

# BATTERY POWER PRODUCTS & TECHNOLOGY

Solutions for OEM Design Engineers, Integrators & Specifiers of Power Management Products



## EnerGenius IQ Opens Powerful Opportunities for Xcel Energy

Xcel Energy is a combination electricity and natural gas energy company, offering a comprehensive portfolio of energy-related products and services to 3.3 million electricity customers and 1.8 million natural gas customers. Xcel Energy is committed to customer

satisfaction by continuously improving its operations to be a low-cost, reliable, environmentally sound energy provider.

Randy Michael is responsible for technical support at Xcel Energy electric utility substations in northwest Texas. Each substation site has battery-backed DC power systems operating substation switchgear. Proper operation of this gear is required to protect the power grid and recover from any outages, it must operate when called upon. The batteries at these sites can be the weak link in the system, especially if they are not properly maintained. Maintenance can be an expensive proposition, and battery maintenance accounts for a considerable portion of the total maintenance budget. Anything that can improve service reliability, reduce maintenance costs, or warn of impending failure is critical to Michael's operation.

Michael's team installed a SENS EnerGenius IQ Intelligent DC Power Supply/Charger in a substation, replacing an existing unit. Beginning with installation of the EnerGenius IQ, the Xcel Energy team identified several features as operational benefits. "We really like the SENS graphic user interface," Michael said. "The lighted system diagram helps you to quickly see what's working in the system and where there's a problem. Operation of

this system could mean fewer calls from my field techs to help them during the installation."

Considering ongoing maintenance, Michael observed how the EnerGenius IQ's built-in expert system features could help save time and money. "The IQ charger has a new feature that could substantially reduce our field support costs," he said. "Sometimes we have to take one, two or three cells out of a battery string. The SENS unit includes a simple 'cell count' feature that automatically calculates output voltage when cells are taken out of the battery for maintenance. That means we won't overcharge the remaining cells, and could translate to significant cost savings for us if we can avoid transporting our portable battery trailer to sites up to 200 miles away."

