

# 600 Miles of Aging Cable Restored with Novinium Sustained Pressure Rejuvenation

## Highlight

- Pilot project saved approximately 40 percent of the cost of replacement of the same line
- MVEA now injects approximately 70,000 feet of cable a year
- Mountain View has experienced zero failures in rejuvenated cable

## Overview

When Mountain View Electric Association (MVEA) saw their line replacement costs rising faster than projections, they decided to explore Novinium cable rejuvenation. After a pilot project that saved some 40 percent of the cost of replacement, MVEA felt comfortable expanding their use of cable rejuvenation and including it on an ongoing basis.

## The company and situation

Mountain View Electric Association (MVEA), an electric cooperative in Falcon, Colorado, serves more than 50,000 members across 5,000 square miles east of Colorado Springs. In 1991, MVEA's service territory included approximately 600 miles of aging unjacketed XLPE URD cable. Their asset management plan called for replacing cable that had faulted at least once. They budgeted one million dollars per year for this purpose.

“ The reliability of rejuvenated cable is the same as replaced cable. Cable rejuvenation is a major part of our URD asset management plan. ”

– David Waldner  
Manager of Engineering  
Mountain View Electric Association



### Company

Mountain View Electric Association

### Location

Falcon, CO, USA

### Website

<http://www.mvea.coop/>

### Cable Sizes and Length

#2, 4/0, 500 kcm, 1/0 EPR, PE, XLPE,  
358,950 feet

### Method

Sustained Pressure Rejuvenation (SPR)  
process with Cablecure® 732 fluid

## Evaluation process

When MVEA management initially learned about Novinium and its process of cable rejuvenation, they were skeptical but curious. MVEA reached out to other electrical cooperatives who have used cable rejuvenation to learn more about the process, the costs, and reliability results in the field.

After several discussions with Novinium customers, MVEA decided to conduct their own pilot cable rejuvenation project. The results from the pilot project proved outstanding. MVEA calculated that they saved approximately 40 percent by rejuvenating cable instead of replacing it. They also determined that the reliability of rejuvenated cable was the same as new cable.



## Solution



With the pilot project results in hand, MVEA revised their asset management plan. They now use cable rejuvenation whenever possible and replace cable only on an as-needed basis. This allows them to address more feet of cable per year, which improves the reliability of their entire system. It has also allowed MVEA to proactively address aging URD cable before faults occur.

Currently, MVEA rejuvenates approximately 70,000 feet of cable each year. About 90 percent of the cable is addressed using the Sustained Pressure Rejuvenation (SPR) injection process with Cablecure® 732. Cable is only replaced for limited reasons:

- When cable can't be injected, such as a segment with too many splices
- When a larger conductor is required to meet members' needs

The MVEA asset management plan follows these guidelines:

- Proactively rejuvenate cable to improve overall system reliability
- Use the SPR processes to rejuvenate the maximum numbers of cables within budget

## Results

Mountain View has experienced zero failures in rejuvenated cable and has rejuvenated approximately 90 percent of all URD cable addressed. Their members also benefit from cable rejuvenation in several ways including:

- Fewer cable-related outages
- Highest system reliability at the lowest possible cost due to the savings afforded by rejuvenation
- Less disruption because the cable rejuvenation process does not disturb members' yards
- Rejuvenated cable is restored to like-new condition and backed by a 40-year warranty