

Minutes

Reliability and Security Technical Committee

December 14-15, 2021

Virtual Meeting Via WebEx

A regular meeting of the NERC Reliability and Security Technical Committee (RSTC) was held on December 14-15, 2021, via webinar. The agenda packages and presentations are available on the [RSTC webpage](#).

Chair Ford called the meeting to order at 11:00 a.m. Eastern on Tuesday, December 14, 2021 and thanked everyone for attending. Tina Buzzard, NERC Staff, reviewed the procedures for the meeting, read the Antitrust Compliance Guidelines and Public meeting notice, and confirmed quorum for the RSTC.

Introductions and Chair's Remarks

Chair Ford, based on comments received in advance of the meeting, reviewed the intent to meet the guideline in the RSTC Charter to post materials for RSTC meetings at least 10 business days in advance of the meeting but that due to December's slightly more compressed timeline the materials were not able to meet this intention and appreciates the Committee's understanding. Chair Ford reminded subcommittees, working groups, and task forces of the need to ensure materials are delivered such that this guideline of at least 10 business days could be met. In addition, Chair Ford noted that the RSTC Executive Committee and NERC management will look at the current processes and what is brought before the Committee and in what order and determine if there is a need to adjust the processes to meet the goals of the Committee and the amount brought forth for each meeting, and welcomes any input from the Committee. Finally, to the extent that Members believe there was insufficient time to review, they may make a motion to table the deliverable (as for any other item) or to take an action without a meeting for a later vote as the meeting progresses.

Chair Ford called on Nina Johnston to review the meeting governance guidelines which were included in the advance materials package, and noted that the RSTC leadership has agreed to adjust the process for agenda topics requiring a formal action. Ms. Johnston stated the Committee will hear the presentation first, provide comments/discussion and then the Chair will call for a motion. Ms. Buzzard reviewed the Committee voting process.

Consent Agenda

Chair Ford noted that the September 2021 minutes were inadvertently not included in the package and will be brought to the Committee with the December minutes for approval at the March 2022 meeting.

Regular Agenda

Chairs Remarks

Chair Ford in his opening remarks congratulated Marc Child as winner of E-ISAC Electricity Security Service Award in honor of Michael J. Assante award, reviewed the appointment of EAS leadership, and acknowledged the attendance of NERC Trustee Jim Piro and offered Mr. Piro to make any opening comments. Mr. Piro acknowledged the full agendas and looked forward to the discussion and providing his report back to the full NERC Board.

Chair Ford referenced the subgroup reports contained in the Agenda package and thanked the Sponsors for reports being submitted in the requested format.

Lastly, Chair Ford provided highlights from the November 2021 Member Representatives Committee and Board of Trustees meetings.

Nominating Subcommittee Member Election

Chair Ford reviewed that due to recently approved RSTC Charter revisions, the Nominating Subcommittee (NS) was expanded to consist of seven (7) members (the RSTC Vice-Chair and six (6) members drawing from different sectors and at-large representatives). He stated nominations were sought November 5-29, 2021 for the two new seats and recommended candidates were selected by him in consultation with the RSTC Executive Committee. The recommended candidates are John Stephens, Sector 5 representative and Patrick Doyle, At-large representative. The terms for the two new seats will be a shortened term through February 2022 and the full Nominating Subcommittee annual nomination process will commence in March 2022. Upon motion duly made and seconded, the Committee approved the appointments of John Stephens and Patrick Doyle to the Nominating Subcommittee.

Frequency Response Annual Analysis

David Till, NERC, presented on the Frequency Response Annual Analysis which is submitted to FERC on an annual basis noting the report is the 2021 annual analysis of frequency response performance for the administration and support of NERC Reliability Standard BAL-003-2 – Frequency Response and Frequency Bias Setting, effective December 1, 2020. He stated BAL-003-2 (Phase I) revises the BAL-003-1.1 standard and process documents to include (in part) the addressing of the inconsistencies in calculation of Interconnection frequency response obligations (IFRO) due to interconnection frequency response performance changes of Point C and/or Value B; the Eastern Interconnection (EI) Resource Contingency Protection Criteria; and the frequency of nadir point limitations. Upon motion duly made and seconded, the Committee endorsed the report and the annual filing with FERC.

6 GHz Task Force Scope

CCC Chair Jennifer Flandermeyer provided an update on the development of the 6GHz Task Force which 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. She reviewed the draft scope document and proposed work plan and noted the proposed task force would report to the RSTC in the Mitigating Risks program area. Upon motion duly made and seconded, the Committee approved the taskforce and scope document.

