Pacific Gas and Electric Company®

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May 30, 2024

Mr. Terence Eng
Program Manager
Gas Safety and Reliability Branch
Safety and Enforcement Division
California Public Utilities Commission
505 Van Ness Avenue
San Francisco, CA 94102

Re: General Order 112-F Compliance Inspection of PG&E Southern Transmission Area

Dear Mr. Eng:

Pacific Gas and Electric Company (PG&E) submits this response to the Safety and Enforcement Division's (SED) Post-Inspection Written Preliminary Findings (Summary) received April 30, 2024, stemming from the 2023 SED inspection of PG&E's Southern Transmission pipeline assets conducted November 13, to December 8, 2023.

For clarity, each of the four items identified in the Summary will be repeated followed by PG&E's response.

Concern #1: Design and Construction: Design of Pipe Components (DC.DPC)

Question Title, ID	Flanges and Flange Accessories, DC.DPC.FLANGE.O
Question Text	8. Do flanges and flange accessories meet the requirements of 192.147?
Assets Covered	Southern Transmission (88996 (78))
References	192.147 (192.147(a), 192.147(b), 192.147(c), 192.607)
Issue Summary	During field inspection, SED team observed some pipeline flange bolts did not extend completely through the nuts at the following locations: 1. Topock Compressor Station, unit K-5 discharge by-pass valve flange 2. Ridgecrest Primary Regulator station, valves V1, V4, V7, V8 3. UPF Corporation Meter & Reg Station flanges PG&E generated the following repair work order notifications for these findings: Work Order numbers - 46079024 for K-5 discharge by-pass valve flange, 127548610 for Ridgecrest station valves, and 127548712 for UPF Corporation Meter & Reg Station flanges. PG&E identified this issue (Flange bolts not completely extending through the nuts) as a systemwide issue and reported it in 2023 Q2 Internal Review Summary of Findings (IRSF) report it submitted to SED on 7/13/23. PG&E's standard procedure B-45.4 - Flange Bolt-Tightening Sequence and Torque Values, Section 2.1 (E) states: *"Bolts/studs must be fully engaged and extend 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 ½-inch beyond nut face."*

American Society of Mechanical Engineers (ASME) / American National Standards Institute (ANSI) B16.5-2003, incorporated by reference into Title 49 CFR, Park 192, requires that bolt length be calculated to include the length of the necessary nuts needed to connect the flange, plus the minimum flange thickness, plus the gasket thickness, plus the appropriate thickness tolerances.

SED requests repair status update on these findings. SED recommends that PG&E's work group evaluation should include identification and remediation of these issues during its normal operations and maintenance (O&M) activities.

Response to Concern #1:

PG&E created corrective notifications during the inspection for these findings: Notification 127542679 for the K-5 discharge flange, Notification 127548610 for the four Ridgecrest Regulation Station valves, and Notification 127548712 for the UPF Corporation Meter & Regulation Station. All work associated with these corrective notifications has been completed. See Attachment 1 - "AOC 1 Completed Corrective Notifications" for screenshots of the notification completion dates.

PG&E has completed the Work Group Evaluation (WGE) for the systemwide issue on the bolt/stud engagement issue and has recommended that during scheduled annual maintenance for all stations, bolts/studs identified that do not meet the standard procedure criteria should be remediated or a corrective notification will be generated to address it. As a corrective action to the WGE, a 5 Minute Meeting (5MM) was created by Gas Pipeline Operations and Maintenance (GPOM) and Standards Engineering to address the issue. See Attachment 2 - "WGE – Bolt/Stud Engagement Issue" and Attachment 3 - "5MM Thread Engagement Requirements for Bolted Connections" for the WGE and 5MM, respectively.

Please note that Annex D of American Society of Mechanical Engineers (ASME) / American National Standards Institute (ANSI) B16.5-2003, was not introduced until the 2003 edition of ASME/ANSI B16.5. While guidance in Annex D is not mandatory per footnote 1 (see Attachment 4 - "Annex D of ASME-ANSI 16.5-2003"), it aligns with the current version of PG&E design standard B45.4 (Rev-0e, effective 03-10-2023) which requires that "bolts/studs must be fully engaged and extend completely through the nut, with a recommended minimum of one thread exposed…" per section 2.1(e).

Concern #2: Design and Construction: Design of Pipe Components (DC.DPC)

Question Title, ID	Supports and Anchors, DC.DPC.SUPPORT.O
Question Text	29. Do field observations confirm each length of pipe and each component is being visually inspected for sufficient installation of anchors or supports to prevent undue strain on connected equipment, to resist longitudinal forces, to prevent or dampen excessive vibration, and is in accordance with §192.161?
References	192.141 (192.161(a), 192.161(b), 192.161(c), 192.161(d), 192.161(e), 192.161(f))
Assets Covered	Southern Transmission (88996 (78))
Issue Summary	During field inspection, SED observed some pipeline supports that were not in contact with the pipelines (not in contact to provide support for the pipelines that needed the support). Also, some of the gaps in supporting frame were bridged with temporary wooden wedges at the following locations:

1. Needles Tap Station
2. [redacted] Meter Station
3. Ridgecrest Primary Reg Station

PG&E generated the following repair work order notifications for these findings: Work order notification numbers - 127496127 for Needles Tap station, 127548611 for Searles Station, and 127548549 Ridgecrest Primary Reg Station. Please provide a remedial action report to SED.

