Executive Summary

Client: Southern Company, Birmingham, AL

Client Challenge: Provide a SCADA radio enclosure that remotely monitors the health of backup batteries

Client Goals:
• Protect, power and deploy GE-MDS radios to support SCADA communications
• Provide ability to monitor backup batteries remotely and send reports by Ethernet

Product Solutions:
• Ventev Outdoor Wireless Enclosure with Battery Test Remote Monitor

Product Benefits:
• Pre-engineered, turnkey solution for faster, less expensive deployments
• True, autonomous battery health testing uses the system’s own load to evaluate battery health in real-time
• Ample power and room for two GE-MDS radios, switches, media converters and power converters
• Flexible design easily accommodates optional components to manage hot or cold temperatures, networking equipment and power conversion equipment
• A two-channel RTU using dry contacts can be configured for extra I/O for reporting additional information
• Provides support for the latest in Ethernet communications including SNMP and DNP3
• NEMA 4X enclosures with latch locks keep equipment safe and secure

With 4.4 million customers and nearly 46,000 megawatts of generating capacity, Atlanta-based Southern Company (NYSE: SO) is the premier energy company serving the Southeast through its subsidiaries. A leading U.S. producer of clean, safe, reliable and affordable electricity, Southern Company owns Georgia Power, Alabama Power, Mississippi Power and Gulf Power. Continually ranked among the top utilities in Fortune Magazine’s annual ranking of the world’s most admired and respected companies, Southern Company is known for excellent customer service and high reliability.

Challenge

Critical power backup systems must be ready if commercial power fails and no one knows that better than Bob Cheney, Team Leader for Power Delivery Test Lab at Southern Company. Cheney contacted Chad Briddell, product manager at Ventev, the manufacturing division of TESSCO Technologies, because he needed an off-the-shelf enclosure that would house essential SCADA communications devices. In the past three years, Southern had doubled the size of their SCADA system and now have approximately 4000 devices in the field. Cheney needed the enclosures to be fully-integrated by the factory with all the components pre-configured. He was also hoping Ventev would design and include a very important new component.

“I had not been able to find anything already on the market that would test the backup battery and send reports back to me,” explained Cheney. “When the AC power is down, the system rests on the backup battery to keep things going. The whole system can go down because a little $30 battery dies. I needed something that would be able to tell me the battery is good or the battery is bad. You have to understand, Alabama is home to several automobile manufacturers. When the power goes down, they’re not working. And we hear about it. Ventev said they could do it.”

Solution

The Ventev team met with Cheney to develop a customer-specific solution. They started with Ventev’s radio-specific Outdoor Wireless Enclosure containing ample power for two radios, radio interface and environmental protection. The design easily accommodates components such as networking equipment, power conversion equipment, cable grounding and lightning protection and they can be installed in the Ventev factory prior to deployment. Then, working with Cheney’s “wish list,” Ventev engineers designed and manufactured a new product, the innovative Battery Test Remote Monitor (BTRM), to perform automatic battery load tests and then send alerts via SNMP, text or email using Ethernet or DNP3 communication protocols.

“Ventev did what no one else had been able to do,” said Cheney. “They created an enclosure that can let me know the health of the backup battery. Now, I ask others in the industry if they are remotely testing their backup batteries. And when they say they are not, I tell them to call Ventev.”

See next page for product information
Ventev Develops Innovative Enclosure System for Leading U.S. Energy Company

Product Details
GE-MDS Radio Enclosure System with Battery Test Remote Monitor

Description
• Pre-engineered for faster, less expensive deployments
• Ample power and room for two MDS radios, switches, media converters and power converters
• Flexible design easily accommodates optional components to manage hot or cold temperatures, networking equipment and power conversion equipment
• A two-channel RTU using dry contacts can be configured for extra I/O for reporting additional information
• Provides support for the latest in Ethernet communications including SNMP and DNP3
• Long-lasting, Sealed Lead Acid Batteries for UPS systems ensure that your data is available when you need it
• Industrial-grade enclosure protects equipment in harsh environments
• NEMA 4X enclosures with latch locks keep equipment safe and secure
• True, autonomous battery health testing uses the system’s own load to evaluate battery health in real-time. (BTRM-200/SKU 578626)

Visit www.ventev.com/radiospecificsolutions:
• Browse Full line of Powered Enclosures
• View Battery Test Remote Monitor (BTRM) Video
• Download GE-MDS Datasheet
• Download FreeWave Datasheet
• Download BTRM Datasheet
• Request a Demo

For questions and to purchase products, contact a regional account executive at 210-375-8482, 800-851-4965 or email: sales@ventev.com.