

**BEFORE THE WASHINGTON  
UTILITIES AND TRANSPORTATION COMMISSION**

In the Matter of the Request of

CASCADE NATURAL GAS  
CORPORATION

Pursuant to WAC 480-93-020 for  
Approval to Operate a Proposed New 6-  
Inch Pipeline at a Maximum Allowable  
Operating Pressure of 400 Pounds per  
Square Inch Gauge within 100 Feet of  
Existing Structures Not Owned by  
Cascade Natural Gas Corporation

DOCKET PG-220683

ORDER 01

ORDER APPROVING REQUEST

**BACKGROUND**

- 1 On September 12, 2022, Cascade Natural Gas Corporation (Cascade or Company) filed with the Washington Utilities and Transportation Commission (Commission) a request for approval to construct and operate a new pipeline consisting of 6-inch, steel gas line operating at a maximum allowable operating pressure (MAOP) of 400 pounds per square inch gauge (psig) within 100 feet of 11 existing structures not owned by Cascade in Zillah, Washington.
- 2 The Commission has adopted the Code of Federal Regulations (C.F.R.) Title 49, Part 192, and promulgated Washington Administrative Code (WAC) Chapter 480-93 as the minimum standards for gas pipeline construction. WAC 480-93-020 requires a gas pipeline company to obtain approval from the Commission to operate a gas pipeline at greater than 250 psig within 100 hundred feet of any existing buildings not owned by the gas pipeline company.
- 3 Cascade is proposing to construct and operate a 4-inch steel pipeline within 100 feet of 11 structures in Zillah, Washington. The MAOP of the proposed pipeline will be 400 psig. The Cascade is performing this work to satisfy the Settlement Agreement in Docket PG-150120.
- 4 Commission Staff reviewed the Company's proposed proximity request and calculations. Because the facility will be new construction, there are no existing records. Staff notes the following facts:

- (a) The proposed MAOP of the new pipeline will be 400 psig
- (b) The proposed piping and all fittings are commensurate with the proposed MAOP.
- (c) Class location for the proposed pipeline is Class 3.
- (d) The approximate distance from the pipeline to existing structures ranges from 19 feet to 100 feet. All other buildings are greater than 100 feet from the pipeline.
- (e) At the proposed MAOP of 400 psig, the maximum stress level of the new pipe would be 9.10 percent of the specified minimum yield strength (SMYS). Pipelines that operate under 20 percent of SMYS are considered low-stress lines and pose a lower risk than pipelines operating above 20 percent of SMYS.
- (f) The proposed pipeline and fittings will be pressure tested to a minimum of 750 psig 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.

5 Staff finds that Cascade's proposed construction meets all the pertinent requirements of Title 49 C.F.R. Part 192 and WAC Chapter 480-93.

6 Staff recommends that the Commission approve the request subject to the following conditions, which are designed to minimize the risks to public safety from the proposed pipeline:

- (a) For underground installations, Cascade must electrically inspect (jeep) the pipe coating and repair any coating defects in accordance with the Company'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 the Company'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 to [pipelineprogram@utc.wa.gov](mailto:pipelineprogram@utc.wa.gov) at least two business days prior to the beginning of project construction.
- (f) Cascade must contact building owners 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.

### DISCUSSION

7 The Commission agrees with Staff's analysis and adopts its recommendations. The Commission's primary objective in regulating natural gas pipelines is to protect public safety. The rules the Commission has promulgated to govern pipelines incorporate and exceed federal requirements and provide flexibility to establish safety standards tailored to individual projects. The Commission's proximity rule, WAC 480-93-020, allows pipeline Staff the opportunity to review construction plans of high-pressure pipelines in close proximity to inhabited structures to address safety considerations. Staff's recommended conditions described in paragraph 6 appropriately minimize the public safety risk associated with the proposed pipeline. Accordingly, we approve the Company's request.

### FINDINGS AND CONCLUSIONS

- 8 (1) The Commission is an agency of the State of Washington vested by statute with the authority to adopt and enforce rules for gas pipeline safety.

- 9 (2) Cascade is a gas pipeline company and subject to Commission jurisdiction.
- 10 (3) In WAC 480-93, the Commission has adopted minimum standards for gas pipeline construction. Pursuant to these standards, gas pipelines are designed to withstand higher pressure than the maximum allowable operating pressure (MAOP) prescribed by these rules. The most restrictive gas pipeline safety rules specify that pipelines in a highly populated area must be operated at pressures producing a hoop stress of no greater than 40 percent of the specified minimum yield strength (SMYS) of the pipe.
- 11 (4) Cascade's construction plan indicates that the proposed pipeline will meet or exceed all the pertinent requirements of Title 49 C.F.R. Part 192 and WAC Chapter 480-93. The conditions recommended by Staff add requirements to this installation that minimize the risk of proximity of the pipeline to habitable structures.
- 12 (5) This matter came before the Commission at its regularly scheduled meeting on September 29, 2022.
- 13 (6) The Commission should approve Cascade's request to operate a new 6-inch natural gas pipeline at a MAOP of 400 psig within 100 feet of existing structures not owned by Cascade because the Company's proposal, with the conditions Staff recommends, is consistent with the public interest.

**ORDER**

**THE COMMISSION ORDERS:**

- 14 (1) The Commission approves Cascade Natural Gas Corporation's request to construct and operate a new regulator station and steel natural gas pipeline in Zillah at a maximum allowable operating pressure of 400 pounds per square inch gauge within 100 feet of existing structures subject to the conditions set out in paragraph 6 of this order.

- 15 (2) The Commission retains jurisdiction over the subject matter and Cascade Natural Gas Corporation to effectuate the provisions of this Order.

DATED at Lacey, Washington, and effective September 29, 2022

WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION

AMANDA MAXWELL  
Executive Director and Secretary