PUBLIC UTILITIES COMMISSION

505 VAN NESS AVENUE SAN FRANCISCO, CA 94102-3298

December 26, 2019

Christine Cowsert

VP, Gas Asset Management and System Operations Pacific Gas and Electric Company Gas Transmission and Distribution Operations 6121 Bollinger Canyon Road San Ramon, CA 94583 GI-2019-10-PGE-78

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

Dear Ms. Cowsert:

On behalf of the Safety and Enforcement Division (SED) of the California Public Utilities Commission (CPUC), Dmitriy Lysak, Jason McMillan, Alan Wehrman, Anthony Phu, Wilson Lule, and Oliver Garcia conducted a General Order 112-F inspection of Pacific Gas & Electric Company's (PG&E) Southern Transmission (District) from October 21 to November 1, 2019. The inspection included a review of the District's records for the period of 2016 through 2018, as well as a representative field sample of the District's facilities. SED staff also reviewed the District's operator qualification 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.

Within 30 days of your receipt of this letter, please provide a written response indicating the measures taken by PG&E to address the violations and concerns noted in the Summary.

If you have any questions, please contact Dmitriy Lysak at (916) 327-6779 or by email at dmitriy.lysak@cpuc.ca.gov.

Sincerely,

Dennis Lee, P.E.

Program and Project Supervisor Gas Safety and Reliability Branch Safety and Enforcement Division

Enclosure: Post-Inspection Written Preliminary Findings

cc: Susie Richmond, PG&E Gas Regulatory Compliance Glen Allen, PG&E Gas Regulatory Compliance

> Terence Eng, SED Claudia Almengor, SED

Post-Inspection Written Preliminary Findings

Dates of Inspection: 10/22/2019-11/1/2019

Operator: PACIFIC GAS & ELECTRIC CO

Operator ID: 15007 (primary)

Assets (Unit IDs): Southern Transmission (88996)

System Type: GT

Inspection Name: PG&E Southern Transmission

Lead Inspector: Dmitriy Lysak

Operator Representative: Glen Allen

Unsatisfactory Results

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

Question Text Do records adequately document cathodic protection monitoring tests have occurred as required?

References 192.491(c) (192.465(a))

Assets Covered Southern Transmission (88996 (99))

Issue Summary Title 49 CFR §192.465(a) states:

"Each pipeline that is under cathodic protection must be tested at least once each calendar year, but with intervals not exceeding 15 months, to determine whether the cathodic protection meets the requirements of §192.463."

a. SED found that ETS points 41409081, 41477200, 41477208, 41477221, 41477229, 41408422, 41408442 were not read in 2018.

SED requested records of the 2018 reads and PG&E confirmed in an email that no reads were taken. All of the points were on the same maintenance plan which was not called for 2018 due to a maintenance plan structure issue. PG&E has corrected this issue after this finding and is ensuring that the points will be read in 2019.

b. SED found that ETS station 41479066 was down between 11/6/17 and 6/20/18 leading to no reads in 2017 and 2018 being taken. PG&E created a troubleshoot notification in 2017 for a new ETS and a troubleshoot in 2018 for new wires at the test station. The corrective was generated on 5/30/19 and fixed shortly after that.

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

Question Text 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 Southern Transmission (88996 (99))

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."

Additionally, PG&E Procedure TD-4181P-201 section 5.1 states, in part:

Corrosion field personnel monitor local transmission, backbone transmission, gathering, and storage pipeline cased crossings for electrical isolation once each calendar year with intervals not to exceed 15 months to the date.

SED identified two casings that were inspected in 2016 and 2017, but had no inspection in 2018:

41441527: Per CAP 115672991 the 2018 work ticket to take reads was canceled by mistake. On 1/16/19, the Self-Report team deemed this a 192.605 violation due to the missed casing monitoring. This was reported as a system wide issue including 36 casings in the 2019 Q1 IRSF.

41479743: Reads were taken on 11/09/2017. In 2018 an RW was created to remove casing because the mechanic could not find eq in field. Upon further investigation the eq was found and reads taken on 01/08/2019.

Concerns

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

Question Text Do field observations confirm that the cathodic protection system was designed and installed to comply with one or more of the applicable criteria contained in Appendix D of Part 192?

References 192.463(a) (192.143(b))

Assets Covered Southern Transmission (88996 (99))

Issue Summary On 10/29/2019, SED observed the ETS at equipment ID 43147484. A pipe-to-soil reading of -2650 mV was taken. This exceeds -2500 mV, indicating possible cathodic overprotection per TD-4181B-002. Per technicians, an off read is not possible at this location as the pipeline is bonded to another system. A ticket will be opened to take action to lower the pipe-to-soil read.

Question Text Do field observations confirm that each pipeline was electrically isolated from metallic casings that are a part of the underground system?

References 192.467(c) (192.143(b))

Assets Covered Southern Transmission (88996 (99))

Issue Summary On 10/29/2019, SED observed a casing, equipment ID 41424021. No pipe lead was available, so an Interrupted Casing-to-Soil Test was performed per TD-4181P-601. The casing-to-soil on potential was -416 mV, and the off potential was -441. Since the shift exceeds 20 mV, additional investigation is required to determine whether the casing and carrier pipe are contacted.

PG&E to provide follow-up ticket for this reading.

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

Question Text Are line markers placed and maintained as required?
References 192.707(a) (192.707(b), 192.707(c), 192.707(d))
Assets Covered Southern Transmission (88996 (99))
Issue Summary Title 49 CFR §192.707(a) states:

"Buried pipelines. Except as provided in paragraph (b) of this section, a line marker must be placed and maintained as close as practical over each buried main and transmission line"

SED observed a pipeline marker that had fallen between mile points 101.30 and 103.72 on the ROW for lines 300A/B.

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

Ouestion Text Do records indicate the location of all items listed in 192.491(a)?

References 192.491(a)

Assets Covered Southern Transmission (88996 (99))

Issue Summary <u>Title 49 CFR §192.491(c) states:</u>

"Each operator shall maintain a record of each test, survey, or inspection required by this subpart in sufficient detail to demonstrate the adequacy of corrosion control measures or that a corrosive condition does not exist."

SED identified 7 instances from 2016 through 2018 where two casings inspected by the same technician had identical pipe-to-soil and casing-to-soil readings. SED requested additional information on ST#52. PG&E responded that the technicians often record readings on paper, which are then entered into SAP, and the duplicate reads are likely the result of inputting error by the maintenance assistants when they transfer the handwritten notes from the technicians into SAP. The original paper notes are no longer available to correct the SAP records.

For the duplicate instances in 2016 and 2017, subsequent readings are not duplicated and indicate no casing-to-pipe contact. However, SED finds it concerning that 7 duplicate entries were found over the past three years. SED recommends PG&E review this process to reduce the risk of data entry errors.