

NEW JERSEY BOARD OF PUBLIC UTILITIES

Natural Gas Pipeline Rules - N.J.A.C. 14:7

Readoption with Amendments

February 12, 2009

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PUBLIC UTILITIES

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Natural Gas Pipelines

Readoption with Amendments: N.J.A.C. 14:7

Proposed: September 2, 2008, at 40 N.J.R. 40 N.J.R. 4915(a).

Adopted: January 28, 2009, by the Board of Public Utilities,
Jeanne M. Fox, President; Frederick F. Butler,
Joseph L. Fiordaliso, Nicholas V. Asselta, and
Elizabeth Randall, Commissioners.

Filed: January 29, 2009, as R. 2008 d. . Adopted with changes not requiring additional public notice or comments.

Authority: N.J.S.A. 48:2-13, 48:2-73 et seq., 48:9-33, 48:10-2 et seq.

BPU Docket Number: GX08050325

Effective date: Readoption: January 29, 2009
Amendments: March 2, 2009

Expiration date: December 9, 2013

The New Jersey Board of Public Utilities (Board) is readopting with amendments its rules regarding various aspects of natural gas pipelines (N.J.A.C. 14:7), which address the construction, operation, and maintenance of natural gas transmission and distribution pipelines. These rules were proposed for readoption with amendments on September 2, 2008 at 40 N.J.R. 4915(a). Pursuant to N.J.S.A. 52:14B-5.1c, N.J.A.C. 14:7 expires on February 8, 2009. These rules explain where pipelines may be constructed, and set requirements for ensuring that the pipelines remain safe both during and after installation. The rules also set specifications that pipeline operators must follow when installing, inspecting, operating and maintaining natural gas pipelines. The primary goal of the amendments is to enhance the safety standards associated with pipeline installation, operation and maintenance.

Although the Federal government has prescribed safety standards for pipeline transportation and for pipeline facilities pursuant to 49 U.S.C. §§60101 et seq., enforcement authority over intrastate lines may be assumed by the various states. Thus, pursuant to a certification submitted annually to the Federal Department of Transportation, New Jersey must enforce the Federal standards in Title 49 of the Code of Federal Regulations and may adopt more stringent standards where warranted. The Board is the State agency with statutory and delegated jurisdiction over all intrastate gas pipelines. The Board is readopting these rules because they are necessary in that they relate directly to the safe, adequate and proper installation, operation and maintenance of pipelines by New Jersey gas pipeline operators.

Summary of Public Comments and Agency Responses:

The following persons submitted timely comments on the proposal:

1. Charles F. Dipppo, South Jersey Gas Company (SJG)
2. Mary Patricia Keefe, Pivotal Utility Holdings, d/b/a Elizabethtown Gas (ETG)
3. Tracey Thayer, New Jersey Natural Gas (NJNG)
4. Sheree L. Kelly, Public Service Electric and Gas Company ((PSE&G))

General comments:

1. COMMENT: We appreciate the opportunity to comment on the readoption proposal and believe that this process provides for the valuable exchange of information which will ultimately result in more productive and efficient regulations. (SJG)
RESPONSE: The Board appreciates this comment in support of the Board's rulemaking process.
2. COMMENT: We support the readoption of Chapter 7, and commend the Board for many of the proposed amendments which provide additional clarity and understanding while strengthening pipeline safety within the state. (SJG)
RESPONSE: The Board appreciates this comment in support of the rule.
3. COMMENT: We fully support the basic principles of ensuring continued pipeline safety and damage prevention, and appreciate the effort demonstrated by the Bureau of Pipeline Safety staff in preparation of the rule. (PSE&G) (ETG)
RESPONSE: The Board appreciates this comment in support of the rule.

SUBCHAPTER 1. CONSTRUCTION, OPERATION AND MAINTENANCE OF TRANSMISSION AND DISTRIBUTION NATURAL GAS PIPELINES

4. COMMENT: We concur with the amendment to N.J.A.C. 14:7-1.3 as written. All of our natural gas pipelines are currently Class 4 design and operation, and we agree with the requirement that all *new* pipelines constructed after the effective date of this rule shall meet the design standards for a Class 4 pipeline location. (SJG)
RESPONSE: The Board appreciates this comment in support of the rule.
5. COMMENT: N.J.A.C. 14:7-1.4(a) should be applied only to transmission lines. The sole use of pressure ignores other factors such as wall thickness and diameter. For example, the Federal Code focuses on risk management linked with performance parameters rather than on pressure alone. (PSE&G)
RESPONSE: High pressure pipelines are inherently more risky than lower pressure lines, regardless of thickness and diameter, because, should there be a puncture, there is a greater potential for danger and damage. This requirement enables Board staff to review these installations and provide enhanced protection to the public. New Jersey is the most densely populated state in the U.S., and the Board believes that the provision as written is necessary to ensure public safety when large natural gas pipelines are located in close proximity to buildings. Although the rule's pressure limitation will affect a few more pipelines than would be subject to Board approval under the Federal Code, in most cases a pipeline of 250 psig or above will meet the definition of a transmission line.
6. COMMENT: N.J.A.C. 14:7-1.4(b) should be deleted. The type of replacement covered by this provision is not common, but if it is necessary, there is little in the way of alternatives. Replacement or relocation will have to occur on one side or the other of the exiting line, which will decrease the distance to the nearest building. If there are buildings on both sides of the street or the pipeline must be placed close

to buildings, Board approval is required. Further, the rule as proposed suggests that we must conduct a records search for any building built since the pipe was originally installed. The process in the rules is burdensome and unlikely to achieve anything except delay and additional cost. If the requirement is not deleted, it should be modified to require only Bureau of Pipeline Safety notification. (PSE&G) (ETG)
RESPONSE: Even in those cases where there are few alternatives for replacement or relocation of a pipeline, it is important that Board staff have the opportunity to review and approve the installation in cases where a pipeline will be located close to an occupied building. As noted by the commenter, the type of replacement covered by this provision is not common. Therefore, the Board does not believe that compliance with this requirement will impose an undue burden on pipeline operators. Regarding the issue of requiring notice only to the Bureau of Pipeline Safety, please see the response Comment 7 below.

