

May 27, 1992

Mr. Paul Curl, Secretary
Washington Utilities and
Transportation Commission
1300 South Evergreen Park Drive SW
P.O. Box 47250
Olympia, WA 98504-7250

Re:

Docket No. UG-911261

(Revisions to Gas Safety Rules)

Dear Mr. Curl:

Washington Natural Gas Company (WNG) submits these final comments to the proposed safety rules. We appreciate the willingness of Staff and the Commission, throughout this proceeding, to consider our thoughts and to react constructively to them. We believe the process has been a positive learning experience for all concerned.

James W. Gustafson Senior Vice President

Operations

During discussions with Staff and in our April 8 comments, we focused on key sections of the rules which affect WNG. Staff has resolved the majority of our concerns by revising the rules or by clarifying their intent. We also understand that Staff may revise the rules again to consider comments which were made at last week's meeting. Because of this ongoing review and the detail in our earlier comments, we will not revisit the issues in this letter.

We do feel strongly about the proposed changes to WAC 480-93-005 and so will discuss those changes briefly. As stated before, the proposed definitions of main and service line will upset the continuity of the DOT definitions. The proposed definitions would unnecessarily classify the vast majority of our service lines as mains (because of the property they cross) and would not allow for the standard practice of running twin services. The existing definitions should be retained because they are preferable to the proposal.

Again, we thank Staff and the Commission for their receptiveness to our comments. The final rules will reflect a cooperative effort to improve the safety of utility operations. WNG is firmly committed to this goal.

Very truly yours,

cc:

Terrence Stapleton

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FACSIMILE SENT 5-27-92 DATE

Dear Mr. Curl:

Northwest Natural Gas appreciates the second opportunity to comment on the proposed rewrite of the gas safety rules in Chapter 480-93 of the Washington Administrative Code. We believe the second conference of the Commission Staff with utility representatives and other pipeline operators was beneficial to all parties, and we now have a better understanding of the rules as they apply to our Company and particularly to a growing group of non-utility operators.

We continue to support the comments expressed in our letter of April 14, 1992. Rather than repeating all of these, we will confine our present comments to an amplification of our previous views, and to presentation of new material primarily involving WAC 480-93-020, 480-93-030, and 480-93-200. Among the issues already covered, the lowering of pipe in WAC 480-93-175 is particularly burdensome without a corresponding benefit.

WAC 480-93-020 and WAC 480-93-030

The rules relating to proximity and proscribed areas as written in the May 6 draft and previous drafts are confusing about definitions as well as general safety. The rule was changed from a 500 psig operating pressure to a 500 psig maximum allowable operating pressure (MAOP). This seems to be a minor change—and the MAOP is a fixed value while the operating pressure is easily adjustable—but the federal pipeline rules dictate that MAOP is established by a mathematical design calculation which includes a factor ranging from 0.40 to 0.72 depending on class location, or test pressure divided by a factor of 1.1 to 1.5 which again depends on class location. The federal rules do not explicitly permit an operator to adopt an MAOP that is either higher or lower than the figures established in accordance with the above. Therefore in the narrowest view the

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operator of a proposed pipeline could lower the MAOP only by reducing pipe grade or wall thickness or by lowering the test pressure. None of these measures are conducive to general public safety. An operator should have the option to design and test a pipeline so that it qualifies from a safety standpoint for an MAOP greater than 500 psig, and then to downrate it arbitrarily to less than 500 psig or 250 psig to avoid the 500-foot or 100-foot limitation. Overdesign coupled with an arbitrary downrate, as described previously, should be far preferable to underdesign. A line designed for 72% SMYS, tested to 100% SMYS, and operated at 72% SMYS (72% of maximum strength capability) could qualify for an MAOP of 499 psig. Such a line cannot be considered as safe as another which operates at 20% SMYS or less, regardless of the absolute pressure values.

In our opinion the guidelines of Parts 191 and 192 of 49 CFR provide for safety on a more consistent basis. The Class Location criteria provide for increased safety measures in accordance with population density for initial construction, and then the area must be monitored for density changes. When these changes reach a critical point the line must be modified, retested, or downgraded to meet the new conditions. In comparison, the state rule has no monitoring requirement. In fact, it generates a "grandfather" rule protecting against future construction.

In summary, the limitations placed on internal pressures by these two state rules are confusing and unrelated to the safety of a gas pipeline. We suggest that they should be eliminated and replaced with the design parameters of the federal pipeline code.

WAC 480-93-082

The experience requirement of five years for qualified personnel is too restrictive. Many individuals reach positions of supervisory authority in shorter time periods. They are expected to perform their jobs responsibly and they may be involved in the training of others. The determination of "qualified personnel" should be left to Company discretion.

WAC 480-93-111

Establishing modified requirements for companies with fewer than 30,000 customers is inappropriate because the customers deserve the same degree of safety as the customers of a larger utility.

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WAC 480-93-115

We have some concern about conditions that are alleviated, and those that are corrected. Is alleviation a partial correction?

WAC 480-93-175

The requirement to prepare a study prior to the lowering of every gas pipeline would be time-consuming, burdensome, and unnecessary for a distribution system operating at a low percentage of SMYS. In particular the considerations of the pH of the soil and the toughness factor of the pipe are cumbersome and devoid of benefit. In general any piping to be lowered is coated and cathodically protected and the pH of surrounding soil would be irrelevant. Pipe old enough to be bare steel would be replaced rather than lowered.

To calculate the toughness of a specific piece of pipe it would be necessary to shut down the line, remove a segment of the pipe and send it to a metallurgical laboratory for a tensile test. The stress-strain curve developed by the laboratory would be the basis for a toughness calculation. Construction contractors would become irate over the time delays, and an increase in damages is a probable result.

The concern over lowering lines is the result of failure incidents involving large-diameter transmission lines of high strength steel which operate at 50% SMYS and higher pressures. In comparison a 4½-inch standard wall steel pipe of Grade B (SMYS 35,000 psi), with an internal pressure of 60 psig, is operating at 2.05% SMYS. A 2-inch pipe under the same conditions is operating at 1.11% SMYS. As mentioned previously, SMYS is equivalent to maximum strength capability.

The provisions of the federal code identify a line operating at 20% SMYS or higher as a transmission line. These are the only lines where routine lowering could become critical. We recommend that systems of coated steel operating at less than 20% SMYS be exempted from this rule completely and that systems operating at less than 50% SMYS be exempted from the pH and toughness rules.

WAC 480-93-200

The reporting requirements of the rule are extensive, and they are identical to the federal requirements of ten years ago. In July 1984 the federal rules dropped many of the inconsequential reporting requirements, and the Commission should consider similar actions. The federal limit on property damage

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was raised to \$50,000. Gas ignition was eliminated, as was taking a transmission line out of service. Reports based on dollar value, minor ignition, or line shutdown are not very significant unless there are additional complications. We recommend that they be eliminated.

Sincerely,

M. S. McCoy

Vice President