

Besmaya III, Iraq

**1500 MW**



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## Supply of 4 John Cockerill HRSGs for Besmaya III combined Cycle Power Plant

### Context of the Project

Baghdad, Iraq; September 15, 2019: Mass Energy Group Holding (MGH) and GE Power signed a new agreement that will help establish Phase 3 of the Besmaya Power Plant, taking the total capacity of the facility up to 4.5 gigawatts (GW). Under the scope of the agreement, GE will supply MGH with four 9F gas turbines and four generators to equip Besmaya Phase 3. Besmaya Phase 3 is the largest new power plant by output to be added to Iraq's national grid since 2014. The project is anticipated to bring another 1.5 GW of power online by 2021, with the first 500 megawatts (MW) scheduled to be added to the grid as early as next year. Up to 1,200 people are expected to be employed in the construction of Besmaya Phase 3.

As for the two first phases, John Cockerill has been awarded with a contract for the design and supply of four vertical HRSGs for phase 3.

### The Contract

In August 2020, Avax SA awarded John Cockerill to design and supply 4 vertical HRSGs with two pressure levels to be associated to GE 9F gas turbines with two pressure levels in a 2-2-1 configuration.

### 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 CMI HRSGs
- Green field
- Dual pressure with by-pass diverter
- Natural circulation

### Performances

GAS	°C	KG/s	
Inlet	621.7	658	
STEAM	°C	KG/s	barA
HP	539.82	108.9	82.04
LP	237.24	9.879	7.95

### Schedule

- Contract Award: August 2020
- Start first boiler Erection: March 21
- PAC: November 2022