PUBLIC UTILITIES COMMISSION
505 VAN NESS AVENUE
SAN FRANCISCO, CA 94102-3298

June 27, 2023

GI-2023-04-PGE-14-02ABC

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

SUBJECT: General Order (GO) 112-F Gas Inspection of PG&E's Sierra Division

Dear Ms. Cowsert:

On behalf of the Safety and Enforcement Division (SED) of the California Public Utilities Commission, Hengyao Chen (Henry), Yi Yang (Rocky) and Dylan Glass conducted a General Order 112-F inspection of Pacific Gas & Electric Company's (PG&E) Sierra Division (Division) on April 17 – April 28, 2023. The inspection included a review of the Division's records for the period of 2019 through 2022, as well as a representative field sample of the Division's facilities. SED staff also reviewed the Division's operator qualification (OQ) records, which included field observation of randomly selected individuals performing covered tasks.

SED's findings are noted in the Post-Inspection Written Preliminary Findings (Summary) which is enclosed with this letter. The Summary reflects only those particular records and pipeline facilities that SED inspected during the inspection. SED discovered three (3) probable violations and five (5) concerns 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 concerns noted in the Summary.

If you have any questions, please contact Hengyao Chen at (415) 214-4173 or by email at hengyao.chen@cpuc.ca.gov.

Sincerely,

Terence Eng

Terence Eng, P.E.
Program Manager
Gas Safety and Reliability Branch
Safety and Enforcement Division

Enclosure: Post-Inspection Written Preliminary Findings

cc: Susie Richmond, PG&E Gas Regulatory Compliance
Paul Camarena, PG&E Gas Regulatory Compliance
Dennis Lee, SED
Claudia Almengor, SED

Post-Inspection Written Preliminary Findings

Dates of Inspection: 4/17/2023 – 4/21/2023, 4/24/23 – 4/28/2023

Operator: PACIFIC GAS & ELECTRIC CO

Operator ID: 15007 (primary)

Inspection Systems: Distribution

Assets (Unit IDs) with results in this report: Sierra Division (86280)

System Type: GD

Inspection Name: PG&E Sierra Division

Lead Inspector: Hengyao Chen

Operator Representative: Paul Camarena

Unsatisfactory Results

Design and Construction: Construction (DC.CO)

Question Title, ID	Plastic pipe - Qualifying Personnel to Make Joints, DC.CO.PLASTICJOINTQUAL.R
Question	5. Do records indicate persons making joints in plastic pipelines are qualified in accordance with 192.285?
References	192.285(d) (192.285(a), 192.285(b), 192.285(c), 192.807(a), 192.807(b))
Assets Covered	Sierra Division (86280 (14))
Issue Summary	Title 49 Code of Federal Regulations (CFR) §192.603(b) states, "*Each operator shall keep records necessary to administer the procedures established under § 192.605.*"

During SED's review of construction project records, SED noted that a Gas Service Record (GSR) (Order#35000536) indicated that the personnel (LANID[redacted]) performing and inspecting Electrofusion (EF) plastic joining for six service tees and six couplings on 6/16/2020 was not qualified to do so. The personnel's OQ (OQ-2108 Electrofusion (coupling)) had expired on 11/30/2019.

After the SED inspection, PG&E began an internal investigation on 5/12/23, provided supporting documentation to SED (timecards and Job Site Safety Analysis (JSSA) forms), and determined that the LAN ID and signature on the GSR was not the person who performed the EF plastic joining, but rather the person overseeing the work.

SED reviewed PG&E's supporting documentation; however, the documents do not clarify the responsibilities/covered tasks performed by the field technicians (LANID: [redacted]&[redacted]). The timecards only show the two technicians' working locations and dates matching the GSR. The JSSA forms only show the emergency role assigned to each technician. PG&E confirmed to SED that there are no existing records or photos indicating which technician made and inspected each joint.

