

TESTING THAT DOESN'T DAMAGE UNDERGROUND LINES

Ron Furrer has miles of aging underground line to worry about—both at Umatilla Electric Cooperative in Hermiston, Ore., where he serves as operations director, and at the neighboring utility he also handles.

With money and manpower both in short supply, Furrer needed to identify only the circuits with the highest probability of failure. So he designed a five-year plan to increase reliability by prioritizing funding for treating or replacing the worst sections, some of which had been installed in 1976 and others that were quite remote and would be difficult to access in a crisis.

But he also wanted a little bit more. Familiar with problems of some underground line testing methods that caused additional degradation, he chose CableWISE, a service of UtilIX Corporation. The non-destructive CableWISE testing technique—known as condition assessment diagnostic testing—records and measures radio signals emitted by defects in the cable system while it's energized. Signals are then measured and analyzed using advanced processing and pattern recognition.

CableWISE technicians worked with Furrer and his team to perform data acquisition on a large number of splices, terminations,



transformers, cables, and switch gear in just a matter of days. Following the in-depth analysis performed at the CableWISE lab, Furrer received a report and maps that gave him a clear picture of the entire system.

"They came in and diagnosed ancillary failures our staff could correct in real-time," Furrer reports. "We now have identified items that will help extend service life along with added confidence in the condition of other sections of cable."

Contact: Tom Thompson, UtilIX Corporation, 800-252-0556, utilix.com; or Ron Furrer, Umatilla Rural Electric Cooperative, 541-564-4381. ❖

THE PROCESS HELPED US RECOGNIZE SOME CRITICAL ISSUES, INCLUDING HOW HARD INTEGRATION WITH OUR CURRENT SYSTEM WOULD BE.

FULL AMR ROLLOUT IN LESS THAN FIVE MONTHS

Lane Electric Cooperative in Eugene, Ore., tackled a lot of issues when it moved last year to install a systemwide automated meter reading (AMR) system. But the co-op had lots of good reasons to undertake the project: challenges with contract meter readers, meter inaccuracies, line losses, inconsistent billing periods, access problems, and an interest in better managing power outages.

Lane Electric formed a team of internal experts and external partners—consultants, metering pros, and marketing firms—to research and develop an AMR system concept. For a year and a half, that team worked with the co-op's board to design a business model complete with features, benefits, and potential costs. Once the model was in place, interested AMR vendors were given the opportunity to make a presentation to the board and staff.



"The process helped us recognize some critical issues, including how hard integration with our current systems would be, what the different procurement and delivery processes were, the business partners various companies had, and whether or not they could deliver," recalls Dave D'Avanzo, Lane Electric manager of member services. "The presentations also revealed some intangibles, including the level of professionalism of the vendor, how well they knew their system, their ability to respond to questions, and whether or not we thought they were a good fit for us."

Eventually, Lane Electric chose Cooper Power Systems/Cannon Technologies, starting out with a three-month pilot program on 1,500 AMR devices served off a single substation. When that test run succeeded, the co-op set an aggressive five-month schedule for deploying 11,500 new units on its remaining 11 substations.

"We've already recognized a return on our investment, with a two-way communication system that offers automated meter reading,

load control, interval data, outage assessment, remote disconnect-connect, on-demand readings, demand response, peak pricing and other pricing programs, and similar value-added services for Lane Electric members—today and into the future," D'Avanzo concludes.

Contact: Jim Roche, Cooper Power Systems/Cannon Technologies, 763-543-7779, cannontech.com; or Dave D'Avanzo, Lane Electric Cooperative, 541-484-1151. ❖

Customer-focused Solutions...

SOLUTIONS FOR OPTIMIZING ENERGY DELIVERY

Asset Utilization

- Defer capital improvements
- Reduce physical inspection costs
- Reduce maintenance, repair, insurance, lost revenue
- Optimize placement of assets
- Prevent stress on equipment

Distribution Reliability

- Predict failures with real-time, intelligent exception analysis
- Avoid failures with better monitoring & control, targeted demand reductions, distributed generation
- Planners have better access to operations data

Supply Risk Management

- Increase reserve capacity
- Improve load factor
- Reduce peak supply costs
- Improve load following
- Smooth boom & bust cycle

Value-Added Products/Services

- Offer "Virtual" Energy Management to key accounts
- Offer new rates and programs to mass market
- Offer risk management options to RTP customers
- Premium power rates