#### PUBLIC UTILITIES COMMISSION

505 VAN NESS AVENUE SAN FRANCISCO, CA 94102-3298



December 8, 2016

GI-2016-10-PGE17-02B

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 Gas Inspection of PG&E's Stockton Division

Dear Mr. Singh:

The Safety and Enforcement Division (SED) of the California Public Utilities Commission conducted a General Order112 inspection of Pacific Gas & Electric (PG&E) Company's Stockton Division (Division) from October 3-7, 2016. <sup>1</sup> The inspection included a review of the Division's operation and maintenance records related to pressure control devices, and emergency and relief valves for the years 2014 and 2015 and some other records. A representative field sample of the Division's facilities in the cities of Tracy, Stockton, Manteca and Lodi was also inspected. 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 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.

If you have any questions, please contact Sikandar Khatri at (415) 703-2565 or by email at Sikandar.Khatri@cpuc.ca.gov.

Sincerely,

cc:

Kuneth A.B

Kenneth Bruno - Program Manager

**Enclosure: Summary of Inspection Findings** 

Safety and Enforcement Division

Dennis Lee, SED

Mike Bradley, PG&E Compliance Gas Operations

Susie Richmond, PG&E Gas Operations Regulatory Compliance and Risk Analysis

<sup>1</sup> 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 inspection, PG&E provided SED its finding from the internal review it conducted of Stockton Division (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), §192.13(c) or §192.605(a). SED is aware that PG&E corrected its findings prior to SED's inspection. Please provide update, if any.

Table 1 lists all the audit related violations from PG&E's internal review.

**Table 1**: PG&E's Internal Review

	Asset	Year: # of		
Code	Type	Non-		Completion
Section		Compliance(s)	Finding Description	Date
192.605 (a)	Regulating Station	2015: 8	Conflicting information between Station Op Diagram and Data Sheet	12/14/2015
		2015: 1	Incorrect recording of the inspection: B Inspection was called for in 2015, but paper document showed an A-inspection was completed	5/24/2016
		2015: 4	Missed maintenance 1) Teichert Primary 2) Knife River 3) Granite Construction 4) Musco Olive primary	6/15/2015
		2015: 8	Data Sheet incorrectly filled out.	12/07/2015
192.605 (a)	Valves	2015: 8	Missing information on Valve Card.	12/1/2015
		2015: 1	Inadequate relief TYHP-73, incorrect Cg value was used in relief calculation	2/3/2016
		2015: 8	SCADA - Pressure Recorder annual calibration Check missed	12/1/2015
		2014: 3	Missed Maintenance: Valves A and B in Stockton at MP 8.47 on L-197C. The AMC expired and a waiver was not approved by PLE until after the expiration date. 2 missed/late C Inspections	8/29/2015
192.605(a)	Valves	2015: 1	Missed Maintenance: V-2 of TYHP-05 Reg. Station	3/5/2015

## B. SED Findings

## 1. Title 49 CFR §192.605 states in part:

- (a) 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..."
- (b) Maintenance and normal operations.
  The manual required by paragraph (a) of this section must include procedures for the following, if applicable, to provide safety during maintenance and operations.
  (1) Operating, maintaining, and repairing the pipeline in accordance with each of the requirements of this subpart and Subpart M of this part..."

#### 1.1. Valve Maintenance

Title 49 Code of Federal Regulations §192.745 Valve maintenance: Transmission lines states:

- (a) Each transmission line valve that might be required during any emergency must be inspected and partially operated at intervals not exceeding 15 months, but at least once each calendar year.
- (b) Each operator must take prompt remedial action to correct any valve found inoperable, unless the operator designates an alternative valve.

Title 49 Code of Federal Regulations §192.747 Valve maintenance: Distribution systems states:

- (a) 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.
- (b) Each operator must take prompt remedial action to correct any valve found inoperable, unless the operator designates an alternative valve.

