engineering and Operations
Larry Berg, PG&E Gas Regulatory Support
Larry Deniston, PG&E Gas Regulatory Support
Dennis Lee, SED
Aimee Cauguiran, SED
Terence Eng, SED

SUMMARY OF INSPECTION FINDINGS

A. PG&E's Internal Audit Findings

Prior to the start of the audit, PG&E provided SED its findings from the internal review it conducted of the 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). Table 1 lists all of the violations that PG&E noted.

SED is aware that PG&E corrected some of its findings prior to SED's audit. Please provide SED an update on the items that were still pending corrective actions as of October 28, 2013.

Table 1 Findings from PG&E's Internal Review

Topic	Code	Finding	Instances	Corrected?
Leak Survey Distribution	192.723	Services exceeded compliance due dates due to restricted access "can't get in" (CGI) locations	31	Yes
	192.723	3-year map missed compliance due date	1	Yes
Leak Survey Transmission	192.706	Semi-annual leak survey exceeded compliance due dates	33	Yes
Leak Repair	192.614	USA ticket missing when one was required	35	Yes
	192.13(c)	Leaks with late action	3	Yes
Regulator Stations	192.13(c)	Monitor set point was documented incorrectly on the maintenance form	1	Yes
	192.13(c)	Missed "B" inspection in pre-audit years	2	Yes
	192.13(c)	Supervisor signed off maintenance document greater than the required 30 days	9	Yes
	192.13(c)	Corrective work to install filter not completed during B inspection	1	Yes
Valves	192.745 / 192.747	Valves have unknown maintenance history	3	Yes

Table 1 (continued)

Topic	Code	Finding	Instances	Corrected?
Corrosion Control	192.13(c)	Action plans not updated or not created in the required 30 day time limit	20	Yes
	192.13(c)	CPA not resurveyed within a 6-yr interval	4	Yes
	192.13(c)	Rectifier test and evaluation form not filled out completely	6	2010: No detail for 2 instances; 2012: 2 completed, 1 no detail, 1 pending
	192.13(c)	Casing not monitored annually	3	Yes
	192.13(c)	10%er read down, greater than 30 days before restoration without an action plan	38	Yes
	192.465(d)	CPAs down for more than 15 months	4	Yes
Instrument Calibrations	192.13(c)	Gas Distribution Leak Survey instrument calibration records missing.	5	Yes
Idle Stubs	192.13(c)	Idle stubs did not meet the criteria of being reviewed by Engineering within required time limits	3	Pending
MAOP	192.619	Distribution system with a pressure chart supporting a Maximum Allowable Operating Pressure (MAOP) less than the documented MAOP	1	Yes
Emergency Zones	192.13(c)	Emergency zone plan did not contain record of review. One year does not contain the updated list of valves and sizes	3	Yes

B. Audit Findings and Violations

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.”

1.1 PG&E’s Form FO-16-D, Standard Cathodic Protection Maintenance Report Instructions, states in part:

Page 3: *“Record the initials of the person reviewing the maintenance sheet for completeness and accuracy. A Supervisor or other corrosion mechanic initials are required for each bimonthly and annual read cycle”*

The Division did not record the initials of the person reviewing the maintenance sheet at the following yearly locations listed below for the indicated maintenance date.

- a. CPA 3214-50, 424 Studio Circle X/S Woodside Way, 9/29/11
- b. CPA 3214-50, 824 Humboldt S/O Peninsula Ave, 12/7/11
- c. CPA 3214-69, 520 Kentucky Ave W/O Alameda, 9/29/11

1.2 PG&E’s Standard O-16, Corrosion Control of Gas Facilities, states in part:

Page 8: *“Cased pipeline crossings that are found to be contacted (the casing is in electrical contact with the pipeline) shall be reported to corrosion engineering personnel within 30 days of discovery of the contact. Contacted casing reported to corrosion engineering personnel will be remediated as part of the contacted casing remediation program administered by corrosion engineering personnel. Once included in the contacted casing remediation program, the cased crossing will be evaluated and assigned a priority number and listed on the current list of contacted cased crossings.”*

The Division found a contacted cased pipeline at 3278-E8, L-101, Mile Point 20.60, Creek crossing, Industrial Way west of G St. in 2011 with a pipe-to-soil read of -519 mV and a casing-to-soil read of -523 mV. The Division did not remediate the casing as part of the contacted casing remediation program, nor assign a priority number.

1.3 PG&E’s Utility Work Procedure TD4540-04 Pilot-Operated Regulator Station Maintenance (Outlet Pressures > 60 psig) states in part:

“B. Supervisors must review and approve all records for work performed at each regulator station within 30 days of the completion of maintenance.”

The Division performed maintenance of Station B-03, Highway 92 and Highway 280, Belmont, on 4/17/12. The supervisor did not review and approve the records until 7/9/12, 93 days later. The Division failed to have the supervisor review and approve the record of work performed within 30 days of the completion of maintenance.

2 Title 49 CFR §192.145(c) states:

“Each valve must be able to meet the anticipated operating conditions.”

