



# COOPERATIVE UTILITY BOOSTS GRID RESILIENCE, REDUCES CUSTOMER DOWNTIME

## **S&C FEATURED SOLUTION:**

IntelliRupter® PulseCloser® Fault Interrupter,  
TripSaver® II Cutout-Mounted Recloser,  
IntelliTeam® Automatic Restoration System.

**LOCATION:** Georgia, United States



**“Our close collaboration  
with S&C has been  
instrumental in enhancing  
the resilience and  
reliability of our system.”**

*—Bryan Ferguson, CEO,  
Habersham Electric  
Membership Corporation*

## **Customer Challenge**

The Habersham Electric Membership Corporation (HEMC) distribution system is built through heavily forested and mountainous areas in northeast Georgia. This terrain, while visually beautiful, made reliable distribution difficult for the nonprofit cooperative.

Between animals, falling trees, and difficult-to-access lines, the utility experienced outages at a rate its leadership wasn't satisfied with. To address these issues, and to improve service for its 28,000+ members, HEMC launched a grid modernization plan.

The plan's goals included:

- Improved reliability and resilience
- Reduced downtime and maintenance
- Integration of smart grid technology
- Advanced fault detection

**HEMC's grid-modernization program improved its system's reliability metrics and reduced its customers' outage times.**

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## Solution

To achieve these goals, HEMC chose to collaborate with S&C Electric Company. Using S&C's grid-modernizing technologies, HEMC was able to automate and enhance both its main feeder lines and its lateral lines.

HEMC segmented its feeders into smaller sections by installing S&C IntelliRupter® fault interrupters at key locations. IntelliRupter fault interrupters:

- Determine whether a fault is temporary or permanent through PulseClosing® Technology, which uses 95% less energy than conventional reclosers
- Restore power in seconds if a fault is identified as temporary
- Isolate permanently faulted segments and quickly reroute power from other available sources by working in tandem with S&C IntelliTeam Automatic Restoration System

On its lateral lines, HEMC is replacing all its existing oil-filled reclosers with new S&C TripSaver II Cutout-Mounted Reclosers. TripSaver II reclosers:

- Restore power automatically after temporary faults
- Prevent nuisance outages
- Reduce the number of truck rolls and site visits by HEMC crews

These grid-enhancing S&C devices were connected to HEMC's systemwide fiber network and its SCADA system, providing complete visibility and real-time access from the utility's control center.

## Results

HEMC and its members have demonstrably and tangibly benefited from these grid upgrades.

With real-time notifications, the utility can identify fault locations the moment faults occur, isolating affected segments and keeping the power on for as many members as possible. Thanks to this technology, HEMC members have enjoyed the following improvements compared with the three years before S&C equipment implementation:

- 14.6% average reduction in outage duration
- 38% decrease in minutes without power

During that same time period, HEMC has seen an overall downward trend in SAIDI, SAIFI, and CAIDI metrics.

Additionally, Touchstone Energy® recognized HEMC for achieving one of the top five American Customer Satisfaction Index scores for energy utility services among all participating cooperatives.

With plans to add more IntelliRupter fault interrupters, TripSaver II reclosers, and other S&C solutions to its system, HEMC intends to continue modernizing its grid and providing improved service for its members.



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