

Agenda Date: April 24, 2002  
Item Number: 2A

**Docket: UG-020156**

Company Name: Cascade Natural Gas Corporation

Staff: Al Jones, Pipeline Safety Engineer  
Kim West, Pipeline Safety Engineer  
Kjel Finnvik, Pipeline Safety Engineer

**Recommendation:**

Enter an Order Granting Authorization pursuant to WAC 480-93-020 for Proximity Considerations to operate a natural gas pipeline above 500 pounds per square inch gauge (psig) within 500 feet of buildings and areas for human occupancy, with conditions.

**Background:**

Cascade Natural Gas Corporation (Cascade) proposes to construct a natural gas transmission pipeline to operate at a maximum pressure of 700 psig in the City of Shelton and parts of Mason County. The nearest occupied building is 30 feet from the proposed pipeline. This segment of the pipeline will extend a distance of approximately 2.6 miles.

The Commission has adopted the Code of Federal Regulations, Title 49 Part 192, and Chapter 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 be operated at pressures producing a hoop stress of no greater than 40% of specified minimum yield strength of the pipe. The proposed pipeline will be constructed to provide a higher margin of safety, a hoop stress of approximately 19.8% of the pipe's specified minimum yield strength.

Cascade had previously noticed affected customers and property owners within 500 feet of the proposed pipeline. At this time, the Commission has not received any comments or questions from citizens about this pipeline.

**Considerations:**

Commission Staff has evaluated the proposed facility to determine if public safety will be compromised by the operation of the proposed 12-inch diameter natural gas transmission pipeline. Cascade has agreed to construct the pipeline to a more stringent standard than state and federal requirements, and its commitment is expressed in Appendix A that will be attached to the Commission's Order. Cascade will conduct a close interval survey or another equivalent or better survey within two years after the pipeline is constructed, to verify the integrity of the coating and conduct an assessment of the pipeline system within five years of construction using technology or techniques consistent with the

proposed gas integrity management rule that includes internal inspection devices, hydrostatic testing, direct assessment, or other accepted methods that will be equal or exceed the above methods. Direct assessment techniques may include the combination of historical data with direct examination from excavations of the pipeline to establish a predictive basis for future pipeline inspection and repair. Possible direct assessment technologies include close interval survey, direct current voltage gradient, or other technologies. Based on the results, the Company and Commission Staff will determine an appropriate schedule for conducting future inspections. As a result of this agreement, Staff considers the installation of the proposed facility to not significantly impact public safety.

**Recommendation:**

Therefore, Staff recommends that the Commission enter an Order Granting Authorization pursuant to WAC 480-93-020 for Proximity Considerations to construct and operate a 12-inch diameter natural gas pipeline in the City of Shelton and parts of Mason County above 500 psig within 500 feet of buildings and areas for human occupancy with conditions included in the stipulation marked Appendix A to the Order.