NERC News

September 2022

ERO Executive Spotlight – Manny Cancel, Senior Vice President, NERC and Chief Executive Officer, Electricity Information Sharing and Analysis Center

Defense-in-Depth Capabilities Founded in Information Sharing and Collaboration

Throughout 2022, cyber and physical security issues continued to garner headlines and increase awareness among policymakers and the general public. Geopolitical events, most notably in Russia and Ukraine; new critical software vulnerabilities; new and changing technologies; and increasingly bold cyber criminals and hacktivists continue to present serious challenges to bulk power system (BPS) reliability and, with it, our fundamental way of life.
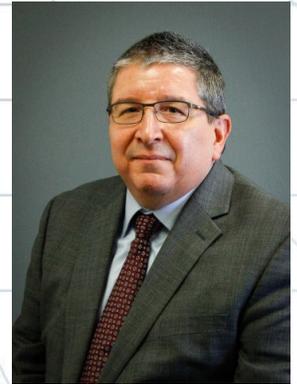
The threat of cyber and physical attacks targeting critical infrastructure is not new, and ensuring a secure and reliable BPS remains the top priority for NERC and the Electricity Information Sharing and Analysis Center (E-ISAC). The comprehensive approach of NERC's mandatory Reliability Standards, information sharing between industry and our government partners and the use of best practices and mitigation to identify vulnerabilities and threats continues to be the best way of securing the grid against threats.

Against this backdrop, E-ISAC membership has grown to 1,496 members, with 117 new organizations (87 members and 30 partners) joining since the beginning of the year. The profile of our membership reflects an increase in non-utility organizations, who attribute their decision to join the E-ISAC to interest in geopolitical events, increased supply chain vulnerabilities and interdependencies.

Headlines

NERC Launches First Reliability Vignette

Lauby to Participate in 2022 ACORE Grid Forum

NERC Publishes Inverter-Based Resource Strategy Document

Lauby to Speak at Advanced Energy Conference 2022

Gugel Appointed to 2022 Electricity Advisory Committee

RELIABILITY | RESILIENCE | SECURITY

(Cont'd)

Information sharing and industry collaboration facilitates strong, knowledge-based defense-in-depth capabilities. Fundamental to this are the E-ISAC's partnerships and joint initiatives with industry and government. This year, we have enhanced our collaboration with partners, including: Canadian industry and government (Independent Electricity System Operator, Cyber Centre, and Electricity Canada); industry subsector groups such as oil and natural gas, communications, financial services and renewables; industry trade associations; and other industry ISACs.

The E-ISAC is also part of the newly established Department of Energy (DOE)-led Energy Threat Analysis Center (ETAC), an initiative that will collaborate with electricity industry partners and government agencies through Department of Homeland Security's Cybersecurity and Infrastructure Security Agency's (CISA) Joint Cyber Defense Collaborative (JCDC). The ETAC pilot, staffed with representatives from DOE, electricity and energy partners and the E-ISAC, will collaborate and share information on emerging cyber threats to electricity infrastructure systems. Participation by the E-ISAC will ensure that information is shared as broadly as possible with industry.

Consistent with its commitment to sharing timely and actionable information, the E-ISAC also analyzes security data for patterns of incidents and shares the result with asset owners and operators, through capabilities such as our Cybersecurity Risk Information Sharing Program (CRISP) and other sensor and intelligence platforms.

The E-ISAC also helps members stay ahead of would-be attackers by issuing notification bulletins on an array of threats from our Watch Operations group; and our physical security team is helping utilities strengthen their security posture through programs and methods such as the Design Basis Threat. The Cyber Threat Intelligence team also began conducting proactive threat hunts through CRISP and other data sources to generate original analysis and share mitigation strategies.

Earlier this year, the E-ISAC launched its new secure Portal for member and partner organizations with enhanced features such as easier access to content, simplified information sharing options, and new tools to manage and protect accounts. In tandem with the Portal, the E-ISAC also debuted a new version of its public website, EISAC.com, with up-to-date information on E-ISAC events and programs, industry resources, and more.

In addition to cyber and physical security risks, our members face the additional challenge of managing third-party risk. Consequently, the E-ISAC recently launched its Vendor Affiliate program, which is open to security vendors and original equipment manufacturers that support the electricity and other critical infrastructure industries. The program is focused on facilitating increased information sharing and best practices in a trusted environment for member and partner organizations.

