



OSIsoft®

EMEA USERS CONFERENCE

BERLIN, GERMANY • SEPT 26-29, 2016



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Welcome!

Power Generation

Industry Forum



Presented by

David Thomason - Principal Global Power Generation

Chris Crosby – Principal Global Nuclear & Renewable Energy



Gold Sponsors



Silver Sponsor



Bronze Sponsors



Exhibitors



OSIsoft Power & Utilities Industry Principals



David Thomason
Global Power
Generation



Kevin Walsh
T&D and
Smart Grids

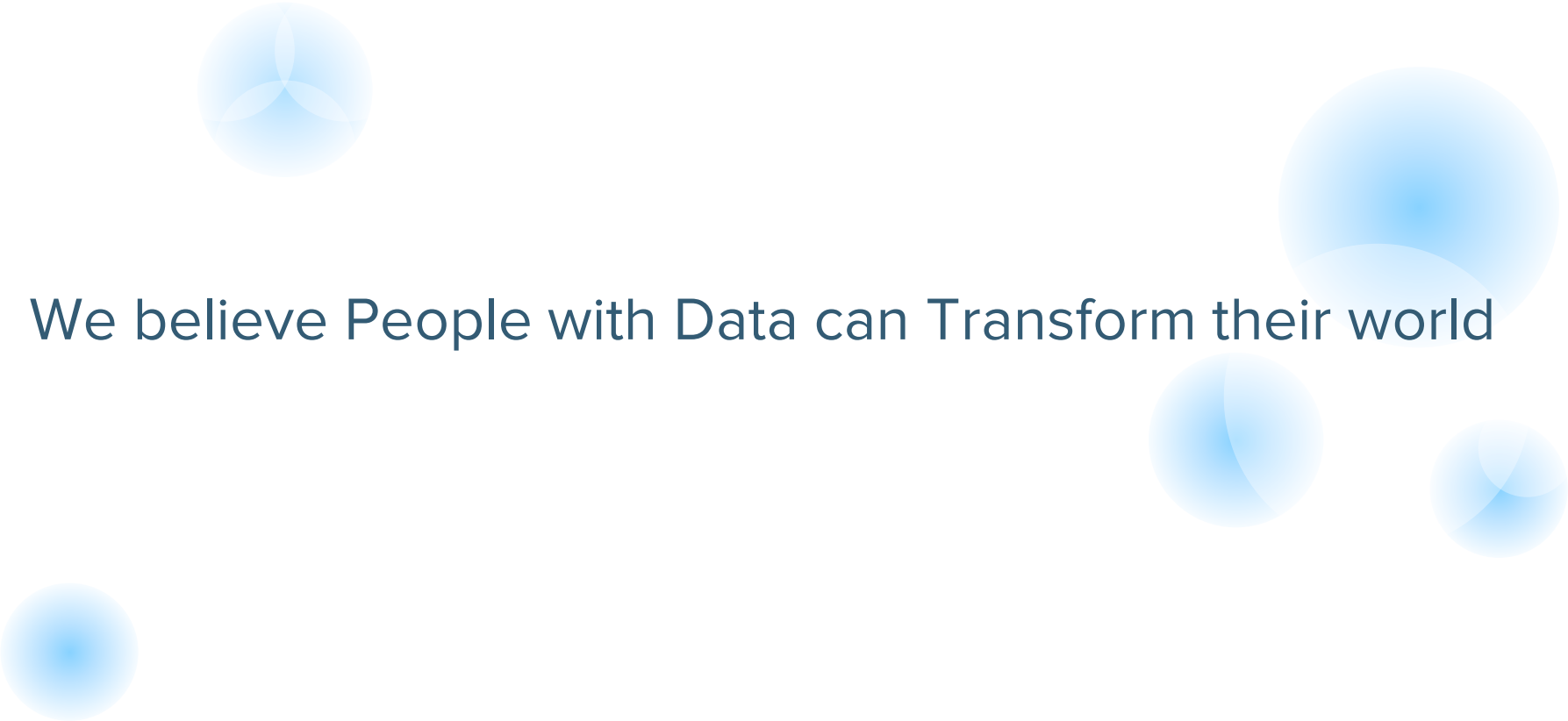
Chris Crosby
Global
Nuclear &
Renewable
Energy



Miguel Chavero
EMEA Power
and Utilities



William E. McEvoy
Distributed Energy
Resources

The slide features several decorative blue circles of varying sizes. Some circles contain white geometric patterns, such as three overlapping circles or a four-pointed star. The circles are semi-transparent and have a soft glow.

