FEDERAL ENERGY REGULATORY COMMISSION
WASHINGTON, D.C. 20426

June 5, 2006

In Reply Refer To:
Natural Gas Pipeline Company of America
Docket No. AC06-18-000

Keith Snider
Kinder Morgan, Inc.
370 Van Gordon Street
P.O. Box 281304
Lakewood, CO 80228-8304

Attention: Keith Snider
Vice President, Controller
Natural Gas Pipeline Company of America

Reference: Request to capitalize pipeline rehabilitation costs

Dear Mr. Snider:

1. On December 8, 2005, Natural Gas Pipeline Company of America (Natural) filed a letter requesting confirmation that it may capitalize costs incurred in a pipeline rehabilitation project that will address stress corrosion cracking (SCC)[1] on Natural's system. Natural proposes to remediate SCC through the combination of hydrostatic "spike" testing (spike pressurization), pipe replacement, and coating on approximately 1300 miles of pipe at an estimated cost of $140 million over a five year period.[2] The Commission accepts in part and denies in part the accounting request for the reasons discussed below.

[1] SCC is a form of environmentally assisted cracking resulting from the combined action of a corrosive environment, pipe tensile stress, and specific pipeline grades of steel. Natural states that on its system, SCC is further linked to a combination of specific pipe production mills, the year the steel was manufactured, metallurgy, pipeline coating materials, and the pipeline construction processes commonly used from the late 1950's to the early 1970's. Once initiated, cracks will grow, eventually leading to pipeline ruptures.

[2] The $140 million cost includes $100 million of spike pressurization costs and $40 million of pipe replacement and coating.

2. As a result of SCC, Natural has had several ruptures on its system causing the release of natural gas into the atmosphere. In response to Natural's most recent incident, on May 13, 2005, the Associate Administrator for Pipeline Safety at the U.S. Department of Transportation issued a corrective action order (CAO) requiring Natural to perform the "appropriate repairs or other corrective measures that fully remediate the integrity threatening conditions."[3] To comply with the CAO, Natural's parent, Kinder Morgan, Inc., developed and implemented a patented process to locate specific parts of its system that are susceptible to SCC and require remediation (KMI Process). Natural explains that it used the KMI Process as an assessment tool to locate the areas on its pipeline system that are likely to have SCC and that it uses spike pressurization as the remediation tool to fix known problems.

3. Natural explains that spike pressurization is a hydrostatic test that pressurizes the pipe to a pressure above its yield strength and states that it is a scientifically validated method of blunting SCC, which stops or significantly reduces the growth rate of the cracks. Natural also claims that after a section of pipe is pressurized to above the specified minimum yield strength (SMYS) and the existing non-critical cracks are blunted, the useful life of the pipe is extended by up to ten years. Natural asserts that during spike pressurization, the pipe will fail if the SCC has grown beyond the point at which remediation can occur (a critical crack), in which case that section of pipe will be replaced and the process will continue. According to Natural, if the pipe does not fail, the existing non-critical cracks are blunted and the useful life of the pipe is extended by up to ten years. Consequently, Natural believes spike pressurization should be capitalized because it remediates SCC, extends the useful life of the pipeline, is a one-time project, and removes a flaw that existed in the pipe since original construction. Natural also claims that the costs of the SCC project are analogous to the costs referred to in Emerging Issues Task Force (EITF) Issue No. 90-8 (EITF 90-8), Accounting for Environmental Contamination Treatment Costs.[4]

4. Natural states it is currently segregating the costs of the SCC program as construction work in progress. Natural states that upon completion of the work associated with each segment, the costs will be closed to plant and accounted for in the same manner as existing pipeline costs in Account 367, Transmission Mains, and depreciated along with other transmission facilities using the composite depreciation method. The costs will be placed into service as new units of property with 100 feet spike pressurization representing a unit of property. Natural requests confirmation that it can continue to account for its SCC project costs as proposed.

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[3] Natural Gas Pipeline Company of America, USDOT, Office of Pipeline Safety, Docket No. CPF No. 4-2005-1011 (May 2005) at 4.

[4] Financial Accounting Standards Board, EITF Abstract No. 90-8, Capitalization of Costs to Treat Environmental Contamination (1990).

