



VICO Indonesia's Nilam Gas Field

Recently, HPI was awarded a project at VICO Indonesia's Nilam Gas Field, to upgrade the controls for three Solar Centaur Compressor sets and one Solar Centaur Generator set.

VICO Indonesia is a joint venture between BP and ENI. VICO is the third largest production-sharing contract operator in Indonesia with a 2005 gross production of 655 million cubic feet per day of gas and 25 thousand barrels of oil per day.



The gas turbine and gas compressor will be operated and monitored by a touch screen PC HMI located on the control panel door. This HMI will be able to monitor and operate any of the three gas turbines. All of the features for the HMI were written using RSVIEW Studio.

Integrated Anti-Surge Control and Compressor Protection functions will be included in the mechanical packages, and new excitation and synchronization will be included in the generator controls using Rockwell's Combination Generator Control Module. The new controls will make use of modern communication systems. To ensure safe and reliable control of the gas turbine and driven load the control communications architecture operates on a single layer Allen Bradley ControlNet. This also ensures that it remains unaffected by outside influence. A SIL-2 rated Fire & Gas detection system will also be incorporated into the network but will function independently of the control system.

The new controller sets for the new Turbine Control Systems will be based on HPI's Allen Bradley ControlLogix PLC. This PLC contains the software for the Gas Turbine controls such as start, stop and auxiliary system sequencing. To reduce the amount of on site wiring required all the terminals, fuses, relays and conduits are supplied mounted on sub-panels.



The benefits of having a HPI based digital turbine control system are:

- Designed for easy retrofit onto existing turbine units.
- Systems replace the existing control system.
- High performance from modern technology.
- User friendly HMI's with enhanced turbine control and diagnostics information.

This provides consistent, repeatable and reliable starting and running.

As technological leaders in the supply of turbo-generator services, for both the OEM and retrofit markets, HPI use professional project teams with extensive experience in design of hardware and software, manufacture, testing, installation, commissioning and supporting of turbine systems. Former key VT Controls and HSDE staff with over 150 cumulative years experience in the industry make up the HPI engineering, project, organization and management teams; they have been proven through many years of providing turbine retrofits and are formed of highly qualified personnel who fully understand the demands of this specialized industry.