

Regulatory Treatment Of Recoating Costs

Prepared for the INGAA Foundation, Inc., by:
Brown, Williams, Scarbrough & Quinn, Inc.
815 Connecticut Ave., N.W.
Suite 750
Washington, DC 20006

EXECUTIVE SUMMARY

This paper examines current federal regulations of interstate natural gas pipelines with regard to their treatment of recoating costs. These regulations require that costs associated with recoating be expensed in the year incurred. The analysis presented in this paper concludes that permitting pipelines to capitalize recoating costs would result in a more equitable distribution of such costs between future and current customers and would reduce the financial impact on pipelines.

There are over 250,000 miles of pipelines in the interstate network. Over 75% pipeline construction occurred prior to 1970 and the average age of pipeline facilities is about 31 years. Among other factors, the age distribution of the interstate network suggests that recoating requirements could be significant in the near future. A survey of pipeline members of INGAA indicated that 13 of 22 pipeline respondents believe recoating will be required on their system in the near future and 5 pipelines project they will recoat more than 150 miles. Recoating involves many of the same tasks in the construction of the original pipeline. Because the right-of-way will be disturbed, the recoating process will likely be subject to environmental standards, many of which were not in place at the time the original pipe was installed. It is estimated that, in some cases, the cost of recoating could be as much as 60 percent of original construction costs.

The current regulatory accounting requirements require that a item be listed as a retirement unit in order for its replacement to be capitalized. Since the cost of coating the pipe was about 2 to 6.5 percent of the original cost of pipeline construction, most pipeline companies simply considered coating to be a part of the pipeline and did not list coating as a retirement unit. Unless the pipeline is able to obtain an exception to the accounting regulations, the costs associated with recoating must be expensed. This paper concludes that recoating costs are too substantial to be expensed and the requirement to expense such costs is inconsistent with sound regulatory policy because:

- It may encourage replacement rather than recoating.
- It has the potential of impacting the financial wealth of the pipeline industry adversely and raising the cost of capital.
- It is not fair to different generations of ratepayers.

This paper explores a number of options that the FERC might pursue for allowing pipelines to capitalize recoating costs. The most promising method is the issuance of a policy statement by FERC that it intends to treat recoating as an addition to plant which can be depreciated over the remaining life of the recoated pipeline. To maintain the integrity of pipeline accounts, the policy statement could allow the pipeline to make a one-time adjustment to plant accounts using one of different approaches. Under one approach, the adjustment could be done on the basis of the estimated cost of the original coating. Alternately, the FERC could select a percentage of the original cost as proxy for recoating costs and permit pipelines to adjust the plant accounts on this basis or provide documentation for a different percentage.

REGULATORY TREATMENT OF RECOATING COSTS

I. BACKGROUND

The U.S. pipeline network subject to the jurisdiction of the Federal Energy Regulatory Commission (FERC) consists of about 250,000 miles of pipeline. Almost 75% of the pipeline mileage was constructed prior to 1970. As the pipeline network ages, an area of particular concern is that the original coating, applied to pipe for protection against corrosion just prior to laying the pipe, will require replacement. A survey of INGAA pipeline members indicated that some pipelines are now projecting substantial expenditures to replace the original pipe coating on parts of their system. This replacement of the original coating will be referred to as recoating in this paper.

In this paper we examine the regulatory accounting treatment of recoating costs and conclude that the current accounting regulations, which require that the costs associated with recoating be expensed in the year incurred, have negative implications for the pipeline industry and consequently for the customers who depend on the pipelines for safe and reliable gas transmission service. We also examine the effect on the pipelines' rates of changing the current accounting treatment to allow recoating costs to be capitalized. We conclude that permitting pipelines to capitalize recoating costs would not adversely affect the rates paid by pipelines' customers and would result in a more equitable distribution of such costs between future and current customers.

II. RECOMMENDATIONS

Based on our examination of the FERC accounting requirements, it appears that, on a case-by-case basis, FERC may allow pipelines to capitalize recoating costs. However, we conclude that potential costs associated with recoating, when coupled with

the time and effort required of a pipeline company to obtain a favorable determination, warrant FERC's establishing new procedures for accounting for recoating costs. These procedures would automatically allow pipeline companies to retire the existing coating and charge the cost of the replacement coating to the pipeline companies' plant accounts and depreciate such costs over the remaining life of the recoated pipe.

