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

June 4, 2024

GI-2024-02-PGE-10-02ABC

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: SED's Closure Letter for General Order 112-F Gas Inspection of PG&E's Sonoma Division

Dear Ms. Cowsert:

The Safety and Enforcement Division (SED) of the California Public Utilities Commission reviewed Pacific Gas & Electric Company's (PG&E) response letter dated May 3, 2024 for the findings identified during the General Order (GO) 112-F inspection of PG&E's Sonoma Division (Division) which was conducted from February 26 to March 8, 2024.

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.

This letter serves as the official closure of the 2024 GO 112-F inspection of PG&E's Sonoma Division and any matters that are being recommended for enforcement will be processed through the Commission's Citation Program or a formal proceeding.

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

Sincerely,

Dennis Lee

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

cc: Ryan Weber, PG&E Gas Regulatory Compliance
Sajjad Azhar, PG&E Gas Regulatory Compliance
Kristina Castrence, PG&E
Frances Yee, PG&E
Terence Eng, SED
Claudia Almengor, SED

Post-Inspection Written Findings

Dates of Inspection: 2/26/2024-3/1/2024, 3/4/2024-3/8/2024

Operator: PACIFIC GAS & ELECTRIC CO

Operator ID: 15007 (primary)

Inspection Systems: Distribution

Assets (Unit IDs) with results in this report: Sonoma Division (85398)

System Type: GD

Inspection Name: PG&E Sonoma Division

Lead Inspector: Chen, Hengyao

Operator Representative: Azhar, Sajjad

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))
Assets Covered	Sonoma Division (SD)
Issue Summary	Title 49 CFR Part 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 "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 of the below four spans and noted the following:

1. **Equipment#44999359**:PG&E identified that this span had coating issues at the air-to-soil transitions on 8/29/2020 and again on 3/11/2023, indicating that PG&E has not remediated the AOC. PG&E confirmed that the first notification ticket (ticket#120236198) they created was on 12/28/2020, followed by another corrective ticket (ticket#45698103) on 3/11/23; however, the previous tickets were cancelled as they have been converted to a replacement project with order number PM45698103 and new notification#125641096.

2. **Equipment#44999356**:PG&E identified that this span had corrosion and coating issues at air-to-soil transitions on 8/27/2020 and again on 3/11/2023, indicating the PG&E has not remediated the AOC. PG&E confirmed that the first notification ticket (ticket#120236334) they created was on 12/28/2020, and the ticket was cancelled as it has been converted to a replacement project with order number PM45698102 and new notification#25641094.
3. **Equipment#44999354**:PG&E identified that this span had coating issues at air-to-soil transitions on 8/29/2020 and again on 3/15/2022, indicating the PG&E has not remediated the AOC. PG&E confirmed that the first notification ticket (ticket#12023884) they created was on 12/29/2020 and the ticket was cancelled as it has been converted to a replacement project with order number PM35342195 and new notification#123361474.
4. **Equipment#44999367**: PG&E identified that this span had corrosion issues at air-to-soil transition on 8/28/2020 and again on 3/16/2022, indicating the PG&E has not remediated the AOC. PG&E confirmed that the first notification ticket (ticket#120234711) they created was on 12/26/2020, and the ticket was canceled as it has been converted to a replacement project with order number PM47035252 and new notification#128250126.

By the end of SED's inspection, March 8, 2024, PG&E still had not remediated the AOCs, 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 Part 192.605(a) for failing to follow its Utility Procedure TD-4188S by not mitigating the AOCs within 39 months of identification.

PG&E's Response

1. **EQ#44999359**: PG&E records indicate that the first corrective ticket created was notification number 120236198 on 12/28/2020. Subsequently, PG&E performed a field check on 02/08/2023 and found no AOCs present. As such, ticket #120236198 was cancelled in May 2023. The second corrective under ticket #45698103 was a duplicate and should have been cancelled per the results of the field check on 02/08/23.
2. **EQ#44999356:** PG&E records indicate the issue was first observed on 08/29/2020 at both air to soil transitions and were recoated on 07/14/2023 as remediation. The AOCs identified on 03/11/2023 were addressed as part of the remediation performed on 07/14/2023.
3. **EQ#44999354:** PG&E records indicate the issue was first observed on 08/29/2020 at both air to soil transitions and were recoated on 05/22/2023 as remediation. The AOCs identified on 03/15/2022 were addressed as part of the remediation performed on 05/22/2023.
4. **EQ#44999367**: PG&E records indicate that the first corrective under ticket #120234711 and the second corrective under ticket #123111781 were cancelled on 02/08/2023 and 03/22/2023, respectively, after a span validation effort found no AOCs present, not because they were being converted to a replacement job. PM47035252 and notification #128250126 were generated to repair a small portion of the pipe, not related to the AOC identified in the correctives. This repair work was completed on 4/14/2024.