As we enter into October, we recognize Cyber Security Awareness Month, which highlights emerging challenges that exist in the world of cyber security and focuses on the importance of basic cyber hygiene. The E-ISAC is supporting the campaign as a Cyber Security Awareness Month champion. This year's theme, "See yourself in cyber," focuses on four primary best practices: enabling multi-factor authentication, using strong passwords and a password manager, updating software, and recognizing and reporting phishing. More information is available at E-ISAC.com.

Cyber and physical security are an ever-evolving risk to our nation's critical infrastructure and NERC and the E-ISAC remain committed to assuring the reliability and security of the North American grid.

Headlines

NERC Launches First Reliability Vignette

NERC launched a new product called Reliability Vignettes, which are intended to capture current operating incidents of interest and project the circumstances of the incidents into the future as think pieces for system planning and operating considerations. NERC will publish Reliability Vignettes on an occasional basis as interesting system occurrences are identified.

The first Reliability Vignette — *Future Wind Planning Informed by Current Operating Experience* — uses the real-world operating experiences of two Balancing Authorities in a high-wind event as the basis for consideration of a future system that is wind- and solar-generation dominant. This document's objective is to provide future resource planning considerations for registered entities to ponder, consider and/or implement as they design future operations of their system assets. Operating scenarios for the vignettes are summarized in an unattributable manner and shared with the industry, policymakers and interested parties. Reliability Vignettes will be available on the Event Analysis, Reliability Assessment and Performance Analysis page of NERC's website.

Lauby to Participate in 2022 ACORE Grid Forum

Mark Lauby, NERC's senior vice president and chief engineer, will participate in the American Council on Renewable Energy Grid Forum on October 13 in Washington, D.C. The forum will convene regulators, grid operators, utilities, developers and other experts to examine the near-term gaps and long-term priorities for infrastructure on the path to a carbon-free grid.

Lauby will participate in a panel discussion — Maintaining Reliability and Resilience on the Path to Decarbonization. The panel will consider whether: (1) thermal and renewable resource reliability contributions are being assessed on equal ground; (2) expanding interregional transmission is critical to achieving resilience; (3) the roles an interregional transfer capacity requirement and solar reliability standards play; (4) additional reforms to energy and ancillary service markets or new market products are needed with a high penetration of renewable and storage resources.

Registration, the agenda and additional information is available on the ACORE website.

NERC Publishes Inverter-Based Resource Strategy Document

The rapid interconnection of BPS-connected inverter-based resources is one of the most significant drivers of grid transformation and poses a high risk to BPS reliability. NERC developed an *Inverter-Based Resource Strategy* document for addressing inverter-based resource performance issues that illustrates current and future work to mitigate emerging risks in this area. The strategy, which was developed to ensure industry awareness and alignment regarding ERO Enterprise and NERC Reliability and Security Technical Committee activities, also addresses the Member Representatives Committee's policy input requesting enhancements in this area. The strategy includes four key focus areas: risk analysis, interconnection process improvements, sharing best practices and industry education and regulatory enhancements. Each focus area includes specific activities and work items that are described in more detail throughout the strategy document.

The ERO Enterprise remains committed to identifying and working toward solutions to manage the complex reliability problems facing industry during this time of unprecedented resource change better. Quick Reference Guide: Inverter-Based Resource Activities

Lauby Speaks at Advanced Energy Conference

The 12th Advanced Energy Conference (AEC) series in New York focused on charting the future for energy through technology innovations, key policy changes, new business models and more. Mark Lauby, NERC's senior vice president and chief engineer, took part in the "Accepting the Cost of Resiliency and Reliability" session. Panelists addressed questions of how grid transformation impacts resilience, technological needs and policies required to manage the cost of resiliency and reliability across ratepayer categories with different power demands and needs as well as what strategies support the needed

investments in resiliency while also addressing the current inequity in energy security.

Gugel Appointed to 2022 Electricity Advisory Committee

U.S. Secretary of Energy Jennifer M. Granholm appointed Howard Gugel, NERC's vice president of Engineering and Standards, to DOE's Electricity Advisory Committee (EAC).

The EAC, which reports to the DOE's Assistant Secretary for Electricity and meets three times a year to advise DOE on a variety of electricity issues, includes 37 members from across the energy community, including state and Regional Entities, utilities, cyber security and national security firms, the natural gas sector, equipment manufacturers, construction and architectural companies, non-governmental organizations and other electricity-related organizations.

During their two-year term, EAC members advise DOE on current and future electric grid reliability, resilience, security, sector interdependence and policy issues. They periodically review and make recommendations on DOE electric grid-related programs and initiatives, including electricity-related research and development programs and modeling efforts. Members also identify emerging issues related to electricity production and delivery and advise on federal coordination with utility industry authorities in the event of supply disruptions and other emergencies.

