

provided as an input to the model. The inputs to the model are developed assuming perfect communication among operators with lines in a single corridor, or supplying a single market center such that operators do not take multiple lines out of service that would compound the impact on capacity restriction at that market center. Taking multiple lines out of service in a single corridor might be necessary, if the baseline assessment interval were sufficiently short to require such action.

As the market becomes thinner (*i.e.*, supply is restricted relative to demand at a market center) consumers bid against each other causing spot market prices to rise. Costs developed in the model may be overstated over a 10-year period, because all consumers do not pay spot prices. As pipelines are re-contracted, however, those costs will be reflected in the new contracts.

In response to questions about why pipe assessments carried out prior to the rule currently being considered have not strongly affected gas prices, INGAA indicated that people who currently administer active pigging programs represent only about 25% of the total pipeline mileage and implemented their programs over about a 20 year period. INGAA said that in response to the anticipated rule, operators would have to assess a significant fraction of their systems (the segments covered by a rule) over ten years. The associated supply impacts and consumer costs will therefore be much larger.

The reviewers at the meeting suggested it would be very useful if INGAA would summarize all major assumptions and discuss the direction and approximate magnitude (*e.g.*, small, medium, large) of the effect of each assumption on the resultant cost impact. INGAA agreed to consider how best to respond to comments raised during the meeting and in the review documents that had been prepared in advance by Volpe and DOE reviewers. For detailed discussion on this subject see minutes of this meeting in the docket.

Other Issues Including Those Related to Cost/Benefit

The ninth consideration of integrity management discussed in the June 27, 2001 FR notice, related to other issues including those related to the cost/benefit analysis.

Comments

INGAA commented that RSPA/OPS should perform its cost-benefit analysis starting with current industry practices (as described in recent INGAA reports) as the baseline. They also provided some data on the number of incidents

and property damage over the past fifteen years, but did not provide any information on the impact of incidents and leaks on the cost of gas to customers.

INGAA provided preliminary information on the estimated costs of inspection of all transmission pipelines for three different scenarios on inspection of hard-to-pig (HTP) pipelines. These preliminary costs include estimates to convert HTP segments to make them piggable. The inspections were assumed to be carried out over a ten year period.

| Scenario description | Consumer cost for 10 years period (millions) |
|--|--|
| 1/2 HTP portion pigged, 1/2 HTP portion DA | \$3,892 |
| 1/2 HTP portion pigged, 1/2 HTP portion Hydro | 6,095 |
| 1/3 HTP portion pigged, 1/3 HTP portion DA, 1/3 HTP portion DA | 4,048 |

The numbers in this table were updated through the completed INGAA/EEA analysis discussed above.

On the question of small business impacts, INGAA noted that no more than 50,000 miles of approximately 274,000 miles of natural gas transmission pipelines (and probably much less) could be owned by small businesses. Also, many of the contractors likely to be involved in inspections are small businesses. Finally, the potential exists that increased gas costs will impact small business customers.

AGA/PGA strongly suggested that RSPA/OPS develop the integrity rule for gas transmission pipelines around a performance-based approach.

The Florida Public Service Commission noted that performance type regulations can only work if operators are willing to share information on both performance and potential problems with the regulators. They believe that the risk management demonstration program has shown the operators are unwilling to openly share needed information.

The New York Gas Group strongly supports the development of a performance-based rule that will allow companies the flexibility needed to manage the risks associated with their pipelines, as effectively as possible. They asserted that this position is supported by the NY State Public Service Commission staff.

The Process Gas Consumers Group (PGC) commented that RSPA/OPS should give strong consideration to any

potential economic impact of interruptions in gas supply to industrial concerns that rely on gas in the conduct of their business.

Conclusions From the Consumer Cost Impact Evaluation

Consumer cost and supply availability are major factors in establishing the period for operators to complete the baseline assessment. There are numerous assumptions made in the INGAA study. In general they are designed to underestimate the predicted cost impact. For example, the study does try to optimize time of testing, and assume infinite availability of pig vendors and equipment. However, there are also assumptions in the study that would lead to prediction of higher cost impact than might realistically be expected. For example, the study does not assume learning on the part of the operators, and the analysis reflects marginal costs rather than contracted costs.

The EEA analysis found that consumer cost impact was more significant with short baseline assessment periods than with longer times. The cost impacts were estimated to be \$7.2 billion for a 14-year baseline period, \$13.1 billion for a 10-year baseline period, and \$20.1 billion for a 5-year baseline period. Although not quantifiable in the model, the potential for critical supply interruptions, resulting from the need to perform assessments during high demand periods and the increased difficulty of coordinating assessments on lines feeding the same customers, increases as the baseline period decreases.

RSPA's Conclusions About the INGAA Study

From its review of the INGAA study RSPA concluded that—

Study Performers. The organization that performed the study for INGAA is recognized as an expert in the type of analysis performed. This conclusion is supported by the fact that EEA has been called to testify on significant supply issues before Congress, and that the gas pipeline industry is using the results of the study on which the present impact analysis is based as a major factor in expansion decisions.

Study Conservatism. The peer review identified several assumptions used in the analysis in which it would lead to over-prediction of the gas supply and cost impacts, as well as some areas where the model would be expected to result in under-estimation of these impacts. In balance, the model together with its major assumptions seems to produce a reasonable, possibly an