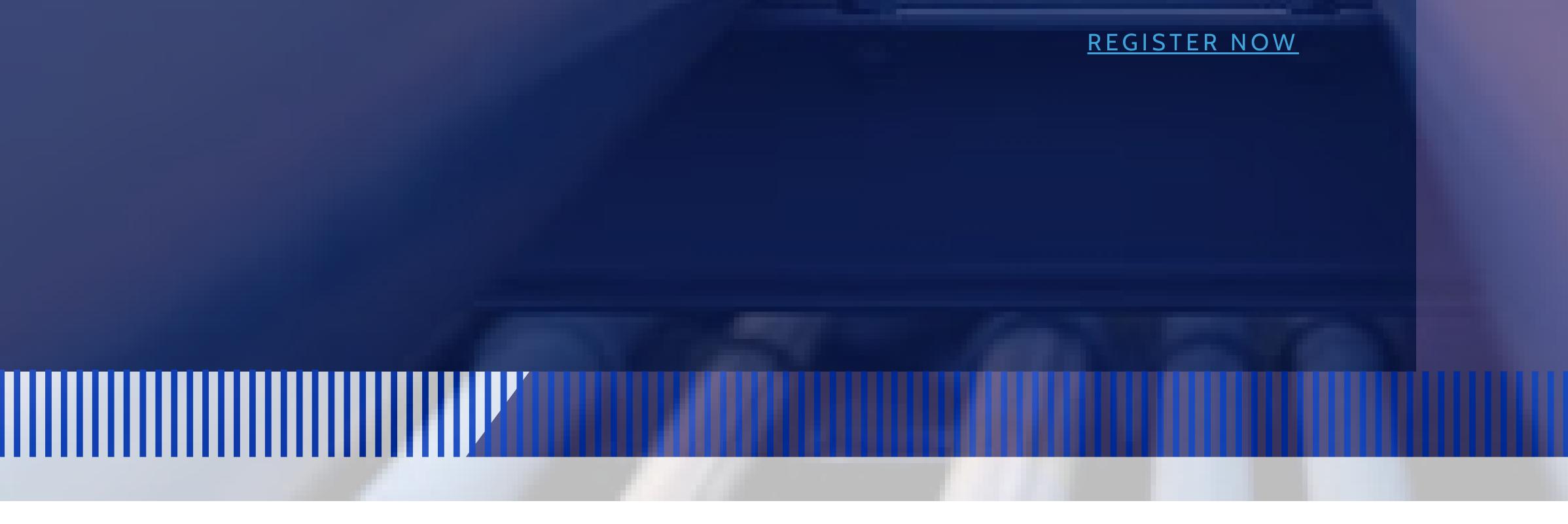


#### PIPELINE CONFERENCE & EXPO <u>EVENTS.API.ORG</u> | MAY 1 - MAY 3 | NASHVILLE

# EADING

# ENERGY EVOLUTION

+ 100 technical sessions, new tracks, diverse industry panels and exhibitors





The entire world is on an extraordinary journey of sustainability. Amidst innovations, challenges, and forward-looking strategies resides the linchpin of the energy evolution – the Oil & Gas industry.

Every day, this industry delivers essential energy across continents, through millions of miles of infrastructure and vehicles, spanning diverse landscapes and climate zones. Not only do these networks deliver safe, reliable energy, they are supported by thousands of workers leading transformative efforts in new technologies, emergent energy sources, workforce development, and safety. Join us, as industry stakeholders travel to Nashville, Tennessee in May 1-3, 2023 to connect, collaborate, learn, and continue leading the energy evolution.

### Leading the Energy Evolution.



### Join us in Nashville.



A minority owned JW Marriott Conference & Expo venue strategically located in the heart of Nashville designed to foster



connection.

Curated program tracks to improve attendee navigation with ease and excitement!

BRIDGESTODE ARENA

Multiple keynotes and diverse panels selected to provoke learning, innovation and new insights.

Tew Highlights

> Renewed focus paired with action around Diversity, Equity, Inclusion and Accessibility throughout the

### entire Conference & Expo.

Exhibit Hall in a central location to promote regular and routine exchanges of information about services & products.



