**Closing Thoughts** 

Tony Anderson on being grateful. p.68

**Co-op Forum** 

Which technology trends will impact electric co-ops? p.12

Infographic

Understanding broadband speeds. p.7



Five emerging developments that are shaping co-op operations

# TECH INSIGHTS

By Todd H. Cunningham

### AT A GLANCE

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## **Delaware County Electric Cooperative**

**CO-OP TYPE:** Distribution

SIZE: 5,441 meters

LOCATION: Delhi, New York

### **GOAL**

Increase grid resilience against outages caused by weather events and tree damage from invasive species.

### **CONTACT**

Delaware County EC, 607-746-2341

### **SOLUTION**

Partnered with five electric cooperatives in three states seeking more than \$27.6 million in federal funding from the bipartisan infrastructure law's Grid Resilience and Innovation Partnerships Program to deploy advanced software to enable proactive grid management and hardware such as grid sensors and drones to provide real-time data and monitoring.

The new technology is expected to improve grid reliability and resilience and enable load growth that the region's aging electric infrastructure had otherwise constrained. The partner co-ops are: Claverack REC in Wysox, Pennsylvania; Oneida-Madison EC in Bouckville, New York; Otsego EC in Hartwick, New York; Steuben REC in Bath, New York; and Sussex REC in Sussex, New Jersey.



# **Western Farmers Electric Cooperative**

CO-OP TYPE: G&T

SIZE: 13.1M MWh sales

LOCATION: Anadarko, Oklahoma

### **GOAL**

Continue upgrading generation units at the G&T's Anadarko Plant.

### **CONTACT**

Western Farmers EC, Sondra Boykin, 405-247-4370

### **SOLUTION**

Replacing two aging steam units with natural gas turbine generators that can quickly ramp up and down to support wind and solar generation. The addition of the units (which join five others already at the plant) will increase reliability, lower maintenance costs and help keep electric rates low, says WFEC CEO Gary Roulet.

Construction of the new units will start in late 2024 and be complete in late 2026.

The cooperative motto, "Owned by those we serve' sends a clear message to keep electricity reliable and affordable.

— Gary Roulet, CEO, Western Farmers EC

# The upgrade will provide added stability and streamline installs, onboarding and training, which previously took hours and will soon take only minutes.

-Christi Mooring, Quality Assurance Analyst, MTE

### **Middle Tennessee Electric**

**CO-OP TYPE:** Distribution

**SIZE:** 325,731 meters

LOCATION: Murfreesboro, Tennessee

### **GOAL**

Integrate the latest innovations in vegetation management technology.

### **SOLUTION**

Upgrading to a new Clearion (NRECA Associate Member, clearion.com) vegetation management platform, slated for completion this year. The upgrade will enhance situational awareness with features like geofencing and streamline work management and planning.

#### CONTACT

Middle Tennessee Electric, Talley Floyd, 615-494-1540; Clearion, Brooks Smith, 770-713-0386

# **West Kentucky RECC**

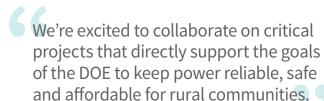
**CO-OP TYPE:** Distribution

SIZE: 40,128 meters

**LOCATION:** Mayfield, Kentucky

### **GOAL**

Improve transformer capacity utilization, reduce overloading and enhance load modeling and event detection to minimize outage times.



—Stan McHann, CTO, SparkMeter

### SOLUTION

Partnered with SparkMeter on a grant-funded project under the U.S. Department of Energy Office of Electricity's \$7.5 million investment to address grid reliability and resilience. WKRECC is a subrecipient on a nearly \$1 million grant to the University of Kentucky to improve transformer performance. The project will leverage SparkMeter's AI-driven Praxis data engineering platform.

"Our project team will be able to leverage data analytics to develop innovative methods to approach dynamic line ratings, reduce grid outages and defer future infrastructure expenditures," says Justin McCann, WKRECC vice president of engineering.

### **CONTACT**

WKRECC, 270-247-1321 SparkMeter, contact@sparkmeter.io

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