

Cyber Security and Grid Vulnerabilities



Stephanie Horst
horst@byelectric.com

Vulnerability of the U.S. electric grid has been a top news topic recently—from the Feb. 2021 energy emergency that brought widespread and costly power outages in Texas to the potential for cyber attacks linked to Russia's aggression against Ukraine. With this news coverage questioning the security of our country's power systems, you might wonder what this means for you and the power you rely on from your local electric cooperative.

B-Y Electric, in collaboration with our wholesale power supplier East River Electric Power Cooperative, places a high priority on keeping our information and assets safe from physical and cyber security breaches. We work together to manage growing threats, promote continuous improvement, and develop solutions that keep the grid secure.

PROTECTING AGAINST CYBER SECURITY THREATS

Delivering on our promise to provide safe and reliable electricity encompasses more than maintaining our system's physical infrastructure. Providing reliable power now requires building cyber-resilient energy delivery systems.

B-Y Electric relies on East River Electric's in-house experts that are focused on keeping our infrastructure safe from cyber security threats. East River's team utilizes a maturity model for managing risks. This process is based on three iterative steps: security awareness and education, vulnerability management, and incident response.

"When taken together, these maturity model steps make cyber security a continuous process rather than a set it and forget it task," said East River Chief Information Officer Jeff May. "As cybersecurity threats and threat actors continue to evolve, so must the industry's capability to defend against them. Maintaining the security and resilience of the grid requires a flexible approach that draws on a variety of tools, resources and options."

Information sharing, technology development and coordination among industry and government partners are essential for strengthening electric sector

cyber defenses. Electric co-ops have frequent interaction with the Department of Energy and other government agencies to coordinate on actions to secure the electric grid. Our cooperative family routinely participates in tabletop exercises to ensure we are ready to enact our emergency response plans if a cyber breach occurs. We also provide our employees with on-going training so they can recognize phishing scams and other cyber threats.

DELIVERING RELIABLE POWER

Our cooperative network works tirelessly to strengthen our infrastructure against the impacts of harsh weather and to restore power when outages occur. We're proud to report that B-Y Electric's current reliability rating is 99% including major events and planned outages. That means you can depend on our service. We can offer this level of reliability with our continual distribution system maintenance program and the close proximity of our line crews to the membership.

Additionally, East River owns eight regional service centers across their territory so they can quickly and safely repair damages to their transmission infrastructure after outages. East River is currently in the middle of an aggressive transmission system upgrade plan that is designed to strengthen their system's backbone, improve reliability, and provide for future load growth.

"East River exists to enhance the value of our member systems and our upgrade plan is designed to ensure we are living out that mission by providing for new load growth, strengthening the backbone of our transmission system, and meeting the reliability expectations of our membership," said East River Chief Operations Officer Mark Hoffman.

With so much uncertainty and flux in the world, power grid vulnerability will no doubt remain a headline for some time. However, you can be certain that B-Y Electric and our power supply partners are working day and night to safeguard against threat actors as well as to restore power quickly after outages so that the power will be there when you need it.

For more information, call our office at (605) 463-2507 or email horst@byelectric.com