7. COMMENT: We recommend changing the proposed language in N.J.A.C. 14:7-1.4(b) which requires “[Board approval]” to **“Board notification”**, or **“Bureau Pipeline Safety notification”**, or **“Bureau Pipeline Safety approval”**. We believe that it would be overly burdensome for all involved parties to require Board approval for relatively minor projects involving natural gas pipeline section replacements or relocations. (SJG)

RESPONSE: The Board did not intend to imply that these approval requests must be heard by the full Board, and has clarified this in companion proposed amendments to these rules, published elsewhere in this issue of the New Jersey Register. However, the Board does not believe that mere notice is sufficient to ensure safety when a pipeline is replaced or relocated close to a building. The prior approval requirement is necessary because of the potential for accidents and danger.

8. COMMENT: Proposed N.J.A.C. 14:7-1.6(a) and (b), which require oversight by qualified welding inspectors, should apply to transmission lines only. The character of transmission lines, especially their potential leak failure mode, makes them much more appropriate for this level of scrutiny. In addition, the rule should be modified from "ensure oversight" to "ensure quality." Oversight implies viewing the welder as he or she welds, which is an not efficient or effective form of quality control. Quality tests and checks are normally included to ensure quality and include 100% X-ray's to ensure weld integrity. (PSE&G) (ETG)

RESPONSE: The oversight required at N.J.A.C. 14:7-1.6(a) does not necessarily require that an inspector watch welding being performed. The amount and type of oversight necessary, whether for a distribution or transmission pipeline, must be determined by the operator. This has been clarified upon adoption.

9. COMMENT: N.J.A.C. 14:7-1.8(b) does not state the distance from the facility in parallel to the pipeline. The distance should be included in the rule to avoid a misinterpretation of the provision. (PSE&G) (ETG)

RESPONSE: This provision requires the operator to assess the potential impact on the proposed pipeline construction parallel to a railroad. As such, the operator

shall determine on a case-by-case basis what distance requires such consideration and analysis relative to the operator's proposed pipeline.

10. COMMENT: N.J.A.C. 14:7-1.8(c) requires that, "whenever reasonably possible to avoid doing so, a gas transmission pipeline shall not be installed beneath and in close proximity to any public hard surface highway or street." This places a burden on the operator to demonstrate that an alternative route is not "reasonably possible". "[R]easonably possible" may be interpreted to exclude considerations of cost and timing, which are important considerations. We request that this paragraph be deleted. (PSE&G) (ETG)

RESPONSE: The Board agrees that the provision is redundant with provisions at N.J.A.C. 14:7-1.4 and 1.18. Those provisions provide an opportunity for Board staff to review the installation of all transmission lines on a case-by-case basis, ensuring that proximity to roads will be minimized whenever possible. However, this change is substantive and therefore cannot be made upon adoption. Therefore, the Board has proposed these changes in a companion proposal of amendments published in this issue of the New Jersey Register.

11. COMMENT: We commend the Board for the creation of the proposed N.J.A.C. 14:7-1.9 which specifically addresses distribution system valves, as this revision recognizes the inherent operational differences between distribution system valves and transmission system valves which are now addressed at new N.J.A.C. 14:7-1.10. (SJG)

RESPONSE: The Board appreciates this comment in support of the rule.

12. COMMENT: There is little or no benefit associated with mandating a detailed study of customer counts for every addition, replacement or maintenance task as outlined in the proposed paragraph. (PSE&G) (ETG)

RESPONSE: Please see the response to comment 13 below.

13. COMMENT: Because of the operational differences between distribution system valves and transmission system valves, we suggest that, in proposed N.J.A.C. 14:7-1.9(b), the words "[ensure that]" be replaced with "**consider**", and that the words "[shall not exceed 500 customers]" be deleted. If adopted in this manner, the operator would obtain flexibility on how the shutdown is effected by means other than the utilization of distribution system valves, which may not represent the optimal solution to minimizing the impact of the shutdown on the balance of the system. This approach would also lower the costs associated with performing system isolation studies, eliminate expenses associated with potentially unnecessary retrofit valve installations and the ongoing incremental annual operations and maintenance expenses associated with increased system valving. We believe these changes will improve both reliability of service for the maximum number of customers, while allowing operators to utilize other existing and accepted industry approaches to safely segregate and control distribution system flows during both normal and emergency operations. In concert with the above changes, we recommend that subsections (c), (d) and (e) be deleted in their entirety. (SJG)

RESPONSE: Since this readoption was proposed, the United States Department of Transportation has proposed changes to the Federal Code at Subpart P, 49 CFR. 192.1001 through 192.1019. The proposed changes would require a written Distribution Integrity Management Program (DIMP) which will be all-encompassing with regard to the operators' distribution systems. It would be premature for the Board to make changes now that likely would require revision as soon as the Federal rules are adopted. However, assuming that the USDOT adopts this requirement, the Board will consider incorporating the new Federal requirement into this chapter. At that time, the Board will consider deleting any requirements in N.J.A.C. 14:7-1.9(b) through (e) that are redundant with or conflict with the DIMP requirement.

14. COMMENT: We recommend that N.J.A.C. 14:7-1.9(b)5 be re-written as follows: **"5. The response time and shutdown capabilities of the operator"**. (SJG)

RESPONSE: The Board has modified this provision upon adoption to clarify that a key component of the operator's response capabilities is the ability to shut down valves as needed.

15. COMMENT: At N.J.A.C. 14:7-1.9(c), the proposed process for analysis of all sectionalizing valves is of limited value. The number of combinations of valve closures is enormous. It is unclear as to whether the analysis can be completed in the time frame specified in the proposed rule. We are unaware of any incident that would justify the need for this rule and requests that this paragraph be deleted. (PSE&G) (ETG)

RESPONSE: This requirement was intended to apply only to distribution valves installed after the effective date of the readoption, in accordance with general legal principles requiring that rules apply prospectively and not retroactively. This has been clarified in the rule upon adoption. As clarified, the Board believes the requirements are reasonable to ensure safety.

