The Value of AMR Technology

Improving performance by implementing Itron meters and mobile collection

background

Background

Johnson County Rural Electric Membership Corporation (REMC) is a not-for-profit electric utility organized as a cooperative serving over 18,500 meters at homes, farms, schools, businesses and industries in Johnson County, Indiana and parts of Shelby, Morgan, and Brown counties, all in Indiana.

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In late 2000, Johnson County REMC was looking for a more efficient way to read meters. The co-op had two meter readers and found a need for a third, so they began to evaluate their system to determine how they could improve their performance. The first step was implementing a handheld reading system. As a result, Johnson County discovered they were back to just two readers again.

In a discussion with the other nearby co-ops, truly learned that three other cooperatives would outsource all meter reading function to Johnson County REMC to save money and time. Johnson County REMC was looking for ways to diversify their business, and reading meters for the other area co-ops seemed like a good idea.

"At Johnson County REMC, we decided that meter reading was one of our core competencies; therefore, it was a good candidate for diversification," said Chet Aubin, CEO of Johnson County REMC. "We were also aware that Itron had just released a new solid-state residential meter, the first in the industry. It made business sense to try and put the two together."

Application

Johnson County REMC developed a business plan to purchase Itron meters from Hughes Supply and lease them to other cooperatives. They also contracted with Hughes to perform the meter installations. As owners of the meters, Johnson County REMC would provide the maintenance and read the newly installed meters for the other cooperatives.

A few years ago, Johnson County REMC purchased Itron's CENTRON® and SENTINEL® meters. The co-op then used vehicle-mounted radio frequency receivers to collect their own readings as well the readings at Boone REMC headquartered in Lebanon, IN, Central Indiana Power in Greenfield, IN and South Central Indiana REMC in Martinsville, IN.

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partner cooperatives."

"We found it more cost effective to install new CENTRON meters rather than retrofit the existing electromechanical meters still in the field," said Aubin.

In the past five years, Johnson County REMC converted more than 85,000 meters to an automatic meter reading (AMR) model. The co-op moved exclusively to installing the CENTRON model, and formed American Meter Reading LLC to read the region's meters. All new customers are fitted with CENTRON meters and the same meters are used to replace old meters taken out of service. In addition, SENTINEL meters were installed for commercial/industrial (C&I) customers for full automation.

"We previously sent meter readers out two days each week just to read C&I customers," said Aubin. "Now, the C&I data is collected along with the residential, which eliminated those two extra days of meter reading."

Results

According to the cooperatives surrounding Indianapolis, the results of the meter reading venture exceeded expectations. Two-thirds of the 85,000 meters read are CENTRON and eventually will be 100 percent CENTRON. Johnson County REMC uses three trucks to travel more than 5,000 miles in 16 days.

The goal of Johnson County's third party meter reading company is to expand the services to include sales to other cooperatives and municipalities in the region. The co-op would like to expand to 100,000 endpoints in the next few years.

"Using Itron's mobile meter reading and solidstate metering technology, American Meter Reading is able to provide a very cost effective kilowatt-hour and demand reading to their members and their partner cooperatives," said Mark Bruss, Itron's energy distribution sales manager. "Even though much of this service territory is very rural, the mobile data collection is efficient, reliable and easy to implement."

"We not only enhanced our own metering system, we have built this new business using Itron's technology to help other cooperatives," said Aubin. "We feel everyone involved in this venture has benefited and we look forward to our continued partnership with Itron and Hughes Supply. It has been an outstanding project."

