DESCRIPTION OF EQUIPMENT

Serial #: 191-761

Model #: LM 6000 PC-NGW, Natural Gas, Sprint Package

Model Year: 2002 Operational: June 2003

Category: Energy Production

Start Attempts: 229 As of 6/18/08 # Fired Starts: 182 As of 6/18/08 Fired Engine Hours: 36,868.2 As of 6/18/08

Items of Supply:

- One (1) Gas Turbine Generator, GE Aero, LM 6000 PC-NGW, Natural Gas, Sprint Package
- Air Cooled GE Generator
- Lifting/ spreader beams available for lifting the GT/Gen package (beams only)
- Inlet Anti-Ice Coil for glycol circulation (Coils are located on the air inlet for the turbine only)
- Inlet Anti Icing System (Steam/Glycol Heat Exchangers/circulation skid module)
- Lube Oil Systems with shell and tube coolers (Lube Oil enclosure contains only the hydraulic jacking pump and hydraulic oil reservoir, turbine lube oil reservoir and tube and shell coolers and the water wash heating tank)
- GT 1 Control Cubicle, which contains the GT 1 Turbine Control Panel which consists of the following controls:
 - Synchroscope with pistol grip controller for Generator with manual-off generator auto
 - o PM 295 Power Analyzer for the generator
 - Excitation Null Meter
 - o Generator Breaker Control pistol grip controller with Trip/Close
 - o PF/VAR pistol grip controller with Voltage-PF-VAR
 - Manual Regulator Voltage pistol grip controller with Lower-Normal-Raise
 - Generator Exciter Voltage Regulator with pistol grip controller with Manual-Normal-Auto
 - Automatic Regulator Voltage pistol grip controller with Lower-Normal-Raise
 - Brush Prismic A30 Excitation Control, HMI into the GE Series 6 and FANUC 90/70
 - o Emergency Stop Button
 - o Control Selector Switch with pistol grip controller with Local-Remote
 - o Governor pistol grip controller with Lower-Normal-Raise
 - Beckwith Electric Company Generator Integrated Protection System
- GT 1 termination Cubicle which consists of the following, termination points for inputs into the GT 1 Turbine Control Panel and into the Allestec Corporation Model 800 natural gas and fire monitoring system for the Gas Turbine and Generator Enclosures and the Bently Nevada 3500 Vibration Monitoring System for the Turbine and Generator.

- Remote work station consisting of the following: A Dell PC and keyboard with a 29 inch Samsung flat screen monitor.
- Neutral Cubicle with ground resistor located next to the Generator Enclosure.
- Noise reduction enclosures:
 - Auxiliary Module (located above the lube oil enclosure)
 - o Sprint Skid
 - Water Injection Skid (two (2) such enclosure, one for each NOX reduction pumps
- Pulse Air Filter/Pre Filter (The Equipment has an air intake filter self supporting housing for the turbine and generator with local control mounted on the structure for the pulse air system)
- Sprint Power Boost (The Equipment is equipped with a GE supplied water Sprint System)
- Standard Documentation consisting only of the following:
 - GE Aero Energy Products, A GE Power Systems Business, LM 6000, Gas Turbine-Generator Set 60 Hz, Installation Manual
 - GE Aero Energy Products, A GE Power Systems Business, LM 6000 Gas Turbine-generator Set 60Hz, <u>Installation Manual</u>, July 2002,
 - o GE Aero Energy Products, A GE Power Systems Business, Gas Turbine-Generator Set 60 Hz, <u>Basic Operator's Course</u>, March 2003
 - GE Aero Energy Products, A GE Power Systems Business, LM 6000, Gas Turbine-Generator Set 60 Hz, <u>Book 1 of 2 and Book 2 of 2, Basic</u> Operator's Course and Package Maintenance Course, April 2003
 - GE Industrial Aero Derivative, Gas Turbines, LM 6000, SAC, GEK 105059, Model-PC, <u>Volume 1 &11, On-Site Operation and Maintenance</u> Manual
 - GE Aero Energy Products, A GE Power Systems Business, LM 6000, Gas Turbine-Generator Set 60 Hz, <u>Advanced Systems & Controls</u>, Training Course (Millenniam-MARK VI / FANUC 90/70) April 2003
- Standard Enclosure for Turbine and Generator
 - Ventilation System
 - CO2 Fire Suppression System mounted in a separate enclosure next to the generator
- Water Injection for NOX Reduction (Duplex Rotojet Pumps, separate enclosures)

























