

Agenda Date: March 11, 2021
Item Number: E3

Docket: PG-210075
Company Name: Avista Corporation d/b/a Avista Utilities

Staff: Derek Norwood, Pipeline Safety Engineer

Recommendation

Issue an order granting Avista Corporation d/b/a Avista Utilities' (Avista or company) request to construct and operate 17,700 feet of 12-inch steel pipeline in Airway Heights, Washington, as proposed in Avista's Proximity Considerations Request dated February 3, 2021. The proposed pipeline will have a maximum allowable operating pressure (MAOP) of 500 pounds per square inch gauge (psig) and approximately 4,500 feet will be located within 100 feet of nine existing buildings not owned by Avista. The project will be split into two construction phases, the first to be completed in 2021 and the second phase in 2022.

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.

Avista is proposing to construct and operate a new 12-inch pipeline within 100 feet of nine buildings in Airway Heights, 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 a MAOP of 500 psig and is also within 100 feet of the same nine buildings. The proposed pipeline project will increase capacity in the system to serve the commercial and residential growth in Airway Heights, the Spokane Airport, and the SW area of Spokane. This project will proactively address risk in Avista's system related to reliability and capacity constraints. The location of the nine buildings in relation to the existing 8-inch pipeline is shown in Attachment 1.

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

- (a) The proposed MAOP of the new pipeline will be the same as the MAOP of the existing 8-inch pipeline, 500 psig.
- (b) The piping and fittings are commensurate with the proposed MAOP.

- (c) The approximate distance between the nine buildings and the pipeline ranges from 35 feet to 105 feet. All other buildings are greater than 100 feet from the pipeline.
- (d) At the proposed MAOP of 500 psig, the maximum stress level of the pipe would be 19.7 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.
- (e) 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 Avista's proposed construction plans indicates that it meets all the pertinent requirements of the Code of Federal Regulations, Title 49, Part 192 and 480-93 of the WAC and that the selected location of the new pipeline has the least impact on surrounding population densities.

The commission's proximity rule, WAC 480-93-020, is one such rule that allows pipeline staff the opportunity to review construction plans of 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 recommend that the commission issue an Order approving Avista's request to install and operate a 12-inch pipeline with a MAOP of 500 psig subject to the following conditions:

- a) For underground installations, Avista must electrically inspect (jeep) the pipe coating and repair any coating defects in accordance with Avista's operating standard prior to backfilling.
- b) For underground installations, Avista 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) Avista must non-destructively test 100 percent of all welds. Avista must remedy defects in the welds in accordance with Avista's operating standards and procedures. Avista must non-destructively test all repaired welds to ensure pipeline integrity and compliance with existing standards.
- d) Avista must install cathodic protection within 90 days after the pipeline is installed.

- e) Avista must provide notification via email at least two business days prior to the beginning of project construction.

- f) Avista 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.

Building Locations