### PIPELINE CONFERENCE & EXPO



Soon









### EVENTS.API.ORG | MAY 1 - MAY 3 | NASHVILLE

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# Featured

eynotes

DEI&A Panel

Coming Soo

02 May

The State of Security Panel Coming Soon



PIPELINE CONFERENCE & EXPO

EVENTS.API.ORG | MAY 1 - MAY 3 | NASHVILLE

### Click Schedule At A Glance



|   |   | ater  |                                     |
|---|---|---|-------------------------------------|
| Sunday,<br>April 30                         | Monday,<br>May 1  | Tuesday,<br>May 2   | Wednesday,<br>May 3                 |
| <b>Registration:</b><br>3:00 pm – 5:00 pm   | Registration:<br>6:30 am – 5:00 pm                        | Registration:   | Registration:<br>7:00 am - 12:00 pm |
| DEI&A Social:<br>5:00 pm – 7:00 pm<br>(TBD) | Exhibit Hall Hours:<br>7:00 am – 6:30 pm                  | Exhibit Hall Hours:<br>7:00 am - 2:30 pm                      |                                     |
|   | Opening Keynote &<br>Awards:<br>TBD<br>8:00 am - 10:00 am | Opening Keynote &<br>DEI&A Panel:<br>TBD<br>8:00 am - 9:30 am |                                     |
|   | Technical Tracks:<br>10:30 am - 12:00 pm                  | Technical Tracks:<br>9:30 am - 12:00 pm                       |                                     |

1:30 pm – 5:15 pm

🕑 2:30 pm – 5:15 pm

6

Opening Reception: 5:30 pm – 7:00 pm (Exhibit Hall) The State of Security Panel: 1:30 pm – 2:30 pm

**Reception:** 5:30 pm – 7:00 pm (TBD)

PIPELINE CONFERENCE & EXPO PROGRAM

UNIT OTT



### **Explore the Pipeline Tracks**



### Stakeholder Engagement & Outreach

This track fosters information sharing and engagement around community involvement and multi stakeholder dialogue efforts and tools for continued advancement in safe pipeline operations. Example topics may include leading practices for engagement with communities throughout the lifecycle of a pipeline(s), API Recommended Practices (RP) 1162, Public Awareness Programs for Pipeline Operators and RP 1185, Pipeline Public Engagement, environmental justice and Tribal/First Nation considerations, emergency responder education, and damage prevention outreach.



### **Operational Excellence**

This track explores how oil and gas leaders are operating their assets safely, reliably, sustainably and cost effectively from safety performance to best-in-class standards and systems. Examples topics may include processes for identifying high consequence areas, in line inspection lessons learned, pipeline safety management systems, safety culture, Management of Change, leak detection analysis and remediation for risk reduction and enterprise & operational risk management.



### Environmental, Social & Governance

This track provides industry insights on both current and forward-looking strategies, changes, and approaches to environmental responsibility and broader ESG measures. Examples topics may include habitat management and conservation programs, ESG risks, system hardening and resiliency, carbon capture utilization and storage, methane emission quantification and other sustainable practices by operators.



### Technology & Innovation

This track highlights operational technologies, tools and other innovations that allow oil and gas organizations to advance their operations, asset integrity, risk management, and business continuity and growth. Example topics may include new inspection tools and engineering practices, leak detection technologies, emergency responder applications and emerging fuel developments.



#### Workforce Development

This track offers insight into diverse workforce development strategies in the pipeline industry. Example topics include succession planning to support knowledge transfer, attracting new workers to the industry, talent retention strategies, managing a multigenerational workforce, Operator Qualification (OQ) and inspector certification programs, establishing competency based learning programs, using technology to train, and expanding formal training to include knowledge-based workers.



### Look! Control Room Tracks

### **Team Training**

This track focuses on establishing and maintaining compliance, while fostering collaboration on one of the newest aspects of Control Room Management regulations. Example topics may include regulation history, interpreting regulatory requirements, incorporating team training into both normal and abnormal operations, and non-technical soft skill training approaches.

### **Emerging Tech & the Future Workforce**

This track explores the future of control room operations, sharing insights on technologies, implementation strategies, use cases and best practices, and talent recruitment and acquisition approaches. Example topics

may include automation/autonomous operations, workforce transition, workforce training and skill development, shiftwork transformation, and recruiting techniques.

