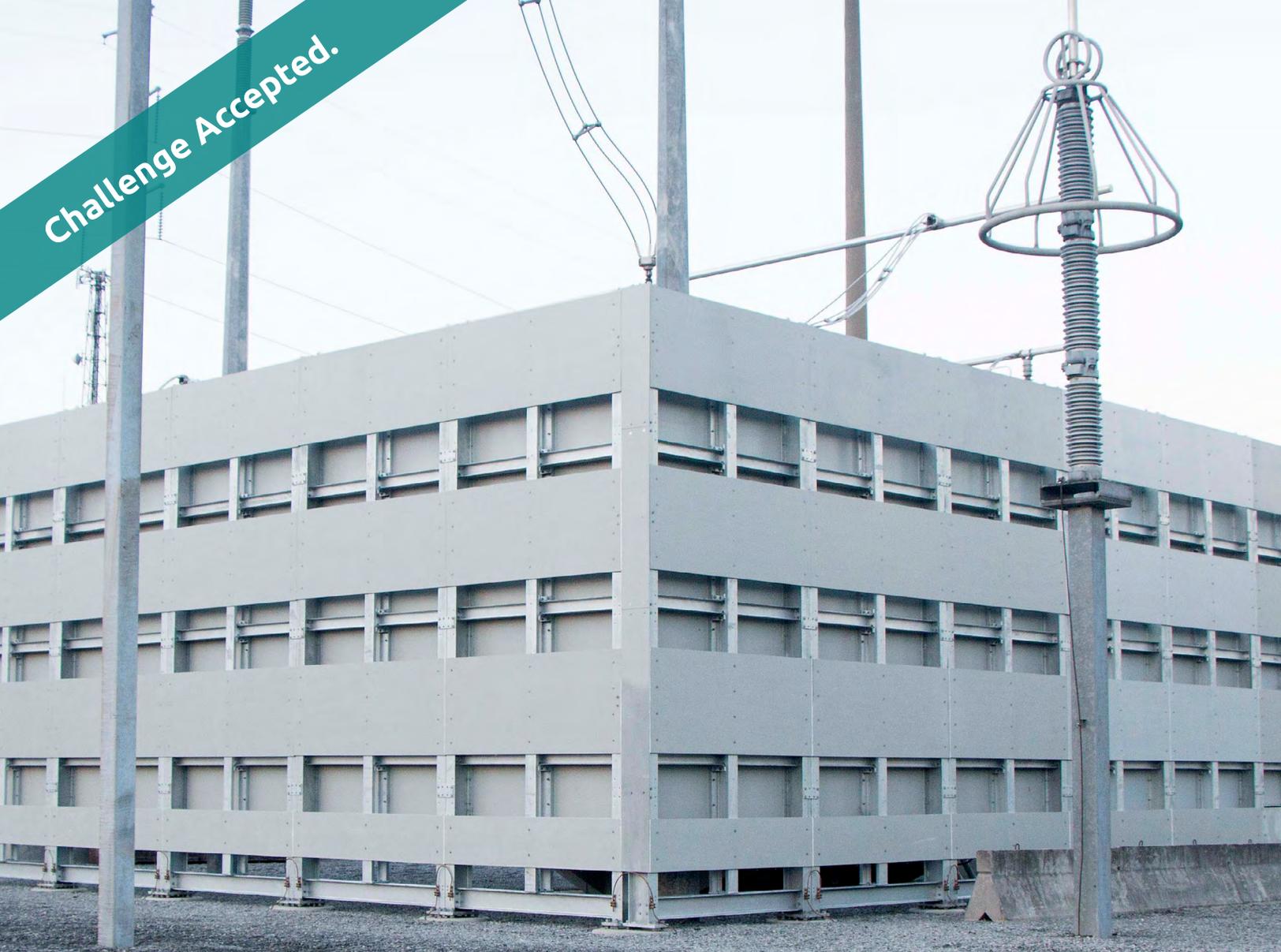


Challenge Accepted.



TOUGH ENOUGH TO PROTECT THE POWER GRID

 **AVIENT™** **» CASE STUDY: GLASARMOR™ BALLISTIC RESISTANT PANELS**





MODULAR BALLISTIC PROTECTION MADE POSSIBLE WITH COMPOSITES

THE CHALLENGE

Recent attacks on U.S. electrical substations across the country provide stark reminders that our nation's power supply remains a primary target for criminals focused on harming our country and security.¹

The call to action is evident: we must continually improve the physical and technological infrastructure protection of our nation's energy supply.

Southern States, LLC, a Georgia-based manufacturer of products for the electric utility industry, understands the immediate importance of enhanced protection and physical security around critical infrastructure components. In addition, its customers have an obligation to comply with Federal Energy Regulatory Commission (FERC)² physical security requirements.

To meet the FERC requirements, each utility company is required to perform a risk assessment of their systems, identify the most critical assets within the power grid, and then propose and implement a plan to protect them. Potential solutions include surveillance as well as physical barriers. Surveillance is an economical option, but it does not protect against an immediate physical attack on an asset. Metal fencing or concrete walls and barriers would protect against ballistic fire, but are permanent structures that can be difficult to repair or replace in the case of an attack.

THE SOLUTION

Ballistic-resistant panels made with fiber-reinforced polymer (FRP) composites offer key properties that enable Southern States to meet its customers' critical needs. Specifically, GlasArmor™ ballistic panels from Avient, constructed of multiple layers of woven fiberglass encapsulated with a proprietary resin system, weigh significantly less than concrete and steel. They can be constructed in a modular configuration to provide the required threat-level protection and simplified replacement in the event of an attack.

Avient and Southern States worked together to develop a modular design using GlasArmor ballistic panels. The Southern States Ballisti-Wall® and Ballisti-Cover® ballistic-resistant solutions made it easy to customize for each application and, at the same time, meet customers' tight delivery requirements.

"Avient enabled us to quickly meet our utility customers' growing demand for improved, customized physical asset protection," said Dave Lombardo, vice president and general manager, Service Division, Southern States LLC. "We have worked closely with Avient for years and are ready to help other utilities as they seek to improve their security infrastructure."

THE IMPACT

Southern States' ballistic-resistant solutions incorporate three layers of uniquely formulated GlasArmor composite panels to achieve Underwriters Laboratories (UL) Level 8 protection. Level 8 specifies protection against a 7.62 mm rifle using a lead core, full metal jacket 0.308 caliber copper military ball. The panels successfully encapsulate the bullet and prevent any ricochet that could be harmful to individuals or assets of the utilities.

Using GlasArmor panels, Ballisti-Wall® and Ballisti-Cover® solutions enable utility companies to add a superior level of protection to critical components and meet FERC security requirements within a modular, adaptable construction.

¹<https://www.nbcnews.com/news/us-news/three-substations-attacked-washington-state-rcna63214>

²https://www.ferc.gov/sites/default/files/2020-04/E-4_10.pdf

To learn more about Avient's advanced composite solutions, visit www.avient.com/composites.