



GENERATOR FORUM Quarterly WebEx

1Q 2024

March 21st 1400 ET – 1500 ET

Microsoft Teams meeting

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Agenda

14:00 NAGF Update

- 1Q 2024 NAGF Activities Update – Wayne Sipperly (NAGF)

For today's webinar agenda, we will discuss some of the key activities performed by the NAGF during the 1Q2024, including an update of NAGF initiatives on various NERC projects, working group updates, NERC IBR efforts, Draft NERC Alert 6GHZ Communications, and close out with the open mic/roundtable discussion.

- NAGF Formal Comments regarding NERC Projects:

- Project 2016-02: CIP Standards Virtualization Modifications Draft #5 (NERC Priority Level: High)

This project is in its final stage of completion. The Draft #5 version was approved by industry last November 2023. The Standard Drafting Team is current working on the final ballot for this project which is anticipated to be posted shortly. The NAGF CIPWG will continue to monitor this project and keep membership informed accordingly.

- Project 2020-06: Verification of Models and Data for Generators – IBR Glossary Terms

(NERC Priority Level – Medium)

The purpose of this project is to revise MOD-026-1 and MOD-027-1 to clarify requirements related to IBRs and to require sufficient model verification to ensure accurate generator representation in dynamic simulations. The NAGF Variable Resources Working Group and the Standards Review Team are leading the efforts regarding this project. A webinar is scheduled for March 27th @ 11:00-12:00 pm EST to review the Draft #2 IBR definitions and gather member input as a first step to developing draft NAGF comments. Note that balloting period is March 29 – April 8, 2024 and formal comments due by April 8, 2024. The NAGF VRWG and SRT will continue to monitor this project and keep membership informed accordingly.

- Project 2021-07: Extreme Cold Weather Grid Operations, Preparedness, and Coordination – EOP-012-2 Draft #2

(NERC Priority Level: High)

The focus of this project is to address the nine (9) reliability related findings for new or enhanced NERC Reliability Standards proposed by the report from the Federal Energy Regulatory Commission (FERC), NERC, and Regional Entity Joint Staff Inquiry into the February 2021 Cold Weather Grid Operations published November 16, 2021.

The NAGF Cold Weather Preparedness Working Group has been following this project through the various phases and postings. During the 1st quarter, the NAGF CWPWG held webinars to review and gather member input for the NAGF comment development effort regarding Phase 2 -EOP-012-2 Draft #2. The NAGF formal comments were submitted during the ballot/formal comment period that ended January 22, 2024. The Draft #2 ballot passed, the NERC BOT approved the revised standards on February 15, 2024, and the standards were files with FERC. This project is complete.

- Project 2022-03: Energy Assurance with Energy Constrained Resources BAL-007 Draft #1

(NERC Priority Level: High)

The purpose of this project is to enhance reliability by requiring entities to perform energy reliability assessments to evaluate energy assurance and develop Corrective Action Plan(s) to address identified risks.

Energy reliability assessments evaluate energy assurance across the Operations Planning, Near-Term Transmission Planning, and Long-Term Transmission Planning or equivalent time horizons by analyzing the expected resource mix availability (flexibility) and the expected availability of fuel during the study period. Note that this project is applicable to Balancing Authority and Reliability Coordinator registrations, but the NAGF is monitoring this project for impacts to GO/GOP. During the recent ballot/comment period for the proposed BAL-007 Draft #1 that ended

March 11th, the NAGF did not submit comments as we did not see any impacts to GO/GOP. The NAGF Variable Resources Working Group will continue to monitor this project going forward.

- Project 2023-01: EOP-004 IBR Event Reporting Draft 2
(NERC Priority Level: Medium)
The focus of this project is to revise EOP-004-4 to ensure timely reporting of events involving inverter-based resources (IBRs) by industry to the Electric Reliability Organization (ERO) Enterprise. The NAGF Variable Resources Working Group is leading the efforts regarding this project. A webinar was held on March 13th to review and gather member input for the NAGF comment development effort regarding the proposed EOP-004 Draft #2. The draft NAGF comments are currently out for member review/comment. Note that formal comments are due to NERC by March 27, 2024. The NAGF VRWG will continue to monitor this project and keep membership informed accordingly.