We believe People with Data can Transform their world

The Evolving Power Generation Spectrum



Natural Gas



Coal



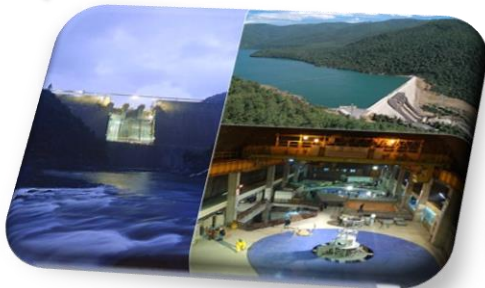
Wind



Solar PV & CSP

Traditional Power Generation

Renewable Generation



Hydro

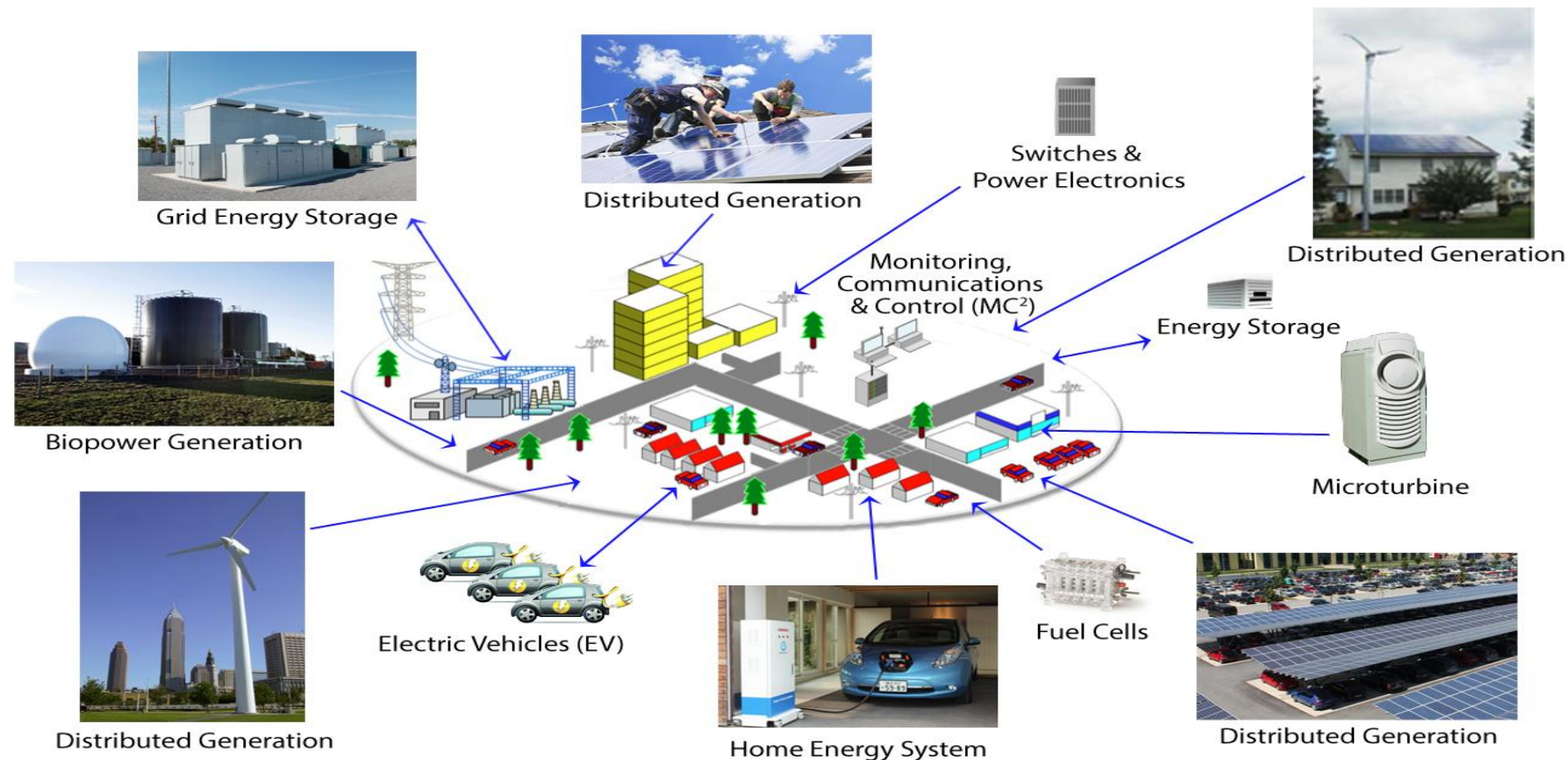


