



THE DIFFERENCE IS THE APPROACH

## CASE STUDY

### Case Study

#### Express, Flawless Installation for 100MW Fast Track Power Plants

4 GE TM2500+ Gas Turbines and their associated BOP installation, commissioning and start up in 6 weeks' time.

#### Case Study – Challenge

In November 2013, TCS experienced its first 100MW turnkey project on two mini power plants installation, commissioning, and start up.

The project is to construct a plant of four GE TM2500+ in two different locations in the western side of Libya on a turnkey basis that each power plant contains two GE TM 2500+ package, two auxiliary power packages, Liquid and Gas Fuel skids, two ABB 11.5/220KV transformer in Azzawia and Tripoli West Power Plants in Libya.

The fast-track solution project, featuring mobile turbines was a challenge to TCS to complete within short time to provide fast-track power while the country repairs/builds its infrastructure as well as to cover anticipated power demand during the critical peak seasons; a challenge against a time-consuming plants locations, customer change of plans, complex installation, full of uprising obstructions such as rebels fighting, roads, sea and airports blockage and lack of locally-supplied material have inspired and boosted TCS to complete the project not only within assigned time frame but also within assured quality and proposed estimates.

#### Case Study – Solution

TCS Gas Turbine and balance of plant installation services business provided the OEM with a TM2500+ gas turbine and power auxiliary packages.

A black start diesel generators, step up transformers, liquid and gas fuel skids and pipes and cable erection and testing, commissioning and start up services as well as civil scopes such as grounding, compaction and foundations.

The balance of plants that includes liquid fuel and gas fuel skids with Enerflex compressor boosters, ABB step up transformer, back start diesel generators, and auxiliary power package were put all together to generate power independently to increase the capability of 1,200MW main power plants and can be easily relocated to any location in matter of weeks.

#### Case Study – Results

The four TM2500+power plants seamless installation process, on time delivery within quality and competitive price allowed to deliver extra 100MW of power to the western cities of Libya.