- Project 2023-04: Modifications to CIP-003 Draft #2
(NERC Priority Level: High)
The purpose of this project is to enhance low impact BES cyber systems to further mitigate a coordinated attack risk. This project will revise CIP-003-9 to add controls to authenticate remote users, protect the information in transit, and detect malicious communications for assets containing low impact BES Cyber Systems with external routable connectivity. The NAGF CIP Working Group held a webinar on February 20, 2024 to gather membership input for developing draft NAGF comments regarding the proposed CIP-003 Draft #2. The NAGF finalized and submitted its comments during the ballot/formal comment period that ended March 14, 2024. The ballot for Draft #2 did not pass. The NAGF CIPWG will continue to monitor this project and keep membership informed accordingly.

Pending:

- *Draft SAR: FAC-001-4 & FAC-002-4*
- *Project 2021-04: Modifications to PRC-002/PRC-028 (new)*

The NAGF is working with schedule webinars to discuss these pending items.

- Communications and Interface – Allen Schriver (NAGF)
 - Quarterly Newsletter
The Newsletter is currently being written and will be sent in April.

 - News Bullets
During the 1Q2024, the NAGF continued to provide members notifications regarding important current or upcoming reliability and resiliency activities, educational opportunities, and opportunities to shape future policy:

- NAGF Bi-Weekly News Bullets
- NAGF Quarterly Newsletters
- NERC Projects – NAGF comment development
- Working Group Monthly Webinar reminders

o Working Groups update – Wayne Sipperly (NAGF)

Cold Weather Preparedness - this working group's primary focus is on NERC Cold Weather initiatives and the development of generator cold weather materials for membership. This working group is currently focused on Phase 2 of NERC Project 2021-07: Extreme Cold Weather Operations. During the 1Q2024, this working group continued to hold monthly webinars to share updates on Phase 2 developments including the review of and comment development efforts for proposed EOP-012-2 modifications. The next monthly meeting for this working group is scheduled for April 17, 2024 (to be confirmed). This working group meets monthly and is open to all NAGF members.

CIP - The CIP Working Group is charged with reviewing cyber security issues that impact the generation sector. During Q12024, this working group continued to monitor the following NERC projects under development:

- Project 2016-02: Modifications to CIP Standards Draft #5
- Project 2021-03: CIP-002 Draft #1
- Project 2022-05: Modifications to CIP-008 Reporting Thresholds (Low Priority)

In addition, webinars were held to review and gather input as part of the NAGF formal comment development process for the following projects:

- Project 2023-03 INSM CIP-015 Draft #1
- Project 2023-04: Modifications to CIP-003 Draft #2

This working group holds monthly meetings on the second Tuesday of every month (meeting information is located on the NAGF website event calendar). The next monthly meeting will be held on April 9, 2024.

Markets and Policy - The focus of this new working group is on FERC, NERC, and other government entity activities that impact the energy markets as well as energy policies applicable to electric generators. The kick-off webinar for this new working group was held on January 24, 2024 with the focus on NAGF Policy Development for the NERC MRC/Board Meeting February 14-15, 2024. The next monthly meeting will be held on March 27, 2024. This working group meets monthly and is open to all NAGF members, especially those with regulatory policy experience.

Physical Security - the NAGF Physical Security working group is focused on sharing of generator physical security issues as well as promoting physical security practices, threat mitigation strategies, incident prevention/response,

training, and other relevant topics to enhance generator physical security and reliability. The 1Q2024 meeting was held on March 5, 2024. Items discussed included EISAC bulletins of interest, physical security considerations for wind farms, and active NERC projects under development (Project 2023-01: EOP-004 IBR Event Reporting and 2023-06: CIP-014 Risk Assessment Refinement). The next quarterly meeting is being planned for 2Q2024, details to follow. Note that this working group is open to all NAGF members.

Standards Review Team (SRT) - The Standards Review Team (SRT) works directly with NERC to address Generator Owners and Generator Operators' concerns regarding enforceable standards and standards under development. The SRT is currently reviewing the following projects:

- Project 2017-01 Modifications to BAL-003-1.1
- Project 2019-04 Modifications to PRC-005-6
- Project 2020-02: Modifications to PRC-024-4
- Project 2020-06 Verifications of Models and Data for Generators
- Project 2021-01 Modifications to MOD-025 and PRC -019
- Project 2021-02 Modifications to VAR-002
- Project 2021-03: CIP-002
- Project 2021-04: Modifications to PRC-002
- Project 2021-07 Extreme Cold Weather Grid Operations
- Project 2021-08 Modifications to FAC-008
- Project 2022-02 Modifications to TPL-001 and MOD-032
- Project 2022-03: Energy Assurance with Energy-Constrained Resources
- Project 2022-05: Modifications to CIP-008 Reporting Thresholds
- Project 2023-01 EOP-004 IBR Event Reporting
- Project 2023-02 Performance of IBRs
- Project 2023-03 INSM
- Project 2023-04 Modifications to CIP-003
- Project 2023-05: Modifications to FAC-001 & FAC-002
- Project 2023-06: CIP-014 Risk Assessment Refinement

