PUBLIC UTILITIES COMMISSION

505 VAN NESS AVENUE SAN FRANCISCO, CA 94102-3298



April 3, 2014

Mr. Sumeet Singh, Vice President Pacific Gas and Electric Company Gas Asset and Risk Management 6111 Bollinger Canyon Road, Office #4590-D San Ramon, CA 94583 GA2013-21

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

Dear Mr. Singh:

On behalf of the Safety and Enforcement Division (SED) of the California Public Utilities Commission (CPUC), Willard Lam, Banu Acimis, Molla Mohammad Ali, Wai Yin Chan, and Nathan Sarina conducted a General Order 112-E audit of Pacific Gas and Electric Company's (PG&E's) North Valley Division (Division) from September 23-27, 2013. The audit consisted of a review of the Division's operation and maintenance records from 2010 to 2012. In addition to the records review, SED conducted a representative field verification sample. SED's findings are noted in the Summary of Inspection Findings (Summary) which is enclosed with this letter. The Summary reflects only the respective records and pipeline facilities that SED inspected during the audit.

Within 30 days of receipt of this letter, please provide a written response identifying measures taken by PG&E to address the violations 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 review of PG&E's audit response. If you have any questions, please contact Willard Lam at (415) 703-1327 or willard.lam@cpuc.ca.gov.

Sincerely,

Michael Robertson Program Manager

Gas Safety and Reliability Branch

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SED/CPUC

Enclosure: Summary of Inspection Findings

cc: Frances Yee, PG&E Gas Engineering and Operations

Mary Muse, PG&E Senior Gas Engineer Larry Berg, PG&E Gas Regulatory Support

Dennis Lee, SED Aimee Cauguiran, SED Banu Acimis, SED

SUMMARY OF INSPECTION FINDINGS

A. PG&E's Internal Audit Findings

PG&E provided SED an Internal Findings Summary of the North Valley Division (Division) prior to the CPUC audit. Some internal findings are violations of PG&E's operations and maintenance standards, and are therefore violations of Title 49 Code of Federal Regulations (CFR), §192.605(a). The violations identified in PG&E's internal summary of the Division are noted in Table 1.

Table 1. PG&E North Valley Division Internal Findings Summary

Item	Code Violation	Topic	Finding	Instances	Corrective Status
1	192.723(a)	Leak Survey Distribution	Services missed compliance dates due to restricted access locations	9	Completed
2	192.706(a), 192.706(b)	Leak Survey Transmission	Semi-annual maps out of compliance	21	Completed
3	192.605(a)	Leak Repair	Leaks with late action	2	Completed
4	192.739(a)	Regulator Stations	HPR set with 3 services, not maintained as district regulator station	1	Pending
5	192.747(a)	Valves	Valve missed maintenance	1	Completed
6	192.605(a)	Odorization	Weekly odor intensity tests not conducted	2	Completed
7	192.605(a)	Transmission Patrols	Missing OQ for employee performing foot patrols	11	Completed
8	192.161(a)	Atmospheric Corrosion on Exposed Spans	Corrective action for pipeline supports not completed in timely manner	1	Pending
9	192.605(a)		CPA not resurveyed within a 6-year Interval	6	Completed
10	192.605(a)	Corrosion Control	CPA Action plans created or updated late	70	Completed
11	192.465(d)	Control	CPA down for more than 15 months	3	Pending
12	192.605(a)		10%er location found low	1	Pending

(cont'd)

Table 1 (cont'd). PG&E North Valley Division Internal Finding Summary

Item	Code Violation	Topic	Finding	Instances	Corrective Status
13	192.605(a)	Instrument	Missing Distribution Leak Survey calibration records	5	Completed
14	192.605(a)	Calibrations	Missing Transmission Leak Survey calibration records	40	Completed
15	192.743(a)		Stations missing relief valve calculations	2	Completed
16	192.739(a)(3)	Relief Valves	Stations with incorrect relief valve set points	1	Completed
17	192.743(a)		Stations using incorrect MAOP in relief valve calculation	1	Completed
18	192.603(b)	MAOP	System did not have complete documentation establishing MAOP	3	Pending

SED is aware that the Division may have been completed some of the items by the time of this letter. Please provide an update on the corrective status on the items that were pending as of September 27, 2013.

B. Audit Findings and Violations

1. Title 49 CFR §192.605(a) states:

"Each operator shall prepare and follow for each pipeline, a manual of written procedures for conducting operations and maintenance activities and for emergency response."

1.1. PG&E Utility Work Procedure WP4540-01 states:

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

SED discovered many instances where the Division failed to review and approve regulator maintenance within the 30-day interval required by PG&E's Work Procedure WP4540-01. Since there were a significant number of instances, SED did not itemize each instance but instead recognizes this is a common issue in the Division. A representative sample of late supervisor reviews is listed in Table 2.

Table 2. Regulator Stations with Late Supervisor Review

Regulator Station Number	Maintenance Date	Supervisor Review Date
	8/30/2010	10/15/2010
91	10/24/2012	12/18/2012
200,000	11/5/2012	12/18/2012
76	6/14/2011	7/20/2011
90	3/16/2010	4/27/2010
D.R. 26	7/24/2013	9/24/2013

1.2. PG&E Form FO-11.1-A states:

"Check box for all items inspected and Record AC/DC voltage and DC amperage measurements leave blank if not applicable."