III. THE PROCESS OF RECOATING

During the construction of a new pipeline, a protective coating is applied to the pipe to aid in the prevention of corrosion. The coating is applied at the pipemill or just prior to placing the pipeline in the trench and backfilling. While coating techniques have changed over time, typically in the coating process a pipeline section is cleaned, covered with a protective primer, "doped" with a protective covering and wrapped tightly in a jacket of felt. The coating is checked electronically for imperfections. Any imperfections, normally small holes in the coating, are marked and repaired before the pipeline is lowered into the ground.

It is difficult to estimate the period during which the original coating will protect a pipeline from corrosion. The type of soil and soil composition affect the useful life of the coating. The materials and methods of installation used will also have an effect, and over time, both the type of materials used and methods of installation have changed. However, over time, the coating is expected to deteriorate and require replacement.

The interstate pipeline network consists of 250,000 miles of pipeline. The installation of pipeline miles by decades is presented in Figure 1.

DISTRIBUTION OF PIPELINE MILES

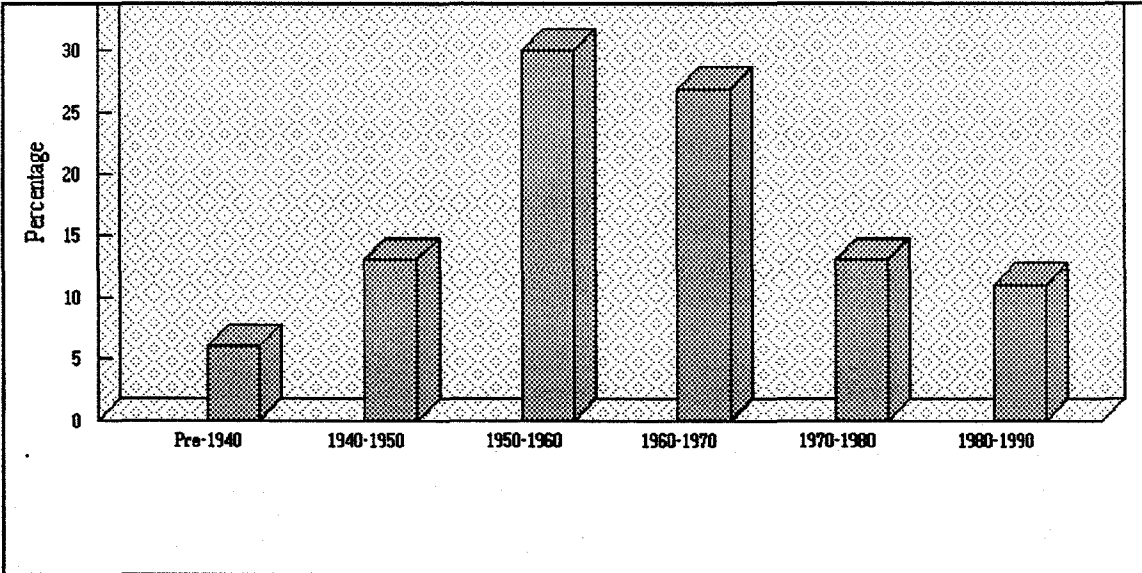


Figure 1

Over 75% of pipeline construction occurred prior to 1970. Based on this distribution of construction, the weighted average age of pipeline facilities is about 31 years. Thus, while the age at which the original coating must be replaced cannot be projected with any certainty, the age of the interstate network suggests that recoating requirements could be significant in the near future.

In this connection, INGAA conducted a survey of its members concerning their plans relating to recoating pipeline facilities. The responses to that survey indicate that certain pipeline companies currently plan to recoat significant portions of their systems.

INGAA received responses to its survey from 22 major pipeline companies regarding their plans for recoating pipeline facilities. Of the 22 respondents, 13 pipeline companies indicate that they believe recoating will be required on their systems in the

near future. Of the 13 pipelines projecting a short-term need for recoating, 5 pipeline companies project they will recoat more than 150 miles. One pipeline estimates that over 1,000 miles will require recoating. The estimated cost of recoating by a pipeline as a percentage of that pipeline's O&M expenses ranges from 6 to 10%.

The results of the survey for the five pipelines are set forth in Table 1:

Table 1

| Company | Miles to be Recoated | Estimated Costs |
|---------|----------------------|-----------------|
| A | 751 | \$164,581,000 |
| B | 425 | 21,250,000 |
| C | 1112 | 70,981,000 |
| D | 171 | 40,800,000 |
| E | 427 | 80,032,000 |

The cost of the original coating was a relatively small portion of the total cost of constructing the pipeline, because applying the original coating was incremental to the process of laying the line. That is, the pipe was out of the ground and the company simply needed to apply the coating before the pipe was placed in the trench and covered. Based on the reports of construction cost by certain pipeline companies, the original cost of coating is estimated to be from 2 to 6.5 percent of the total cost of pipeline construction, as shown in Table 2.

