# Newsletter, Intelligence System, Recorded Webinars

Newsletter

Intelligence system

**Recorded webinars** 



### Industrial IoT and Remote O&M Newsletter Headlines December 2016

#### REMOTE MONITORING

- MHPS Will Remotely Monitor Power Plants from the Philippines
- MHPS Provides Remote Monitoring of Gas Turbines from Orlando
- LINKEDIN
- Record All Your Power Point Sales Presentations
- INDUSTRY NEWS
- ABB CEMS System Used at Innovative New WTE Plant in Near Copenhagen
- MHI and OSI Soft Alliance Provides Cloud- Based Analytic Services
- Remote Water Chemistry Control
- Who Should Purchase GE Water?
- How Much Will the Climate Change Program Differ in the New Administration?
- Exelon Chooses GE Predix to Accelerate Digital Transformation
- Supplier and Utility Connect is a Game Changer
- Thermo Fisher Revenue Increased 9 Percent to \$4.49 Billion in the Third Quarter

#### **MHPS Will Remotely Monitor Power Plants from the Philippines**

Mitsubishi Hitachi Power Systems opened a global service center in the Philippine capital in September 2016, a center that aims to train personnel to operate and maintain power plants around the world.

This is the third MHPS services center in the world, after one in the U.S. state of Florida and Japan's Hyogo Prefecture. Its main functions include aiding power plant operations via remote monitoring and data collection and analysis.

The center's first project will be to remotely monitor a coal-fired power plant in Pagbilao, Luzon Island, operated by a joint venture between Tokyo Electric Power Co., Marubeni and a Filipino company. Later, services will extend to other power plant operators in Southeast Asia, which are increasing in number as the region's economy grows.

The service can meet customers' needs by such means as preventing sudden production halts at power stations, according to Takato Nishiwaza, MHPS' president, who was attending the center's opening ceremony in September, 2016.

The center opened with about 20 employees, but MHPS is considering adding personnel. The service center can also provide assistance to power plants not built by MHPS. In addition to its data analysis capabilities, the center can also manage maintenance equipment and dispatch staff in emergency situations. It will in addition serve as a training hub for technicians. Every year, around 200 individuals will be picked from both in and outside the company to transfer technical expertise on maintenance and management. Since Filipinos are highly proficient in English, the company expects the staff to be able to work in power plants around the world. In the Philippines, MHPS already operates a design and construction base for power plant boilers, employing about 1600 people.



### Intelligence System Access Screen

- Application
- Calendar of Events
- Company / Divisions
- Corporations
- Global Search
- Locations
- Other Subjects
- McIlvaine Keywords
- Person

- Process
- Product
- Projects
- Projects by Startup Date
- Publication
- Publication Date
- Text descriptor
- Title (starting with most recent)
- Data Prior to October 2010



#### Titles Displayed when Keyword is Clicked

- Emerson Smart Wireless technology provides boiler feed pump performance data (Article Dated: 1/11/2017)
  Barking CCGT uses Emerson wielessHART® to monitor steam traps and valves (Article Dated: 1/11/2017)
  Vaisala Measures Moisture in Oil Online (Article Dated: 1/11/2017)
- •\$3.8 GTCC Valve Market but New Route with IIoT (Article Dated: 1/11/2017)
- •Considerations relative to IIoT and application for pumps (Article Dated: 1/11/2017)
- •Enterprice Asset Performance Management solutions from Schneider Electric (Article Dated: 1/11/2017)
- •Flow control network article by National Instuments on pum IIoT (Article Dated: 1/11/2017)
- •liot and smart pumping with remote monitoring and VFD (Article Dated: 1/11/2017)
- •Modernizing Old Plants to Meet New Demands (Article Dated: 1/11/2017)
- •New Condition Monitoring Approach (Article Dated: 1/5/2017)
- •Fleetwide Monitoring (Article Dated: 1/5/2017)
- •Berkshire Hathaway Energy Will Spend \$100 Million For Monitoring and Automation Next Year
- •Fiber optic temperature sensor measurement for geothermal plant (Article Dated: 11/1/2016)
- •Sewage Lift Station Level Sensors are Critical to Successful Operation (Article Dated: 10/17/2016)
- •Radar Level Measurement for Lift Stations Eliminates the Fog Variable (Article Dated: 10/17/2016)
- •Vega gets compliments in blogs on lift station level measurement (Article Dated: 10/17/2016)
- •Breen Fuel-Lean Gas Reburn (Article Dated: 7/18/2016)
- •Alcoa Warrick using Doosan HF Controls for direct operator interface (Article Dated: 7/18/2016



