

Agenda Date: February 11, 2004
Item Number: A3

Docket: **PL-040123**
Waiver request from WAC 480-93-020 to operate a pipeline at a pressure greater than 500 psig.

Staff: Sondra Walsh, Senior Policy Strategist
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Recommendation

Approve the petition of ARCO Western Gas Pipeline Company and BP Pipelines (North America) Inc. to uprate the Ferndale Pipeline from 550 psig to 950 psig pursuant to WAC 480-93-020.

Background

The 16-inch Ferndale Pipeline operated by BP Pipelines (North America) Inc. (BP Pipelines or Company), originates in Sumas, Washington near the Canadian border. The pipeline extends 30.7 miles to Ferndale. The pipeline is not dedicated or devoted to any public use, it is used exclusively to transport Canadian natural gas for consumption as fuel at BP's Cherry Point Refinery (BP) and Intalco's aluminum smelter. The current maximum allowable operating pressure (MAOP) of 550 psig was granted by the Commission in a waiver request at the time the Ferndale Pipeline was commissioned in 1990. At the time the pipeline was constructed the pipeline was hydrostatically tested to 1,828 psig for eight hours. The criteria fell within Title 49 CFR., Part 192, for pipelines in a Class 3 location, and established the Ferndale Pipeline's MAOP to be 1,105 psig. Based on an April 2001, class location study, the study demonstrated that the pipeline route continues to remain in rural areas. The study showed that 80.8 percent of the pipeline is located in rural areas, therefore it is a class 1 location, 15.6 percent is a class 2 location, 3.6 percent is a class 3 location and no class 4 location.

To date there have been no leaks or operational failures on the Ferndale Pipeline. The Commission's pipeline safety inspection staff have performed yearly inspections on this pipeline. In March, 2000, an in-line inspection of the pipeline was performed. The results of the inspection indicated one metal loss feature, which was repaired, and two other metal loss features related to manufacturing process that were excavated, inspected and repaired.

Purpose for Uprate Request

BP, in conjunction with TransCanada Pipelines Limited (TransCanada), is presently developing a 720-MW cogeneration project (Cogen) to be completed by 2006, at the Cherry Point Refinery. This proposal is currently before EFSEC. The proposed uprate will provide for the additional fuel capacity needed for the new Cogen facility and continue to provide fuel to the refinery and smelter. The current MAOP would not accomplish the fuel needs. Because of the financial

commitment to construct the Cogen plant, BP is requesting the uprate at this time to provide assurance that the fuel capacity will be available at start-up time.

BP did research two other options prior to petitioning for an uprate. The first alternative was to become a shipper on the proposed Williams GSX pipeline. This alternative did not prove to be feasible because it did not appear that the GSX construction would be completed in time to provide the needed fuel capacity by 2006 or may not be viable at all. As a second alternative, BP approached Cascade Natural Gas Corporation (Cascade) about utilizing unused capacity on Cascade's pipeline near the Cherry Point Refinery. It was determined that a new compressor station would be required along Cascade's pipeline route and that the pipeline was not designed to the same specifications as the Ferndale pipeline. These two alternatives would require new construction and/or new compressor stations. BP concluded that each alternative was more costly and not as reliable as requesting to uprate the Ferndale Pipeline.

Public Comment

In December BP Pipelines sent notice to all customers residing within one-half mile of the pipeline to announce its proposal to increase the amount of natural gas transported in the pipeline to about 95 percent. The Commission received two comments on the proposal. One customer is opposed to the increased pressure because of concern about the integrity of the pipeline and how well it has been maintained by the Company. The other customer would like the Commission to consider requiring the Company to increase smart pig tests to once a year to enhance safety. The customer believes the Company should also implement first responder training to all relevant municipal and county safety/emergency response personnel and grant access to crucial information in the event of an emergency. The Company has worked with both customers to answer their questions.

Safety of the Pipeline at an increased MAOP

Staff requested, and BP Pipelines agreed to operate the Ferndale Pipeline using additional safety measures that exceed the Federal and State requirements. These additional safety measures are as follows:

1. A detailed plan will be created to administer the pressure increase in consultation with the WUTC Pipeline staff, and will contain elements including 1) Notification plan for stakeholders including emergency responders and landowners, 2) Specific procedure to be followed, 3) Roles and responsibilities of participants, 4) Communication and documentation requirements during the increase, and 5) Contingency actions.
2. Prior to any increase in pressurization, BP Pipelines will conduct an internal inspection of the entire pipeline, using tools to detect any corrosion or deformation. Any internal problems would be addressed, prior to proceeding with any increase in line pressure.

3. Once internal inspections are completed, a four-stage increase in pressurization would be undertaken. This conforms to 49 C.F.R. §192.551. Each staging increment is approximately 25% of the total operating pressure increase:

Stage 1	650 psig
Stage 2	750 psig
Stage 3	850 psig
Stage 4	950 psig

Between each stage, BP Pipelines will block in the pipeline to hold the pressure constant for at least four hours while inspecting the pipeline for leaks.

4. Leak inspection will be done by 1) monitoring pressure in each segment of the line, and 2) walking the entire length of the pipeline while using a sniffer to check for leaks. Special attention will be paid to areas around the isolation valves, located at Sumas and at five-mile increments along the pipeline. If a leak is discovered, it will be repaired in conformity with 49 C.F.R. §192.553. Only when the staging increment is proven will company personnel give approval to proceed to the next stage.
5. BP Pipelines will increase its right-of-way ground patrol and leak detection survey to a quarterly basis, with a maximum period between patrols of 4.5 months.

Conclusion

Staff recommends that the Commission approve the petition request of ARCO Western Gas Pipeline Company and BP Pipelines (North America) Inc. to uprate the Ferndale Pipeline from 550 psig to 950 psig pursuant to WAC 480-93-020 with the condition that all additional safety measures as outlined in the petition and the memo are implemented.