### Alarm Management

This is track discusses the lifecycle of alarms, from identification to alarm monitoring, and management of change with topics concentrated in challenges related to implementation of an alarm philosophy and fulfillment of regulations requiring an alarm management plan. Example topics may include smart alarms, alarm dashboarding and analysis, impacts by Title 49 rupture response procedures, and alarm workload management.

### Manual Pipeline Operation & Business Continuity

This track highlights response measures and strategies when faced with frequent natural disasters, challenging infrastructure, or staffing limitations while maintaining operations. Example topics may include preparedness and response to social unrest or pandemics, manual operations due to system operations, controller and staffing continuity strategies, and procedure development insights.

### **Compliance Best Practices & Audits**



This track takes a deep look into control room compliance and effectiveness through the lens of regulatory audits, inspections, investigations and self assessments. Example topics may include: lessons learned from inspection findings, inspection preparation successfully demonstrating compliance, differences between regulator inspections and investigations, and the value of self assessments.



### View the Cybernetics Tracks



### Cybersecurity

This track explores topics related to the hardening of critical control systems amongst a backdrop of an everchanging cybersecurity landscape where prudent pipeline operators must continually strive to stay ahead of evolving cyber threats and regulations. Example topics may include strategies for responding to TSA Security Directives, contingency planning, redundancy strategies, cybersecurity approaches to legacy systems, and cybersecurity designs.

### Leak Detection Advancements

This track examines the roles that different leak detection advancements play in ensuring the pipeline industry exceeds the expectations of the public, businesses and communities. Example topics may include new leak detection technologies, implementation and response to the Rupture Rule, leak detection maintenance and optimization of existing systems, and applications of novel leak detection technology to operations.

### **SCADA Improvements**

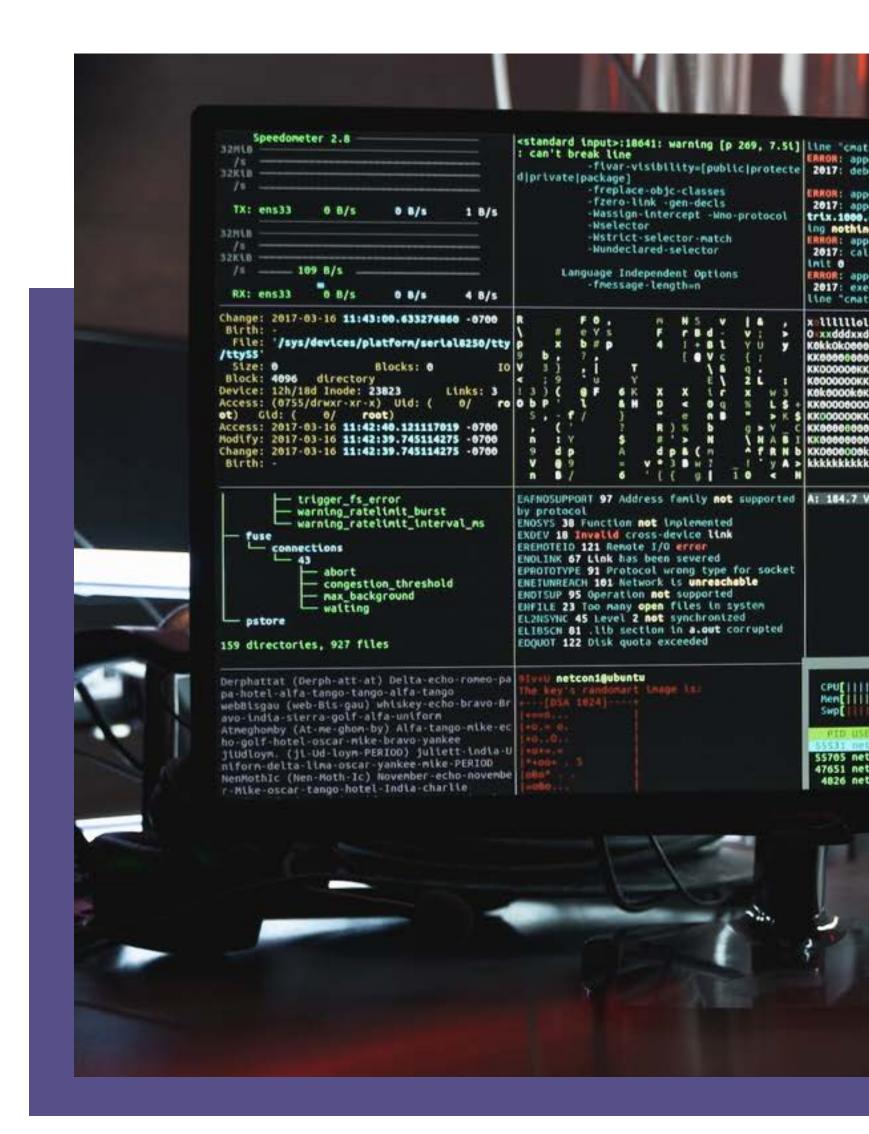
This track provides information about key industry improvements to SCADA systems from the processes to technologies. Example topics may include the modernization of SCADA communications, implementations of Human Machine Interfaces, automation of complex operations, and remote access and support tools or practices.

