Besmaya, Irak

1500 MW

johncockerill.com/energy
Besmaya, Irak | 1500 MW

With this contract, John Cockerill will have supplied 28 HRSGs in Iraq

Project Description

The Besmaya project will be built in two phases of 1500 MW each. The power plant will have a capacity of 3000 MW when both phases are achieved.

In December 2014, the Turkish EPC ENKA awarded John Cockerill Energy with a contract for the design and supply of four vertical HRSGs. They will be installed in Besmaya (Iraq), which is a new city, whose construction started in 2013. The city is expected to be completed in 2019.

This contract is the fourth one for John Cockerill Energy with ENKA in Iraq for the same plant owner, MGH (Mass Group Holding).

The brand new combined cycle of Besmaya will enable power cuts to be avoided in Iraq, whose inhabitants only receive a few hours of electricity per day.

The Contract

The contract includes four John Cockerill HRSGs with two pressure levels in a 2-2-1 configuration. John Cockerill's scope also includes integrated deaerators on the LP drum, four diverter dampers, their structures and bypass stacks.

Plant Operation

The Besmaya electrical power station is designed for base load with natural gas and Diesel oil as a backup.

Gas Turbine

- GE 9FA
- Fuel: natural gas
- Diesel oil as backup

Heat Recovery Steam Generator

- 4 vertical John Cockerill HRSGs
- Green field
- Dual pressure with by-pass diverter
- Natural circulation

Performances

<table>
<thead>
<tr>
<th>GAS</th>
<th>°C</th>
<th>kg/s</th>
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<tbody>
<tr>
<td>Inlet</td>
<td>545</td>
<td>88</td>
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<tr>
<td>Outlet</td>
<td>141</td>
<td>88</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>STEAM</th>
<th>°C</th>
<th>barA</th>
<th>t/h</th>
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<tbody>
<tr>
<td>HP</td>
<td>512</td>
<td>84</td>
<td>40</td>
</tr>
<tr>
<td>LP</td>
<td>232</td>
<td>8</td>
<td>6</td>
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</tbody>
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Schedule

- Contract Award: December 2014
- Start first boiler erection: September 2015
- Hydrotest Block 1: March 2017
- Hydrotest Block 2: May 2017
- 1st HRSG ready for PAC: October 2017