The Electric Power Industry Is United In Its Commitment To Protect Its Critical Infrastructure

Providing safe, reliable, and affordable electricity is the electric power industry’s top priority. To that end, electric utilities across the United States and Canada work to maintain both the cybersecurity and physical security of the substations, transformers, and other assets that help utilities deliver a reliable supply of electricity across the interconnected electric power grid. In addition, the industry is subject to mandatory bulk-power system reliability standards that are developed through the North American Electric Reliability Corporation (NERC) and enforced by the Federal Energy Regulatory Commission (in the United States), NERC, and applicable Canadian governmental authorities.

The North American electric power grid is a complex, interconnected network of generating plants, transmission lines, and distribution facilities, which can be damaged by natural events, such as severe storms, as well as by malicious events designed to harm electric infrastructure. The electricity sector takes its role as a critical infrastructure provider very seriously. It continuously strives to improve on its history of protecting its assets from physical security threats, including longstanding programs and protocols designed to protect utility systems.

Key to reliability efforts are the crisis management and site-specific security plans developed by electric utilities to ensure that operations and infrastructure systems are properly supported. In addition, a number of redundancies are built into the system, in many cases allowing utilities to re-route power around damaged facilities. Utilities also partner with federal, state/provincial, and local government and law enforcement agencies in both the United States and Canada to ensure that they can respond effectively to any event that may impact their operations.

The electric power industry employs threat mitigation known as “defense-in-depth” that focuses on preparation, prevention, response, and recovery. The goal of every utility and the industry as a whole is to manage risk prudently. Still, there are tens of thousands of diverse, often remote, facilities throughout the United States and Canada that cannot be 100-percent protected from all threats, requiring utilities to prioritize facilities that, if damaged, would have the most severe impacts on their ability to “keep the lights on.” These facilities would then receive increased attention and investment in critical infrastructure protection.

Specific actions the industry is taking include:

- Participating in preparation drills for extraordinary scenarios, such as Grid Ex II, an exercise in November 2013 organized by NERC that included both cyber and physical security threats and U.S. and Canadian utilities and participants;
• Improving **prevention strategies** that include tighter physical access measures and surveillance, industry-wide physical and cyber security standards and guidelines, and NERC alerts regarding significant incidents or threat information;

• Enhancing **resiliency efforts** through programs such as the Edison Electric Institute’s Spare Transformer Equipment Program (STEP), the Electric Power Research Institute’s Recovery Transformer Program (RecX), and other similar programs to help ensure the availability of sufficient spare equipment in the event of an incident;

• Forging strong **industry-government partnerships**, including through the Electricity Subsector Coordinating Council (ESCC), to coordinate with the relevant federal government, intelligence, and law enforcement agencies to enhance security measures and to promote awareness and coordination with local law enforcement; and

• Focusing on **response and recovery**, utilizing industry mutual assistance networks, and leveraging government resources to speed restoration following significant damage to the electric grid.

The electric power industry takes very seriously its responsibility to provide a safe, reliable and affordable electricity supply, and will continue to work together and with federal, state/provincial, and local agencies to enhance the physical security of its critical infrastructure. The electric sector and its subject matter experts will continue to partner with government agencies to improve physical security for its assets. Also, to help maintain operational security, the industry is careful not to publicize clearly sensitive information about critical infrastructure that might provoke new threats or endanger the safety and well-being of the public or the integrity of the electric power grid.

American Public Power Association  
Canadian Electric Association  
Edison Electric Institute  
Electric Power Supply Association  
GridWise Alliance  
Large Public Power Council  
National Rural Electric Cooperative Association  
Transmission Access Policy Study Group  
Utilities Telecom Council

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