Pengerang power plant receives first gas turbine

KUALA LUMPUR — The first gas turbine for the cogeneration power plant in Pengerang has arrived, and it signals the start of a new beginning for the Johor based mega-project.

Siemens Malaysia, Petronas and MMC Engineering Services said they received the gas turbine at the Tanjung Setapa Material Offloading Facility (MOLF) located within the Refinery and Petrochemical Integrated Development (Rapid) project site in Pengerang, Johor.

This first Siemens SGT5-8000H gas turbine was received by representatives and management officials from the Johor port authorities, Petronas as well as from the Consortium group Siemens AG, Siemens Malaysia and MMC Engineering Services at a special ceremony held at the port.

The turbine measures 13.5 meters long, 5.5 meters high and 5.9 meters wide and weighs as much as a fully-fuelled A380 Airbus.

A total of four SGT5-8000H gas turbines will be installed at the Pengerang cogeneration power plant as part of a turnkey construction order.

The order was awarded two years ago to a consortium group comprising of Siemens AG, Siemens Malaysia and MMC Engineering Services Sdn Bhd. The gas turbines will be installed in several phases and the first unit is expected to go online into commercial operation by middle of next year.

"The on-time arrival of the first Siemens SGT5-8000H gas turbine marks a significant milestone in the engineering, procurement and construction of the Pengerang Cogeneration Plant. It signifies our commitment to bringing this power plant online, on time, to supply reliable power with proven power plant technology to our customer, Petronas, and to the Pengerang Integrated Complex," said Siemens Malaysia Sdn Bhd president and chief executive officer Prakash Chandran.

Also present at the ceremony were Petronas Refinery and Petrochemical Corporation (PRPC) senior vice president and chief executive officer Colin Wong Hee Huing and MMC Corporation Bhd director engineering and construction Chee Weng Loon.

Each gas turbine unit comes with a waste-heat recovery steam generator (HRSG), associated mechanical and electrical systems and the instrumentation and control system.

The steam produced in the HRSG will not only be partly used to supply up to 1,250 tonnes per hour of steam to various consumers within the Pengerang Integrated Complex (PIC) but will also be partly used to produce further electricity inside a triple stage steam turbine, hence optimising efficiency.

Offering outstanding performance and high flexibility, the SGT5-8000H gas turbine is the most powerful gas turbine in commercial operation today.

As of April, there are already 22 units in commercial operation worldwide, having already clocked in more than 200,000 fired hours; demonstrating proven innovative technology with verified reliability and availability.