# Al-Shabab Gas Turbine Generating Plant

#### Client

Kharafi National for Mechanical and Electrical Works

# **Scope of Work**

Concept design Schematic design Design development Detailed design Shop drawings

Kharafi National (KN) was awarded the Engineering, Procurement and Construction (EPC) contract of Egypt Al-Shabab Gas Turbine Generating Plant (GTGP). ECG was invited by KN to provide the engineering design services in support to their EPC contract.

The first gas turbine unit started commercial operation on June, 2011 for Al-Shabab GTGP. Subsequently, ECG set its fast track methodology to fully complete the design services in a period satisfying KN proposed schedule requirements.

The new plant has eight new gas turbines with a total rated capacity of 1,000 MW using 8\*125 MW gas turbines.

Understanding the importance, sensitivity and urgency for implementing the plant within the time constraint being a national "on spot" project, ECG quickly set a task

### Location

Ismailia, Egypt

## **Types of Activities**

Architecture

Communications & security systems

Electrical

Infrastructure

**HVAC** 

Landscape

Mechanical

Piping

Roads

Structur

force from its senior staff to plan and set the project staffing requirements and the immediate mobilization of task forces, fast-track quality control measures, and packaging of deliverables which were tailored to meet KN milestones, enabled the quick start of construction and allowed for a continuous flow of KN construction execution scheme.

ECG Scope of Services covered the following:

- Package 1: Enabling work
- Package 2: Foundation package
- Package 3: Tank farm design
- Package 4: Auxiliary systems (service water system, compressed air system, solar fuel system, fire protection system, GIS substation, control s/s, LV transformer, control building, etc)
- Package 5: Infrastructure networks
- Package 6: Ancillary buildings







