

OPERATIONAL MANAGEMENT SOLUTIONS
PipelineManager / PipelineStudio
Thursday, October 24, 2019

10:00 am to 11:30 am

Breakout Session I

(Azalea IV- V)

PipelineManager, PipelineStudio

Digital Transformation in Operational Pipelines

Presenters: Paul Dickerson, Product Manager & Phanindra Kanakamedala, Product Execution Manager

Digital transformation is affecting how organizations operate, such as how to manage and analyze data, learning and understanding the performance indicators and the convergence between information technology and operational management.

Leak Detection - The Forward View

Keynote speaker: Philip Carpenter, Author of Pipeline Leak Detection Handbook

The economic infrastructure of the entire world is heavily dependent on the existence of pipelines to transport commodities of various kinds, however there are risks in that transportation including the potential hazards of leakage. Analysis of the operating risk due to hazardous liquid pipeline spills is a challenging task. In this presentation the data sources are reviewed, risks determined and recommendations on leak detection and leak detection program management made.

1:00 pm to 2:30 pm

Breakout Session II

(Azalea IV- V)

PipelineManager

Real Time Pipeline Modeling and Leak Detection Experiences in Crude Gathering Systems

Customer Presentation: Jody Kennedy with Inter Pipeline (IPL)

Operating gathering lines presents several challenges that are hard to simulate using an online model. In this session we discuss a few challenges and the various tools used by both controllers and engineers.

Key Performance Indicators for Pipeline Operations

Presenter: Dr. Greg Morrow

We give an introduction to industry definitions of Key Performance Indicators (KPIs), apply that to KPIs specific to RTTM and leak detection performance, and demonstrate specific examples with our LDPA tool. We open a discussion with the audience on what KPIs are most important to their operations

(Azalea VI)

PipelineStudio

Surge Analysis using Logical Rules

Customer Presentation: Augusto Garcia-Hernandez, Pipeline Systems Planning with Enterprise Products

Surge in PipelineStudio can be controlled using the built-in scripting tools. Using the tools can appear daunting, however in this session the best practices and examples of their use are offered.

Economic Analysis Using UDL

Customer Presentation: Brad Thompson with Holly Energy

A model that determines the most cost-efficient operating scenario on a pipeline using PipelineStudio's User Defined Logic feature. An additional model to evaluate surge pressures along a pipeline.

4:00 pm to 5:30 pm

Breakout Session III

(Azalea IV- V)

PipelineManager & Gas Management Integration

Gas Management Solutions with PipelineManager Integration

- Seamless Integration of Control Room and Enterprise Management for Natural Gas Transmission Systems

Presenter: Clara Johnson, Emerson

Integration of contractual demands satisfaction and operating environments is challenging, and in the natural gas business attention to maximize current capacity and future loads must also be considered from both commercial and operational positions. In this presentation we provide a more in-depth insight into the natural gas transmission

customers we have been able to help addressing effectively these challenges.

Implementation of a Predictive Virtual Model (Digital Twin) on TGI Gas Network

Presenter: Omar Efrén Caro Vargas and Jesús Vargas Torres with Transportadora de Gas Internacional (TGI)

Operating a large gas pipeline network requires from the operator the delivery of the contracted quantities with safety, inside contractual parameters, and regulations. Also, the timely handling of daily planned and unplanned situations. In this presentation we will show how the implementation of a virtual model (digital twin) of the gas network, enabled TGI to forecast scenarios and design immediate and precise responses.

(Azalea VI)

PipelineStudio

How PLS helps to quickly derive a cost-effective solution with an optimal heavy crude pipeline system design

Customer Presentation: James Yang, Sr. Pipeline Engineer with Wolf Midstream

Development of heavy crude pipeline has been challenging in the most recent years largely due to uncertainty of regulation and commercial environment. The development group needs to cope with the quick changing variables such as flow rates, fluid property, delivery points etc. Comparing with other tools, Pipeline Studio helps us to come up with a design in short turnaround with satisfactory accuracy.

Modelling Utilizing History Matching and Equivalent Length Techniques

Customer Presentation: Mary Goodreau, Manager System Planning with Enterprise Products

It is a challenge to simulate certain pipeline behavior accurately and handle the “minor frictional losses”. This presentation discusses the use of an advanced simulation method to match real time suction surge pressure trends for worst case terminal scenarios

FRIDAY OCTOBER 25, 2019

9:00 am to Noon

Advanced Product Exploration and Discussion

(Azalea IV- V)

PipelineManager Workshop

Workshop and Training

Collaborative Team Session: Greg Morrow, Hugh Robinson & Phani Kanakamedala

In this session we will be offering training on new and upcoming features of PipelineManager:

Scripting using PipelineManager

We demonstrate a new feature for PLM: Scripting, user-defined logic to do custom pre-processing for instrumentation. We show how you create and apply scripts, give examples, show live hot-swapping of scripts, and discuss how scripts can be used.

Pipeline Leak Detection

Discuss and demonstrate alternative and complimenting leak detection methodologies to RTTM.

User Interface

Demonstration of new updates to the user interface. Guidelines and best practices to follow when designing the user interface to custom fit your control room environment.

(Azalea VI)

PipelineStudio Workshop

Workshop and Training

Collaborative Team Session: Paul Dickerson, Rob Keller, Kenny Wade, Mike McCain, Mingang Jin

In this session we will be offering training on new and upcoming features of PipelineStudio:

Slack line flow in PipelineStudio

PipelineStudio 5.0 sees the inclusion of support for a full slack line flow model for both steady-state and transient simulation. In this session we will offer training and support for how to model slack, and how to interpret the results of a simulation.

PipelineStudio 5.0

In this session we will be offering training and support on all of the new features of PipelineStudio 5.0. SMEs will be in hand to ask the expert or help dig into specific simulation questions you may have.

For more information, contact info.energysolutions@emerson.com
or visit www.Energy-Solutions.com/Flow