Taurus™ 60 Gas Turbine – Horsepower Upgrade

Project Highlights

+ Up-rate from Centaur® 40-T4701DLN to Taurus™ 60-T7901DLN
+ Increased Reliability and Reduction in Fuel Costs
+ Control System Upgrade
+ Service Agreement and Remote Monitoring System

Key Challenges

+ The client required a short outage duration and commercial operations prior to the summer peak season. Equipment availability and effective project planning were required to complete execution within a seven (7) day outage period
+ Replacing the existing Centaur® 40 gas turbine with the larger Taurus™ 60 engine also required compatibility with the existing electrical installation and equipment
+ Major modifications to the exhaust system were required as well as upgrades to the control system

Project Overview

One of the largest paediatric hospitals in California, providing care to more than 150,000 children, came to EthosEnergy concerning their power issues. After a major hospital expansion, the facility was unable to supply 100% of its power and suffered electrical power loss when Southern California lost power. The hospital needed reliable, uninterrupted power and looked to upgrade its existing gas turbine to increase power output without relying on the grid.

enquiries@ethosenergygroup.com
www.ethosenergygroup.com
**Case Study**

**EthosEnergy** is a leading independent service provider of rotating equipment services and solutions to the power, oil & gas and industrial markets. Globally, these services include facility operations & maintenance; design, manufacture and application of engineered components, upgrades and re-rates; repair, overhaul and optimization of gas and steam turbines, generators, pumps, compressors and transformers; delivery of gas turbines and generators, and supply of overhauled and warrantied equipment on a FAST TRACK basis.

**Key Results**

+ Rated power increased by 57% from 2800 kW to 3200 kW
+ Reduction in fuel cost per kW due to better efficiency thereby improving return on investment
+ 100% self sufficient power generation, guaranteeing a safer environment for its patients

**The EthosEnergy Solution**

+ Pre-project planning and execution plan focused on customer critical to quality elements
+ Installation, testing, commissioning and hand-over completed within six (6) days
+ Team of highly skilled engineers performed all mechanical and electrical adaptations
+ Installation of burner acoustics monitoring systems
+ Implementation of a remote turbine view system to allow for advanced troubleshooting and trend analysis
+ Term Service Agreement to increase reliability and efficiency

**EthosEnergy (US Corporate Office)**
Brookhollow Central I, 2800 North Loop West
Houston, TX 77092

**EthosEnergy (UK Corporate Office)**
Ethos House, Craigshaw Business Park,
Craigshaw Road, Aberdeen, AB12 3QH