Agenda Date: June 30, 2022
Item Number: E1

Docket: **PG-220409**
Company Name: Cascade Natural Gas Corporation

Staff: Dennis Ritter, Pipeline Safety Engineer

Recommendation

Issue an order granting Cascade Natural Gas Corporation's (Cascade or Company) request to construct and operate approximately 56 feet of 6-inch, steel pipeline and one new regulator station (see Figure 1), in Yakima, Washington, as proposed in Cascade's Proximity Considerations Request dated June 1, 2022. These new assets will allow Cascade to take over gas pressure regulation from Williams NW Pipeline (NWP). The proposed 56 feet of pipeline and new regulator station will have a maximum allowable operating pressure (MAOP) of 960 pounds per square inch gauge (psig) which is the current MAOP of NWP. The new line and regulator station will be located within 500 feet of 13 existing buildings not owned by Cascade (Table 1), two of which are NWP structures.

Discussion

A gas pipeline company must receive approval from the Washington Utilities and Transportation Commission (Commission) to operate a pipeline at greater than 500 psig, within 500 feet of an existing building not owned by the gas pipeline company, as described in Washington Administrative Code (WAC) 480-93-020. The Commission has adopted the Code of Federal Regulations, Title 49, Part 192 and 480-93 of the WAC as minimum standards for natural gas pipeline construction.

Cascade is proposing to construct and operate a new steel pipeline consisting of 56-feet of 6-inch diameter pipeline with a new regulator station (Figure 1). The proposed location of this new line will be within 500 feet of 13 existing buildings in Yakima, Washington not owned by Cascade (Table 1 and Figure 1). The MAOP of the proposed pipeline and regulator station will be 960 psig. The proposed pipeline and regulator station will allow Cascade to take over pressure regulation currently the responsibility of NWP. NWP has made it a continuing practice to turn over this responsibility to local distribution companies.

Commission staff (Staff) reviewed the proposed proximity request and calculations. As the facility will be new, there are no existing records. Staff notes the following facts:

(a) The proposed MAOP of the new pipeline and regulator station will be 960 psig which is the same as the existing Williams NWP MAOP currently serving Cascade's distribution system.

(b) The proposed pipeline and regulator station will be designed with a minimum component rating of 1480 psig and pressure tested to 1440 psig to allow operation up to 960 psig at the MAOP.

(c) Class location for the proposed pipeline is Class 2.

(d) At the proposed MAOP of 960 psig, the maximum stress level of the pipeline would be 24.00 percent of the specified minimum yield strength (SMYS) for the 6-inch pipeline.

(e) As the hoop stress of the line is over 20 percent SMYS, the proposed pipeline is considered transmission and will be included in Cascade's Transmission Integrity Management Program.

(f) The proposed pipeline and fittings will be pressure tested to a minimum of 1440 psig for 24 hours in accordance with the Company's procedures prior to operation. This test pressure is at least 1.5 times the MAOP of the pipeline suitable for existing and future class location.

Conclusion

A review of Cascade's proximity request indicates that it meets the pertinent requirements of the Code of Federal Regulations, Title 49, Part 192 and 480-93 of the WAC and that the proposed location of the new pipeline and regulator station is immediately adjacent to the existing Williams NWP regulator station operating at 960 psig (MAOP).

The Commission's proximity rule, WAC 480-93-020, allows pipeline staff to review proposed high-pressure pipelines in close proximity to structures to address safety considerations. Staff's recommended conditions described below appropriately minimize the public safety risk associated with the proposed pipeline.

For these reasons, Staff recommend that the Commission issue an Order approving Cascade's request to install and operate a pipeline with a MAOP of 500 psig subject to the following conditions:

a) For underground installations, Cascade must electrically inspect (jeep) the pipe coating and repair any coating defects in accordance with Cascade's operating standard prior to backfilling.

b) For underground installations, Cascade must apply suitable backfill material around the pipe to protect the pipe and coating. The material around the pipe must be free of any sharp rocks or other objects with a maximum particle size of one-half inch and must contain a large percentage of fines, such as sand, native soil, or

soil-based select materials.

c) Cascade must non-destructively test 100 percent of all welds. Cascade must remedy defects in the welds in accordance with Cascade's operating standards and procedures. Cascade must non-destructively test all repaired welds to ensure pipeline integrity and compliance with existing standards.

d) Cascade must install cathodic protection within 90 days after the pipeline is installed.

e) Cascade must provide notification to the Commission via email at least two business days prior to the beginning of project construction.

f) Cascade must contact building occupants within 500 feet of the new pipeline prior to the Commission's open meeting and inform them of the project construction and any additional information consistent with the public awareness requirements in Title 49 CFR Part 192.616.