PG&E was unable to provide adequate or traceable records for identifying plastic joiners and inspectors on the selected project. Therefore, PG&E is in violation of Title 49 CFR §192.603(b) for failing to keep adequate records of qualified plastic joiners and inspectors.

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

Question Title, ID Flanges and Flange Accessories, DC.DPC.FLANGE.O

Question 2. Do flanges and flange accessories meet the requirements of 192.147?

References 192.141 (192.147(a), 192.147(b), 192.147(c))

Assets Covered Sierra Division (86280 (14))

Issue Summary Title 49 CFR §192.605(a) states, "*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 Standard B-45.4 (Publication Date:3/10/2023, Effective Date:3/10/2023 Rev.0e), Section 2.1, Part E, states, *"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."*

During field inspection at [redacted] regulator station, SED noted that the flange between the filter and valve V-2 had two sets of bolts and nuts that were not fully engaged. Therefore, PG&E is in violation of Title 49 CFR §192.605(a) for failing to follow its standard B-45.4 by not installing bolts and nuts properly to maintain their designed strength.

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

Question Title, ID Atmospheric Corrosion Monitoring, TD.ATM.ATMCORRODEINSP.R

Question 4. Do records document inspection of aboveground pipe for atmospheric corrosion?

References 192.491(c) (192.481(a), 192.481(b), 192.481(c), 192.481(d))

Assets Covered Sierra Division (86280 (14))

Issue Summary Title 49 CFR §192.605(a) states, "*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-4188P-02 (Publication Date:1/16/2019, Effective Date:4/16/2019 Rev:1) requires the corrosion technician to contact the local supervisor to create a corrective to recoat when they discover an Abnormal Operating Condition (AOC) consisting of light surface rust or coating issues at air-to-soil transitions.

PG&E's Utility Procedure TD-4188S (Publication Date:2/17/2016, Effective Date: 1/1/2017) Section 4 states, in part: *"The mitigation timeline of atmospheric corrosion-related abnormal operating conditions (AOCs) found during monitoring must not exceed thirty-nine months from the date of the AOC identification…"*

SED reviewed atmospheric corrosion inspection records of a span (Equipment#44821225) for the years of 2019 and 2022. SED noted that PG&E identified coating issues at the air-to-soil transitions on 7/31/2019 and again on 7/1/2022, indicating that PG&E has not remediated the AOC. PG&E confirmed that the first correction ticket (ticket#123979311) PG&E created was on 7/1/2022, followed by another ticket (ticket#125986590) on 4/20/23.

By the end of SED's inspection, April 28, 2023, PG&E still had not remediated the AOC, thus exceeding the 39-month timeline specified in TD-4188S. Based on the information gathered, SED found PG&E in violation of Title 49 CFR §192.605(a) for failing to follow its Utility Procedure TD-4188P-02 by not creating a corrective to recoat the span when PG&E discovered the AOC on 7/31/2019. PG&E also failed to follow its Utility Procedure TD-4188S by not mitigating the AOC within 39 months of identification.

Concerns

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

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

Question: 4. 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: Sierra Division (86280 (14))

Issue Summary: SED reviewed pressure regulating station maintenance records and found that for regulator station R-608, the left run was the lead run on Aug 6, 2019, but on September 4, 2020, PG&E found that the left run was the lag run. PG&E later confirmed that the regulator station runs were swapped on January 29, 2020 for the moisture to dry and apply paint. However, the personnel who conducted the maintenance and swapped the runs did not document the change.

SED recommends PG&E document the event of changing regulator station configurations whenever it occurs.

Maintenance and Operations: ROW Markers, Patrols, Leakage Survey and Monitoring (MO.RW)

Question Title, ID: Distribution Leakage Surveys, MO.RW.DISTPATROLLEAKAGE.R (also presented in: PD.RW)

Question: 11. Do records indicate distribution leakage surveys were conducted as required?