SED made following observations:

- (i) Valve, V-T-16.09, Clement Taps and Atkins Rd.: The valve maintenance took place on 7/8/13 and 11/17/14; this exceeded allowed time interval of 15 months.
- (ii) The history and/or maintenance card was missing for following valves and therefore SED was unable to verify prior records:
  - Hazelton & California V-520 History and Valve Card Missing; New history started 2/28/15.
  - Thornton Rd E/O Lodi Energy Plant V-2 New Card made in 4/29/15 due to missing card.

## 1.2. Designating Alternate Means of Control for Valves:

PG&E procedure TD-4430P-04, Rev. 1, section 4.3. states:

"Perform the tasks below upon discovery of any inoperable transmission emergency, distribution critical main, distribution station, or inlet and outlet station isolation (fire) valve prior to 15 months from the last successful operation of a valve that is NOT promptly repaired:

1. Complete Gas Utility Form TD-4430P-04-F03, "Inoperable Valves—Alternate Means of Control (AMC)."

SED found following non-compliances:

- (i) Pressure Limiting Station V-21.41 (End of Brandt Rd.): Valve, V-A was reported non-operational on 7/30/14. The request for the designation of Alternate Means of Control (AMC) was filed on 2/11/15 which is more than 15 months after 7/26/13 when it was last properly operated.
- (ii) Pressure Limiting Station V21.42: Valve V-C was reported non-operational on 7/30/14. The request for the designation of Alternate Means of Control (AMC) was filed on 2/11/15 which is more than 15 months after 7/26/13 when it was last properly operated.

# 1.3. Bypass Regulator not maintained:

PG&E procedure TD-4540P-02, section 2.4. states:

"Test bypass regulators for ability to control pressure and lock up"

SED found that no maintenance for bypass regulators was performed for the years 2014 and 2015 for following facilities:

- ST-HP-24: Navy Drive E/o Fresno Street
- ST-HP-36: Airport Way & Zephyr Street

#### 1.4. Inaccurate Records:

PG&E procedure TD-4540P-01, section 6.1. states:

"Complete paper records as outlined below OR enter information on company mobile platform developed for documenting regulator station maintenance ...

4. Review data sheets during each inspection AND update as needed"

SED observed that following records were in error:

- (i) Friant Dr. and Saratoga Rd District Regulator Station (TYHP 02): Datasheet showed outlet MAOP as 5000 psig
- (ii) Station MAHP-55 (Airport and Louise Reg. station)
  The datasheet showed valves 11, 12 and 13 as Inlet and Valves 1, 2 as outlet. In fact, as per station diagram, 11, 12 and 13 are outlet valves and 1 and 2 are inlet valves.
  PG&E staff confirmed the same and made a change.

## 1.5. Meterset Assemblies and Large Volume Customers

PG&E procedure D-4540S, Rev 0, Table 2 Maintenance Schedule outlines the frequency intervals for regulating stations. According to this table Class A Inspection of customer meterset assemblies should be performed at least once every 5-calendar years and large volume customer regulator set at least once each calendar year, at intervals not to exceed 15 months.

SED found that the following assets missed the maintenance at the required timeframe (although some of them have maintenance done only recently). In addition, datasheets were incomplete, station diagram were not up-to-date and other issues as noted below. Please provide an update on maintenance of these facilities, completion of datasheets, station diagrams, other observations mentioned below and any other changes made to make the records complete.

