

Meeting Minutes

Performance Analysis Subcommittee Meeting

January 12, 2022 | 1:00 - 2:30 p.m. Eastern

WebEx Meeting

Introduction and Chair's Remarks – Chair Brantley Tillis (Duke Energy)

NERC Antitrust Compliance Guidelines and Public Announcement – Robert Tallman (NERC)

Agenda Items

1. Report of December 14 and 15, 2021 Reliability Security and Technical Committee (RSTC) Meeting – Jeff Harrison (Associated Electric Cooperative) / Brantley Tillis

a. 6 GHz Task Force

A task force has been created to investigate the reliability impacts as the 6 GHz band of the radio spectrum is widely used by a broad array of industries responsible for critical infrastructure such as electric, gas and water utilities, railroads, and wireless carriers, as well as by public safety and law enforcement officials.

b. RSTC Sunset Review Team Recommendations

The RSTC conducts a “sunset” review of each working group and task force every year. PAS was not impacted by the sunset review.

c. RSTC Work Plan, Reliability Issues Steering Committee (RISC) Report Recommendations and Joint FERC/NERC Cold Weather Report Recommendations

i. The RSTC Tiger Team identified current RSTC subgroup work plan items that address recommendations identified in the RISC Report and the Cold Weather Report.

(1) The RISC report recommendation 1.5 requests the RSTC to develop methods, processes, tools, metrics, and/or standard authorization requests that are needed to address energy security. The Energy Reliability Assessment Task Force (ERATF) will coordinate with PAS as needed for RISC recommendation 1.5 to assess whether the RISC Report recommendation is fully addressed or if those groups should undertake additional mitigation actions for the RSTC Tiger Team review by January 31, 2022.

(2) This Tiger Team is conducting a similar review for the Joint FERC/NERC Cold Weather Report Recommendations. A request for action by RSTC groups will be made as appropriate. The goal is to provide an update set of work plan items to address the recommendations at the March 8-9, 2022 RSTC meeting.

ii. The RSTC work plan is posted on the PAS extranet site in the January 2022 meeting material folder. Jeff will let PAS know of any pertinent items.

d. Resource Subcommittee (RS)

RS provided a revised draft of the Reporting Area Control Area (ACE) definition that accommodates any Interconnection that has an approved Automatic Time Error Correction (ATEC) process.

e. Inverter resources and distributed energy

- i. The Inverter-Based Resource Performance Working Group (IRPWG) developed a White Paper with recommendations to support BPS frequency.
- ii. The System Planning Impacts from Distributed Energy Resources (DER) Working Group (SPIDERWG)
 - (1) Undertook a review of the TPL-001 standard considering the potential impact of DERs.
 - (2) Updated the Reliability Guideline, Recommended Approaches for UFLS Program Design with Increasing Penetrations of DERs.
 - (a) The IRPWG and SPIDERWG requested the RSTC to approve several Standards Authorization Requests (SARs).

f. Facility ratings task force scope

- i. This task force provides focus and technical expertise on Facility Ratings, including reliability risk to the grid, technical analysis and additional industry perspectives in problem statement definition.

g. Processes within the RSTC are still evolving.

h. Donna Pratt commented that an update on the GADS Section 1600 comments received in 2020 will be provided in March at the RSTC and a request will be made to the RSTC in June to endorse an additional comment period.

i. Jeff will no longer be the PAS sponsor after February when his current term is up as sponsors currently serve one term per subcommittee.

j. The next RSTC meeting will be held via WebEx on March 8 and 9.

2. Metrics Review

a. M-2 BPS Transmission Related Events Resulting in Loss of Load

b. M-2.1 BPS Transmission Related Events Resulting in Loss of Load

As this is a new metric, NERC staff will add wording to the effect on the rating criteria. PAS will continue to refine this metric.

Due to time constraints, discussion of the remaining metrics was tabled. PAS will review the metrics and note any modifications before the February meeting. These metrics were listed in the agenda package and are posted on the PAS extranet site in the January 2022 meeting material folder.

- i. M-7 Disturbance Control Events Greater than Most Severe Single Contingency (MSSC)

- ii. M-11 Energy Emergency Alert (EEA) 3 rating
 - iii. M-12 Automatic AC Transmission Outages Initiated by Failed Protection System Equipment
 - iv. M-13 Automatic AC Transmission Outages Initiated by Human Errors
 - v. M-14 Automatic AC Transmission Outages Initiated by Failed AC Substation Equipment
- PAS should review the metric modifications and provide feedback to Robert Tallman prior to the February PAS meeting.

3. The 2022 State of Reliability Report (SOR) structure was revised.

- a. Preface
- b. About This Report
 - i. Development Process
 - ii. Primary Data Sources
 - iii. Reading this Report
- c. Executive Summary
 - i. Key Findings
 - ii. Recommendations
- d. Chapter 1: The North American BPS—By the Numbers
 - i. 2021 Key Occurrences and Extreme Events
- e. Chapter 2: Risk Areas
 - i. Bulk Electric System Impact of Extreme Event Days
 - ii. Restoration Analysis to Evaluate Resilience under Extreme Weather
 - (1) Was Item h. vi.
 - iii. Resource Adequacy
 - iv. Grid Transformation
 - (1) Was previously labeled Changing Resource Mix
 - v. Critical Infrastructure Interdependencies
 - vi. Situation Awareness Challenges
 - vii. Increasing Complexity of Protection and Control Systems
 - viii. Human Performance
- f. Chapter 3: Cyber and Physical Security
- g. Chapter 4: Severity Risk Index (SRI)
 - i. Severity Risk Index and Trends

- ii. Severity Risk Index by Interconnection
- h. Chapter 5: Adequate Level of Reliability Performance Objectives
 - i. BES Instability, Separation, and Cascading Performance
 - ii. BES Frequency Performance
 - iii. BES Voltage Performance
 - iv. Adverse Reliability Impacts
 - v. BES Restoration Performance
- i. Appendix A: Reliability Indicator Ratings and Descriptions
- j. Appendix B: Contributions
- 4. 2022 Leadership Opening**
- 5. Upcoming meetings**
 - a. Regularly scheduled meetings are on the third Wednesday of each month
 - b. High level schedule for the production of the SOR
 - i. Late March – initial draft of report
 - ii. April – weekly PAS meetings to review and revise report
 - iii. May – NERC internal and external committee reviews

*Background material including meeting minutes is located on the PAS Extranet site. Meeting minutes are posted on nerc.com. PAS members should contact [Robert Tallman](#) for access.