Ever First John Cockerill Horizontal Three Wide Boiler

**Project definition**

Poweo, the end user, is an independent power producer emerging from the power market liberalization in Europe. In 2006, Poweo decided to install its ever first Combined Cycle Power Plant on an old EDF site decommissioned in 1997. This site is located in Pont-sur-Sambre, in the North West of France.

**The Contract**

In December 2006, Siemens Power Generation awarded a contract to John Cockerill on a turnkey basis for the supply of one Heat Recovery Steam Generator. John Cockerill scope consisted in the design, engineering, erection and assistance for the commissioning of the boiler. The pressure parts were manufactured in Korea under John Cockerill supervision.

**Plant Operation**

The HRSG is designed for base load and cycling operation.

**Gas Turbine**

- Siemens SGT5-4000F (V94.3A) single shaft
- ISO rated 240 MW
- Fuel: natural gas

**Heat Recovery Steam Generator**

- John Cockerill horizontal HRSG, natural circulation design
- Three Pressure levels to steam turbine with reheat
- With preheater

**Performances**

<table>
<thead>
<tr>
<th></th>
<th>°C</th>
<th>barA</th>
<th>t/h</th>
</tr>
</thead>
<tbody>
<tr>
<td>HP</td>
<td>567</td>
<td>130</td>
<td>299</td>
</tr>
<tr>
<td>IP</td>
<td>320</td>
<td>32</td>
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</tr>
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<td>LP</td>
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<td>39</td>
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<tr>
<td>REHEAT</td>
<td>565</td>
<td>31</td>
<td>328</td>
</tr>
</tbody>
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**Schedule**

- Contract Award: December 2006
- HRSG ready for acid cleaning: July 2008
- HRSG ready for PAC: December 2008