

Agenda Reliability and Security Technical Committee Informational Session

June 12, 2024 | 8:00 – 11:30 a.m. Pacific Hybrid

Amazon Headquarters SEA51 Mayday 1220 Howell Street Seattle, WA 98101

Join WebEx

Call to Order

NERC Antitrust Compliance Guidelines and Public Announcement

Agenda

- Cyber and Physical Threats to the Grid Information Hayley Floyd, E-ISAC Intelligence Coordination Team
- 2. FERC Order 901 Update Information Jamie Calderon, NERC Staff
- 3. NERC Bulk Power System Awareness Update Information Bill Graham, NERC Staff
- 4. Forum and Group Reports* Information
 - a. North American Transmission Forum* Roman Carter
 - b. North American Generator Forum* Wayne Sipperly
- 5. Interregional Transfer Capability Study (ITCS) Information John Moura, NERC Staff
- **6. Standing Committee Coordination Group (SCCG) Update* Information –** Rich Hydzik, RSTC Chair
- 7. RSTC 2024 Calendar Review Stephen Crutchfield, NERC Staff

2024 RSTC Meeting Calendar					
Meeting Dates	Time	Format	Location		
September 11, 2024	8:30 a.m. – 4:00 p.m.	Hybrid	Hotel Alt Montreal		
September 12, 2024	8:30 a.m. – 12:30 p.m.		Montreal, Canada		
December 11, 2024	11:00 a.m. – 4:30 p.m.	Virtual	N/A		
December 12, 2024	11:00 a.m. – 4:30 p.m.				

2025 RSTC Meeting Calendar (Tentative)					
Meeting Dates	Time	Format	Location		
January 21, 2025	1:00-5:00 p.m.	Work Plan Summit	TBD		



2025 RSTC Meeting Calendar (Tentative)					
Meeting Dates	Time	Format	Location		
January 22, 2025	8:30 a.m. – 4:00 p.m.	Hybrid			
January 23, 2025	8:30 a.m. – 12:30 p.m.				
March 12, 2025	8:30 a.m. – 4:00 p.m.	In Person	TBD		
March 13, 2025	8:30 a.m. – 12:30 p.m.				
June 11, 2025	8:30 a.m. – 4:00 p.m.				
June 12, 2025	8:30 a.m. – 12:30 p.m.	Hybrid	TBD		
June 12, 2025	1:00-4:00 p.m. (Joint SC)				
September 10, 2025	8:30 a.m. – 4:00 p.m.	Hybrid	TBD		
September 11, 2025	8:30 a.m. – 12:30 p.m.				
December 10, 2025	11:00 a.m. – 4:30 p.m.	Virtual	N/A		
December 11, 2025	11:00 a.m. – 4:30 p.m.				

8. Chair's Closing Remarks and Adjournment

^{*}Background materials included.

E-ISAC Security Update

Action

Information

Summary

This topic will address the recent activities and security and threat analysis of the E-ISAC.

NERC Standards Development Update for FERC Order No. 901

Action

Information

Background

The Federal Energy Regulatory Commission (FERC) issued Order No. 901 on October 19, 2023, which includes directives on new or modified NERC Reliability Standard projects. Order No. 901 addresses a wide spectrum of reliability risks to the grid from the application of inverter-based resources (IBRs), including both utility scale and behind the-meter or distributed energy resources. Within the Order, there are 4 milestones that include sets of directives to NERC.

The first milestone was achieved on January 17, 2024 as NERC filed its initial work plan to address all aspects of Order No. 901 throughout the next 3 years. The filed work plan includes extensive detail on Standards Development approach and next steps to accomplish the suite of directives addressing IBRs. The work plan is intended to be a roadmap to guide development for each of the Reliability Standards Projects identified as a 901-related project. Additional updates to FERC are planned to ensure all milestones and directives are effectively addressed.

Summary

This update to the RSTC is to inform and help build industry involvement and support the 901 related Reliability Standards Projects. The scope of the Order and the NERC work plan is largely impactful to many Reliability Standards and necessitates some substantive changes to modeling and that studies are conducted to ensure that the performance of IBRs is accurate and effectively updated. Some adjustments were made to active Reliability Standards Projects to accomplish Milestone 3 including Projects 2022-02, 2020-06, and 2021-01. New SARs have been posted for comment and solicitation of additional team members to supplement existing teams.

This update also provides an update to the RSTC on larger communication efforts and goals from NERC to ensure frequent updates with 901-related Reliability Standards Projects as well as other IBR-related initiatives. The presentation closes with a discussion around additional collaboration efforts that are requested of technical experts to assist the development of the Milestone 3 related projects and the beginning of Milestone 4 related projects.

¹ <u>Informational Filing of The North American Reliability Corporation Regarding the Development of Reliability Standards Responsive to Order No. 901; 01/17/2024</u>



Standards Development FERC Order 901

Jamie Calderon - Manager, Standards Development Reliability and Security Technical Committee Meeting June 12, 2024

RELIABILITY | RESILIENCE | SECURITY











Order 901 Summary Update

- Update on approach to respond to the Order
- Update on changes to communication
- Progress on 2024 timeline of activities
- Summary update on Milestone 2, 3, and 4
- Update on Registrations
- Discussion on ongoing project needs







- Key Factors Included in Strategy
 - Ongoing prioritization of NERC Standards Projects
 - Continual coordination between NERC Engineering, Legal, and Standards
 - Frequent communication to industry
 - Balancing other Projects, FERC directives, and risks to the BPS





Continual Coordination



- Continual need to coordinate between NERC Engineering, Legal, Compliance, Registration, and Standards
- Holistic changes to Performance-based requirements
- Standards Development heavily depends on technical foundation documents (Guidelines, white papers, etc.
- RSTC products provide clear guidance to drafting teams



