

Abu Qir Thermal Power Plant

Client

Orascom Construction Industries

Scope of Work

Detailed design

Location

Alexandria, Egypt

Types of Activities

Civil works
Electrical
Infrastructure
Landscape
Mechanical
Roads

Expanding the capacity of the existing Abu Qir Power Plant, involved the development of the new Abu Qir Thermal Power Plant. Situated on the Mediterranean coast, 20 km east of Alexandria and to the east of the existing Abu Qir Power Plant, the new plant comprises two 650 MW indoor condensing steam turbine generating units; two outdoor, dual-fuel fired (natural gas and mazut), pressurized furnace steam generators; and necessary auxiliary equipment including onsite storage; a natural gas reducing and handling facility; desalination plant for plant make-up water, off-shore structures for plant cooling water intake and discharge; water and wastewater treatment and GIS 500 kV indoor switchyard buildings. While the main fuel is natural gas, the plant was also designed to run on heavy fuel (mazut) oil as a backup fuel.

With a construction cost of 875 million euro for this state funded project, the objective was to increase the generation capacity of the Unified Power System (UPS) by about 4% in the year 2012 to meet the electricity demand on the UPS in the short-to-medium term. The project, when completed, would contribute to making available sufficient and reliable power to the various consumers including the households, agriculture, business and industries.

ECG has completed the detailed designs of the underground utility networks (water, sewage, and irrigation); asphalt-paved roads (3,100 m long, with carriageway width of 7 m); and landscaping; alongside the electrical detailed designs of all site buildings.

