

ICB® JET CASE STUDY



BACKGROUND

Application: Power Generation

Location: CA, USA

Site: 45 MW Gas-Fired Peaker Plant with a GE LM6000 Aero-derivative Gas Turbine

PROBLEM

A Peaking Plant's Aero-derivative Gas Turbine failed to start as required based on grid demand. The failure was determined to be the result of varnish-accumulation in the turbine's lube oil system. Oil analysis revealed that the unit's turbine oil had a high MPC varnish potential, increasing the likelihood of similar oil-related fail-to-start events going forward.

SOLUTION

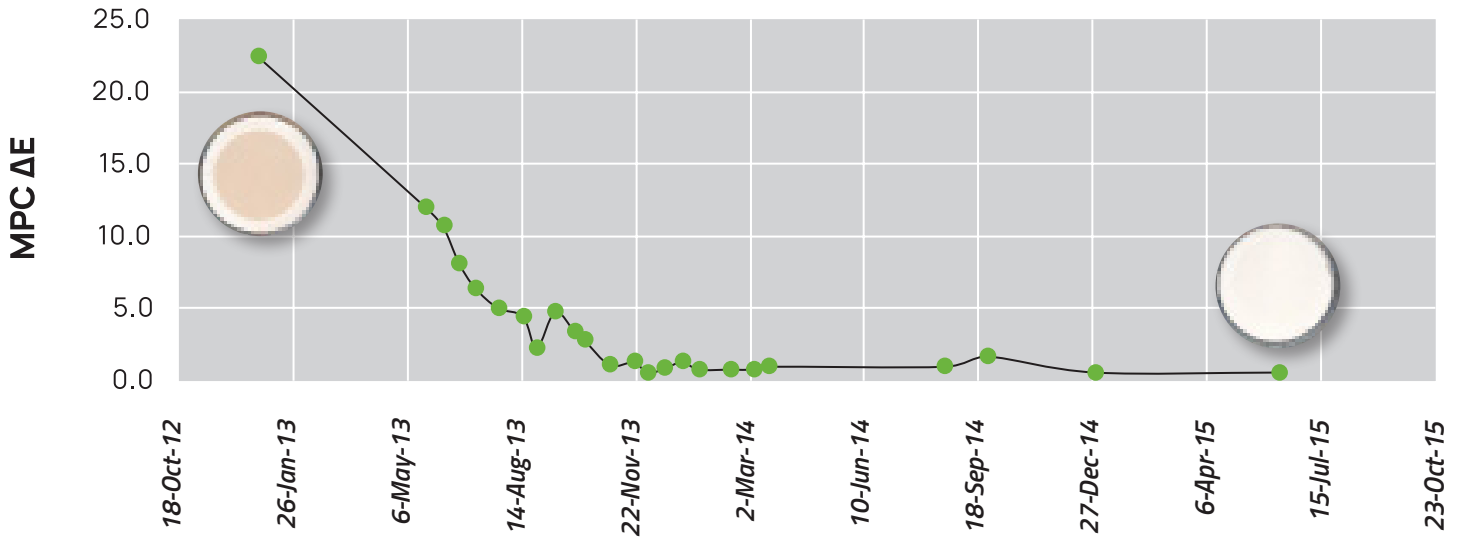
An SVR® Lubricant Conditioning skid employing ICB® JET filters was installed.

RESULTS

The installed ICB JET filters effectively removed varnish and its soluble precursors from the site's jet lube, improving its MPC varnish potential by 97% and maintaining its acid number within the application's required range. Since the filters were installed, fail-to-start conditions have been eliminated and the costly jet lube has not needed to be replaced.



POWER GENERATION



EPTTM
CLEAN OIL

LUBRICANT CHEMISTRY MANAGEMENT

ICB® JET CASE STUDY



BACKGROUND

Application: Power Generation

Location: AB, Canada

Site: 290 MW Gas-Fired Combined Cycle Plant with numerous GE LM6000 Aero-derivative Gas Turbines

PROBLEM

Regular oil analysis revealed that one of the Plant's jet lube featured critical acid levels that were above the application's maximum in-service limit. Since acids are established varnish precursors, the system's MPC varnish potential was also extremely high. Continued operation with degraded jet lube placed this system at heightened risk of failure.

SOLUTION

An SVR® Lubricant Conditioning skid employing ICB® JET filters was installed.

RESULTS

The installed ICB JET filters effectively removed acids and the varnish that they produced from the site's jet lube, improving its acid number and MPC varnish potential by 78% and 90%, respectively. Since the filters were installed, the system has not experienced any problems relating to oil breakdown.



POWER GENERATION

