

POWER OPTIMIZATION CENTER



Luminant

ANOTHER SUCCESS STORY PRIMARY AIR FAN BEARING TEMPERATURE

24/7 Real-Time Operational Support With *Actionable Intelligence*

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SOLUTIONS & SAVINGS

“Swift action by the Power Optimization Center saved this generation facility over \$360,000 in total cost avoidance”

OUR MISSION:

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 services organizations, the success of the Power Optimization Center is driven by the competitive market advantage its clients achieve through realizing maximum asset performance.



PRIMARY AIR FAN 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.

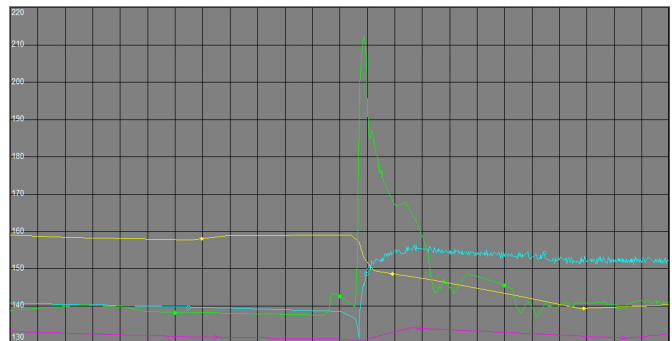
In the current market environment of low natural gas and wholesale power prices, and tightening emissions standards, generators need produce megawatts as profitably as possible. The Power Optimization Center can help reach that goal.

For example, Power Optimization Center personnel discovered rapidly rising bearing temperature on a primary air fan Bearing. **Swift action by the Power Optimization Center saved this generation facility over \$360,000 in total cost avoidance.**

The Problem

Winter can be unpredictable and ambient temperatures can change in the blink of an eye, no matter how well the weather is forecast. One afternoon, temperatures plummeted and the wind strengthened, creating challenging conditions for any power plant.

Power Optimization Center personnel received a primary air fan bearing temperature high alarm. The operator recognized this temperature signature as an emergency requiring immediate action. Primary air fans provide the required air to carry crushed coal from the coal pulverizers into the boiler furnace. Without these fans, fuel could not be fed into the furnace and the plant would trip.



Power Optimization Center Procedures state that plant control rooms should be contacted directly when emergency situations arise, minimizing the time between emergency and remedy. This allows for proper plant personnel to assess the situation and follow their procedures without delay, minimizing risk and maximizing response time.

The Solution

The Power Optimization Center contacted the control room and apprised plant operations of the rapidly rising bearing temperature. Oil flow to one of the primary air fan bearings was stopped due to freezing weather, causing the bearing to quickly overheat. Due to the timely notification by the Power Optimization Center, plant operations was able to restore oil flow before significant bearing damage occurred, avoiding a fan trip and a subsequent plant trip. Grid conditions are critical during significant weather events and even a single plant trip can be disastrous.

The primary air fan was added to the Power Optimization Center Watchlist for additional scrutiny until the fan bearings could be inspected for damage. Not only did the Power Optimization Center help avert potential failure, but plant outage planning personnel also scheduled this asset for bearing inspection during the next available opportunity. They were able to replace the affected bearings during a scheduled outage rather than taking a forced outage during a time when much-needed generation was required to maintain grid reliability.

The Savings

The Power Optimization Center determines cost avoidance by applying proprietary calculations. This generating facility avoided \$350,193 in lost revenue and \$13,640 in additional maintenance costs, including parts and labor, totaling \$363,833 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 efficiency, 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

POWER OPTIMIZATION CENTER

1601 Bryan St.

Energy Plaza

Dallas, TX 75201

Phone: 214.875.8130

POCInfo@luminant.com