



With SurvalentONE SCADA & OMS, Mid-Ohio Energy Cooperative has reduced outage time by 64%.

Case Study



Survalent.

Mid-Ohio Energy Cooperative Reduces Outage Time by 64% with SurvalentONE SCADA & OMS

Mid-Ohio Energy Cooperative is a not-for-profit, customer-owned electric utility serving rural farming communities across central Ohio. The utility's 8,200 meters are distributed along 1,300 miles of line running through 10 counties, which makes it difficult to manually monitor the network, diagnose problems, and take corrective action. With travel time often measured in hours, even minor glitches can lead to sustained outages if field crews are the first and only line of defense.

In 2007, as one section of Mid-Ohio Energy's distribution network was experiencing regular difficulties, the utility decided to evaluate software-driven technology solutions that would allow it to oversee the grid remotely.

Higher Operational Efficiency

Mid-Ohio Energy initially considered installing a decentralized control system in its substations, but soon discovered that centralized supervisory control and data acquisition (SCADA) software would provide more functionality at a lower cost. Two other Ohio co-ops were using SurvalentONE SCADA so the utility did some homework and determined that it was indeed the right solution.

"We envisioned a user-friendly SCADA system that our field crews could use both in the office and in the field. With SurvalentONE SCADA, they have easy access to the entire network," said Mark Terrill, Director of Operations at Mid-Ohio. Thanks to SurvalentONE WebSurv, an add-on SCADA application, Mid-Ohio's field crews are able to log into the SCADA system from anywhere using a web browser.

After commissioning SurvalentONE SCADA, Terrill observed a marked decrease in the duration of power outages, which he attributes to the field crews being able to remotely monitor and operate network devices

such as breakers and switches instead of having to drive out to where each device is physically located. He also noted that field crews have taken advantage of Survalent's device-tagging feature to better coordinate their activities and improve workplace safety at the utility.

"Now that we're working with SurvalentONE SCADA, everything is just so much more efficient," said Terrill.

In 2010, Mid-Ohio Energy further augmented its grid management capabilities by implementing a GIS mapping system. The utility proceeded to map its entire network infrastructure and import the new map into SurvalentONE SCADA with the SurvalentONE GIS Wizard application, replacing an existing network representation that had been created in AutoCAD.

Mid-Ohio Energy subsequently introduced advanced metering infrastructure (AMI) technology to its network, changing over from traditional one-way meters to a more intelligent two-way system.

Faster Response Time

“For us, an outage management system (OMS) was the last piece of the pie. We started with SCADA, then did GIS mapping and the two-way AMI system. After all of those were in place, it was time to do OMS,” said Terrill.

Assisted by Survalent’s system specialists, Mid-Ohio Energy was able to integrate SurvalentONE OMS with its smart meter network, customer information system (CIS), and trouble call system (TCS) so customers now have the option of reporting power outages by phone, through an app on their mobile device, or via the outage portal on the utility’s website.

“When one of our customers submits an outage report, SurvalentONE OMS directs the AMI system to ping all of the meters on that circuit.

Using those meter readings, the OMS can accurately determine the location and extent of the outage, and then display that information for our field crews,” explained Brent Ransome, Mid-Ohio Energy’s Operations Technology Manager.

Customers are also able to monitor the status of the electrical grid in real time with Mid-Ohio Energy’s Customer Outage Portal.

According to Terrill, “With SurvalentONE OMS, we can assess the whole situation within minutes of receiving an outage report, so we’re not left wondering what else is out. When other customers call in to report the outage, we can reassure them, ‘Yes, we know you’re in the outage area. We know that something is up with this device. Crews are on their way.’ OMS takes the guesswork out of the process for everyone involved.”

Improved Reliability Indices

Mid-Ohio Energy has not only improved the reliability of its electrical network, but also increased its confidence in the data it collects. “SurvalentONE OMS has given us more accurate numbers. For example, now we know exactly what time a customer calls in to report an outage and when the power is restored,” said Terrill.

“In recent years, Mid-Ohio has been consistently recognized as one of the five utilities in the state with the lowest annual outage times. Our System Average Interruption Duration Index (SAIDI) dropped from 128 minutes in 2009 to just 46 minutes in 2016, a 64% decrease. Also, since installing SurvalentONE SCADA and OMS, we’ve achieved an impressive 87% on the American Customer Satisfaction Index (ACSI), our highest-ever score on this important metric,” reported Terrill.

SurvalentONE SCADA and OMS will continue to transform Mid-Ohio Energy’s operation as the utility develops new, more efficient processes around these two core systems, creating even more value for its customers.

Control your critical network operations with confidence

With Survalent, you can control your critical network operations with confidence. We're the most trusted provider of advanced distribution management systems (ADMS) for electric, water/wastewater, gas, and transit utilities across the globe.

Over 600 utilities in 30 countries rely on the SurvalentONE platform to effectively operate, monitor, analyze, restore, and optimize operations. By supporting critical utility operations with a fully integrated solution, our customers have significantly improved operational efficiencies, customer satisfaction and network reliability.

Our unwavering commitment to excellence and to our customers has been the key to our success for over 50 years.

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- Mid-Ohio Energy Cooperative

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