



Challenge Accepted.

LINEMAN EDUCATION FORMS A FOUNDATION FOR THE FUTURE



» CASE STUDY: GRIDCORE™ COMPOSITE UTILITY POLES



MODERNIZING UTILITY INFRASTRUCTURE: A HANDS-ON APPROACH TO COMPOSITE POLE ADOPTION

THE CHALLENGE

An aging electrical utility infrastructure, coupled with rising electricity demand and stronger, more frequent climate events, is driving demand for grid modernization and upgrades. The majority of utility poles in service are traditionally made from wood that degrades over time, leading to costly maintenance, more frequent power outages, and negative effects on the environment when that wood is chemically treated. As electrification and energy demands surge, the need for more durable and sustainable infrastructure has become increasingly crucial.

Avient's GridCore™ Composite Utility Poles are engineered to address these infrastructure challenges by offering superior strength and resistance to environmental stressors compared to traditional wood poles. However, the adoption of these emerging materials faces a key hurdle: linemen, the skilled workers who install, maintain, and repair electrical power systems, are unfamiliar with how to work with composite poles. The successful implementation of composites relies on educating linemen on how they differ from traditional materials, along with training in proper installation and handling techniques.

THE SOLUTION

To overcome the adoption barrier, Avient took a hands-on, educational approach. The Avient GridCore team visited the Power Lineman Program at Mountain Empire Community College (MECC) in Appalachia, Virginia. The goal: to support the installation of the first fully fabricated GridCore Composite Utility Pole and provide direct training to future linemen.

Training began with a classroom discussion about the nuances of working with composites compared to the wood poles they were familiar with. Moving to MECC's outdoor training yard, the installation of the donated GridCore pole replicated a real-world scenario, providing students with practical experience. Through this exercise, students learned how to properly handle and install composite poles, while gaining a clear understanding of the key differences and similarities between composite and traditional utility poles.

THE IMPACT

The successful installation of GridCore pole number 0001 was not just a technical exercise but a meaningful exchange of knowledge and expertise, helping to facilitate that the next generation of lineworkers is well-prepared to work with Avient's cutting-edge technology.

For the linemen, the training highlighted that working with composite poles is more familiar to linemen than expected, with many installation practices closely resembling traditional methods. This makes the transition smoother and more accessible for crews in the field. For Avient, the insights gained from this real-world experience and dialogue with the skilled students and staff at MECC are directly informing the go-to-market approach for GridCore poles and ultimately helping drive adoption and growth across the electrification and energy sectors.

The Avient team is grateful to the students and staff at the MECC Power Lineman Program and looks forward to continuing to build relationships with technicians like them who are essential to the future of the power grid.



Avient GridCore™ Pole
Installation Date: 05/15/25
S/N: BHM001
Class/Height: H2-45
Weight: 1170 lbs
MECC Lineman Training
Customer S/N: 0001

To learn more about GridCore Composite Poles,
visit gridcore.avient.com.