Mary, Turkmenistan

1574 MW

johncockerill.com/energy
**Project Description**

Turkmenistan, as a growing country, needs modernization of its power infrastructure and decided in 2015 to build the country’s first combined cycle power plant in Mary, 300km east of Ashgabat. The plant of Mary consists of 4 blocks with GE 9F.03 gas turbines and John Cockerill Heat Recovery Steam Generators. The power plant will have a 57% efficiency, a very efficient rate.

**The Contract**

GE France in partnership with Calik Enerji (Turkey) awarded a contract to John Cockerill Energy in January 2016 for the design and supply of 4 dual pressure HRSGs for the combined cycle power plant of Mary, in Turkmenistan. These steam generators will be associated with GE 9F.03 gas turbines and will be the first John Cockerill HRSGs to be installed in Turkmenistan, a country where the power industry is on the rise.

**Plant Operation**

MARY is designed for semi base load.

**Gas Turbines**

- 4 GE 9F.03
- Fuel: natural gas

**Heat Recovery Steam Generator**

- 4 horizontal John Cockerill HRSGs
- Double pressure
- Natural circulation

**Performances**

<table>
<thead>
<tr>
<th>STEAM</th>
<th>°C</th>
<th>BarA</th>
<th>t/h</th>
</tr>
</thead>
<tbody>
<tr>
<td>HP</td>
<td>538</td>
<td>89</td>
<td>361</td>
</tr>
<tr>
<td>LP</td>
<td>204</td>
<td>8</td>
<td>56</td>
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</tbody>
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**Schedule**

- Contract Award: January 2016
- Start (first) boiler erection: March 2017
- HRSGs ready for PAC: September 2018