Nuclear

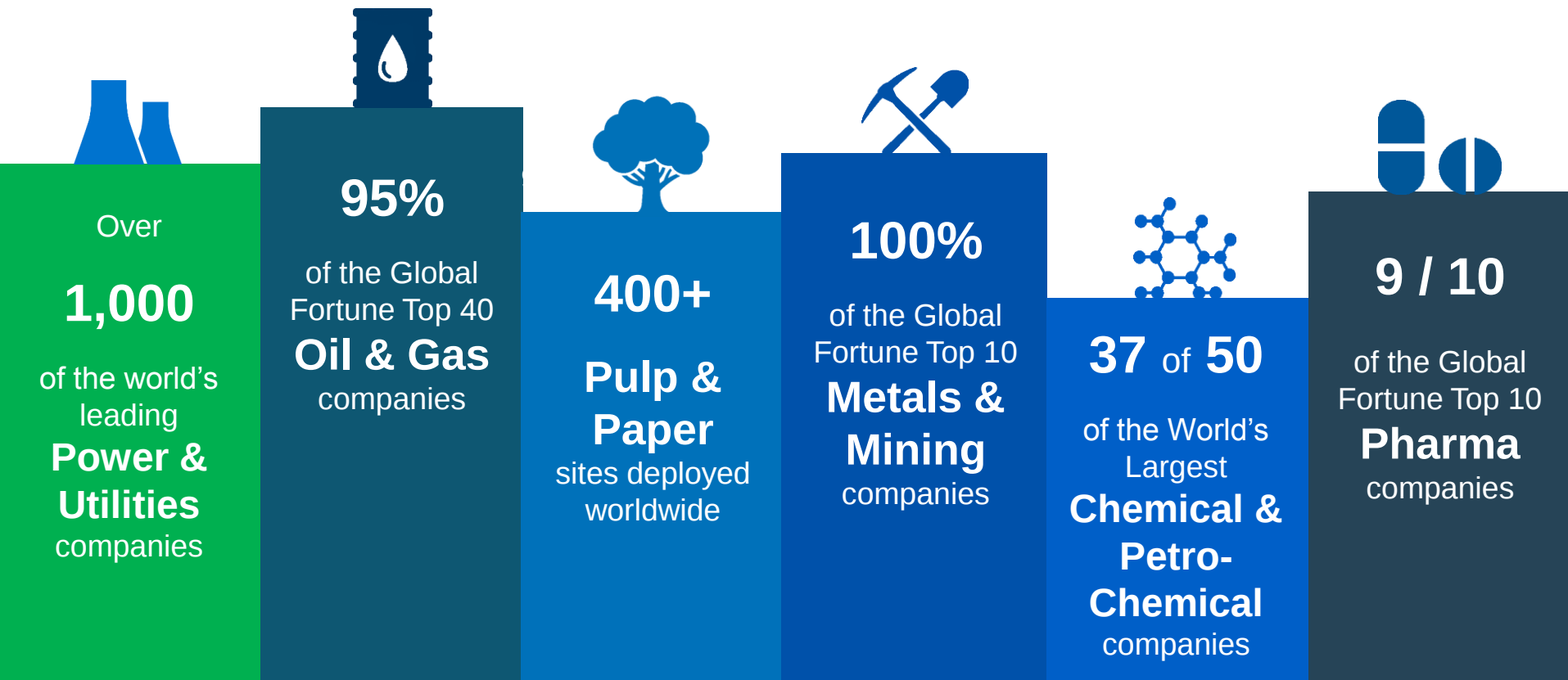


Geo-thermal / Biomass / Tidal / Battery

Power Generation is Still Evolving ...



OSIsoft is trusted by the worlds leading Companies



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Leading in Power and Utilities



