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June 7, 2024

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 Bay Area North 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) report received May 10, 2024, stemming from the SED inspection of PG&E's Bay Area North Transmission Area (Area), which included the Humboldt, Sonoma and North Bay Divisions, conducted from October 10-12, October 16-20, and October 23-27, 2023.

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

Unsatisfactory Result #1: Facilities and Storage: Compressor Station System Protection (FS.CSSYSPROT)

Question Title, ID	Compressor Station - Gas Detection and Alarm System, FS.CSSYSPROT.CMPGASDETOM.R
Question	25. Do records document that all compressor station gas detection and alarm systems are being maintained and tested as required?
References	192.709(c) (192.736(c), 192.736(b)) 192.605(a)
Assets Covered	Bay Area North Transmission (88994 (74))
Issue *Summary*	SED reviewed the on-site record for the 2,000 horsepower Santa Rosa compressor station which meets the requirement of gas detection alarm system per CFR 192.736 and emergency shutdown system per CFR 192.167:

G.O. 112-F, Reference Title 49 CFR, Part 192, Section 192.605 states in part:

(a) *"Each operator shall prepare and follow for each pipeline, a manual of written procedures for conducting operations and maintenance activities and for emergency response."*

SED requested Gas detection device inspection records and Emergency Shutdown (ESD) system testing records from 2019 to September 2023. However, PG&E was unable to provide the Gas detection device inspection records for 2019-2021. Also, PG&E was unable to provide the ESD records for 2019-2022.

PG&E failed to demonstrate through the 2019-2021 gas detection device inspection records that the Santa Rosa compressor station gas detection device was inspected annually as required in PG&E's procedure. PG&E's Procedure TD-4430-02 Rev.1 (effective on 12/19/2021) Section 4.4 states in part:

Maintain and performance-test gas detectors in compressor buildings annually per manufacturer's recommendations.

Furthermore, PG&E's Procedure TD-4430-02 Rev.1 (effective on 12/19/2021), Section 4.2 states: *Perform emergency shutdown (ESD) tests at compressor stations once each calendar year, not to exceed 15 months. Tests may be performed more often when that frequency is supported by sound engineering judgement.*

PG&E failed to provide Gas detection device inspection records for the period 2019 through 2021, resulting in a probable violation of 192.605(a). In addition, PG&E failed to provide the ESD test records for the period 2019 through 2022, resulting in a probable violation of 192.605(a).

Response to Unsatisfactory Result #1:

PG&E agrees with this finding and was unable to locate records for the Gas Detection device inspection records for the period of 2019 through 2021, as well as the Emergency Shutdown (ESD) test records for the period of 2019 through 2022. On 12/15/2022, PG&E completed ESD upgrades, which included P-70 upgrades replacing most ESD triggers and installing a dedicated relay based ESD controller. The new gas detection units were brought online in December 2022. PG&E has since completed one ESD test and performed maintenance for two years on the gas detectors. See Attachment 1 – "ESD_2023," Attachment 2 - "GasD_2022," and Attachment 3 – "GasD_2023" for the test and maintenance records.

Unsatisfactory Result #2: Maintenance and Operations : Gas Pipeline Operations (MO.GO)

Question Title, ID Normal Operations and Maintenance Procedures - History, MO.GO.OMHISTORY.R

Question 10. Are construction records, maps, and operating history available to appropriate operating personnel?

References 192.605(a) (192.605(b)(3))

Assets Covered Bay Area North Transmission (88994 (74))

Issue Summary 49 CFR PART 192 Section 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 Utility Procedure: TD-4540P-01 (Publication Date:1/26/2023, Effective Date:1/26/2023 Rev:2c) section 4.4. states:

"Review data sheets during each inspection AND update as needed."

SED reviewed a set of regulator station maintenance binders and noted that the inlet pressure MAOP from the data sheet did not match the system operation diagram for the following stations:

Division	Reg Station Maintenance Binder	Issue: inlet pressure MAOP does not match the operation diagram	PG&E's Remediation actions on 10/24/23:
North Bay	GT V-35 East 2nd & Industrial Way	Data sheet: MAOP=720# Operation diagram: MAOP=650#	Updated MAOP on the data sheet to 650#
North Bay	DR RA-15A SEQUOIA DR	Data sheet: MAOP=500# Operation diagram: MAOP=450#	Updated MAOP on the data sheet to 450#

North Bay	DR RA-15B LINCOLN LINE	Data sheet: MAOP=500# Operation diagram: MAOP=450#	Updated MAOP on the data sheet to 450#

PG&E's field technicians failed to follow procedure TD-4540P-01, to update the inspection data sheets. Therefore, PG&E committed a probable violation of G.O. 112-F, Reference Title 49 CFR, Part 192, Section 192.605(a). Note: all data sheets were updated by PG&E on 10/24/23 after SED's discovery.