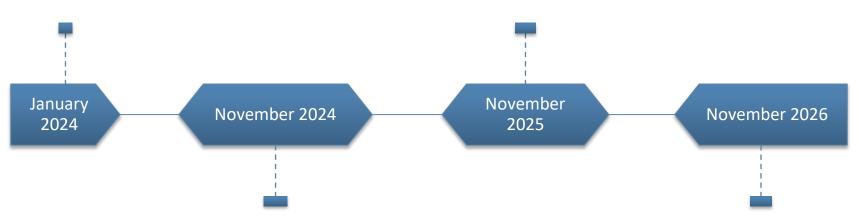
General Milestone Summary

Milestone 1:

Submit Information Work Plan

Milestone 3:

Modeling Data
Sharing and
Validation based on
Performance



Milestone 2: IBR

Performance based on disturbance monitoring data requirements and post-event analytics

Milestone 4: New Requirements for Operational and Planning Studies to Leverage Performance Data



Next Steps – 2024 Timeline



January 17

File Milestone 1 with FERC (completed)



April - June

Create projects for Milestone 3 or assign to active projects (completed)

Develop Milestone 4 SARs



November 4

File Milestone 2

Develop Milestone 3 SARs (completed)



January - March

Create projects for Milestone 4 or assign to active projects



July – September



Milestone 2 Summary Update

New PRC-028

Installation of disturbance monitoring equipment

Share data on request

New PRC-029

Performance based ridethrough criteria

Capability based ridethrough criteria

New PRC-030

Analysis of performance during a disturbance

Triggers what is evaluated for ride-through performance



Milestone 3 Summary Update

Project 2022-02

Establish
Uniform
Modeling
Framework

Aggregated nonregistered IBR and DER

Project 2020-06

Modeling validation replacement requirements

Ongoing performance based validation

Project 2021-01

Active project with other model validation standards

Collaborate with 2020-06 for single solution





Operational Studies

Anticipated start in Q3

Planning Studies

Anticipated start in Q3

Registration Update



- Changes to Rules of Procedure for sub-BES IBR, Category 2 assets
- All GO/GOP Standards reviewed and put into 1 of 3 "blocks" for Standards Development
- Block 1: New Standards Development project to modify definition of Generator Owner/Operator
 - Align definitions with the changes made in the Rules of Procedure
- Block 2: Affected Standards in currently active Projects being revised for Order 901
- Block 3: Additional technical work needed to evaluate need, group, and prioritize by risk







BLOCK ONE

Standards Revisions to Definition Only



APPLICABLE TO

Generator Owners and Generator Operators (both new and currently registered) with Category 2 Assets



STANDARDS

BAL-001-TRE-2 IRO-010-5*

MOD-032-1*

PRC-012-2 PRC-017-1 TOP-003-6.1*

VAR-001-5

VAR-002-4.1*

*Indicates standards already part of active projects. Entities should be aware of current and pending versions of these standards.



EFFECTIVE DATE

Upon Completion of Revisions

Anticipated* Implementation Plan Timeline: Q2 2025–Q2 2026

*Indicates timelines are dependent on development by the project drafting teams





BLOCK TWO

Standards Under Development Related to Order No. 901



APPLICABLE TO

Generator Owners and Generator Operators with Category 2 Type Assets (newly and currently registered)



STANDARDS

MOD-025-2 PRC-019-2 MOD-026-1 PRC-024-3

MOD-027-1

EFFECTIVE DATE

December 30, 2030







BLOCK THREE

Standards Under Development (Technical Conference to Review)



APPLICABLE TO

Generator Owners and Generator Operators with Category 2 Type Assets (newly and currently registered)



STANDARDS

PER-005-2 CIP-002-5.1a PER-006-1 CIP-003-8 CIP-012-1 PRC-002-2 PRC-004-6 COM-001-3 PRC-005-6 COM-002-4 PRC-025-2 EOP-004-4 PRC-027-1 EOP-012-1 FAC-002-4 TOP-001-6 FAC-008-5 TPL-007-4 IRO-001-4



EFFECTIVE DATE

December 30, 2030



Ongoing Project Needs

- Through next year, teams need assist during comment periods
- Milestone 3 Modeling guidelines more on next slide
- Milestone 4 SAR review





Let's Discuss Milestone 3 Needs

Project 2022-02

Establish
Uniform
Modeling
Framework

Aggregated nonregistered IBR and DER

Project 2020-06

Modeling validation replacement requirements

Ongoing performance based validation

Project 2021-01

Active project with other model validation standards

Collaborate with 2020-06 for single solution



- Milestone 4 SAR feedback
 - Project scope is set by the directives
 - SAR Objectives narrow scope to similar directives (per our Standards organization)
 - Specifics are determined by the drafting teams during calls and draft comment periods but are built on technical supporting information/involvement! We need ongoing collaboration
- Technical Workshop or fast/track task force on Model Library development with NERC
- Assuring performance-based model validation solutions fit the design – liaisons, monthly updates to individual groups,





NERC Bulk Power System Awareness Update

Action

Information

Background

NERC's Bulk Power System Awareness (BPSA) group acquires and disseminates timely, accurate, and complete information regarding the current status of the bulk power system (BPS) and threats to its reliable operation, to enable the ERO Enterprise to effectively assure the reliability of the BPS. During major system disturbances, extreme weather, fires, hurricanes, physical events, and geomagnetic disturbances, etc. the BPSA facilitates effective communications between the ERO Enterprise, industry, and government stakeholders.

