

Agenda**Wednesday, September 20th**

- 9:30- 10:30 Meet the PI Team, prior to the kick off of the meeting. So bring your questions and meet the PI team
- 10:30 - 11:30 Special guest speaker from Burns & McDonnell will present the latest on cyber security and NERC CIP, where it is today, and where it's going.
Burns & McDonnell
Jerome A. Farquharson - Principal Dir & Regional Global Practice Manager Compliance and Infrastructure
- 11:30-1:00 Registration and Lunch Reception
- 1:00 -1:15 Welcome and User group Community Update
James Thompson - ComEd (T&D Chair)
Kevin P Walsh - OSIsoft
- 1:15 -1:45 **Keynote**
Entergy
Raiford Smith - Vice President - Energy Technology and Analytics
- 1:45 -2:15 PI System Roadmap/OSIsoft
OSIsoft - Stephen Kwan - Product Management
- 2:15 -2:45 **Break**
- 2:45 -3:15 UI's Journey with PI: From a Challenging Start to Efficiency-Driving Analytics & Compliance
United Illuminating Company
Mark Adam - Lead Engineer, SCADA Engineering
Bryan LaPerle - SCADA Manager
- 3:15 -3:45 Say hello to PI Vision - Overview of the new PI Vision Product
OSIsoft
Chris Nelson - Dir. Visualization Products
- 3:45 -4:15 **Break**
- 4:15 -4:45 Needle in a Haystack - How ERCOT is using AF and Seeq to find and resolve Operational issues.
ERCOT
Joel Koepke, P.E. - Grid Application Developer
- 4:45 -5:15 Partner Introduction/**Partners**
- 5:30 -9:00 OSIsoft/Partner Demo Exhibition/Hospitality

Thursday, September 21th

- 7:30 -8:30 Breakfast Session
- 8:30 -8:45 Break
- 8:45 -9:15 Title of Presentation
ComEd - an Exelon Company
James Thompson - IT ComEd Solutions, SCADA Application Support
- 9:15 -9:45 Visualization and Situational Awareness
San Diego Gas & Electric
Subbu Sankaran -
- 9:45-10:15 Break
- 10:15-10:45 Title of Presentation
City of Riverside - Public Utilities
Ed Cortez - Principal Electrical Engineer
- 10:45-11:15 PI at LADWP and the road map to the ESRI Integrator
Los Angeles Department of Water and Power (LADWP)
Miguel Sanchez - Electrical Engineer II - LADWP
Robert Krisher - Senior Consultant II - POWER Engineers
- 11:15 - 11:45 New grid control solutions leveraging PI - wind farm case study
Sempra Renewables
David Jeon, Director - Technical Services Manager
- 12:00-1:30 Lunch
- 1:30 -2:00 Optimizing the Benefits of FLISR with a Near Real-time Management Dashboard
Pacific Gas & Electric
Eric Anderson - Manager, Distribution SCADA/FLISR
Dan Brancaccio - Sr Principal Consultant, Tech Architect, Bridge Energy Group
- 2:00 -2:30 Leveraging the new PI System Connector to replicate a very large PI AF System
Southwest Power Pool (SPP)
Cody Parker
- 2:30 -3:00 Break
- 3:00 -4:00 Enabling Analytics for Operational Intelligence plus Q&A
OSIsoft - Keith Pierce, Global Solution Architect
- 4:00 -4:30 Break
- 4:30 -5:00 Closing and 2017 T&D Meeting
James Thompson - ComEd (T&D Chair)
Kevin P Walsh - OSIsoft

5:30 - 9:30 PM

OSIsoft Hosted Dinner

Pat O's on the River

Friday, September 22th

7:30 -8:30 Breakfast

9:00 -12:00 Training

Goal: To provide exposure to all the knowledge-base & tools that PI admin/Users could leverage from OSIsoft that would make them comfortable to think about the concept of AF.

Trainer: Rajesh Gomatam Ph.D.; Sr. Field Engineer, OSIsoft LLC

Agenda:

- Review the usual resources such as TS Search, and training course schedules
- Review all self training resources, such as, YouTube channel, PI Square, VLEs
- Show the AF jumpstart kits, VLEs for both public training classes and even TechCon labs, which are valuable
- PI Square: VLEs, code examples, AF Jumpstart kits, discussion forms. Pick 1 or 2 discussion posts and show how active the forums are where they can share ideas and implements their use cases
- Use the AF training VLE and review material, building AF, contexts in AF, simple example of analytics, and possibly show how one can use AF to create structure and at the same time create PI tags, as well. Also, discuss/review/show notification and element relative displays, which customer always appreciate related to AF

Exhibiting Partners

Seeq® enables organizations to get even more value out of their OSIsoft PI System data. Instead of hours of data wrangling, engineers using Seeq require just minutes to assemble, contextualize and organize their data, providing them with more time for analysis and reporting. The result is improved employee productivity and insights that lead to better yields, margins, and product quality. Seeq is also well integrated into OSIsoft product offerings. In addition to easy connectivity with PI System servers, Seeq leverages your investment in Asset Framework, and at the conclusion of a report or investigation, Seeq worksheets may be exported to PI Vision, Microsoft Excel, or PowerBI.



