Tides of Change
What Does it Mean for Pipeline Safety?

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What’s the Environment?

- **Unpredictable Landscape**
  - Ongoing Political Banter
  - Robust dialogue

- **Legacy Administration**
  - Pipeline Reauthorization (PIPES Act)
  - Increase in regulations

- **Current Administration**
  - Executive Orders (EOs)/Presidential Memos
  - Nationalistic Trends
  - Less Regulation/Regulatory Reform
Administration Priorities
EOs & PMs

- Construction of American Pipelines
- Expediting Environmental Reviews & Approvals for High Priority Infrastructure
- Reducing Regulation and Regulatory Cost Burden
- Enforcing Regulatory Reform
- Promoting Energy Independence & Economic Growth
What does it all Mean for the Pipeline Industry?

Hopefully reform that brings....

- Certainty
- Consistency
- Timeliness

Regulations that are.....

- Improving Pipeline Safety
- Fit for Purpose
- Cost Beneficial
Greatest Regulatory Focus for Pipeline Industry

• NPRM, “Pipeline Safety: Safety of Gas Transmission and Gathering Lines”

• Final Rule, "Pipeline Safety: Safety of Hazardous Liquid Pipelines"
API-AOPL Pipeline Safety Strategic Plan

- Three-year time horizon
- New Paradigm Shift
- Transparency
  - 29 measures tied to goals and objectives of plan
  - 5-6 Overarching Key Performance Indicators
- Stakeholder Awareness Focus
Strategic Plan Goals & Objectives

GOAL 1: Promote Organization Excellence
• Objective 1.1 - Expand Safety Management Systems
• Objective 1.2 - Promote Best Safety Practices Sharing
• Objective 1.3 - Improve Pipeline Integrity Through Technical Data & Analysis

GOAL 2: Improve Safety Through Technology & Innovation
• Objective 2.1 - Improve Pipeline Integrity Inspection Technology
• Objective 2.2 - Enhance Incident Identification & Response

GOAL 3: Enhance Emergency Response Preparedness
• Objective 3.1 - Boost Operator & First Responder Planning, Preparedness & Response Capabilities

GOAL 4: Increase Stakeholder Awareness & Involvement
• Objective 4.1 - Improve stakeholder communication on energy infrastructure and pipeline safety
• Objective 4.2 - Promote innovative approaches to enhancing damage prevention
API Pipeline Standards

PIPETLINE SAFETY STARTS WITH YOU

INTEGRITY
- RP 1160 Managing System Integrity for Hazardous Liquid Pipelines
- Std 1163 In-line Inspection Systems Qualification Standard
- RP 1176 Assessment and Management of Cracking in Pipelines
- RP 1133 Managing Hydrotechnical Hazards for Pipelines Located Onshore or within Coastal Zone Areas
- TR 1179 Guidelines for Use of Hydrostatic Testing as an Integrity Management Tool
- Bull 1178 Data Management and Integration

CONSTRUCTION, INSPECTION, AND REPAIR
- RP 1111 Design, Construction, Operation, and Maintenance of Offshore Hydrocarbons Pipelines and Risers
- RP 1173 Construction Parallel to Existing Underground Transmission Pipelines
- RP 1159 Basic Inspection Requirements - New Pipeline Construction
- RP 2200 Replacing Hazardous Liquids Pipelines
- RP 1177 Quality Management Systems for New Pipeline Construction

UNDERGROUND STORAGE
- RP 1170 Design and Operation of Solution-mined Salt caverns Used for Natural Gas Storage
- RP 1171 Functional Integrity of Natural Gas Storage in Depleted Hydrocarbon Reservoirs and Aquifer Reservoirs
- RP 1114 Design of Solution-mined Underground Storage Facilities
- RP 1115 Operation of Solution-mined Underground Storage Facilities

PUBLIC SAFETY AND DAMAGE PREVENTION
- RP 1162 Public Awareness Programs for Pipeline Operators
- TR 1166 Excavation Monitoring and Observation for Damage Prevention
- RP 1109 Marking Liquid Petroleum Pipeline Facilities
- RP 1102 Steel Pipelines Crossing Railroads and Highways

MANAGEMENT SYSTEMS
- RP 1173 Pipeline Safety Management Systems
- RP 1160 Managing System Integrity for Hazardous Liquid Pipelines
- RP 1175 Pipeline Leak Detection - Program Management
- RP 1177 Quality Management Systems for New Steel Pipeline Construction
- RP 1174 Onshore Hazardous Liquid Pipeline Emergency Preparedness and Response

CYBERNETICS AND CONTROL ROOM
- RP 1113 Developing a Pipeline Supervisory Control Center
- RP 1130 Computational Pipeline Monitoring for Liquids Pipelines
- TR 1149 Pipeline Variable Uncertainties and Their Effects on Leak Detectability
- RP 1161 Pipeline Operator Qualification
- Std 1164 Pipeline SCADA Security
- RP 1165 Pipeline SCADA Displays
- RP 1167 Pipeline SCADA Alarm Management
- RP 1168 Pipeline Control Room Management
- RP 1175 Pipeline Leak Detection - Program Management

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New Way of Thinking

• **Recommended Practices (RPs) - Layered Management**

• **Programmatic Approach in Implementation of RPs**
  - Concurrent identification of program elements, e.g. training, supporting materials, etc.
  - Greater support to operators through development of tools
  - Measure commitment, progress and safety improvements

• **RP 1173, Safety Management Systems is model**
  - Similar Implementation – RP1175, RP1174
  - On the horizon – RP1160 & RP1177
Value of Sharing & Learning

- Foundation of Continuous Improvement
- Robust history of sharing within the industry
- Sharing is important but learning is critical
- SMS driving us toward next generation of sharing & learning
- Data management & use is key
Stakeholder Engagement Focus

- Priority within 2017-2019 Strategic Plan
- Major revisions to RP 1162, *Public Awareness Programs for Pipeline Operators*
- Tribal Affairs Pipeline Team underway
- Commitment to Landowners published
Questions

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