

Blenod, France

400 MW



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BLENOD, EDF's first Combined Cycle in France

A 430 MW Combined Cycle Power Plant for Electricité de France

Project Definition

The Power Plant of Blenod is the first Class F combined cycle power station entirely designed from the outset to be implemented by Electricité de France (EDF). This plant is located in Lorraine, in the North Eastern part of France. It is equipped with one 9FB gas turbine from GE, one horizontal Heat Recovery Steam Generator from John Cockerill and one steam turbine. This power station is designed as a semi base load, operating on natural gas.

The Contract

In February 2008, EDF awarded a contract to John Cockerill for the supply of one horizontal Heat Recovery Steam Generator (three pressure plus reheat). This contract followed an international tender including Martigues, Blenod and West Burton. The orders for the three French units (Martigues 1 & 2 and Blenod) were simultaneously awarded to John Cockerill. The present contract for Blenod includes the BFPs and John Cockerill is responsible for a supply and construct package.

Plant Operation

Semi base load operation (daily start-up).
4,000 operating hours per year.

Gas Turbines

- GE 9FB type
- ISO rated 280 MW
- Fuel: natural gas

Heat Recovery Steam Generator

- John Cockerill horizontal design, natural circulation, unfired HRSG
- Three output pressures to steam turbine with reheat
- Feedwater pumps and integral deaerator with LP drums as feedwater tank

Performances

GAS	°C		kg/s
Inlet	642.2		657
Outlet	99.2		657
STEAM	°C	barA	t/h
HP	566	129	315
IP	312	28	41
LP	271	5	20
Reheat	565	26	353

Schedule

- Contract Award..... February 2008
- Start boiler erection September 2009
- HRSG ready for PAC..... April 2011



CMI becomes John Cockerill

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