

Customer

Cairo Electricity Production
Company

Type of project

Power production.
El Tebbin project is intended to generate
about 700MWe.

Date of award

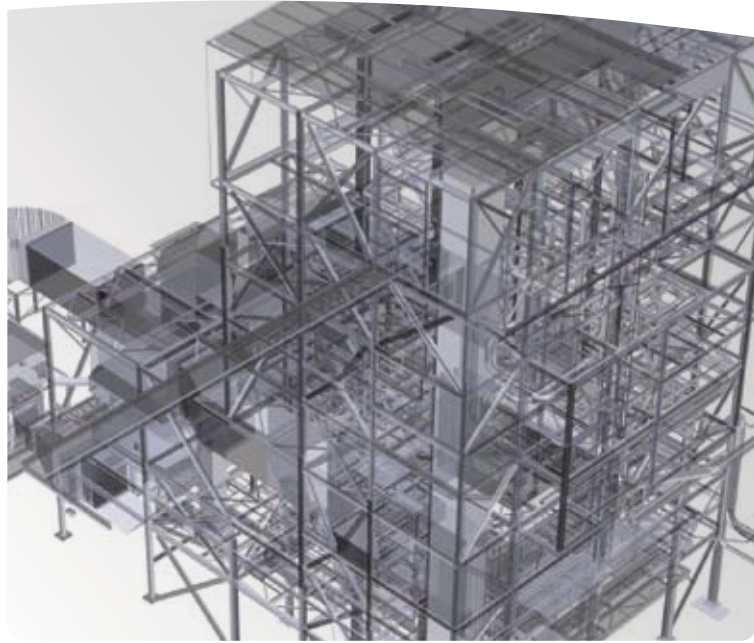
May 2007

Project completion

July 2010

Ansaldo Caldaie scope of works

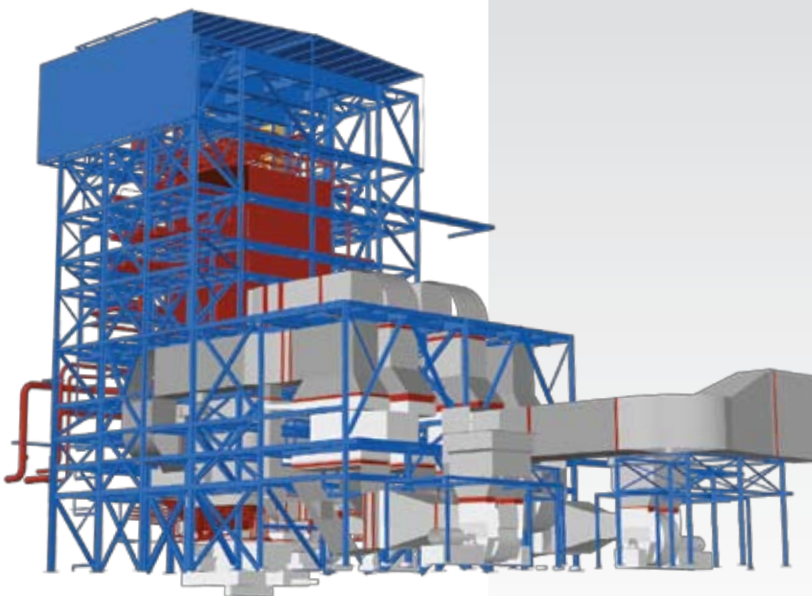
Engineering, manufacturing, supply,
erection and start-up of 2 x 1,095 t/h
gas & oil fired boilers.



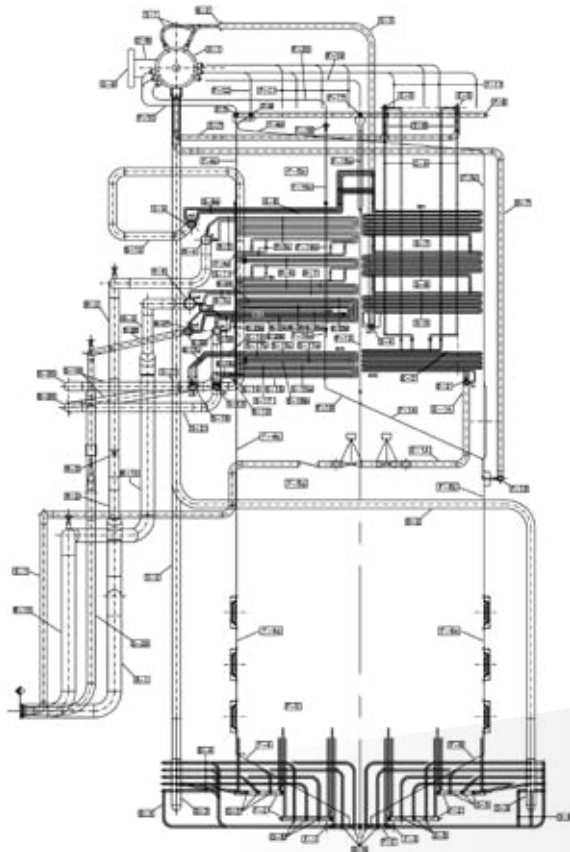
EL TEBBIN 2X350 MW GAS & OIL FIRED EGYPT

The boilers are designed to fire gas as primary fuel and mazout oil as alternative fuel. They will be equipped with a low NOx firing system based on Ansaldo Caldaie low NOx burners plus gas mixing.

The boilers are of the natural circulation type, based on Ansaldo Caldaie extensive experience with high pressure plants, resulting in high boiler availability.



N° of Units	2
Unit type	BOX Type
Rated power	350 MWe
Operating conditions	
- SH Flow	1,095 t/h
- SHO Temperature	541 °C
- SHO Pressure	182 bar (a)
- FW Temperature	274 °C
- RH Flow	932 t/h
- RH inlet pressure	41 bar(a)
- RH outlet Temp.	541 °C
- RH outlet Pressure	39 bar (a)
Furnace Type	Membraned walls / ribbed and smooth tubes
Furnace draft	Pressurized
Furnace Size	Depth = 13.7 m Width = 12.1 m
Superheater	Three stages
Reheater	Single stage
Economiser	Bare tubes in-line
SH Temperature Control	Two stages of desuperheating
RH Temperature Control	Control gas recirculation from economiser outlet
Circulation Type	Natural
Main Fuels	Gas: LHV 46,100kJ/kg Mazout oi: LHV 39,750 kJ/kg
Regenerative air heaters	Two vertical Ljungström type
Fans	Two FDF Two GRF
Firing Equipment	Low-NOx opposite firing scheme, based on Gas & Oil burners: - 18 TEA - BA Gas & Oil fired burners arranged in 3 rows at boiler front & rear walls



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