

IBM Maximo MRO Inventory Optimization for power generation

Reduce costs, increase uptime

Industry challenges

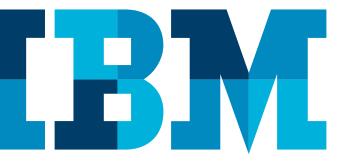
- · Low load growth
- · Regulatory compliance
- · Capital-intensive projects
- · Competition low cost alternatives

Resulting pressures

- · O&M cost reduction
- Maintain or improve reliability
- Preventive Maintenance (PM) compliance / Mean Time to Repair (MTTR)
- Labor efficiency
- · Plant shutdowns and/or re-powering

IBM® Maximo® MRO Inventory Optimization – A strategic approach

- Maintaining the right mix of MRO inventory
- · Establish objective spares criticality rankings
- · Dynamically segment MRO inventory
- Streamline potential stranded reviews
- Improve collaboration between maintenance and supply chain teams
- Prioritize and streamline workload through exceptions management



"50 percent of unscheduled asset downtime can be attributed to a lack of spare parts."

- 2015 Aberdeen Group Report - The Importance of Inventory Optimization and MRO

Customer Success - Large U.S. Utility*

Customer profile

- · Generation fleet nuclear, fossil, hydro, wind
- · Over 5,200 miles of transmission lines
- Over 2,600 miles of distribution lines
- · Serving over 1 million electricity customers

Problem: MRO inventory management issues

- Inventory value growth was on an unacceptable trajectory of 10 percent annually
- Benchmarking indicated company had higher inventory levels than its peers
- Previous attempts to optimize inventories were short-lived, at best

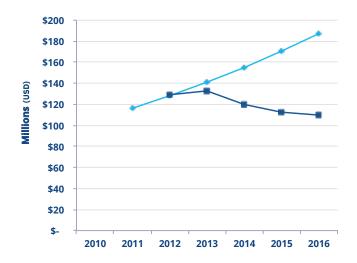
Process improvement tools, accountability

- Inventory Governance team
- · MRO Inventory Peer team created
- MRO inventory-related standards and procedures instituted
- Inventory optimization software tool (IBM MRO Inventory Optimization) implemented
- · Greater management accountability

Results Snapshot

July 2012 through December 2016

- \$24M USD MRO inventory savings in first year
- Elimination of 10 percent annual inventory growth
- \$77.8M USD spend avoidance over 5 year
- No negative impact on reliability to customers or system
- · Critical spares service level for generation is 99.7 percent



For more information regarding IBM Maximo MRO Inventory Optimization for the power beneration industry, visit:

www.ibm.com/services/process/mro-inventory





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