POWER OPTIMIZATION CENTER



ANOTHER SUCCESS STORY AIR PREHEATER HOT END BEARING TEMPERATURE

24/7 Real-Time Operational Support With Actionable Intelligence

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SOLUTIONS & SAVINGS

"Immediate action by the Power Optimization Center saved this generation facility \$1,582,748 in total cost avoidance."

OUR MISSION:

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The Power Optimization Center is dedicated to providing unsurpassed, advanced monitoring and diagnostics services to generation and production facilities. Industry-seasoned engineers and experienced process control operators excel in identifying incipient and long-term equipment issues around the clock, providing actionable intelligence directly to those responsible for real-time operations. With no ties to parts or maintenance organizations, the success of the Power Optimization Center is driven by the competitive market advantage its clients achieve through realizing maximum asset performance.



AIR PREHEATER HOT END BEARING TEMPERATURE HIGH

The Luminant Power Optimization Center identifies, forecasts and advises plant personnel of emergent issues impacting production through the integration of remote monitoring, modeling and diagnostics.

In the current market environment of low natural gas and wholesale power prices, and tightening emissions standards, generators need to produce megawatts as profitably as possible. The Power Optimization Center can help reach that goal.

Power Optimization Center personnel discovered rapidly rising bearing temperature on an air preheater hot end bearing. **Immediate action by the Power Optimization Center saved this generation facility \$1,582,748 in total cost avoidance**.

The Problem

Sometimes, even the best intentions do not yield the greatest results. When a plant was experiencing higher-than-normal bearing temperatures on one of its air preheaters, the Power Optimization Center correspondingly increased their monitoring efforts. Auxiliary cooling was used at the time to help achieve normal bearing temperatures.



One morning, the Power Optimization Center received a high temperature alarm on an air preheater hot end bearing. The air preheater utilizes excess heat from exhaust gasses to warm cold air coming in from the forced draft fans. If the rotating heat transfer element cannot rotate, the unit must shut down in order to prevent damage to the rotating element.



The Solution

The Power Optimization Center contacted the control room and apprised plant operations of the rapidly rising bearing temperature. Plant personnel investigated and found decreased bearing system lube oil pressure, causing higher bearing temperatures. Upon further investigation, the plant found the inline lube oil filter to be partially obstructed. They changed the lube oil filters and bearing temperatures returned to normal.

Without advanced notification by the Power Optimization Center, plant personnel would have received air preheater bearing temperature alarms when temperatures reached engineering limits. Bearing temperatures were rising rapidly and immediate action by plant personnel would have resulted in tripping the air preheater and thereby tripping the unit offline. Power Optimization Center intervention prevented a unit trip and potential equipment damage.

The Savings

The Power Optimization Center determines cost avoidance by applying proprietary calculations. This generating facility avoided \$1,530,748 in lost revenue and \$52,000 in additional maintenance costs, including parts and labor, totaling \$1,582,748 in total cost avoidance.

Utilizing over a dozen separate software systems that monitor and diagnose just about any issue that may affect plant operations, the Power Optimization Center has a proven history of helping manufacturing and generating facilities realize maximum asset performance.

With power markets nationwide under low price pressures, generators more than ever need a way to analyze unit performance in real time to enhance effi-



ciency, prevent shutdowns and save dollars. Whether your equipment resides in the utility industry, manufacturing or any other type of facility, the Power Optimization Center is ready to help your company achieve the highest levels of safety and reliability.

Call us today to see how we can bring value to your company and visit www.pocdiagnostics.net to learn more.

POWER OPTIMIZATION CENTER



CONTACT US TODAY TO SEE HOW WE CAN HELP YOU

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