SED's Conclusion

1. **EQ#44999359:** SED has reviewed the response from PG&E. Based on PG&E's past span inspection records (8/29/2020 and 3/11/2023) and SED's field verification on 3/6/24. SED believes that the AOCs haven't been remediated since 2020. Therefore, this is still a violation. SED has opted not to impose a fine or penalty. However, PG&E should provide SED the completion package of the replacement project (PM45698103) once it is available**.**
2. **EQ#44999356:** SED has reviewed the response from PG&E. Based on PG&E's past span inspection records (8/27/2020 and 3/11/2023) and SED's field verification on 3/6/24. SED believes that the AOCs haven't been remediated since 2020. Therefore, this is still a violation. SED has opted not to impose a fine or penalty. However, PG&E should provide SED the completion package of the replacement project (PM45698102) once it is available.
3. **EQ#44999354**: SED has reviewed the response from PG&E. Based on PG&E's past span inspection records (8/29/2020 and 3/15/2023) and SED's field verification on 3/6/24. SED believes that the AOCs haven't been remediated since 2020. Therefore, this is still a violation. SED has opted not to impose a fine or penalty. However, PG&E should provide SED the completion package of the replacement project (PM35342195) once it is available.
4. **EQ#44999367**: SED has reviewed the response from PG&E and has opted not to impose a fine or penalty. However, PG&E should provide SED the completion package of the replacement project (PM47035252) once it is available.

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

Question Title, ID Correction of Corrosion Control Deficiencies, TD.CPMONITOR.DEFICIENCY.R

Question 13. Do records adequately document actions taken to correct any identified deficiencies in corrosion control?

References 192.491(c) (192.465(d))

Assets Covered Sonoma Division (SD)

Issue Summary *Title 49 CFR Part 192.465(d) states, "Each operator must promptly correct any deficiencies indicated by the inspection and testing required by paragraphs (a) through (c) of this section. For onshore gas transmission pipelines, each operator must develop a remedial action plan and apply for any necessary permits within 6 months of completing the inspection or testing that identified the deficiency. Remedial action must be completed promptly, but no later than the earliest of the following: prior to the next inspection or test interval required by this section; within 1 year, not to exceed 15 months, of the inspection or test that identified the deficiency; or as soon as practicable, not to exceed 6 months, after obtaining any necessary permits." (emphasis added)*

PG&E's Utility Standard: TD-4181S (Publication Date:9/19/2018, Effective Date: 10/01/2018 Rev:2), 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." And Section 8.4 states, "CPAs must be restored within 12 months from the date the CPA is found below adequate levels of protection, not to exceed 15 months to the date, per Pipeline and Hazardous Materials Safety Administration (PHMSA) Inspection Guideline and Interpretation #PI-89-006 for 49 CFR Part 192.465(d)."

SED reviewed isolated steel (10%er) inspection records of the below equipment. SED noted that PG&E identified the pipe-to-soil (P/S) potentials are less negative than -900mV since 2021 or 2022 and the first notifications were created after the follow-up read in next year or in the same year. However, PG&E did not take prompt remedial action to correct the low CP deficiencies.

Equipment (10%er)	Tech Inspection Date	Read (mV)	Notification Number	Notification First Creation Date
45201969	10/01/2021	-230.00		
45201969	09/20/2022	-230.00	124606938	10/01/2022
45202067	10/04/2021	-318.00		
45202067	09/26/2022	-430.00	124836847	11/02/2022
45202185	10/01/2021	208.00		
45202185	09/27/2022	-237.00	124839243	11/02/2022
45202187	10/28/2021	-385.00		
45202187	09/26/2022	-441.00	124836845	11/05/2022
45202203	10/07/2021	-200.00		
45202203	09/21/2022	-195.00	124761431	10/22/2022
45270887	03/08/2022	-156.00		
45270887	10/03/2022	-180.00	124881478	11/12/2022
45317423	06/08/2022	-867.00	124373012	08/25/2022

During field observation, SED noted the following read points were still low:

Equipment (10%er)	Current (P/S) Read	Last (P/S) Read
45202022	-816mV on 3/6/2024	-897mV on 12/6/2023
45202203	-160mV on 3/6/2024	-195mV on 9/21/2022
45270887	-183mV on 3/7/2024	-180mV on 10/3/2022

By the end of SED's inspection, March 8, 2024, PG&E still had not remediated the AOCs for the above equipment except Equipment#45202022, thus exceeding the 15-month timeline specified in TD-4181S. Based on the information gathered, SED found PG&E in violation of Title 49 CFR Part 192.465(d) for not taking prompt remedial action within 15 months, of the inspection or test that identified the deficiency; PG&E is also in violation of Title 49 CFR Part 192.605(a) for failing to follow its Utility Procedure TD-4181S by not mitigating the AOCs within 15 months of identification.

