PUBLIC UTILITIES COMMISSION

505 VAN NESS AVENUE SAN FRANCISCO, CA 94102-3298



September 4, 2016

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 GI-2016-04-PGE10-02B

SUBJECT: General Order 112 Gas Inspection of PG&E's Sonoma Division

Dear Mr. Singh:

The Safety and Enforcement Division (SED) of the California Public Utilities Commission conducted a General Order 112¹ inspection of Pacific Gas & Electric Company's (PG&E) Sonoma Division (Division) on April 4-8, 2016. The inspection included a review of the Division's records for the period of 2014 to 2015, as well as a representative field sample of the Division's facilities in the cities of Ukiah, Santa Rosa, Petaluma, and Sonoma. SED staff also reviewed the Division's operator qualification records, which included field observation of randomly selected individuals performing covered tasks.

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 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 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 inspection.

If you have any questions, please contact Willard Lam at (415) 703-1327 or by email at wlm@cpuc.ca.gov.

Sincerely,

Kenneth Bruno Program Manager

Gas Safety and Reliability Branch Safety and Enforcement Division

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Enclosure: Summary of Inspection Findings

General Order 112-F was adopted by the Commission on June 25, 2015 via Decision 15-06-044.

SUMMARY OF INSPECTION FINDINGS

I. Probable Violations

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 standards, and are therefore violations of Title 49 Code of Federal Regulations (CFR), §192.605(a). SED is aware that PG&E corrected some of its findings prior to SED's inspection. Table 1 lists all of the violations from PG&E's internal review.

Table 1: PG&E's Internal Review

Code Section	# of Non- Compliance	Finding Description	Corrective Action	Remediation Status
192.605(a)	1	Grade 2+ Leak repaired late	Leak repaired 1/26/2015	Completed
192.743(a)	8	Inadequate relief valve capacities for District Regulator Stations	Installed appropriate orifices, remote monitors, and/or larger relief valve	12/31/2016
192.465(a)	21	Annual Pipe-to-Soil (P/S) reads not read once each calendar year or 15 months	Annual P/S reads taken 4/1/2015	Completed
192.465(a)	47	Yearly P/S reads not read once each calendar year	Yearly P/S reads taken 4/1/2015	Completed
192.605(a)	10	Bi-monthly P/S reads not read 6 times a year / 2.5 months	Bimonthly P/S reads taken 3/19/2015	Completed
192.605(a)	8	Action Plans missing or generated late for out of tolerance casings	Engineer entered casings into risk ranking on	Completed
192.605(a)	4	Missed casing assessments	10/16/2014	
192.605(a)	7	Missed maintenance for the casings without leads	Maintenance Notifications created on 3/19/2016 to maintain the casings	Completed
192.705(b)	1	Missed Pipeline Patrol	Area patrolled on 1/19/2016	Completed
192.605(a)	2	Deactivated service risers not cut off within 15 days of discovery	Cut offs completed 8/6/15 and 8/27/2015	Completed
192.605(a)	1	1990 Service main incorrectly designated as private customer line however confirmed as PG&E asset	6/15/2012 Leak Survey and atmospheric corrosion inspections performed with no issues. Pressure test and document update scheduled.	4/31/2016

192.605(a)	1	Tapping tee being used in lieu of the inlet pinoff tee is underrated	Tee and small portion of pipe are to be replaced. Permanent regulator station upgrade in planning phase.	4/31/2016
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SED is aware that the Division may have completed some of the items by the time of this letter. Please provide an update of the corrective status on the items that were pending as of April 8, 2016.

B. SED Findings

1. <u>Title 49 CFR §192.187(a) states in part:</u>

"Each underground vault or closed top pit containing either a pressure regulating or reducing station, or a pressure limiting or relieving station, must be sealed, vented or ventilated as follows:

- (a) When the internal volume exceeds 200 cubic feet (5.7 cubic meters):
 - (1) The vault or pit must be ventilated with two ducts, each having at least the ventilating effect of a pipe 4 inches (102 millimeters) in diameter"

During a field visit to the Haystack valve pit, SED discovered an underground vault exceeding 200 cubic feet with no ventilation ducts installed, therefore violating the requirement of 49 CFR §192.187(a). Additionally, the vault lids appeared difficult to operate with one person. During an emergency, the current lids would be cumbersome when the valves need to be accessed immediately. Please provide SED with an update on the remediation of this underground vault.

2. Title 49 CFR §192.605(a) states in part:

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

2.1 Utility Procedure TD-4430P-04, Section 3.3, Maintenance Record Keeping and Review, states in part:

"Maintenance supervisor, upon completion of valve maintenance, will accomplish the following:

1. Review, within [30]-working days, each Gas Utility Form TD-4430P-04-F02, [Gas Valve Maintenance Record Form-Service History] for accuracy and completeness. Return Service History Form to personnel that performed maintenance to correct errors and omissions."

