

Mobil DTE™ and Mobil Solvancer® assist nuclear facility in varnish prevention and extended oil life

GE Steam Turbine - Nuclear Facility | Power Generation | Minnesota, United States

Situation

A Minnesota company manages a large nuclear-power generation complex consisting of one nuclear reactor and a GE TC4F-30 power turbine with a 650 MW capacity. The turbine lube system had been using **Mobil DTE™ 732** turbine lubricant since 2013 and had accumulated over 96,000 hours with no trips or signs of varnish, far surpassing GE's 64,000-hour overhaul-to-overhaul interval. The company wanted to explore ways to further extend the life of **Mobil DTE™ 732** to their 2027 outage and reached to the **Mobil™ Engineering Team** for support.

Recommendation

The **Mobil™ Engineering Team** completed a thorough investigation of the historic oil analysis reports and recommended the use of **Mobil™ Solvancer®** oil-soluble cleaner to allow the oil to continue to operate with very low varnish potential. **Mobil™ Solvancer®** quickly dissolves deposits and varnish to help maintain cleanliness of turbine bearings and seals and has exceptional ability to remove varnish, carbon and sludge from circulating lubrication systems, bearings, and hydraulic systems.

Impact

Through the use of **Mobil™ Solvancer®** and the robust performance of **Mobil DTE™ 732**, the customer was able to save an estimated \$600,000 by avoiding an extended 2025 outage and continuing production into the 2027 major outage.



Annual Savings



~\$ 600,000 USD

Revenue Improvement



72 Hours

Exposure Reduction



7,450 Gallons**

Environmental Improvement

Advancing Productivity

Helping you reach your Safety, Environmental Care** and Productivity goals through our innovative lubricants and services is our highest priority. That's Advancing Productivity. And that's how we help you achieve your broader vision of success.

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