Solar Turbines

A Caterpillar Company

Turbomachinery Consulting for the Oil and Gas Industry

ASSET INTEGRITY STUDIES MAXIMIZING TURBOMACHINERY SAFETY AND RELIABILITY

Location: Offshore - West Africa

Solar Turbines has a strong presence in the West African oil and gas industry. One of Solar's largest customers in West Africa operates a total fleet of 120 Solar gas turbine units. Of these, 107 units are positioned offshore on various production platforms as well as an FPSO and 13 units are located onshore providing facility power and crude oil pumping.

At the customer's request, Solar Fleet Assessment Services (FAS) was hired to conduct an onsite evaluation of the customer's turbomachinery equipment. The FAS team focused its initial assessment activities on the equipment positioned in the most mature field locations.

After two years of intense logistical planning and customer collaboration, FAS completed assessments of a total of 84 Solar units (70% of the entire customer fleet and 100% of all units over 15 years old).

The goals of the assessment were to baseline the equipment condition and identify potential safety and lifecycle management risks. The results of the FAS inspections and data analyses became the basis for the Solar Turbines Package Maintenance Program (STPMP) — a comprehensive customer initiative for restoring aging equipment within their oil and gas field concessions.

The assessment results were reviewed with the customer through a series of detailed workshops with FAS analysts in Africa.

Collaboratively, the customer and FAS developed an executable reinvestment strategy aimed at addressing three key items:

- Safety
- Reliability
- Obsolescence

The pragmatic FAS solutions were consistent with the customer's operational objectives, budget and available manpower. Additionally, in an effort to limit equipment downtime, the program was specifically designed within the constraints of platform maintenance and shutdown schedules.

FAS also developed detailed program metrics, cost-benefit analyses and presentation materials to assist the customer through the complex process of business partner and government financial approvals.

For more information on how Solar Fleet Assessment Services can provide intelligent, cost-effective equipment optimization and refurbishment solutions for your Solar fleet, please contact your local Solar Sales Account Manager.

Internet: www.solarturbines.com
Email: infocorp@solarturbines.com

