Using PowerNet to Ensure Uptime

When you're responsible for the uptime a corn refinery operation that runs 24 hours a day, 7 days a week and has the capacity to process in excess of 600,000 bushels per day, you can't take chances. That's why energy managers at a Midwest refinery, one of the largest in the U.S., turned to Cutler-Hammer.

The facility has two incoming utility lines, 9 MW and 16 MW. A PowerNet system was installed in 1994, then upgraded and expanded over time. Approximately 50 IQ Analyzers are currently installed on the incoming switchgear lineups, distribution switchgear and MCC mains. Digitrip MVs are installed on the MV switchgear. All communicate via INCOM to a CONI card and a PC located in a central control room.

The PowerNet system continuously monitors loads and delivers the data to personnel who can view breaker and analog alarms indicating potential overloads. The software is also connected via Ethernet to the electrical maintenance engineer's office computer, where he can view trends and monitor from the convenience of his desk.

The benefits of PowerNet: avoidance of downtime and less equipment replacements, translating into huge savings. The energy managers are now trending KW demand and KWH usage and expect use this data to further reduce their energy costs.

New Portable IQ Analyzer 6600

A new and improved Portable IQ Analyzer is coming this February. The portable unit will be based upon the powerful IQ Analyzer 6600 power quality meter. The 6600 provides the ability to store a wide variety of energy, trend and waveform data in nonvolatile memory for downloading and analysis.

Some of the improvements to the Portable 6600 include a battery power supply that enables the unit to operate up to three hours without AC input. This will enable the user to accurately capture sag and outage information. INCOM and RS-232 communication are both standard with the new 6600 portable unit. The INCOM communications allow the portable to be networked into an existing PowerNet system, while the RS-232 interface allows easy connection to a PC.

The Portable IQ Analyzer works with both PowerNet and PowerPort software. PowerPort software can be downloaded directly from the Internet for free and provides an easy to use configuration and monitoring interface.

Order catalog number IQA6610PORT from your local Cutler-Hammer distributor.
ICONICS Update

The ICONICS agreement announced in the last issue of Power Monitor has generated a lot of interest and some questions about the product as well. Below is a brief description of each component included in the GENESIS32™ offering.

Graph Worx32 - Drawing and animation tools to create customized operator displays; integrate drawings, operating procedures, quality reporting, and recipe management directly into the operator displays using Active X controls or OLE automation compliant products.

Alarm Worx32 - Create distributed enterprise-wide alarm and events applications; included are powerful alarm detection, multimedia, pager, telephony, e-mail, sorting, filtering, viewing, and OPC Server.

Trend Worx32 - Power data logging, trending and analysis tools for seamless integration of your enterprise-wide information systems; acquire thousands of data points for fast and efficient replay of historical and real-time information.

Web HMI - Publish graphics, trends and alarms to web servers; can be browsed over Intranet networks by any PC client running Microsoft Internet Explorer 4.x or greater.

GENESIS32 is a trademark of ICONICS

PowerNet Version 3.1

Version 3.1 of PowerNet has some exciting new enhancements and is now available. This release of PowerNet is web-enabled when accompanied by the new ICONICS offering (see story above).

Version 3.1 supports the recently-released IQ Analyzer 6400/6600 and can calculate and graphically display CBEMA events captured by the Analyzer. In addition, this version will automatically upload waveforms recorded by all models of the IQ Analyzer, the DT 1150 and the MPCV relay.

PowerNet Version 3.1 is Windows 2000-compatible and includes support for the DT 1150, the MPCV phasor calculation, and the newly-released features of the IQ Transfer II. When attached to an EPONI, the following devices can communicate with PowerNet 3.1: MP-3000, AEM II, CED, CMU, IQ 1000, BIM and IQ Transfer Switch.

The catalog number for an upgrade to PowerNet 3.1 from a previous version is PNUPDATE and lists for $1000 USD. Call your Power Management Sales Manager or your C-H ESS contact for further information.

Getting the Most from Your Power Management System

By Wayne McCurdy, CEM - Manager, CHESS Automation Services Group

A Power Management System represents a considerable investment for most organizations. Yet many users are not fully aware of how they can use this important tool to reduce energy costs and increase the uptime of their facility. Using a Power Management System to gather energy usage and power quality data is only the first step in an overall energy management strategy. Not only can this data be used to initiate automatic load shedding and peak shaving, but it can also be shared across the enterprise using an Intranet or the Internet, facilitating detailed analysis at various levels of the organization - leading to better informed energy management and procurement decisions. CHESS' Automation Services Group can help you get the most from your investment - contact your local C-H ESS office for more information.

New Low Cost Meter!

Have you ever said to yourself, “Gee that Cutler-Hammer IQ220 is a great little meter but I don’t need communications for my applications”. Or, “The wide ranging power supply of the IQ220 is a nice feature, but all of our meters are powered from 120VAC”?

Well now there is a lower cost option for applications where a full featured meter is desired but communications capability is not needed. Cutler-Hammer has a new member of the IQ200 family - the IQ210. The IQ210 has all of the metering features and accuracy of the IQ220 with a few things removed for lower cost applications.

The IQ210 does not have INCOM communication capability, nor does it have the KYZ energy pulse output of the IQ220. The only other difference is while the IQ220 can be powered from 100 to 600VAC the IQ210 will only operate from control power in the 100 to 240VAC range.

Order catalog number IQ210 from your local Cutler-Hammer distributor.

Power Monitor

Power Monitor is published by Cutler-Hammer as a service to our Power Management customers.

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