

PUBLIC UTILITIES COMMISSION

505 VAN NESS AVENUE
SAN FRANCISCO, CA 94102-3298



September 22, 2023

GI-2023-02-PGE-76-01ABC

Christine Cowsert
Senior Vice President, Gas Engineering
Pacific Gas and Electric Company
6121 Bollinger Canyon Road
San Ramon, CA 94583

SUBJECT: SED Closure Letter - General Order 112-F Inspection of PG&E's Bay Area South Transmission Area

Dear Ms. Cowsert:

The Safety and Enforcement Division (SED) of the California Public Utilities Commission (Commission) reviewed Pacific Gas & Electric Company's (PG&E) response letter dated June 27, 2023 for the findings identified during the General Order (GO) 112-F inspection of the Bay Area South Transmission Area done between February 27-March 3, 2023, March 6-10, 2023, and March 13-17, 2023. The inspection included a review of records related to the Bay Area South Transmission Area system and field inspections in the South Bay areas of Hollister, Salinas, and San Jose, including adjacent areas in the South Bay.

A summary of the inspection findings documented by SED, PG&E's response to our findings, and SED's evaluation of PG&E's response taken for each identified Violation and Area of Concern is attached.

If you have any questions, please contact Paul Penney at (415) 703-1817 or by email at Paul.Penney@cpuc.ca.gov.

Sincerely,

Dennis Lee, P.E.
Program and Project Supervisor
Gas Safety and Reliability Branch
Safety and Enforcement Division

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Summary of Inspection Findings

PG&E's Response and SEDs Evaluation

Dates of Inspection: February 27—March 3, 2023, March 6-10, 2023, and March 13-17, 2023

Operator: PACIFIC GAS & ELECTRIC CO

Operator ID: 15007 (primary)

Inspection Systems: Bay Area South Transmission System, including Hollister, San Jose, Salinas and surrounding areas

Assets (Unit IDs) with results in this report: All Bay Area South Transmission Assets

System Type: GT

Inspection Name: (2023) PG&E Bay Area South Transmission Audit

Lead Inspector: Paul Penney

Operator Representatives: Paul Camarena, Sajjad Sazar, Mark Montoya, Barbara Patterson and Susie Richmond

Unsatisfactory Results

Facilities and Storage : Facilities General (FS.FG)

1. Question Title, Vault Inspection, FS.FG.VAULTINSPECT.R (also presented in: MO.GM)
ID

Question 4. Do records document the adequacy of inspections of all vaults having an internal volume =200 cubic feet (5.66 cubic meters) that house pressure regulating/limiting equipment?

References 192.709(c) (192.749(a), 192.749(b), 192.749(c), 192.749(d))

Assets Covered All South Bay Transmission Assets (Bay Area South Trans)

Issue Summary Title 49, Code of Federal Regulations (49 CFR) 192.749(a) requires a vault with a volume of greater than 200 cubic feet to be inspected once each calendar year, not to exceed 15 months. PG&E violated this code section in the one case listed below.

PG&E performed an inspection of a vault with equipment #42760472 on 6/26/20 and subsequently on 10/15/21, more than 15 months later. Between 2020 and 2021, PG&E violated 192.749(a) for failure to conduct a vault inspection at this vault at least once each calendar year, not to exceed 15 months.

PG&E's Response:

Vault Equipment #42760472 was removed from service in August 2021 for rebuilding of the Harkins Rd Reg Station. Please refer to "Attachment 1_Clearance 80161286.pdf" for documentation of the clearance used to remove this asset temporarily from PG&E's infrastructure. The removal from service was within 15 months of the prior inspection performed on 6/26/20 and because the regulation was relocated above ground, the vault with equipment #42760472 was eliminated. An adjacent vault was mistaken for the vault with equipment #42760472, resulting in the October 15, 2021 inspection completion. The vault with equipment #42760472 now reflects a removed status in our SAP work management system (see Attachment 2_EQ#42760472 Removed Status.pdf).

SED's Conclusion:

SED has reviewed PG&E's explanation above and retracts this violation.

Maintenance and Operations : Gas Pipeline Maintenance (MO.GM)

2. Question Title, Valve Maintenance Transmission Lines, MO.GM.VALVEINSPECT.O
ID

Question 11. Are field inspection and partial operation of transmission line valves adequate?

References 192.745(a) (192.745(b))

Assets Covered All South Bay Transmission Assets (Bay Area South Trans)

Issue Summary 1. During the field visit of PG&E's Bay Area South Transmission facilities, SED found the lack of bolt and nut thread engagement on the flanges:

One of the bolts on valve V-C at Bannister Station.

One of the bolts on valve V-D at Bloomfield Station.