16. COMMENT: We seek clarification on the phrase, "whenever any maintenance and/or replacement work is performed", in N.J.A.C. 14:7-1.9(e), which appears overly broad in scope. Also, the language applying the rule to replacements and short additions should be deleted, as gas distribution systems are extensively back fed in grid configurations, and field operations routinely limit the effect of main shutdowns by using plastic main squeeze-offs, LP bag-offs, valves and by-passes. Consequently, we have not historically experienced a large customer loss of service in areas when these techniques are utilized. (PSE&G) (ETG)

RESPONSE: In companion proposed amendments to these rules, published elsewhere in this issue of the New Jersey Register, the Board proposes to delete N.J.A.C. 14:7-1.9(e), which contains the language to which the commenters object.

17. COMMENT: N.J.A.C. 14:7-1.11(c) includes new backfill requirements for gas pipelines but does not specify the depth requirement of the clean select fill around the pipe. We suggest a six inch cushion of clean select fill around the pipe. (PSE&G) (ETG)

RESPONSE: The Board agrees that a six inch cushion should be required to prevent damage to pipes or coatings from sharp objects in fill surrounding pipes. However, this is a substantive change which cannot be made upon adoption, and instead is found in companion proposed amendments to these rules, published elsewhere in this issue of the New Jersey Register.

18. **COMMENT:** We recommend that N.J.A.C. 14:7-1.11(d)3 be deleted in its entirety. The existing Federal Pipeline Safety Regulations mandate that an effective cathodic protection ("CP") system, which incorporates the condition of pipe coatings, be operational within one year of pipe installation. It is common practice to check the final condition of the cathodic protection system including the coating performance within a few months of construction. Tests are normally performed by corrosion technicians, who are not typically members of a construction crew. Therefore, the term "coating" should be changed to "cathodic protection system" and the time requirement should be increased to maintain consistency with the Federal Code. Therefore, to minimize expenditures associated with establishing effective levels of CP, it is in the operator's best interest that upon completion of backfill, pipe coatings are in adequate and satisfactory condition. The implied testing of individual joint coatings would be both costly and impractical. (SJG) (PSE&G) (ETG)

RESPONSE: The Board agrees that N.J.A.C. 14:7-1.11(d)3 conflicts with the Federal Code at 49 CFR. 192.455. Therefore, this provision has been deleted upon adoption for consistency with Federal Pipeline Safety Regulations.

19. **COMMENT:** Under N.J.A.C. 14:7-1.11(f), we recommend the installation of a single six-inch wide subsurface marking tape for *all* pipe sizes, in lieu of utilizing 12" wide tape or 2-6" wide tapes for those pipelines above 16" in diameter. We see no justification for the proposed rule requiring the use of much wider and more costly tape. Twelve inch wide warning tape is not standard and must be purchased at considerable additional expense. In addition, we suggest an exception to the warning tape requirement for pipeline insertions as placement of tape is not practical without an open trench. (SJG) (PSE&G) (ETG)

RESPONSE: The Board believes that the requirement for wider tape above larger pipe sizes provides an inexpensive but effective measure of increased damage prevention. When excavating above larger pipe sizes, the potential for damage is increased, and the consequences of such damage can cause greater volumes of gas release, more difficult repair, and a higher probability of service disruption. A wider warning area provides the additional warning for the excavator. Therefore, the commenter's suggested change has not been made upon adoption.

20. **COMMENT:** We are in general agreement with the proposed depth of cover requirements at N.J.A.C. 14:7-1.12 for distribution mains, transmission pipelines and service lines which are installed after the effective date of this rule, but recommend that protective shielding only be mandated for those new facilities installed after the effective date of this rule as follows:

- Distribution mains with less than 30" of cover
- Transmission mains with less than 42" of cover

- Service lines with less than 12" of cover

In this way, all new facilities would be installed with a greater depth of cover wherever feasible, and operators would have greater flexibility in providing the mandated shielding when the additional depths of cover cannot be achieved. (SJG)

RESPONSE: The Board appreciates the commenter's support for the depth of cover requirements. With respect to distribution and transmission mains, the Board agrees that the commenter's suggested revisions would provide additional flexibility for pipeline operators to ensure a safe combination of cover and shielding. However, this change is substantive and therefore cannot be made upon adoption. Therefore, the Board has proposed these changes in a companion proposal of amendments published in this issue of the New Jersey Register. Regarding service lines, in order to provide a safe combination of cover and shielding, the Board believes that shielding is needed whenever cover is less than 18 inches, rather than the commenter's suggested 12 inches.

21. **COMMENT:** The title of N.J.A.C. 14:7-1.12 should indicate that the section includes provisions for transmission pipelines. In addition, the provision exempting short replacement sections for mains from the depth requirement should also cover service and transmission lines as well. Installing offsets in transmission or service lines to achieve the required depth for a short run of pipe connecting existing pipe adds significant cost in fittings and labor and increases the risk of trapping liquids. (PSE&G) (ETG)

RESPONSE: The Board has clarified the section heading upon adoption. Further, the Board agrees that the exception for short replacement sections should be added. However, this change is substantive and therefore cannot be made upon adoption. Therefore, the Board has proposed these changes in a companion proposal of amendments published in this issue of the New Jersey Register.

22. **COMMENT:** The new shielding requirements for mains and transmission pipelines are a full foot greater than the standard in the Federal Code. There is no allowance between the required pipeline depth and the shielding depth. The rule should have a six inch allowance for shielding, and should set a more reasonable thirty inch minimum cover for distribution mains and forty-two inches for transmission pipelines. In addition, this will assist in avoiding unnecessary shielding and is especially important for short replacements of main currently between thirty and thirty-six inches of cover. Finally, the subject pipelines often have fittings or valves which may protrude above the pipe. The six inches allowance will avoid over-shielding these while still providing protection when a fitting protrusion extends significantly above the pipeline. (PSE&G) (ETG)

RESPONSE: After careful consideration of all comments received on the proposed readoption, and discussion with other natural gas pipeline regulators in various government agencies, the Board has determined that a reduction of the minimum depths and shielding requirements can be made without jeopardizing public safety or pipeline reliability. However, this change is substantive and therefore cannot be made upon adoption. Therefore, the Board has proposed these changes in a companion proposal of amendments published in this issue of the New Jersey Register.

