

Meeting Minutes

Reliability and Security Technical Committee

March 4, 2020

Atlanta Marriott Marquis Hotel
265 Peachtree Center Ave.
Atlanta, GA 30303

A regular meeting of the NERC Reliability and Security Technical Committee (RSTC) was held on March 4, 2020, in Atlanta, GA. The meeting agenda is affixed as **Exhibit A**.

RSTC Chair Greg Ford convened the meeting at 1:00 p.m. Eastern on Wednesday, March 4, 2020 and led introductions of RSTC members, Observers and NERC Staff. Stephen Crutchfield read the NERC Antitrust Compliance Guidelines and the Notice of Public Meeting. The committee members introduced themselves and Stephen Crutchfield confirmed quorum of the Committee.

Chair Ford invited Trustee Ken DeFontes to provide remarks.

It was an honor to serve on the SET and former Trustee Fred Gorbet and he were pleased with that effort. The Technical Committee (TC) meetings were a little melancholy listening to the closing remarks. This effort is to make our work more efficient and effective. The RSTC has leadership from the TCs and believes the RSTC will be very successful. He thanked everyone for participating and he looks forward to watching us thrive.

Chair Ford invited Mark Lauby, NERC Senior Vice President and Chief Engineer to provide remarks.

Thrilled to be here and excited for our future. Industry is facing transformation. Interdependencies with distribution, gas, and other systems. Electricity is the key driver for all infrastructure. Industry and the ERO are good at identifying problems and solving them. It's important to collaboratively identify issues and solve them. This committee is a fundamental part of that effort.

Meeting Highlights

1. Trustee Ken DeFontes and Mark Lauby provided opening remarks to welcome the new committee.
2. Chair Ford introduced the Executive Committee consisting of Chair Ford, Vice Chair Zwergel, Marc Child, Rich Hydzik, Christine Hasha, and Robert Reinmuller.
3. The RSTC elected the Nominating Subcommittee consisting of Vice Chair Zwergel, Jodirah Green, Todd Lucas, Sandra Ellis and Wayne Guttormson.
4. The chairs of the OC, PC and CIPC reviewed the existing committee organizations and work plans.
5. The RSTC discussed potential ways to organize the work of the RSTC while incorporating the risks presented in the RISC report.

Remarks and Reports (Items 2a, 2b and 2c)

Chair Ford welcomed members and observers to the meeting. In the agenda package, there are a number of documents linked including the RSTC Roster, RSTC Organization, RSTC Charter, Parliamentary Procedures and Participant Conduct Policy. Greg also pointed out the future meeting dates and noted that the meeting locations was yet to be determined.

Brian noted that the Joint session was helpful and suggested that the RSTC consider having something similar. Greg acknowledged that was an idea to consider along with WebEx pre-session for reports or consent agenda items.

Chair Ford encouraged everyone to contribute their ideas to help the RSTC to advance our mission and improve efficiency and effectiveness. The mission of the RSTC is to fold in all of the technical functions into a single group and collaborate with each other to move forward.

Introduction of Executive Committee – Chair Ford introduced the RSTC Executive Committee (EC), which consists of:

Chair Ford, Georgia System Operations

Vice Chair Zwergel, MISO

Marc Child, Great River Energy

Rich Hydzik, Avista

Christine Hasha, ERCOT

Robert Reinmuller, Hydro One

He noted that the EC has participated in one call in an effort to get the RSTC off to a good start. A suggestion was made to put an asterisk by the EC member's names on the RSTC Roster that is posted.

Report of February 5, 2020 Member Representatives Committee (MRC) Meeting and the February 6, 2020 Board Meeting – Chair Ford reported on the February 5, 2020 Member Representatives Committee (MRC) Meeting and the February 6, 2020 Board of Trustees (Board) Meeting. Chair Ford noted that the main topics were the appointment of the RSTC members and the retirement of two Trustees (Fred Gorbet, Janice Case) and the election of a new Trustee (Jim Piro) by the MRC. Supply Chain is an important issue as well as Policy Input. Stakeholders provide input to the board through this effort. MRC will look to this group to provide Policy Input going forward.