# **Large Volume Customers:**

- Musco Olive Primary 17950 via Nicolo, Tracy
- Granite Construction Primary, 10500 Harlan Road, Lathrop
- Teichert Primary, 36314 S Bird, Tracy
- R&B Foods Primary (Ragu), Waterloo and D street,
- Ameron Primary, 10100 Linne Road, Tracy the folders showed comments such as fire valve needs to be dig up, datasheet needs to be typed and diagram created. There were no relief capacity calculations present
- Sutter Home Winery Primary, 18667 N Jacob Brack Rd Unit 1 Lodi
- Granite Construction Primary 34700 Bird Road, Tracy datasheet had no relief pressure set points, and relief capacity calculations were not present

#### Meterset Assemblies:

- (a) Ione Minerals, Calcine Plant # 1, Jackson
  - The datasheet did not provide required information on stage 1 and stage 2 pressures so that it could be verified with those on the maintenance sheet. This needs to be resolved
- (b) Specialty Granules, 1900 HWY 104 W, Ione
  - There was discrepancy between metering pressure on datasheet and maintenance sheet, the customer is currently billed at 10 psig, whereas maintenance sheet shows metering pressure 20 psig. This needs to be resolved.

#### II. Areas of Concern/ Observations/Recommendations

SED made following observations during the audit. We understand that PG&E is taking steps to remediate the situations, please provide the information and update.

- 1. It was observed that a number of valve maintenance records (valve cards) did not have valve pressure ratings, model number and others. Examples are:
  - Station MAHP-52 (River Island and MCKee W/) I-5 Lathrop, valves 1 and 2
  - MAHP-47, McKinley and Roth b Road, valves 1.11 and 2
  - MAHP-42(Jennifer and Jacktone), valve 2
  - MAHP-17 (First and Industrial), valves 1, 2 and 3

Please provide detailed explanations of any efforts that PG&E made to find this critical information ("Type", "Pressure Rating", "Make/Model", "Size") for those filled as "Unknown" on valve cards.

- 2. A number of valves had notes such as hard to turn, in some case either there were no correctives or no action taken on the requests. Examples are:
  - July binder Valve:

L-197 Ione Tap & Acampo Rd, V-B

Hard to turn; operable w/ 2 people

- January binder Valve:

Cambridge and Lathrop V-12

Hard to turn in 2013 and 2014

Please provide update on actions being taken to resolve the situation, and expected deadlines.

- 3. SED observed that a number of regulator stations have lock up issues, possibly due to Sulphur deposits on regulator components which was also observed during the field visit for the station LO-HP-11. Please provide an update on steps being taken to avoid this situation in future. Examples are:
  - ST-HP-27 b Swain Ct & N. El Dorado
  - ST-HP-56 Waterloo Rd & Hiawatha Way
  - ST-HP-60 Feather River Dr & March Ln
  - ST-HP-61 Swain Rd & West Ln (station needs painting, there are lots of corrosion pits, please provide update)
  - LO-HP-03 Kile Rd & WPRR Station
  - LO-HP-11 Turner Rd & Lower Sacramento Rd
- 4. During field visit, following observations were made:
  - (a) It was observed that the work was performed by a journeyman and two employees under training. Although, journeyman did his best to direct and observe these employees, but it would be more appropriate to have 1:1 span of control in such situations.

- (b) At the regulator station HPR T76 Holly DR. and E Larch Tracy, the tags showed pressures 37 psig on regulator and 53 psig on relief. However, datasheet showed 40 psig on regulator and 50 psig on relief. The as left pressures were set to 40 psig and 50 psig on regulator and relief respectively. Please provide documentation that when and why the change was made together with the relief valve calculation record.
- (c) For the station ST-HP-27, Swain Ct and N El Dorado, Stockton, the valve card for valve V-2 had information that it is multi-turn, but it was found to be quarter turn. Necessary change in records is required.
- (d) Valve, V-2 (Thornton Rd. E/O Lodi Energy Plant) needs tags and specific location identification for ease of locating and identifying it in the field.
- (e) Station LO-HP-11, Turner Road and Lower Sacramento Rd. Lodi
  The regulator did not lock-up; the Sulphur build-up was noticed and therefore it
  required change of the cartridge and boot. In this case, Sulphur filters were also
  present at the station and hence in addition to other investigation of cause of the
  Sulphur presence, the performance of these filters may need to be investigated.