

Al Khalij Power Plant



This is the first Bechtel project to be performed in Libya since the 1970s.

Bechtel is providing engineering, project, and construction management services for the Al Khalij project, a four unit, 1,400 MW electric generating station located 450 km east of Tripoli and 20 km west of Surt, Libya. The project was signed on October 19, 2008, construction began in early 2009, and is scheduled to be completed in September 2012.

PLANT CONFIGURATION

The plant consists of 4 x 350 MW thermal units firing natural gas and heavy and light fuel oils. It is connected to the electricity grid via a new 400 kV GIS switchyard. The plant uses a once-through cooling system. Also included in the scope of work are fuel oil storage tanks and multi-effect desalination units.

POWER ISLAND

The power island consists of four tangential-fired boilers, four reheat steam turbines, a main boiler, feedwater and booster pumps for each unit, a once-through cooling system, a common steam turbine building, and a common control room.

EMISSIONS CONTROL

The boiler design incorporates low-NO_x burners.



Location:

Libya

Customer:

General Electricity Company of Libya

Scope of Services:

Project Management
Engineering Management
Construction Management

Project Completion:

2012

Units and Megawatts:

4 x 350 MW

Significant Features/ Accomplishments:

- Located on the Mediterranean Sea
- Includes a 1 km offshore intake and a 2 km single-point offshore mooring for fuel oil unloading
- Incorporates multi-effect desalination units