

CORE ELECTRIC COOPERATIVE SAVES MILLIONS WITH SOUTHWIRE'S NOVINIUM UNDERGROUND SERVICES REJUVENATION PROCESS ACHIEVES 99.4 PERCENT CABLE RELIABILITY

COMPANY: CORE ELECTRIC CO-OP, FORMERLY INTERMOUNTAIN RURAL ELECTRIC ASSOCIATION
LOCATION: SEDALIA, CO, USA
WEBSITE: CORE.COOP
CABLE LENGTH: 2,526,721 FEET
CABLE SIZES: #2, 1/0, 4/0, 500 MCM

METHOD: Hybrid rejuvenation using CableCure[®] 732 fluid with the Improved Unsustained Rejuvenation (iUPR), and Sustained Pressure Rejuvenation (SPR) processes.

HIGHLIGHTS

- *Utility saved more than \$10 million over projected replacement costs*
- *2.5 million feet of cable rejuvenated to date*
- *Hybrid iUPR and SPR approach combined to yield a 99.4 percent reliability rate on treated line*

OVERVIEW

Core Electric Cooperative, formerly Intermountain Rural Electric Association (Intermountain REA), began to experience an number of failures with cable laid in the in 1970s and '80s. By proactively rejuvenating entire neighborhoods before cables failed, the utility improved service levels to a 99.4 percent reliability rate and saved tens of millions of dollars.

THE COMPANY AND SITUATION

Many segments of aging cable were failing frequently in the Core Electric Co-op service area. The standard operating procedure was to replace cable that had faulted more than three times, but this approach proved unsustainable. An increasing number of segments failed and cable replacement costs, including pavement and landscape restoration, grew too high.

The utility had experienced a significant increase in feeder failures, bringing with it a growing number of customers without power. Facing high replacement costs and a lack of knowledge about the condition of much of the underground cable, Core Electric Co-op decided to use cable rejuvenation more widely to address the problem.

EVALUATION PROCESS

The first step for Core Electric Co-op was to combine cable testing and limited cable rejuvenation to systematically identify, prioritize, and then address their worst URD cable. Over time, they noticed an issue with this approach. While a section of URD cable might test well, this process did not predict future failures. As Core Electric Co-op became comfortable with Southwire's Novinium Underground Services cable injection process and results, it decided to proactively rejuvenate wider areas rather than just sections of lines.

"The replacement costs would have been astronomical. By injecting this cable, we saved our company and our consumers tens of millions, if not hundreds of millions, of dollars."

- Michael Surran
Director of Underground Operations, Core Electric Co-op

SOLUTION

Core Electric Co-op used Southwire's Novinium Underground Services Improved Unsustained Pressure Rejuvenation (iUPR) and Sustained Pressure Rejuvenation (SPR) processes with CableCure[®] 732 fluid on both feeder and URD cable. This hybrid approach restored the greatest number of segments, avoided the cost of digging difficult-to-access splices, and significantly increased the reliability of treated cable.



RESULTS

To date, Core Electric Co-op has rejuvenated approximately 2,526,721 feet of cable. The utility realized a savings of tens of millions of dollars compared to cable replacement. The treated cable was restored to like-new condition.