23. COMMENT: N.J.A.C. 14:7-1.20(c) requires leak detection surveys to be performed using leak detection equipment that is "as reliable and sensitive as flame ionization." Please clarify that combustible gas indicators can be utilized when performing a leak survey inside a building. Combustible gas indicators are currently in use for leak investigations and for inside leak surveys, and their portability and size are more appropriate for the confines of an inside investigation. (PSE&G) (ETG)

RESPONSE: The Board agrees, and has clarified N.J.A.C. 14:7-1.20(c) to this effect in a companion proposal of amendments published in this issue of the New Jersey Register.

24. COMMENT: We recommend deletion of N.J.A.C. 14:7-1.20(f). We will be required to provide Board staff with copies of all Federal Safety-Related Condition Reports on an as-filed basis, and Leak classification status reports on an annual basis in accordance with proposed N.J.A.C. 14:7-1.26, and we view N.J.A.C. 14:7-1.20(f) to be vague, redundant and potentially burdensome. (SJG) (PSE&G) (ETG)

RESPONSE: N.J.A.C. 14:7-1.20(f) addresses different reports than those required under N.J.A.C. 14:7-1.26(d), and the Board believes that both types of reports are necessary to ensure that the Board has the information needed to monitor the operation and maintenance of natural gas pipelines. Therefore, the commenters' suggested change has not been made. However, a cross reference to N.J.A.C. 14:7-1.20(f) has been added at N.J.A.C. 14:7-1.26(f) upon adoption to reduce confusion.

25. COMMENT: Under proposed N.J.A.C. 14:7-1.23, our operating procedures will now be required to "meet or improve the current level of safety" as opposed to meeting the requirements of the Federal Code. This change may be problematic in light of the risk based criteria for resource allocation in the anticipated federal rulemaking related to the Distribution Integrity Management Program (DIMP). We request that the final rule maintain the current review criteria, which by definition default to be consistent with DIMP to obtain approval from the Board for additions and/or revisions to its operating procedures. (PSE&G) (ETG)

RESPONSE: While the Board agrees with the commenter that the Federal DIMP rulemaking is likely to provide a workable framework for the Board's treatment of natural gas pipeline operators' operating procedures, that rulemaking is not completed, and until it is, the Board believes that its requirements as proposed are the best way to ensure that operating procedures are adequate.

26. COMMENT: We object to the proposed modification in proposed N.J.A.C. 14:7-1.23 of the role of Board Staff from the role of "reviewer" to the role of "approver" of our operating procedures. We are responsible for maintenance and operational responsibility of our system and the development of written procedures relating to same. We commend Board Staff for its dedication, however, Board Staff is ultimately not responsible for the maintenance and operation of our system. (PSE&G) (ETG)

RESPONSE: The modifications made to this section in the proposal made no change to the role actually played by Board staff in processing operating standards or procedures, with two exceptions. First, the amendments expand the scope of the provision to cover new procedures as well as revisions to existing procedures. Second, the amendments lengthen the deadline for their submittal to the Board. As was the case in the previous rules, a pipeline operator may not implement a standard or procedure without awaiting Board staff approval, whether that approval is granted by default through staff non-action (see N.J.A.C. 14:7-1.23(d)), or through an explicit staff approval of the standard or procedure (see N.J.A.C. 14:7-1.23(c)). The heading of the section has been modified upon adoption to clarify that Board staff review of operating standards and procedures does not invariably result in their approval. In addition, N.J.A.C. 14:7-1.23(a) has been modified upon adoption to clarify that this section applies only to standards adopted or revised after the rule becomes effective, in accordance with general legal principles requiring that rules apply prospectively and not retroactively. A corresponding change is included in companion amendments proposed elsewhere in this issue of the New Jersey Register. The proposal deletes an erroneous requirement at N.J.A.C. 14:7-1.24(d) and (c) that an operator's program for qualification of pipeline personnel be approved by the Bureau of Pipeline Safety. The Board has never approved these Federally required programs and does not intend to begin doing so.

27. **COMMENT:** We share Board Staff's concern over main and service construction oversight. However, the proposed rule requirements are overly burdensome and inefficient. Our work sites and crews for main construction may be the same for days or weeks depending on the job size. Some contracted crews have been working for us for many years and their qualifications and skill level are well known. In other cases, newer crews may require increased oversight. Requiring this detailed inspection for every crew every day is not necessary to ensure high quality properly installed pipelines. A more flexible approach that may better serve all parties could be accomplished by requiring a written quality assurance plan to be submitted to the Board for review. (PSE&G) (ETG)

RESPONSE: The Board did not intend to require repeated unnecessary inspections of sites where conditions are not changing, or where inspection is clearly not necessary for other reasons. However, this change is substantive and therefore cannot be made upon adoption. Therefore, the Board has proposed these changes in a companion proposal of amendments published in this issue of the New Jersey Register.

28. **COMMENT:** Under N.J.A.C. 14:7-1.24(d), we recommend deleting the word "[records]" and inserting the word "**audits**" in its place in the first sentence. In the following sentence, We recommend deleting the word "[inspector]" and inserting the word "**audit**" in its place. (SJG) (NJNG)

RESPONSE: The Board agrees that an audit of pipeline installations is an acceptable, and probably better requirement. An audit is performed by a separate group or department within the pipeline operator's company. The audit group is assigned to ensure the quality of the installation, and acts as a check on the

inspector as well as the installation crew. However, this is a substantive change and thus cannot be made upon adoption. Therefore, this change has been included in a companion proposal published in this issue of the New Jersey Register.