EMEA PowerGen Customers



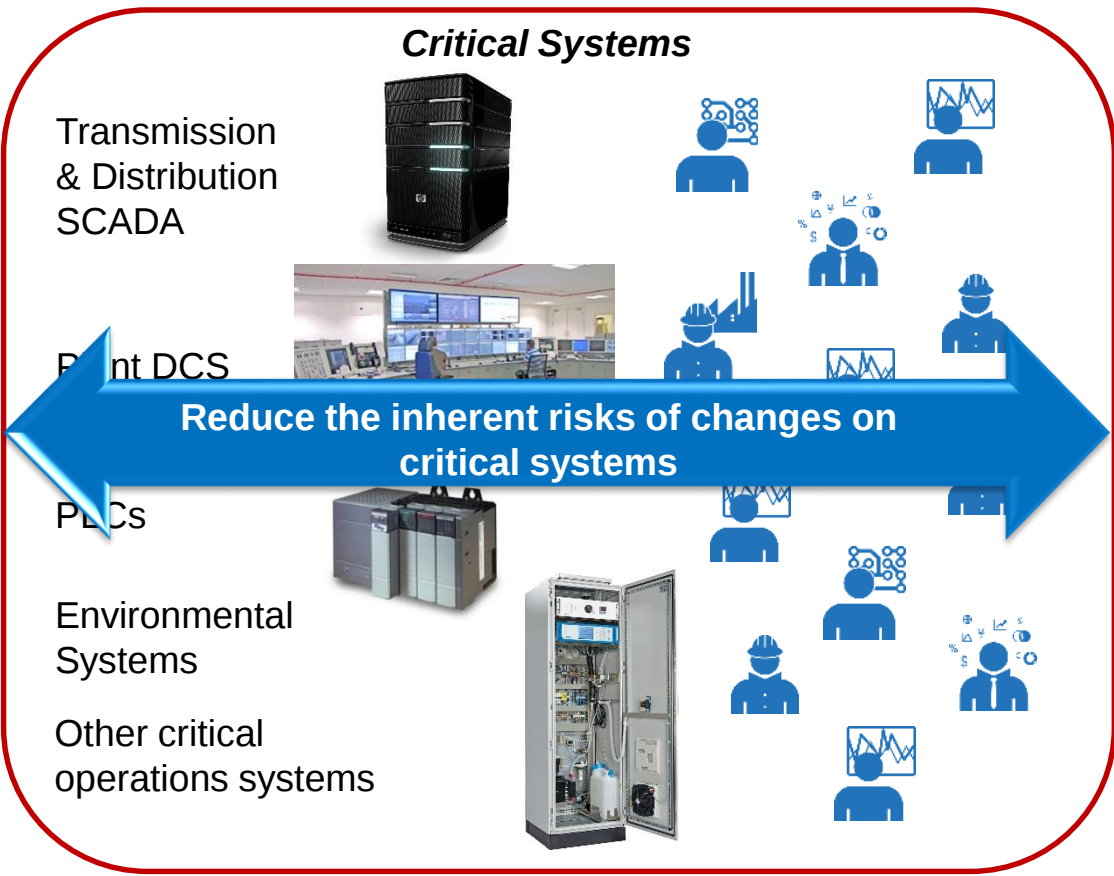
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11

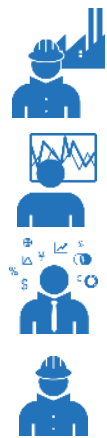
Security - Cyber Risk Management



Electronic Security
Perimeter ESP



Limiting direct access to cyber assets in the ESP while expanding the value use of information.

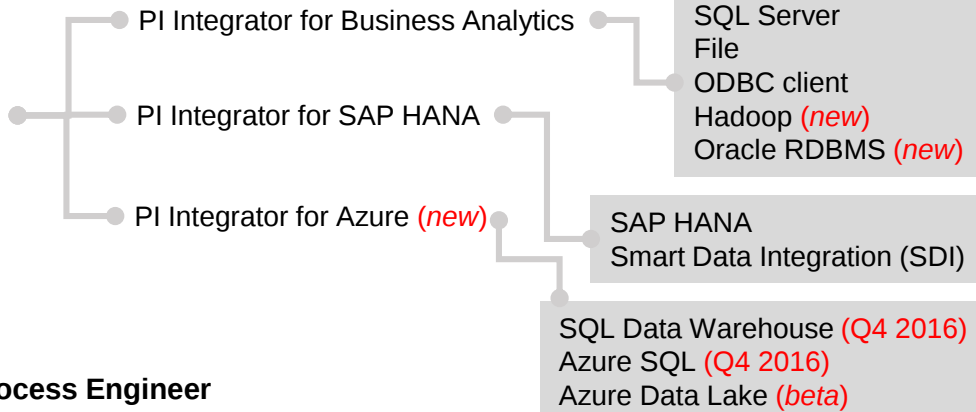


PI Integrators

Products

Targets

Capabilities



Transform **heterogeneous sensor data** captured in PI **to a format useful for BI Tools & Data Warehouses**

Create **views** of PI System data **with** asset and event frame **context**

Prototype and publish views quickly **with a self-service, web-based user interface**

What is Enabled?

