

Boroa combined cycle plant



SENER XENERGY / XTHERMAL GENERATION / XCCGT - COMBINED CYCLE GAS TURBINES / SPAIN

*BOROA COMBINED CY-
CLE PLANT*

**Cliente: NP/ESB INTERNA- Fecha inicio: enero del
TIONAL ESBI 2000**

País: Spain Fecha fin: enero del 2005

Boroa combined cycle plant, Amorebieta, Biscay, Spain.

The combined cycle at Boroa in Amorebieta (Biscay-Spain), with its 800 MW, provides high thermal efficiency with combustion of natural gas (55%) and low emissions of pollutants to the atmosphere. It has a multi-axis configuration with two gas turbines, General Electric Fr 9FA model of 250 MW each, two recovery boilers with three pressure levels and one steam turbine of 280 MW.

To realise this project, Sener set up a consortium with General Electric and ACS, also being responsible for the project engineering.

Besides, Sener took on the role of plant contractor for the design, supply and construction, and participated in the selection of the site, evaluation of cooling system alternatives (open circuit, cooling towers, aerocondensers), studies regarding connection to the electricity network, analysis of the environmental impact and the engineering, purchase management and building:

- [Project description:](#)

- 800 MW, 2x2x1, with air cooled condensers.
 - GE (turbines Fr 9FA), HRSG DOOSAN.
 - Owner's engineering, previous to turn-key contract.
 - EPC Contract in consortium with GE Energy and ACS.
 - Scope: Detail engineering, procurement project management, construction supervision, commissioning and Start-up, and tests.
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