Agenda Date: September 29, 2022
Item Number: E3

Docket: **PG-220648**
Company Name: Cascade Natural Gas Corporation

Staff: Scott Anderson, Pipeline Safety Engineer

Recommendation

Issue an order granting Cascade Natural Gas Corporation's (Cascade or Company) request to construct and operate approximately 6770 feet of new 4-inch steel main in Toppenish, Washington, as proposed in Cascade's Proximity Considerations Request dated August 29, 2022. The new pipeline will connect to the existing 4-inch East Toppenish HP pipeline that operates at a maximum allowable operating pressure (MAOP) of 400 psig and the existing regulator station 032-R-059 which feeds the Toppenish distribution system at a MAOP of 56 psig.

Discussion

A gas pipeline company must receive approval from the Washington Utilities and Transportation Commission (Commission) to operate a pipeline at greater than 250 psig, up to and including 500 psig, within 100 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 a 4-inch diameter pipeline and a new inlet at existing regulator station, 032-R-059. The proposed alignment of this new line will be within 100 feet of 151 existing buildings in Toppenish, Washington not owned by Cascade. The MAOP of the proposed pipeline will be 400 psig. Cascade is performing this work to satisfy Settlement Agreement Docket PG-150120, maintain core customer needs, and supply necessary capacities for future growth in Toppenish, WA.

Cascade looked at connections using alternative routes, but they were not chosen due to lack of existing easements, difficulty in obtaining new easements, and restrictions in place on crossing BNSF Railway tracks.

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

(a) The proposed MAOP of the new pipeline 400 psig.

(b) The project will use API 5L, X52 piping and ANSI 300 fittings which are appropriate for the proposed MAOP.

(c) Class location for the proposed pipeline is Class 3.

(d) The approximate distance from the pipeline to the existing structures ranges from 15 feet to 100 feet. All other buildings along the route are greater than 100 feet from the pipeline.

(e) At the proposed MAOP of 400 psig the stress level of the new pipe and fittings will be a maximum of 7.30 percent of the specified minimum yield strength and the stress level of the existing regulator station will be 13.68 percent of the specified minimum yield strength.

(f) The proposed pipeline and fittings will be pressure tested to a minimum of 750 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 as required for a Class 3 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 selected route of the new pipeline has the least impact (based on future development) on surrounding population densities.

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 recommends that the Commission issue an Order approving Cascade's request to install and operate a pipeline with a MAOP of 400 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 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 100 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.