RSTC Sunset Review Team Recommendations

In follow-up to the discussion at the September RSTC meeting, Ms. Christine Hasha, RSTC Executive Committee member, presented on the RSTC Sunset Review Team recommendations. Ms. Hasha stated the process for this review included the RSTC Sponsors, in coordination with group leadership and NERC Staff Liaisons, reviewing the working group or task force deliverables and work plans to populate the template and determine the recommendations. Upon motion duly made and seconded, the Committee approved the recommendations.

Chair Ford noted that this would be Ms. Hasha's last RSTC meeting due to changing companies and thanked her for her service and support of the Committee's efforts.

Reliability Guidelines and Security Guidelines Triennial Review

Mr. John Moura and Ms. Candice Casteneda, NERC, presented on the Reliability Guidelines and Security Guidelines Triennial review noting the initial triennial review of existing Reliability Guidelines is due June 2023. They noted that NERC Staff made a preliminary recommendation for each existing Guideline to either remain a Guideline, convert to a Technical Reference Document or become a Hybrid (a Guideline and a Technical Reference Document). Each RSTC subcommittee, working group or task force that is responsible for triennial review of an existing guideline reviewed the recommendation and determined the final disposition as well as which tranche the document should be revised within. The RSTC Review Team developed its final recommendations request RSTC approval of the tranches so that work plan items can be developed to meet the regulatory deadlines. Upon motion duly made and seconded, the Committee approved the tranches and proposal for metrics.

Event Analysis Subcommittee Membership

EAS Chair Ralph Rufrano presented Bill Temple, Avangrid, to fill the vacant seat for the NPCC Regional Industry Representative. Upon motion duly made and seconded, the Committee approved the appointment of Mr. Temple.

RSTC Work Plan, RISC Report Recommendations and Joint FERC/NERC Cold Weather Report Recommendations

Vice Chair Hydzik provided a status update on the activities to date completed by the Tiger Team that was formed to review the RISC Report recommendations and the Joint FERC/NERC Cold Weather Report recommendations to create or modify RSTC work plan items to address the recommendations. Mr. Hydzik noted the plan developed to coordinate with the RSTC subgroups to review risks and develop mitigation activities and work plan items for future RSTC approval.

EMP Working Group Update

EMPWG Chair Aaron Shaw briefed the RSTC members on the overall EMP project to include the current thinking on EMP Vulnerability Assessments, as well as other EMPWG subteam's work plans.

White Paper – Oscillation Analysis for Monitoring and Mitigation

SMWG Chair Tim Fritch, provided an overview of the proposed White Paper – Oscillation Analysis for Monitoring and Mitigation noting the SMWG was requested to develop guidance on oscillation analysis methods to encourage consistency in the system quantities that are monitored for oscillation events and the respective thresholds for alarms. The detection and alarming of oscillations and their classification in a consistent manner is critical in ensuring coordinated mitigation of both local and widespread oscillation disturbances in the bulk power system. In the review, Mr. Fritch recommended that the document be changed from a white paper to a technical reference document and sought approval as a technical reference document. Upon motion duly made and seconded, the Committee approved the Technical Reference Document - Oscillation Analysis for Monitoring and Mitigation.

Nominating Subcommittee (NS) Update

Vice Chair Hydzik provided an update of the Nominating Subcommittee activities included a review of the Sector election results and the timeline for the At-Large Nominations.

Odessa Disturbance Report and Odessa Disturbance Follow-Up Document

Ryan Quint and Rich Bauer, NERC provided an overview of the Odessa Event. IRPWG Vice Chair Julia Matevoysan presented on the Odessa Disturbance Report and Odessa Disturbance Follow-Up Document. noting the report contained a set of key findings and recommendations and the IRPWG reviewed each of the key findings and recommendations in detail and has developed a document that provides a brief technical discussion and technical basis for each recommendation and where appropriate identified follow up action items. IRPWG Sponsor Jody Green noted the recommendations will be incorporated into the IRPWG work plan as appropriate. Upon motion duly made and seconded, the Committee approved the IRPWG follow-up document and recommendations.