NERC BPSA, in collaboration with the E-ISAC and the ERO Enterprise Situation Awareness teams, maintains a near real-time situation awareness of conditions on the BPS. Notifies the Industry of significant BPS events that have occurred in one area, and which have the potential to impact reliability in other areas. Maintains and strengthens high-level communications, coordination, and cooperation with governments and government agencies regarding real-time conditions.



Bulk Power System Awareness

Situational Awareness Q2 2024

Bill Graham Manager, BPSA RSTC Informational Session June 12, 2024

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Notable Weather Events

- Total Solar Eclipse on April 10, 2024
- Geomagnetic Storm throughout weekend of May 10, 2024
- Severe thunderstorms struck Houston, Texas on Thursday, May 16, 2024





A total solar eclipse crossed North America on Monday, April 8. Through proactive planning and posturing, system operators maintained BPSreliability during the event.

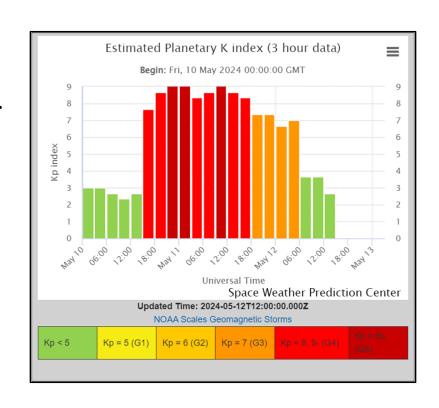






The BPS remained stable and largely unaffected in the presence of a strong to extreme geomagnetic storm throughout the weekend of May 10.

- Reliability Coordinators closely followed space weather conditions and vigilantly monitoring BPS facilities.
- Operators postured the system to ensure reliability.
- Minor impacts were observed in northern areas.
- The NOAA Space Weather Prediction Center (SWPC) initiated multiple Reliability Coordinator Hotline telephone calls to keep system operators informed of conditions.

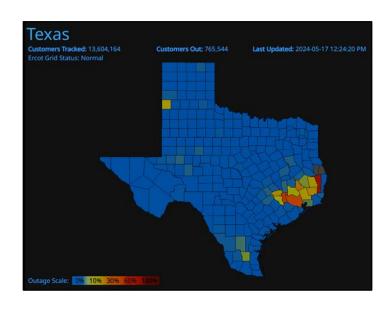




Houston Thunderstorms

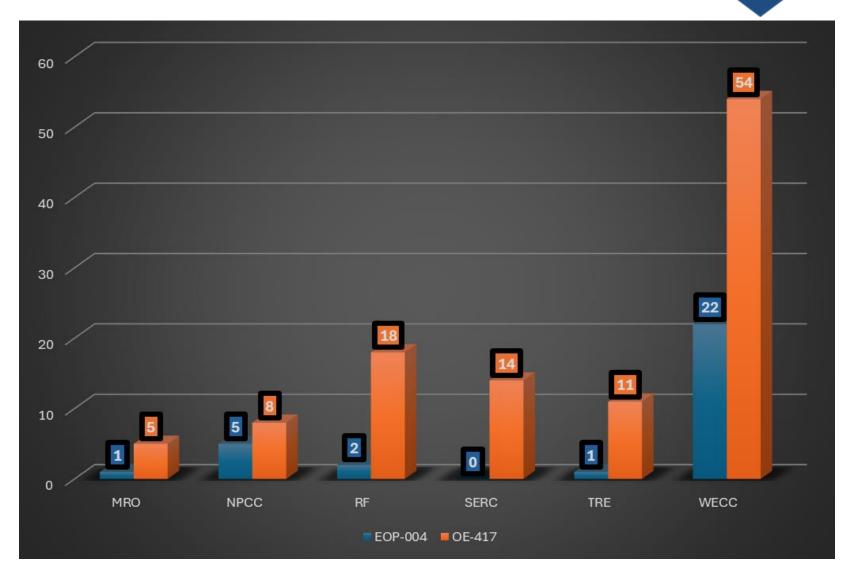
The BPS remained stable as severe thunderstorms traversed Houston, Texas on Thursday, May 16.

- Approximately 4,100 MW of load was lost between 6:00 and 7:00 p.m.
 Central.
- Many transmission and distribution circuits were damaged.
- Texas distribution outages peaked at 1.05M.
- Louisiana distribution outages peaked at 218k.
- Restoration continued though Wednesday, May 22.



