



May 2, 2024

Robert Burrough
Director, Eastern Region,
Office of Pipeline Safety Pipeline and Hazardous Materials Safety Administration
840 Bear Tavern Road, Suite 300
West Trenton, NJ 08628

Re: CPF 1-2024-024-WL

2023 Warning Letter for Roundup Underground Natural Gas Storage Facility

Dear Mr. Burrough,

Public Service Co of Colorado, a Colorado company and wholly owned subsidiary of Xcel Energy Inc. (Public Service) received a Warning Letter (WL) from the Office of Pipeline Safety Pipeline and Hazardous Materials Safety Administration (PHMSA) dated April 4, 2024. The letter was received in response to the inspection, which took place August 22, 2023, through August 24, 2023, for the Asbury Creek Storage and Fruita Storage Facilities in Mesa County, Colorado.

Although no response was required for this Warning Letter, Public Service includes responses to each PHMSA probable violation below to demonstrate the additional remedial actions taken by the operator.

1. **§ 191.22 - National Registry of Pipeline and LNG operators.**
 - (a) ...
 - (c) **Changes.** Each operator of a gas pipeline, gas pipeline facility, UNGSF, LNG plant, or LNG facility must notify PHMSA electronically through the National Registry of Operators at <https://portal.pbmsa.dot.gov> of certain events.
 - (1) An operator must notify PHMSA of any of the following events not later than 60 days before the event occurs:
 - (i) ...
 - (iv) Maintenance of a UNGSF that involves the plugging or abandonment of a well or that requires a workover rig and costs \$200,000 or more for an individual well, including its wellhead. If 60-days' notice is not feasible due to an emergency, an operator must promptly respond to the emergency and notify PHMSA as soon as practicable;

PSCC failed to submit notifications for the plugging and abandonment of Asbury 4 and Asbury 5 in 2020 in accordance with § 191.22(c)(1)(iv).

During the inspection, PHMSA reviewed notification submitted by PSCC and found that notifications for the plugging and abandonment of Asbury 4 and Asbury 5 were not submitted to PHMSA. Asbury 4 was plugged and abandoned on July 2, 2020 and Asbury 5 was plugged and abandoned on July 8, 2020.

Therefore, PSCC failed to meet the requirements of § 191.22(c)(1)(iv).

Public Service Response

Public Service notified the Colorado Energy & Carbon Management Commission (formerly the Colorado Oil & Gas Conservation Commission) of the plugging and abandonment of the Asbury 4 and Asbury 5 wells. PHMSA was notified outside of the reporting timelines on 11/22/2023.

Public Service will work closely with Gas Engineering and its contractors to ensure future notifications of plugging and abandonment are submitted to PHMSA as required by §191.22. At this time, no well plugging and abandonment plans are scheduled within the next two years.

2. § 192.12 Underground natural gas storage facilities.

(a) ...

{b) Depleted hydrocarbon and aquifer reservoir UNGS A.

(2) Each NGSF that uses a depleted hydrocarbon reservoir or an aquifer reservoir for natural gas storage and was constructed on or before July 18, 2017, must meet the provisions of API RP 1171 (incorporated by reference, see § 192.7), sections 8, 9, 10, and 11, and paragraph (c) of this section, by January 18, 2018, and must meet all provisions of paragraph (d) of this section by March 13, 2021.

PSCC failed to meet the provisions of API RP 1171, Section 9. Specifically, PSCC did not have inventory assessment reports available for its Asbury and Fruita fields nor did it have any assessment information for its Fruita field in accordance with API RP 1171, Section 9.8.2 (Section 9.8.2).

Section 9.8.2 states in part, "The operator shall maintain records of storage inventory assessments for the life of the facility."

During the inspection, PHMSA requested to review the data gathered from PSCC's bi-annual shut-in tests for bottom hole pressures and the resulting plots to determine possible migration issues, but PSCC did not have an assessment report available for its Asbury and Fruita fields. Also, PSCC did not have any assessment information for its Fruita field, which has not been utilized since 2020.

Therefore, PSCC failed to meet the provisions of Section 9.8.2 as required by § 192.12(6)(2).

Public Service Response

Public Service has historically completed formal inventory assessments to ensure no gas is migrating out of the underground natural gas storage formations. Starting in 2023, the internal review of these inventory assessments is now being documented. This was communicated to the PHMSA inspector on March 1, 2024.

3. § 192.12 Underground natural gas storage facilities.

(a) ...

(b) Depleted hydrocarbon and aquifer reservoir UNGSFs.

(2) Each UNGSF that uses a depleted hydrocarbon reservoir or an aquifer reservoir for natural gas storage and was constructed on or before July 18, 2017, must meet the provisions of API RP 1171 (incorporated by reference, see §192.7), sections 8, 9, 10, and 11, and paragraph (c) of this section, by January 18, 2018, and must meet all provisions of paragraph (d) of this section by March 13, 2021.