29. COMMENT: Under N.J.A.C. 14:7-1.24(e), we recommend inserting the word “**periodic**” before the word “inspection” within the first sentence, to help provide clarity. (SJG) (NJNG)
RESPONSE: The Board has added this term for clarity and to ensure consistency with the use of the term in the final sentence of the provision.
30. COMMENT: We oppose the requirement at N.J.A.C. 14:7-1.25(c) to produce profile drawings for other excavators doing non-utility work. This is an unjustified cost to utilities and their ratepayers. (PSE&G) (ETG)
RESPONSE: This provision is not intended to require the operator to provide these drawings to others, but merely to prepare them prior to the HDD work, and make them available for Board staff inspection if requested. This requirement ensures that the HDD work is carefully planned for safety. This has been clarified in a companion proposal published in this issue of the New Jersey Register.
31. COMMENT: We suggest that N.J.A.C. 14:7-1.25(d) be modified slightly to add the phrase “whenever reasonably possible to do so” after the word excavation. Since there are instances in which test-hole excavations are just not feasible, the addition of that language would avoid confusion. At a minimum, the rules should grant an exception in cases where municipalities disallow excavations on newly paved roads. (NJNG) (SJG) (PSE&G) (ETG)
RESPONSE: The commenter’s suggested change would conflict with the Board’s one-call rules at N.J.A.C. 14:2-3.3(a)1, which require an excavator to hand dig and locate subsurface facilities prior to excavating.
32. COMMENT: In N.J.A.C. 14:7-1.25(f), it is our recommendation that an alternative method of inspection, such as “weak links” or ground penetrating radar, be permitted in addition to the use of window excavations. In that way, the inspection of the leading section of pipe being inspected is possible. Additionally, window excavations become useless because they become filled with drilling mud. (NJNG) (SJG)
RESPONSE: The Board agrees that there are situations in which window excavations may be less effective for verifying the integrity of HDD pipe than another method. The Board has modified the rules through companion proposed amendments published in this issue of the New Jersey Register, to provide the option for an operator to obtain prior Board approval for an alternative, but equally effective, method of verification.
33. COMMENT: N.J.A.C. 14:7-1.25(h) should apply to HDD installations and transmission line crossings only. (PSE&G) (ETG)

RESPONSE: The Board did not intend this provision to apply to distribution pipelines, and has clarified the scope of the requirement in a companion proposal of amendments published in this issue of the New Jersey Register.

34. **COMMENT:** In N.J.A.C. 14:7-1.25(h), we recommend the addition of the following phrase “or contractor’s representative” after the word “inspector” in the first sentence and the replacement of the word “An” with “The” in the second sentence, also adding the phrase “or contractor’s representative” after the word “inspector.” (NJNG) (SJG)

RESPONSE: The changes recommended are not necessary, as the rules allow an operator to designate any qualified inspector.

35. **COMMENT:** Under N.J.A.C. 14:7-1.26(d)2, we question the need for, and value of reporting EFV actuations on an annual basis. It is difficult to foresee the benefit of such data as all operators in New Jersey have been voluntarily installing EFVs for many years. In addition, the tracking required is overly burdensome. (SJG) (NJNG) (PSE&G) (ETG)

RESPONSE: Board staff need these data in order to monitor the effectiveness of EFVs with regard to mitigating or eliminating the release of gas as a result of excavation damage to pipeline facilities.

36. **COMMENT:** N.J.A.C. 14:7-1.26(d)8 partially conflicts with the proposed requirements in N.J.A.C. 14:7-1.19. (NJNG)

RESPONSE: This has been resolved through a companion proposal of amendments published elsewhere in this issue of the New Jersey Register, which consolidate existing N.J.A.C. 14:7-1.14 and 1.19, which both address pressure testing, at proposed N.J.A.C. 14:7-1.14. Existing N.J.A.C. 14:7-1.19(a) is recodified in the proposal as N.J.A.C. 14:7-1.14(e) and (f), and streamlined to be more similar to the testing requirements of the Federal code. Rather than requiring an operator to submit certification of testing prior to operating a transmission pipeline, the modified rule would require that the testing take place prior to operation, but submittal of the certification and test report could occur any time within one month after the test date. Since the Board normally witnesses these tests, the simplified provision will reduce paperwork while still ensuring that necessary testing is performed.

SUBCHAPTER 2. VIOLATIONS, INFORMAL CONFERENCES, CIVIL ADMINISTRATIVE PENALTIES AND ADJUDICATORY HEARINGS

37. **COMMENT:** N.J.A.C. 14:7-2.3: While we appreciate the Board’s effort to streamline and improve the efficiency of the existing process, there are occasions when 14 business days may be insufficient to provide a responsive and complete Answering Certification. Further, the consequence for untimely reply is the issuance of a Final Order of Penalty Assessment (“FOPA”), without further notice to the alleged violator. Therefore, the time to file the certification should be at least as long as that set forth under NJ.A.C. 14:7-2.5 for a Notice of Administrative Order

and Civil Administrative Penalty Assessment (ANOCAPA), which is twenty days. We respectfully request that 14 business days be increased to 20 business days. One commenter requested forty-five days, to be consistent with Bureau of Pipeline Safety review of procedures. (SJG) (NJNG) (PSE&G) (ETG)

RESPONSE: Please see the response to comment 38 below.

38. COMMENT: We work closely with Board staff to resolve alleged violations. Issuance of a FOPA without further notice may deny us the opportunity to remedy what is likely to be an administrative oversight. We request a twenty day time period to file the certification, a second written notice to an alternate contact and additional verbal notice to a designated utility representative, if the certification is not filed within 14 days. (PSE&G)

RESPONSE to comments 37 and 38: The Board believes that the deadline as proposed and adopted provides sufficient time to submit a complete Answering Certification. The purpose of the certification is to provide the Board with a written response to the NOPV. Under the previous rules at N.J.A.C. 14:7-2.3(b), an alleged violator was required to respond to an NOPV within fourteen days. This has not proved to be a problem in the past. It should be noted, however, that in a companion proposal in this issue of the New Jersey Register, the time period in this provision is proposed to be modified to count calendar days rather than business days, for clarity and for consistency with N.J.A.C. 14:3-1.1 and other Board rules. The proposal would thus require submittal of the certification within 21 calendar days, which is approximately the same as 14 business days.