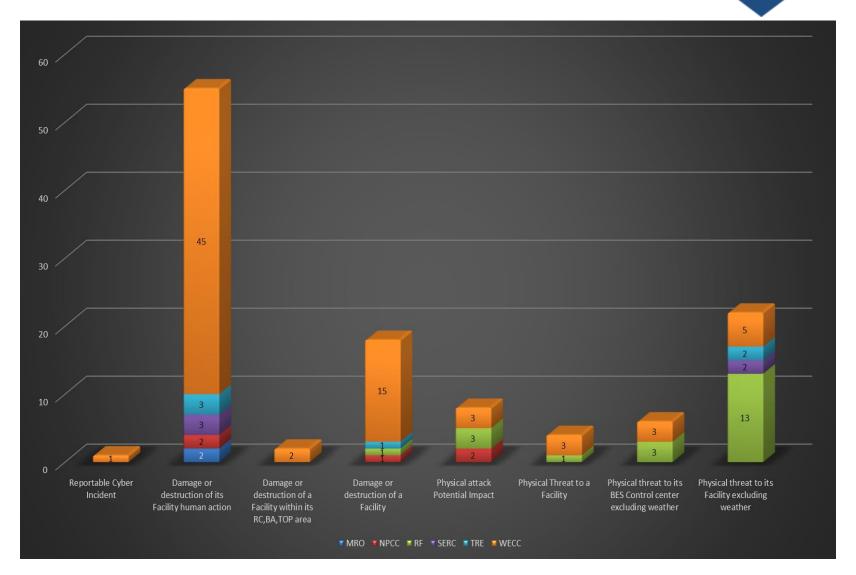


2024 Q1 Mandatory Reports by Region



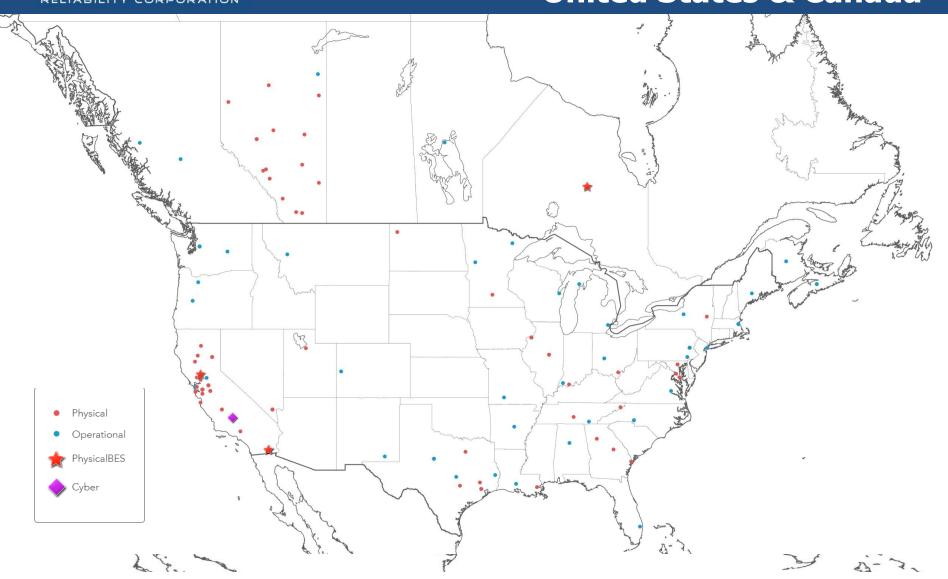


2024 Q1 Cyber & Physical Security Reports by Region



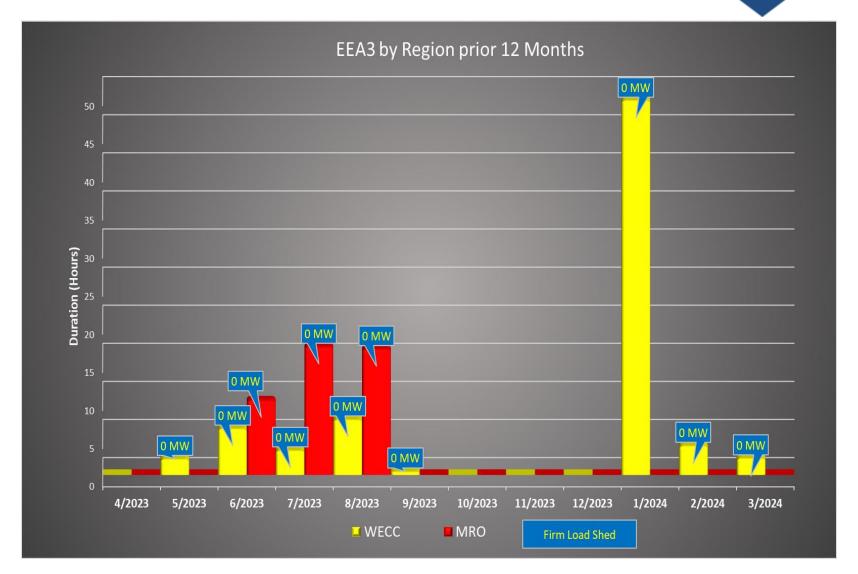


2024 Q1 Events United States & Canada



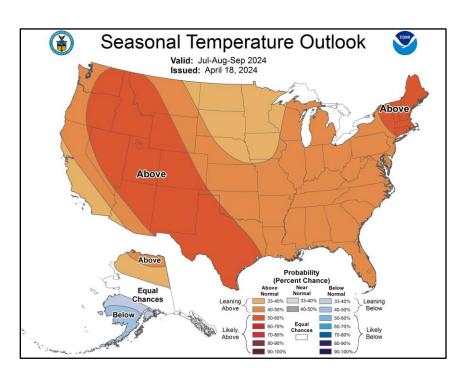


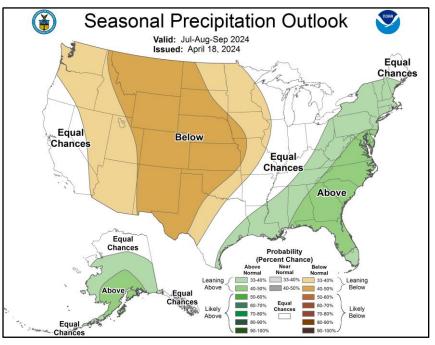
Energy Emergency Alert (EEA) 3 Reports 12 Month View





Summer Weather Forecast











To: NERC Reliability and Security Technical Committee (RSTC)

From: Roman Carter, Director - Peer Reviews, Assistance, Training and Knowledge Management

Date: May 10, 2024

Subject: NATF Periodic Report to the NERC RSTC (June 2024)

Attachments: NATF External Newsletter (April 2024)

The North American Transmission Forum (NATF) interfaces with the industry as well as regulatory agencies on key reliability, resiliency, security, and safety topics to promote collaboration, alignment, and continuous improvement, while reducing duplication of effort. Some examples are highlighted below and with additional detail in the attached NATF External Newsletter, which is also available on our public website: www.natf.net/news/newsletters.