5. Notice of Natural's filing was issued on December 13, 2005, with interventions and protests due as provided in section 154.210 of the Commission's regulations, 18 C.F.R. § 154.210 (2005). Pursuant to Rule 214, 18 C.F.R. § 385.214 (2005), all timely motions to intervene and any motions to intervene out-of-time filed before the issuance date of this order are granted. Granting late intervention at this stage of the proceeding will not disrupt the proceeding or place additional burdens on existing parties. Marathon Oil Company filed a motion for leave to intervene. No protests or comments were submitted.

6. Natural's remediation program falls within the scope of the Commission's accounting guidance on pipeline integrity management costs issued on June 30, 2005, in Docket No. AI05-1-000.[5] In the June 30 Order, the Commission stated that pipeline assessment activities, such as hydrostatic testing and smart pigging in an integrity management program must be charged to maintenance expense.[6] The Commission also stated that remedial and mitigation actions to correct an identified condition that could threaten a pipeline's integrity should be accounted for in accordance with Gas Plant Instruction No. 10, Additions and Retirements of Gas Plant (GPI No. 10).[7] In instances where an expenditure has dual purpose and benefits, the accounting decision is typically made by identifying the primary purpose for which an activity is undertaken and that purpose then determines the accounting for the related costs. As relevant here, if the primary purpose is to blunt cracks, the SCC Project could possibly be capitalized; however, if the primary purpose is to assess the integrity of pipe, the costs must be expensed pursuant to Operating Expense Instruction No. 2, Maintenance (OEI No. 2).[8]

7. As explained below, the Commission finds that the primary purpose of spike pressurization is to serve as an assessment tool rather than a remediation tool. Based on statements by Natural, gas industry literature, and information obtained from the U.S. Department of Transportation spike pressurization is primarily a type of hydrostatic test used to reveal critical cracks that threaten the pipeline's integrity, albeit with the added benefit of blunting minor cracks. Therefore, Natural must expense rather than capitalize the cost of spike pressurization under the Commission's accounting requirements, as set forth in the June 30 Order. Further, contrary to assertions by Natural, blunting cracks in a pipeline using spike pressurization does not meet the capitalization criteria set forth in

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[5] *Jurisdictional Public Utilities and Licensees, Natural Gas Companies, Oil Pipeline Companies*, 111 FERC ¶ 61,501 (2005), (June 30 Order), *reh'g denied*, 112 FERC ¶ 61,309 (2005).

[6] June 30 Order at P 28.

[7] *Id.*

[8] OEI No. 2 – Item 2 includes that costs of inspecting, testing, and reporting on condition of plant specifically to determine the need for repairs, replacements, re-arrangements and changes and inspecting and testing the adequacy of repairs which have been made. 18 C.F.R. Part 201 (2005).

EITF 90-8. Natural may, however, capitalize the cost of pipe replacement and coating undertaken as a part of its remediation program consistent with the requirements in GPI No. 10 and the June 30 Order.

8. The record here supports the finding that the primary purpose of spike pressurization in this instance involves the identification of critical SCC for removal by a separate process, rather than the blunting of non-critical cracks. Natural states that during spike pressurization "the pipe will fail because the SCC has grown beyond the point at which it can be remediated, in which case that section of pipe will be replaced and the remediation process will continue." Thus, before spike pressurization can remediate non-critical cracks, it first serves the purpose of exposing the existing critical cracks in the pipeline, which are then remediated by replacing and coating the affected pipe. Additionally, gas industry literature indicates that gas pipeline companies use spike pressurization for the primary purpose of exposing cracks and ensuring safety. For example, the Research and Special Programs Administration (RSPA) of the U.S. Department of Transportation issued an Advisory Bulletin advising natural gas and oil companies to consider SCC as a possible safety risk and stated that it "has often required the pipeline operator to perform a spike hydrostatic pressure test to expose other cracks and ensure a safe return to full operating pressure."[9] Additionally, in a report on SCC developed for the RSPA, spike pressurization is described as a tool which uses "a short duration high-pressure spike (*e.g.*, 100 to 110 percent of SMYS for 1 hour) to remove long flaws capable of producing a rupture."[10] We also note that as an attachment to its filing, Natural includes a page from a publication by the Canadian Energy Policy Association which describes spike pressurization as "a 'high' pressure test [which] is intended to determine the integrity of the existing pipe within the test section."[11] Under these circumstances, Natural must expense the spike pressurization costs because the primary purpose of the activity is to assess the condition of your pipe. This conclusion is consistent with OEI No. 2 and the Commission's June 30 Order which requires that pipeline assessment activities be charged to expense as incurred.[12]

