PROJECT PROFILES CO-OPS DEPLOYING NEW TECHNOLOGIES

BY TODD H. CUNNINGHAM



EnergyUnited's new dispatch system will help them keep track of crews during restoration work.

ENERGYUNITED BOLSTERS POST-STORM CAPABILITIES

When it comes to storms, EnergyUnited has seen it all—or most of it, anyway—in a recent three-month period, and restoration efforts illuminated short-comings in the co-op's manual process for deploying lineworkers while tracking required rest periods.

"Dispatchers are busy notifying crews, while outages are placed on hold to monitor and provide equally distributed employee opportunities for outage restoration," co-op COO John McMurray says.

Accordingly, North Carolina-based EnergyUnited plans to launch software from ARCOS (arcos-inc.com), the Callout and Scheduling Suite, as its platform for responding to, restoring, and reporting on outages. The solution will also ensure that when co-op field workers are between shifts, they take required rest periods rather than relying on written notes or memory to recall the number of hours worked and rested.

The solution also allows managers, substation personnel, lineworkers, and others to plan, launch, and

track the status of automated after-hours calls from their desktops, tablets, and smartphones.

Contact: EnergyUnited, Maureen Moore, 704-924-2159; ARCOS, Bill Perry, 716-652-1762.

NOVEC SOLAR DEAL WILL BE ITS LARGEST GREEN BUY

orthern Virginia Electric Cooperative's (NOVEC) portfolio of renewable energy resources will get a boost with the prospective purchase of some 300 MW of solar energy from facilities to be built within the PJM Interconnection's footprint. Manassas-based NOVEC will buy the output of the planned facilities under a deal with developer D.E. Shaw Renewable Investments (DESRI, deshaw.com).

"This agreement with DESRI is another step toward meeting our customers' expectations for more renewable energy in NOVEC's resource mix," says President and CEO Stan Feuerberg.

Photo courtesy ARCOS

The co-op currently has 60 MW of renewables, including solar, hydro, woody biomass, and landfill methane gas recovery. The solar output, to be on-line by 2023, will represent its largest source of renewable energy, and will be acquired at a cost that's competitive with the market for comparable on-peak energy, says Gil Jaramillo, manager of portfolio optimization and business development.

"NOVEC's strategy is to continue improving our environmental footprint through the addition of new renewable energy sources that are not only clean but affordable," Feuerberg says. "The partnership with DESRI does just that."

Contact: Northern Virginia Electric Cooperative, 888-335-0500; D.E. Shaw Renewable Investments, 212-478-0000.

'COMMUNITY BATTERY' PROJECT ADVANCES IN COLORADO

United Power is nearing completion of its first commercial-scale energy storage project, a 4-MW/16-MWh battery system that CEO John Parker says will keep the co-op "ahead of the curve" in integrating new technology to help boost reliability and keep costs down.

The project, to be one of the largest owned and operated

by an electric co-op, will store energy generated overnight, when demand is low, and discharge it during peak hours.

Jerry Marizza, the Brighton, Colorado, co-op's new business director, told The Denver Post that it will primarily be used for peak shaving on hot summer days.

United Power is partnering with SoCore Energy (socoreenergy.com), a leading solar energy and energy storage developer recently acquired by ENGIE Distributed Solar, on the project, with Tesla supplying its Powerpack system.

The system will be the first of several energy storage projects the co-op plans to roll out; United's "community battery" strategy will allow users to purchase a share of the battery system's output to directly reduce demand charges on monthly electric bills.

"Community batteries are the next big trend," Marizza predicts.

Contact: United Power, Jerry Marizza, 303-637-1347.

GRE WIRELESS UPGRADES PAY ONGOING DIVIDENDS

Great River Energy (GRE), the G&T based outside of Minneapolis, and several of its member cooperatives are seeing the benefits of upgrades to their 700-MHz wireless broadband system. The improvements—nearly 200 new radios at 50 telecommunications sites and 150 substations, along with 500 new cellular data modems—bolster SCADA communications, allowing operators to see the real-time operations of transmission substations, member



Great River Energy's 700-MHz wireless communications system

distribution substations, and automated switches so they can be controlled remotely.

"The cut-over went great," says Chris Leleux, GRE's infrastructure services manager, referring to bringing the improvements to about one-third of the system on-line. "By the end of 2019, we will have cut over the rest of the system."

The upgrades have sparked improved reliability in communications to substations, says Phil Beaupre, manager of system control at GRE member East Central Energy. This allows operators to more effectively monitor and control the distribution system today and be ready for rapid industry changes tomorrow.

"Electric cooperatives need to be prepared to take advantage of monitoring and control opportunities for our members," Beaupre says. "Having a solid communication network already in place when these opportunities present themselves puts the cooperatives in a great position to do so."

Contact: Great River Energy, Lori Buffington, 763-445-5714.

SOUTH CENTRAL POWER FINDS AN AMI SOLUTION

A fter years of successful use, the limitations of South Central Power Company's legacy powerline carrier communications system began to hinder the efficiency of the Lancaster, Ohio, co-op's operations. The need for electrical switching from substation to substation often resulted in reduced meter reading capability, and calls from members were needed to understand when outages occurred.

South Central decided to upgrade to a next-generation advanced metering infrastructure (AMI) solution, "a platform to allow us to grow with the changing times," says Director of Utility Services Nathan Whitacre. The co-op chose a system from Sensus (NRECA Associate Member; sensus.com) that allows it to collect, deliver, manage, and analyze meter data remotely in near-real time over a secure two-way communications network. The system can also be used for distribution automation, providing greater visibility and control.

The first phase of the deployment involves 25,000 Stratus Electricity Meters, which provide accurate use data and improved outage response times.

"Having a handle on usage data will provide better rate structures," says Allison Saffle, vice president of member services. "This will improve operations and allow us to offer more benefits to members in the future."

Full deployment is scheduled for completion in less than three years.

Contact: South Central Power Company, Nathan Whitacre, 800-282-5064; Sensus, Kim Genardo, 919-376-2566. RE

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