U.S. Department
of Transportation

**Pipeline and
Hazardous Materials
Safety Administration**

840 Bear Tavern Road, Suite 300
West Trenton, NJ 08628
609.771.7800

WARNING LETTER

OVERNIGHT EXPRESS DELIVERY

June 12, 2020

William D. Johnson
President
Pacific Gas and Electric Company
PO Box 770000 Mail Code H15B
San Francisco, CA 94105

CPF 1-2020-1023W

Dear Mr. Johnson:

From November 19 – 22, 2019, inspectors from the California Geologic Energy Management Division (CalGEM), acting as an Agent for the Pipeline and Hazardous Materials Safety Administration (PHMSA), Office of Pipeline Safety (OPS), pursuant to Chapter 601 of 49 United States Code (U.S.C.) inspected Pacific Gas & Electric Company's (PG&E) underground natural gas storage program and records for the Pleasant Creek (PC) and McDonald Island (MI) intrastate underground natural gas storage (UNGS) facilities in San Joaquin and Yolo Counties, California.

As a result of the inspection, it is alleged that you have committed probable violations of the Pipeline Safety Regulations, Title 49, Code of Federal Regulations (CFR). The item(s) inspected and the probable violation(s) are:

1. **§ 192.12 Underground natural gas storage facilities.**

   (a) ....

   (d) Each underground natural gas storage facility that uses a depleted hydrocarbon reservoir or an aquifer reservoir for gas storage, including those constructed not later than July 18, 2017 must meet the operations, maintenance, integrity demonstration and verification, monitoring, threat and hazard identification, assessment, remediation, site security, emergency response and preparedness, and recordkeeping requirements and recommendations of API RP 1171, sections 8, 9, 10, and 11 (incorporated by reference, see §192.7) by

January 18, 2018.[1]

PG&E failed to meet applicable requirements and recommendations of API RP 1171, Section 9. Specifically, PG&E failed to demonstrate that the threshold of 225 psi for MI wells incorporated engineering and scientific principles, determined from well integrity evaluations and from risk assessments, in accordance with API RP 1171, Section 9.3.2, Well Integrity Monitoring (Section 9.3.2).

Section 9.3.2 states in part:

> The operator shall monitor for presence of annular gas by measuring and recording annular pressure and/or annular gas flow. The operator shall evaluate each annular gas occurrence that exceeds operator- or regulatory-defined threshold levels determined from well integrity evaluation and from risk assessment.

At the time of the inspection, PG&E's records did not provide documentation of how the 225 psi threshold was determined using well integrity evaluations and risk assessments. Therefore, PG&E failed to meet the requirements of Section 9.3.2.

2. § 192.12 Underground natural gas storage facilities.

(a) ....

(d) Each underground natural gas storage facility that uses a depleted hydrocarbon reservoir or an aquifer reservoir for gas storage, including those constructed not later than July 18, 2017 must meet the operations, maintenance, integrity demonstration and verification, monitoring, threat and hazard identification, assessment, remediation, site security, emergency response and preparedness, and recordkeeping requirements and recommendations of API RP 1171, sections 8, 9, 10, and 11 (incorporated by reference, see §192.7) by January 18, 2018.

PG&E failed to meet the applicable requirements and recommendations of API RP 1171, Section 9. Specifically, PG&E failed to demonstrate that it tested each master valve and wellhead pipeline isolation valve at least annually in accordance with API RP 1171, Section 9.3.2, Well Integrity Monitoring (Section 9.3.2).

Section 9.3.2 states in part:

> The operator shall test the operation of the master valve and wellhead pipeline isolation valve at least annually for proper function and ability to isolate the well. The valves shall be maintained, repaired, or replaced in accordance with the operator's valve maintenance program for isolation valves.

[1] The final rule, Pipeline Safety: Safety of Underground Natural Gas Storage Facilities, 85 FR 8104 (February 12, 2020), revised § 192.12. The requirement cited in this Warning Letter is still present but is now codified in § 192.12(b)(2).

At the time of the inspection, PG&E's records did not provide documentation of the testing of master valves for at least eight (8) wells at PC and MI on a frequency of at least annually. Therefore, PG&E failed to meet the requirements of Section 9.3.2.

3. § 192.12 Underground natural gas storage facilities.

(a) ...

