



STATE OF WASHINGTON

UTILITIES AND TRANSPORTATION COMMISSION

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CERTIFIED MAIL

July 7, 2016

Eric Martuscelli
Vice President-Operations
Cascade Natural Gas Corporation
8113 W. Grandridge Blvd.
Kennewick, WA 99336

Dear Mr. Martuscelli:

RE: PG-150120 – Stipulated Agreement MAOP Validation Plan Review (Insp. No. 2655)

The Washington Utilities and Transportation Commission (Commission) and Cascade Natural Gas Corporation (CNGC) entered into the attached Stipulated Agreement (Agreement) on February 2, 2015. The Agreement explained how CNGC would collect information, prioritize and execute steps to confirm the maximum allowable operating pressure (MAOP) for high pressure pipelines in Washington. Section III.1 of the Agreement states that CNGC will submit a written plan to the Commission within six months of approval of the Agreement. CNGC submitted its plan on April 29, 2016. Staff have reviewed the submittal and have the following comments.

- 1) The timeframe per Table 6 extends out to 2026—CNGC needs to justify why it will take 10 years to complete the validation efforts to confirm MAOP on operating pipelines. Staff does not support a time frame which extends out another 10 years.

Additionally, staff supports your statement on page 6, Prioritization, “In general, pre-code pipeline segments operating at a greater than 30% SMYS without pressure test records were the highest priorities, with subsequent priorities influenced by the availability of pressure test records”. Staff has not attempted to evaluate the prioritization of your mitigation, as those decisions are based on your operational expertise and customer knowledge base.

- 2) Page 5 of the MAOP Validation Plan, Pressure Testing, CNGC assumes a methodology for pressure testing that is NOT in accordance with Subpart J for areas where it’s not feasible (one way feeds, large customer load) to isolate and test. The code does not allow for these methodologies. Please explain what CNGC will do to meet current code requirements for pressure testing.

- 3) Section 1.ii of the Agreement states CNGC must provide the basis by which CNGC has determined MAOP for precode pipe with unknown characteristics. Staff's interpretation for this requirement is for each segment in Table 1, there needs to be a column which lists which of the 192.619 criteria they are using to establish MAOP (i.e.-- 619(a)(1) design pressure, 619(a)(2) pressure test, 619(a)(3) high 5 operating, or 619(c) high 5 grandfather-no other documentation). This information is not listed in Table 1 for each deficient segment. Staff also believes it would be a good idea for post code pipeline segments as well.
- 4) Section 6 of the Agreement requires CNGC to take a 20% reduction on the operating pressure on any precode pipeline which has a calculated design pressure over 30% SMYS and which CNGC does not know seam type. Seam type is not identified in Table 1 as a critical piece of MAOP confirming documentation. CNGC needs to verify seam type on all segments as part of the validation process.

Staff understands CNGC's commitment and duty to meet customer demand per their operating tariff. However, staff needs more information to understand why CNGC states for the Bellingham HP Line #1, 8 and 12-inch Bremerton Line #2, and the 8-inch March Point HP Line #2 "that lowering the pressure 20% below MAOP will result in Cascade not being able to supply gas to all customers." **Under what operating conditions would CNGC not be able to supply gas to all its customers and what is that probability of those conditions actually occurring?** Further, staff is not convinced that the current MAOP is a valid operating pressure as CNGC does not have the records to prove legitimacy.

Additionally, the majority of the length falls in Class 3 areas (with the exception of the Lake Terrel Rd Transmission Line #9). For the 8-inch Bellingham HP Line #1, 8-inch Central Whatcom HP Line #3, the 8-inch Anacortes HP Line #1, and the 8-inch March Point HP Line #2, they are missing **both** critical pipe data to calculate design pressure (wall thickness and pipe grade) and CNGC does not have a pressure test to confirm pipe strength. As such, staff believes that a pressure reduction should be warranted unless CNGC shows that operating conditions are so grievous that a pressure reduction would be a calamity for its customers.

- 5) There is a discrepancy for the 8-inch Central Whatcom Transmission Line (Bellingham Line #3). The map for Bellingham Line #3 shows the segment number as 14C1344. Table 6 shows the 8-inch Central Whatcom Transmission Line as segment 14C1314. Please confirm the correct segment number.
- 6) At Staff's request, CNGC submitted mapping showing the HP pipeline segments in each of their operating districts. This mapping has both validated (CNGC has MAOP confirming documentation) and non-validated segments on the same map. Staff have reviewed a random sample of validated MAOP confirming documentation for several

pipe segments in each of the operating districts. Staff have found the documentation acceptable for verifying the MAOP of the line segment in question. However, staff have not reviewed all line segments or CNGC's process for ensuring quality control. It is expected that if CNGC has validated a segment as having sufficient documentation to confirm MAOP that during future inspections, this information will be readily available to verify the MAOP.

Additionally, PHMSA has published a Notice of Proposed Rule Making for 49 CFR Parts 191 and 192. In this NPRM, PHMSA has proposed language for documentation of MAOP confirming records. "Records must be reliable, traceable, verifiable, and complete". This language has not been defined in terms of prescriptive documentation requirements. Staff believes the regulatory approach to verifying the efficacy of any MAOP confirming documentation will fall on the thoroughness and vigor the operator puts into their pipeline safety records management. If well managed, the ability of the operator to then present, and if necessary, justify the completeness of their records during the inspection would and should be reasonable, efficient and straightforward.

- 7) Staff sent CNGC a letter dated January 12, 2016 confirming that the Automated Ball Indentation (ABI) insitu technology to determine pipe grade would give accurate and valid results. However, CNGC needs to explain the process of how ABI Services will conduct and document the testing and results. The results will be life of the pipeline documents and must be traceable, verifiable and complete. At a minimum the following questions would need to be answered:
 - a. What qualifications/certifications does the operator of the device need to conduct testing?
 - b. Does the device need to be calibrated/inspected/certified? If so, on what schedule and is there a manufacturer's recommendation?
 - c. What is the output data format and does it require additional time and manipulation/interpretation to give yield strength values (similar to an ILI run)? If so, who does the manipulation/interpretation and what are their qualifications?
 - d. How does CNGC know the output results are accurate (i.e. is the device out of calibration)?
 - e. Does CNGC propose to conduct destructive yield strength testing commensurate with the ABI insitu testing to confirm results for locations where CNGC has actual pipe samples available? If not, why not?

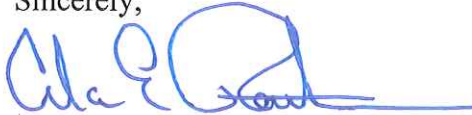
CNGC will need to document and approve the process for the insitu testing methodology and subsequent results.

- 8) Please provide the Parametrix results for all districts where insitu testing will occur. Staff will also need to know the location of the testing. This can be accomplished as noted in the January 12, 2016 letter by utilizing the daily construction schedule already being submitted to the UTC.

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According to CNGC's schedule, insitu testing is to start the week of July 18, 2016 in Bremerton, WA. As such, staff would need the answers to items 7) and 8) immediately. Please submit the answers to the remaining items by August 12, 2016. If you have any questions or if we may be of any assistance, please contact Dennis Ritter at (360) 664-1159. Please refer to the inspection number above in any future correspondence.

Sincerely,



Alan E. Rathbun
Pipeline Safety Director

cc: Steve Kessie, Director Operation Services, CNGC
Jeremy Ogden, Director Engineering Services, CNGC
Mike Eutsey, Manager, Standards and Compliance, CNGC
Vicki Ganow, Pipeline Safety Specialist, CNGC