

# Power Generation Lubrication Workshop

Power generation is a vital contributor to our economy. Reliable and cost-effective power can impact nearly every facet of manufacturing and daily life. Lubricants are at the focal point for the reliability of nearly every mechanical system in a power plant, including nuclear, fossil, hydro, wind and even large solar installations. Turbines, gearboxes, electric motors, electrohydraulic controls (EHC) systems, solar positioner gears, and wind turbine main and blade bearings all require reliable operation through effective lubrication. When an experienced and capable workforce is armed with the knowledge of lubrication replenishment, life extension of critical components and reduction in O&M costs can be substantial.

## 2 DAY WORKSHOP

Power generation professionals will gather for a 2-day workshop to tackle machinery care and reliability improvement issues through laboratory time, classroom workshops and hands-on training.

### WHO SHOULD ATTEND?

- Plant Supervisors
- Plant Engineers
- Reliability Engineers
- Maintenance Managers
- Machine Lubrication Technicians

### RELEVANT INDUSTRIES

- Nuclear Power
- Fossil Fired Units
- Wind Power
- Hydro Power
- Large Solar Arrays
- Gas Turbine Units

*All training occurs at York College's J.D. Brown Entrepreneurship Center at King's Mill Depot, 410 Kings Mill Road, York, Pennsylvania*



Contact MRG Labs for more  
information!  
717-843-8884



## WORKSHOP SESSIONS

1. Turbine Lubricants
  - Steam and Gas Turbine Oil
  - EHC Fluid Health
  - Varnish Monitoring and Mitigation
  - Additive formulations and replenishment strategies
2. Lubricant Analysis Testing [Hands-On]
  - Grease and Oil Sampling
  - Lubricant health and detecting and correct lube mixing
  - Contamination, including microbial testing & remediation
3. Oil & Grease Analysis Case Studies
  - Industry Examples in Wind, Nuclear, Fossil, Hydro
  - Participant Provided Reports
  - Turbine Oil changeover lowers bearing temps by 6 deg F
4. Contamination Control
  - Proper sample collection and particle counting
  - Removal of water, particles and other contaminants
  - Contaminant exclusion with breathers and best strategies
5. Machine Retrofits [Hands-On]
  - Splash Bath & Circulating Systems
  - Breathers and Filters
  - New tools for Oil & Grease Sampling
6. Special Applications
  - Lube sampling and analysts in Wind Turbines
  - Managing Hydro Power Lubricants
7. Building Work Practices
  - Creating a Clean-Inspect-Lube culture in food production
  - Optimizing Lubrication Routes
  - Software & Electronic Tools
  - Using Linear Regression & Predictive Analytics in Lubrication