(d) Each underground natural gas storage facility that uses a depleted hydrocarbon reservoir or an aquifer reservoir for gas storage, including those constructed not later than July 18, 2017 must meet the operations, maintenance, integrity demonstration and verification, monitoring, threat and hazard identification, assessment, remediation, site security, emergency response and preparedness, and recordkeeping requirements and recommendations of API RP 1171, sections 8, 9, 10, and 11 (incorporated by reference, see §192.7) by January 18, 2018.

PG&E failed to meet the applicable requirements and recommendations of API RP 1171, Section 10.4 Signage. Specifically, PG&E failed to install permanent weatherproof signage at each well site for identification purposes in accordance with API RP 1171. Section 10.4.1, Minimum Signage Information (Section 10.4.1).

Section 10.4.1 states in part that "Permanent weatherproof signage shall be installed at each well site for identification purposes."

At the time of the field inspection, CalGEM observed a lack of signage at each well and a failure to use permanent and weatherproof materials at certain wells. Therefore, PG&E failed to meet the requirements of Section 10.4.1.

4. § 192.12 Underground natural gas storage facilities.

(a) ....

(d) Each underground natural gas storage facility that uses a depleted hydrocarbon reservoir or an aquifer reservoir for gas storage, including those constructed not later than July 18, 2017 must meet the operations, maintenance, integrity demonstration and verification, monitoring, threat and hazard identification, assessment, remediation, site security, emergency response and preparedness, and recordkeeping requirements and recommendations of API RP 1171, sections 8, 9, 10, and 11 (incorporated by reference, see §192.7) by January 18, 2018.

PG&E failed to meet the applicable requirements and recommendations of API RP 1171, Section 11. Specifically, PG&E failed to have adequate provisions in place for communication to comply with API RP 1171, Section 11.7, Interaction with Control Room (Section 11.7).

Section 11.7.1 states that "Storage personnel shall be responsible for preparing and communicating guidelines for maintaining reservoir and well functional integrity."

At the time of the inspection, CalGEM requested PG&E to explain and demonstrate functionality of within-facility backup communication at PC and MI. The demonstration failed to show the functionality of backup communication at each facility. Specifically, the backup radios did not function as intended. Therefore, PG&E failed to meet the requirements of Section 11.7.1.

Under 49 U.S.C. § 60122 and 49 CFR § 190.223, you are subject to a civil penalty not to exceed $218,647 per violation per day the violation persists, up to a maximum of $2,186,465 for a related series of violations. For violation occurring on or after November 27, 2018 and before July 31, 2019, the maximum penalty may not exceed $213,268 per violation per day, with a maximum penalty not to exceed $2,132,679. For violation occurring on or after November 2, 2015 and before November 27, 2018, the maximum penalty may not exceed $209,002 per violation per day, with a maximum penalty not to exceed $2,090,022. For violations occurring prior to November 2, 2015, the maximum penalty may not exceed $200,000 per violation per day, with a maximum penalty not to exceed $2,000,000 for a related series of violations. We have reviewed the circumstances and supporting documents involved in this case, and have decided not to conduct additional enforcement action or penalty assessment proceedings at this time. We advise you to correct the item(s) identified in this letter. Failure to do so will result in PGE being subject to additional enforcement action.

Be advised that all material you submit in response to this enforcement action is subject to being made publicly available. If you believe that any portion of your responsive material qualifies for confidential treatment under 5 U.S.C. 552(b), along with the complete original document you must provide a second copy of the document with the portions you believe qualify for confidential treatment redacted and an explanation of why you believe the redacted information qualifies for confidential treatment under 5 U.S.C. 552(b).

No reply to this letter is required. If you choose to reply, please submit all correspondence in this matter to Robert Burrough, Director, PHMSA Eastern Region, 840 Bear Tavern Road, Suite 300, West Trenton, NJ 08628. Please refer to **CPF 1-2020-1023W** on each document you submit, and whenever possible provide a signed PDF copy in electronic format. Smaller files may be emailed to robert.burrough@dot.gov. Larger files should be sent on USB flash drive accompanied by the original paper copy to the Eastern Region Office.

Sincerely,

Robert Burrough
Director, Eastern Region
Pipeline and Hazardous Materials Safety Administration

CC: Nick Stavropoulos, Executive Vice President, Gas Operations, Pacific Gas and Electric Company (via email)
Mike Bradley, Senior Manager, Gas Ops Compliance, Pacific Gas and Electric Company (via email)