EDF Controls Retrofit

EDF Energy is one of the largest energy companies in the UK. EDF Recently requested for HPI to do a controls retrofit for two of their English Electric EA2 Twin Avon generator sets at their West Burton power station. Included in the retrofit is full local and off-site remote black start functionality, along with HMI-integral trending and archiving of critical data.

For this project HPI's US and UK staff will work nearly round the clock to minimize the generator's 'Out of Service' time. The project is scheduled to only require eight days of down time for the generators. To help with this HPI plans to maximize the amount of work that can be carried out before taking the two units down. This goal is achievable since HPI has extensive knowledge on the requirements for controlling Avon engines, and many others.

The new controls will be fitted into a new double bay NEMA 12 enclosure designed for front access and bottom cable entry. An Allen Bradley ControlLogix PLC system using a single processor will be used. A 17" HMI will be fitted onto the door of the enclosure. This HMI will be used to monitor and operate the gas turbine engines. Most of the existing engine indicators will be removed and their functionality will be included on the HMI. 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.

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.