Kristina Castrence
Sr. Director, Gas Regulatory & Risk
6121 Bollinger Canyon Road
San Ramon, CA 94583
Phone: (415) 407-1152
Email: Kristina.Castrence@pge.com

February 11, 2025

Mr. Terence Eng, P.E.
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 Gas Inspection of PG&E's Central Area Transmission Assets

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 January 23, 2025, stemming from the 2024 SED inspection of PG&E's 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.

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

Unsatisfactory Result #1: 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.

Response to Unsatisfactory Result #1:

PG&E agrees with this finding. Correctives for the 2019 inspection results for unintentionally exposed pipes 44728718 and 44728719 were not manually created in SAP after uploading their maintenance inspection records. In 2019, correctives were not automatically generated in SAP following input of the results, as they currently are. Corrective notifications were automatically created following input of the 2022 maintenance inspection results and both of these unintentionally exposed pipes are scheduled for repair in 2025. To prevent reoccurrence, a meeting was held with relevant departments (TIMP Risk, Pipeline Services and Corrosion Engineering) to confirm and review responsibility for inputting inspection results into SAP so that corrective notifications for unintentionally exposed pipes are automatically generated. Starting in 2025, Quality Control will screen all inspections and confirm a corrective was created based on the inspection results.

Unsatisfactory Result #2: 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*	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.

Response to Unsatisfactory Result #2:

PG&E agrees with this finding. The issue with the quarterly inspections for unintentionally exposed pipe 41440904 was self-identified and reported per CAP 128472298 on April 8, 2024, prior to the start of the inspection (see Attachment 1 – "CAP 128472298"). This self-report was included in the 2024 Q2 IRSF which was submitted to SED on July 26, 2024 (see Attachment 2 – "2024 Q2 IRSF_CONF"). This information was provided to SED during the inspection per Data Request #80 and again by email to the audit lead on December 4, 2024. The reason for 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. Per the IRSF, all actions are complete and "Last maintenance that was completed was on April 11, 2024 and it is currently not submerged. It is back on its 3-year maintenance plan which is set to call next in April 2027".

Unsatisfactory Result #3: 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.

Response to Unsatisfactory Result #3:

PG&E agrees with this finding. The Coupon Test Station (CTS) overprotection for EQ's 41385543, 44662777, 44782147 and 44361695 were 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 self-identified in February of 2024 by Corrosion Engineering and was corrected in SAP in April of 2024. CAP 129036062 (see Attachment 3 – “CAP 129036062”) was generated and the issue was first self-reported in the 2024 Q2 IRSF. EQ’s 41385543, 44662777, 44782147 and 44361695 were remediated in 2023 and the latest 2024 reads indicate that they are still in compliance. Attached, please find Attachment 4 – “Updated OP Reads Notifications” for the latest reads for these CTS’s.

Please note that EQ 44917626 was not out of compliance. As stated in the “Issue Summary” above, **both** the “pipe-to-soil (P/S) potentials have to be more negative than -2,500 mV with impressed cathodic protection current applied (rectifier On) **and** more negative than -1,200 mV with (instant-OFF)” to be out of compliance. This criterion was not met for EQ 44917626. The pipe to soil reads were not more negative than -2500 mV. Attached, please find Attachment 5 – “EQ 44917626 Read Summary”.

Concern #1: 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.

Response to Concern #1:

PG&E agrees with this finding. A Vegetation management work order was not completed following the quarterly inspections performed between February 22, 2022 and February 6, 2023 for unintentionally exposed pipe 45227711. PG&E has implemented a new process for field personnel to request and submit a vegetation clearing work order. The Vegetation Management team has instituted this new process for PG&E's field personnel to request and submit a vegetation clearing work order through its Gas Transmission Vegetation Management Home SharePoint site. A five-minute meeting to explain the new process has been created for guidance. This new process was demonstrated to the SED inspectors prior to the inspection close-out meeting. Please see Attachment 6 – “5MM_GTVM_Jan 7 2025”, for the completed 5

Minute Meeting. This unintentionally exposed pipe was inspected on November 13, 2024 with no abnormal operating conditions identified and has been placed on a 3 year inspection cycle.

PG&E span and unintentionally exposed pipe inspections have a due date of 36 months (often completed sooner than 36 months) from the previous inspection. This 36-month due date is 3 months ahead of the 39-month compliance date. Therefore, if a span has vegetation issues not previously identified when a mechanic goes to perform the inspection at or before the 36-month PG&E due date, there will be time to create and complete a vegetation clearing work order for the atmospheric corrosion inspection prior to the compliance due date. For corrective projects, a site walk is performed over a year prior to the compliance date. This allows adequate time to identify a vegetation issue and complete a vegetation clearing work order prior to the start of a corrective project.

Concern #2: 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:

(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.

Response to Concern #2:

PG&E agrees with this finding. PG&E performed an inspection on span 41431166 on May 10, 2023 but incorrectly documented it as unintentionally exposed pipe 45227711. Please note that both are located on the same dirt road within approximately two miles of each other on rural Grizzly Island in the Rio Vista District. PG&E has attached the span inspection reports to their correct equipment numbers. To prevent reoccurrence, a meeting was held with relevant departments (TIMP Risk, Pipeline Services and Corrosion Engineering) to confirm and review responsibility for inputting inspection results into SAP. Starting in 2025, Quality Control will screen all inspections and confirm that inspection reports are uploaded to the correct equipment number and confirm that correct notifications are created.

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

Sincerely,

Kristina Castrence
Sr. Director, Gas Regulatory and Risk
Gas Engineering

cc: Claudia Almengor, CPUC
Dennis Lee, CPUC
Victor Muller, CPUC
[redacted] PG&E
[redacted] PG&E

Attachments:

Attachment 1 – CAP 128472298.pdf
Attachment 2 – 2024 Q2 IRSF_CONF.xlsx
Attachment 3 – CAP 129036062.pdf
Attachment 4 – Updated OP Reads Notifications.docx
Attachment 5 – EQ 44917626 Read Summary
Attachment 6 – 5MM_GTVM_Jan 7 2025.pdf