NATF-ERO Leadership Meetings

To promote effective coordination, NATF and ERO leadership meet periodically to discuss reliability topics and activities. On April 19, NATF staff and board members met with ERO leadership to discuss collaboration opportunities, including integration of inverter-based resources, supply chain security, resilience to extreme events, long-range planning, and tiering of physical assets regarding security mitigations.

NERC-NATF-EPRI FERC Order 896 Workshop

The NATF, NERC, and the Electric Power Research Institute (EPRI) are hosting an in-person workshop May 29-30, 2024, that will focus on the implications of FERC Order No. 896 and the upcoming TPL-008 standard regarding extreme weather impacts on transmission planning. The workshop will also discuss the science behind climate impacted weather data in the long-term transmission planning timeframe. Key topics include:

- Data sources for event definition historical and projected datasets.
- Key considerations for extreme heat and extreme cold events.
- Coordination across areas based on selection of the benchmark event.
- Capturing asset vulnerabilities data sources, availability, and approaches.
- Building benchmark planning cases methods and important considerations.
- Extreme temperature assessment study process and the need for corrective action plans.
- Approaches and tools needed to build power flow cases.

Supply Chain Criteria and Questionnaire

The NATF Criteria and Questionnaire Revision Team has completed modifications to version 5 of the *NATF Supply Chain Security Criteria* and the *Energy Sector Supply Chain Risk Questionnaire*. Significant changes for this version include updated mapping for the criteria and the addition of mapping the questionnaire to several NIST guidelines, ISA/IEC 62443, ISO 27001, and SOC. The security framework mappings provide utilities and suppliers the ability to leverage existing security certifications to provide utilities (and regulators) with a higher degree of assurance of suppliers' adherence to the security practices set forth in the criteria and questionnaire.

These two products are part of the "Collect Information" step of the five-step *NATF Supply Chain Security*Assessment Model. The model calls for entities to evaluate the information and conduct a risk assessment, use

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the risk assessment in purchase decision, implement mitigating controls, and monitor risks on an ongoing basis. The NATF anticipates continuing activities to emphasize the importance of all steps of the model.

Additional resources can be found on the NATF Supply Chain Cyber Security Industry Coordination page.

Supplier Sharing Calls

NATF supplier sharing calls are developed and hosted by renowned individuals from key suppliers and organizations in the electric power industry. The next meeting is scheduled for June 19, 2024.

On this call, suppliers and industry entities will discuss the current state of SBOM (software bill of materials) production, adoption, protection, and governance. The discussions will be led by representatives of the hosting suppliers. In addition, the calls are supported by representatives from the International Society of Automation (ISA), the National Electrical Manufacturers Association (NEMA), and the US Chamber of Commerce.

The intent of these calls is to encourage conversation among suppliers, provide a forum for suppliers to share forefront security concerns and how to address them, and discuss general security practices. The calls are applicable to suppliers of all sizes and security maturity.

Redacted Operating Experience Reports

We recently posted a new operating experience report to the "<u>Documents</u>" section of our public site for members and other utilities to use internally and share with their contractors to help improve safety, reliability, and resilience.

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North American Transmission Forum External Newsletter

April 2024

NATF Welcomes New Members and Affiliates

Long Island Lighting Company (LIPA) and Seminole Electric are the newest NATF members. LIPA is a municipal utility in New York and Seminole Electric is a generation and transmission cooperative headquartered in Tampa, Florida.

We also recently added several independent transmission affiliates under NextEra Energy.

Click here to learn more about NATF membership.

NERC-NATF-EPRI FERC Order 896 Workshop

The NATF, North American Electric Reliability Corporation (NERC), and Electric Power Research Institute (EPRI) are hosting a joint workshop to discuss the implications of FERC Order No. 896 and the upcoming TPL-008 draft standard regarding extreme weather impacts on transmission planning. The event will focus on integrating climate and weather data into transmission planning tools and methods.

The workshop is open to the public and will take place May 29–30, 2024, in Dallas, Texas. Registration is open and a draft agenda will be available soon.

Supply Chain Criteria and Questionnaire

Revisions Posted for Comment through April 7

The NATF Criteria and Questionnaire Revision Team has reviewed suggested modifications to the *NATF Supply Chain Security Criteria* and the *Energy Sector Supply Chain Risk Questionnaire*. These documents are key enablers for the electric sector to efficiently improve supply chain security through converging on a standardized approach for obtaining risk information and leveraging existing security frameworks.

The proposed changes are posted for industry-wide comment on the <u>NATF Supply Chain Cyber Security Industry Coordination</u> page. A summary of changes is available in the "Change Log" section of each document, and changes are indicated by red font. Feedback on the proposed changes can be submitted to supplychain@natf.net through April 7.

The revision team will review comments in April and make any final determinations. The updated documents will be posted following NATF approval.

Model

The NATF Supply Chain Security Criteria and Energy Sector Supply Chain Risk Questionnaire are tools to be used in the "Collect Information" step of the Supply Chain Security Assessment Model. This five-step model provides a solid foundation for identifying, assessing, and mitigating supply chain risks and allows flexibility in each entity's implementation. Further, the model and complementary products from other organizations provide tools that

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support good supply chain security practices. When executed properly and with a focus on security, the model assists entities with meeting the compliance requirements of the NERC supply chain reliability standards.

The *Supply Chain Security Assessment Model* and additional resources can be found on the <u>NATF Supply Chain Cyber Security Industry Coordination</u> page.

