

PUBLIC UTILITIES COMMISSION

505 VAN NESS AVENUE
SAN FRANCISCO, CA 94102-3298



December 13, 2016

GI-2016-05-PGE13-02B

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

SUBJECT: General Order 112 Inspection of PG&E's Sacramento 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 and Electric Company's (PG&E) Sacramento Division (Division) from May 16 through May 20 and June 27 through July 1, 2016. The inspection included a review of Division records for the period of January 1, 2013 through part of 2016. A representative sample of PG&E facilities and right-of-way were also inspected.

A Summary of Inspection Findings (Summary), which contains probable violations and areas of concerns and recommendations identified by SED staff, is included as an attachment to this letter.

Please provide a written response indicating the measures taken by PG&E to address the probable violations and areas of concerns and recommendations within 30 days from the date of this letter. SED will notify PG&E of the enforcement actions it plans to take in regard to each of the violations found during the inspection, pursuant to Commission Resolution ALJ-274, after it has an opportunity to review PG&E's response to the findings included in the Summary.

If you have any questions, please contact Alin Podoreanu at (916) 928-2552 or by email at alin.podoreanu@cpuc.ca.gov.

Sincerely,

A handwritten signature in blue ink that reads "Kenneth A. Bruno".

Kenneth Bruno
Program Manager
Gas Safety and Reliability Branch
Safety and Enforcement Division

Enclosure: Summary of Inspection Findings

cc: Mike Bradley, PG&E Regulatory Compliance
Susie Richmond, PG&E Regulatory Compliance

¹ General Order 112-F was adopted by the Commission on June 25, 2015 via Decision 15-06-044.

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 valve and regulator station violations that PG&E noted.

Table 1: Sacramento Division Internal Findings Summary

Topic	Code	Finding	Instances	Corrected?
Valves & Regulator Stations	192.605(a)	Missed Maintenance - While performing a field inspection a Gas Mechanic discovered two separate HPR sets that appeared to feed facilities identified as gas main. As such these facilities appear to meet the definition of a District regulator station. Facility that is currently classified as a distribution main is in the process of being reclassified as a service.	2	Pending
	192.605(a)	Not Following Company Procedures - Relief Capacity Calculation not completed within 30 days	1	Yes
	192.605(a)	Missed Distribution Main Valve Maintenance	1	Yes

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.

B. Probable Violations

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

“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.”

PG&E’s Utility Procedure: TD-4430P-04, Gas Valve Maintenance, Publication Date: 01/01/2014
Rev: 01 states in part:

“11 Operating Plug Valves During Maintenance

11.1 Valve being maintained must be operated (or stroked) through its complete range when operating conditions permit.

1. Execute a full operation of valve.

2. *IF operating conditions do not permit a full operation of valve—to do so would cause downstream piping to be over-pressured or valve flow to be adversely affected, THEN partially operate valve per instructions in Section 11.2, AND document the reason for not fully operating the valve in the action taken section of the Gas Utility Form TD-4430P-04-F02, “Gas Valve Maintenance Record Form—Service History.”*

SED reviewed Gas Valve Maintenance Record Forms and found that PG&E did not document the reason for not fully operating plug valves on *Gas Utility Form TD-4430P-04-F02* in the following instances:

Table 2: Plug Valves without Documentation for Partial Operation

Valve No.	Description	Year	Valve Type
W-33	North Area Zone Valve	2016	Plug
W-26	North Area Zone Valve	2016	Plug
W-25	North Area Zone Valve	2016	Plug
W-24	North Area Zone Valve	2014, 2016	Plug
W-23	North Area Zone Valve	2016	Plug
W-21	North Area Zone Valve	2015, 2016	Plug
BV-29	Greenback & Almond	2016	Plug
BV-27	Greenback & Trajan	2016	Plug
BV-24	North Area Zone Valve	2015, 2016	Plug
BV-22	North Area Zone Valve	2016	Plug
BV-19	North Area Zone Valve	2015, 2016	Plug
BV-16	North Area Zone Valve	2015,2016	Plug

PG&E is in violation of Title 49 CFR §192.605(a) because it failed to document the reason for not fully operating its plug valves.

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

“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.”