Response to Concern #2:

PG&E created corrective notifications during the inspection for these findings: Notification 127496127 for the Needles Tap Regulation Station, Notification 127548611 for the [redacted] Meter Station, and Notification 127548549 for the Ridgecrest Primary Regulation Station. All work associated with these corrective notifications has been completed. See Attachment 5 - "AOC 2 Completed Corrective Notifications" for screenshots of the notification completion dates.

Concern #3: Maintenance and Operations: Gas Pipeline Operations (MO.GO)

Question Title, ID	Continuing Surveillance, MO.GO.CONTSURVEILLANCE.O (also presented in: MO.GOCLASS)
Question Text	3. Are unsatisfactory conditions being captured and addressed by continuing surveillance of facilities and the pipeline as required by 192.613?
References	192.613(a) (192.613(b), 192.703(a), 192.703(b), 192.703(c))
Assets Covered	Southern Transmission (88996 (78))
Issue Summary	During field inspection of leak survey, SED team noted gas leaks on the following locations: 1. Three (3) leaks during Topock Compressor Station leak survey 2. A Launcher inside the Hinkley Compressor station 3. MLV 275.86B at Gosford Rd. Meter Station PG&E generated the following work order notifications for these findings: Work Order Notification numbers - 127484097, 127484132, and 127484300 for Topock Compressor Station leaks, 127529671 for the Launcher inside the Hinkley Compressor station, and 127549297 for MLV 275.86B at Gosford Rd. Meter Station. PG&E informed SED it completed remediation of all the gas leaks that were discovered the field inspections the leak at MLV 275.86B. Please provide a remedial action report to SED for the gas leak at MLV 275.86B.

Response to Concern #3:

PG&E created leak notifications during the inspection for these findings: Notifications 127484097, 127484132 and 127484300 for the Topock Compressor Station, Notification 127529671 for the Hinkley Compressor Station, and Notification 127549297 for the Gosford Road Meter Station valve MLV 275.86B. Repairs for the Topock Compressor Station and the Hinkley Compressor Station were completed during the inspection, and the repair documentation was provided to SED under Southern Transmission Audit Data Requests #54 and #69, respectively. The non-hazardous Grade 3 leak on MLV 275.86B at Gosford Road Meter Station is scheduled to be repaired by Kettleman District personnel during the valve's annual maintenance in June, 2024.

Concern #4: Time-Dependent Threats: Atmospheric Corrosion (TD.ATM)

Question Title, ID	Atmospheric Corrosion Monitoring, TD.ATM.ATMCORRODEINSP.O
Question Text	5. Is pipe that is exposed to atmospheric corrosion protected?
References	192.481(b) (192.481(c), 192.479(a), 192.479(b), 192.479(c), 192.481(d))
Assets Covered	Southern Transmission (88996 (78))
Issue Summary	During field inspection, SED team observed surface rust with indications of atmospheric corrosion and disbonded coating at the following locations: 1. V-20 and blind flange near Needles Tap 2. Topock compressor station unit K-5 discharge by-pass valve 3. Victorville G TAP flanges and volts 4. Oro Grande Reg station flanges and volts 5. [redacted] Meter Station volts and flanges 6. L-300A span (EQ# 41453454) just outside of Topock compressor station

PG&E generated the following work order notifications for these findings: Work Order Notification numbers: 127496126 for V-20 and blind flange near Needles Tap, 127496128 for K-5 discharge by-pass valve, 127658648 for Victorville G TAP flanges and volts, 127658649 for Oro Grande Reg station flanges and volts, 127549055 for Searles Station, and 120503300 for Span outside of Topock Compressor station. Please provide a remedial action report to SED.

Response to Concern #4:

PG&E created corrective notifications during the inspection for these findings: Notification 127496126 for the V-20 blind flange near Needles Tap, Notification 127496128 for the Topock Compressor Station K-5 discharge by-pass valve, Notification 127658648 for the Victorville G TAP flanges and bolts, Notification 127658649 for the Oro Grande Regulation Station flanges and bolts, and Notification 127549055 for the [redacted] Meter Station flanges and bolts. Notification 120503300 for the span just outside of Topock compressor station, EQ #41453454, was created following its last inspection.

All work associated with the corrective notifications for the V-20 blind flange near Needles Tap, Topock Compressor Station K-5 discharge by-pass valve and the [redacted] Meter Station flanges and bolts have been completed. See Attachment 6 - "AOC 4 Completed Corrective Notifications" for screenshots of the notification completion dates. The work associated with the Victorville G TAP and Oro Grande Regulation Station flanges and bolts is currently scheduled to be completed in the 3rd quarter of 2025. Please note that there are no abnormal operating conditions associated with the coating at these stations. See Attachment 7 - "AC Inspection Reports" for the latest Atmospheric Corrosion Inspection Reports for these two stations. The span just outside of Topock compressor station, EQ #41453454, is currently being remediated by the Projects group under order 43292177, with an expected completion of June, 2024.

Please contact [redacted] for any questions you may have regarding this response.

Sincerely,

Kristina Castrence
Sr. Director, Gas Regulatory and Risk

cc: Claudia Almengor, CPUC
Matthewson Epuna, CPUC
Dennis Lee, CPUC
Sann Naing, CPUC
[redacted], PG&E

Attachments:

Attachment 1 - AOC 1 Completed Corrective Notifications.docx
Attachment 2 - WGE - Bolt/Stud Engagement Issue.docx
Attachment 3 - 5MM Thread Engagement Requirements for Bolted Connections.pdf
Attachment 4 - Annex D of ASME-ANSI 16.5-2003.pdf
Attachment 5 - AOC 2 Completed Corrective Notifications.docx
Attachment 6 - AOC 4 Completed Corrective Notifications.docx
Attachment 7 - AC Inspection Reports.pdf