

**BEFORE THE WASHINGTON STATE  
UTILITIES AND TRANSPORTATION COMMISSION**

In the Matter of the Petition of	)	DOCKET PG-100845
	)	
AVISTA CORPORATION, D/B/A	)	ORDER 01
AVISTA UTILITIES,	)	
	)	
Petitioner,	)	
	)	
Seeking Authorization to Operate a	)	
Facility with a Maximum Allowable	)	
Operating Pressure Greater Than 250	)	
PSIG Pursuant to <a href="#">WAC 480-93-020</a>	)	ORDER GRANTING PETITION
.....	)	

**BACKGROUND**

- 1 On May 14, 2010, Avista Corporation, d/b/a Avista Utilities (Avista or Company), filed with the Washington Utilities and Transportation Commission (Commission) a petition requesting Commission approval to operate a pipeline at greater than 250 psig (pounds per square inch gauge).
  
- 2 A gas pipeline company must have permission from the Commission to operate a pipeline at greater than 250 psig, up to and including 500 psig, within one hundred feet of certain buildings described in [WAC 480-93-020](#).
  
- 3 The Company proposes to construct a 2.8 mile long gas main of 6-inch diameter pipeline near the vicinity of State Route 129 in Clarkston, Washington. The pipeline would be within 100 feet of an existing U. S. Forest Service building, two outdoor playground areas, and one fishing pier designed for access by people with handicaps that limit their mobility within the U. S. Army Corps of Engineers' Swallows Park.
  
- 4 Avista proposes the pipeline begin at the existing Gas Regulator Station #417 at the Snake River near Highland Ave and 3<sup>rd</sup> Street, crossing from Lewiston, Idaho, and extend south to Gas Regulator Station #440 near Critchfield Road. This looped high pressure pipeline will provide more than triple the current throughput capacity of gas feed into the Clarkston gas system. The existing 4-inch high pressure distribution line in this vicinity has reached its capacity to adequately supply the gas needs of Clarkston on a design heating degree day and will remain in service after the new line is installed.

5 The Commission has adopted the Code of Federal Regulation, Title 49, Part 192 and 480-93 of the Washington Administrative Code as minimum standards for natural gas pipeline construction. The most restrictive natural gas pipeline safety rules specify that pipelines in a highly populated area (Class 4 Location) be operated at pressures producing a hoop stress of no greater than 40 percent of the specified minimum yield strength (SMYS) of the pipe. Avista's proposed pipeline route (Class 3 Location) for a well-defined outside public area that is limited to a hoop stress no greater than 50 percent of the SMYS of the pipe. The pipeline will be constructed for a maximum allowable operating pressure (MAOP) of 500 psig or a hoop stress of 16.9 percent of SMYS, less than 50 percent SMYS for Class 3 Location. The pipeline will be pressure tested at a minimum of one and one-half times the MAOP or 750 psig or a hoop stress of 25.4 percent of SMYS.

6 Commission staff reviewed the request and recommends the Commission grant the petition subject to the following condition(s):

**a. Filings and Notices:**

1. Notify the Commission 48 hours prior to the commencement of construction.
2. Submit a map of the pipe location and the final construction specification to the Commission within 30 days of the project completion.

**b. Design and Construction**

1. The 6-inch diameter pipe will be constructed of American Petroleum Institute (API) 5L Grade X-52 steel pipe with a nominal wall thickness of 0.219 inch. Fittings will be ASTM A-234 WPB.
2. The pipeline will be built to maintain the pipe stress level for natural gas at or below 16.9 percent of the SMYS at the MAOP of 500 psig.
3. Mainline valves will be installed at both ends of the pipeline segment.
4. Avista will radiographically examine 100 percent of all girth welds or at a minimum 90 percent of the pipeline and above ground piping except welds that cannot be radiographed. Avista will provide, upon request by staff, written documentation where radiographs are impractical including the certified radiographer's statement. All welds will be inspected and defects

will be replaced or repaired in accordance with Avista's standards. All repaired welds will be radiographed to ensure pipeline integrity and compliance with existing standards.