"I am honored to have been invited to join this esteemed group," said Gugel. "I look forward to providing NERC's perspective on important issues that the electric industry is facing." DOE Announcement | Electricity Advisory Committee ∎∎∎

Compliance

Newly Effective Standards
The following standards will become effective on October 1, 2022:

- CIP-013-2 – Cyber Security — Supply Chain Risk Management
- CIP-005-7 – Cyber Security — Electronic Security Perimeter(s)

- CIP-010-4 – Cyber Security — Configuration Change Management and Vulnerability Assessments
- PRC-024-3 – Frequency and Voltage Protection Settings for Generating Resources

CIP-012-1 Frequently Asked Questions Updated

On June 2, 2022, the ERO Enterprise hosted a CIP-012-1 – Cyber Security – Communications between Control Center roundtable discussion with industry participants. The roundtable was intended to assist stakeholders in their program development, implementation and understanding of the Reliability Standard.

Throughout the discussion, the ERO Enterprise captured several questions and responses. Subsequently, NERC staff updated the CIP CMEP FAQs document and posted it to the Compliance Monitoring and Enforcement One-Stop Shop web page.

Posted RSAWs

NERC posted the Reliability Standard Audit Worksheets (RSAWs) for CIP-005-7, CIP-010-4 and CIP-013-2. These standards become effective October 1, 2022 and reflect the changes related to Standard Drafting Team Project 2019-03 – Cyber Security Supply Chain Risks. The standard modifications address the FERC-issued directives in Order No. 850.

RSAWs are guides provided by the ERO Enterprise that describe types of evidence that registered entities may use to demonstrate compliance with a Reliability Standard. RSAWs also include information regarding how the ERO Enterprise may assess that evidence. RSAWs do not require specific evidence provided and are not intended to require a single, exclusive approach to assessing compliance with a Reliability Standard.

Updated CIP-014-3 R1 Practice Guide

The ERO Enterprise updated the CIP-014-3 R1 CMEP Practice Guide, which provides guidance to ERO Enterprise CMEP staff during the review of an entity's risk assessments as prescribed in the CIP-014 Reliability Standard.

CMEP Practice Guides are developed solely by the ERO Enterprise to reflect the independent, objective professional judgment of ERO Enterprise CMEP staff, and, at times, may be initiated following policy discussions with industry stakeholders. Following development, they are posted for transparency on the NERC website. While some aspects of this guide may assist CMEP staff directly in determining compliance, some parts of the guide are to assist CMEP staff in understanding how an entity mitigates risk in order to inform risk-based compliance monitoring. This understanding of the controls to mitigate risk can affect monitoring activities, such as requests for information, and adjustments to an entity's compliance oversight plan. ■■■

Event Analysis, Reliability Assessment, and Performance Analysis

Aggregated Cold Weather Preparations Report Posted
NERC posted an aggregated report on the Level 2 Recommendation to Industry: *Cold Weather Preparations for Extreme Weather Events*, which was published originally on August 18, 2021. NERC posted the aggregated report to help industry better prepare for challenges due to extreme winter weather.

White Paper Posted
Earlier this year, the NERC 6 GHZ Task Force (6GHZTF) conducted a voluntary survey to assess the penetration of 6 GHz usage related to the BPS impacts. The results of the survey provided the framework for the *6 GHz Communication Network Extent of Condition White Paper*, which details conditions related to and identifies risks associated with 6 GHz communication interference.

Nomination Period Opens for Member Representatives Committee Annual Sector Election
In accordance with Article VIII, Section 3, of the NERC Bylaws, NERC is holding its annual nomination and election to replace the Member Representatives Committee (MRC) sector members whose terms expire in February 2023. The annual sector election will fill the one open seat of each of the sectors of the MRC. The newly elected representatives' terms will expire in February 2025.

Please review the Steps for Nominating and Electing Members to the Member Representatives Committee during your sectors' election. To be eligible for nomination for election as a sector representative, the nominee's organization must be registered as a member of NERC in that sector by the date the nomination period closes. The nomination period opened on September 19 and will close November 17. The election will take place December 14–23. Submit your nomination using the online nomination form. ■■■

Standards

Webinar Resources Posted
NERC posted the slide presentation and recording from the Project 2016-02 – Modifications to CIP Standards | Virtualization Industry Webinar.