Table 2

PIPELINE COATING COSTS V. CONSTRUCTION COST

| Docket No. | Coating Cost | Total Cost | Coating Cost As Percentage of Total Cost |
|------------|--------------|-------------|--|
| CP75-158 | 74,000 | 1,680,000 | 4.4% |
| CP78-143 | 370,000 | 5,723,000 | 6.5% |
| CP79-26 | 9,900 | 261,600 | 3.8% |
| CP81-179 | 391,400 | 8,762,500 | 4.5% |
| CP82-85 | 591,500 | 24,702,200 | 2.4% |
| CP74-317 | 330,600 | 17,110,800 | 2.0% |
| CP78-216 | 21,780 | 545,000 | 4.0% |
| CP79-157 | 136,000 | 5,047,500 | 2.7% |
| CP80-279 | 213,310 | 4,730,240 | 4.5% |
| CP81-408 | 85,519 | 2,689,003 | 3.2% |
| CP79-80 | 2,843,679 | 57,793,863 | 4.9% |
| CP84-98 | 329,814 | 9,265,780 | 3.6% |
| CP79-248 | 8,114 | 340,235 | 2.4% |
| CP79-261 | 5,703 | 204,600 | 2.8% |
| CP81-207 | 198,750 | 3,432,988 | 5.8% |
| CP81-470 | 30,221 | 1,277,600 | 2.4% |
| CP77-453 | 447,463 | 22,048,651 | 2.0% |
| Average | 6,378,263 | 173,264,160 | 3.7% |

SOURCE: FERC Construction Cost Reports

By contrast, recoating an existing pipeline segment involves a considerable capital expenditure. It involves many of the same tasks involved in the construction of the

original pipeline. Recoating a pipeline segment requires taking the line out of service and venting the natural gas. The line must be uncovered, the old coating removed and the pipe cleaned, repaired if necessary, primed and then coated and wrapped. The pipe can then be covered and the right-of-way restored. Because the right-of-way will be disturbed, the recoating process will likely be subject to environmental standards. Many of today's environmental standards were not in place at the time the original pipe was installed. The cost associated with recoating will be significant. In some cases, it is estimated that the cost of recoating could be as much as 60 percent of the original construction costs.

IV. CURRENT REGULATORY ACCOUNTING

Pipeline companies are required to maintain their books and records in accordance with the Uniform System of Accounts prescribed for natural gas companies by the FERC. This system of accounts requires that pipeline companies maintain a Continuing Plant Inventory Record. Generally, the plant inventory record provides detailed information about retirement units sufficient to relate physical plant to the costs recorded in the gas plant accounts. A retirement unit is defined as an item of plant which, when retired with or without replacement, is accounted for by crediting the book cost of the item to the gas plant account in which the item was included. Pipeline companies are also required to maintain a list of retirement units in accordance with specific instructions set forth in the FERC's accounting regulations. A component of a property unit may be listed as a

separate retirement unit if it is *relatively costly* and is not an *integral part* of the property unit.

Generally, when property is retired, plant accounts are credited with the book cost of the retired plant and the depreciation reserve is charged with the book cost of retired plant. The continuing property records of the company are also revised to reflect the deletion of the retired property. In this way, the plant accounts and property records are consistent. That is, the property records identify and describe the plant for which costs are recorded in the plant accounts. Maintaining a continuing property record assures that the assets for which costs are recorded do in fact exist.

The purpose of the accounting regulations is thus to preserve and assure the integrity of the company's accounting system. In order to maintain consistency between the property records and the costs recorded in the plant accounts, items retired must be identified separately as retirement units. Moreover, the accounting regulations generally comport with real world distinctions between capital expenditures and expenditures made for maintenance. The requirement that retirement units be relatively costly and not an integral part of a larger retirement unit recognizes that as a general matter, small items would not be listed as a retirement unit and any subsequent replacement of the small item would simply be considered as maintenance of the capital asset of which the small item is a part.

Whether an item of plant may be retired and its replacement treated as a capital cost hinges on whether the item is recognized as a retirement unit. To be recognized as a retirement unit, the item must be specifically listed by the company or be embraced by

components or parts of general units described in Instruction No. 10 of the Gas Plant Instructions.^{1/} The original cost of coating was not listed as a retirement unit in the property records of most pipeline companies. Instead, the coating was simply considered to be part of the pipeline. Consequently, unless the pipeline is able to obtain an exception to these accounting regulations, the cost associated with recoating must be expensed under the current accounting regulations.

