

Mutual Assistance in the Cyber Age

By **WILLIAM J. FEHRMAN**

The December 2015 cyber attack on Ukraine’s electric distribution system may be a canary in a coal mine—emphasizing how serious any attack against critical infrastructure can be. The Ukraine attack also demonstrated that security cannot be limited to protecting and defending systems; it requires a plan for responding and recovering when confronted by a determined adversary.

While some have called this event a “wake-up call” for the industry, the North American electric power sector has been anticipating and preparing for this type of threat for years.

The electric power industry takes a “defense-in-depth” approach to protecting grid assets. The industry’s experience is that cyber threats evolve and, likewise, defenses must evolve to keep pace. Even as we implement more comprehensive regulatory standards to secure our infrastructure, better tools and technology to monitor and defend our systems, and stronger partnerships with government to improve our preparedness, we must prepare, as there is no silver bullet or 100-percent security.

Mutual assistance has been a pillar of the industry’s resiliency strategy to manage weather impacts that disrupt electric service to our customers. What began as electric power companies informally sharing crews and equipment with their neighboring utilities has evolved into Regional Mutual Assistance Groups. And, following Superstorm

Sandy in 2012, it became clear that a national framework was needed to most effectively deploy mutual assistance resources during significant regional or national events.

Our responsibility to customers is to anticipate threats and mitigate the risk. Last November, the North American Electric Reliability Corporation’s industry-wide GridEx III exercised incident response protocols for a combined cyber and physical attack that wreaked havoc on grid operators for weeks. GridEx III underscored the need to evolve the industry’s mutual assistance framework beyond traditional natural disasters.

In response, the Electricity Subsector Coordinating Council (ESCC) established the Cyber Mutual Assistance Task Force, which I co-chair, to convene industry experts and develop a cyber mutual assistance framework that will aid electric power companies in rebuilding and recovering necessary computer systems in the event of a regional or national cyber incident. This mutual assistance program will build on the industry’s traditions to develop resource-sharing relationships that provide “surge capacity” should a cyber incident exceed an individual company’s ability to respond.

Developing a mutual assistance framework for cyber threats has its own set of unique challenges. The cyber domain does not honor physical or geographical boundaries, and the skills to respond, remediate, and recover from a widespread cyber

incident are different from the field workers in traditional mutual assistance. Our industry also competes for the highly skilled cyber experts needed to secure the power grid; other critical industries and the government all are fighting for the same limited pool of resources.

The North American electric sector must address these challenges. In the near term, simply having the capability to share resources should be a focus. Over the long term, our industry must build on our mutual assistance culture and lead the effort to strengthen cyber incident response capabilities.

The electric sector’s Cyber Mutual Assistance Task Force is already engaging other critical infrastructure sectors, including communications, downstream natural gas, transportation, banking, the vendor community, and the government to invest in well-planned, well-executed industry response capabilities. On behalf of MidAmerican Energy’s customers and employees, we are proud the ESCC is undertaking this important cyber mutual assistance initiative.



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The Electricity Subsector Coordinating Council (ESCC) serves as the principal liaison between the federal government and the electric power sector, with the mission of coordinating efforts to prepare for, and respond to, national-level disasters or threats to critical infrastructure. The ESCC includes utility CEOs and trade association leaders representing all segments of the industry.