Standards Committee Process Subcommittee Seeking Nominees
The Standards Committee Process Subcommittee (SCPS) is soliciting nominees for the roles of chair and vice chair. At least one of these roles needs to be filled by a member of the Standards Committee. The SCPS is also seeking nominations for additional members. If you are interested, please send an email to Josh Blume to nominate yourself by October 1, 2022.

Standards Commenting and Balloting System | Login Platform Update Coming October 19, 2022
The Standards Commenting and Balloting System (SBS) will be moved to the ERO Portal on October 19, 2022. The ERO Portal uses the same platform as other NERC applications — including CORES, Align, GADS Wind and MIDAS, among others — and will provide users with a single platform and login for managing their accounts, as well as extra security features. NERC is excited to bring this new, streamlined account access to SBS users.

- SBS Registered Ballot Body members, Proxy Voters and Contributor users who do not have an ERO Portal account must create one and do a one-time multifactor authentication setup. See instructions here.

- Important: After logging into the ERO Portal, go to My Profile and check this box to connect the SBS account:

  ☐ ERO Platform account owner

- After October 19, 2022, SBS users who have an existing ERO Portal account will be able to access SBS after logging in as they currently do for other NERC applications.
- "Guest" (public/read-only) viewers will be able to access the SBS as they do today without creating an ERO Portal account.
- The current login site (https://identity.eroenterprise.com/account/SignIn) will be retired after the change is deployed. ■■■

Upcoming Events

For a full schedule of NERC events, such as meetings and conference calls for standard drafting teams, other standing committees, subcommittees, task forces, and working groups, please refer to the NERC calendar.

- **Monitoring and Situational Awareness Technical Conference Session 2** – October 6 | Register | Agenda
- **Member Representatives Committee Pre-Meeting Conference Call and Informational Webinar** – 11:00 a.m.–12:00 p.m. Eastern, October 12| Register
- **GridSecCon 2022** – October 18–19 | Register
- **Monitoring and Situational Awareness Technical Conference Session 3** – October 20 | Register | Agenda
- **EPRI–NATF–NERC 2022 Annual Transmission Planning and Modeling Workshop** – November 2–3| Day 1 Registration | Day 2 Registration
- **Personnel Certification Governance Committee Meeting** – 8:00–9:00 a.m. Eastern, November 8 | Register
- **Quarterly Board of Trustees, Board Committees, and Member Representatives Committee Meetings** – November 15–16 | Meetings Registration | Schedule of Events ■■■

Regional Entity Events

Midwest Reliability Organization (MRO)
- MRO Security Conference Training, October 4
- MRO Security Conference, October 5
- CMEP Advisory Council Monthly Call, October 11
- CMEP Advisory Council Monthly Call, November 8
- MRO Security Advisory Council Q4 Meeting, November 9
- MRO CMEP Advisory Council Q4 Meeting, November 10
- MRO Reliability Advisory Council Q4 Meeting, November 16
- Organizational Group Oversight Committee, November 30

NPCC
- NPCC DER_VER Forum, October 13
- NPCC Fall 2022 Hybrid Compliance and Reliability Conference, November 9–10

ReliabilityFirst (RF)
- Technical Talk with RF, October 24
- Technical Talk with RF, November 14

SERC Reliability Corporation
- Fall Reliability and Security Seminar, October 4–5
- Extreme Weather Webinar, October 20
- SERC Sponsored Physical Security Professional (PSP) Class, October 24–28
- System Operator Conference #4, November 8–10

Texas RE
- Fall Standards, Security, and Reliability Workshop, October 27

WECC
- Resource Adequacy Series: Spanning the Technology Gap Virtual Meeting, October 5
- Joint Guidance Committee Virtual Meeting, October 7
- Reliability Assessment Committee Hybrid Meeting, October 18

- Reliability Risk Committee Hybrid Meeting, October 20
- Reliability and Security Workshop Hybrid Event, October 25–26

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Filings

NERC Filings to FERC in September

September 15
CIP SDT Schedule - Informational Filing | NERC submitted an informational filing as directed by FERC in its February 20, 2020 Order. This filing contains a status update on one standard development project relating to the CIP Reliability Standards.

September 12
RR22-4-000 NERC Submission of Corrected MRO BPB 9-12-2022 | NERC submitted an amendment to its August 23, 2022 Business Plan and Budget Filing with a corrected Attachment 3 - Proposed MRO 2023 Business Plan and Budget. ■■■

Careers at NERC

Principal Technical Advisor, Performance Analysis Program
Location: Atlanta
Details

Compliance Assurance Manager
Location: Atlanta
Details
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