

**DEPARTMENT OF
TRANSPORTATION**

Materials Transportation Bureau

[Docket No. Pet. 75-9W,
Notice 1]

**TRANSPORTATION OF
NATURAL AND OTHER
GAS BY PIPELINE**

Petition for Waiver

The Panhandle Eastern Pipe Line Co. has petitioned the Materials Transportation Bureau (MTB) for a waiver from compliance with section 192.611(c) of the Federal gas pipeline safety standards (49 CFR part 192) for 11 transmission line segments installed in 1962 in the following localities: Liberal, Greensburg, Haven, Olpe, and Louisburg, Kans.; Houstonia and Centralia, Mo.; Pleasant Hill and Tuscola, Ill.; and Montezuma and Zionsville, Ind.

The segments form part of a pipeline known as "Line 400." Almost all the segments are in a class 1 location (see §192.5) with 1.4 miles in a class 2 location and 2 miles in a class 3 location. The segments total approximately 370 miles in length and consist of grade X-60, 30-inch outside diameter, 0.312 inch wall thickness steel pipe with grade X-46, 30.375-inch outside diameter, 0.500 inch wall thickness steel pipe at road crossings. The maximum allowable operating pressure (MAOP) (see §192.619) for the 0.312 inch wall thickness pipe in a class 1 location is 898 psig and for the 0.500 inch wall thickness pipe in a class 2 location is 920 psig.

Since Line 400 was constructed, the population along the route has increased. Some sections of the 11 segments are now in higher class locations, and additional changes in class location are anticipated. Under these circumstances, section 192.611(e) requires that the established MAOP be confirmed or revised within 18 months of the change in class location. Under section 192.611(a), if a pipeline has been previously tested to at least 90 percent of its specified minimum yield strength (SMYS) for at least 8 hours, it may be operated at a pressure which produces a corresponding hoop stress no higher than 72 percent of SMYS in class 2, 60 percent of SMYS in class 3, and 50 percent of SMYS in class 4. This MAOP is not otherwise permissible unless the pipeline is retested as

required by section 192.611(c).

Approximately 390 miles of Line 400, including the 11 segments for which a waiver is sought, were originally tested using a specially developed cyclic procedure rather than by holding a minimum test pressure for 8 hours. This procedure consisted of 4 cycles of hydrostatically pressuring a test section to at least 95 percent of SMYS and then reducing the pressure to a stress level of 60 percent of SMYS. The total time at 90 percent of SMYS was approximately 22 hours. As a result, in accordance with section 192.611(c), this portion of the line would have to be retested in order to maintain its established MAOP in areas of changed class locations.

In 1974, about 20 miles of the pipeline were retested as required by section 192.611(c). The fact that no failures occurred is offered as evidence of the integrity of the remaining 11 cyclically tested segments. The petitioner estimates that the cost of retesting the 11 segments would be over \$444,000 and that the amount of natural gas lost would be 486,000 MCF.

The petitioner requests that it be allowed to operate the 11 segments of Line 400 as if they were tested as set forth in section 192.611(a). The petitioner argues that retesting is unnecessary because the pipeline's design, construction, testing, and operating history (no operational failures) qualify it for safe operation at the stress levels permitted by section 192.611(a).

In support of this contention, the petitioner particularly relies on the severity of the cyclic testing procedure. It states that the cyclic testing was more likely to produce test failures than if a single test pressure had been held for 8 hours. This conclusion is based on research performed by the Battelle Memorial Institute in Columbus, Ohio, which shows that cyclically induced strains cause more material defects to reach their failure stress level sooner than strains induced by static loading. Also, the petitioner states that because of the higher stress level attained during testing (95 versus 990 percent), any defects remaining in the pipeline are smaller than would have been the case if the pipeline had been tested to only 90 percent of SMYS.

MTB has reviewed the history of this pipeline and the petitioner's arguments and is considering granting the requested waiver on the basis that retesting as required by section 192.611(c) is, in this instance, not necessary for public safety.

Interested persons are invited to comment on the proposed waiver by submitting in quadruplicate such data, views, or arguments as they may desire. Communications should identify the regulatory docket and notice numbers and be submitted to:

Chief, Docket Section, Materials Transportation Bureau, Room 6500, Trans Point Building, 2100 Second Street SW., Washington, D.C. 20590.

All comments received before June 19, 1978, will be considered before final action is taken. Late filed comments will be considered so far as practicable. All comments will be available for examination and copying at Docket Room 6500, Trans Point Building, before and after the closing date for comments. No hearing is contemplated, but one may be held at a time and place set in a later notice in the **FEDERAL REGISTER** if requested by an interested person desiring to comment at a public hearing and raising a genuine issue.

(49 U.S.C. 1672; 49 CFR 1.53(a), app. A. of pt. 1, and app. A. of pt. 102.)

Issued in Washington, D.C., on May 12, 1978.

CESAR DELEON,
*Acting Director, Office of
Pipeline Safety Operations.*

[FR Doc. 78-13645 Filed 5-17-78; 8:45 am]

**DEPARTMENT OF
TRANSPORTATION**

Materials Transportation Bureau

[Docket No. Pet. 75-9W, Notice 2]

**TRANSPORTATION OF NATURAL
AND OTHER GAS BY PIPELINE**

Petition for Waiver

The Panhandle Eastern Pipe Line Co. petitioned for a waiver from compliance with §192.611(c) of the Federal gas pipeline safety standards (49 CFR Part 192) for 11 transmission line segments installed in 1962 in the following localities: Liberal, Greensburg, Haven, Olpe, and Louisburg, Kansas; Houstonia and Centralia, Missouri; Pleasant Hill and Tuscola, Illinois; and Montezuma and Zionsville, Indiana.