PG&E's Response EQ#s 45202203, 45270887, 45201969, 45202067, 45202185, 45202187 and 45317423: PG&E records indicate that these equipment numbers are part of the ECPS (Enhanced Cathodic Protection Survey) program. Updates to the ECPS program are provided twice a year to the CPUC via PG&E's Corrosion Self-Report Update, with the latest update provided on April 29, 2024. The correctives are scheduled to be completed by 12/31/2024.
EQ#45202022 will undergo troubleshooting and be restored within 15 months of the last read on December 6, 2023.

SED's conclusion SED has reviewed the response from PG&E and understands that PG&E has an ECPS program to oversee the remediation process of test stations with cathodic protection issues; however, PG&E failed to comply with Title 49 CFR Part 192.465(d) by not mitigating the AOCs within 15 months of identification. SED has opted not to impose a fine or penalty. However, PG&E should provide SED an update (final pipe-to-soil read) after completing any corrective actions.

Time-Dependent Threats: External Corrosion - Cathodic Protection (TD.CP)

Question Title, ID Isolation from Other Metallic Structures, TD.CP.ELECISOLATE.P

Question 10. Does the process give adequate guidance for electrically isolating each buried or submerged pipeline from other metallic structures unless they electrically interconnect and cathodically protect the pipeline and the other structures as a single unit?

References 192.605(b)(2) (192.467(a), 192.467(b), 192.467(c), 192.467(d), 192.467(e))

Assets Covered Sonoma Division (SD)

Issue Summary Title 49 CFR Part 192.605(b)(2) states: "*(b)Maintenance and normal operations. The manual required by paragraph (a) of this section must include procedures for the following, if applicable, to provide safety during maintenance and operations. (2) Controlling corrosion in accordance with the operations and maintenance requirements of subpart I of this part*."

SED reviewed the below two utility procedures and noted that both procedures don't apply to distribution pipeline cased crossings:

- Utility Procedure:TD-4181P-601(Publication Date:10/17/2018, Effective Date:10/17/2018 Rev.0c) – "Testing Procedures for Pipe Casings"
- Utility Procedure:TD-4181P-602 (Publication Date:09/16/2015, Effective Date:01/01/2016 Rev:1) – "Mitigating Casing Contacts"

PG&E corrosion field personnel have used the Utility Procedure:TD-4181P-601 as guidance to perform the annual casing testing between 2020 and 2023. PG&E responded that "*Until the (latest) revision the corrosion technicians used the existing testing knowledge and techniques per TD-4181P-601 while PG&E transitioned the distribution casings from program driven to maintenance driven assets*".

PG&E also provided a new revision of the Utility Procedure:TD-4181P-601(Publication Date:12/20/2023, Effective Date:3/1/2024 Rev1) and stated this new procedure applies to gas distribution cased crossings.

In addition, PG&E also confirmed that they are currently working on adding distribution casing mitigation procedures to TD-4181P-602, however it currently only has details for transmission casing mitigation procedures.

Based on the information gathered, PG&E did not provide adequate distribution casing testing or mitigation procedures for corrosion personnel to follow between 2020 and 2023. Therefore, SED found PG&E in violation of Title 49 CFR Part 192.605(b)(2) by failing to provide adequate written procedures for electrically isolating buried distribution pipeline from other metallic structures.

PG&E's Response PG&E's Corrosion Engineering team provided interim casing testing guidance to use existing testing knowledge and techniques per TD-4181P-601 while PG&E transitioned the distribution casings from program driven to maintenance driven assets. (See "Attachment 1" for SAP change request # 111617162). In addition, PG&E set testing procedures and expectations internally by creating maintenance plans and SAP logic to mimic existing testing for transmission casings as an interim step, which was sufficient to provide guidance and record information necessary to fulfill the testing requirements. Both actions were applied between 2020 and 2023. As the Enhanced Cathodic Protection Survey Program has been ongoing since 2017 and is nearly complete, TD-4181P-601 has now been

updated and published, which includes the addition of guidance for performing isolation testing on distribution casings. As a result, PG&E believes these actions were adequate to fulfill the requirement to provide corrosion personnel with guidance on how to perform distribution casing testing to electrically isolate buried distribution pipeline from other metallic structures from 2020 to 2023.

