### Challenge

AmerenUE needed to manage and extract more value from their regulatory process control assets. AmerenUE was looking for a proactive solution that would provide personnel with the necessary tools to identify and solve control asset issues before they became serious problems.

### Solution

Control Performance Monitor targeted key control tuning issues and simultaneously provided a big-picture view of overall performance. Control Performance Monitor lowered maintenance costs, reduced unit trips and outages and allowed plant personnel to pursue a self-directed control asset improvement program.

### Advantage

- Reduced maintenance costs
- Increased durations between major unit overhauls
- Reduced equipment failures and unnecessary overhauls

### Pursuing a Proactive Control Maintenance Strategy

AmerenUE was looking for a product that would manage their process control assets more effectively. Their Labadie facility uses hundreds of regulatory control loops to manage the power generation process. These control loops degrade over time, resulting in process variability, higher maintenance costs and expensive disruptions to plant operations.

As with many power generation facilities, control loop tuning at AmerenUE had traditionally been done by a boiler expert. As unit performance degraded over time, the boiler expert had to be repeatedly brought back to re-establish peak performance while personnel responded to pressing control problems on a reactive basis between scheduled maintenance calls. AmerenUE was seeking a proactive product that would allow their staff to identify and solve control problems before they could impact unit performance.

AmerenUE requirements included:

- reduce maintenance costs
- improve efficiency of maintenance planning
- reduce unit trips, disturbances and outages
- introduce a self-directed control asset improvement program

### A Complete Control Loop Health Solution

Control Performance Monitor targeted key control tuning issues and simultaneously provided a big-picture view of overall performance. As part of its ongoing service alliance with AmerenUE, Honeywell implemented Control Performance Monitor in Labadie’s number 4 unit, focusing on the critical control loops in the unit, including air, furnace and feed water controls. The project was soon expanded to include all the controls in the unit.

Approximately 50% of the controllers were underperforming across the entire unit. As the ratio of control assets to maintenance personnel grew to greater than 300 to 1, maintenance and engineering teams were unable to efficiently maintain these assets using traditional methods.

Control Performance Monitor uses data analysis to provide users with the information needed to target key control tuning issues. Tim Laifer, supervising engineer at Labadie, says Control Performance Monitor has lowered maintenance costs, reduced unit trips and outages and allowed plant personnel to pursue a self-directed control asset improvement program.

Control Performance Monitor has been implemented across all of AmerenUE’s coal-fired generation units at four separate locations. Control Performance Monitor is a complete control asset optimization product for every control layer from instrumentation to regulatory, inferential and advanced process control levels. Not only does Control Performance Monitor detect, prioritize and diagnose control issues, it includes intuitive tools that allow users to quickly resolve problems that can detract from process performance optimization.
“Control Performance Monitor has enabled us to reduce maintenance costs. We’re seeing greater durations between major unit overhauls, and we’re experiencing fewer equipment failures and unnecessary overhauls. Best of all, Control Performance Monitor has allowed us to take a proactive approach to control asset management,” said Tim Lafser, Supervising Engineer, AmerenUE.

About AmerenUE
AmerenUE is a medium-sized electric utility located in the American Midwest. AmerenUE’s generation assets consist of fossil fuel, hydro and nuclear power facilities. The Labadie power plant is AmerenUE’s largest coal fired facility and boasts four 630 MW generators.

‘Powered by Matrikon’ symbolizes that this product/solution is system and application independent.

For more information:
For more information about Control Performance Monitor, visit our website www.honeywell.com/ps or contact your Honeywell account manager.
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