### Standards Updates

This track provides updates on industry standards, and recommended practices that support the evolution of current industry practices. Example topics may include new standard applications, practice interpretations and industry standards or practices under review.

### **Emerging Technologies**

This track highlights forward looking technological advancements that will



change operational intelligence. Example topics may include drones, energy optimization methods, remote sensing technology and satellite based platforms, virtual and augmented reality, carbon dioxide pipeline monitoring and control innovations.

### Workforce Development

This track promotes the sharing of practices or strategies that support the development and preparation of the diverse workforce aimed at strengthening the industry skills of the current and future workforce. Example topics may include control room remote workforce strategies, knowledge retention and accessibility approaches, and internal qualification evaluation practices.



### Leading the Energy Evolution.

### See you soon.

Attendee Duty of Care: API recognizes the safety of all of those in-person at the2O23 API Pipeline Conference and Expo as a top priority. API is committed to following CDC, local government agencies, and the JW Marriott Nashville Covid-19 health and safety guidelines for hosting in-person events. By attending the2O23 API Pipeline Conference and Expo in Nashville, Tennessee, you agree to comply with all Covid-19 health and safety guidelines adopted by API, that have been recommended by the CDC, local government agencies and the JW Marriott Nashville. Your acceptance of the Attendee Duty of Care is a condition of registration and participation in the 2O23 API Pipeline Conference and Expo.



#### APPENDIX: TECHNICAL SESSION LISTING

### **Technical Session Listing**

**Technical Session** 

Panel: Hydrogen and CO2 - Expanding Opportunities for the Pipeline Sector

Evolving the Pipeline Landscape

Storage Tank Vapor Assessment

High Consequence Areas: Location Matters

Maximize Sustainability and Safety with Advanced Automation Solutions

Characteristics of Energy Efficient, Low Carbon Intensity Pipeline Systems

ESG Update for the Pipeline Industry

Track

Pipeline | Environmental, Social & Governance Pipeline | Environmental, Social & Governance

Consequence Modeling of Releases from Carbon Dioxide (CO2) Transport Pipelines

Wildland Fire Smoke Plume and Hurricane Forecasting

Real World Use Cases of Oil Spill Modeling in Rivers and Lakes

PFAS Risk Management for Energy

Let's Talk Conservation

Panel: Updates on The Environmental Partnership (TEP)

Panel: Enhancing Contractor Management through PSMS and Safety Culture

Pipeline dead legs and potential pressure surges

New Gathering Pipeline Regulations An Operator's Perspective to Achieve Operational Excellence!

API 1188 – A Strategic Approach to Facility Risk

Connecting PSMS With Our Field Work Force [Boots on the Ground]

Demonstration of PSMS Voluntary Information Sharing (VIS)

Geographic Response Plan for Pipeline Water Crossings

Pipeline | Environmental, Social & Governance

Pipeline | Environmental, Social & Governance Pipeline | Environmental, Social & Governance

Pipeline | Environmental, Social & Governance

Pipeline | Environmental, Social & Governance

Pipeline | Environmental, Social & Governance

Pipeline | Environmental, Social & Governance

Pipeline | Operational Excellence

What's in Your Audit?

Lessons Learned – Are we following through?

