



8113 WEST GRANDRIDGE BOULEVARD, KENNEWICK, WASHINGTON 99336-7166

March 12, 2015

David Lykken
Director, Pipeline Safety
Utilities & Transportation Commission
1300 S. Evergreen Park Dr. S.W
PO Box 47250
Olympia, WA 98504-7250

Subject: WAC 480-93-020 – Request for Approval – Southridge Gate: New Construction

Dear Mr. Lykken:

Pursuant to the requirements of WAC 480-93-020 Proximity Considerations, Cascade Natural Gas Corporation (CNGC) requests approval to operate a new regulator station at a Maximum Allowable Operating Pressure (MAOP) of 811 psig within 500 feet of existing structures intended for human occupancy.

Proposed Scope of Work:

In order to serve the growing communities of Kennewick, Richland and West Richland, Cascade Natural Gas Corporation (CNGC) is obliged to install a new gate station at interconnect with Williams Northwest Pipeline (NWP). Aside from custody transfer of the gas, the gate station will also heat the transferred gas in preparation for pressure reduction, reduce the gas pressure from an MAOP of 811 psig to a proposed MAOP of 250 psig and odorize the gas for distribution. This gate station will provide gas to a new high pressure pipeline that will serve the developing area of South Kennewick as well as reinforce the Richland, West Richland and Kennewick distribution systems.

The proposed new facilities that will operate at an MAOP of 811 psig will include the custody transfer point, the inlet valve assembly (V-154), the piping run between the custody transfer point and the heater valve assembly, the heater valve assembly, the piping run between the heater valve assembly and the regulator assembly inlet, the regulator assembly inlet and the high pressure feed to the odorizer (O-11). The new facilities that will operate at an MAOP of 250 psig will include the regulator runs downstream of the worker-monitor regulators, the relief valve, the odorant injection run, the gate station's outlet valve (V-155) assembly and the secondary regulator (R-120) and associated valves. All the aforementioned facilities will be above ground with exception to the piping runs between facilities. Please refer to the Exhibit titled, "*Southridge Gate Proximity Exhibit*" for clarification.

Proposed Regulator Station:

The proposed regulator station would be installed immediately north of NWP's proposed meter facilities and northeast of NWP's existing valve station, as shown on the Proximity Exhibit. The existing NWP valve station and future meter station, along with the NWP mainline, operate with an MAOP of 811 psig.

The proposed new regulator station would be designed with a minimum component rating of 1480 psig and would be pressure tested to a minimum of 1225 psig. At the proposed upstream MAOP of 811 psig, the maximum stress level of the pipe and pipeline fittings would be 18.77% of SMYS. At the proposed downstream MAOP of 250 psig, the maximum stress level of the pipe and pipeline fittings would be 8.29% of the SMYS. Thus, the Southridge Gate Station would be classified as a high pressure distribution facility.

All welds, including tie-in welds between facilities will be non-destructively tested.

Specifications of the regulator station, including the pipe segment from the custody transfer point to the inlet of the station, would be as follows:

- Pipe specifications include the following:
 - API 5L Grade X-52 Steel line pipe.
 - API 5L Grade X-65 Steel line pipe.
 - API 5L Grade X-42 Steel line pipe.
 - API 5L Grade B Steel line pipe.

- The fitting (elbows, tees, caps etc.) specifications will be:
 - Standard weight, ANSI 16.9 WPHY-52.
 - Standard weight, ANSI 16.9 WPHY-65.
 - Standard weight, ANSI 16.9 and ASTM A234 WPB.

- All components (valves, regulators, etc.) upstream of and including the regulator devices would be Class 600 with a maximum working pressure rating of 1480 psig.
- All components (valves, regulators, etc.) downstream of the regulator devices would be Class 300 with a maximum working pressure rating of 720 psig.

Proximity:

The 811 psig MAOP side of proposed regulator station is located within 500 feet of the following buildings as shown on Figure 1:

- 129 feet from existing business building at 5200 W. Brinkley Road.
- 457 feet from existing business building at 5115 W. Brinkley Road.
- 427 feet from existing business building at 6100 W. Brinkley Road.

- 104 feet from a building being constructed to the West of the proposed regulator station, address is 6321 W. Brinkley Road.
- 72 feet from the nearest future proposed self-storage building at 6241 W. Brinkley Road.

In addition, the proposed regulator station is within 180 feet of the edge of pavement of the westbound lanes of Interstate Highway I-82, near milepost 112.34. Cascade personnel have conducted a field survey and verified that as of 2/27/2015, that there are additional buildings under construction since the date of the aerial photograph. All buildings under construction are noted in the list preceding this paragraph. The area is zoned as Light Industrial.

Of the buildings on the above list, none are currently greater than 500 feet from a pipeline facility operating at a pressure above 500 psig.

Alternatives:

Other potential gate station sites were explored when searching for a future gate station site. Since NWP's Spokane Pipeline is the closest available transmission pipeline, CNGC was limited to locating potential sites along the NWP's Spokane Pipeline. Any sites to the North of the proposed site would require CNGC to construct a gate station in close proximity with existing homes, a proposed future school or in areas that have been zoned for residential use. Any sites to the South of the proposed site would require extensive pipeline extensions projects to reach the Kennewick distribution system.

Timeframe:

CNGC anticipates that construction to install this regulator station will start in late spring or early summer of 2015.

Closing:

Cascade Natural Gas Corporation respectfully requests your approval to move forward with the installation of the proposed Southridge Gate Station, which is scheduled for a construction in the Spring of 2015. If you have any questions or require additional information, feel free to contact me at (509) 734-4576 or via email at mike.eutsey@cngc.com

Sincerely,
CASCADE NATURAL GAS



Mike Eutsey
Manager of Standards and Compliance
CC: Eric Martuscelli
Steve Kessie
Jeremy Ogden

Enclosures