5. The entire pipeline coating will be electrically tested or "jeeped" for flaws to ensure coating integrity. Any flaws will be repaired in accordance with Avista's standards.
6. The backfill materials around the pipe to protect the pipe and coating will be in accordance with Avista's standards; free from sharp objects and large clods that could damage the pipe and coating with the maximum particle size of one half inch and containing a large percentage of fines. Rock shield is allowed where the use of sand is impractical or prohibited.
7. The pipeline will be buried with at least 42-inches of cover.
8. The pipeline will be air or inert gas tested to a minimum of one and one-half times the MAOP. The test duration will a minimum of 24 hours without pressure loss unless the pressure loss can be justified by corresponding change in pipe temperature. Any leaks identified during the test will be repaired and the pressure test shall be restarted.
9. Exposed (unburied) piping areas will be posted with signs three days prior to and the day of the pipeline test. The signs will be easily seen warning people to keep out of the area during a high pressure pipeline test. The signs will provide specific date and time of the test. The lettering for the signs will be typical labeling for Avista's right-of-way markers.
10. Cathodic protection will be installed within 90 days after the pipeline is installed.
11. Cathodic protection test locations will be installed at intervals sufficient to determine the adequate protection of the pipeline during surveys.

**c. Operations and Maintenance**

1. Avista shall not operate the pipeline in excess of 500 psig, without further Commission approval.

2. Leak surveys will be conducted in accordance with Avista's Operating Standard. The survey will be conducted annually, not to exceed 15 months.

### FINDINGS AND CONCLUSIONS

- 7 (1) The Washington Utilities and Transportation Commission is an agency of the State of Washington vested by statute with the authority to adopt and enforce rules for gas pipeline safety. [RCW 81.88.040](#) and [RCW 81.88.065](#).
- 8 (2) Avista is a gas pipeline company and subject to Commission jurisdiction.
- 9 (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 MAOP prescribed by these rules. The most restrictive gas pipeline safety rules specify that pipelines in a highly populated area (Class 4 Location) must be operated at pressures producing a hoop stress of no greater than 40 percent of the SMYS of the pipe.
- 10 (4) The proposed 6-inch diameter pipeline approximately 2.8 miles in length located in the vicinity of SR 129 in Clarkston, Washington will be constructed and operated by Avista Utilities. The purpose of the pipeline is to provide increased gas supply to Clarkston gas distribution system.
- 11 (5) This matter came before the Commission at its regularly scheduled meeting on December 30, 2010.
- 12 (6) After reviewing Avista's petition and giving due consideration to all relevant matters and for good cause shown, the Commission finds it is consistent with the public interest to conditionally grant Avista's request to operate at up to and including 500 psig subject to the conditions recommended by commission Staff in paragraph 6 of this order.

**ORDER**

**THE COMMISSION ORDERS:**

- 13 (1) After the effective date of this Order, the petition of Avista Corporation, d/b/a Avista Utilities for authorization to operate a pipeline given in paragraph 4 at up to and including 500 psig is granted.
- 14 (2) This authorization is conditioned on Avista meeting the following , which exceed the minimum regulatory requirements:

**a. Filings and Notices:**

- 1 Notify the Commission 48 hours prior to the commencement of construction.
- 2 Submit a map of the pipe location and the final construction specification to the Commission within 30 days of the project completion.

**b. Design and Construction**

1. The 6-inch diameter pipe will be constructed of American Petroleum Institute (API) 5L Grade X-52 steel pipe with a nominal wall thickness of 0.219 inch.
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4. Avista will radiographically examine 100 percent of all girth welds or at a minimum 90 percent of the pipeline and above ground piping except welds that cannot be radiographed. Avista will provide, upon request by staff, written documentation where radiographs are impractical including the certified radiographer's statement. All welds will be inspected and defects will be replaced or repaired in accordance with Avista's standards. All repaired welds will be radiographed to ensure pipeline integrity and compliance with existing standards.

5. The entire pipeline coating will be electrically tested or “jeeped” for flaws to ensure coating integrity. Any flaws will be repaired in accordance with Avista’s standards.
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10. Cathodic protection will be installed within 90 days after the pipeline is installed.
11. Cathodic protection test locations will be installed at intervals sufficient to determine the adequate protection of the pipeline during surveys.

**c. Operations and Maintenance**

1. Avista shall not operate the pipeline in excess of 500 psig, without further Commission approval.
2. Leak surveys will be conducted in accordance with Avista’s Operating Standard. The survey will be conducted annually, not to exceed 15 months.

- 15 (3) The Commission retains jurisdiction over the subject matter and Avista Corporation, d/b/a Avista Utilities to effectuate the provisions of this Order.

DATED at Olympia, Washington, and effective December 30, 2010.

**WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION**

**JEFFREY D. GOLTZ, Chairman**

**PATRICK J. OSHIE, Commissioner**

**PHILIP B. JONES, Commissioner**