SED inspected Regulator Station R-22 Inlet Fire Valve V-D03. At the time of the field inspection the valve maintenance card indicated Valve V-D03 was a 6-inch Cameron ball valve. PG&E Gas Valve Maintenance Work Procedure TD-4430P-04 specifies the maximum wrench length and

torque limit for operating a valve based on manufacturer, type and size. Work Procedure TD-4430P-04 however, did not specify a maximum wrench length or torque limit for a 6-inch Cameron ball valve. SED observed PG&E exercise Valve V-D03 by attaching a cheater bar on a T-Bar wrench. The assembly measured 5 ½ feet end to end. PG&E later excavated the valve to validate specification and found the valve to be a 4” Grove B4d ball valve. The valve was tagged as inoperable, and an Alternate Means of Control was established while a project was initiated to replace the valve.

PG&E is in violation of Title 49 CFR §192.605(a) because it used a wrench exceeding the maximum wrench length allowed of 24” as specified in the Gas Valve Maintenance Work Procedure for a 4” Grove ball valve. Please explain what corrective action PG&E has taken to prevent the use of wrenches which exceed the maximum allowed length.

C. Areas of Concern and Recommendations

1. SED reviewed maintenance records for regulator stations. Maintenance records indicated Regulator Stations B-07, B-10, B-20, B-22, B-37, A-08, A-57, R-09, R-01, R-14, R-41, R-46, R-49, R-60, R-61, A-40, A-64, D-30, DA-15, DA-02, DA-07, R-19, TS-01, WO-07 had regulators that failed to lock-up and noted sulfur deposits on components. Please explain what corrective action PG&E is taking to address lock-up issues due to sulfur deposits in the Division.

During SED’s field visits, SED made the following observations:

2. SED inspected Regulator Station No. B-25 and found three regulators which had tag numbers that differed from the operating diagram.

Table 3: Regulators Incorrectly Tagged

Regulator	Tag No.
R2	R4
R3	R2
R4	R3

SED also observed that regulator R4 failed to lock up. The Division found sulfur deposits on the pilot stem and rebuilt the pilot assembly.

3. SED inspected Regulator Station No. B-19 and observed that regulator R3 failed to lock up. The Division found sulfur deposits on the pilot stem and rebuilt the pilot assembly. SED observed corrosion at Regulator Station No. B-19 (see Figure 1) and requested PG&E to evaluate the type of corrosion and take corrective action.



Figure 1. A photograph of corrosion at Regulator Station No. B-19.

4. SED inspected Regulator Station No. W0-22 in Woodland, CA and observed that regulator R-2 failed to lock up. PG&E crews found sulfur deposits on the pilot stem and rebuilt the pilot assembly.
5. SED inspected the Clarksburg Town Regulator Station (DR20) and Regulator Station No. R-22 and observed that both stations were missing electrical insulators between the pipeline and pipe stands. Insulators were installed at Clarksburg Town Regulator Station on July 12, 2016. Insulators were installed at Regulator Station No. 22 on July 15, 2016.
6. SED inspected Regulator Station No. B-07 and observed that regulator R-3 failed to lock up. The Division found sulfur deposits on the pilot stem and rebuilt the pilot assembly.
7. SED inspected Regulator Station No. W0-20 in Woodland, CA and observed that regulator R-2 failed to lock up. The Division found sulfur deposits on the pilot stem and rebuilt the pilot assembly.
8. SED inspected Regulator Station No. B-34 in Elk Grove and observed corrosion. SED requests PG&E to evaluate the type of corrosion and take corrective action.
9. SED inspected Distribution Critical Main Valve B-01 in Davis and observed PG&E attempt to exercise the valve. The valve could not be exercised with the maximum T-Bar wrench length and number of personnel allowed in PG&E Gas Valve Maintenance Work Procedure TD-4430P-04 and therefore was considered inoperable. Please explain what corrective action PG&E has taken to correct this issue.

10. SED inspected Regulator Station No. D-22 and observed corrosion (see Figure 2). SED requests PG&E evaluate the type of corrosion and take corrective action.



Figure 2. A photograph of corrosion at Regulator Station No. D-22.

11. SED inspected Regulator Station No. R-22 in Dixon and observed that regulator R-2 failed to lock up. PG&E crews replaced the diaphragm and rebuilt the pilot cartridge.
12. SED inspected Regulator Station No. R-59 in Dixon and observed that Regulator R2 failed to lock up. PG&E crews replaced the diaphragm and rebuilt the pilot cartridge.