# BEFORE THE WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION

In the Matter of the Request of	DOCKET PG-220008
CASCADE NATURAL GAS CORPORATION	ORDER 01
Pursuant to WAC 480-93-020 for	APPROVING REQUEST
Approval to Operate a Proposed New 12-	
Inch Pipeline at a Maximum Allowable	
Operating Pressure of 500 Pounds per	
Square Inch Gauge within 100 Feet of	
Existing Structures Not Owned by	
Cascade Natural Gas Corporation	

# BACKGROUND

- I On January 3, 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 regulator station and a pipeline consisting of new 12-inch, 8-inch, and 6-inch steel natural gas lines operating at a maximum allowable operating pressure (MAOP) of 500 pounds per square inch gauge (psig) within 100 feet of 80 existing structures not owned by Cascade.
- 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 regulator station and pipeline consisting of 12-inch, 8-inch, and 6-inch steel within 100 feet of 80 structures in Richland, Washington. The MAOP of the proposed pipeline will be 500 psig. The proposed pipeline will operate in parallel with an existing 8-inch pipeline that has an MAOP of 500 psig and is also within 100 feet of 9 buildings. The proposed pipeline will operate concurrently with an existing 8-inch pipeline that has a MAOP of 250 psig. The proposed pipeline will maintain core customer needs and can supply necessary capacity for future growth in Richland.

- Commission staff (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 500 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 30 feet to 100 feet. All other buildings are greater than 100 feet from the pipeline.
  - (e) At the proposed MAOP of 500 psig, the maximum stress level of the pipe would be 16.35 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 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.
- 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 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 49 C.F.R. Part 192.

## 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 near 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 subject to those conditions.

# 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.
- 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 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 of the pipe.
- (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 February 10, 2022.
- (6) The Commission should approve Cascade's request to operate a new 12-inch natural gas pipeline at a MAOP of 500 psig within 100 feet of existing structures not owned by Cascade because the Company's proposal, subject to 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 Richland at a maximum allowable operating pressure of 500 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.

The Commissioners, having determined this Order to be consistent with the public interest, directed the Secretary to enter this Order.

DATED at Lacey, Washington, and effective February 10, 2022

WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION

AMANDA MAXWELL Executive Director and Secretary