Agency-initiated changes:

1. Several definitions are added at N.J.A.C. 14:7-1.1A to ensure accurate use and understanding of basic terms throughout the chapter. The definitions all refer to the definition of the same term in the Federal code.
2. At N.J.A.C. 14:7-1.11(d), the term "insure" is replaced with the term "ensure."
3. At N.J.A.C. 14:7-1.11(f), the rule has been modified upon adoption to clarify that the requirement to place marking tape in backfill material above a pipe does not apply in any case where the installation or repair of the pipe is accomplished without disturbing the backfill above the pipe.
4. At N.J.A.C. 14:7-1.14(b), a method of contacting Board staff is provided for those who must comply with the notice requirement in this subsection.
5. At N.J.A.C. 14:7-1.14(d), the rule is modified to clarify which Board staff will approve abbreviated pressure tests.

Federal Standards Analysis

Executive Order No. 27(1994), and P.L. 1995, c.65 (N.J.S.A. 52:14B-22 through 24), require State agencies that adopt State rules which exceed any Federal requirements to include in the rulemaking document a comparison with Federal law. The Federal law that corresponds to these rules is found in the regulations of the United States Department of Transportation at 49 CFR. §§190, 191, 192, 193, 198, and 199. This

re-adoption of N.J.A.C. 14:7 with amendments is comparable with the corresponding Federal law in all but the areas discussed below.

The State system for designing pipelines based on the class location in relation to population density, found at N.J.A.C. 14:7-1.3, requires all pipelines installed after the effective date of this re-adoption to be designed to class 4 pipeline location standards, the highest standard for similar pipelines designed under the Federal classification system at 49 CFR. §192.5. This may result in some costs for pipeline operators, although most have voluntarily chosen to meet higher standards than Federally required. To the extent that costs are incurred, the Board has determined that these costs are justified in order to ensure safety.

The Board's rules governing the quality control of field welding, found at N.J.A.C. 14:7-1.6(a) and (b), are more stringent than corresponding Federal regulations at 49 CFR. §192.225 and §192.241. N.J.A.C. 14:7-1.6(a) and (b) require oversight of field welding by qualified welding inspectors, and require that a copy of the applicable welding procedure be readily available at the job site for natural gas pipelines with a maximum operating pressure in excess of 250 psig. The Board believes these requirements are necessary to ensure safety.

The Board's rules governing fabrication details, found at N.J.A.C. 14:7-1.7(c) and (d), are more stringent than corresponding Federal regulations at 49 CFR. §192.155 and §192.151. N.J.A.C. 14:7-1.7(c) requires that branch connections for transmission pipelines fabricated by welding be of the reinforced type, whereas the Federal regulations at 49 CFR. 192.155 do not require reinforced type branch connections. However, the Board believes that reinforced type branch connections significantly increase the level of pipeline safety. N.J.A.C. 14:7-1.7(d) states that line taps may be made under pressure in the sizes and at the pressure at which the line tapping equipment is recommended for use by the manufacturer. The Federal regulations do not address line tapping equipment.

The Board's rules governing the spacing of sectionalizing distribution valves, found at N.J.A.C. 14:7-1.9(a) and (b), are more stringent than corresponding Federal regulations at 49 CFR. §192.181. Sectionalizing valves allow a pipeline operator to stop the flow of gas through a section of pipeline in cases of pipeline failure or emergency. The Federal regulation for high-pressure distribution systems requires valves to be spaced "so as to reduce the time to shut down a section of main in an emergency," and states that the spacing shall be determined by operating pressure, pipe size, and local physical conditions. N.J.A.C. 14:7-1.9(b) requires that, in determining the number and spacing of sectionalizing valves, a pipeline operator shall ensure that the maximum number of customers to be affected by an emergency shutdown shall not exceed 500 customers. In addition, the operator shall consider the volume of gas that could be released to the atmosphere and the response time capabilities of the operator in addition to the Federal requirements. Also, N.J.A.C. 14:7-1.9(c) requires the operator to evaluate the number and spacing of all of its sectionalizing valves and file a report summarizing the evaluation. Where sectionalization may result in more than 500 customers being

affected, N.J.A.C. 14:7-1.9(e) requires the operator to analyze whether additional valves need to be installed.. To the extent that this rule may require an operator to install and maintain more valves, there will be some costs incurred. However, the Board has determined that the amendment is necessary to ensure safety.

N.J.A.C. 14:7-1.11 (codified at N.J.A.C. 14:7-1.13 in the existing rules) governs the installation of pipe and its requirements are more stringent than corresponding Federal regulations at 49 CFR. §192.325. N.J.A.C. 14:7-1.11(a) requires all gas pipelines to be installed with at least twelve inches separation from any other subsurface structure or facility, whereas the corresponding Federal regulations require twelve inches separation only for the installation of transmission pipelines. N.J.A.C. 14:7-1.11(d)1 and 2 specify the size and type of wire required for tracer wire on plastic pipe installations. These specifications are more stringent than the corresponding Federal regulations at 49 CFR. §192.321, which do not govern the size and type of wire.

The Board's rules governing minimum cover of mains and service lines found at N.J.A.C. 14:7-1.12 are more stringent than corresponding Federal regulations at 49 CFR. §192.327 and §192.361. N.J.A.C. 14:7-1.12(a) and (b) require 36 inches cover over distribution mains and 48 inches cover over transmission pipelines, respectively, in comparison with Federal regulation requirements, at 49 CFR. §192.327, of 24 inches cover over distribution mains and 36 cover over transmission pipelines. In addition, N.J.A.C. 14:7-1.12(c) requires 18 inches cover over gas service lines, whereas the Board's existing rules are consistent with Federal regulations at 49 CFR. §192.361, requiring 12 inches of cover in private property and 18 inches of cover in streets and roads. To the extent that this rule requires an operator to install pipelines at increased depths of cover, there will be some costs incurred. However, the Board has determined that these costs are justified as a measure of damage prevention and to ensure the protection of people, property and the environment, especially in densely populated areas.