Developing the Next Generation of Lifesaving Damage Prevention Practices and Metrics

Investigation of Facility Microbiological Induced Corrosion Failures

Impacts of Updated 49 CFR 192 Requirements for Pipeline Corrosion Control

Safe Autonomous Operation of Liquids Pipelines Using Technology

Lessons Learned from Girth Weld Failures of Newly Constructed Pipelines and Industry Responses Pipeline | Operational Excellence



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Tyranny of TRIR as a Measure of Safety Performance

A Regulatory Compliance Management Process to Enhance Pipeline Safety and Compliance

Efficiently Achieve TVC Compliance

Improvement in Hydrotest Procedure and Practice at Phillips 66

SMS: Making It Work!

Applying API 1173 to Assess Controls related to New Regulations

Waterway Modeling is Key in Determining Impacts or Proper Remediation

Stakeholder Engagement Meets Conservation Matters

Pipeline | Operational Excellence

Pipeline | Stakeholder Engagement & Outreach

#### **Opportunities in Public Awareness Outreach**

Guidance for Forming Industry User Groups to Enhance Innovation and Collaboration

The Difference in Today's RP 1162

Panel: RP 1185: What Is It and How Will It Help?

Protecting the Public and Earning Their Trust: Mitigating Agricultural Risk

Engagement – art or science?

Modernizing Stakeholder Communications and Engagement

Do You Really Know Your Pipeline Route?

Application of Volatile Corrosion Inhibitors (VCI)

Improvement of ILI Sizing Accuracy for Problematic Corrosion Profiles (PHMSA Project)

Integrated External Corrosion Management - Using Digital Twins

Further Advances in DAS for Ground Subsidence and Temperature Monitoring

Visualization of Geohazard Movement Assessments Using Google Earth

In-Line Inspection Performance for Mechanical Damage with Coincident Features

Reshaping geohazards

Pipeline | Stakeholder Engagement & Outreach

Pipeline | Stakeholder Engagement & Outreach Pipeline | Stakeholder Engagement & Outreach Pipeline | Stakeholder Engagement & Outreach Pipeline | Stakeholder Engagement & Outreach Pipeline | Stakeholder Engagement & Outreach Pipeline | Stakeholder Engagement & Outreach Pipeline | Stakeholder Engagement & Outreach Pipeline | Technology & Innovation Pipeline | Technology & Innovation

Integrity Data in BI Dashboards Drives Engineering Insights and Program Performance

Essential Elements and Guidelines to Perform a Dent Engineering Critical Assessment

Nondestructive Testing for Toughness of Vintage ERW Pipes

Using Digital Image Correlation Technology To Enhance Learnings From Traditional Pipeline Integrity Testing

Advances Considering Technology Readiness, Regulations, and Commercialization

Recent Advances in Automated Threat Detection and Reporting On Routine Aerial Patrol

Pipeline | Technology & Innovation



### **Technical Session Listing**

Dent Fatigue Life Assessment – Proposed Modifications to API RP 1183

Regulations and Integrity Requirements of Supercritical CO2 Pipelines

Satellite Remote Sensing Data Analytics for Operational Monitoring of Pipeline System

Unprecedented Insight into In-Line Inspection Analytics

Effects of Surface Loading on Pipeline Integrity

The Road Ahead for Pressure Cycling: A Pressure Cycling Fatigue Analysis Application

Impact of CO2 Impurities on Corrosion of Pipelines Transporting Dense Phase CO2

Considerations for Crack ILI Response in Hazardous Liquids Pipelines

Pipeline | Technology & Innovation

Know Your Pipeline with UHR MFL/Cal ILI

Girth Weld Reinforcement with Type B Sleeves

Potential Safety and Integrity Challenges of Hydrogen Pipelines Subjected to Geohazards Loading

Using Satellites for Enhanced Leak and Risk Id., ESG Performance, Compliance & Trust

Damage Prevention and ROW Integrity 2.0 : Analysis of First Multi-operator Operational Campaign

Pipeline Integrity and Leak Detection Verification and Validation Advancements

GIS Technologies for Responsive Pipeline Engineering and Design

Pipeline Stacked Cracks Interaction Burst Pressure Analysis Using 3-D Crack Meshes

Operational Digital Platforms for Offshore Operators

How to integrate Operator Qualification (OQ) into your O&M Competency Management Program

The Science of Safety Training; Defining The Fundamental Drivers of Adult Learning