The Division failed to indicate a value for the pressure rating of numerous valves maintained by the Division. Listed below are just 3 examples.

- a. Transmission valve V-046, East Hillside Blvd and Norfolk / San Mateo
- b. Transmission valve V-070, Alameda De Las Pulgas & Ralston / Belmont
- c. Transmission valve V-095, Holly St. & El Camino Real / San Carlos

3 Title 49 CFR §192.459 states in part:

“Whenever an operator has knowledge that any portion of a buried pipeline is exposed, the exposed portion must be examined for evidence of external corrosion if the pipe is bare, or if the coating is deteriorated.”

- a. To repair leak number 58-10-20015-1, the Division exposed a portion of buried bare pipeline. The Division failed to examine the pipe for evidence of external corrosion.
- b. The Division discovered an 8’ span at mile point 29.78 of L-109, 2100’ N/W of Bunker Hill and Highway 280 to be exposed as a “washout”, a previously buried pipe that had been exposed due to erosion or other factors, during a pipeline patrol in 2011. The Division did not perform an inspection of the exposed pipe until SED brought it to their attention during the audit on 10/30/13.

4 Title 49 CFR §192.475(b) states:

“Whenever any pipe is removed from a pipeline for any reason, the internal surface must be inspected for evidence of corrosion.”

To repair leak number 58-12-20187-1, the Division removed a portion of pipe. The Division failed to inspect the internal surface for evidence of corrosion.

5 Title 49 CFR §192.481(a) 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 onshore, then the frequency of inspection is at least once every 3 calendar years, but with intervals not exceeding 39 months.”

The Division failed to inspect a 55’ span at mile point 29.82 of L-109, 2192’ northwest of Bunker Hill and Highway 280 for evidence of atmospheric corrosion between 1971 (when the requirement was first issued) and 2013. The Division performed the first and only

atmospheric corrosion inspection of the span on 10/30/13, after SED notified the Division of the issue. The aboveground span was installed in 1936.

6 Title 49 CFR §192.747(b) states:

“Each operator must take prompt remedial action to correct any valve found inoperable, unless the operator designates an alternative valve.”

The Division did not take prompt remedial action to correct valve V-264 of Plat 3348-B1 which was found inoperable on 6/6/12; nor did it designate an alternative valve until 4/25/13, over 10 months later.

C. Observations and Concerns

1. On the Leak Repair, Inspection and Gas Quarterly Incident Report (Form "A") for leak number 58-10-20167-1, the welder indicated that he "welded over defective weld". CFR § 192.245(b) states that "Each weld that is repaired must have the defect removed down to sound metal and the segment to be repaired must be preheated if conditions exist which would adversely affect the quality of the weld repair". Welding over a defective weld, without removing the defect down to sound metal would be a non-compliant method to repair a weld. During the audit, the Division spoke with the welder who confirmed that he did in fact remove the defect down to sound metal before welding, and that "welded over defective weld" is not representative of the entire procedure that he followed. The Division should have clear records to indicate the work performed.
2. During SED's field inspection, the Division discovered that the regulator at station A-47, Wall Map 3214-G4, failed to achieve lock-up. The Division subsequently replaced the diaphragm to achieve lock-up. Maintenance records show that the regulator had failed to achieve lock-up during each annual inspection from 2010 through 2012, and the Division replaced the diaphragm each time as a solution. PG&E is performing a root cause analysis to determine what is causing the regulator not to lock-up. Please provide SED with a report on PG&E's root cause analysis and what measures it will implement to ensure that the regulator properly locks-up.
3. The Division uses PG&E's Yearly Cathodic Protection Maintenance Report form to record pipe-to-soil potential measurements in millivolts. When recording pipe-to-soil readings on the form, the Division indicated the readings as positive instead of negative. The issue was found on almost all handwritten records for the following binders and Division personnel for 2010 to 2012:
 - a. Colma Yearly Reads – Anthony Montalvo
 - b. Colma Annual Reads – Anthony Montalvo
 - c. Yearly Reads/ Annual Reads – Walt Lee
 - d. Yearlys – Gartner
4. During SED's field inspection, the Division discovered that the casing at 3278-E8, L-101. Mile Point 20.60, Creek crossing, Industrial Way west of G St., was in contact with the pipe. The pipe had a potential of -501 mV; the casing had a potential of -500 mV. These reads are similar to those the Division read in 2011. The Division is not adequately cathodically protecting the pipe at this location; therefore the pipe must be electrically isolated from the casing. Please provide SED a status report and action the Division engaged in to correct this.
5. SED reviewed the following three Plat Maps for meter atmospheric corrosion:
 - a. 3214-H8 (dated 6/12/12 and 6/14/12)
 - b. 3214-G7 (dated 6/14/12 and 6/15/12)
 - c. 3278-F7 (dated 6/7/12)

SED requested more information on 14 locations on the maps that had notations of either “AC” for atmospheric corrosion, or “CGI” for can’t get in. SED has yet to receive the information as of this writing. Please provide SED the information requested.