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

January 23, 2025

GI-2024-04-PGE-77-01ABC

Mr. Austin Hastings
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 Central Area Transmission Assets

Dear Mr. Hastings:

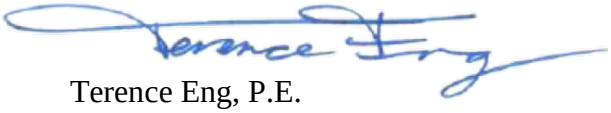
On behalf of the Safety and Enforcement Division (SED) of the California Public Utilities Commission (CPUC), Victor Muller, Hengyao "Henry" Chen, Matthew Shaffer, Mohammad Noureddine, and Jessica Nicolas conducted a General Order 112-F inspection of Pacific Gas & Electric Company's (PG&E) Central Area Transmission Assets (Rio Vista, Tracy, Stockton, and Yosemite Districts, including the Bethany compressor station) from April 15th through April 26th, from May 6th through May 10th, and from November 18th through November 22nd, 2024. The inspection included a review of the Central Area's records for the period of 2021 through 2023, as well as a representative field sample of the Central Area's facilities. SED staff also reviewed the Central Area's operator qualification (OQ) records and the 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 records and pipeline facilities that SED inspected. SED discovered three (3) unsatisfactory results and two (2) 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 findings noted in the Summary.

If you have any questions, please contact Victor Muller at (415) 940-4352 or by email at victor.muller@cpuc.ca.gov.

Sincerely,



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

Enclosure: Post-Inspection Written Preliminary Findings

cc: Glen Allen, PG&E Gas Regulatory Compliance
Frances Yee, PG&E
Kristina Castrence, PG&E
Brian Stout, PG&E
Jason McMillan, SED
Claudia Almengor, SED

Post-Inspection Written Findings

Dates of Inspection: 04/15/2024 - 04/26/2024, 05/06/2024-05/10/2024, & 11/18/2024-11/22/2024

Operator: PACIFIC GAS & ELECTRIC CO

Operator ID: 15007 (primary)

Inspection Systems: PG&E Central Transmission

Assets (Unit IDs) with results in this report: Central Area (86288)

System Type: GT

Inspection Name: 2024 PG&E Central Transmission

Lead Inspector: Victor Muller

Operator Representative: Glen Allen

Unsatisfactory Results

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), 192.9(f)(1), 192.453)
Assets Covered	Central Area (86288 (77))
Issue Summary	Unsatisfactory

Title 49 Code of Federal Regulations (CFR) §192.605(a) states, in part, "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:11/18/2020, Effective Date:11/18/2020 Rev:1a) requires the corrosion technician to contact the local supervisor to create a corrective notification ticket 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 "Mitigation", 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 and found the following:

PG&E identified major coating and/or corrosion issues at the air-to-soil transitions for two different aboveground pipe spans, Equipment #44728718 and #44728719, on 8/27/2019. PG&E found the same issues again on 5/16/2022. PG&E did not take steps to remediate these corrosion issues between these inspection dates. PG&E confirmed that they first created corrective notification tickets (123697644 and 123699292, respectively) on 5/26/2022. SED visited both spans in the field on 5/8/2024 and verified that the AOCs had not been remediated.

PG&E still had not remediated the AOCs by the end of SED's inspection on 11/22/2024, thus exceeding the 39-month timeline specified in TD-4188S. Based on the information gathered, SED finds that PG&E is in violation of Title 49 CFR Part 192.605(a) for failing to follow its Utility Procedure TD-4188S by not mitigating the AOCs within 39 months of identification.

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

Question 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), 192.9(f)(1), 192.453, 192.491)

Assets Covered Central Area (86288 (77))

Issue Summary Unsatisfactory

Title 49 CFR §192.605(a) states, in part, "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:11/18/2020, Effective Date:11/18/2020 Rev:1a), Section 2.1 requires corrosion personnel to note the location of submerged areas on Form TD-4188P-02-F01 and create a Request for Work in SAP to inspect the span on a quarterly interval if span is partially or fully submerged in water.

SED reviewed atmospheric corrosion inspection records of an aboveground span, Equipment #41440904, for the year of 2021. SED found that a corrosion technician noted the location of submerged areas on the atmospheric corrosion (AC) inspection form (i.e. Form TD-4188P-02-F01 or Pronto Form) and created a Request for Work (RW) in SAP to inspect the span on a quarterly maintenance plan on 6/3/2021. PG&E has missed a total of three quarterly maintenance cycles since 6/3/2021.