Doble partners with electric power industry clients to minimize risk, improve operations and optimize system performance. Doble provides enterprise level solutions, engineering expertise, on-line and off-line diagnostic instruments, consulting and testing services, educational seminars and the world's premier library of electrical apparatus test data for the benefit of the global power industry. Doble prides itself on the knowledge we offer, including forums such as client conferences, seminars, and technical papers.



SISCO helps customers create value with open interoperable standards by delivering robust and secure solutions that foster interoperability in unique and innovative ways. We connect our customers to information using IEC 61850, CIM, COMTRADE, and ICCP-TASE.2 The SISCO CIM Adapter for PI AF uses an enterprise semantic model based on the IEC standardized Common Information Model (CIM) to organize PI data and manage tag naming for more flexible and agile applications and systems. The COMTRADE Utility automatically retrieves power system disturbance files from devices and associates them with Event Frames and PI AF assets enabling the OSIsoft PI System with a disturbance file event management system.



As a leading independent provider of comprehensive automation solutions and services, RoviSys has the resources, experience and skills to make the smart grid era work for you. RoviSys integrates the wealth of data provided by modern SCADA, AMR and intelligent substations to make the grid smarter, more reliable and flexible. Whether your goals are predictive maintenance, equipment monitoring, informative dashboards or sequence of events visualization, RoviSys can bring your vision to life. RoviSys has completed thousands of projects for more than 300 companies in nearly 100 industries. From the substation to the cloud, RoviSys' more than 600 engineers, software developers and project managers make RoviSys an excellent choice for companies of all sizes looking for real solutions.



Owl Cyber Defense Solutions, LLC leads the world in data diode and cross domain network cybersecurity. With a constant focus on customers in the military, government, critical infrastructure, and commercial communities, Owl develops market-first, one-way data transfer products to meet a variety of operational needs, from entry level to enterprise.



PowerRunner™ is an exceptionally efficient application platform that joins and delivers highly granular, real-time OT and IT data to support enhanced operational decision management for critical utility business processes. PowerRunner joins data from disparate OT & IT sources such as CIS, MDM and SCADA with external localized weather and real-time market data to support enhanced operational decision management for critical business processes. PowerRunner is an intuitive, business-centric application platform that joins disparate internal and external, time-series data sources resulting in a single source of accurate analysis across the enterprise to support Meter Data Analytics such as: load factor; power factor; asset loading and coincident peak analysis on all system assets and asset level load, generation and revenue forecasting. With the PowerRunner PI Adapter, PowerRunner unleashes the power of PI by extracting and presenting tag data in an intuitive UI. PowerRunner provides Utilities with an intuitive platform to extract maximum value from your PI System investment.



SUBNET Solutions Inc. is a software company dedicated to serving the needs of the electric utility industry. SUBNET is making substations more intelligent through their unified grid intelligence solutions. SUBNET provides innovative and integrated products for all of your smart grid projects. Now you can simply manage all of your IEDs, IT systems with one multi-vendor solution. We create products that make your substations--and your overall power grid--more intelligent through a single innovative solution.



DST Controls is a top-to-bottom industrial data and control systems integrator, i.e., control panels, PLC's, HMI, and SCADA. We then connect those systems to PI and then connect PI to enterprise applications such as GIS, Work Order, Asset Management, Energy Monitoring, and Predictive Maintenance systems. We specialize in making data meaningful to those who need it. (e.g., we populated a 90 foot "Situational Awareness" video wall with PI data!) Then, we go home. DST Controls was founded in 1975 to provide automation systems for industrial plants. Our customers say that we offer more than technical expertise: we understand business needs, produce quality results and are flexible as customer needs change. One customer presented our work five times and OSIsoft has accepted us as speakers at all UC conferences since 2009.