Response to Unsatisfactory Result #2:

In accordance with TD-4540P-01, PG&E has since updated the data sheets and operating diagrams for the following regulator stations – GT V-35, DR RA-15A and 15B. The data sheets were updated and verified by SED during the inspection on 10/24/2023. As a further action to prevent recurrence, PG&E held a tailboard on 11/17/2023 to ensure adherence and understanding of proper tagging and updating maintenance forms & diagrams in TD-4545P-01. See Attachment 4 – "Tailboard."

Unsatisfactory Result #3: Maintenance and Operations : Gas Pipeline Overpressure Protection (MO.GMOPP)

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

Question: 7. Are field or bench tests or inspections of regulating stations, pressure limiting stations or relief devices adequate?

References: 192.739(a) (192.739(b), 192.743) 192.605(a)

Assets Covered: Bay Area North Transmission (88994 (74))

Issue Summary: CFR 49 PART 192 Section 192.605(a) states in part:

"General. 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 Utility Procedure: TD-4540P-01 (Publication Date:10/16/2013, Rev:0) section 6.c. states:

"Verify all major valves and components are properly tagged AND that tag numbers match station diagram." and section 6.e states: "Ensure field copy of diagram matches operating diagram in station folder."

SED field visited a set of selected equipment and noted the following:

Equipment	**SED Inspection date**	**Issue(s):**	**PG&E's Remediation Measures**
DR R-124 "Hart LN & Fulton RD	10/18/23	*Field copy of diagram does not match operating diagram in station folder*	Updated the field copy on 10/18/23
DR RA-15A &B SEQUOIA DR	10/25/23	(1) Missing tags: Valve V#16 and Filters, F1, and F2. (2) Tag numbers do not match operating diagram: two filters were labeled "A" and "B" and one valve was labeled "V#15" on the tag number; however, they were	(1) Reinstalled tags on 10/25/23 (2) Updated the tag numbers on 10/25/23

		labeled "F-3", "F-4" and "V#17" on operating diagram.	
GT R-70 Napa WYE 250 DFM to NAPA	10/26/23	Missing tags for monitors: #98,99,118, and 119	Reinstalled tags on 10/26/23
GT R48 Kaiser RD & Napa Pipe Yard	10/26/23	(1) Field operating diagram (Rev.#5) does not match diagram in station folder (Rev#8) (2) Missing tag for monitors and filters (3) Two valves' tags were incorrectly swapped (V-5 & V6)	SED notified the PGOM supervisor on the same date, and remediation is in processing

PG&E's field personnel failed to follow PG&E's Procedure, TD-4540P-01, to verify the valve tags and station diagrams. Therefore, PG&E committed a probable violation of G.O. 112-F, Reference Title 49 CFR, Part 192, Section 192.605(a).

Response to Unsatisfactory Result #3:

In accordance with TD-4540P-01, PG&E updated the field copy for DR R-124 during the inspection on 10/18/2023, reinstalled tags and updated tag numbers at DR RA-15A and 15B during the inspection on 10/25/2023, and reinstalled tags at GT R-70 during the inspection on 10/26/2023. PG&E re-tagged GT R-48, and a new operating diagram was placed at the station on 11/16/2023. See Attachment 5 - "R-48 Valve and filter tags" for photos of the new tags and Attachment 6 – "Op Diag GT R-48" for the new operating diagram.

Unsatisfactory Result #4: 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)) 192.479(a)
Assets Covered Bay Area North Transmission (88994 (74))
Issue Summary **1)**

49 CFR Part 192 Section 192.481 states in part:

§ 192.481 Atmospheric corrosion control: Monitoring.

(a) Each operator must inspect and evaluate each pipeline or portion of the pipeline that is exposed to the atmosphere for evidence of atmospheric corrosion, as follows:

Pipeline type:	Then the frequency of inspection is:
(1) Onshore other than a Service Line	At least once every 3 calendar years, but with intervals not exceeding 39 months.