Election of Nominating Subcommittee (Item 3)

Chair Ford reviewed the proposed Nominating Subcommittee slate as recommended by the Executive Committee, noting the Nominating Subcommittee consists of the RSTC Vice Chair and four additional committee members. Greg will then request nominations from the floor and there were no additional nomination. He then asked all nominees to leave the room and requested a motion for approval.

Recommended Slate: Vice Chair David Zwergel
Todd Lucas
Wayne Guttormson
Sandra Ellis
Jodirah Green

Marc Child made a motion to approve the slate and it passed without dissent.

Committee Organization Charts (Items 4a, 4b and 4c)

Chair Ford called upon each standing committee chair to provide a review of their current organization charts.

Vice Chair Zwergel, Operating Committee (OC) Chair reviewed the OC organization chart. He noted the focus area for each subgroup. He also noted that the PS was renamed the Reliability Training Working Group by the OC at the meeting yesterday.

Brian Evans-Mongeon, Planning Committee (PC) Chair, reviewed the PC organization. He noted the focus area for each subgroup. The Electric/Gas Working Group was missing from the chart. He also noted that some of the subgroups are nearing the end of their charge and the PC may come to the RSTC with recommendations to disband some subgroups. Peter Brandien asked if the PC is reaching out to other groups such as the NAGF and NATF to avoid duplication of effort. Brian noted that subgroups do reach out and coordinate with other industry groups to collaborate and avoid duplication of effort.

Marc Child, Critical Infrastructure Protection Committee (CIPC) Chair, reviewed the CIPC organization. He noted the focus area for each subgroup. He noted that CIPC is organized in four areas as shown on the org chart. Physical Security Advisory Group (PSAG) and Grid Exercise Working Group (GEWG) are aligned with the E-ISAC and provide updates to CIPC. The Control Systems Security Working Group (CSSWG) was retired last year. The CIPC also participated in Event Analysis process as well.

Since there are errors on the organization chart slides, they will be updated and posted with the agenda package.

Is there a plan going forward for security training? Marc – the CIPC has enjoyed partnerships with National Labs, E-ISAC, and other vendors. Security Training WG should help retain engagement at all levels with the RSTC. When it was brought to the MRC to combine the TCs, one of the comments received was the need to consolidate cyber analysis into bulk power system planning and operations. The RSTC should try to integrate the three committees and ignore silos.

2020 Subcommittee Work Plans (Items 5a, 5b, 5c and 5d)

Chair Ford called on each standing committee chair to provide a review of their current work plan

Vice Chair Zwergel, OC Chair reviewed the OC Work Plan. He noted recurring items and specific work plan items for each subcommittee. A suggestion was made to identify recurring items that Planning or Security people need to be made more aware. The work plans should be updated as well.

Brian Evans-Mongeon, PC Chair, reviewed the PC Work plan document. Part of the design of the work plan is to make this a good reference for all of the subgroups under the PC. It contains links for other references. The PC EC meets monthly to consider additions to the work plan. Transitions with industry require the PC to alter the work plan and deliverables/schedule. It provides an up-to-date work scope and deliverable for the subgroups.

Marc Child, CIPC Chair, reviewed the CIPC Work Plan. He noted that the CIWG and SCWG are the only active CIPC subgroups. The remaining groups were moved to the E-ISAC or disbanded. There are also items in the work plan listed a “new TF”. These items need to be addressed by the RSTC.

After the work plans were reviewed, Chair Ford requested a motion for approval of the OC/PC/CIPC work plans to be combined and considered the INITIAL RSTC work plan. This will be refined as the RSTC commences its work and determines prioritization of tasks. The OC, PC and CIPC may edit the work plans, however the changes must be approved by the RSTC. The committees should identify priority items/tasks.

Wayne Guttormson made a motion to approve the work plans. The motion passed without dissent.

RSTC Transition Plan (Items 6a, 6b, 6c, and 6d)

Chair Ford lead a discussion on the proposed RSTC Transition Plan with members and observers. The Executive Committee will review the input received from today’s discussion at its March 2020 face-to-face meeting, refine the transition plan as needed, and present an updated transition plan at the June RSTC meeting which will be used as the ongoing working document.

