

Agenda Date: May 28, 2015
Item Number: A4

Docket: PG-150468
Company Name: Cascade Natural Gas Corporation

Staff: Dennis Ritter, Pipeline Safety Engineer

Recommendation

Issue an order granting Cascade Natural Gas Corporation's (CNGC) request to construct and operate a regulator station, associated piping and pipeline heater above 500 pounds per square inch gauge (psig) as proposed in CNGC's Bellingham Gate Upgrade proximity request.

Discussion

A gas pipeline company must have permission from the Washington Utilities and Transportation Commission (commission) to operate a pipeline at greater than 500 psig within five hundred feet of certain buildings as described in WAC 480-93-020. 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.

CNGC is proposing to install a new regulator facility operating at greater than 500 psig within 500 feet of seven existing buildings. CNGC is taking over responsibility of pressure control from Northwest Pipeline (NWP). The existing NWP gate/regulator station operates at a maximum allowable operating pressure (MAOP) of 960 psig. No change is proposed to CNGC's current MAOP of 380 psig. CNGC is proposing to locate the new regulator station adjacent to NWP's existing regulator station in existing CNGC right-of-way, as shown in the attached overhead photo (Attachment 1).

Staff reviewed the proposed proximity request and calculations supporting low pressure designation. As the facility will be new, there are no existing records. Staff notes the following facts:

- (a) The location of the new regulator station is within existing CNGC/Williams gated facilities operating at a pressure above 500 psig (MAOP 960).
- (b) The proposed regulator station materials are commensurate with the proposed MAOPs upstream and downstream of pressure regulation.
- (c) Of the seven existing buildings within 500 feet of this proximity request, only 2 are located outside of the existing 500 foot radius of existing pipeline facilities operating at a pressure above 500 psig (commercial buildings E and F as shown on Attachment 1).

- (d) At the proposed upstream MAOP of 960 psig, the maximum stress level of the pipe and pipeline fittings would be 18.83 percent of specified minimum yield strength (SMYS). At the downstream MAOP of 380 psig, the maximum stress level of the pipe and pipeline fittings would be 12.42 percent of the SMYS. These are considered low stress pipelines.
- (e) The current NWP gate station and proposed CNGC regulator station are located in a Class 1 Location.
- (f) CNGC will take over the responsibility of pressure control from NWP and the proximity request is required by WAC 480-93-020 in order to operate facilities over 500 psig.
- (g) Other avenues to construct a new regulator station in another location are practically infeasible as the NWP gate station and transfer point is a fixed location. To move the CNGC regulator station to another location would require construction of new pipeline facilities operating at 960 psig which would be closer to many of the seven structures than what is already proposed and would include many additional structures currently not within the 500 foot radius.

Conclusion

After examination of the request, staff recommends the commission issue an order granting CNGC's request to install and operate a new regulator facility and appurtenances operating at greater than 500 psig as proposed in CNGC's Bellingham Gate Upgrade proximity request.