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[9] Research and Special Programs Administration (Department of Transportation), Advisory Bulletin ADB-03-05, Stress Corrosion Cracking Threat to Gas and Hazardous Liquid Pipelines, October 8, 2003. http://a257.g.akamaitech.net/7/257/2422/14mar20010800/edocket.access.gpo.gov/2003/pdf/03-25421.pdf

[10] Stress Corrosion Cracking Study with Database, Final Report, Michael Baker Jr., Inc., http://primis.phmsa.dot.gov/iim/pdfs/SCC_Report-Final_Report_with_Database.pdf (January 2005) (SCC Report).

[11] Canadian Energy Pipeline Association, Stress Corrosion Cracking – Recommended Practices, section 9.3.2.2 (1999).

[12] June 30 Order at P 27.

9. Further, Natural's reliance on EITF 90-8 is misplaced. To capitalize costs under EITF 90-8, the costs must: 1) extend the life, increase the capacity, or improve the safety or efficiency of property owned by the company, and 2) improve the condition of that property after the costs are incurred as compared with the condition of that property when originally constructed or acquired, if later. Because most routine maintenance activities increase life, safety, and reliability of property, this second criterion is typically the factor that distinguishes an expense from a capital cost.

10. The Commission finds that the second criterion for capitalization, discussed above, is not met because spike pressurization does not improve the condition of pipe to a state better than its original condition. By blunting the cracks in the pipe, the symptom (SCC) is temporarily mitigated; however, the cracks and the cause of the problem (soil ph, imperfections in the pipe, and disbonded coating) remain present.[13] This will cause the blunted SCC in the pipe to eventually grow again and new SCC to develop in other places.[14] Therefore, spike pressurization does not meet the requirements for capitalization in EITF 90-8.

11. The Commission also notes that Natural's statement that its SCC Program is a one-time rehabilitation project is misleading. In making this statement, Natural focuses on the fact that it will conduct spike pressurization one time and that spike pressurization is performed to blunt cracks. However, Natural does not focus on the other characteristics of spike pressurization, the most important characteristic being the exposure of critical defects in the pipe and validating removal of critical defects. From this viewpoint, there seems to be little doubt that some assessment activities will always be required to identify critical defects in the pipe. Natural acknowledges that it will use EMAT technology[15] to routinely assess the condition of SCC on its pipeline system when it becomes available by locating cracks that are in danger of becoming critical.[16]

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[13] *See* Examples 5(a) and 6(a) in EITF 90-8. Example 5(a) is about refining soil on dump property that has been contaminated by operating a garbage dump. Example 6(a) is about the costs to neutralize water in wells with water contamination caused by chemicals that leaked into the wells. These two examples are instances where costs were incurred to treat the symptoms of a problem but do not fix the cause of the problem. In both examples, it was concluded that while the costs addressed an existing concern, it does not mitigate or prevent future contamination and the risk will continue. Accordingly, the EITF concluded these costs should be expensed.

[14] SCC Report at 44.

[15] Natural states EMAT technology is a future inline inspection tool which will permit pipeline operators to conduct inline inspections and locate, with specificity, SCC that is in danger of becoming critical. EMAT technology is not yet commercially viable.

[16] Natural transmittal letter at 6.

Consequently, it can be concluded that spike pressurization is the first phase of Natural's continual effort to validate the integrity of their pipe that will continue as long as Natural operates with SCC susceptible pipe.

12. Accordingly, the Commission rejects Natural's request to capitalize costs associated with spike pressurization. Based on this determination, Natural must treat these costs as maintenance expenses.[17] However, as stated previously, the subsequent pipe replacement and coating of the affected pipe should be treated as a remedial action and capitalized if the requirements in GPI No. 10 are met.