Table 1 - Buildings within 500-foot proximity to the pipeline and facilities.

1.	2501 Terrace Heights Rd.	Commercial
2.	2501 Terrace Heights Rd.	Commercial
3.	2609 Terrace Heights Dr.	Commercial
4.	2609 Terrace Heights Dr.	Commercial
5.	2801 Terrace Heights Dr.	Commercial
6.	2801 Terrace Heights Dr.	Commercial
7.	2710 Terrace Heights Dr.	Commercial
8.	2812 ½ terrace Heights Dr.	Commercial
9.	2812 ½ terrace Heights Dr.	Commercial
10.	2608 Terrace Heights Dr.	Commercial
11.	2608 Terrace Heights Dr.	Commercial
12.	2506 Terrace Heights Dr.	Industrial
13.	2506 Terrace Heights Dr.	Industrial

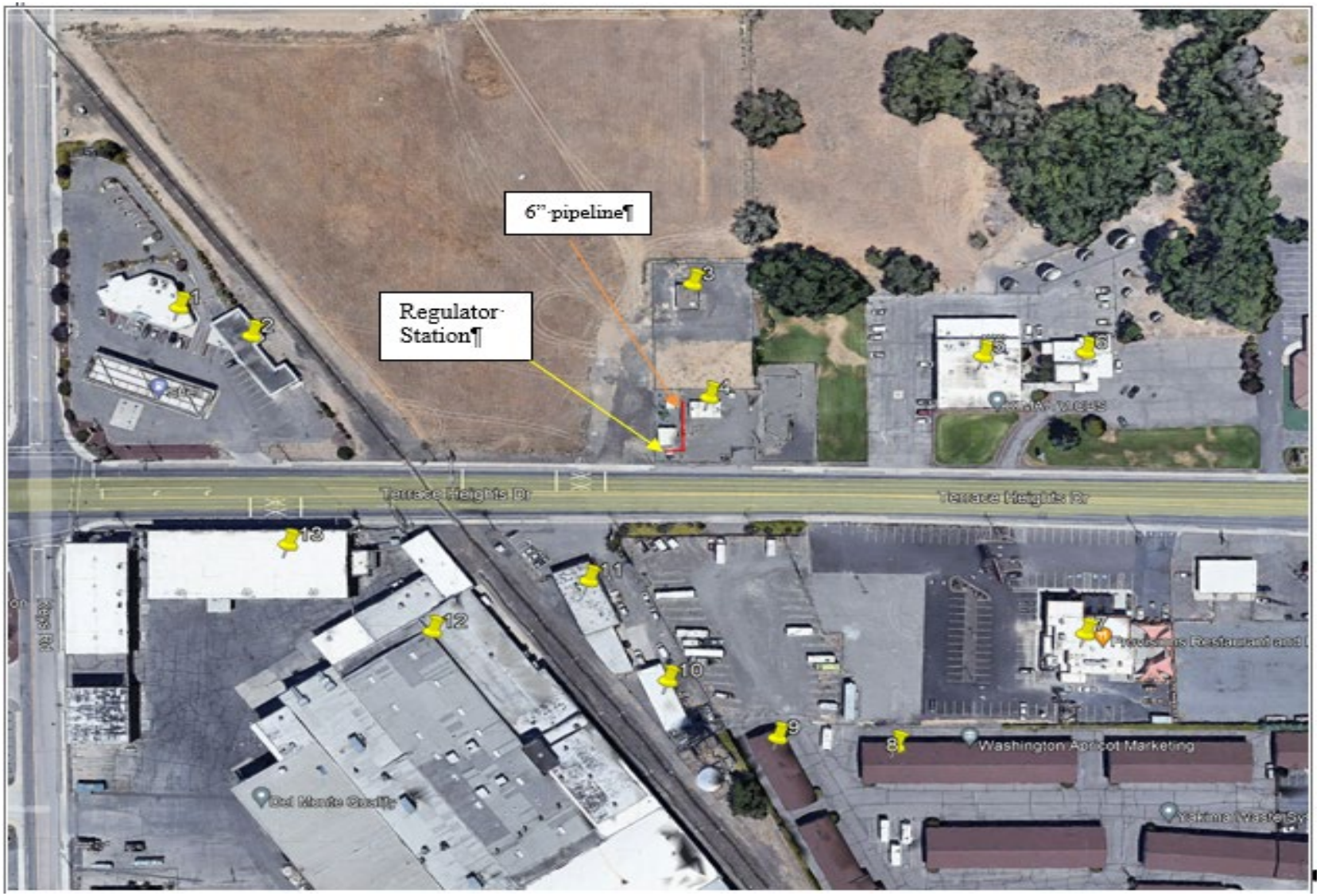

Figure 1 Proposed location of new pipeline and regulator station