The SRT generally meets on the first Wednesday of every month and is open to all NAGF members (meeting information is located on the NAGF Group site event calendar). The next monthly meeting is tentatively scheduled for April 3, 2024.

Variable Resources – the focus of Variable Resources Working Group's focus is on NERC Reliability Standards implementation and best practice sharing for utility scale Variable Resources (mainly for wind and solar) connected at transmission voltages of 100kV or greater. Distributed Energy Resources (DER) topics are also welcomed in this working group. During 1Q2024, topics included reviewing the status of active NERC Projects on IBRs:

- Project 2020-02: PRC-024 Modifications
- Project 2020-06 – IBR Glossary Terms
- Project 2021-04: Modifications to PRC-002

- *Project 2023-01: EOP-004 IBR Event Reporting*
- *Project 2023-02: Performance of IBRs*

This group is open to all NAGF members and occurs on the fourth Wednesday of every month (meeting information is located on the NAGF website event calendar). The next meeting will be held on March 27, 2024 and will focus on reviewing the Project 2020-06: IBR Definitions Draft #2.

14:15 NAGF Policy Input to NERC Board of Trustees for February 15, 2024 Meeting – Allen Schriver (NAGF)

- NAGF Policy Input Summary

The NAGF provided policy input to the following NERC questions:

- *Item 1: How can NERC help facilitate greater engagement from new entrants in the industry?*

The NAGF recommends that NERC make new entrants aware of the existing industry trade organizations available to assist new entrants and help facilitate greater engagement. The trade organizations provide experience and understanding of the NERC Reliability Standards and associated processes which the new entrants can leverage to engage directly/indirectly with NERC and industry.

- *Item 2: How can NERC facilitate continued engagement from incumbent players in the industry and ensure contributions are effective as well as a valuable dedication of resources?*

While solving an emerging problem and developing NERC Guidance Documents and Whitepapers, the NAGF recommends that NERC seek input from industry trade organizations via Webex's or short position papers which would allow for the better sharing of information and development of requirements via the Standards Development process.

- *Item 3: How can NERC promote improved alignment between the subject matter experts, the MRC, trade associations, industry leadership, and NERC?*

The NAGF recommends that NERC seek input from industry trade organizations early and often by leveraging Webex's and meetings to discuss various problem solutions with the industry. Discussion of proposed solutions prior to moving quickly to a Standards Drafting Team would allow for improved alignment and a more efficient Standards development process.

- Trades Letter on NERC Rules Of Procedure IBR Registration changes status

The NAGF and other Trades Association members submitted to the NERC Board their shared concerns regarding the draft changes to the NERC Rules of Procedure proposed for discussion at the February NERC Board meeting, The Trades noted: They share NERC's goal of registering the appropriate set of IBR owners and operators; and they agree that 20 MVA and 60 kV, respectively, are appropriate bright-line thresholds for aggregate material impact. However, rather than creating new, independent "GO-IBR" and "GOP-IBR" registration categories, NERC's revised proposal expands the definitions of the existing GO and GOP registration to include GO-IBR and GOP-IBRs as Category 2. Members are concerned that this revised approach is significantly more confusing and less efficient than the original proposal to establish new independent categories for IBRs. The expansion of standards applicability beyond the BES will require particular care and precision because there must not be vagueness or ambiguity regarding which facilities are subject to each revised standard.