Supplier Sharing Calls

NATF supplier sharing calls are developed and hosted by renowned individuals from key suppliers and organizations in the electric power industry. Our upcoming meetings are listed below.

Wednesday, April 17, 2024

1:00-2:30 pm Eastern

Register

• This session will look at geopolitical risks, evaluating whether a potential risk will become an actual threat, and when to begin taking mitigating actions.

Wednesday, June 19, 2024

1:00-2:30 pm Eastern

Register

• By request, this call will feature a discussion on software bills of materials (SBOMs).

The discussions will be led by representatives of the hosting suppliers: Aspen Technology / OSI, Hitachi Energy, SEL, Siemens Energy, Hitachi Energy, and Schneider Electric. In addition, the calls are supported by representatives from the International Society of Automation (ISA), the National Electrical Manufacturers Association (NEMA), and the US Chamber of Commerce.

The intent of these calls is to encourage conversation among suppliers, provide a forum for suppliers to share forefront security concerns and how to address them, and discuss general security practices. The calls are applicable to suppliers of all sizes and security maturity.

Redacted Operating Experience Reports

We recently posted a new operating experience report to the "<u>Documents</u>" section of our public site for members and other utilities to use internally and share with their contractors to help improve safety, reliability, and resilience.

For more information about the NATF, please visit https://www.natf.net/.



NATF Report to NERC RSTC

Roman Carter - Director

June 13, 2024

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NATF - ERO Collaboration

NATF interfaces on key reliability, resiliency, security and safety topics – most recent meeting was April 19th

Promotes alignment and continuous improvement while reducing duplication of effort

Refer to NATF newsletter for additional examples beyond this presentation

• www.natf.net/news/newsletters



NATF Activities – Grid Transformation

NATF members addressing many issues affecting the reliability of the Grid



Inverter-Based Resources

*Help operations improve modeling in EMS; started an interconnection lifecycle program



Supply Chain Security

*NATF-developed guidelines address topics in CIP-013 SAR; encourage industry to implement guidelines





Long-range planning

*FERC RM 21-17 – develop studies that address the 12 long-term regional trans. benefits



Physical Assets

* Tiering based on factors like impact to customers; focus is beyond CIP-014 stations



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3

NERC-NATF-EPRI FERC Order 896 Workshop

Implications of Order and TPL-008

- Approaches and tools needed to build power flow models
- Extreme temperature assessment study process/correction action plan
- Data sources for event definition historical and projected
- Key considerations for extreme heat and extreme cold
- Building benchmark planning cases methods and important considerations
- Capturing asse vulnerabilities data sources and availability



Supply Chain Criteria and Questionnaire



Completed version 5 of the Supply Chain Security Criteria and the Energy Sector Supply Chain Risk Questionnaire

1. Updated mapping to several NIST guidelines, ISA/IEC 62443, ISO 27001 and SOC



2. The security framework mappings provide utilities and suppliers the ability to leverage existing security certifications that will provide a higher degree of assurance of supplier's adherence to security practices in criteria and questionnaire



3. The products are part of the "collect information" step of the 5-step NATF Supply Chain Security Assessment Model



Redacted Operating Experience Reports

 We often post new operating experience reports to the "Documents" section of our public site, <u>www.natf.net</u>, for utilities to use to help improve safety, reliability, and resilience.



Questions?

Comments?



Interregional Transfer Capability Study (ITCS)

Action

Information

Background

Congress passed the Fiscal Responsibility Act of 2023, which included a provision for NERC to conduct a study on the reliable transfer of electric power between neighboring transmission planning areas. NERC, in consultation with the Regional Entities and industry stakeholders, will conduct transfer capabilities studies for regional transmission areas in the United States and recommend transfer capability enhancements needed for reliability.

Who: NERC, in consultation with each Regional Entity and each transmitting utility in a neighboring transmission planning region.

What: A study of total transfer capability between transmission planning regions. In accomplishing this work, the study should include:

- "Current total transfer capability, between each pair of neighboring transmission planning regions."
- "A recommendation of prudent additions to total transfer capability between each pair
 of neighboring transmission planning regions that would demonstrably strengthen
 reliability within and among such neighboring transmission planning regions"; and
- "Recommendations to meet and maintain total transfer capability together with such recommended prudent additions to total transfer capability between each pair of neighboring transmission planning regions."

When: NERC must file with FERC within 18 months of enactment of the bill. Public comment period will occur when FERC publishes the study in the Federal Register. After submittal, FERC must provide a report to Congress within 12 months of closure of the public comment period with recommendations (if any) for statutory changes.

ERO study filing deadline: On or before December 2, 2024

Project Goals and Objectives

- Conduct a comprehensive study of existing interregional transfer capability across the
 United States (between each transmission planning region) to assess currently available
 transfer capability between neighboring areas and the future need for additional transfer
 capacity to ensure reliability under various system conditions including extreme weather
- Provide reliable and data-driven recommendations for "prudent" additions to the amount of electric power that can be moved or transferred between neighboring transmission planning regions
- Recommend approaches to achieve and maintain an adequate level transfer capability.

