

methods. This is discussed below in section 4 of *Comments to NPRM*.

The Committee discussed some of the proposed requirements for remediation of anomalies found during an assessment, including whether repair criteria for dents located on the bottom of the pipeline should be different from those for top dents and whether the presence of stress risers or metal loss should affect this decision. The Committee voted that RSPA/OPS:

Modify the proposal to require remediation of dents without stress risers in one year to allow treating bottom-side dents as monitored conditions if the operator runs the necessary tools to perform strain calculations, meets B31.8 strain criteria, and [ensures] that the dent involves no corrosion or stress riser.

RSPA accepted this recommendation and revised § 192.933 to address remediation requirements.

A member of the Committee noted that the proposed waiver language did not exactly track the language in the statute. The Committee recommended that RSPA/OPS:

Revise the proposed waiver language to be consistent with the language in the statute.

RSPA/OPS revised the waiver language in § 192.943 to track the language in the statute. This is discussed below in section 5 of *Comments to NPRM*.

The TPSSC discussed how to cost-effectively protect against delayed failures from third-party damage and whether additional third-party damage prevention methods should be used instead of assessments for third-party damage. The Committee recommended that RSPA/OPS:

Use the language proposed by INGAA, in its April 17, 2003, letter (as modified by Committee comments) as the basis for requiring additional preventive and mitigative measures to address third-party damage.

RSPA accepted this recommendation and revised the third-party damage requirements.

The Committee discussed how to clarify the requirements for an operator to look beyond the HCA segment to address segments outside the HCA that are likely to have similar integrity concerns. After discussion the Committee voted that the rule should:

Require that operators use the risk assessment process as described in ASME B31.8S as the basis for deciding when actions need to be taken for pipeline segments not in HCAs.

RSPA incorporated this recommendation into the final rule.

The TPSSC discussed at what frequency and by what means operators should report performance measures. The recommendation was to:

Require operators to submit performance measures electronically (instead of merely maintaining the information) on a semi-annual frequency.

RSPA revised § 192.945 to incorporate this recommendation.

The Committee discussed the proposed rule's treatment of earlier integrity assessments to allow only assessments conducted after December 17, 1997, to be used as a baseline assessment. The TPSSC recommend that the rule:

Allow, without a time limit, an assessment conducted prior to the rule as a baseline assessment as long as the prior assessment substantially meets the requirements of the rule, and provide that the reassessment for such a segment not be required until December 17, 2009 to the extent allowed by law.

For the reasons discussed below in section 4 of *Program Requirements*, RSPA/OPS is allowing as a baseline assessment any prior assessment conducted in accordance with the requirements of the subpart on integrity management. RSPA/OPS has further revised the rule to specify that the reassessment on a covered segment for which a prior assessment is credited as a baseline be completed by December 17, 2009.

Discussion on Cost-Benefit Analysis

The TPSSC met via conference telephone call on July 31, 2003, to discuss the draft cost-benefit analysis prepared in support of the final rule. RSPA/OPS presented a summary of the benefits and costs of the rule. Because of the integrity requirements in the Pipeline Safety Improvement Act of 2002 (49 U.S.C. 60109), this rule does not impose integrity management requirements from a baseline condition in which no such requirements exist. The law required pipeline companies to develop and follow integrity management programs. This rule takes advantage of the implementation flexibility allowed in the law to focus integrity management efforts on the highest risk areas.

RSPA/OPS estimates that implementing the requirements in the law, without any additional flexibility, would cost approximately \$11 billion over 20 years. Using the same basic assumptions, implementing the provisions of this rule is estimated to cost \$4.7 billion over 20 years, which is \$6.2 billion less than implementation of the law without a regulation. The \$6.2

billion savings represents a benefit of the rule, since the requirements of the law would have to be implemented in the absence of regulatory action. RSPA/OPS informed the Committee that:

- Changes in the definition of HCAs focuses pipeline operator resources on areas of high consequence. Class 3 areas that are sparsely populated have been deleted.

- Confirmatory direct assessment (CDA) is allowed to perform assessments at the seven-year intervals specified in the Act. This method is not among those listed in the law.

- The rule explicitly recognizes the scientific conclusion that low-pressure pipelines are more likely to leak than to rupture. Outside force damage is therefore a relatively more important threat for low-pressure pipelines. The rule provides for assessments and actions that emphasize damage protection, leak surveys, and electrical surveys to better address the relevant integrity threats.

The direct safety benefits of the rule will be realized in reduced consequences of accidents, including deaths, serious injuries, and property damage. RSPA/OPS has estimated the value of this benefit at \$800 million over 20 years. There are a number of other potential benefits of the rule as described to the TPSSC:

- Improved ability to site new pipelines in certain high-volume markets because of the improvements in public confidence. RSPA/OPS informed the Committee that this benefit is difficult to quantify, and would be qualitatively described in the final regulatory analysis.

- Averting accidents with larger consequences than any experienced to date. The quantitative estimate of this safety benefit is based on the historical accident record. Population growth along some transmission pipelines puts more people at risk and exposes the pipelines to increased chances of third-party damage. Therefore, it is possible that accidents larger than any in the historical record could occur. This rule will act to significantly reduce the likelihood of such accidents, because it is focused on precisely the high population areas in which they could occur. RSPA/OPS informed the Committee that this benefit would be analyzed further and quantified in the final regulatory analysis.

- The final rule exceeds the requirements of the law in ways that will avert accidents. This includes the requirement that consensus standards be used, and that a threat-by-threat analysis be performed to ascertain needed protections.