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CONNECTIONS

NRECA Associate/Service Members and Co-ops Working Together

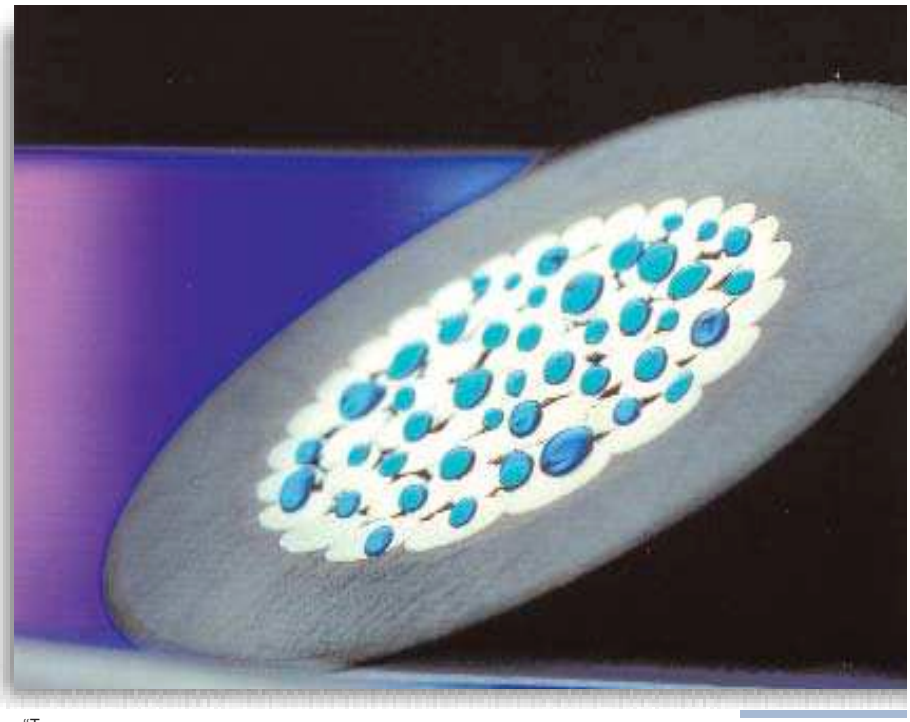
FINDING THE CURE FOR AGING UNDERGROUND

This advertising supplement shows how NRECA Associate/ Service Members help electric co-ops solve operational problems and boost consumer relations. For information about Associate Membership, contact Nancy McMahen: 800-230-2601 or nancy.mcmahen@nreca.coop. Or visit Cooperative.com and click on "Contact."

With roughly a third of its 20 miles of underground cable more than two decades old, Sierra Electric Cooperative in Elephant Butte, N.M., was in the market for a fast and effective way to keep those facilities in service. So Emery Owen, Sierra Electric operations manager, compared the cost of replacing the cable against a new injection treatment from UtilX Corporation.

"UtilX's CableCURE technology came up a winner," he stresses. "We were able to remedy the situation for less than half the cost of cable replacement. In addition, it was much less disruptive to our consumers, field proven, and accompanied by a 20-year satisfaction warranty."

Overall, UtilX injected 7 miles of Sierra Electric aging underground last year. "To date, we have not seen a single failure on any of those lines," Owen says.



Contact: Gus Derezes, UtilX Corporation, 253-395-4537, utilx.com; or Emery Owen, Sierra Electric Cooperative, 505-744-5231. ❖

CERTIFIED STAKERS

Staking technicians at electric co-ops throughout Mississippi have a clearer grasp of their jobs, and are doing them better, thanks to a certification program launched by the co-op's statewide service association and Hi-Line Engineering, a GDS Associates company.

"The course goes over things folks need to do a good job staking," observes Stan Rucker, vice president of safety & loss control at Ridgeland-based Electric Power Associations of Mississippi, which has sponsored the intensive three-week training and certification effort for four years.

The comprehensive curriculum provides practical staking instruction emphasizing safety, reliability, and efficiency. Specifically, it covers overhead and underground design, permitting, easement acquisition, joint-use staking, surveying, transformer sizing, overcurrent protection, construction contract administration, inspections, code application and use, and unique structures.

Graduate engineers, line foremen, and construction personnel have all taken part.

"It's been a hit with all of them, Rucker concludes. "We've not had one bad evaluation yet."

Contact: Kevin Mara, Hi-Line Engineering, a GDS Company, 770-425-8100, gdsassociates.com; or Stan Rucker, Electric Power Associations of Mississippi, 601-605-8600. ❖

Hi LiNE ENGINEERING
a GDS Company

RADIO SWAP MEETS THE TEST—FOR TODAY AND TOMORROW

When Great River Energy, a Maple Gove, Minn.-based generation and transmission co-op, called on its largest distribution member, Ramsey-headquartered Connexus Energy, to increase the number of distributed generators on its Supervisory Control and Data Acquisition (SCADA) system from eight to 20 in the spring of 2007, the co-op met the challenge with what came to be known as "The Great Swap."

With a communications infrastructure built around a private frequency burdened by slow, overloaded lines with limited bandwidth, Connexus Energy needed to upgrade communications capabilities at all of its substations—those using the 900-MHz system for SCADA as well as approximately 45 without it.

> "Reliability on the 700-MHz system is estimated at 99.9 percent compared to the old system that managed reliability ratings in the high 80s at best.

Connexus Energy engineers came up with the swap, building on a plan suggested by Arcadian Networks that uses a licensed 700-MHz frequency. The swap meant replacing older, slower 900-MHz substation radios with the more secure and reliable 700-MHz system. The still-functional 900-MHz radios were then utilized for distributed generation.

Aiming to convert four substations by June 2007, the co-op used its own line trucks and crews to install many of the radio endpoints. "The partnership with Arcadian Networks was fast and efficient," comments Ed Budde, Connexus Energy systems engineer. "Modems were set up and connected to the network within minutes."

By the end of 2007, Connexus Energy had converted the 20 substations to 700 MHz, and plans to roll out SCADA to all substations over the next four years. "Reliability on the 700-MHz system is estimated at 99.9 percent compared to the old system that managed reliability ratings in the high 80s at best," Budde reports. "It also makes advanced meter infrastructure applications possible as well."

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ARCADIAN Networks