The segments form part of a pipeline known as "Line 400." Almost all the segments are in a class 1 location (see §192.5) with 1.4 miles in a class 2 location and 2 miles in a class 3 location. The segments total approximately 370 miles in length and consist of grade X-60, 30-inch outside diameter, 0.312-inch wall thickness steel pipe with grade X-46, 30.375-inch outside diameter, 0.500-inch wall thickness steel pipe at road crossings. The maximum allowable operating pressure (MAOP) (see §192.619) for the 0.312-inch wall thickness pipe in a class 1 location is 898 psig and for the 0.500-inch wall thickness pipe in a class 2 location is 920 psig.

Since Line 400 was constructed, the population along the route has increased. Some sections of the 11 segments are now in higher class locations than when originally installed and additional changes in class location are anticipated. Under these circumstances, §192.611(e) requires that the established MAOP be confirmed or revised within 18 months of the change in class location. Under §192.611(a), if a pipeline has been previously tested to at least 90 percent of its specified minimum yield strength (SMYS) for at least 8 hours, it may be operated at a pressure which produces a corresponding hoop stress no higher than 72 percent of SMYS in class 2, 60 percent of SMYS in class 3, and 50 percent of SMYS in class 4. This MAOP is not otherwise permissible unless the pipeline is retested as required by §192.611(c).

Approximately 390 miles of Line 400, including the 11 segments for which a waiver is sought, were originally tested

using a specially developed cyclic procedure rather than by holding a minimum test pressure for 8 hours. This procedure consisted of 4 cycles of hydrostatically pressuring a test section to at least 95 percent of SMYS and then reducing the pressure to a stress level of 60 percent of SMYS. The total time the stress exceeded at 90 percent of SMYS was approximately 22 hours. Section 192.611(a) requires a test to at least 90 percent of SMYS for not less than 8 hours if a pipeline is to be permitted to continue to operate at a stress level for which it was previously qualified in the next lower Class location than that existing. As a result, in accordance with §192.611(c), this portion of the line would have to be retested in order to maintain its established MAOP in areas of changed class locations.

In 1974, about 20 miles of the pipeline were retested as required by §192.611(c). The fact that no failures occurred is offered as evidence of the integrity of the remaining 11 cyclically tested segments. The petitioner estimates that the cost of retesting the 11 segments would be over \$444,000 and that the amount of natural gas lost would be 486,000 MCF.

The petitioner requests that it be allowed to operate the 11 segments of Line 400 as if they were tested as set forth in §192.611(a). The petitioner argues that retesting is unnecessary because the pipeline's design, construction, testing, and operating history (no operational failures) qualify it for safe operation at the stress levels permitted by §192.611(a).

In support of this contention, the petitioner particularly relies on the severity of the cyclic testing procedure. It states that cyclic testing procedure was developed to provide a means of detecting even smaller flaws in a pipeline than would be detected by a pressure test at a stress of 90 percent of SMYS for 8 hours or more. Research done at Battelle Memorial Institute in Columbus, Ohio, shows that the cyclic testing procedure does discover even smaller defects than are detected by an 8-hour pressure test at a stress of 90 percent of SMYS. However, the additional small defects detected are ones that would not have failed at operational stress levels during the life of the pipeline and thus would not be detrimental to the safe operation of the pipeline. Because the additional flaws detected did not effect safety, the additional time and effort required to conduct the cyclic testing were not considered as

justified. Battelle also showed that testing for 8 hours at 90 percent of SMYS was effective in detecting the significant flaws that would effect the safety of the pipeline. Also, the petitioner states that because of the higher stress level attained during testing (95 versus 90 percent), any defects remaining in the pipeline are smaller than would have been the case if the pipeline had been tested to only 90 percent of SMYS.

In response to this petition, Materials Transportation Bureau (MTB) issued a notice of petition for waiver, requesting public comment (43 FR 21526, May 18, 1978). In this notice, MTB stated that it was considering granting the requested waiver on the basis that retesting, as required by §192.611(c), is in this instance not necessary for public safety.

Only one comment was received in response to the invitation to comment. That comment supported the granting of the waiver, stating that the cyclic hydrostatic testing method used on this pipeline was even more severe a test than the 8-hour test required by Part 192.

In consideration of the foregoing, MTB finds that compliance with §192.611(c) in this instance is unnecessary and that granting the requested waiver would not be inconsistent with pipeline safety.

Accordingly, effective immediately, the Panhandle Eastern Pipe Line Company is hereby granted a waiver from compliance with §192.611(c) regarding the 370 miles of a pipeline known as "Line 400" for which the waiver was requested.

(Sec. 3, Pub. L. 90-481, 82 Stat. 721, 40 U.S.C. 1672, 40 FR 43901, 49 CFR 1.53 Appendix A of part 1 and Appendix A of Part 106)

Issued in Washington, D.C., on February 23, 1979.

CESAR DE LEON,
*Associate Director for
Pipeline Safety Regulation.*

[FR Doc. 79-6230 Filed 3-2-79; 8:45 am]