PG&E Utility Standard:TD-4188S (Publication Date: 2/17/2016, Effective Date: 1/1/2017 Rev:1) section 3.1 states:

"The Company must inspect each onshore pipeline or portion of pipeline that is exposed to the atmosphere for evidence of atmospheric corrosion at least once every 3 calendar years, but with intervals not exceeding 39 months per 49 CFR §192.481(a)".

Also, PG&E Utility Procedure: TD-4540P-01 (Publication Date:1/26/2023, Effective Date:1/26/2023 Rev:2c), Section 1.3 part#9 states in part:

"…Perform an atmospheric corrosion inspection following the frequencies and steps in Utility Procedure TD-41880P-02, "Atmospheric Corrosion Inspection of Exposed Metallic Piping Systems"."

SED reviewed sets of atmospheric corrosion (AC) inspection records in the regulator maintenance binders and noted the following:

Corrosion technicians failed to perform and record the required AC inspection for the following regulator station and aboveground large volume customers (LVC) piping:

Division	Reg Station Maintenance Binders	AC inspection date	Issue(s)
North Bay	GT R-48	7/23/2023	Missing record for 2020
North Bay	GT V-14	10/20/2023	Missing record for 2020
North Bay	GT V-54A	4/19/2023	Missing record for 2020
North Bay	[redacted] Valve Tap	5/10/2023	Missing record for 2020
North Bay	[redacted] (LVC)		No records between 2019 and 2022
North Bay	Allied CNG Meter Station		No records between 2019 and 2022
North Bay	[redacted] Meter & Regulator Station (LVC)		No records between 2019 and 2022
North Bay	[redacted], NAPA Meter & Regulator Station		No records between 2019 and 2022

Therefore, PG&E committed a probable violation of G.O. 112-F, Reference Title 49 CFR, Part 192, Section 192.481(a).

Response to Unsatisfactory Result #4:

PG&E agrees with this finding, as PG&E was unable to locate some of the missing maintenance records identified by SED. For those records that PG&E was able to locate, refer to the table below, Column "PG&E Response."

Division	Reg Station Maintenance Binders	AC inspection date	Issue(s)	PG&E Response
North Bay	GT R-48	7/23/2023	Missing record for 2020	See Attachment 7 for the 2020 maintenance record.
North Bay	GT V-14	10/20/2023	Missing record for 2020	See Attachment 8 for the 2020 maintenance record.
North Bay	GT V-54A	4/19/2023	Missing record for 2020	See Attachment 9 for the 2020 maintenance record.
North Bay	[redacted] Valve Tap	5/10/2023	Missing record for 2020	Maintenance plan for AC inspection not required because all pipe and valves are underground and not exposed to the atmosphere.
North Bay	[redacted] (LVC)		No records between 2019 and 2022	Prior to 2020, on a five-year maintenance plan. See Attachment 10 for the 2015 and 2020 maintenance records and Attachment 11 for the 2021-2023 maintenance records.

North Bay	Allied CNG Meter Station		No records between 2019 and 2022	Per Attachment 12, the maintenance records show AC inspection was performed on 7/14/22 but not between 2019 to 2021.
North Bay	[redacted] Meter & Regulator Station (LVC)		No records between 2019 and 2022	Could not locate maintenance records for 2019 and 2020. See Attachment 13, for the 2021, 2022 and 2023 maintenance records.
North Bay	[redacted], NAPA Meter & Regulator Station		No records between 2019 and 2022	See Attachment 14 for the 2019 and 2020 maintenance records and Attachment 15 for the 2021 maintenance records. Could not locate maintenance records for 2022.

Unsatisfactory Result #5: Time-Dependent Threats: External Corrosion - Cathodic Protection (TD.CP)

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

Question: 13. Do records adequately document electrical isolation of 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: 192.491(c) (192.467(a), 192.467(b), 192.467(c), 192.467(d), 192.467(e))

Assets Covered: Bay Area North Transmission (88994 (74))

Issue Summary: Vallejo casing inspection record issue DR#124:

Pipeline Casing inspection records obtained through DR#23 for Vallejo, indicated that the pipeline casing without leads EQ#41390212 was inspected each year in 2019-2022. However, the Contact Type cells were not filled out for 2019-2021, only pipe-to-soil readings were recorded.