PG&E responded that "The reason this missed maintenance was due to a misfunction of PRONTO which did not attach the inspection form to the notification, therefore stopping the creation of the RW".

Based on the information gathered, SED finds PG&E is in violation of Title 49 CFR §192.605(a) for failing to follow its Utility Procedure TD-4188P-02 by not conducting quarterly maintenance inspections after PG&E discovered the span was fully submerged in water on 6/3/2021.

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

Question Title, ID	Extent of Corrosion Control Deficiencies for Onshore Gas Transmission, TD.CPMONITOR.DEFICIENCYEXTENT.R
Question	13. For onshore gas transmission pipelines, does the remedial action plan adequately document actions taken to determine the extent of inadequate cathodic protection, and correct any identified deficiencies in corrosion control?
References	192.491(c) (192.465(d), 192.465(f))
Assets Covered	Central Area (86288 (77))
Issue Summary	Title 49 CFR §192.463(c) states: "The amount of cathodic protection must be controlled so as not to damage the protective coating or the pipe."

Title 49 CFR §192.465(d) states, "Each operator shall take prompt remedial action to correct any deficiencies indicated by the monitoring."

PG&E's Utility Procedure: TD-4181P-202 (Publication Date:9/18/2019, Effective Date: 12/18/2019 Rev:1), Section 2.1 states, in part "1. If the P/S potential measurements are more negative than -2500 mV with impressed cathodic protection current applied (rectifier ON), then perform an instant-OFF test… 3. IF the instant-OFF test demonstrated that the P/S potential of the pipeline is more negative than -1200 mV, then an overprotection condition may exist and further testing may be required."

SED reviewed a set of test station inspection records and noted that PG&E identified overprotection issues (i.e. pipe-to-soil (P/S) potentials more negative than -2,500 mV with impressed cathodic protection current applied (rectifier On) and more negative than -1,200 mV during the instant-OFF test) for equipment #41385543, #44662777, #44782147, #44361695, and #44917626 in 2021. The remediation was completed in 2023, more than a full inspection cycle after the discovery of the overprotection issues and which SED does not consider to be 'prompt' action.

PG&E stated in part, "Overprotection issues was not mitigated earlier due to a systemwide issue within SAP where "Instant Off" reads more negative than -1200 mv were listed as an "area up" rather than an "area down". Therefore, the overprotection reads on CTS's in SAP would not automatically generate a troubleshoot notification for the local Corrosion Mechanics to troubleshoot. This issue was first identified in February of this year [2024] by Corrosion Engineering and was corrected in SAP in April [2024]. CAP 129036062 (see attached) was generated and the issue was first self-reported in the 2022 Q2 IRSF."

Based on the information gathered, SED finds PG&E in violation of Title 49 CFR §192.465(d) for not taking prompt remedial action to address the above deficiencies.

Concerns

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

Question Title, ID	Atmospheric Corrosion Monitoring, TD.ATM.ATMCORRODEINSP.O
Question	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), 192.9(f)(1), 192.453, 192.491)
Assets Covered	Central Area (86288 (77))
Issue Summary	Concerns:

(1) PG&E was unable to perform a full inspection during the quarterly maintenance for the aboveground span with equipment #45227711 due to heavy vegetation around the span between 2/22/22 and 2/6/23. SED visited the span and verified that PG&E had not remediated the heavy vegetation issue by 4/25/24. PG&E has worked with its vegetation management team to remove the vegetation from the span. On 11/18/24, PG&E responded that starting in October of this year, the Vegetation Management team had instituted a new process for PG&E's field personnel to request and submit a vegetation cleaning work order through its Gas Transmission Vegetation Management Home SharePoint site as well as hold a five-minute meeting to explain the new process.

SED recommends PG&E update its procedures to include a timeframe for remediation for vegetation management.

(2) PG&E performed an inspection on span equipment #41431166 on 5/10/23 but incorrectly documented it as span equipment #45227711. As a result, the span, equipment #45227711, was incorrectly removed from the Quarterly Maintenance plan.

SED recommends that PG&E update its procedures to add a requirement for quality control (QC) personnel to check for accuracy of inspection reports.