

PROJECT BACKGROUND

SYSTEM: 925MW CCGT – 2 x 327MW Mitsubishi M501J + Siemens SST6-5000 requiring 182 MMscfd at 600 psig

RISK: Supply of power to 1,000,000 homes

OPERATING CHALLENGE: Impaired reliability due to turbine trips caused by oil carryover from booster compressor

OPERATING IMPACT: \$1,000,000 per day of lost revenue per day of downtime.

ENSUR™ OLYMPUS™ ADVANCED AEROSOL SEPARATION SYSTEM

CONVENTIONAL: Original installation of horizontal filter separator, taken out of service in less than 12 mo

ENSUR OLYMPUS: Vertical, ultrahigh efficiency, separation system, with available field performance verification



PERFORMANCE VALIDATION SYSTEM

RESULTS

COMPRESSOR OIL REMOVAL: Performance Tests indicated *Non-Detectable* oil downstream of the ENSUR OLYMPUS

OIL RECOVERED: Approximately 3-8 gal/day of expensive compressor oil, during booster compressor operation

SEPARATOR ELEMENT REPLACEMENT: >1-year expected

RISK REDUCTION: \$10,000,000+ reduced risk of gas turbine blade damage due to oil carryover

POWER OUTPUT: Improved reliability means reduced risk of lost power generation, worth \$1,000,000 per day