

**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 Increase the Pressure of Existing
Southridge High-Pressure Pipeline to 500
Pounds per Square Inch within 100 Feet of
Existing Structures or Structures Under
Construction Not Owned by Cascade
Natural Gas Corporation

DOCKET PG-190654

ORDER 01

APPROVING REQUEST

BACKGROUND

- 1 On July 31, 2019, Cascade Natural Gas Corporation (Cascade or Company) filed with the Washington Utilities and Transportation Commission (Commission) a request for approval to increase the pressure of the existing Southridge high-pressure pipeline from 250 pounds per square inch gauge (psig) to 500 psig within 100 feet of existing structures or structures under construction not owned by Cascade.
- 2 The Commission has adopted the Code of Federal Regulations (CFR) 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 proposes to increase the pressure from 250 psig to 500 psig on a portion of the existing Southridge high-pressure pipeline: 2,200 feet of existing 8-inch steel pipe and approximately 5.3 miles of existing 6-inch steel pipe. The existing pipeline was designed, constructed, and pressure tested to operate at 500 psig based on a previous 750 psig pressure test.

- 4 Cascade also requests to operate two pending regulator stations at 500 psig MAOP. These two new regulator stations are proposed to be installed in conjunction with this project and are identified as regulator station (R-124) and regulator station (R-123). R-124 will tie-in a portion of the Southridge line that already operates at 500 psig MAOP to the existing 8-inch pipe (currently operated only at 250 psig MAOP). R-123 will tie in from the Southridge high-pressure line to Cascade's distribution system located at the Northwest corner of West 10th Avenue and South Clodfelter Road. The new regulator stations and associated pipeline necessary for their installation are proposed to be designed with a minimum component rating of 720 psig and will be pressure tested to a minimum of 750 psig.
- 5 Commission staff (Staff) reviewed the Company's proposed proximity request and calculations. As the facility is an existing pipeline, Staff reviewed historical records. Staff notes the following:
- (a) The proposed MAOP of the pipeline will be 500 psig, which is a 100 percent increase over the current 250 psig.
 - (b) The proposed piping and all fittings are commensurate with the proposed MAOP.
 - (c) The proposed MAOP is commensurate with the current class location, which is Class 3.
 - (d) The Southridge high-pressure pipeline will be within 100 feet of 98 structures. As a proactive measure, Cascade will be moving the existing high-pressure line further into the road away from three homes.
 - (e) It is not possible to increase the distance between the pipeline and the other buildings because this is an existing pipeline; however, the newly proposed regulator stations do not increase the number of buildings within the same proximity limit.
 - (f) At the proposed MAOP of 500 psig, the maximum stress level of the pipe would be 16.94 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.

- (g) 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.

6 After review, Staff believes that Cascade's proposed construction meets all of the pertinent requirements of Title 49 CFR, Part 192 and Chapter 480-93 WAC. Staff believes that the selected location of the new pipeline has the least impact on surrounding population densities.

7 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 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 new construction welds operating above 250 psig. Cascade must remedy defects in the welds in accordance with Cascade's operating standards and procedures. Cascade must non-destructively test all repaired welds operating above 250 psig 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 via email to pipelineprogram@utc.wa.gov at least two business days prior to the beginning of project construction.
- (f) Cascade will submit ESRI Shapefiles and final construction specifications to the Commission within 90 days of project completion.

- (g) Cascade will conduct leak surveys on the Southridge high-pressure pipeline in accordance with the Company's standards. The pipeline will be leak surveyed annually when it operates at 500 psig. Cascade will conduct leak surveys near high occupancy structures or areas – no less frequently than annually, not to exceed 15 months between surveys, unless additional surveys are required by Commission rules. Cascade will repair any leaks found on the system during the annual leak survey.
- (h) Cascade will notify the affected public no less than 14 days prior to the open meeting date to allow the public an opportunity to comment or have questions answered by Staff.
- (i) Cascade will bury the pipeline with a minimum of 48-inches of cover. Where 48-inches of cover cannot be achieved, a minimum of 36-inches of cover will be maintained.

DISCUSSION

8 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 and the Commission the opportunity to review construction plans of high-pressure pipelines in close proximity to inhabited structures to address safety considerations. The conditions Staff recommends in paragraph 7 appropriately minimize the public safety risk associated with the increased operating pressure of the existing pipeline and the two planned regulator stations. Accordingly, we approve the Company's request subject to those conditions.

FINDINGS AND CONCLUSIONS

- 9 (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.
- 10 (2) Cascade is a gas pipeline company subject to Commission jurisdiction.

- 11 (3) Cascade proposes to increase the pressure on 2,200 feet of 8-inch steel pipe and 5.3 miles of 6-inch steel pipe portions of the Southridge high-pressure pipeline from 250 psig to 500 psig. The Southridge high-pressure pipeline was designed, constructed, and pressure tested to operate at 500 psig on a previous 750 psig pressure test.
- 12 (4) Cascade also proposes to install two new regulator stations, identified as regulator stations R-124 and R-123, on the Southridge high-pressure pipeline and operate the regulator stations at 500 psig MAOP. The new regulator stations and associated pipeline necessary for their installation will be designed with a minimum component rating of 720 psig and will be pressure tested to a minimum of 750 psig.
- 13 (5) The location Cascade has selected has the least impact on surrounding population densities.
- 14 (6) Cascade's construction plans and historical record indicate that the pipeline meets or exceeds all of the pertinent requirements of Title 49 CFR, Part 192 and Chapter 480-93 WAC.
- 15 (7) The selected location has the least impact on the surrounding community.
- 16 (8) The conditions recommended by Staff add requirements to the installation of new regulator stations and the proposed increase in operating pressure – some of which exceed federal and state regulations – that minimize the added risk of the close proximity of the pipeline to habitable structures.
- 17 (9) This matter came before the Commission at its regularly scheduled open meeting on December 5, 2019.
- 18 (10) The Commission should approve Cascade's request to increase the pressure on the existing Southridge high-pressure pipeline from 250 psig to 500 psig and to operate two pending regulator stations at 500 psig MAOP as consistent with the public interest with the conditions Staff recommends.

ORDER

THE COMMISSION ORDERS:

- 19 (1) The Commission approves Cascade Natural Gas Corporation's request to increase the pressure on the existing Southridge high-pressure pipeline from 250 pounds per square inch to 500 pounds per square inch and to operate two pending regulator stations at a maximum allowable operating pressure of 500 pounds per square inch within 100 feet of existing structures and structures under construction subject to the conditions in paragraph 7 of this Order.
- 20 (2) The Commission retains jurisdiction over the subject matter of this docket and Cascade Natural Gas Corporation to effectuate the terms of this Order.

DATED at Lacey, Washington, and effective December 5, 2019.

WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION

DAVID W. DANNER, Chair

ANN E. RENDAHL, Commissioner

JAY M. BALASBAS, Commissioner