
KMK 40MW Cogeneration Facility Distributed Control System MMI Upgrade

PearlStreet Energy Services (PES) received approval from Western Power Corporation (WPC) during the month of May 2005 to proceed with the upgrade of the Man Machine Interface (MMI) component of the distributed control system (DCS) for the 40MW KMK cogeneration facility.

The compact unit hardware on which the existing operation / maintenance interface and engineering system operate is now obsolete and is no longer supported by the original equipment manufacturer. Similarly the existing version of software on which the compact units operate is also becoming obsolete with the installed version of control system software lagging the latest software release by numerous editions.



40MW KMK Cogeneration Facility



Main Control Room DCS Consoles

PES have contracted Siemens to complete the DCS upgrade works for the plant which comprises the provision of the latest version of operating software (TXP-Release 7.7) and new 100% redundant compact unit hardware to support the upgraded software version.

The upgrade of the existing DCS compact unit hardware and associated operating software at the KMK cogeneration facility will provide a multitude of benefits, which will include but not be limited to the following:

- Improved availability of control system spare components through the elimination of system obsolescence.
- Increased support from the OEM's technical resources resulting in faster response times and reduced control system down time.
- Improved plant alarm handling capabilities.
- Faster control system response and processing times.
- Increased hardware reliability.
- Better in built control system and plant diagnostics.
- Improved / increased redundancy schemes across control system equipment hardware (Compact Units).
- Improved historical data recording capabilities, which are more user friendly, improving troubleshooting of plant problems.
- On-site technical resources with up to date skills in the operation, maintenance and administration of the control system. This will serve to reduce the reliance on outside technical resources for repairs.
- More efficient use of outside technical resources due to their improved familiarity with the current revision of hardware and software.

The DCS MMI upgrade project is scheduled to be completed during a three-day outage in early November of this year.