- Engage stakeholders and gather inputs, assumptions, and conditions from Regional Entities, industry, and the ITCS Stakeholder Advisory Group to ensure a comprehensive and inclusive study
- Identify expectations for next steps and continuing analysis to reinforce the Long-Term Reliability Assessment

General Approach

- 1. Engage Executive Leadership Group: For ERO-wide strategic leadership, concurrence on study design and approaches, and support for the project manager of this project. Form ERO project team that will be responsible for developing the overall project execution strategy, monitoring, and overseeing the project progress.
- 2. Collaborate with Regional Entities and industry to collect necessary data and information: Work closely with Regional Entities and industry stakeholders to gather relevant data, build system models, and reports required for the study. Develop input assumptions, including loads, resources, transmission topology, extreme weather conditions utilizing external consulting and industry expertise.
- 3. Engage a Stakeholder Advisory Group composed of representation from all planning areas to gather inputs and ensure a comprehensive study: Form a Stakeholder Advisory Group consisting of representatives from all planning areas to provide insights, expertise, and inputs to the study, study scope, and study results.
- 4. Conduct comprehensive analysis and modeling of interregional transfer capability: Perform detailed analysis and modeling of the transmission systems to assess the current and potential transfer capability between neighboring areas. Assumptions will need to be internally consistent and consider scenarios and conditions that impact long-distance power transfers. The study will also consider factors such as generation mix, load growth projections, various high-risk scenarios, and emerging environmental policy in the study.
- **5.** Evaluate existing transmission infrastructure, system constraints, and potential areas for improvement: Assess the current transmission infrastructure, identifying system constraints, and identifying opportunities for improvement to enhance interregional transfer capability.
- 6. Identify potential reliability challenges and propose solutions to enhance interregional transfer capability: Identify existing transfer capability between transmission planning areas, potential reliability challenges associated with interregional transfers and recommendations to address them.
- 7. Develop a final report with actionable recommendations for enhancing interregional transfer capability: Compile all study findings, analysis, and stakeholder inputs into a comprehensive final report that provides actionable recommendations for improving interregional transfer capability based on a quantifiable and objective metric and criteria.

Deliverables and Schedule

- **1. Finalized Study Framework:** Describes the overall framework and governance of the project, general scoping, objectives, and roles and responsibilities.
- **2. Interim Progress Reports:** Regular updates on project milestones, findings, and emerging recommendations. (September 2023, then quarterly)

- **3. Draft Study Report:** A preliminary report shared with stakeholders for review and feedback. (June 2024)
- **4. Final Study Report:** A comprehensive report outlining the study method, findings, recommendations, and supporting analysis. (November 2024)

Standing Committee Coordination Group (SCCG) Update

Action

Information

Summary

Per the SCCG scope document, the SCCG is to "provide quarterly reports to the standing committees for inclusion in their public agenda posting on cross-cutting initiatives addressing risks to the reliability, security, and resilience of the BPS. This report shall be prepared in advance and voted on by the SCCG at the SCCG's quarterly meetings."



Standing Committees Coordinating Group (SCCG) Quarterly Report

April 3, 2024 Update

RELIABILITY | RESILIENCE | SECURITY











SCCG Status Report

Standing Committees Coordinating Group (SCCG)

Co-Chairs: Silvia Parada-Mitchell (CCC), Michael Hoke (PCGC) (January 2024-January 2026)

Purpose: The SCCG advises the NERC standing committees, NERC staff, regulators, Regional Entities, and industry stakeholders on standing committee crosscutting initiatives to address risks to the BPS by implementing the risk framework and addressing issues identified in the risk registry and/or NERC assessments. The SCCG's activities enhance transparency, efficiency, and effectiveness of NERC Standing Committee work, by ensuring communication and coordination on a regular basis.

SCCG SPSEG Recommendations

- The SCCG should review the SAR
 Form and recommend revisions to
 enhance the role of this important tool
 in the standards process (NERC Staff
 Recommendation 2a).
- The SCCG should perform a regular review of new standards projects to aid in effective project prioritization (NERC Staff Recommendation 2g).
- The SCCG should work to expand participation in the Reliability Standards Quality Review (QR) process (NERC Staff Recommendation 7).

Recent Activity

- Approved 1st Quarter Collaboration Report
- Review of Risk Framework and opportunities for improvement/clarity.
- Continued discussions on addressing SPEC recommendations for SCCG.

Upcoming Meeting Dates

- May 23, 2024 WebEx Meeting
- June TBD WebEx Meeting
- July TBD WebEx Meeting
- August 13, 2024 Hybrid

Schedule to address SPSEG Recommendations (Complete):

- SAR Form: The SCCG has provided feedback to NERC staff and a revised SAR form has been issued.
- Prioritization: The SCCG has reviewed and provided comments on the proposed prioritization and the Standards Under Development web page reflects the project prioritization. The SCCG will continue to assist as requested with prioritization.
- QR Participation: The SCCG developed a volunteer form that contained detailed volunteer information based on feedback from NERC Standards Staff. This information will be used by NERC Staff to select the best candidates to perform a QR. Each committee has sent the form to their membership with a request to volunteer for QR.



CCC Status Report

Compliance and Certification Committee (CCC)

Chair: Scott Tomashefsky Vice-Chair: Silvia Parada Mitchell

Purpose: The CCC will engage, support, and advise the NERC Board and NERC Management regarding all facets of the NERC Compliance Monitoring and Enforcement Program, and Organization Registration and Certification Programs and specific elements of the Reliability Standards Development Process.

Top Priorities for SCCG Discussion:

- CCC support Standards Grading efforts any opportunities for improvement in the context of updates to the risk framework
- CCC support of developing risk measures of success

Recent Risk Identification, Mitigation, Monitoring Activity

- Continued support of ERO Program Alignment topics, including
 - Program Consistency
 - · Implementation Guidance
 - · CMEP Practice Guide Reviews
- Stakeholder Perception Feedback
 - Drafting report for Q3 issuance
- Align User Group Participation
 - Supporting ERO/industry feedback sessions

Upcoming Risk Identification, Mitigation, Monitoring Activity

- Q2 Focused discussion
 - Review the value and range of Audit/Compliance Guidance Tools to support Agility
- Consistency Reporting Tool Working Group
 - Finalize Communication Plan
 - Support ERO Webinar
- Support ERO non-BES IBR registration efforts

What information/guidance/support is needed from another committee?

