

Modernization Order for the Hydro Electric Power Plant CIRATA, Indonesia

The Indonesian generation utility and transmission grid operator PT. PEMBANGKITAN JAWA-BALI (PJB2) has awarded the contract to the Consortium **PT VA TECH Indonesia – inCONTROL Tech Sdn. Bhd.** Malaysia (formerly known as VA TECH SAT Sdn. Bhd.) on January 22nd 2007. The long time relation with the customer in combination with superb technical, economical and reliable solutions has been the key to this success.

This power plant was first commissioned in 1986 with 4 generating units and extended in 1994 to a total of 8 units with a rated output of 126 MW / 140 MVA each. With its installed 1008 MW Cirata is one of the biggest underground hydro power stations in the world.

The scope of works includes the complete replacement of the control system, i.e. all 8 unit controllers, powerhouse-1 and powerhouse-2 computer systems, the central control room computer system located in the 500 kV switchyard and the dam control room. Due to Cirata's key role in the Java-Bali grid, special functions such as plant black start, line charging, load frequency control, joint control and remote control from Gandul load dispatch center will be incorporated to the control system. The communication system will be a 100 MB redundant fiber optic local area backbone network, which provides communication services for the control system, telephone system and camera system.

The static excitation system of the first 4 units will be upgraded from an analogue type automatic voltage regulator (AVR) to a digital type AVR, equivalent with the generating units no.5 – 8.

Based on its special experience in refurbishment projects, the Consortium with its international team from Indonesia, Malaysia and Austria will implement the project within 15 months.

