



Hancock-Wood Electric Migrates from Power Line Carrier to Sensus Solution

OHIO COOPERATIVE MAXIMIZES INVESTMENT WITH DISTRIBUTION AUTOMATION



CHALLENGE

Establish reliable communication to new distribution equipment, and transition from aging PLC system to improve service reliability

If you drove through rural northwest Ohio, you'd probably want to stop and take a photo of the serene countryside, where farmers work hard plowing fields that have sustained the area for more than a hundred years.

SOLUTION

Deploy Sensus DA and AMI solutions with the FlexNet communication network

With the same ingenuity that led local farmers to build new transportation infrastructure and embrace technology to advance production methods, [Hancock-Wood Electric Cooperative](#) has pushed new boundaries in driving reliability and energy efficiency for its local members.

REACH FARTHER

Use AMI to expand capabilities and improve outage response

"Hancock-Wood was created more than 80 years ago by neighbors working together to bring power to this rural farming community," said Andy Wiles, SCADA Technician at Hancock-Wood Electric Cooperative. "We continue to embrace their pioneering spirit."



“We went from getting one meter read per month to 3,000 per month with the Sensus AMI system. It instantly removed so much guesswork for our technicians as they monitored and managed meters.”

RYAN GOOLSBY *Senior Engineer, Hancock-Wood Electric Cooperative*

A turning point

The team at Hancock-Wood takes pride in providing innovative technology to keep the electricity flowing for its 11,300 members electric stoves and HVAC units, as temperatures can drop to a mere 19 degrees during the coldest days of the year. In fact, the co-op was an early adopter of the power line carrier (PLC) system for electrical metering, but by 2012 that system was starting to show its age.

“We regularly experienced transmission issues which were adding up outage minutes for our members as our coverage area spans ten rural counties,” said Wiles. “With 13,000 meters and 1,800 miles of line

to manage, we knew there had to be a way to improve reliability and streamline the process.”

“Hancock-Wood decided it was time to modernize our distribution system—to replace manual switches with remotely-operated reclosers,” said Hancock-Wood Senior Engineer Ryan Goolsby. “Reliable communication would be required, but simply building fiber everywhere wasn’t an option.”

After an extensive evaluation process, they selected the Sensus [Advanced Metering Infrastructure \(AMI\)](#) and [Distribution Automation \(DA\)](#) solutions to address transmission issues and improve member services.

An instantaneous impact

Hancock-Wood’s AMI solution includes Sensus [Stratus®](#) and [iConA™ Gen 4](#) meters for residential members, and [A3 ALPHA®](#) meters for commercial and industrial accounts. Running on the point-to-multipoint Sensus [FlexNet® communication network](#), the system allows access to real-time data over a reliable two-way network that began to pay off immediately for the co-op.

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Hancock-Wood updated its PLC system to the Sensus DA and AMI solutions to improve the member experience, cut down costs and increase efficiency.





Sensus AMI system,” said Goolsby. “It instantly removed so much guesswork for our technicians as they monitored and managed meters.”

The Sensus DA capabilities also help energy providers reduce costs and enhance system reliability to minimize outages. By coupling the Sensus DA and AMI solutions, the co-op not only minimizes outage problems but also quickly responds to member needs.

“It can get cold here, so we don’t want to waste any time,” said Wiles. “The AMI and DA systems allow us to pinpoint problems quickly, and we’ll often dispatch our technicians before we even get a call from a member.”

Lasting results

While the Sensus AMI solution and DA capabilities provide Hancock-Wood personnel with the real-time connectivity they need to enhance member service, it also helps the co-op save money over the long haul.

“With DA, we can monitor and maintain the voltage at a pre-determined threshold,” said Wiles. “This can allow us to save money by optimizing our costs related to purchasing energy.”

Better control over the metering infrastructure also improves efficiency across operations.

“By reducing truck rolls significantly, we’ve freed up time for staff to focus on other priorities and explore new avenues for advancement,” said Goolsby. “Now, our teams can continue assessing and adding new capabilities to support membership.”

Future Flexibility

Though farmland takes up much of Hancock-Wood’s coverage area, the co-op also has a large commercial & industrial membership.

“We’re in the process of leveraging AMI data, helping members understand and control their costs,” said Goolsby.

As Hancock-Wood looks ahead, the co-op owns the framework to continue building new capabilities and keep up their pioneering ways.

“With our Sensus AMI solution, we’ll keep pushing the limits on what’s possible,” said Goolsby.