



HPI's HCH Generator Protection Panel

After previously working with HPI, HCH once again tasked HPI with a new project. This time it was for the supply of an AC Generator Protection and Control Panel.

HPI will upgrade the controls and protection for HCH's 160KW Waukesha VHP2900G reciprocation gas generator package. The system will be upgraded at the same time the engine is being upgraded to 250KW. The Engine Control System is based upon the Allen Bradley FlexLogix PLC. The PLC Processor interfaces with the I/O via an Allen Bradley FlexIO modules system. The FlexLogix PLC will contain the software for the Engine governor control and, in the case of the Engine Protection and Sequencing option, the Start, Stop and Auxiliary System sequencing.

In addition to the local communications for the FlexLogix and the PanelView, the "Engine Protection & Sequencing" system is provided with an RS485 Modbus RTU communications link for interface to the Basler BE1-GPS100; allowing generator data to be displayed on the PanelView. Furthermore a TCP/IP Ethernet interface is provided to allow the system to be interfaced to additional equipment. By structuring the system architecture in this manner, we can ensure that the deterministic nature of the Control environment remains unaffected by outside influence, and ensures safe and reliable control of the engine and generator.



As technological leaders in the supply of turbo-generator services, for both the OEM and retrofit markets, HPI uses professional project teams with extensive experience in the design of hardware and software, manufacturing, testing, installation, commissioning and supporting of turbine systems. Former key VT Controls and HSDE staff have 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.