'Moving from task-based to competency-based talent management: Case Study'

The Normalization of Excellence: A Critical Success Model

Panel : Interpreting the Recently Updated PHMSA Operator Qualification Frequently Asked Questions

Pipeline | Technology & Innovation

Pipeline | Workforce Development

The Future is Now: Modern Recruitment and Retention Strategies to Create and Maintain a Diverse and Equitable Workforce

Roundtable on Cybernetics

Real-Time Data Distribution for Improved Leak Detection and Operational Intelligence in **Pipeline Operations** 

Panel on Cyber Security

Midstream Cyber Security Risk-Based Controls

Achieving the next level of pipeline intelligence through Virtual Competency Teams

A Forty Year Perspective on Pipeline Leak Detection Technologies, Recommended Practices and the Evolution of Current Regulations

Pipeline | Workforce Development

Cybernetics | Cybersecurity

Cybernetics | Cybersecurity

Cybernetics | Cybersecurity

Cybernetics | Cybersecurity

Cybernetics | Emerging Technologies

Cybernetics | Leak Detection Advancements



### **Technical Session Listing**

Pipeline Leak Evaluation and Management

RTTM based Leak detection system for Energy transition

Monitoring of High Pressure Gas Pipelines using Fiber Optic Sensing

Advantages of Machine Learning-Enhanced Leak Detection over Basic Line Balance

API RP 1175 impact on Transpetro's Leak Detection Program

Enabling Pipeline Monitoring Through the Retrofit of Cable-Based Technologies

Realtime Transient Modeling for Gas Pipelines

Leak Detection Key Performance Indicators and Metric Report Creation

Cybernetics | Leak Detection Advancements

### How to replace CPM pipeline leak detection systems effectively? Leveraging Knowledge Management in the Optimization of the Display Lifecycle The Good, the Bad and the Grey Screen: A Human Factors Approach to SCADA HMI Design and API RP 1165 Compliance Understanding and Teaching Hydraulics to Improve Controller Performance in Identifying Pipeline Leaks. Dissecting Alarm Management Definitions Simplifying Effective Control Room Alarm Management Alarm Segregation and Rationalization Strategies Deployed for Control Room Effectiveness How Technology and the New Innovated Control Room will Change our Future Roundtable on Control Room Management Practices Trends in Controller Workload Over the Years

Ensuring CRM Plan Compliance and Effectiveness

Effective Scheduling to Maintain Operations

Improving Display Development in ICS through a Formal Display Life Cycle

Control Room Management Audit Preparation and Effectiveness

Cybernetics | Leak Detection Advancements

Cybernetics | SCADA Improvements

Cybernetics | SCADA Improvements

Cybernetics | Workforce Development

Control Room | Alarm Management

Control Room | Compliance Best Practices & Audits

#### Reducing cost of point to point checkouts

CRM Program – Internal Effectiveness Evaluations

Transform Your Control Room into the future with RIPA Technology

Transpetro's new concept of a logistics integrated Control Center

CRM as the Controller Assistant – Collaboration and Compliance

Securing the gas supply and making the industry sustainable with advanced technologies

How Alarm Management Has Evolved and What Does the Future Hold

Control Room | Compliance Best Practices & Audits

Control Room | Compliance Best Practices & Audits

Control Room | Emerging Tech & the Future Workforce

Control Room | Emerging Tech & the Future Workforce

Control Room | Emerging Tech & the Future Workforce

Control Room | Emerging Tech & the Future Workforce

Control Room | Emerging Tech & the Future Workforce



#### APPENDIX: TECHNICAL SESSION LISTING

### **Technical Session Listing**

Manual Operations

Challenges and Lessons Learned of Implementing an Operations Continuity Plan

CRM Program – Teams Training Examples

Realtime Dataset Transfer for Offline Training and Predictive Modeling

Improving the Effectiveness of Team-Based Leak Detection Alarm Response

Who should be the focus of Control Room team training – the people that control the assets, or the people that may provide key information and decision-making input?

"Can Everyone See My Screen?" Lessons Learned Conducting Virtual Team Training

Control Room | Manual Pipeline Operation & Business Continuity

Control Room | Manual Pipeline Operation & Business Continuity

Control Room | Team Training

Roundtable on Leak Detection

Cybernetics | Leak Detection Advancements