References: 192.603(b) (192.723(a), 192.723(b))

Assets Covered: Sierra Division (86280 (14))

Issue Summary: SED reviewed selected leakage survey records and found discrepancies in the length of main leak surveyed for the following:

	Ft of main surveyed: (2021)	Ft of main surveyed: (2022)
Map:2405-C5	7,125	4,500
Map:2405-D1	940	550
Map:2405-G2	3,735	7,824
Map:2405-G2	2,950	1,540

PG&E responded that the discrepancies were a result of the leak survey technicians incorrectly using the scale wheel because there are no standards or procedures for the technicians to follow.

SED also reviewed PG&E's "Distribution Leak Survey Protocol" for performing quality control (QC) reviews of leak survey plat maps, and selected QC records for the issue plat maps (2019-2022).

SED found that both the protocol and records do not require the QC personnel to compare leak survey footage between the current and previous cycle.

PG&E confirmed to SED that the QC personnel do not compare the length of main surveyed.

SED recommends PG&E update its procedures for proper use of the scale wheel and add a requirement for QC personnel to check for discrepancies in leak survey footage.

Question Title, ID Placement of ROW Markers, MO.RW.ROWMARKERABOVE.O (also presented in: PD.RW)

Question 14. Are line markers placed and maintained as required for above ground pipelines?

References 192.707(c) (CGA Best Practices, v4.0, Practice 2-5, CGA Best Practices, v4.0, Practice 4-20)

Assets Covered Sierra Division (86280 (14))

Issue Summary During SED's field observation, SED noted that line markers were missing at pipeline span (Equipment#45065215) on 4/27/2023.

PG&E corrosion technician remediated the issue by installing the new line markers on the same day. Please provide documentation of the remediation.

Time-Dependent Threats: External Corrosion - CP Monitoring (TD.CPMONITOR)

Question Title, ID Cathodic Protection Monitoring Criteria, TD.CPMONITOR.MONITORCRITERIA.O

Question 3. Are methods used for taking CP monitoring readings that allow for the application of appropriate CP monitoring criteria?

References 192.465(a) (192.463(b), 192.463(c), 192.463(a))

Assets Covered Sierra Division (86280 (14))

Issue Summary PG&E's Utility Standard: TD-4181S (Publication Date:5/24/23, Effective Date:5/24/23 Rev:3), Section 5.1 states, in part:"...*Cathodic protection areas are considered adequately protected, per 49 CFR 192, Appendix D, "Criteria for Cathodic Protection and Determination of Measurements," Section 1.A.1, when the structure-to-soil potentials are −850 millivolts (mV) or more negative, with reference to a copper-copper sulfate electrode, with CP current applied*." And Section 7.4, states, " *To ensure facilities are protected until the next monitoring cycle, a drivable anode must be installed if the P/S potentials are less negative than −900 mV with reference to a copper-copper sulfate electrode, with CP current applied."*

During field observation, SED noted the following read points to be low:

Test Station (ETS):

- Equipment#44406710: -690mV (P/S)

Isolated steel (10%er):

- Equipment#44903579: -871mV (P/S)
- Equipment#45103724: -856mV (P/S)

PG&E indicated that they created correction tickets, and all remediation is currently in progress.

SED requests that PG&E provide an update after completing any corrective actions.

Generic Questions: Generic Questions (GENERIC.GENERIC)

Question Title, ID Generic Question, GENERIC.GENERIC.GENOBSERVE.O

Question 1. Generic question - please provide context in result notes.

References 196.161

Assets Covered Sierra Division (86280 (14))

Issue Summary During SED's field observation, SED observed exposed pipes (spans) and noted the following AOCs:

1. Equipment#44821225
    a) A barbed wire was supporting the main body of the pipe.
    b) The contact areas between the barbed wire and pipe had surface rust and small coating holidays.

2. Equipment#45031542
    a) Unauthorized plastic pipe tied to the span.
    b) The support at "Pipe to Support interfaces#1" has sharp open edges and could damage the pipe and/or coating.
    c) The support at "Pipe to Support interfaces#2" rests on loose soil.

SED requests that PG&E provide an update on any corrective actions taken.