



Performance Tracking & Monitoring, and Data Initiatives

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RSPA/OPS
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RSPA/OPS



Recap

- Understanding the Context
 - Current Requirements
 - Stakeholder Demand for Information
 - Safety Enhanced Via Information
 - Security Concerns Post 9/11
 - How OPS is Responding to Three Overarching Areas for Today's Workshop:
 - Integrity Management
 - ➔ • **Performance Metrics**
 - Public Awareness Initiatives



Why Discuss Performance Monitoring and Data Initiatives Today?

- To **Inform** the Public on OPS Activities Related to Data & Performance Monitoring
- To **Engage** the Public and Solicit Your Opinions at an Early Stage
- To **Enable** a Public Role in Promoting Pipeline Safety



How Can Performance Measures Be Used to Improve Safety & Reliability?

- To Inform the **Public** on Trends in Overall Pipeline Safety and Performance
- To Provide **Regulators** Access to Evidence of the Effectiveness of Operator Integrity Management Practices
- To Provide **Operators** Information on Safety Issues and on the Effectiveness of Efforts to Manage Them



How Might the Public Use Performance Measures?

- To Enhance Understanding of Performance Trends for Pipelines Operated Near Home
 - First Performance Information Must be Developed for Individual Pipe Segments
- To Support Advocacy of Accelerated Performance Improvements Where Needed
- To Inform Judgement on Whether to Support Pipeline System Expansion or Increased Capacity of Existing Lines



How Will Regulators Use Performance Measures?

- To Supplement Information From Inspections
- To Monitor Operator Performance Trends and Focus Inspection Resources
- To Evaluate the Effectiveness of Changes in Equipment and Practices
- To Support Decisions Regarding Customized Operator Approaches to Address Performance Issues
- To Communicate the Impact of Regulatory Changes on Operator Performance



How Do Performance Measures and Improved Data Fit the OPS Strategy?

- Support Identification of Failures & Causes
 - More Stringent Spill Reporting Limits
 - Expanded Incident Cause Categories
 - Enhanced Annual Reporting for Liquid Lines
- Support Assembly and Communication of Performance Focused on the Pipeline
- Support Evaluation of Operator Performance as well as Pipeline Performance



Will Operators be Required to Develop and Report PMs?

- OPS Is Considering Requiring Operators (in Gas IMP) to Provide Information on the Four Measures Required in ASME B31.8S
- OPS Expects to Mirror These Requirements in Revised Liquid IMP Rule
- OPS Is Planning to Issue a Communications Rule in Which Measures of Use to Public Safety Officials Will Be Mandated
- OPS Expects to Monitor Measures Relevant to Integrity Management During Inspections



What are the Difficulties in Developing Useful & Meaningful Performance Measures?

- Collecting Data on Performance Measures Implies a Desired Trend – May Be Misleading
 - (E.G., Monitoring Trends in Incidents May Lead to Under-reporting – Counter to Management Objective)
- Meaningful Measures Must Be Normalized
 - (E.G., “Immediate Repair Defects” *Per Mile*)
- Measures That Monitor Effectiveness of Individual Practices: Very Difficult to Find
- Consistent Definitions Needed
 - (E.G., “Anomaly”)



What are the Difficulties in Using Measures to Communicate Performance?

- Meaningful Inter-Operator Comparisons are Difficult
 - (i.e., Pipeline History and Past Management Practices will Impact Measures - Only Trends Reflect the Effectiveness of Current Practices)
- Security of Pipeline Systems Must be Considered
 - (Therefore, Some Information Restricted to Responsible Representatives of the Public)
- Requirements on Paperwork Reduction May Impact Development and Reporting



Examples of Performance Measures Likely to be Required

- Four “Required” Measures in B31.8S
 - Miles Assessed vs. Program Requirements
 - Number of Immediate Repairs Completed
 - Number of Scheduled Repairs Completed
 - Number of Leaks, Failures, Incidents (by Cause)
- “Required” Measures in API 1160
 - Volume of Product Released
 - Number of Release Incidents
 - Fraction of Required Assessments Completed
 - Community Outreach Program Effectiveness (How?)
 - Completion of Description of Integrity Management Program



Ongoing Efforts of Value to Industry, Public & Regulatory Community (1/2)

- OPS Development of New Requirements:
 - Rulemaking on Integrity Management and Communications
 - More Comprehensive and Meaningful Incident Reporting
- API Assembly & Analysis of Metrics: PPTS
 - Attempt of Identify Causes of Accidents to Support Prevention Strategies



Ongoing Efforts of Value to Industry, Public & Regulatory Community (2/2)

- Gas Pipeline Performance Metrics Team
 - Developing Measures for the Public, Regulators and Operators
 - Special Focus on Meaningful Measures for the Public
- Performance-Related Information, Including Incident Data, Aligned with Pipe Location
 - IOCS Restructuring Consistent with NPMS



Regulatory Reliance on Performance Measures Must Evolve

- OPS Has Historically Relied on Prescriptive Requirements
 - (Check List Inspection, Assure Presence of Basic Design & Operation Elements)
- OPS Must Next Rely on Process Requirements
 - (Systems-Focused Inspection, Promote Continuous Process Improvement)
- OPS Must Ultimately Identify and Monitor an Evolving Set of Performance Measures
- Severe Events Occur Infrequently – OPS Must Avoid Over-Reaction to Annual “Trends”
 - (Either Up or Down)



Public Access to Better Performance Measures and Data will Improve

- **Strengthened and Expanded Annual Reports**
 - Gas Lines – Continuing
 - Liquid Lines – Being Added
 - Distribution Lines – In Progress
- **Access to Rule-Mandated Performance Measures, Including More Leak Data**
- **Access to Measures Tied to Specific Pipe Locations (“Pipe-Centric View”)**



Pipeline Industry Performance Measurement Initiatives

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Questions for Panel Discussion

- Q: What types of indicators are of value to the public in order to understand the effectiveness of an operator's overall safety and environmental performance?
- Q: Who should supply information about those indicators to the public?
- Q: How should such information be supplied?



Questions for Panel Discussion

- Q. What types of indicators are of value to the public in order to understand the effectiveness of federal and state pipeline regulatory programs?
- Q: How should such information be supplied?



Questions for Panel Discussion

- Q: Are additional performance measures related specifically to the new requirements for operators to have integrity management programs of value to the public? To state and local officials?