In today's deregulated electric power industry, the need for a vast amount of real-time information is crucial to system operators. No longer is system security the only overriding factor, but economics, competition, customer service and reliability of service have become important issues as well. Supervisory Control and Data Acquisition (SCADA) systems that are used to monitor and control the power grid have become increasingly popular as an important part of the utility information infrastructure.

OpenSCADA™ is an open, scalable and feature-rich SCADA software product. When used in conjunction with other monarch™ software modules, it provides very efficient real-time information management and control for demanding operations centers. OpenSCADA supports a distributed architecture and runs on a number of Unix, Microsoft® Windows® and Linux® operating systems. It supports a very effective and high performance real-time database and a graphical user interface system as well as support for various SCADA applications.

Salient features include:

- Secured operation via Areas of Responsibility and logins
- Secured data view on displays based on Areas of Responsibility
- Efficient data processing for very large systems supporting hundreds of thousands of points
- Efficient multi-level tagging
- Support for group operation (Tagging and Control)
- Support for Information 'POSTED’ notes
- Support for continuous SCADA snapshots for archiving
- Support for SCADA playback of archived real-time data
- Automatic calculations of statistics on device performance
- Automatic calculations of hourly analog data average, minimum, maximum and integral
- Automatic generation of substation or data tabular displays
OpenSCADA also supports dynamic or projection mapboards and supporting local I/O for status and analog input and/or output.

An effective Alarm processing system is available, which includes advanced alarming techniques such as:

- Efficient Alarming for a number of conditions including multiple limits, Rate of Change and Sudden Rate of Change
- Capability to trigger a monarch™ or system process/program
- Capability to forward the alarm message via e-mail
- Capability to forward alarm via a pager
- Archiving of alarms in the Historical Database
- Hierarchical alarm processing and alarm suppression
- Alarm filtering based on a number of indicators
- Alarm query and sort capability
- Capability to process thousands of alarms with no degradation in system performance

A number of applications such as Disturbance Data Collection and Review, Load Shedding and Restoration, Group Control, and Calculation Subsystems are supported.

OpenSCADA, via the use of the OpenView™ User Interface system, supports efficient and high performance real-time graphical schematics of the power system and substation. Also via the use of the OpenView Lite™ web-based user interface, authorized users can access all SCADA displays and applications via a Web browser.