

Announcement

New Strategy Seeks to Ensure Reliability by Integrating Cyber and Physical Security into Grid Planning, Design, Operation

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ATLANTA – The transformation of the grid is expanding the existing attack surface due to the changing resource mix as well as the use of emerging technologies, additional communications and industrial controls and remote control capabilities. Focusing on and mitigating these known and emerging cyber and physical security risks is critical to the ERO Enterprise’s mission of assuring the reliability, resilience and security of the North American electric grid.

To that end, NERC is integrating cyber and physical security concepts more holistically into transmission planning, engineering design and system operations to ensure that mitigating security controls are considered as early in the process as possible. The new [NERC Security Integration Strategy](#), which is primarily focused on risk identification and validation, prioritization and development of possible mitigations, outlines ERO priorities to enhance security integration through working collaboratively with electricity sector stakeholders.

The strategy’s four core tenets, which can be mapped to the [NERC Risk Framework](#) that guides the ERO Enterprise in prioritization of risks and provides guidance on the application of ERO policies, incorporate near-term and long-term work items to ensure reliable and secure operation of the bulk power system:

- Cyber-Informed Transmission Planning
- Security Integrated Design and Operations
- Grid Transformation
- Emerging Technologies and Security Practices

The strategy also highlights some current and future work products, one of which is the [IEEE Technical Report: Towards Integrating Cyber and Physical Security for a More Reliable, Resilient, and Secure Energy Sector](#), drafted by the IEEE–NERC Joint Task Force on Security Integration into Bulk Power System Engineering Practices. This report, which was published on December 6 and is available to IEEE subscribers and members, is one of the first major deliverables tied to the strategy and provides content in all four of its major tenets.

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Delivering on all aspects of *NERC's Security Integration Strategy* will require outreach and collaboration with industry stakeholders, regulatory bodies, policy organizations and equipment standards bodies. Engagement and support from industry members through the Reliability and Security Technical Committee, the Security Integration and Technology Enablement Subcommittee, the Security Working Group and others is critical to support the development and execution of components of this strategy with specific work items. This includes industry guidance materials, white papers, technical assessments and reports and possibly future standard authorization requests (if needed) to move the needle toward more wholly integrated cyber and physical security within the bulk power system.

The ERO Enterprise remains committed to identifying and working toward solutions to better manage the complex reliability problems facing industry during this time of unprecedented resource change.

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Electricity is a key component of the fabric of modern society and NERC, as the Electric Reliability Organization, serves to strengthen that fabric. The vision for the ERO Enterprise, which is comprised of NERC and the six Regional Entities, is a highly reliable and secure North American bulk power system. Our mission is to assure the effective and efficient reduction of risks to the reliability and security of the grid.