According to 49 CFR 192.13(c), "... Each operator shall maintain, modify as appropriate, and follow the plans, procedures, and programs that it is required to establish under this part."

Under PG&E Standard B-45.4, Section 2.1, Part E, "Bolts/studs must be fully engaged and extend completely through their nuts, with a recommended minimum of two threads exposed, as long as the bolt/stud does not extend beyond 1/2 inch (in.) from the nut face."

Therefore, PG&E is in violation of 49 CFR 192.13(c) for not following its own procedure, Standard B-45.4, Section 2.1, Part E. PG&E shall ensure the bolts and nuts on the flanges are fully engaged to maintain their designed strength. Please provide an update on the corrective actions that have been or will be taken.

2. SED visited the Tully Station in San Jose. SED found multiple vaults missing bolt locks for the top cover including V-15, V-16, SCADA-E, SCADA-D, AE-T, QW, R, and CZ.

In a response on March 16, 2023, PG&E stated that all bolt locks for the vaults were installed and they provided the proof of the vault covers (pictures).

Therefore, PG&E is in violation of 49 CFR 192.13(c) for not following its own procedure, Standard B-45.4, Section 2.1, Part E. PG&E should make sure all vaults that contain transmission valves and important gas equipment are locked to prevent unauthorized access to them.

PG&E's Response:

1. PG&E Design Standard B-45.4, Section 2.1, Part E states, "Bolts/studs must be fully engaged completely through the nut, with a recommended minimum of one thread exposed. Any excess thread protruding beyond the nut face should be minimized with a recommendation, not to exceed 1/2" beyond nut face." Please refer to "Attachment 3_GDS B-45.4". In both instances raised in this finding, the bolts/studs were fully engaged completely through the nut. Therefore, PG&E respectfully disagrees that 49 CFR 192.13(c) was violated.

2. PG&E recognizes the concern and resolved the issue during the field inspection to ensure locking devices were present and operating properly as required by Section 1.3(12) of Utility Standard TD-4540P-01(Attachment 4_TD-4540P-01).

SED's Conclusion for Each Finding:

1. After review of photos taken at the two locations identified above, SED concludes that PG&E is mistaken in its assertion above. Attached please find photos taken at valve V-C at Bannister Station (the first photo below) and valve V-D at Bloomfield Station (the second photo below). Clearly, there is one bolt that is not completely through the nut for V-C. The second photo show a bolt that appears to be flush with nut, not with a minimum of one thread exposed. As a result, please identify how PG&E will correct these conditions. Please respond in writing.
2. SED accepts PG&E's response that the issue was resolved during the field inspection. SED will continue to monitor this non-compliance during future audits.





Concerns

Maintenance and Operations : Gas Pipeline Abnormal Operations (MO.GOABNORMAL)

1. Question Title, Abnormal Operations Review, MO.GOABNORMAL.ABNORMALREVIEW.R
ID

Question 6. Do records indicate periodic review of work done by operator personnel to determine the effectiveness of the abnormal operation processes and corrective action taken where deficiencies are found?

References 192.605(a) (192.605(c)(4))

Assets Covered All South Bay Transmission Assets (Bay Area South Trans)

Issue Summary **49 CFR 192.603(b) states:** "Each operator shall keep records necessary to administer the procedures established under § 192.605."

49 CFR 192.605(c) states in part:

"(c) Abnormal operation. For transmission lines, the manual required by paragraph (a) of this section must include procedures for the following to provide safety when operating design limits have been exceeded:...

(4) Periodically reviewing the response of operator personnel to determine the effectiveness of the procedures controlling abnormal operation and taking corrective action where deficiencies are found."[Underline Added]

The spreadsheet from DR #95 (Bay Area South AOC) showed five (5) Abnormal Operating Conditions (AOCs), with description of each AOC and lessons learned along with a review. However, it is unclear from the spreadsheet whether PG&E proposed or implemented corrective or remedial actions. Therefore, for each of the five AOCs identified, please identify if corrective actions were identified and implemented.

PG&E's Response to Concern #1:

In accordance with 49 CFR 192.631 and PG&E Utility Procedure TD-4436P-05 (Attachment 5_TD-4436P-05), none of the five (5) AOC events listed in the spreadsheet for DR#95 (Attachment 6_AOC Events) met the criteria of being a Gas Control contributed reportable incident. PG&E developed a lessons learned for each AOC event but did not identify corrective actions. PG&E will continue to evaluate all AOC events for necessary corrective actions in addition to developing lessons learned.