- RSTC Risk Tool election (Guideline, SAR, White Paper) and support measuring effectiveness
- SC Standards Grading process opportunities and recommendations for improvement
- RISC Feedback looks on risk priorities and risk tolerance
- All Committees Stakeholder Perception Feedback Input

PCGC Status Report

Personnel Certification Governance Committee (PCGC)

Chair: Cory Danson Vice-Chair: Michael B. Hoke

Purpose: The PCGC shall be to provide oversight to the policies and processes used to implement and maintain the integrity and independence of NERC's System Operator Certification Program.

Recent Risk Identification, Mitigation, Monitoring Activity

N/A

Top Priorities for SCCG Discussion:

- Continue to develop work plan for incorporating recommended changes into the Certification and Credential Maintenance program
- PCGC/CMWG Leadership met with FERC to clarify any questions/concerns on programs changes

Upcoming Risk Identification, Mitigation, Monitoring Activity

 FERC & Industry acceptance on direction of program changes

What information/guidance/support is needed from another committee?

 Support SAR and SDT process for PER-003 to implement changes to certification credentials





Reliability Issues Steering Committee (RISC)

Chair: Teresa Mogensen Vice-Chair: TBD

Purpose: The RISC is an advisory committee that triages and provides frontend, high-level leadership and accountability for nominated issues of strategic importance to bulk power system reliability.

Top Priorities for SCCG Discussion: Mitigations listed in the report should be assigned to committees that can address the items.

Recent Risk Identification, Mitigation, Monitoring Activity

The Nominations for 2024-2026
 membership commenced on
 November 27 and will conclude on
 December 29. The RISC
 Nominating Committee will meet in
 early January 2024 to review the
 nominations and select a slate to
 present to the Board of Trustees at
 is February 2024 meeting for
 consideration and approval.

Upcoming Risk Identification, Mitigation, Monitoring Activity

 The Leadership Summit is being moved up this year. Instead of taking place in January 2025, it will now take place in Q4 2024.

What information/guidance/support is needed from another committee?

- The committee will reconvene in early 2024 to discuss its work plan and objectives for the next year.
- Doodle poll was sent out to committee members



RSTC Status Report

Reliability and Security Technical Committee (RSTC)

Chair: Rich Hydzik Vice-Chair: John Stephens

Purpose: The RSTC strives to advance the reliability and security of the BPS by creating a forum for ideas and interests to support the ERO's mission, and leveraging such expertise to identify solutions to study, mitigate, and/or eliminate emerging risks.

Top Priorities for SCCG Discussion:

- Continue to monitor progress on RSTC work plan
- Prioritize SARs with SC and SCCG input

What information/guidance/support is needed from another committee?

 SC – Prioritization of SARs, technical review protocol of SARs developed outside of RSTC groups

Recent Risk Identification, Mitigation, Monitoring Activity

- Charter and Strategic Plan
- · Annual Sunset Review
- 6 GHz Communication Interference Whitepaper
- Product Security Sourcing Guide and Reference Guide Security Guideline
- Electric Vehicle Technical Reference Document
- Reliability Guideline: Fuel
 Assurance and Fuel-Related
 Reliability Risk Analysis for the Bulk
 Power System
- Elected Nominating Subcommittee
- White Paper: Transmission-Distribution Coordination Strategies
- White Paper: Probabilistic Planning for Tail Risks

Upcoming Risk Identification, Mitigation, Monitoring Activity

- SAR: Revisions to FAC-001 and FAC-002
- SAR: Clarifications to Operational Planning Analysis and Real-time Assessment
- Emerging Loads and Electric Vehicle Load





Standards Committee (SC)

Chair: Todd Bennett Vice-Chair: Troy Brumfield

Purpose: The SC oversees the development of NERC Reliability Standards as its members review actions to ensure the standards development process is being followed.

Top Priorities for SCCG Discussion:

- SC will effectively execute on the standards prioritization initiative.
- Execute 2024 Strategic Work Plan.

Recent Risk Identification, Mitigation, Monitoring Activity

- FERC Order 901
- IBR Definition
- · IBR Project Coordination Dependencies
- CIP-014 Risk Assessment Refinement SAR
- Energy Assurance ballot
- Internal Network Security Monitoring ballot
- CIP-003 Low Impact BCS ballot

Upcoming Risk Identification, Mitigation, Monitoring Activity

- Setting Planner/Operator Data Sharing Requirements SAR
- Data Aggregation for Non-registered Generation SAR
- IBR Model Validation SAR
- Internal Network Security Monitoring posting
- · Energy Assurance posting
- PRC-024 Generator Ride-through project
- PRC-030 Analysis and Mitigation of BES IBR Performance Issues
- TPL-008 Transmission System Planning Performance for Extreme Weather

What information/guidance/support is needed from another committee?

- CCC Continue to participate and support the joint task force to evaluate the existing Standards Grading process, identify opportunities, and provide recommendations for improvement. Joint conference call in 2024.
- PCGC N/A
- RISC Risk Framework: Continue discussion of risk tolerance and contribute to risk framework revision plan, as needed. The outcome of the initiative could potentially impact Standards Grading Taskforce initiatives.
- RSTC Increased awareness of SAR development process through standing agenda item on SC agenda. Awareness and status of SARs being worked at subcommittee level. Formalize process of support on SARs sent to RSTC (CIP-013 SAR). Explore opportunities to align RSTC and SC SAR postings for comment.