There are two types of casings in PG&E's system, casing with lead and casing without lead. When performing casing inspections, PG&E must fill out Contact Type for casing without lead and fill out the Pipe-to-Soil read AND Casing-to-Soil read for casing with lead. The identified casing (without lead) did not have Contact Type recorded, nor did it have Casing-to-Soil read, so PG&E was not able to determine if the gas carrier pipe was electrically isolated from the casing.

49 CFR Part § 192.467 External corrosion control: Electrical isolation. states:

"(d) Inspection and electrical tests must be made to assure that electrical isolation is adequate."

PG&E's record did not demonstrate that the gas carrier pipeline was electrically isolated from casing EQ#41390212 for 2019-2021.

Therefore, PG&E committed a probable violation of G.O. 112-F, Reference Title 49 CFR, Part 192, Section 192.467(d).

Response to Unsatisfactory Result #5:

After further investigation, PG&E was able to confirm that EQ#41390212 was originally a casing with leads. The request for work (RW) was made in 2022 to change to a casing without leads per notification 124716555. Through engineering review, preventative (PR) notification 124755133 confirms there was no contact in 2022. See Attachment 16 – "Notifications" for the no contact reads.

Notification	Contact Type in SAP	Engineering Review
124480392	Blank	No contact
124755133	No contact	No contact

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

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

Question 8. Do flanges and flange accessories meet the requirements of 192.147?

References 192.147 (192.147(a), 192.147(b), 192.147(c), 192.607) 192.605(a)

Assets Covered Bay Area North Transmission (88994 (74))

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."

SED field inspected the following SAP equipment, SED noted that the flanges' bolts and nuts were not fully engaged.

SAP Equipment#	Number of sets (bolts & nuts):	Issue location:	PG&E's Remediation
[redacted] LVCR	1	upstream of regulator station	Order#46013961 Completed and photo provided on 10/18/23
44421076	1	near F-2 (filter)	In progress
43603691	10	between V-3 (valve) and M-1 (monitor)	In progress
41438033	2	between V-8 and V-9 (valve)	In progress
GD Regulator Station (Union St Santa Rosa)	2	between R-30 and R-26 (monitor)	In progress

GT R-70 NAPA WYE 250 DFM TO NAPA	2	between F-118 and monitor #118 (one for each component)	In progress

Although PG&E self-reported the system wide lack of bolt-and-nut engagement issue prior to the audit, PG&E should correct the identified issues and provide remediation updates.

Response to Concern #1:

PG&E created corrective notifications for these findings: Notification 127270527 for [redacted] LVCR (upstream of regulator station), Notification 127270429 for EQ#44421076 (near F-2 (filter)), Notification 127270528 for EQ#43603691 (between V-3 (valve) and M-1 (monitor)), Notification 127270656 for EQ#41438033 (between V-8 and V-9 (valve)), Notification 127270656 for GD Regulator Station (between R-30 and R-26 monitor), and Notifications 127395264 and 127360109 for GT R-70 (between F-118 and monitor-118). All work associated with these corrective notifications has been completed. See Attachment 17 – "Completed Corrective Notifications" for screenshots of the corrective notifications.

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 18 – "WGE – Bolt/Stud Engagement Issue" and Attachment 19 – "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 20 – "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: Maintenance and Operations : Gas Pipeline Maintenance (MO.GM)

Question Title, ID Valve Maintenance Transmission Lines, MO.GM.VALVEINSPECT.O
Question 11. Are field inspection and partial operation of transmission line valves adequate?
References 192.745(a) (192.745(b))
Assets Covered Bay Area North Transmission (88994 (74))
Issue Summary Missing bolts

During field inspections, SED observed that the following equipment lids for below ground valves or vaults were not bolted (missing bolts):

Equipment	Asset Type	PG&E last inspection	Issue(s):	PG&E's Remediation
45155333	Tag Valve	2/21/23	The below ground valve lid/cover was missing 3 bolts (3 out of 4) on 10/25/23	Field personnel reinstalled three new bolts on 10/25/23
44736923	Tag Valve	4/27/23	The below ground valve lid/cover was missing two	Field personnel reinstalled two new bolts on 10/25/23

			bolts (2 out of 4) on 10/25/23	
41481946	Regulator Station		The vault lid/cover was missing two bolts (2 out of 4) on 10/19/23	Field personnel reinstalled two new bolts on 10/19/23

SED recommends that field personnel bolt all valve and vault covers completely to provide adequate security for underground equipment.

