



Illinois' Nicor Gas Evolves System to Cultivate Advanced Data Capabilities with Sensus

THE STATE'S LARGEST NATURAL GAS DISTRIBUTION COMPANY DEPLOYS SMART UTILITY NETWORK TO STREAMLINE OPERATIONS



CHALLENGE

Modernize the utility's gas metering infrastructure to improve meter data collection

SOLUTION

Deploy the FlexNet communication network and FlexNet EasyLink Mobile Communications solution

REACH FARTHER

Leverage the network by adding advanced applications like pressure monitoring

Nicor Gas has come a long way since planting roots in the abundant farmlands of northern Illinois. In the same way a good farmer always checks the weather, it's with anticipation and an eye toward the future that this utility has grown into the largest natural gas distribution company in the state.

"We're committed to delivering clean, safe, reliable and affordable natural gas for our customers, our neighbors and our communities," said Sandy Garcia, director of special projects at Nicor Gas. "Investing in new programs and technologies across the Nicor Gas system is a key step toward building a state-of-the-art natural gas delivery system for northern Illinois."

Nicor Gas's Meter Modernization program began in 2018, and deployment of the advanced metering infrastructure to all 2.2 million customers is expected to be complete this year.



“The ability to read meters remotely helps us simplify the process for customers moving to new properties and it also reduces our carbon footprint with far less service vehicles on the road.”

GRETCHEN OHL *Advanced Metering Infrastructure Deployment Manager, Nicor Gas*

Planting seeds

For more than six decades, Nicor Gas meter readers have visited customers’ homes and businesses bimonthly to check actual gas usage - a large undertaking with 2.2 million customers across its footprint in northern Illinois. Based on growing customer demand for real time data, Nicor Gas launched the modernization effort.

“We needed a solution to accelerate our data collection without sacrificing reliability,” said Gretchen Ohl, manager of advanced metering infrastructure deployment for Nicor Gas. “We made the decision to upgrade our network infrastructure and transitioned to an automated meter reading process.”

The natural gas provider selected advanced metering infrastructure from [Sensus](#), a Xylem brand, to enhance customer service and build for future development.

Tilling the soil

As part of an aggressive, three-year deployment, Nicor Gas began installing the two-way Sensus [FlexNet® communication network](#) across its service area to lay the groundwork for advanced metering infrastructure. The deployment includes FlexNet communication modules that communicate data to and from current

residential and commercial natural gas meters. Nicor Gas continued its fast-paced module deployment with the [FlexNet EasyLink™ Mobile Communications solution](#), which allows technicians to automate data collection by obtaining meter reads using a portable, long-range radio device.



[Will Linzy](#), Nicor Gas meter reader, is installing a FlexNet communication module. The easy installation does not interrupt natural gas service during the few minutes it takes to place the module onto existing natural gas meters.

The compact size and minimal hardware requirements to setup EasyLink helps Ohl and her team more quickly realize operational benefits. Most customers with outdoor-accessible meters do not need to be present at installation and there is no interruption to natural gas service during





the few minutes it takes to place the module onto existing meters.

As the company quickly reached a one million installation milestone last year, the natural gas utility began to make fundamental changes to billing processes.

“We transitioned from billing customers with estimated reads to actual reads from real-time data,” said Ohl. “It was like going from the Stone Age to the Modern Age.”

A plentiful harvest

As the utility nears a full deployment of the FlexNet communication modules later this year, the Nicor Gas team sees the power of enhanced data collection extend beyond billing.

“The automation will enhance our customer experience by helping to eliminate estimated meter reads and providing more timely and accurate data about their energy usage,” Garcia said. “The resulting analytics gives customers more control, enabling

better informed energy- and cost-savings decisions.”

The new system has also helped the utility grow in its own efforts to become more energy efficient and sustainable.

“We are committed to pursuing an environmentally sustainable future for our customers and communities,” Ohl said. “The ability to read meters remotely helps us simplify the process for customers moving to new properties and it also reduces our carbon footprint with far less service vehicles on the road.”

Nicor Gas continues to explore ways to advance this technology. Future operation-use applications like pressure monitoring and pipeline cathodic protection are being considered.

“Our system gives us the flexibility to continue growing and reaping new rewards,” said Ohl.