ELECTRICAL FEEDER SYSTEM

Utilities Backed by CFES

Leaks and Regulatory Pressures on the System

A major northeastern utility was experiencing an unacceptable amount of dielectric fluid leaks on its underground 345kV electrical feeder system. System reliability was being impacted and the state's environmental protection agency was threatening to impose an administrative consent order forcing them to replace the aging lines.





Maintaining Power While Under Repair Constraints

Since the system provided power to millions of people, it could not be taken out of service. The repair solution needed to be meticulously designed with a high certainty of the outcome. Other factors impacting the repair were temporary barrel repairs and clamps that were installed through the system and the system was coated with an asbestos-containing mastic. The repair would need to be installed around these constraints while maintaining the integrity of the system.



Leak Protection and Long-term Reliability

Carbon Fiber Engineered Solutions installed our engineered system while the electrical feeders remained fully energized. The solution fully encapsulated the existing electrical feeders, previous barrel repairs, and asbestos-containing mastic coating. The composite carbon fiber solution is rated for 1,000 psi and serves as a secondary pressure boundary for the existing feeders.



As a result, the leaks were stopped, cleanup efforts and environmental reporting were eliminated, system reliability was restored, and the system was extended with **over 30 years** of maintenance-free life.

CONTACT US

If you have any questions about your project, just contact us in a convenient way for you.

Office: 774 773 9873

Direct: 774 773 9873

www.carbonfiberes.com

Peter@carbonfiberes.com