SED's Conclusion SED has reviewed the response and Attachment 1 from PG&E and has opted not to impose a fine or penalty. However, PG&E should provide SED with a copy of the updated distribution casing mitigation procedure, TD-4181P-602, once it is available.

Concerns

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 Sonoma Division (SD)

Issue Summary SED reviewed the atmospheric corrosion (AC) inspection records of the following spans and noted the AC inspection form (i.e. Pronto form) requires corrosion personnel to enter reason(s) if they entered "NONE" under "Action Taken" section; however, SED noted the below corrosion personnel did not properly fill out the form as they only marked "NONE" without entering any reason(s). PG&E responded that "*When the field technician enters "none" for "action taken" on Pronto forms, it literally means no action was taken by the technician. However, the technician can initiate a work request notification if any action is required (although no action was taken by the technician). Pronto forms for Span Inspection are currently designed to input reason when "none" is selected in the "action taken" field. PG&E will look into improving the Pronto form to clarify any confusion that may result from such requirements.*"

Equipment	Date of Inspection	Tech LAN ID
44463543	3/23/2022	S2LB
44463548	3/22/2022	FIA1
44463585	3/18/2022	FIA1
44947200	3/23/2023	EASO
44998704	3/22/2023	EASO
44999348	3/15/2022	S2LB
44999354	3/15/2022	S2LB
44999367	3/16/2022	S2LB

SED recommends that PG&E update its relevant procedure(s) to ensure corrosion personnel properly records their inspection results to prevent recurrence.

PG&E's Response PG&E is evaluating the Pronto form to improve the documentation process.

SED's Conclusion SED has reviewed the response from PG&E and determined that the ongoing corrective actions articulated by PG&E sufficiently address SED's concern.

Design and Construction: Meters, Service Regulators, and Service Lines (DC.METERREGSVC)

Question Title, ID Customer Meters and Regulator Location, DC.METERREGSVC.CUSTMETERREGLOC.O

Question 1. Are meters and service regulators being located consistent with the requirements of 192.353?

References 192.351 (192.353(a), 192.353(b), 192.353(c), 192.353(d))

Assets Covered Sonoma Division (SD)

Issue Summary On 3/7/24, SED observed a qualified PG&E leak survey personnel perform an annual and 5-year leak survey. The leak surveyor found atmospheric corrosion at the bottom of the customer meter at [redacted] Ukiah, CA 95482.

The leak survey personnel created a notification ticket on the same date.

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

PG&E's Response PG&E records indicate that the above-mentioned atmospheric corrosion found at the bottom of customer meter at [redacted] Ukiah, CA was corrected on March 18, 2024.

SED's Conclusion SED has reviewed PG&E's response and accepted the corrective actions.

Question Title, ID Customer Meters and Regulator Protection, DC.METERREGSVC.CUSTMETERREGPROT.O

Question 2. Are meters and service regulators being protected from damage consistent with the requirements of 192.355?

References 192.351 (192.355(a), 192.355(b), 192.355(c))

Assets Covered Sonoma Division (SD)

Issue Summary On 3/7/24, SED observed a qualified PG&E leak survey personnel perform an annual and 5-year leak survey. The leak surveyor found a missing service regulator venting screen at [redacted] CA 95482.

The leak survey personnel created a notification ticket on the same date.

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

PG&E's Response PG&E records indicate that the above-mentioned service regulator venting screen replacement work at [redacted] Ukiah, CA was completed on March 12, 2024.

SED's Conclusion SED has reviewed PG&E's response and accepted the 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 192.161

Assets Covered Sonoma Division (SD)

Issue Summary On 3/6/24, SED observed exposed pipes (spans) and noted the following AOCs:

1. Equipment#44998690:

   a) Metal wires were wrapped around two segments of the main body of the pipe.

   b) The contact areas between the metal wire and pipe had surface rust and small coating holidays.

2. Equipment#44999356: Unauthorized pipe was installed along the span and the bottom of the pipe was in contact with the top of the span.

PG&E confirmed that they have created a replacement project with order number PM45811787 and new notification#126277769 for Equipment#44998690 and a replacement project with order number PM45698102 and new notification#125641094 for Equipment#44999356.

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

PG&E's Response Under notification numbers 126277769 and 125641094, PG&E will be investigating and determining the required work for these two projects. Due to the complex nature of these projects, PG&E is anticipating completion of the work in 2026.

SED's Conclusion SED has reviewed the response from PG&E and determined that the corrective actions articulated by PG&E sufficiently address SED's concern. However, PG&E should provide SED the completion package of the replacement projects (PM45811787 & PM45698102) once they are available.