Holistic view of sensor data from operations with business data from financial or ERP systems

Analysis against a holistic data set that is a **single version of the truth**

Visual correlations drawn **from** interactively **slicing and dicing data**

Pattern recognition on multivariate data sets **via data science experiments**

Advanced analytics and visualizations **with** the **tools you already own and use.**



Process Engineer

Analyze your fleet of assets across multiple variables in your BI tool of choice



Data Scientist:

Spend more time analyzing data and less time preparing it



IT Manager

Enable self-service, rapid prototyping of operational data sets for advanced analytics projects



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Power Generation PI User Group

Join to discuss best practices, white papers, share news, and exchange ideas.

Objectives:

- Identify Best Practices
- Share knowledge and ideas across our industry
- Foster communication with OSIsoft regarding our industry needs

Customer run,
customer led,
OSIsoft assisted

This is NOT an avenue for sales presentations or marketing

Want to opt in?

<https://pisquare.osisoft.com/groups/power-gen>

Or contact jsirois@osisoft.com



Have questions?

- jsirois@osisoft.com
- dthomason@osisoft.com
- ccrosby@osisoft.com
- Visit the PI Square Booth



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15

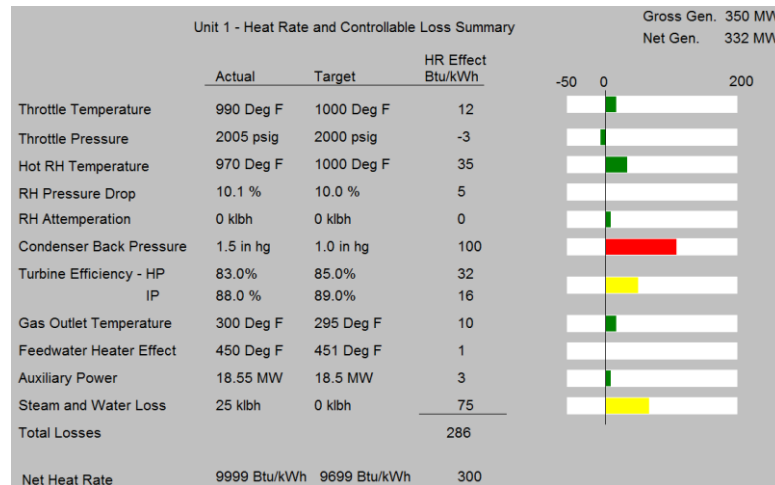
Resources: AF Example Kits

- New sets of AF templates available for Power Generation.
 - Asset Based PI Example Kit for Turbine Efficiency! The gas turbine and the HRSG have been modeled, efficiency and heat rate calculated based on process conditions. PI Square page: <https://pisquare.osisoft.com/docs/DOC-2384>
 - Asset Based PI Example Kit for Condition Monitoring! General approach to leveraging PI AF for condition monitoring, including key operating condition excursions, assigning severity to limits violations, tracking excursions, and aggregating the status for a hierarchy of assets. PI Square page: <https://pisquare.osisoft.com/docs/DOC-2296>
 - Asset Based PI Example Kit for Power Generation Load Forecasting! Uses analytics to calculate predictions for weather, network power needs and compare them to current data.
<http://techsupport.osisoft.com/Troubleshooting/Releases/RL01109>
- Other example kits or questions see the [PI Square space for the Asset Based PI Example Kits](#).



Resources: White Papers & Industry Champion Program

- Launched a new OSIssoft.com that improves access to events, product information and past presentations
- Performance Optimization Guide - Fossil Power Generation White Paper Published March, 2016
 - Streaming analytics for Heat rate calculations and tracking controllable losses



- CBM Guidebook White Paper
- OSIssoft internal Industry Champion Program
- Highlights on Thursday :
 - Using Data Science for Machine Learning and Predictions Based on Your PI System Data 9:00am-10:25am
 - Condition Based Maintenance with PI AF 10:35am - 11:50am
 - What's New in PI Security? 15:45pm - 17:00pm

Today's Agenda – Presenting this Morning



RWE Supply & Trading: Greater Flexibility for Smart Energy



E.ON: The Internet of Wind



ESB: Using the PI System in Power Generation Operation and Maintenance to Optimise Commercial, Environmental and Safety Performance



Ansaldo Energia: ADA and APEX: A Global Diagnostics Platform For Power Generation

LUNCH – Pavillon 12:15pm-2:15pm

Presenting this afternoon



Uniper/Pimsoft: Meeting New Regulatory and Financial Challenges Through Asset Framework



AES Jordan: The PI System Paves the Way for ISO50001 and ISO55001 Certifications



Power Generation and the PI System - a live demonstration of new features & Wrap up

Please join the Offsite Underground Dinner Party - Berlin U3
6pm-1am

감사합니다

谢谢

Danke

Merci

Gracias

Thank You

ありがとう

Спасибо

Obrigado



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