



Kristina Castrence
Director
Gas Regulatory and Risk

6121 Bollinger Canyon Road
San Ramon, CA 94583
Phone: 415-407-1152
E-mail: Kristina.Castrence@pge.com

July 6, 2023

Mr. Terence Eng
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 Inspection of PG&E’s Yosemite Division

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 June 9, 2023, stemming from the 2023 SED inspection of PG&E’s Yosemite Division distribution pipeline assets conducted April 03, 2023 to April 14, 2023.

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

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

Question Title, ID	Flanges and Flange Accessories, DC.DPC.FLANGE.O
Question Text	2. Do flanges and flange accessories meet the requirements of 192.147?
References	192.141 (192.147(a), 192.147(b), 192.147(c))
Issue Summary	During the field inspection at the meter set assembly located at [REDACTED] #11 in Turlock, SED discovered four stud bolts that were not completely threaded through the nuts at two blind flanges.

49 CFR §192.147(a) states that “(a) Each flange or flange accessory (other than cast iron) must meet the minimum requirements of ASME/ANSI B 16.5 and MSS SP-44 (incorporated by reference, see § 192.7), or the equivalent.”

ASME B16.5-2003 Annex D requires that bolt length be calculated to include the length of the necessary nuts needed to connect the flange, plus the minimum flange thickness, plus the gasket thickness, plus the appropriate thickness tolerances.

The four stud bolts do not meet the minimum requirements of ASME B16.5; therefore, PG&E is in violation of 49 CFR §192.147(a).

Response to Unsatisfactory Result #1:

The bolt/nut engagement concerns raised during field inspections on 04/12/2023 at customer meter set at [REDACTED] in Turlock, CA were brought into alignment with recommendations of section 2.1(E) of the current revision of PG&E guidance document B45.4 (see Att#01) on 04/17/2023 under SAP Notification# 125874150 (see pictures in Att#02).

Note the meter set was installed in 1996 therefore 49 CFR §192.147(a) would have referenced the 1988 edition of ASME/ANSI B16.5. Annex D was not introduced until the 2003 edition of ASME/ANSI B16.5. While guidance in Annex D is not mandatory per footnote 1 (see [Att#03](#)), it aligns with 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 #1: Time-Dependent Threats : External Corrosion - CP Monitoring (TD.CPMONITOR)

Question Title, ID	Correction of Corrosion Control Deficiencies, TD.CPMONITOR.DEFICIENCY.R
Question Text	13. Do records adequately document actions taken to correct any identified deficiencies in corrosion control?
References	192.491(c) (192.465(d))
Issue Summary	During the review of rectifier maintenance records, SED found that the rectifier with Equipment #44984755 had multiple readings of 0 volts and 0 Amps between 4/28/2020 and 12/6/2022.
	When SED asked PG&E about this rectifier, they stated it was currently non-operational, although the electronic test stations in that cathodic protection area were still more negative than -850 mV.

Response to Concern #1:

Cathodic Protection Area (CPA) 3176-07 was continually monitored and maintained to provide adequate levels of cathodic protection (i.e. -850mV or less) before and during the timeframe that the rectifier with equipment #44984755 was down due to a depleted deep-well anode. As of Nov-2022, the rectifier with equipment #44984755 was back in service and all periodic inspections for the rectifier with equipment #44984755 have demonstrated consistent, adequate amperage and voltage levels ([Att#04](#)).

Concern #2: Design and Construction : Meters, Service Regulators, and Service Lines (DC.METERREGSVC)

Question Title, ID	Customer Meters and Regulator Location, DC.METERREGSVC.CUSTOMETERREGLOC.O
Question Text	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))
Issue Summary	SED observed two traffic protection bollards which were damaged and no longer provide adequate protection for a SCADA equipment cabinet (YO-TUR-PL08). Also, a communications module (YO-TUR-RU08) mounted on a utility pole was missing an access cover.
	SED requests that PG&E take corrective actions to repair or replace the traffic bollards, as well as the communications module cover, and provide an update regarding those actions.

Response to Concern #2:

Correctives for the vehicle impact protection to the SCADA cabinet serving station YO-TUR-RU08 and cover plate for adjacent utility pole have been completed (see [Att#05](#)).

Concern #3: Time-Dependent Threats: External Corrosion - CP Monitoring (TD.CPMONITOR)

Question Title, ID	Cathodic Protection Monitoring Criteria, TD.CPMONITOR.MONITORCRITERIA.O
Question Text	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(b), 192.463(c), 192.463(a))
Issue Summary	SED found one Electronic Test Station (Equipment #44302010) that had a pipe-to-soil (P/S) read of -815 mV. The previous P/S read was -818mV.

According to PG&E, this area is out of tolerance due to a rectifier that is awaiting the installation of a new deep well anode.

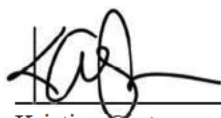
SED requests that once the installation is complete, up-reads be taken and sent to SED as confirmation of compliance.

Response to Concern #3:

Following the 04/05/2023 pipe-to-soil (P/S) reading of -815mV, the corrosion mechanic troubleshot the area and recorded a P/S reading of -867mV on 04/22/2023 (SAP Notification # 122925131) and a subsequent P/S reading taken 06/30/2023 was -910 mV (Att#06).

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

Sincerely,



Kristina Castrence
Director, Gas Regulatory and Risk

cc: Dennis Lee, CPUC
Jason McMillan, CPUC
Claudia Almengor, CPUC
Matthew Shaffer, CPUC

[REDACTED] PG&E
[REDACTED] PG&E

Attachments :

Att#01_B-45.4 (GDS, Flange Bolt-Tightening Sequence and Torque Values).pdf
Att#02_Corrective to Customer at W. Main (Thread engagement).pdf
Att#03_Annex D of ASME-ANSI 16.5-2003.pdf
Att#04_Inspection reads - Rectifier (EQ#44984755).pdf
Att#05_Correctives to YO-TUR-RU08 (Bollards & cover).pdf
Att#06_P-S readings (EQ#44302010).pdf