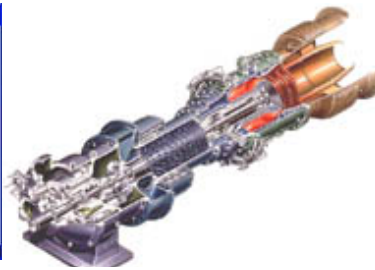
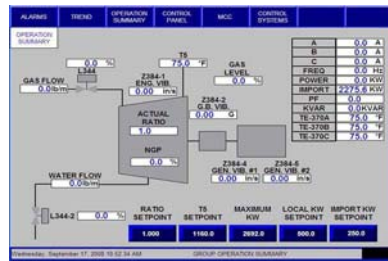


Two (2) Solar Turbine (Centaur 40) Maintenance Services

State of California – Department of Corrections & Rehabilitation
Avenal State Prison



LOCATION:

Avenal, California

PROJECTS & SERVICES:

- Project Management
- Required Scheduled Maintenance
- Predictive Maintenance
- Engineering Control System Troubleshooting and Correction
- Emissions Source Testing

PROJECT OVERVIEW:

Source California Energy Services, Inc. (SCES) is the primary contractor since 2006 for the maintenance and engineering services required on two (2) Centaur 40 Solar Turbines with Heat Recovery Steam Generators (HRSG).

SCES provides all the necessary personnel, tools, and equipment necessary to conduct regularly scheduled preventative maintenance and repair services including the following:

- ◆ Quarterly Preventative Maintenance
- ◆ Semi-annual Maintenance
- ◆ Annual Maintenance
- ◆ Emissions Source Testing
- ◆ Tri-annual Maintenance

SCES also provides all unscheduled maintenance requirements including mechanical repairs and engineering controls system diagnostics and corrections. SCES was successful at correcting historical turbine load instabilities when operated in the fully automated load sharing mode. Examples of other corrections to unscheduled events include:

- ◆ corruption of the starter motor Variable Frequency Drive (VFD) control parameters;
- ◆ turbine primary speed probe failure preventing startup;
- ◆ Allen-Bradley ControlNet 1.25 diagnostics for input/output T5 data problems;
- ◆ replacement of automated switchgear controller PLC; and
- ◆ Allen-Bradley PLC-5 ladder logic corrections.