One way that the replacement of minor item of property which does not qualify as a retirement unit may be capitalized is if it results in a "substantial betterment." While recoating a pipeline will extend the useful life of the original pipeline, it is not clear that such an extension would be viewed as a "substantial betterment."

V. IMPLICATIONS OF THE ACCOUNTING REGULATION

The requirement that an item be listed as a retirement unit in order for its replacement to be capitalized is predicated on the notion that *relatively costly* items which are not integral parts of a system would be listed as retirement items and minor items would be considered as maintenance of the retirement unit. This works well under normal situations because the cost of replacing most minor items, which were not listed as retirement units, does not significantly affect operating costs.

Recoating a pipeline is *relatively costly* compared to the cost of the pipeline. Recoating costs can have a significant effect on operating expenses. For these reasons,

^{1/} Part 216 sets forth a list of general retirement units.

the rationale for the requirement that items not listed as retirement units be expensed does not particularly fit recoating.

There are several aspects of the current regulatory accounting requirements which are inconsistent with sound regulatory policy when applied to recoating. One problem is that it sends the wrong signal to the pipeline industry. The signal it sends may encourage replacement rather than recoating of pipeline segments because the replacement of a pipeline segment can be capitalized while the recoating of that same segment must be expensed. Depending on its competitive situation, a pipeline could be better off choosing the option which allows the cost to be capitalized because its current rates would not be affected as dramatically as they would if the pipeline were forced to expense the cost of recoating on a current basis.

Another negative implication of the current accounting regulation, as applied to recoating costs, is that it has the potential of reducing the financial ability of the pipeline industry to maintain a safe and reliable transmission network. This is because the pipeline industry, under the restructuring mandated by FERC, has become extremely competitive. Pipelines often must discount their rates in order to maintain markets. The requirement that recoating costs be expensed can significantly affect current rates at a time when competitive pressures may not allow increases in rates to fully recover such costs.

Finally, the current requirement that recoating costs be expensed is not fair to different generations of ratepayers. The cost of recoating a pipeline segment could be as much as 60% of the original cost of constructing the segment. The recoating of the

pipeline segment will benefit future customers as well as present customers. But if the pipeline is required to expense the cost of recoating the pipeline segment, the future customer will gain the benefit of a safe and reliable transmission network without sharing in the cost of providing it.

VI. FERC SHOULD ALLOW CAPITALIZATION OF RECOATING COSTS

Recoating costs are too substantial to be expensed. While capitalization of these expenses will increase the total costs paid by consumers by the amount of return and related income taxes paid on the undepreciated portion of such costs, allowing the costs to be capitalized provides benefits which could more than offset the increase in costs. Allowing recoating costs to be capitalized may result in a delivered price of gas which is competitive with alternate fuels. If so, the consumer would benefit from increased throughput. Allowing recoating costs to be capitalized will eliminate concerns over distortions to current rates and will focus the decision by pipeline companies concerning alternative methods of maintaining a safe and reliable pipeline network on the economics of the alternative methods. The consumer benefits through lower rates when the pipeline is able to make decisions on the basis of economics.

VII. PROPOSED ACTION

There are a number of ways in which the FERC could allow pipelines to capitalize recoating costs:

- (1) It could review requests by pipelines on a case-by-case basis. While this may be acceptable, it does not send correct market or economic signals because the pipeline would have expended the funds before it knew the accounting treatment.
- (2) It could institute a rulemaking proceeding to change the current regulations. This action might not be warranted because the accounting regulations are basically sound. Recoating should be viewed as an exception to the regulations. Moreover, the rulemaking process is time-consuming and is unlikely to provide the Commission with data or information which it does not currently possess.
- (3) It could issue a policy statement stating that it intends to allow capitalization of recoating costs. This method has the advantage of providing notice to all parties of the Commission's intentions. The policy statement should set forth the elements required in order for a pipeline to obtain the capitalization option, and it should provide certainty with regard to the treatment of future costs.

The basic element of a policy statement could be a statement by FERC that it intends to treat recoating costs as an addition to plant which can be depreciated over the remaining life of the recoated pipeline. If FERC believes that adjustments to plant accounts and property records are required in order to maintain the integrity of the pipeline accounts, then the policy statement could allow the pipeline to estimate the cost of the original coating and make the required adjustments on this basis. Alternatively,

the Commission could select a percentage of the original cost as a proxy for the original coating and permit pipelines either to accept the proxy by default or provide documentation for a different percentage.