14:20 NERC Inverter-Based Resources (IBR) IBR Registrations update – Allen Schriver (NAGF)

- *NERC Rules Of Procedure IBR Registration changes status*
NERC considered the NAGF and Trade Associations concerns with the proposed GO/GOP-IBR Category 2 changes to the existing GO/GOP registrations, but ultimately decided to move forward with such changes to the NERC ROP. The NERC Board approved the IBR ROP changes on February 22nd. On March 19th, NERC submitted to FERC the NERC Board approved Request for Approval of Proposed Revisions to the Rules of Procedure to Address Unregistered Inverter Based Resources and Request for Expedited Review. NERC requested that the Commission issue a 30-day public comment period for this proposal (with comments due approximately April 19, 2024) and an expedited Commission review period for 60 days thereafter (approximately June 19, 2024). The timeline requirements are:
 - *Through May 2024, NERC will conduct outreach and education on the changes via the Trade Organizations.*
 - *From May 2025 – May 2025, NERC will complete the identification of Category 2 GO and GOP candidates.*
 - *From May 2025 – May 2026, NERC will complete the registration of Category 2 GO and GOP candidates and make them subject to Reliability Standards*

14:25 Draft NERC Level 2 Alert: Industry Recommendation 6 GHZ Communication Penetration in the Electric Industry – Allen Schriver (NAGF)

- *The NAGF was contacted by NERC to ask if we would be interested in commenting on a draft NERC Alert on 6 GHZ Communication Penetration in the Electric Industry. The NAGF quickly scheduled a Webex for March 11th to discuss NERC's concerns for impacts to voice, Supervisory Control and Data Acquisition (SCADA) (monitoring and control), data-acquisition-only, communication-assisted relay protection, and/or communication-assisted remedial action in support of the reliable operation of the BPS. Per discussions on the Webex, The NAGF commented:*
 - *Very few GO's use any 6 GHz equipment for data, SCADA, relaying, or voice communication. Rather than having to go through 20 questions for each of our GO registrations, would it be possible for NERC to add a question at the beginning asking if we use 6GHz equipment for data transfer, SCADA, relaying or voice communications? If the answer is "no", there would be no need to complete the rest of the form. If one or more is used, then go to those sections to answer and be done. Members have noted that the forms are more than a bit unwieldy to answer, especially when you must submit multiple replies.*

14:30 NAGF-NERC Collaboration Discussions – Allen Schriver (NAGF)

- *In the NERC Policy Input request discussed previously, NERC is seeking greater engagement of both new entrants and incumbents in the industry. They also sought feedback on increasing alignment of the members.*

In subsequent NAGF discussions with NERC leadership, they noted that:

- *Resource transformation is increasing uncertainty and,*
 - *Unlike mature generators, new generators are not as concerned with reliability.*
- *NERC then stated that they would like to work with the NAGF to:*
 - *Identify problems that NERC shouldn't be solving, but the Trades should.*
 - *Get the issues to the forefront including the growing IBR issues.*
 - *Work with the NAGF to develop best practices.*
 - *They are interested in having more Webex's where we can transfer knowledge, understanding and experience.*
 - *They would like more executive participation.*
 - *The NAGF noted we would like to:*
 - *Comment on NERC Alerts before they are issued.*
 - *Comment on SARs before they are approved and move to the project development stage.*
 - *Discuss emerging issues and concerns before they move to an Alert or SAR.*

- i. Work with NERC during the registration process for non-BES GO/GOP IBR facilities to identify the trades/industry organizations that are available to new entrants. New entrants can leverage the experience of the NAGF and its members to understand the applicable Compliance Standards and build sustainable compliance programs.*

As a result of these discussions with NERC, we were sent the 6 GHz Alert draft, advised we could contact NERC at any time, and now have scheduled quarterly Webex's with NERC leadership and other quarterly Webex's with the Trades Association members.

14:40 Opportunity for volunteers – Jim Houston (Southern Company)

- National Electrical Safety Code (NESC) update

The National Electric Safety Code is being updated. The NAGF is seeking volunteers to work on this update and to represent the view and concerns from the generator perspective.

- NERC Failure Mode Analysis

NERC is seeking volunteers to work with NERC staff on conducting Failure Mode Analysis of system equipment. The goal is to enhance knowledge and increase equipment reliability.

Contact Wayne Sipperly or Allen Schriver if you would like to participate.

14:45 NAGF Website Enhancements – Wayne Sipperly (NAGF)

The following enhancements have added to the NAGF website:

- *New member account request button – located on website home page*
- *Upgraded calendar download options – located on the website calendar page*
- *New Member Materials – button on the Dashboard home page*

14:50 Open Microphone/Roundtable/Feedback

The NAGF noted that planning for the Annual Compliance Conference has begun. The conference has been held at the NERC offices in Atlanta, Georgia but that venue is not available for this year. If any members have a conference space that can accommodate 100 + people that would be available for the NAGF to use, please contact Wayne Sipperly or Allen Schriver accordingly.