Response to Concern #2:

PG&E field personnel completed all the correctives during the inspection on 10/19/2023 and 10/25/2023. The remediation consisted of field personnel reinstalling new bolts to the referenced valve and vault covers to provide adequate security for underground equipment. As a further action to prevent recurrence, PG&E held a tailboard on 10/20/2023 to ensure understanding of the importance of bolting all valve and vault covers. See Attachment 21 – "Tailboard."

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

Question Title, ID: Odorization of Gas, MO.GOODOR.ODORIZE.R

Question: 2. Do records indicate appropriate odorization of its combustible gases in accordance with its processes and conduct of the required testing to verify odorant levels met requirements?

References: 192.709(c) (192.625(a), 192.625(b), 192.625(c), 192.625(d), 192.625(e), 192.625(f))

Assets Covered: Bay Area North Transmission (88994 (74))

Issue Summary: CFR 49 PART 192 Section 192.605(a) states in part:

"*General. 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 Utility Procedure: TD-4570P-03 (Publication Date:06/21/23, Effective Date: 09/01/23, Rev:1) Section 3.3, table 2, requires PG&E field personnel to take continuing actions to restore odor intensity levels when the gas-in-air reading is below or over the acceptable range of 0.1% to 0.60%.

PG&E Odor Intensity Report: Form TD450P-03-F02 (Publication Date: 6/21/23, Effective Date: 9/1/23, Rev.2) also state, in part: "*If the odor intensity reading is over 0.6% gas-in-air (too weak), or below 0.1% gas-in-air (too strong), a confirmation test with a different operator must be performed...*".

SED reviewed the sniff test binder and noted the gas-in-air readings over a period in 2020 were outside of the company established odor intensity range:

Inspected on	% of gas in air read
7/23/20	0.78
7/28/20	0.65
9/2/20	0.70
9/9/20	0.62
10/8/20	0.80
10/20/20	0.75
11/3/20	0.68

PG&E did not conduct confirmation tests with a different operator. PG&E's field personnel did not take continuing actions to ensure restoration of odor intensity levels to the acceptable range of 0.1% to 0.60% during the period 7/23/2020 through 11/3/2020. SED

recommends that PG&E's field personnel conduct confirmation tests with different operators when odor intensity reading is outside the acceptable range of 0.1% to 0.60%.

Response to Concern #3:

PG&E agrees with this concern. To prevent recurrence, PG&E held a tailboard on 10/20/2023 to review the requirements to restoring odor intensity levels to the acceptable range of 0.1% to 0.60%. See Attachment 21 – "Tailboard."

Concern #4: Maintenance and Operations : ROW Markers, Patrols, Leakage Survey and Monitoring (MO.RW)

Question Title, ID	Placement of ROW Markers, MO.RW.ROWMARKER.O (also presented in: PD.RW)
Question	3. Are line markers placed and maintained as required?
References	192.707(a) (192.707(b), 192.707(c), 192.707(d))
Assets Covered	Bay Area North Transmission (88994 (74))
Issue Summary	During field inspection, SED found two locations where the line markers were knocked down.

- Line marker at span EQ# 43166095 in San Rafael
- Line marker at span EQ# 44600747 in Vallejo

49 CFR Part 192 Section 192.707(c) states:

"Line markers must be placed and maintained along each section of a main and transmission line that is located aboveground in an area accessible to the public."

PG&E should remediate the damaged line markers.

Response to Concern #4:

During field inspection, the SED observed downed paddle markers at two spans. Per §192.707, "Line markers must be placed and maintained along each section of a main and transmission line that is located aboveground in an area accessible to the public." Notification 128872511 was created for EQ# 43166095 and Notification 128874102 was created for EQ# 44600747, both scheduled to be completed by Q2 2024. Furthermore, CAP 128846437 was created to monitor the progress and visibility of the affected markers.

Concern #5: Time-Dependent Threats: External Corrosion - CP Monitoring (TD.CPMONITOR)

Question Title, ID	Cathodic Protection 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(a), 192.463(b), 192.463(c), Part 192, Appendix D)
Assets Covered	Bay Area North Transmission (88994 (74))
Issue Summary	SED observed CP maintenance & monitoring tasks in Eureka, Sonoma & Vallejo districts and noted the following issues:

- Coupon station EQ# 44760045 in Eureka: CP reading was out of compliance (-1720 mV on, -620 mV instant off, -550 mV native)

- ETS EQ# 44931694 in San Rafael: High instant off reading (-1635 mV on, -1489 mV instant off)

SED recommends that PG&E take remedial action.