FERC - NERC - Regional Entity Staff Report: The February 2021 Cold Weather Outages in Texas and the South Central United States

Dave Huff and Heather Polzin, FERC Staff, Steven Noess and Kiel Lyons, NERC Staff presented on the FERC - NERC - Regional Entity Staff Report on the February 2021 Cold Weather Outages in Texas and the South Central United States. The report describes the severe cold weather event that occurred between February 8 and 20, 2021 and how it impacted the reliability of the bulk electric system in Texas and the South Central United States.

Other Matters, Chair's Closing Remarks and Adjournment

Chair Ford concluded the meeting by thanking the participants, the committee members and looked forward to the meeting the next day.

Wednesday, December 15, 2021

Chair Ford called the meeting to order, and thanked everyone for attending. Tina Buzzard reviewed the procedures for the meeting, reviewed the Antitrust Compliance Guidelines, and confirmed quorum, as well as provided an overview of the polling actions to be used for Committee actions during the meeting.

Introductions and Chair's Remarks

Chair Ford noted the packed agenda with a number of approval and informational items of importance.

Regular Agenda

Energy Reliability Assessments Task Force (ERATF) Recommendations

ERATF Chair Peter Brandien provided an update on the taskforce's work including a draft SAR for RSTC review as well as a plan to gather industry input for development of a final SAR for RSTC endorsement in March, 2022. Mr. Brandien requested RSTC reviewers to review the draft SAR and technical justification document and provide comments by no later than January 14, 2022.

Reliability Guideline: Cyber Intrusion Guide for the System Operator

RTOS Sponsor Todd Lucas and RTOS Chair Jimmy Hartmann presented on the Reliability Guideline: Cyber Intrusion Guide for the System Operator to include an update on the revisions made which includes additions of specific metrics to facilitate determining the effectiveness of the guideline per the FERC order. Upon motion duly made and seconded, the Committee accepted to post the Reliability Guideline for a 45-day comment period.

GMD Monitoring Reference Document

RTOS Sponsor Todd Lucas and RTOS Chair Jimmy Hartmann provided an update on the GMD Monitoring Reference Document and revisions to the reference document. Upon motion duly made and seconded, the Committee accepted to post the reference document for a 45-day comment period.

Resources Subcommittee (RS) Reporting ACE Definition SAR

RS Sponsor Rich Hydzik provided an overview of the purpose of the SAR and RS Chair Greg Park provided a more detailed review of the SAR noting the current definition of Reporting ACE has a conflict with the Western Interconnection's Automatic Time Error Correction (ATEC) process and does not allow other Interconnections to pursue ATEC. He stated the RS has a revised draft of the Reporting ACE definition that accommodates any Interconnection that has an approved ATEC process. The revised definition is also shortened to remove verbiage that duplicates obligations in the BAL standards. Mr. Park requested endorsement of the SAR and submittal to the NERC Standards Committee. Upon motion duly made and seconded, the Committee endorsed the SAR and its submission to the Standards Committee.

White Paper: Grid Forming Technology, Bulk Power System Reliability Considerations

IRPWG Vice Chair Julia Matevoysan provided an overview of the White Paper: Grid Forming Technology, Bulk Power System Reliability Considerations and developed recommendations. Committee member discussion inquired on how the recommendations would be tracked, Ms. Matevoysan stated the IRPWG will monitor the development of the technology and will follow up with a Reliability Guideline or SAR as appropriate. Upon motion duly made and seconded, the Committee approved the White Paper.

White Paper: BPS-Connected IBR and Hybrid Plant Capabilities for Frequency Response

IRPWG Sponsor Jody Green, IRPWG Chair Al Schriver, and Vice Chair Julia Matevoysan provided an overview of the White Paper: BPS-Connected IBR and Hybrid Plant Capabilities for Frequency Response and its recommendations noting the white paper provides insight on how to utilize the capability of an overbuilt IBR site to assist with frequency response. Upon motion duly made and seconded, the Committee approved the White Paper.

TPL-001-5 SAR for BPS-Connected IBRs

IRPWG Sponsor Green introduced the TPL-001-5 SAR for BPS-Connected IBRs and its development. He noted that the SPIDERWG would also have a SAR for revisions to the TPL-001-5 standard. Mr. Green stated the SAR was rejected by the RSTC earlier and the IRPWG received feedback and made revisions based on the comments as needed. IRPWG Vice Chair Matevoysan provided a detailed overview of the SAR, the IRPWG response to comments received and requested RSTC endorsement. There was a request from Committee member Brian Evans-Mongeeon to defer the ballot until the middle of January to provide the RSTC more time to review the materials. A motion was made to endorse the SAR as presented at the meeting. Mr. Evans-Mongeeon motioned to postpone the vote on the SAR until no later than January 15 via an action without a meeting (e-mail vote), and the motion was seconded, the motion failed with 10 votes for and 14 votes against. The primary motion was seconded, and the Committee endorsed the SAR.

