



Sensus Technology Aids Fayetteville PWC in Response to Hurricane Florence

NORTH CAROLINA UTILITY USES SMART UTILITY NETWORK FOR ENHANCED COMMUNICATIONS AND OUTAGE MANAGEMENT



CHALLENGE

Upgrade metering infrastructure to advance storm resiliency

SOLUTION

Sensus smart utility network with two-way FlexNet communication network

REACH FARTHER

Expand solution with new metering capabilities to serve both electric and water customers

In September 2018, residents and businesses in Fayetteville, North Carolina, braced for the arrival of Hurricane Florence. The military community situated 60 miles south of Raleigh was no stranger to seasonal weather events, but no one could foresee the historic flooding and **\$24 billion in damage** that would occur as the storm slowed down for an extended stay in the Tar Heel State.

Florence turned into the **storm of a lifetime** due to stalled weather patterns that caused the hurricane to move across the region at a snail's pace. By the time the hurricane reached Fayetteville, residents were in for four days of unprecedented rainfall and damages never seen before.

"What made Florence such a menace was its longevity," said Mark Brown, senior customer programs officer, Fayetteville Public Works Commission. "We had up to 20 inches of rain in certain parts of our area and damage that left more than 50,000 customers without power."



“We were able to act quickly because our system let us know exactly where to put boots on the ground,” said Brown. “We had 97 percent of customers who had lost power back up and running within 96 hours.”

MARK BROWN *Senior Customer Programs Officer, Fayetteville Public Works Commission*

Prepared for the worst

For years, Fayetteville PWC practiced and refined emergency plans to be ready for an event of this magnitude. They knew that supporting customers through Hurricane Florence would require the hard work of every staff member and the right technology to get service restored.

Fayetteville’s hometown utility made outage management a priority. They are the largest public power provider in North Carolina with over 82,000 electric customers.

“Everything is happening rapidly when you’re facing bad storms and other emergencies,” said Brown. “We wanted to accurately monitor what was happening and let our customers know what to expect.”

To improve communications and streamline service restoration, Fayetteville PWC made the move to a smart utility network from Sensus, a Xylem brand. The solution runs on the point-to-multipoint Sensus FlexNet® communication network, a reliable, two-way system that produces real-time data.



Following Hurricane Florence, Fayetteville PWC was able to act quickly because their Sensus solution alerted them to exact outage locations.

Riding the storm

Brown and his team were hunkered down in Fayetteville PWC’s Emergency Response Center when Hurricane Florence arrived. Every department within the utility supported storm response efforts and each employee had an assignment, whether answering phones or updating social media. As the storm slowly made its way through the region, utility staff used their network to stay on top of the situation.

“The system allowed us to be proactive,” said Brown. “We were able to provide real-time updates to residents and send hourly notifications to local media channels and across social media to keep the public informed.”





At the peak of the storm 15 of 35 substations lost service. When the hurricane's wrath finally began to subside, Fayetteville PWC's team used data to fuel their [outage management](#) process.

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Seeing the bigger picture

The network acted as a compass for Fayetteville PWC and the mutual aid workers from Alabama, Georgia and Tennessee that offered additional help with downed powerlines and trees toppled on homes. The utility communicated regularly with emergency responders to help people in need and clear major roads.

"We were extremely pleased that no staff or customers were injured," said Brown. "The ability to communicate real-time updates to our customers and act quickly to get power restored helped us avoid complications."

The utility's efforts to communicate proactively with customers during and after the prolonged hurricane didn't go unnoticed. Fayetteville PWC was honored with a North Carolina City & County Communicators' (NC3C) [Excellence in Communications Award](#) for their social media communications during the storm.

Their social media messages reached nearly half a million people and the team had over 1,300 private message conversations with customers during the storm and the week-long recovery efforts.

Staying ahead of the curve

With Florence in the rearview, Fayetteville PWC plans to keep perfecting their system. The utility has already merged the system with their water meters across 93,000 endpoints, deploying Sensus residential [iPERL®](#) and [OMNI™](#) commercial and industrial meters for advanced functionality. Now, the utility is installing Sensus [Stratus®](#) electricity meters with voltage reduction capabilities to continue enhanced services as a power provider.

"A big differentiator of the network is that we can refine and build on our solution," said Brown. "We'll be able to keep improving our services for customers and ensure that we're prepared for the next big storm that could come our way."

ABOUT SENSUS

Sensus, a Xylem brand, helps public service providers — from utilities to cities to industrial complexes and campuses — do more with their infrastructure to improve quality of life in their communities. We enable our customers to reach farther by responding to evolving business needs with innovation in sensing and communications technologies, data analytics and services.