



## Crews meet deadline in spite of Mother Nature

Eversource is New England's largest energy delivery company, with nearly four million electric and natural gas customers in Connecticut, Massachusetts, and New Hampshire. Their electric service territory covers approximately 500 towns across more than 13,000 square miles, with 140 towns in Massachusetts alone.

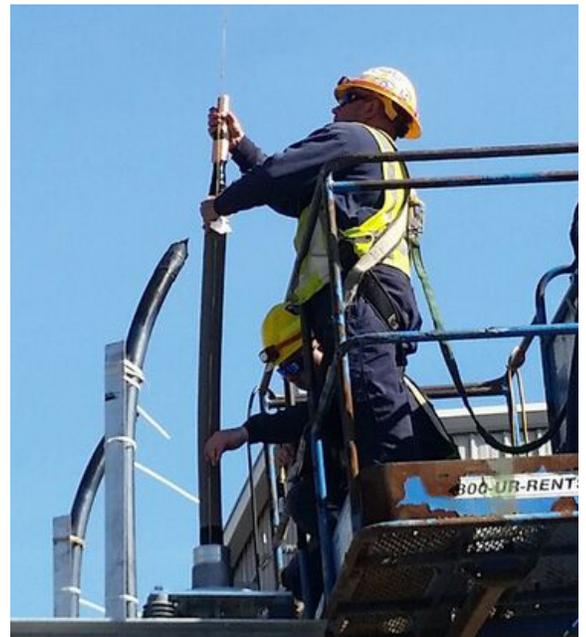
Due to regional growth in western Massachusetts, and the corresponding increased load requirements, Eversource needed to expand and retrofit their substation at 5 Agawam Avenue in West Springfield. As is the case with most substation retrofit projects, there was much congestion within the confines of the substation, and not enough room for an overhead solution. Underground cable was the only way to go.

### Teamwork

After an extensive bidding process, Eversource chose to hire Burns & McDonnell as their primary contractor. Kerite Cable Services was hired as the subcontractor, due to their expertise in cable design, installation, terminations and testing capabilities. Central Connecticut Cable Company (CCCC) was also brought in to help with the installation of the Kerite 115kV underground power cable – chosen by Eversource to power the circuit.

The contractor teams had done much work together over the years, which provided piece of mind to James Long and Julio Couceiro and the rest of the group at Burns & McDonnell.

“We knew the team that Eversource put in place,” says James Long, Senior Project Manager at Burns & McDonnell. “The weather started to wreak havoc on our production schedule, and there were a couple of days where it just wasn't safe to be out there. But otherwise Eversource was able to get the job done and we had complete confidence that the contractors in place would push through and get it done for us.”



## Getting it done

In March of 2016, battling rain, snow, and some of the coldest temperatures recorded that winter, the two 1,000kcmil Cu 115kV underground circuits were installed. A two week outage was required to perform the work in the substation, and time was of the essence, due to the need to get other scheduled contractors to move in and start the work on the other side of the substation. As much as the crews tried to work through the inclement weather, they did lose a number of days due to extreme weather conditions. Eversource and the contractor teams worked long weekends to remain on schedule.

Six lengths of 1,000kcmil Cu 115kV cable – 200 feet each – with twelve G&W PAT 140 terminations were installed during the two-week period in March 2016, as well as the shield grounding and final acceptance testing, to ensure the system was ready to go. This Phase I part of the project was done, and Burns & McDonnell and Eversource brought in the other contractors to take care of other components of the substation expansion and retrofit.



## Back to finish the job

In April of 2017, Burns & McDonnell had Kerite and CCCC come back to the Agawam Avenue substation for Phase II of the project – to install the final circuit. The old/ existing bus work in the substation had been removed, and new termination riser structures were installed by other contractors since the first circuit was installed in March of 2016.



This time around, Eversource and the teams had to install a single circuit of the 1000kcmil Cu 115kV underground cable to officially complete the project. In just a short six-day period, the crews installed three 150 foot lengths of power cable, along with another six G&W PAT 140 terminations atop the new termination riser structures. Kerite Cable Services and CCCC took care of the shield grounding and performed the final acceptance testing of the new circuit before it was energized.

With Eversource and the contractor teams working together – determined to battle challenging weather in the face of tight deadlines – the retrofit and expansion of the substation at Agawam Avenue is now complete. As central and western Massachusetts continues to experience regional growth, Eversource is no longer limited by the capacity of the substation, as it will now be able to handle additional growth in the area for years to come.