#### Articles are Summarized with Full Text Linked

- Title: Emerson Smart Wireless technology provides boiler feed pump performance data (click for full article text)
- Emerson Process Management's Smart Wireless technology has proved to be "extremely cost-effective and reliable" for PPL Generation in providing continuous performance data on critical boiler feed pumps at Montour power station in Washingtonville, Pa., as well as feedwater and air heaters at the Brunner Island Unit 1 in York Haven, Pa."The additional information provided by the wireless instruments allows us to more effectively monitor the mechanical and thermal performance of these valuable assets," according to Joe Murach, supervisor of equipment reliability.Key temperature and pressure measurements were not available previously to populate software designed to analyze thermal performance and determine previously to maintenance schedules. Company officials have long wanted to obtain this information, but the high cost of installing wiring was a roadblock they could not overcome. Wireless was the only option for obtaining the needed data, Murach said.Emerson's Smart Wireless technology was chosen following an on-site demonstration that proved its ability to transmit reliably despite the dense infrastructure of the power plant. Then Rosemount wireless transmitters were installed at the Montour plant to monitor suction pressure and DP across the suction screen as well as other points that provide valuable insight as to the overall condition of the feedwater pumps.



#### **Recoded Webinars**

September 8, 2016	PacifiCorp Webinar #5 on Front End NOx Reduction <b>91 minutes</b>
September 1, 2016	PacifiCorp Webinar #4 on Back End NOx Removal 84 minutes
August 25, 2016	Oil, Gas, Refining <b>60</b> minutes
August 2, 2016	NOx Control for PacifiCorp: Back end NOx Control <b>99</b> minutes
July 19, 2016	NOx Control for PacifiCorp: Combustion Modifications and Neural Networks_ 97 minutes
July 14, 2016	NOx Control for PacifiCorp: Overview and Summary of Low NOx Options 69 minutes
July 14, 2016	Desalination 42 minutes
June 16, 2016	FGD and Acid Gas Separation <b>104</b> minutes
April 21, 2016	Hot Gas Filtration 65 minutes
April 7, 2016	Power Generation Technologies 53 minutes



# NeuCo/GE Boiler Optimization Technology

Presentation in Mcilvaine Webinar for PacifiCorp, July 2016



# SootOpt ®

- Real-time closed-loop optimization of boiler cleaning equipment using expert rules, thermal calculations and neural networks
  - Reduced and more tightly controlled APH temperatures
  - Improved SH and RH steam temperature control
  - Reduced attemperation sprays
  - Heat rate reduction of 0.75% 1.50%
  - Incremental NOx reduction of 2.5% 5%
  - Avoided opacity excursions
  - Reduced blowing of 10% 35%
  - Avoided thermal stress from blowing
  - Fewer tube-leak failures
  - Improved situational awareness insight





#### NeuCo, Now Part Of GE Power Digitial

- NeuCo Power Optimization Market Leader
  - Only company 100% dedicated to power optimization software
  - More than 120 active optimization systems
  - 100% technology ownership and strong patent position
  - Two U.S. Dept of Energy projects totaling \$38M investment
- GE Power
  - Leader in Industrial Internet design with defined the technical roadmap for exploiting big data
  - Coal-fired boiler OEM and engineering services leader
  - Asset monitoring capability
    - 2000+ units monitored remotely 24 X 7 X 365
    - Local Field Service presence



NeuCo / GE Power technology Operating at Cholla and Jim Bridger



