

PHMSA Control Room Management Implementation Workshop

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Gas Pipeline Approach

- Industry-wide Compliance Framework Document
 - ~100 operating companies contributed
 - Distribution & Transmission Pipelines
 - Included Best Practices
 - Recommendations with flexibility for each operator to customize

Adequate Information

- 40 CFR Part 192
 - §192.631(c)(1)
 - API RP 1165: Pipeline SCADA Displays
 - §192.631(c)(2)
 - Point-to-Point Verification
 - §192.631(c)(3)
 - Internal Communications Plan
 - §192.631(c)(4)
 - Backup SCADA Systems
 - §192.631(c)(5)
 - Shift Change Documentation

API RP 1165 – Pipeline SCADA Displays

Implement sections 1, 4, 8, 9, 11.1, and 11.3 of API RP 1165 (incorporated by reference, see § 192.7) whenever a SCADA system is added, expanded or replaced, unless the operator demonstrates that certain provisions of sections 1, 4, 8, 9, 11.1, and 11.3 of API RP 1165 are not practical for the SCADA system used

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API RP 1165 – Pipeline SCADA Displays

- **Section 1:** Scope Purpose & Limitations
- **Section 4:** Human Factors Engineering Considerations in Display Design
- **Section 8:** Object Characteristics
- **Section 9:** Object Dynamics
- **Section 11:** Administration
 - 11.1: Company Consistency
 - 11.3: Multiple Facility Consistency

API RP 1165 – Pipeline SCADA Displays

- Key considerations:
 - Define when a SCADA system is added, expanded or replaced
 - Define practicality of required API RP-1165 changes

Point-to-Point Verification

Conduct a point-to-point verification between SCADA displays and related field equipment when field equipment is added or moved and when other changes that affect pipeline safety are made to field equipment or SCADA displays

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Point-to-Point Verification

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Point-to-Point Verification

- Key Considerations:
 - SCADA or Field Equipment
 - Added
 - Moved
 - "Other Changes"

Internal Communications Plan

Test and verify an internal communication plan to provide adequate means for manual operation of the pipeline safely, at least once each calendar year, but at intervals not to exceed 15 months

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Internal Communications Plan

- Key considerations:
 - Manual operation of pipeline
 - Application
 - Entire System
 - Section
 - Method
 - By Drill
 - By Actual Event
 - Ensure systems work appropriately
 - Ensure personnel are familiar with communication requirements under manual system operation

Backup SCADA Systems

Test any backup SCADA systems at least once each calendar year, but at intervals not to exceed 15 months

Backup SCADA Systems

- What constitutes a test?
 - Ensure backup systems are in working order
 - Failover procedures streamlined
 - Employees familiar with how backup system works
 - Notification
 - Physical deployment of personnel to off-site facilities
 - Employment of the backup system
 - Specific events?
 - Failure of main system(s)?

Shift Change Documentation

Establish and implement procedures for when a different controller assumes responsibility, including the content of information to be exchanged

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- Key Considerations:
 - Shift Change @ End of Normal Shift
 - Change of controllers within normal scheduled shift change times
 - “Pass The Baton” Assurance

Shift Change Documentation

- Items covered, but not limited to:
 - Abnormal Operation Conditions
 - Current pipe condition/line-pack
 - Ongoing maintenance
 - Pressure restrictions
 - Impending weather & forecasts
 - Storage status
 - SCADA concerns or issues
 - Horsepower utilization and/or changes
 - Gas supply
 - Pipeline interconnects
 - Gas quality
 - Various alarm status
- Items may vary depending on system operations, time of year, or other “global” items to consider

Summary

- Collective effort for compliance
- Extensive work in developing industry-wide document
- Even more work at a Pipeline Operator level to meet specific needs
- Ongoing industry dialogue for challenges & questions
- Some concerns for how PHMSA will “define” some terms in regulatory text
- Additional feedback and guidance from PHMSA published FAQs
- How will those FAQs (1Q 2011) impact the implementation & potentially accelerated implementation (August 2011) for some of “Adequate Information” section?

Contact Information

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