

Energy management and control for industrial facilities



Combined SCADA/PMS system: more uptime and output with less energy

Schneider Electric's Energy Management and Control System (EMCS) combines Supervisory Control and Data Acquisition (SCADA) and Power Management System (PMS) capabilities in a single platform to allow facilities to monitor plant performance, safety, energy usage and power quality.

The benefits of this system are considerable: improved uptime and process availability, more output with less energy, safer operations and extended equipment life.

Schneider Electric's IEC61850-compliant EMCS solution gives users a system featuring interoperability between devices and systems, as well as the unprecedented ability to reduce wiring and increase installation flexibility.

PMS: complete power management solution

PMS helps engineering and management personnel cut energy-related costs, avoid downtime and optimize equipment utilization.

The system tracks real-time power conditions, analyzes power quality and reliability, and responds quickly to alarms to avoid critical situations.

It helps study trends to reveal energy waste or unused capacity, verifies efficiency improvements and allocates costs to processes.

PMS uses industry-standard network technologies, including Ethernet, to automatically collect and store data from key electrical distribution points and physical assets.

It forms a layer of energy intelligence across the industrial facility, acting as a unified interface to electricity and other consumable resources such as water, compressed air, gas and steam.

Web-enabled monitoring and reporting gives each user personalized access to timely, relevant information.

SCADA: real-time alarms/events shown in customizable, high impact graphics

To obtain a copy of the complete presentation given at the 2010 Global Petroleum Show, contact rick.barnes@ca.schneider-electric.com

The user-friendly SCADA functionalities of the EMCS solution include

- Real-time visualization of alarms and events
- Select before Operate (SBO) orders
- Customizable HMI colours
- Dynamic color animations
- Trending information
- Customizable alarm levels
- 1ms time stamping
- Disturbance monitoring
- Waveform analysis

The tool also monitors parameters such as consumed current, power, operating counters (number of trips, number of starts, etc), device settings, trip currents and operating times.

The SCADA can also monitor advanced functions such as fast load shedding, load sharing and automatic transfer schemes.