Wunderlich Malec Engineering (WME) has been dedicated to our industrial customers' success since 1982. Today, WME is a proud OSIsoft Partner and has developed VIP Services to support our customers need to digitally transform their work place. Our VIP software app easily interfaces with the PI system to display relevant trends, alarms, and real time conditions. With our VIP documentation and PI System data, industrial customers are able to review relevant documentation and trends which improve employee efficiency, decision making and results in higher productivity and a safer work environment.

Customer Presentations

UI - UI's Journey with PI: From a Challenging Start to Efficiency-Driving Analytics & Compliance

The United Illuminating Company (UI) shares their story regarding their unique application and evolution of the PI System implementation. The discussion features challenges with user adoption from the initial rollout, overcoming data quality issues with the use of Asset Framework, then successfully planning and executing a re-rollout. UI's goals were to implement the use of change management practices to achieve radical change in how we do business. UI faced a regulatory challenge where we leveraged PI Asset Framework with analytics to create a solution to effectively meet the compliance requirements.

ERCOT - Presentation Title: Needle in a Haystack - How ERCOT is using AF and Seeq to find and resolve Operational issues.

ERCOT is responsible for monitoring the majority of the Texas transmission system. Throughout the day Operators experience equipment and data-related issues which require deeper analysis. These efforts often result in finding a single offending asset but do not give insight into the scope of the problem; the Operator does not know if it is a single issue or hundreds. ERCOT is leveraging its extensive AF model and using Seeq, an OSIsoft Partner, to automatically comb through historical data and find the worst offenders - an analytic result that was too hard and time consuming before. Now ERCOT is finding just how many needles exist in the haystack.

ComEd

San Diego Gas & Electric - Visualization and Situational Awareness

SDG&E thru the CPUC and the EPIC program set out to demonstrate how integrating smart grid technology would help make the smart grid "smarter". This program addresses the data tsunami issues created by SCADA, PMU and Smart Meters generated data by demonstrating components and subsystems choices for SDG&E's Smart Grid Visualization and Situational Awareness.

Specifically this presentation will cover the following T&D use cases utilizing PI, ESRI and Power BI as the components:

- Transmission Fault Location
- Load Curtailment
- Volt/Var Analytics using AMI and SCADA Data
- DER/Advanced Energy Storage Visualization and
- Customer System Integration

The City of Riverside - Public Utilities

LADWP - PI at LADWP and the road map to the ESRI Integrator

This presentation will provide an overview of how the Power group within the Los Angeles Department of Water and Power (LADWP) leverages OSIsoft's PI System and Coresight applications to not only monitor their day to day operations but to provide insights that will assist their engineers in anticipating failures before they occur. Their longer term goal will be to actually predict failures before they occur. The presentation will also provide the findings of a recent pilot project with OSIsoft's ESRI PI Integrator and how LADWP plans to use this solution to improve data quality within their organization as well as solve several outstanding requests from their users.

Sempra Renewables - Auwahi Wind Farm demonstrates high speed closed loop frequency control using PMU measurements

Sempra Renewables owns and operates a 24 MW Wind Farm connected to the local grid. The wind farm consists of eight three MW wind turbines connected over two parallel lines sending power from four turbines each to a substation ring bus located 11 miles away. The transmission voltage is 34.5 kV in delta configuration. The ring bus includes nine battery containers and nine inverters each capable of delivering 1.1 MW of power and power is delivered to the grid at 69 kV. The total energy storage is 4.5 MWh. The system began operation in 2014 using a conventional control system developed by Sempra Renewables. The power contract with the local utility includes ramp rate constrained power delivery, curtailment, and inertial response.

PG&E -

SPP - Leveraging the new PI System Connector to replicate a very large PI AF System

SPP maintains a very large PI AF System (~20,000 elements and 2 million PI tags) and worked with OSIsoft to create a new solution that replicates everything from our highly secure, CIP protected infrastructure to our corporate environment. This replication has put critical data back into the hands of SPP staff while reducing compliance risks associated with accessing the CIP protected infrastructure.

The OSIsoft logo is displayed in white text on a blue background. The background of the entire slide features a blurred industrial scene with yellow and blue tones, showing pipes and structures.

T&D USERS GROUP MEETING

September 20-22 | New Orleans, LA

OSIsoft - Introduction to the new PI Vision product

OSIsoft - Enabling Analytics for Operational Intelligence

How to get more value from your existing data and when to apply other technologies

Most companies have some “big data” or “advanced analytics” initiative started or on-going at this point. What does this mean for T&D Utilities, how can I use these techniques to improve system operations and asset health, and what techniques and technologies are appropriate for improving both? In this session you will learn what you can do with a modern PI System and how and why to add-on some recent technology improvements. We want to help you to understand what’s behind the hype and how to improve, especially asset health, with the PI System.