

PUBLIC UTILITIES COMMISSION

505 VAN NESS AVENUE
SAN FRANCISCO, CA 94102-3298



December 1, 2020

Ms. Christine Cowsert, VP
Gas Asset Management and System Operations
6121 Bollinger Canyon Road
San Ramon, CA 94583

GI-2020-09-PGE-13-02ABC

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

Dear Ms. Cowsert:

On behalf of the Safety and Enforcement Division (SED) of the California Public Utilities Commission (CPUC), Kai Cheung, Victor Muller, and Anthony Phu conducted a General Order 112-F inspection of Pacific Gas & Electric Company's (PG&E) Sacramento Division (Division) from September 28 to October 16, 2020. The inspection included a review of the Division's records for the period of 2017 through 2019, as well as a representative field sample of the Division's facilities. SED staff also reviewed the Division's operator qualification (OQ) records, which included field observation of randomly selected individuals performing covered tasks.

SED's findings are noted in the Summary of Inspection Findings (Summary) which is enclosed with this letter. The Summary reflects only those particular records and pipeline facilities that SED inspected during the inspection. SED discovered two violations and two concerns during the inspection.

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 Kai Cheung at (415) 940-8836 or by email at kai.cheung@cpuc.ca.gov.

Sincerely,

A handwritten signature in blue ink, appearing to read "Terence Eng".

Terence Eng, P.E.
Program Manager
Gas Safety and Reliability Branch
Safety and Enforcement Division

Enclosure: Summary of Inspection Findings

cc: Susie Richmond, PG&E Gas Regulatory Compliance
Paul Camarena, PG&E Gas Regulatory Compliance
Claudia Almengor, SED

Summary of Inspection Findings

Dates of Inspection: 9/28/2020 – 10/16/2020

Operator: PACIFIC GAS & ELECTRIC CO

Operator ID: 15007 (primary)

Assets (Unit IDs): PG&E Sacramento Division (85399)

System Type: GD

Inspection Name: PG&E Sacramento Division

Lead Inspector: Kai Cheung

Operator Representative: Paul Camarena

I. Unsatisfactory Results

(1) Records: Uprating (PRR.UPRATE)

(1.1) Question Text Do records indicate that increases in MAOP of pipeline were determined in accordance with 192.553?

References 192.553(a) (192.553(b), 192.553(c))

Assets Covered PG&E Sacramento Division (SA)

Issue Summary Title 49 CFR §192.553(c) states:

"Written plan. Each operator who uprates a segment of pipeline shall establish a written procedure that will ensure that each applicable requirement of this subpart is complied with."

PG&E Uprate Written Plan of Project #31284129 states:

"Using the method of "Uprating by testing as for a new main" for a low pressure uprate described in TD-4125P-03 "Revising the MAOP of Pipelines Operating at 60 psig or Less," revise the MAOP from 12 in-WC (low pressure) to 50 psig (high pressure) as depicted in the uprate drawings (attached). Utility Procedure TD-4125P-03, Attachment 1, "Uprate Matrix for Less Than 60 PSIG," contains the procedural steps for executing the uprate."

"Pressure-test main and services with air to a pressure of 100-110 psig for a minimum of 4 hours."

PG&E Utility Procedure: TD-4125P-03, Revising the MAOP of Pipelines Operating at 60 psig or Less, Step 2.1.2 Rev: 0c (Effective 04/01/2019) states:

"For all low pressure and semi-high pressure uprates, pressure-test the main and services being uprated with air to a pressure of 100-110 psig for a minimum of 4 hours."

PG&E uprated two distribution segments, PM#31284129 and PM#31323918, from 12 in-WC (low pressure) to 50 psig (high pressure) in the scope of the inspection. After reviewing all record documents of the uprating projects, including additional records and responses PG&E provided in follow-up data requests SA#52 and SA#57, SED found that, in one of the projects, PM#31284129, all pressure tests conducted were two hours or less, which did not comply with PG&E's Uprate Written Plan. PG&E explained in SA#57 that the effective standard during the time of construction was TD-4125P-03 Rev 0b, which did not include Step 2.1.2. However, pressure test and work clearance records show that all pressure tests were conducted during April and May of 2019, which were after the Rev 0c effective date of 04/01/2019. Therefore, TD-4125P-03 Rev 0c applies.

PG&E failed to follow their Uprate Written Plan and violated Title 49 CFR §192.553(c).

(1.2) Question Text Do records indicate that increases in MAOP were preceded by the actions specified in 192.557?

References 192.553(b) (192.553(c), 192.553(a), 192.557(b), 192.557(c))

Assets Covered PG&E Sacramento Division (SA)

Issue Summary Title 49 CFR §192.557(b) states in part:

"Before increasing operating pressure above the previously established maximum allowable operating pressure, the operator shall:

(1) Review the design, operating, and maintenance history of the segment of pipeline;

...

(6) If the pressure in main or service line, or both, is to be higher than the pressure delivered to the customer, install a service regulator on each service line and test each regulator to determine that it is functioning."