While reviewing the Division's valve maintenance records, SED discovered multiple instances of the Division failing to review valve maintenance within the timeframe allowed by PG&E Utility Procedure TD-4430P-04. PG&E's failure to review and approve within 30 days of maintenance completion is not compliant with PG&E

Procedure TD-4430P-04 and is therefore a violation of 49 CFR §192.605(a). Table 2 details valves where the Division reviewed and approved maintenance late.

Table 2. Valve Maintenance with Late Supervisor Review

Item	Valve Location	Maintenance Date	Supervisor Review Date
1	L-21E tap to R-52 V0.00	10/18/2014	11/21/2014
2	DFM FMV-56 V-35.18	10/16/2014	11/21/2014
3	DFM 1305-01 V-6.62	10/3/2014	11/21/2014
4	DFM 1305-37 V-6.63	10/3/2014	11/21/2014
5	DFM 1305-01 V-6.61	10/3/2014	11/21/2014
6	L-21E V-93.55	10/10/2014	11/21/2014
7	L-21E V-1 (42691904)	10/10/2014	11/21/2014
8	L-21E V-3 (42691905)	10/10/2014	11/21/2014
9	L-21E V-A (42691907)	10/10/2014	11/21/2014
10	L-21E V-A (42691909)	10/10/2014	11/21/2014
11	L-21E V-4 (42704457)	10/10/2014	11/21/2014
12	L-21E V-5 (42703350	10/10/2014	11/21/2014
13	L-21E V-6 (43165976)	10/10/2014	11/21/2014
14	L-21E V-6 (43165983)	10/10/2014	11/21/2014

2.2 Utility Procedure TD-4540P-01, Section 7, Ensuring Compliance and Control, states in part:

4. Review AND approve all records for work performed at each regulator station within 30 days of completion of maintenance."

During a review of the Division's regulator station maintenance records, SED discovered the Division never reviewed or approved maintenance performed for Regulator Station 431 (R-431) on 8/24/2015. A Division supervisor reviewed and approved the maintenance after SED brought it to attention. PG&E's failure to review and approve within 30 days of maintenance completion is not compliant with PG&E Procedure TD-4540P-01 and is therefore a violation of 49 CFR §192.605(a).

2.3 Utility Standard TD-4540S, Table 2, Maintenance Schedule, requires in part that Large Volume Customer (LVC) regulator set facility types must have Class A Inspections performed:

[&]quot;Supervisors, responsible for proper completion of regulator station inspection, testing, and maintenance, must perform the following tasks:

[&]quot;At least once each calendar year, at intervals not to exceed 15 months to the date of the previous Class A or Class B inspection."

While reviewing the Division's regulator maintenance records, SED discovered that LVC High Pressure Regulator (HPR) sets for the Sonoma Developmental Center in Glen Ellen and the County of Sonoma in Santa Rosa were required to have an annual Class A maintenance performed, per PG&E Utility Standard TD-4540S. The HPR sets were discovered to still be on a five year inspection schedule. The Division failed to adhere to §192.605(a) when it exceeded the annual Class A inspection interval required by PG&E Utility Standard TD-4540S.

2.4 PG&E Gas Valve Maintenance Record Form TD-4430P-04-F01, states in part:

"Fill out this form completely. (DO NOT LEAVE EMPTY BLANKS OR WRITE "UNKNOWN")"

Furthermore, PG&E Job Aid TD-4430P-04-JA01, states in part:

"Complete the Valve Data Section, leaving no blank items. [UNKNOWN] is not acceptable."

During a review of the Division's valve maintenance records, SED discovered the valve card for regulator station R-726 lists "unknown" for valve make, model, pressure rating, and serial numbers. SED observed other instances of valve data listed as "unknown" however identified this particular valve to illustrate an example. PG&E form TD-4430P-04-F01 and Job Aid TD-4430P-04-JA01 both do not allow 'unknown" to be listed in the valve data section, therefore PG&E is in violation of 49 CFR §192.605(a) for not following its own procedures.

II. Areas of Concern/ Observations/ Recommendations

- 1. SED reviewed the Division's valve records and discovered two instances of valve card information not matching valve diagram and maintenance records:
 - a. Valve N-529 is listed as "closed" in valve diagram and also in maintenance sheets, however, on the valve card, its normal position is shown as "open".
 - b. Valve V-12 for regulator station R-124 is listed as "closed" in diagram and in maintenance sheets, however on the valve card, its normal position is listed as "open".

Please provide SED with an update on the Division's actions in determining the correct valve position information for Valves N-529 and V-12.

- 2. In reviewing the Division's maintenance records for regulator station R-437, SED observed the fire inlet and outlet valves (V-1 and V-6) documented as being hard to operate since 2010. Please provide SED with an update on the Division's action plan for remediating the hard to operate fire valves at regulator station R-437.
- 3. In reviewing the Division's maintenance records for regulator station R-390, SED discovered the Division set the relief valve above its recommended spring range of 15-50 pounds per square inch (psi). The Division mentioned plans to lower the relief set point

from 53 psi to 50 psi. Please provide SED with an update on the Division's action plan to remediate the relief valve set point.