Pharmaceutical Manufacturer Optimizes Uptime With Eaton’s Power Xpert®

Background
After helping one of the world’s largest generic pharmaceutical manufacturers cope with power quality issues and equipment failures over the years, Eaton was chosen to provide metering equipment for a substation expansion.

When Eaton noted that the company had specified its IQ Analyzer and a number of harmonic filters, it felt that it was spending money on filters that it may or may not need. Eaton knew that a reliable power supply is critical to the production of pharmaceutical products. Utility voltage deviations, power surges, sags, electrical noise, harmonics, load and other interferences can result in violation of process parameters, loss of real-time data, loss of process control, loss of archiving data, batch loss and ultimately loss of revenue. As a result, it suggested that the company consider investing in a power metering package with monitoring capabilities so it could quantify its power consumption and determine if it had power quality issues that needed correction.

Challenge
The company agreed to eliminate some of the automatic harmonic filtration equipment and buy Eaton’s PowerNet® monitoring system, which would enable it to connect all the meters as well as trend, monitor and manage the data being collected. In the course of implementing the system, Eaton developed Power Xpert Meters and Software and proposed that the company become a BETA site for the new products since it would enable the manufacturer to monitor consumption, power quality, energy usage, demand, loads in general as well as the voltage it coming from the power company.

Eaton’s Kenny Shillingburg explains, “In the past, we were called to the location to investigate power quality issues, but by the time we arrived, the event had passed and there was no record of it. After we explained that upgrading to Power Xpert would provide information about the event, the customer agreed to the upgrade.”

Location:
United States

Segment:
Pharmaceutical Manufacturer

Problem:
Power quality issues

Solution:
Power Xpert Meters and Software

Results:
Better planning and cost savings

Contact Information:
Eaton Corporation
Carolyn M. Roberts
CarolynMRoberts@eaton.com
919-431-6322

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Pharmaceutical Manufacturer

Powering Business Worldwide
Eaton also explained that it would provide the company with the services of its Instant Response Center (IRC), which would monitor the system. It told the customer that when a meter signaled an alarm indicating power quality events or voltage disturbances, IRC personnel would be notified and they, in turn, would notify the pharmaceutical manufacturer’s staff.

Shillingburg reports, “Although the manufacturer saw the value of our IRC’s remote monitoring services, the IT department was concerned about the software’s impact on the existing network. Since the facility deals with the Federal Drug Administration, the IT department has exceptionally stringent security requirements. After we explained that Power Xpert could be installed on a virtual server as well as how its secure socket layer works, the IT people recognized that it would not affect any of its activities or comprise the network’s security and we began implementation.”

Solution
Eaton delivered the software to the site where the metering had already been installed, resolved all the communication issues and trained the company’s staff to use the system.

Shortly after the system was operational, IRC staffers were inundated with alarming issues because the meters identified multiple power quality events and harmonics. When the customer saw the effectiveness of the metering and monitoring system, it decided to expand the system to include a number of meters at its remote warehouse facility.

Historically, the warehouse had issues with single phase conditions from the power company. By tying in one meter to the system and adding two more, the manufacturer will not only be able to see the conditions in its management system, but it will also be able to get trending information from the main monitoring system.

Results
Shillingburg states, “The customer told me that the company believes that the Power Xpert is a great tool that enables them to maintain productivity. Since the Power Xpert system provides historical data, the customer can accurately determine when it can add extra load. In the event that one unit substation needs to be switched off for maintenance, the system provides the company with a way to feed loads from another location with the confidence that it has the necessary capacity.

“The company has also used the system to shift loads when it added new equipment. By looking at the monitoring system, the customer can determine if a circuit has the necessary capacity. In the past, the customer had to rely on hand calculations or rent a recorder to perform the load analysis. Power Xpert gives the company a streamlined way to collect information and the assurance that it has accurate input to make a decision.”

With Power Xpert, companies can capture power quality events that a metering system alone cannot capture.

Shillingburg adds, “For customers like the pharmaceutical company, Power Xpert has not only proven to be a cost effective solution because it is upgradeable, but also because it helps them identify and correct issues to ensure that their facilities have the clean power that is critical to maintaining their uptime.”

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