PG&E Utility Procedure: TD-4125P-03 Attachment 1, Uprate Matrix for Less Than 60 psig, Rev: 0b (Effective 04/01/2019) states:

1. The following matrix identifies each activity that needs to be considered in each particular type of uprating procedure. Direct particular attention towards properly documenting certain activities while performing each uprate project.
2. All items normally required for the procedure are identified in the "Activity" column. To the right of the "Activity" column are columns for each type of uprating. The activity items needed for each type of uprating are identified by a "Y" in the appropriate column, if needed, and an "N" if not needed.

Table 1. Uprate Matrix for Less Than 60 psig

Step	Activity	Uprating in Increments	Uprating by Testing as for a New Main	
			LP	SHP
Before Uprating		HP	LP	SHP
1	Prepare a written plan describing the method of uprating required for the pressure system.	Y		Y
2	Review the design, operating, and maintenance history of the pipeline to be uprated. For uprates involving cast iron or ductile iron facilities, evaluate the level of safety of the pipeline when operating at the proposed increased pressure, in accordance with 49 CFR 192.557(d).	Y		Y

PG&E uprated two distribution segments, PM#31284129 and PM#31323918, from 12 in-WC (low pressure) to 50 psig (high pressure) in the scope of the inspection. After reviewing all record documents of the two uprating projects, including additional records and responses PG&E provided in follow-up data requests SA#52 and SA#57, SED found that, prior to the uprate:

1. PG&E did not conduct a design review of the two pipeline segments.
2. PG&E did not test each service regulator to determine that it is functioning.

PG&E first provided two project packages in SA#45 which only included Uprate Written Plans and As-Built drawings. SED submitted follow-up data request SA#52 for additional records to verify that PG&E has considered/performed/completed activities as listed on TD-4125P-03 Attachment 1, "Uprate Matrix for Less Than 60 psig". The response of SA#52 included As-Built Drawings and Checklists, Operating Change Notices (deactivation, activation, and tie-in), Pressure Test Charts, Field Inspector Notes, Operator Qualifications, and Cathodic Protection Review Form (CPRF). While the CPRF meets the requirement of reviewing the operating and maintenance history per 192.557(b)(1), the rest of the documents contain no information of pre-uprate leak survey, design review, and service regulator tests. SED further requested these documents specifically in SA#57. PG&E provided special leak survey records but were unable to provide design review and service regulator test records.

PG&E failed to review the design of pipeline segments prior to the pressure uprate and violated Title 49 CFR §192.557(b)(1). PG&E did not test each service regulator before the tie-in and violated Title 49 CFR §192.557(b)(6). PG&E failed to follow their Utility Procedure TD-4125P-03 Attachment 1 and violated Title 49 CFR §192.553(c).

SED recommends PG&E create a form for their Utility Procedure: TD-4125P-03 Attachment 1, Uprate Matrix for Less Than 60 psig, so that the project manager and the QA/QC personnel can keep track of the required work completed before, during, and after a pressure uprate project.

II. Concerns

(1) Records: Uprating (PRR.UPRATE)

(1.1) Question Text Do records indicate that increases in MAOP are limited in accordance with 192.619 and 192.621?

References 192.553(b) (192.553(c), 192.553(d), 192.557(a))

Assets Covered PG&E Sacramento Division (SA)

Issue Summary Title 49 CFR §192.621(a) states in part:

"No person may operate a segment of a high pressure distribution system at a pressure that exceeds the lowest of the following pressures, as applicable:

(1) The design pressure of the weakest element in the segment, determined in accordance with C and D of this part."

Title 49 CFR §192.557(b) states in part:

"Before increasing operating pressure above the previously established maximum allowable operating pressure, the operator shall:

(1) Review the design, operating, and maintenance history of the segment of pipeline;"

Since PG&E failed to review the design of pipeline segments prior to the pressure uprate per 49 CFR §192.557(b)(1) (see the unsatisfactory section for details), it is unknown if the maximum allowable operating pressure (MAOP) of the two uprated segments exceeds the design pressure of the weakest element in the segment, therefore put the compliance of Title 49 CFR §192.621(a) in question.

(2) Records: Operations and Maintenance (PRR.OM)

(2.1) Question Text Do records indicate determination of the MAOP of pipeline segments in accordance with 192.619 and limiting of the operating pressure as required?

References 192.619(a) (192.619(b), 192.621(a), 192.621(b), 192.623(a), 192.623(b))

Assets Covered PG&E Sacramento Division (SA)

Issue Summary Title 49 CFR §192.621(a) states in part:

"No person may operate a segment of a high pressure distribution system at a pressure that exceeds the lowest of the following pressures, as applicable:

(1) The design pressure of the weakest element in the segment, determined in accordance with C and D of this part."

Title 49 CFR §192.557(b) states in part:

"Before increasing operating pressure above the previously established maximum allowable operating pressure, the operator shall:

(1) Review the design, operating, and maintenance history of the segment of pipeline;"

Since PG&E failed to review the design of pipeline segments prior to the pressure uprate per 49 CFR §192.557(b)(1) (see the unsatisfactory section for details), it is unknown if the maximum allowable operating pressure (MAOP) of the two uprated segments exceeds the design pressure of the weakest element in the segment, therefore put the compliance of Title 49 CFR §192.621(a) in question.