# **Operations Performance Management for Coal-Fired Power Plants**

The need to minimize costs, maximize availability and enhance operational flexibility is more important than ever. GE Operations Performance Management is a powerful digital solution that improves plant productivity by pushing the operations envelope to be more flexible and available when markets demand it while minimizing emissions, outages and maintenance costs.

### **Proven Results for Boiler Optimization – a Function of Operations Performance Management**

2016 Cumulative Results

# **Proven Technology**

LEARN MORE

Over 150 installations at coal plants

Proven over

**17**<sub>years</sub> of operation

49% Wall-Fired 43% T-Fired boilers

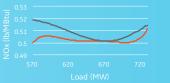
From 50 MW to **1 GW** plants

Total 20 GW capacity under

016 015 014 012 330 335 340 345 350 Load (MW) 550 MW Plant NOx		<b>350 MW Plant</b> NOx	
0.12 330 335 340 345 350 Load (MW) 550 MW Plant NOx	0.15 0.14 0.13 0.13		
NOx			
		550 MW Plant	
		NOx	
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**EMISSION IMPROVEMENTS** 

755 MW Plant



monitored by GE's M&D Center HEAT RATE IMPROVEMENTS

**Real World Results** 

Data derived from plants



550 MW Plant

755 MW Plant

Optimizer On — Optimizer Of



CO2 Savings: **1 MM tons** 

# **Customers Speak**



**Challenge:** OMU needed to reduce emissions and improve flexibility. **Solution:** Early adopter of Operations Performance Management.

**Results:** Reduced emissions with NOX benefits of **10–17%**, improved heat rate by **0.5%** and significantly reduced outages related to issues like tube ruptures.\*

**"GE Boiler Optimization Solution can** anticipate, predict and evaluate which makes it a very powerful tool for the operators to utilize."

John Allen, Operations Manager Owensboro Municipal Utilities, Owensboro Kentucky

### WEBINAR

# **The New Era of Digital** for Coal-Fired Plants

Listen to the experts, including a large coal power producer, discuss the benefits of digital and optimization to lower heat rates and improve emissions.



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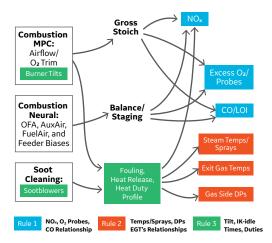




### WATCH VIDEO

# **How Operations Optimization Works** for Boilers

The boiler optimization component of **Operations Performance Management** uses multiple model-based triggers to create real-time alerts to impending excursions, imbalances, and other adverse conditions. The solution employs a combination of expert rules, empirical models and thermodynamic calculations with out-come optimizing controls to achieve improved boiler performance.



### Want to learn more?

Read our executive brief "Achieving Better Coal Plant Efficiency and Emissions Control with Digital'

**DOWNLOAD NOW**