PSCC failed to meet the provisions of API RP 1171, Section 9. Specifically, PSCC failed to test the operation of the master valves and wellhead isolation valves at least annually for proper function and ability to isolate the well in accordance with API RP 1171, Section 9.3.2 (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."

During the inspection, PSCC did not have records available of the testing of the operation of the master valves and wellhead pipeline isolation valves at least annually for proper function and ability to isolate the well.

Therefore, PSCC failed to meet the provisions of Section 9.3.2 as required by § 192.12(b)(2).

Public Service Response

Historically, Public Service Gas Operations performed maintenance at the wellheads, but this was not documented separately for the master valve and wellhead pipeline isolation valves. Public Service has modified its SAP work management system to include specific work orders to document the operation of the master valves and wellhead pipeline isolation valves. These electronic work orders will start with the 2024 calendar year.

On March 1, 2024, this plan was communicated to the PHMSA inspector.

4. § 192.12 Underground natural gas storage facilities.

(a) ...

(b) Depleted hydrocarbon and aquifer reservoir UNGSFs.

(2) Each UNGSF that uses a depleted hydrocarbon reservoir or an aquifer reservoir for natural gas storage and was constructed on or before July 18, 2017, must meet the provisions of API RP 1171 (incorporated by reference, see § 192.7), sections 8, 9, 10, and 11, and paragraph (c) of this section, by January 18, 2018, and must meet all provisions of paragraph (d) of this section by March 13, 2021.

PSCC failed to meet the provisions of API RP 1171, Section 8. Specifically, PSCC had not included interactive threats into its risk model in accordance with API RP 1171, Section 8.3.2 (Section 8.3.2).

Section 8.3.2 states in part:

The operator shall use available information such as performance data collected through the field history, operations and maintenance (O&M) activities, geotechnical data such as well logs, engineering data, and completion reports to determine susceptibility to threat and hazard-related events and to assess threat and hazard interaction.

During the inspection, PHMSA reviewed PSCC's risk model and found that interactive threats had not been incorporated into the model and assessed.

Therefore, PSCC failed to meet the provisions of Section 8.3.2 as required by § 192.12(6)(2).

Public Service Response

Public Service Storage Integrity Management Plan (SIMP), was revised (version 2024-1) on December 28, 2023. SIMP Section 4.2 was revised to reflect the risk model utilizing interactive threats. Interactive threats will be more deliberately included in future UNGSF risk assessments.

On March 1, 2024, the PHMSA inspector was provided with a copy of the revised SIMP (2024-1).

5. § 192.12 Underground natural gas storage facilities.

(a) ...

(c) Procedural manuals. Each operator of a UNGSF must prepare and follow for each facility one or more manuals of written procedures for conducting operations, maintenance, and emergency preparedness and response activities under paragraphs (a) and (b) of this section. Each operator must keep records necessary to administer such procedures and review and update these manuals at intervals not exceeding 15 months, but at least once each

calendar year. Each operator must keep the appropriate parts of these manuals accessible at locations where UNGSF work is being performed. Each operator must have written procedures in place before commencing operations or beginning an activity not yet implemented.

PSCC failed to review and update its O&M manuals at intervals not to exceed 15 months, but at least once each calendar year in accordance with § 192.12(c).

During the inspection, PHMSA requested records demonstrating PSCC had reviewed and updated its O&M manuals during calendar years 2021 to 2023. PSCC did not have records available of reviews of its O&M manuals other than the General Work Plan and the Kill and Plug plan that were included in the annual Storage Integrity Management Plan (SIMP) review done on December 14, 2022.

Therefore, PSCC failed to meet the requirements of § 192.12(c) regarding reviewing and updating its manuals of procedures.

Public Service Response

The Public Service Storage Integrity Management Plan (SIMP) review was completed on December 17, 2021, December 14, 2022, and December 28, 2023. The SIMP plan includes many O&M procedures and processes. Public Service has twelve additional underground storage O&M procedures. On December 28, 2023, these additional O&M procedures were reviewed, and the revision date was updated. Although they may not be revised annually, they will be included in future underground storage procedure reviews.

On March 1, 2024, the PHMSA inspector was provided a copy of the procedure reviews, revised O&M procedures, and the revised SIMP plan.

If you need any further information or clarification regarding this matter, please contact Jeff Cremin at Jeffrey.J.Cremin@xcelenergy.com.

Sincerely,

A handwritten signature in black ink, reading "Lauren Gilliland". The signature is fluid and cursive, with the first name "Lauren" written in a larger, more prominent script than the last name "Gilliland".

Lauren Gilliland
Vice President, Natural Gas Unit

Cc:

Samuel Aguirre (PHMSA)

Chris Akins, Jeff Cremin, Drew Tedford, Dan May, John Surette, Heidi Bennedit (Xcel Energy)