

AMR & AMI: Side by Side

Colorado utility reaps benefits with a hybrid meter reading solution

By Rick Straley

Flexibility, sound management decisions and leveraging various avenues of technology have set the Fort Collins-Loveland Water District (FCLWD) on a path of smart utility operations. The Colorado utility, located about 60 miles north of Denver, employs a unique mix of AMR and AMI meter reading and communications systems. Officials have said the plan is working to increase customer service, aid in resource conservation and create a foundation for expected growth.

ARTICLE SUMMARY

Challenge: With regard to its meter reading program, a water district in a high-profile area of Colorado sought to make the most of employee time and eliminate problems related to accessing customer properties.

Solution: In 2002, officials transitioned from a handheld meter reading system to a drive-by system. More recently, they employed AMI technology to service a portion of the district's customer base.

Conclusion: The hybrid setup is working well, according to district officials. The systems have saved time, enhanced customer service capabilities and are expected to accommodate for population growth.

The FCLWD, in operation since the 1960s, began a transition from handheld meter reading to a drive-by RadioRead system in 2002. With about 60 sq miles of service area, officials found the RadioRead solution to be a better way to utilize employee time and eliminate issues with accessing customer property. Deployment began in subdivisions with aging equipment and then switched to densely populated areas to capitalize on the speed of reads offered by drive-by units.

With the launch of FlexNet by Sensus, FCLWD officials saw the opportunity to employ AMI technology to service a portion of its 13,600 residential and 400 commercial customers with an even higher level of efficiency, given the area's challenging terrain. The utility uses Sensus meters and reading equipment, supplied by local distributor Dana Kepner Co., Inc. The FCLWD uses a mix of pit and nonpit meters and transmitters to serve its customer base.

The district sits at the foothills of the Rocky Mountains and serves portions of the towns of Ft. Collins, Windsor, Timnath and Larimer County. The highly traveled Interstate 25 bisects the urban territory, which has a higher population density on the west side of the interstate than on the east. The area also hosts Colorado State University, and the Ft. Collins region has been listed by major magazines as one of the top places to live, work and raise a family for five straight years.

"With the kind of attention our area is getting nationally, we saw the benefits of embracing the



FlexNet technology now to leverage its benefits, and also to have it in place and be ready for the coming growth," said Tre' Grisby, customer service and information technology liaison for FCLWD.

Technology Setup

As part of the FlexNet deployment process, Sensus performed a propagation study on the service area to identify the required infrastructure. Because growth was already occurring east of I-25, the water district targeted that region for FlexNet. The move was meant to eliminate the need for drive-by coverage in an area that was growing farther from its central operations.

One Tower Gateway Basestation (TGB) services FlexNet customers, and Grisby said officials are optimistic that as growth commences, the TGB has the capacity to continue handling data collection needs.

FCLWD currently uses three methods to collect usage data from its customer base. It uses RadioRead to gain monthly readings for 7,000 of its customers, most of whom are on the west side of I-25. FlexNet provides daily reads to 3,000-plus customers on the east side of the road, and the balance is read manually. No estimates are used, and there is no rate difference for RadioRead and FlexNet customers. The hybrid AMR-AMI setup is working so well, according to Grisby, that the utility plans to continue deploying the west side with RadioRead and the east side with FlexNet.

"Each is so easy to use that you can have the benefits of both at once," Grisby said. "Our AMI is placed so that we can accommodate the expected



The drive-by unit with a mapping interface depicts meter locations graphically.