TPL-001-5 SAR for DERs

SPIDERWG Sponsor Wayne Guttormson introduced the TPL-001-5 SAR for DERs, development of the MOD-032 SAR, the White Paper, and the Reliability Guideline. SPIDERWG Chair Zhu provided a detailed overview of the SAR noting the SPIDERWG undertook a review of the TPL-001 standard considering the potential impact of DERs. The review is captured in the white paper and serves as the technical justification for the revisions suggested in the SAR. Upon motion duly made and seconded, the Committee endorsed the SAR.

MOD-032 SAR

SPIDERWG Zhu provided an overview and history of the MOD-032 SAR noting the SPIDERWG updated the SAR and developed a clarifying document for industry, as well provided a letter of support from the ISO/RTO Council which supports the SPIDERWG efforts to develop mandatory provisions to compel Distribution Providers to provide Distributed Energy Resource (DER) data to reliability entities in support of accurate and comprehensive reliability studies, specifically SPIDERWG's request to revive the SAR for Project 2020-01: Modifications to MOD-032: Data for Power System Modeling and Analysis. Mr. Guttormson requested the RSTC endorse the SAR and associated technical justification documents for subsequent Standards Committee action. Upon motion duly made and seconded, the Committee endorsed the SAR and associated technical justification documents.

White Paper: Survey of DER Modeling Practices

SPIDERWG Zhu provided an overview of the White Paper: Survey of DER Modeling Practices highlighting the SPIDERWG sought RSTC reviewers for the draft white paper at the September RSTC meeting. Based on reviewer comments, the white paper was updated to revise recommendations and to further clarify the scope of the survey data (within SPIDERWG members) throughout the document. Upon motion duly made and seconded, the Committee approved the White Paper.

Reliability Guideline: Recommended Approaches for UFLS Program Design with Increasing Penetrations of DERs

SPIDERWG Zhu provided an overview of the Reliability Guideline: Recommended Approaches for UFLS Program Design with Increasing Penetrations of DERs noting the guideline was posted for a 45-day comment period. The SPIDERWG reviewed the comments received and made conforming revisions to the guideline. The SPIDERWG also included metrics to help assess the effectiveness of the guideline and is seeking RSTC approval of the revised guideline. Upon motion duly made and seconded, the Committee approved the White Paper.

Facility Ratings Task Force (FRTF) Scope and Next Steps

FRTF Co-Chair Greg Stone provided an overview of the FRTF scope and next steps stating the revised scope includes a change in reporting structure. Mr. Stone stated the transition of the FRTF to RSTC oversight continues to provide focus and technical expertise on Facility Ratings, including reliability risk to the grid, technical analysis and additional industry perspectives in problem statement definition. He also stated the FRTF recommends adding additional technical expertise from the industry to the group for more robust discussion. Upon motion duly made and seconded, the Committee approved the revised FRTF scope document.

Security Working Group (SWG)

Brent Sessions, SWC and Christine Hasha, Sponsor provided an update on the SWG's current work plan activities as well as the results of the Assessing Cyber Risk Team and NIST partnership survey.

Forum and Group Reports

Mr. Schriver, NAGF and Mr. Carter, NATF provided highlights of their written reports that were provided in the advance agenda package.

TOCC Field Test Update

Marisa Hecht, NERC, provided an update on the TOCC Field Test Status, 2021-03 Standard Drafting Team and sought recommendations from RSTC for Field Test participants, as well as noted the project plan is on the SDT web page. Ms. Hecht requested recommended participants be submitted to Stephen Crutchfield.

RSTC 2022 Calendar Review

Chair Ford referenced the 2022 calendar review contained in the agenda included in the advance materials and noted that the March meeting would be conducted virtually.

Closing Remarks and Adjournment

Chair Ford thanked attendees and Committee members for their attendance and participation. There being no further business before the RSTC, Chair Ford adjourned the meeting.

Next Meeting

The RSTC will meet virtually in March 8-9, 2021, 11:00 a.m. - 4:30 p.m. eastern time.

Stephen Crutchfield

Stephen Crutchfield
Secretary