



HPI, LLC



Retrofitting Valero Aruba

HPI is pleased to have been awarded another job from one of its most valued customers, Valero. For this job HPI is performing a control panel upgrade on one GE Frame 5 Gas Turbine Unit GT2, for the Valero Aruba Refinery.



The replacement controller for the new Turbine Control System is based upon the existing Allen Bradley ControlLogix Controller. The Controller will contain the software for the Gas Turbine governor control, Start, Stop, and Auxiliary System sequencing.

The new control system will be equipped with a touch screen HMI display, through which the gas turbine will be monitored and operated. The left door will be

mounted with the new EGCP-3 and the existing Bentley Nevada monitor system.

The scheme highlighted above will result in ease of maintenance due to the uncluttered and tidy space in the cabinet. Also the HMI will provide for an uncluttered front door. The HMI presents a high level of diagnostic information to make maintenance and fault finding even easier. The nature of digital controls reduces the need to perform calibration to almost zero. It also allows tighter controls over the engine therefore reducing temperature swings and increasing the life of the hot section components. As there is no parametric drift control the unit can be operated closer to the engine manufacturers' limits and thus enabling higher output powers.

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.