Response to Concern #5:

PG&E created Notification 127516416 for coupon station EQ# 44760045 in Eureka and Notification 128886779 for ETS EQ 44931694 in San Rafael to address these findings. All work associated with these corrective notifications has been completed. See Attachment 22 – "Completed Corrective Notifications."

Concern #6: 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)) 192.479(a)
Assets Covered	Bay Area North Transmission (88994 (74))

Issue Summary Section 192.479 Atmospheric corrosion control: General states in part:

(a) Each operator must clean and coat each pipeline or portion of pipeline that is exposed to the atmosphere, except pipelines under paragraph (c) of this section.

SED conducted a review of PG&E's operation and maintenance (O&M) records during the week of October 23, 2023. During the O&M records review, SED's staff reviewed PG&E's pipeline span atmospheric corrosion inspection records for span equipment ID # 44823701. PG&E performed pipeline span atmospheric corrosion inspections on 10/18/2019 and identified damage wrapping on the span equipment ID # 44823701. On December 21, 2022, PG&E performed another three-year anniversary atmospheric corrosion inspections on the same span. PG&E's inspection records indicated that PG&E noted the same damaged wrap/ coating damage on the span equipment ID# 44823701 during the subsequent inspection. PG&E's October 18, 2019, and December 21, 2022, inspection records indicated that the damaged pipeline wrapping had not been remediated. PG&E's atmospheric corrosion record descriptions of the condition of span equipment ID # 44823701 are as follows:

"24" TP pipe w/ no wrap. AOC was found 3 yrs ago still no wrap, ***Action Taken*** Pipe needs wrap ASAP, ***Notification #*** 124474420."

On October 26, 2023, SED conducted atmospheric corrosion field inspections and inspected span equipment ID: 44823701. During the field inspection, SED observed damaged coating condition on span equipment ID# 44823701. The damaged pipeline wrapping condition that was initially noted on PG&E's October 18, 2019, inspection was not remediated as of SED's field visit on October 26, 2023. In addition, SED noted that PG&E's inspection record had incorrect equipment ID number on the original Atmospheric Corrosion Inspection Record. PG&E corrected the equipment ID number during SED's inspections.
SED is concerned that the substandard conditions that PG&E's employees observed during routine O&M inspections are not remediated despite PG&E's employees notification request for corrective actions.

Response to Concern #6:

PG&E agrees with this concern. The 2019 and 2022 span inspection records show no abnormal operating conditions (AOCs) identified on page 1 but are listed as AOCs in the notes on page 2. Project R-1962 was initiated to remediate Sh-7396 tracked by the program as exposed pipe for EQ# 44823701. In the interim, geohazard field reconnaissance is planned and performed annually by our internal geosciences team to evaluate the erosion (only) that has caused the

pipeline to become exposed. This project is currently in the design phase with remediation planned for 2026 due to permitting issues.

Please contact [redacted] at [redacted] or [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
Matthewson Epuna, CPUC
Dennis Lee, CPUC
Yang Yi, CPUC
[redacted], PG&E
[redacted], PG&E

Attachments:

Attachment 1 - ESD_2023.pdf
Attachment 2 - GasD_2022.pdf
Attachment 3 – GasD_2023.pdf
Attachment 4 - Tailboard.pdf
Attachment 5 - R-48 Valve and filter tags.pdf
Attachment 6 - Op Diag GT R-48.pdf
Attachment 7 - GT R-48.pdf
Attachment 8 - Reg V-14.pdf
Attachment 9 - V-54A.pdf
Attachment 10 - N.S. Hospital LVC.pdf
Attachment 11 - N.S. Hospital LVC (2)pdf
Attachment 12 - Allied CNG.pdf
Attachment 13 - I.E. LVC.pdf
Attachment 14 - S. Industries LVCR p.1.pdf
Attachment 15 - S. Industries LVCR p.2.pdf
Attachment 16 - Notifications.pdf
Attachment 17 - Completed Corrective Notifications.pdf
Attachment 18 – WGE – Bolt/Stud Engagement Issue.pdf
Attachment 19 – 5MM: Thread Engagement Reqs.pdf
Attachment 20 - Annex D of ASME-ANSI 16.5-2003.pdf
Attachment 21 - Tailboard.pdf
Attachment 22 – Completed Corrective Notifications.pdf