

MEA Addresses Older Subdivisions with Cable Rejuvenation, Trains Own Team on Process

Highlight

- Utility chooses to train own crew and use cable injection year-round
- Additional maintenance was completed during rejuvenation project
- Most faults can be rejuvenated during ad hoc repairs with another 30 minutes of work time

Overview

Matanuska Electric Association (MEA) found that even subdivisions with well-laid cable were experiencing increasing faults with the stress of multiple freezes each year, so the utility decided to try cable injection to restore reliable service. Now, the Novinium-trained MEA staff can do the work so efficiently that MEA plans to continue using cable injection year-round.

The company and situation

MEA is a member-owned cooperative that serves more than 60,000 customers through 4,200+ miles of underground power lines in tough Alaskan terrain. Several older subdivisions within MEA's service area in Eagle River were experiencing an increasing number of cable faults even though the original cable was installed by the book: the cables were bedded in sand and proper cable separation was maintained. These faults always increased in the colder weather when the frost level reached the depth of the buried cable.

These increasing failures were a significant problem, since these subdivisions were right next to the substation. When there was a fault, not only did one subdivision go dark, but many customers further down the line also lost power.

“ We are very pleased with this project and that Glenn Durkee was certified as an injection technician by Novinium. We plan to expand the training and certify more linemen next year. ”

– Tim Barnum
Line Superintendent
Matanuska Electric Association



Company

Matanuska Electric Association

Location

Palmer, AK, USA

Website

www.mea.coop

Cable Sizes and Length

15 kV, XLPE, #2 cable circuits, 32,094 feet

Method

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

Evaluation process

MEA knew that there were a lot of splices of unknown quality and remaining life. So, they decided to use the Novinium® Sustained Pressure Rejuvenation (SPR) method to rejuvenate the cables and replace all of the splices.

Solution

During the first few weeks, a Novinium technician trained and certified Glenn Durkee, the line superintendent crew sub-foreman and an MEA crew member. Once certified, Glenn supervised the crew to perform all of the injection work with only occasional oversight from Novinium.

Results

Having trained line workers in-house means that MEA can now use rejuvenation services year-round when there is slack time, especially in winter months. This project also gave MEA a chance to clear growth away from equipment, fix secondary pedestals that needed repair and remove rust from transformers.



Now the utility does injection on all cable faults when they happen. This approach also lets MEA capitalize some repair costs. It takes only about 30 minutes extra to inject the cable when repairing a fault.