N.J.A.C. 14:7-1.16 provides odorization requirements for pipelines. N.J.A.C. 14:7-1.16(c) requires a pipeline operator to make periodic tests to determine the adequacy of the odorization of the gas. Federal regulations at 49 CFR. §192.625 require only periodic sampling but do not specify a time interval. To the extent that costs are incurred by requiring monthly tests, the Board has determined that these costs are justified in order to ensure the safety of the public.

N.J.A.C. 14:7-1.20(b) requires leak detection surveys on bare and cathodically unprotected steel distribution lines consistent with the requirements of Federal regulations at 49 CFR. §192.723. In addition, N.J.A.C. 14:7-1.20(b) requires an operator to perform more frequent surveys as the operator deems necessary based on leak history, leaks discovered by the public, and operating pressure. This provides an extra measure of safety in the densely populated areas that typify New Jersey.

N.J.A.C. 14:7-1.22 requires damage prevention efforts consistent with the requirements of Federal regulations at 49 CFR. §192.614. In addition, N.J.A.C. 14:7-1.22(c) requires

an operator to take additional measures when the operator becomes aware of potential high risk excavations, such as performing on-site inspection, coordinating with the excavator, continuing surveillance, and checking/verifying clear access to gas valves that may be operated in an emergency, Also, an operator must provide training for operator personnel in preparation for potential high risk excavations around underground gas facilities. These stringent requirements reflect the importance of careful supervision of excavation around gas facilities, in consideration of the highly developed and densely populated nature of New Jersey.

N.J.A.C. 14:7-1.23 (codified at N.J.A.C. 14:7-1.37 in the existing rules) provides an administrative procedure for pipeline operators to obtain approval from the Board of additions and revisions to their operation and maintenance procedures. The Federal standards do not require this. However, due to the economic conditions, many natural gas pipeline operators in New Jersey are reviewing operating and maintenance standards, including those relating to inspections and testing, to minimize costs. This section will enable the Board to review such changes before they become operator policy, and to ensure that any cost cutting measures do not compromise the safety of a natural gas pipeline.

N.J.A.C. 14:7-1.24 provides for oversight of construction activity. N.J.A.C. 14:7-1.24(c), (d), and (e) contain requirements for quality assurance/quality control inspection, inspection and calibration of all equipment used on construction, operations, and maintenance activities, and joint trench pipe inspections, respectively. These requirements exceed the Federal regulation requirements, although quality assurance/quality control measures are implied by various Federal regulations. Again, the incremental cost of careful quality assurance/quality control is justified by the dense population of New Jersey, as well as the heavy development which results in a large number of underground facilities.

N.J.A.C. 14:7-1.25 requires a pipeline operator to develop guidelines for horizontal directional drilling (HDD) operations, including establishing minimum clearances when drilling in proximity to existing subsurface facilities, requirements for test hole excavations, verification of drilling/reaming head location during HDD operations, ensuring the integrity of plastic pipe installed by HDD, supporting pipe during HDD operations, and on-site inspection for HDD installations. These requirements are not found in the Federal regulations but the Board's experience with HDD indicates that they are necessary for safety in New Jersey.

Full text of the rule adoption follows (additions are indicated in boldface with asterisks ***thus***; deletions are indicated in brackets with asterisks *[thus]*):

CHAPTER 7. NATURAL GAS PIPELINES

SUBCHAPTER 1. CONSTRUCTION, OPERATION AND MAINTENANCE OF TRANSMISSION AND DISTRIBUTION NATURAL GAS PIPELINES

14:7-1.1A Definitions

For the purposes of this chapter, the following words and terms shall have the following meanings, unless the context clearly indicates otherwise. Additional definitions that apply to this chapter can be found at N.J.A.C. 14:3-1.1, and in 49 CFR. 190.3, 191.3, 192.3, 193.3, 198.3, and 199.3, which are incorporated by reference herein.

“Administrative Order and Notice of Civil Administrative Penalty Assessment” or “AONOCAPA”, means the written notice provided under N.J.A.C. 14:7-2.6, to alert an alleged violator of the violation and the potential penalty for the violation.

"Automatically controlled valve" means a valve that does not require personnel to activate. It closes in response to a pressure loss or flow rate increase that exceeds a pre-set level. The valve operator is powered by electricity, by the gas pressure in the pipeline, or by another power source. Automatically controlled valves are intended to provide timely closure whenever there is an abnormal pressure loss on the pipeline.

"Bureau" means the Bureau of Pipeline Safety in the Division of Reliability and Security, in the New Jersey Board of Public Utilities.

"Class 3" means the Federal Class 3 location as described in 49 CFR. 192.5.

"Class 4" means the Federal Class 4 location as described in 49 CFR. 192.5.

"Distribution line" has the meaning assigned to this term in the Federal code at 49 CFR. 192.3.

"Division" means the Division of Reliability and Security in the Board of Public Utilities.

"Federal Code" means the Pipeline Safety Regulations of the United States Department of Transportation, Pipeline and Hazardous Materials Safety Administration, set forth at 49 CFR. 190, 191, 192, 193, 198 and 199.

"Main" has the meaning assigned to this term in the Federal code at 49 CFR. 192.3. A main is a type of distribution line.

“Notice of civil administrative penalty assessment” or “NOCAPA”, means the written notice provided under N.J.A.C. 14:7-2.6, to alert an alleged violator of the violation and the potential penalty for the violation.

"Pipeline" has the meaning assigned to this term in the Federal code at 49 CFR. 192.3.

"Pipeline operator" or "operator" means a person that owns, operates, manages or controls an intrastate natural gas pipeline, including a public utility as that term is defined in N.J.S.A. 48:2-13 or a natural gas pipeline utility as that term is defined in N.J.S.A. 48:10-3.