Form FO-11.1-A Pole Mount/Pedestal Mount Rectifier Test and Site Evaluation Form requires the fusible AC disconnect switch rating to be recorded on the form during rectifier maintenance. SED found that the Division failed to record the Fusible AC disconnect switch rating for Rectifier #100002 during the 2010 to 2013 annual maintenance.

1.3. PG&E Standard M53.3 Leak Survey Calibration states:

"Check the calibration of HFI gas detectors before the first field use in any given week. If the unit is not used and its calibration not checked for any given week, record that the particular unit was out of service for that week. Record this on the "Weekly Calibration Check of Flame Ionization Unit" form, for [Optical Methane Detectors] on the "Weekly Calibration Check of Optical Methane Detector" form"

SED discovered two instances, shown in Table 3, of the Division not documenting leak survey calibration records in accordance with the PG&E M53.3 Standard.

Table 3. Missing Leak Survey Instrument Documentation

Instrument Description	Issue	
Optical Methane Detector #1186	Missing weekly notes after May 2013 indicating if the unit has been used or calibrated	
Flame Ionization Unit #1500914008	Missing weekly notes from September 17, 2012 to December 31, 2012 indicating if the unit has been used or calibrated	

Please verify if the Division used the Optical Methane Detector #1186 for gas leak surveys, gas leak rechecks, gas leak investigations, or any other use during the period identified as missing records of calibration or indication of use. Please provide the record(s) showing when the Division used the instrument without proper calibration records, and follow up actions the Division has taken to ensure that the gas leak surveys it performed were with calibrated instruments.

1.4. PG&E UO Standard S5000 states:

"GD&TS area senior gas engineers are responsible for...Reviewing the Emergency Zone Curtailment binder annually. Reviews are to occur not more than 15 months apart"

SED found that the Division failed to review all three Emergency Zone Curtailment binders during the 2011 calendar year.

Table 4. Missing Emergency Shutdown Zone Reviews

Emergency Shutdown Zone Location	2010 Annual Review Date	2011 Annual Review Date	2012 Annual Review Date
Hamilton City, Orland, Willows	5/4/2010	Missing	10/4/2012
Durham, Paradise, Oroville, Gridley, Biggs	5/10/2010	Missing	10/4/2012
Chico	5/4/2010	Missing	10/4/2012

2. General Order 112-E Section 143.1 states:

"A gas detector survey must be conducted in business districts and in the vicinity of schools, hospitals and churches, including tests of the atmosphere in gas, electric, telephone, sewer and water system manholes, at cracks in pavement, and sidewalks, and at other locations providing an opportunity for finding gas leaks, at intervals not exceeding 15 months, but at least once each calendar year"

SED discovered the following two instances of the Division failing to perform a gas detector survey in the vicinity of a school at least once each calendar year:

Table 5. Missing Gas Detector Surveys

Plat Map Location	Service Type	Year Gas Detector Survey Missed
1715H7	School	2011
1899C3	School	2012

C. Field Audit

1. Title 49 CFR §192.707(c) states:

"Line markers must be placed and maintained along each section of a main and transmission line that is located above ground in an area accessible to the public"

During a field visit, SED discovered that the Division failed to install line markers for the above ground main located on the East Gridley bridge span.

2. During a field visit to various Cathodic Protection Areas (CPAs), SED observed the following pipe-to-soil readings did not meet the -850 mV criteria:

Table 6. Inadequate Pipe-to-Soil Readings

Location	Address	Pipe-to-Soil Reading millivolts (mV)	
CPA 1011-02	ETS N/W Corner Lassen Ave and Shasta Dam Blvd	-759	
	13593 Beacon Ave	-720	
CPA 1770-01	Kirkwood Dehydrator, Hall Road	-808*	
CPA 1079-11	918 Placer Street	-709**	
Yearly Read	3135 5 th Street, Biggs	-836	

PG&E identified the inadequate read on August 6, 2013

Please provide a status update on the corrective action taken to restore cathodic protection at these locations.

3. The Division's records of prior casing-to-soil potential readings for DREG-5476 MP 0.24 shown in Table 7, indicate potential contact in 2010 and 2011. It appears that the Division remediated the contacts in 2012 and 2013. However, on September 25, 2013, SED observed the Division record a casing-to-soil potential of -945 mV, which meets the -800 mV criteria stated in PG&E Utility Standard O-16 indicating contact between the casing and pipe. Please provide SED with a status update on the remediation of this contacted pipe casing.

Table 7. Casing-to-Soil Potentials at DREG-5476 MP 0.24

Date	Casing-to-Soil Reading (mV)
9/8/2010	-1003
6/13/2011	-1089
6/15/2012	-569
7/19/2013	-753
9/25/2013	-945

^{**} PG&E identified the inadequate read on July 10, 2013

D. Observations and Concerns

On 8/28/2013, the Division performed exposed pipe and span inspections for the Pentz span and Ophir span. The Division identified issues with deteriorating paint on the pipe. Under the "Action" description of the inspection form, the individual who performed the inspection noted "none taken" because the individual was not qualified to remove or repaint the pipeline. Even though the individual notified the pipe coating group of the condition of the pipe for remediation, the comment "none taken" on the pipeline inspection form implies that no corrective action was necessary. SED recommends that the "Action" column should clearly reflect the action taken by either the Division or the individual to correct the deficiency found during the inspection. In this case, the inspection record should reflect that the Division or individual doing the inspection notified the pipe coating group to perform the remediation work. Furthermore, the inspection record should also reflect completion of remediation work.