By direction of the Commission.

Magalie R. Salas,
Secretary.

[17] Notwithstanding our decision to require Natural to expense spike pressurization costs, Natural may record a regulatory asset for its spike pressurization expenditures, provided the criteria for recognition of a regulatory asset are met. *See* 18 C.F.R. Part 201, Account 182.3, Other Regulatory Assets, and Definition No. 31, Regulatory Assets and Liabilities.

UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION

Natural Gas Pipeline Company of America Docket No. AC06-18-000

(Issued June 5, 2006)

BROWNELL, Commissioner, dissenting:

Some background information is useful in placing the issue raised in this proceeding in context. Stress Corrosion Cracking (SCC) is a form of pipeline cracking. Once initiated, cracks will grow, eventually leading to pipeline ruptures. As a result of SCC, Natural has had several ruptures on its system. Consequently, on May 13, 2005, the Office of Pipeline Safety (OPS) issued a corrective action order (CAO) requiring Natural to perform "appropriate repairs or other corrective measures that fully remediate the integrity threatening conditions."[1] Natural proposed to remediate SCC through the combination of hydrostatic "spike" testing (spike pressurization), pipeline replacement, and coating on 1300 miles of pipe at a cost of $140 million over a five year period. The $140 million cost includes $100 million of spike pressurization costs and $40 million of pipeline replacement and coating. Natural seeks confirmation that the $100 million of spike pressurization costs can be capitalized.

The order finds that the $100 million of spike pressurization costs must be expensed. The basis for this finding is the conclusion that the primary purpose of spike pressurization is to assess the integrity of the pipe and not to remediate the problem. I disagree.

Natural is a system with approximately 10,000 miles of pipeline. Natural explains that its assessment tool is the so-called "KMI Process". The KMI Process correlates pipeline characteristics such as manufacturer, wall thickness, steel grade, type of coating as well as surrounding soil characteristics to located pipeline segments that are likely to have SCC. Natural has identified 1,300 miles of such pipe. Consequently, the KMI Process is Natural's primary assessment tool, not spike pressurization.

The next step was to develop a remediation plan. The standard pipeline integrity hydrostatic test is a low pressure test (e.g., 90 percent of SMYS for 24 hours).[2] This type of low pressure test only locates defects, it does not correct them. In contrast, spike pressurization is a short duration high-pressure spike (e.g., 100 to 110 percent of SMYS

[1] Natural Gas Pipeline Company of America, USDOT, Office of Pipeline Safety, Docket No. CPF No. 4-2005-1011 (May 2005) at 4.

[2] Stress Corrosion Cracking Study, Final Report (January 2005) at page 43.

for an hour) that will remove long flaws capable of producing a rupture.[3] Pursuant to Natural's remediation plan using spike pressurization, one of two things will happen. The pipe will rupture and have to be replaced. If the pipe does not fail, the crack will be blunted and the life of the pipe extended. Consequently, having already located the segments of pipe with an SCC problem, Natural's plan uses spike pressurization as part of the remediation phase of the project. Importantly, Natural states that its remediation plan using spike pressurization has been submitted to OPS in satisfaction of the CAO to fully remediate the SCC problem.

Finally, the gas industry literature acknowledges pipelines' use of spike pressurization as a remediation tool to extend the life of a facility. Spike pressurization blunts and imparts a compressive residual at the crack tip that will inhibit subsequent SCC crack growth. Once the crack tip is blunted, the pipe is repaired until a new crack grows at the end of the blunted crack. Pipes have survived 10 to 12 years without additional failure.[4] While spike pressurization can be used as an assessment tool, the method that Natural has employed this technique for its SCC problem is not. In comparison, Natural continues to use the standard pipeline integrity hydrostatic test as an assessment tool in its compliance program necessitated by OPS' IM Regulations.

For these reasons, I believe that Natural has justified capital treatment for the costs of spike pressurization incurred in conjunction with its SSC remediation project. Therefore, I dissent.

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Nora Mead Brownell
Commissioner

[3] Id.

[4] Id. at 73-74.