"Remotely controlled valve" means a valve that is operated by personnel from a location that is remote from where the valve is installed. The location is usually at the pipeline control or dispatching center. A remotely controlled valve consists of the valve itself and a valve operator that is attached to the valve to open or close it. The valve operator is powered by electricity, by the gas pressure from the pipeline, or by another power source. The communications linkage between the remote location and the remotely controlled valve may be by fiber optics, microwave, telephone lines, or satellite.

*"Service line" has the meaning assigned to this term in the Federal code at 49 CFR. 192.3. A gas service line is a type of distribution line.

"Transmission line" has the meaning assigned to this term in the Federal code at 49 CFR. 192.3.*

14:7-1.6 Quality control of field welding

(a) In addition to all applicable Federal Code requirements, each operator shall ensure oversight of field welding on a natural gas pipeline with a maximum operating pressure in excess of 250 psig by welding inspectors that are determined qualified by the operator on the basis of training and experience, ~~*[sø]~~ as *necessary* to ensure that all operator procedures are followed.

(b) (No change from proposal.)

14:7-1.9 Distribution system valve requirements

(a) (No change.)

(b) In determining the number and spacing of sectionalizing valves, each operator shall ensure that the maximum number of customers to be affected by an emergency shutdown shall not exceed 500 customers. In addition, the operator shall consider the following:

1. - 4. (No change.)
5. The response time *and shutdown* capabilities of the operator.

(c) Each distribution pipeline operator shall evaluate the number and spacing of all ~~*[of its]*~~ sectionalizing valves ~~*[and file an evaluation report in accordance with (d) below]*~~ *installed after {effective date of this rule}*. The operator shall apply the considerations in (b) above, and shall determine whether the number and spacing of its valves meets

the requirement in (a) above to adequately facilitate the safe and reliable operation of the distribution system under both normal and emergency operating conditions.

(d) - (f) (No change.)

14:7-1.11 Installation of pipe

(a) - (c) (No change.)

(d) Whenever pipe coating is applied, the pipeline operator shall take the following additional precautions:

1. Tests and inspections shall be made before backfill to ~~*[insure]~~ *ensure* that the coating is adequate and satisfactory; *and*
2. During backfill, precautions shall be taken to ~~*[insure]~~ *ensure* the coating is not damaged~~*[; and~~
3. ~~On completion of backfill, tests shall be made to ascertain if the coating is adequate and satisfactory]*.~~

(e) (No change.)

(f) An operator shall place a yellow subsurface marking or warning tape in the backfill material above a transmission or distribution pipeline whenever the pipeline is installed, repaired or replaced, except that this requirement shall not apply to a transmission or distribution pipeline that is being installed, repaired or replaced ~~*[by]~~ *using techniques that do not disturb the backfill above the pipeline, such as* directional drilling*, insertion* or boring. For pipes of less than 16 inches in diameter, the operator shall install one six-inch wide tape. For pipes of 16 inches or more in diameter, the operator shall install one 12-inch wide tape, or two 6-inch wide tapes installed side by side.

14:7-1.12 Minimum cover ~~*[of mains and service lines]~~ *over natural gas pipelines*

(a) - (c) (No change.)

14:7-1.14 ~~*[Testing]~~ *Pressure testing*

(a) (No change.)

(b) The Board shall be notified at least three business days prior to pressure testing of any gas transmission pipeline~~*, through an e-mail or telephone call to the Board's Bureau of Pipeline Safety*.~~ Officials of municipalities wherein a line is to be tested shall also be notified in order that proper and adequate police protection may be provided.

(c) (No change.)

(d) Test pressure for any gas transmission pipeline shall be maintained wherever possible for a period of 24 hours but in no event for a period of less than 12 hours. If an operator cannot perform a 24-hour test, the operator shall submit a written request to the Board for approval of a shorter test period, including an explanation of why a 24-hour test is not possible. Board staff in the Bureau of Pipeline Safety will review the request and will determine whether to approve a test period of less than 24 hours.

(e) (No change.)

14:7-1.23 ~~*[Approval]~~ *Review* of operating and maintenance standards

(a) A pipeline operator shall not adopt or revise any operating and maintenance standard ~~*[that]~~ *after {effective date of this rule}, if the standard* affects the frequency or performance of inspections, investigations, surveys, or testing, ~~*[without submitting]~~ *unless the operator has submitted* the new standard or revision to the Bureau of Pipeline Safety for review *under this section,* to determine if the new standard or revision will adversely affect or otherwise downgrade the current level of compliance with the safety requirements of 49 CFR. 192.603, 192.605 and this chapter.

(b) - (d) (No change.)

14:7-1.24 Oversight of construction activity

(a) - (d) (No change.)

(e) A pipeline operator shall ensure the *periodic* inspection and calibration of all equipment, including but not limited to equipment used for cathodic protection, pipe jacking, leak detection, plastic fusion, and pressure testing, which is used in construction, operations, and maintenance activities, in accordance with the frequencies defined in the manufacturers' procedures and specifications. Inspection stickers shall be attached to all such equipment, indicating the date of the most recent inspection and/or calibration. The operator shall maintain records of all periodic inspections and calibrations.

(f) (No change.)

14:7-1.25 Directional drilling operations

(a) - (b) (No change.)

(c) Prior to ~~*[the start of]~~ *beginning* any *natural gas pipeline* HDD work that will be in proximity to and/or will cross gas pipelines subjected to or intended to be subjected to pressure in excess of 125 psig, the pipeline operator shall prepare proposed horizontal directional drilling (HDD) plan and profile drawings. The drawings shall depict all subsurface facilities in proximity to and/or crossing the proposed HDD alignment.

Note: This is a courtesy copy of the adoption. The official version will be published in the New Jersey Register on March 2, 2009. Should there be any discrepancies between this courtesy copy and the official version, the official version will govern.

(d) - (h) (No change.)

14:7-1.26 Operator reporting requirements

(a) - (e) (No change.)

(f) In addition to the other reporting required in this section, a pipeline operator shall comply with the reporting required under N.J.A.C. 14:7-1.20(f).