Itron Case Study
South Central Power Company

The Value of AMR Technology

South Central Power Company Upgrades its AMR Program to Solid-State and Power Line Carrier

Benefits

Solid-state metering eliminates the drifting problems between the meter's register and the AMR read that we had experienced with the electromechanical meters.

The meters come to us with the PLC module already installed saving us extensive labor costs.

More efficient use of manpower.

Eliminates errors caused by manual input at the reading and billling phases.

background

The Background

South Central Power Company has a long tradition of providing customers with safe, reliable, and economical electric power, and related services. As an electric cooperative, we provide service to more than 100,000 customers in all or part of 24 central and southern Ohio counties. As a not-for-profit cooperative business, our members are our owners. Our employees' commitment to serving our customers in a timely, courteous and knowledgeable manner is what differentiates South Central Power from other utility providers.

The Challenge

We have been doing AMR since early 1998, but we were using electromechanical meters that had begun to give us problems. We were retrofitting these meters with the Hunt Turtle® module to do our reading. This was very labor intensive because we had to take the meter apart, insert the Turtle module, and then reassemble the meter. In addition, we also had to test the Turtle module once it was installed.

Another challenge was that our territories were growing. We were adding 2,500 new customers each year, and we needed a more efficient way of keeping up. We did not want to add staff nor did we want to replace retiring staff.

As a result, a couple of years ago, we started to investigate solid-state metering for our residential markets.

application

Application

At that time, we had heard about the new electronic residential meter, the CENTRON® meter. We met with our distributor, Hughes Supply, to discuss the CENTRON and its features. A list of references was provided, and we sent out fifty emails to existing CENTRON customers asking about the quality of the product as well as the service provided by Itron, Inc. When we received the responses, these were analyzed by our metering department and then passed up to our directors for evaluation.

Based on what we knew about the meter and what existing customers had to say, we made a decision to go with the CENTRON meter.

Given the past experience of retrofitting our old electromechanical meters, we were particularly interested in the fact that the Turtle module was being tested and installed on the CENTRON meters at the metering facility in West Union, SC. They would ship the meters to us ready to install.

Another feature that we liked about the CENTRON was the way it managed light loads. It is a more accurate meter at loads below 700 watts (light load) and also starts measuring energy at lower power levels (5 watts). We had been losing revenue with our old electromechanical meters, so the CENTRON helps us by reading energy that we had been missing.

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Knowledge to Shape Your Future

results

Results

We are in our third year of the project, and have 40,000 Turtle modules in the field. Of these, 3,000 are on CENTRON meters.

We plan to install 2,000 CENTRON meters in February this year to wholly convert one substation, and then continue with a total of 15,000 CENTRON meters this year. By 2006, we expect total saturation.

Future Plans

Currently, we have 7,000 polyphase customers for whom we are looking for solutions. We are still researching, but we plan to make a decision by the end of 2003 and move forward with this segment of our customer base.

This story, written by Paul Shaeffer of South Central Power, first appeared in the Itron (formerly Schlumberger Electricity, Inc.) customer magazine, Systems Watch Spring 2003.

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