

POWER OPTIMIZATION CENTER



Luminant

ANOTHER SUCCESS STORY PULVERIZER MILL LUBE OIL PRESSURE LOW

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

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SOLUTIONS & SAVINGS

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



PULVERIZER MILL LUBE OIL PRESSURE LOW

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.

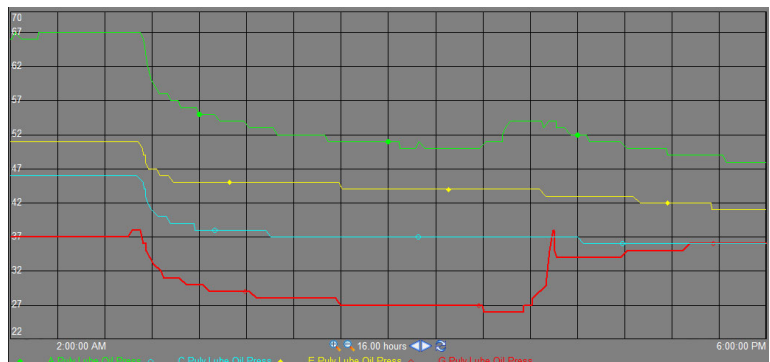
In the current market environment of low natural gas and wholesale power prices, and tightening emissions standards, generators need to produce megawatts as profitably as possible. The Power Optimization Center can help reach that goal.

Upon discovering low lube oil pressure on a bowl mill lube oil system, **Power Optimization Center personnel took immediate action, ultimately saving this generation facility \$688,435 in total cost avoidance.**

The Problem

Power Optimization Center operators are always on alert. Complacency is not accepted. At 8:30 a.m., the Power Optimization Center received a pulverizer mill lube oil low-pressure alarm. Plant operations was contacted and lube oil pressure was immediately, but temporarily, corrected and the alarm cleared.

Then again at 3:50 p.m., the Power Optimization Center received the same alarm. Complacency would dictate that the issue had been remedied and the alarm was a nuisance alarm; however, Power Optimization Center operators are trained to trust their indications unless an instrumentation failure has been proven. The lube oil trend for that bank of pulverizers, along with associated trends, quickly revealed that the plant's adjustment had the opposite effect.



Lubrication is essential to any rotating machinery. The journal bearings installed in this type of pulverizer utilize a forced-oil system that relies on lube oil pressure and temperature to be within a specific band. When lube oil pressure lowers out of specification, bearing damage is likely to occur.

The Solution

The Power Optimization Center contacted the control room again and apprised plant operations of the decrease in pulverizer lube oil pressure for that bank of pulverizers, especially the 'G' pulverizer. Plant operations made another set of adjustments and 'G' pulverizer lube oil pressure returned to normal.

If pulverizer lube oil pressure remained low with its slow continuous trend downward, then significant bearing damage would be expected. Replacing the affected bearings would have required a 30-day outage with a 9% power derate for the entire duration of repairs.

The Savings

The Power Optimization Center determines cost avoidance by applying proprietary calculations. This generating facility avoided \$563,435 in lost revenue and \$125,000 in additional maintenance costs, including parts and labor, totaling \$688,435 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

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