Monolec® Turbine Oil (6461-6462)

Combined Cycle Gas Plant in the Southeast
Alstom and GE Turbines

- Reduced turbine oil inventory

Customer Profile
This plant is a natural gas fueled, combined-cycle electric generating plant. The plant is used to generate electricity for the Southeast United States—the fastest growing region in the country.

Application
The plant consists of two combined-cycle units—one 564 megawatts and one 621 megawatts. Combine-cycle technology is one of the cleanest and most efficient methods of producing electricity. With this technology, the power plant’s combustion turbines make electricity by burning natural gas. Waste heat from the turbines is captured and reused to drive a separate steam turbine that produces additional electricity.

Challenge
Due to the concerns of having too many turbine oils on hand for the Alstom and GE turbines, the plant manager consulted with Blake Yates, LE lubrication consultant, to see what their options were.

LE Solution
Blake recommended Monolec Turbine Oils (6461-6462). Monolec 6461-6462 are premium quality turbine oils formulated using select paraffinic base oils coupled with a synergistic mix of additives that provides excellent performance in mainline steam and gas turbine applications. The LE turbine oils provide excellent water separation characteristics, are non-foaming in service, rust and oxidation inhibited, and have anti-wear properties.

Blake informed the plant personnel of the potential for varnish in today’s commercial turbine oils and how LE’s proactive reliability program provides solutions to mitigating varnish potential through advanced lubricants, contamination control, testing, and proper awareness.

Results
With the threat of a turbine trip block shutting down a turbine due to dirty oil, varnish deposits, or a list of numerous potential hazards that can create downtime in excess of $100,000. This customer likes having vendors they can partner with, including the ability to consult with them on ways to keep plant maintenance reliability at the forefront.

“You can’t put a price on true customer service and LE has provided us with every bit of service that we’ve asked for and more. We will continue to build relations with LE and other vendors like them that put our needs first.”

Other Products Used
- Duolec® Vari-Purpose Gear Lubricant (1604)
- Monolec® Multiplex Lubricant (4622)
- Monolec® Industrial Lubricant (4702)
- Monolec® R & O Compressor / Turbine Oil (6404 & 6406)
- Multilec® Industrial Oil (6803)
- Monolec® Synthetic Industrial Oil (9032)
- Monolec® Synthetic Industrial Lubricant (9460)
- IFH Storage Tanks
- Oil Safe containers
- Des-Case Filter Carts
Thank you to the plant personnel, and to Blake Yates, LE lubrication consultant, (pictured) for providing the information used in this report.