

29 April 2008

Press Release

Cogeneration Unit ready for commissioning

The Ministry of Development has adopted the opinion and associated positive recommendation submitted by the Regulatory Authority for Energy (RAE) on the inclusion of the Combined Heat and Power (CHP) Unit in the country's electrical power System.

With a nominal power output of 334 MW, the High-Yield Combined Heat and Power Station is an innovative investment in the Greek energy market, as it is the single large-scale cogeneration venture not only in the country but also in the wider region of Southeastern Europe. The Gas Turbine and Heat Recovery Steam Generator (GT+HRSG) technology used employed in the cogeneration station, coupled with the use of a dual-fuel steam turbine / boiler unit, not only achieves coverage of the requirements in steam across all pressure levels in the Aluminium of Greece plant, but also contributes a significant amount of electrical power to the System.

More in particular, electrical power is generated by two (2) General Electric high-yield gas turbine / power generator units (9E/PG171E) and one steam turbine / power generator unit, and is relayed to an existing PPC substation. The steam required for the alumina production process of the Aluminium of Greece plant is produced by two ALSTOM heat recovery steam generators (boilers), by exploiting the thermal energy contained in the exhaust gases emitted by the system's steam turbines, and one expansion steam turbine.

The specialist engineers of METKA (responsible for construction of the project) and ENDESA HELLAS (responsible for the unit's operation), together with the technical personnel of all technical equipment suppliers, have immediately started on the Station commissioning procedures, so as to ensure –within the tight timeframe available– the support of the System during the critical summer months.

The operation of the Cogeneration Station has multiple benefits for society at large and for the National Economy. In particular:

 The Station's operation achieves primary energy savings of more than 10% when compared to the individual electrical and thermal power production processes.



- o The Station will contribute to reducing the Marginal System Price (SMP), i.e. the wholesale purchase price for electrical power.
- The Station will contribute to the reliable coverage of demand for electrical power, by substituting expensive electricity imports and the rentals of mobile power generation units (power generators and steam turbines), which are also available at very high prices.
- Because the Station is located within the country's South System, it will help reduce System losses, while also alleviating congestion in the electrical power transmission network in the wider region of Viotia, by eliminating the need for additional works to expand/strengthen this network.
- o The Station will support the System through auxiliary services such as the supply of reactive power and voltage support, and the capability for "black start" (restarting after a complete interruption of operations).
- o The expansion of the natural gas network with the construction of the high-pressure Mavroneri-Antikyra pipeline to feed the Station, will create new consumers for natural gas across all consumer categories (small industries, residential, commercial etc.).
- o The operation of the unit is expected to upgrade significantly the environment in the wider region of Southern Viotia, as it will reduce by 160,000 tons the annual consumption of fuel oil needed to produce the steam required for the production process of the Aluminium of Greece plant, thus helping drastically reduce pollutant emissions.

The Combined Heat and Power Unit is the last energy asset of MYTILINEOS HOLDINGS S.A. transferred to Endesa Hellas, a procedure expected to be completed around mid-June 2008.