SED's Conclusion for Concern #1:

At least one of these AOC's should have had a corrective action implemented. That AOC was item #3 on the spreadsheet. It was a dig-in event. The "Lessons Learned" column stated:

"Final E-Page sent out 12 hours after. Need process to determine in writing who send final SRDGSO isn't on shift." [Underline Added]

The underlined portion of this comment suggests a corrective action was needed. Therefore, please identify (1) whether PG&E has or will incorporated a process in writing as identified in the lessons learned comment. (2) Further, SED recommend that PG&E incorporate into the spreadsheet a column or columns stating whether a corrective action is necessary (i.e., Yes/No) and has been implemented.

Please respond in writing regarding the two items from the paragraph above.

Maintenance and Operations : Gas Pipeline Class Location (MO.GOCLASS)

2. Question Title, Change in Class Location Required Study, MO.GOCLASS.CLASSLOCATESTUDY.R
ID

Question 2. Do records indicate performance of the required study whenever the population along a pipeline increased or there was an indication that the pipe hoop stress was not commensurate with the present class location?

References 192.605(b)(1) (192.609(a), 192.609(b), 192.609(c), 192.609(d), 192.609(e), 192.609(f))

Assets Covered All South Bay Transmission Assets (Bay Area South Trans)

Issue Summary PG&E provided the required class location study in pdfs and Excel spreadsheets.

For pipeline segments where the class has changed, resulting in an MAOP that is too high for the current higher class, SED seeks to determine if PG&E has undertaken remedial actions to assure the MAOP is commensurate with the current class location for the segments identified in the Data Request (DR) below.

DR: Regarding the required class location study from 2020-2022, please list all line segments from DR #56 on L-300A and L-300B where the MAOP is not commensurate with the current class location. Also, please identify what PG&E has done or plans to do to bring the pipeline MAOP into alignment with each line segment's class location to the extent known by PG&E (i.e., replace pipe, lower pressure, etc.).

PG&E's Response to Concern #2:

As noted in DR#56, below are tables by class change year, identifying the mitigations performed where the MAOP was not commensurate with the current class location. For locations categorized as "Operating OCO with a valid test," the pipeline was strength tested prior to the class change to allow commensurate operation at the new class per 49 CFR 192.611.

2020:

Class Location Study Report #	Mitigation Notes
39	Operating one class out (OCO) with a valid post-class change test, per T-1606 conducted in 2022.
40	Operating OCO with a valid post-class change test, per T-1606 conducted in 2022.
41	Operating OCO with a valid post-class change test, per T-1606 conducted in 2022.
42	Operating OCO with a valid test.
43	Operating OCO with a valid test.
44	Operating OCO with a valid test.
50	Operating OCO with a valid test. Initially found to be operating OCO. Issue cleared by MAOP Engineering after 192.609 signature, older test found that allows compliance with 192.611.
52	Operating OCO with a valid test.

2021:

Class Location Study Report #	Mitigation Notes
33	Operating OCO with a valid post-class change test, per T-1606 conducted in 2022.
34	Operating OCO with a valid test.

36	Operating in Class but a test is required for other reasons. Placed in Strength Test Program.
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2022:

Class Location Study Report #	Mitigation Notes
29	Operating in Class.
30	Operating in Class.
41	Operating OCO with a valid test.
45	Operating in Class.
49	Operating OCO with a valid test.

SED's Conclusion for Concern #2:

SED has reviewed PG&E's response and has no further comments.

Maintenance and Operations : Gas Pipeline Overpressure Protection (MO.GMOPP)

3. Question Title, Pressure Limiting and Regulating Stations Inspection and Testing, MO.GMOPP.PRESSREGTEST.R ID

Question 6. Do records indicate inspection and testing of pressure limiting, relief devices, and pressure regulating stations?

References 192.709(c) (192.739(a), 192.739(b))

Assets Covered All South Bay Transmission Assets (Bay Area South Trans)

Issue Summary For the Reg station J80 located at Cole Rd & Anzar Rd, the station maintenance record showed that the left run was set as the lead run (370 psi) and the set pressure was not changed in the 2020 or 2021 inspection. PG&E later confirmed in DR#71 that the technician did switch the runs in 2021, but the lead and lag regulator set points were incorrectly documented on the station maintenance form, so the lead and lag run as left pressures appeared to be the same. Although the supervisor reviewed and signed the maintenance form in 2020 and 2021, the apparent mistake was not caught.

PG&E should take precautions to accurately document maintenance records. Supervisors should review the record thoroughly before signing the record.

PG&E's Response to Concern #3:

The Supervisor has noted the discrepancy and discussed the issue with the team of technicians. The Supervisor will take steps to note the working side of each regulator station to ensure equalized run-time on equipment.

SED's Conclusion for Concern #3:

SED reviewed PG&E's response and finds it to be acceptable.