

**BEFORE THE WASHINGTON
UTILITIES AND TRANSPORTATION COMMISSION**

In the Matter of the Request of

PUGET SOUND ENERGY

Pursuant to WAC 480-93-020 for
Approval to Construct and Operate a
New Limit Station and 12-inch High
Pressure Piping at a Maximum
Allowable Operating Pressure of 490
Pounds per Square Inch Gauge within
100 Feet of Existing Structures Not
Owned by Puget Sound Energy

DOCKET PG-171217

ORDER 01

APPROVING REQUEST

BACKGROUND

- 1 On December 28, 2017, Puget Sound Energy (PSE or Company) filed with the Washington Utilities and Transportation Commission (Commission) a request for approval to construct and operate a new limit station and 1.07 miles of 12-inch high pressure (HP) piping at a pressure of 490 per square inch, gauge (psig). In its request, the Company explains that the project will help serve the needs of its Tacoma customer base and improve HP system reliability. The construction of this pipeline and limit station will be within 100 feet of approximately 145 commercial and residential structures not owned by PSE.
- 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, up to and including 500 psig, within 100 feet of an existing building not owned by the gas pipeline company.
- 3 The new pipeline will tie in to an existing 12-inch pipeline near the intersection of 112th Street East and Golden Given Road East in Tacoma. The pipeline will follow Golden Given Road north to the intersection of 99th Street East, then continue west on 99th Street East approximately 500 feet to the new Golden Given Limit Station at 964 99th Street East. The pipeline and limit station will be connected to the North Tacoma HP supply system. This new pipeline and limit station will be designed, constructed, and tested for a

maximum allowable operating pressure (MAOP) of 490 psig with a specified minimum yield strength (SMYS) of below 20 percent.

- 4 Commission staff (Staff) reviewed the proposed proximity request and calculations. Because the facility will be new, there are no existing records. Staff notes the following facts:
- (a) The proposed pipe and pipeline materials are commensurate with the proposed MAOP.
 - (b) There are currently approximately 145 structures that will be within 100 feet of the new facilities operating at a pressure of 490 psig.
 - (c) At the proposed MAOP of 490 psig, the maximum stress level of the pipe and pipeline fittings would be below 20 percent of SMYS for the pipe and pipeline fittings.
 - (d) The proposed new pipeline and limit station will be located in a Class 4 location (0.40 design factor), but is being designed with a design factor of 0.20. This design factor is more stringent than code requirements.
 - (e) The proposed new pipeline will have valves installed at a spacing of less than 1 mile apart, which is more stringent than code requirements of 2.5 miles.
 - (f) The new pipeline will be pressure tested to at least 735 psig using water. The limit station will be pressure tested to at least 735 psig using water or nitrogen.
 - (g) At least one of the sections of the proposed pipe will be installed via directional drill. That pipe will have abrasion coated overlay (ARO) coating applied to guard against abrasive damage that could occur as part of the installation process.
 - (h) All welding and welding inspection will conform to PSE Gas Operating Standards.

- (i) Any field joints and fittings not factory-supplied with protective coatings will have field-applied coating. All above-ground piping will be painted in accordance with written specifications.

Staff believes that PSE's proposed construction plans meet all of the pertinent requirements of the Code of Federal Regulation, Title 49, Part 192 and Washington Administrative Code (WAC) 480-93, and that the selected location of the new pipeline has the least impact on surrounding population densities.

5 Staff recommends that the Commission issue an Order approving PSE's request to install and operate a 12-inch pipeline and limit station, with a MAOP of 490 psig subject to the following conditions:

- a) For underground installations, PSE must electrically inspect (jeep) the pipe coating and repair any coating defects in accordance with PSE's operating standard prior to backfilling.
- b) PSE must submit "as-built" ESRI GIS Shapefiles of the pipeline location with final construction specifications to the Commission within 6 months of completing the project.
- c) For underground installations, PSE 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.
- d) PSE must perform non-destructive testing (NDT) of 100 percent of all welds. PSE must remedy any defects in the welds in accordance with PSE's operating standards and procedures. PSE must perform NDT on all repaired welds to ensure pipeline integrity and compliance with existing standards prior to the pipeline becoming operational.
- e) PSE must install cathodic protection within 90 days after the pipeline is installed.

- f) PSE must provide telephonic notice to the Commission Pipeline Safety Program followed by an email confirmation at least two business days prior to the beginning of project construction.
- g) PSE must contact residents 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.
- h) PSE must test the pipeline to a minimum of 735 psig in all locations along the pipeline route at a test pressure that is at least 1.5 times the MAOP of 490 psig. The test will be held without pressure loss unless the loss can be justified by a corresponding change in temperature. If PSE identifies any leaks, PSE will stop the pressure test, repair the leak, and start the pressure test anew.
- i) Where physically practicable, PSE will bury the pipeline with a minimum of 48-inches of cover. Where 48-inches of cover is not practicable, PSE will bury the pipeline with a minimum of 36-inches of cover.

DISCUSSION

- 6 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 5 appropriately minimize the public safety risk associated with the proposed pipeline. Accordingly, we approve the Company's request.
- 7 The Commission makes no finding regarding the prudence of the Company's investment. PSE may seek recovery of its costs in a future proceeding, at which time the Company must demonstrate that the facilities are used and useful.

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) PSE is a gas pipeline company subject to Commission jurisdiction.
- 10 (3) PSE proposes to construct a new limit station and 1.07 miles of new 12-inch HP piping at a pressure of up to 490 psig within 100 feet of approximately 145 commercial and residential buildings not owned by PSE.
- 11 (4) The location PSE has selected for the new pipeline and limit station has the least impact on surrounding population densities.
- 12 (5) PSE's construction plans indicate that the proposed pipeline and limit station meet or exceed all of the pertinent requirements of Title 49 CFR, Part 192 and WAC Chapter 480-93.
- 13 (6) The conditions recommended by Staff add requirements to this installation – some of which exceed federal and state regulations – that minimize the added risk of the close proximity of the pipeline to a habitable structure.
- 14 (7) This matter came before the Commission at its regularly scheduled open meeting on February 8, 2018.
- 15 (8) The Commission should approve PSE's proposal to construct a new limit station and 1.07 miles of new 12-inch HP piping at a pressure of up to 490 psig within 100 feet of approximately 145 commercial and residential buildings not owned by PSE as consistent with the public interest subject to the conditions Staff recommends.

ORDER

THE COMMISSION ORDERS:

- 16 (1) The Commission approves Puget Sound Energy's proposal to construct a new limit station and 1.07 miles of new 12-inch high pressure pipeline operating at a pressure 490 psig within 100 feet of approximately 145 commercial and

residential buildings not owned by PSE subject to the conditions set out in paragraph 5 of this Order.

- 17 (2) The Commission retains jurisdiction over the subject matter of this docket and Puget Sound Energy effectuate the terms of this Order.

DATED at Olympia, Washington, and effective February 8, 2018.

WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION

DAVID W. DANNER, Chairman

ANN E. RENDAHL, Commissioner

JAY M. BALASBAS, Commissioner