- Consider appointing liaisons/sponsor that are not from the same committee as the work plan (i.e., don’t put ops people on ops projects. Cross-pollinate by getting people out of their comfort zone.
- Consider interaction with liaisons and staff and their expectations around project management. The liaison would be more like an executive sponsor while staff continues their role as they do today.
- There may be inter-relationships between subgroups. It may be more beneficial to bring together common subject areas and have a liaison for these “groupings”. While RISC should be included, need to consider ERO priorities and strategic plan to the subgroups. Liaison would provide triage function and help with agenda setting for the RSTC.
- Need to consider how task forces will be staffed for emerging issues/work plan items. NERC will be able to post seeking volunteers for such efforts.
- How does the EC and the liaisons contribute to agenda building? Subcommittee leadership? What are the specific roles?
- Consider the terms of RSTC members when assigning liaisons to provide continuity.

- Evaluate the existing subgroups before assigning liaisons due to potential changes in organization/structure.
- Liaisons can bring back recommendations to RSTC for synergies in subgroup work plans.

Chair Ford referenced the Policy Input/Industry Comment Resolution and Tracking document and reviewed the transition plan tracking plan document.

The RSTC should ensure work plans, strategic plan, ERO priorities and RISC report are all coordinated.

Chair Ford reviewed the draft agenda template for regular RSTC meetings.

- Do not need to have in-person report from every subcommittee at every meeting. Want to prioritize work items and consolidate reports to present to the RSTC. Liaisons can facilitate this effort.
- Have a standing “emerging issues” item on the agenda
- Link to RSTC Charter needs to be updated
- EMPTF (new group) will be reporting to the RSTC

Chair Ford referenced the committee calendar that was included in the agenda package. A question was raised regarding travel restrictions that many companies are implementing. NERC will continue to monitor conditions and make decisions whether to cancel a meeting or conduct it via webinar.

Reliability Issues Steering Committee (RISC) Status Report and Coordination (Item 7)

Vice Chair Zwergel provided a RISC update. The RSTC has a representative on the RISC and Vice Chair Zwergel will continue to be a member of the RISC. Vice Chair Zwergel noted that the RISC will meet by conference call the week of March 16th to discuss 2020 activities, objectives and risks. Will be looking at RISC enhancement, charter review and begin planning 2021 RISC report at Reliability Summit. Determine how RISC can have input and support RSTC work plan.

North American Generator Forum (Item 8a)

Allen Schriver provided an update on the activities of the NAGF.

NERC Standard Drafting Teams

- PRC-005
 - Revise PRC-005-6 to clearly delineate the applicability of Protection Systems associated with AVR protective functions.
 - Needs to clearly limit the scope of the AVR protective functions to those elements that open a breaker directly or via lockout or tripping auxiliary relays.

Winterization

- Enhance the process and communications.
- Recognize all plants are a unique design, face different weather challenges and may have low capacity factors.

NAGF Collaboration with NATF

- Supply Chain
 - Collaborating with NATF and other industry organizations to provide a streamlined, effective, and efficient industry-accepted approach to assess supplier cyber security practices to enhance cyber security.
 - Model to reduce supplier burden so efforts with purchasers can be prioritized and entities provided information effectively and efficiently.
 - Resilience
 - NAGF was invited to attend a pilot of the NATF Transmission Resilience Maturity Model (TRMM). NAFG to begin working with the NATF to develop a similar model to be used by GO/GOP's to evaluate their resiliency policies and programs.

NPCC DER

- Work with NPCC DER Forum to identify challenges/opportunities for DER “grid edge” resources installed on the Distribution System, to promote understanding and support reliable integration.

IRPTF/IEEE P2800

- Technical Report: Energy Transition to High IBR
 - **Goal:** Provide visionary technical report and roadmap of how to manage a BPS with increasing penetration of BPS-connected inverter-based resources.
- Reliability Guideline: EMT Modeling and Simulations
 - **Goal:** Provide industry with clear guidance and recommendations for use of EMT models and performing EMT simulations.
- Reliability Guideline: BESS and Hybrid Plant Performance, Modeling Studies
 - **Goal:** Provide industry with clear guidance and recommendations for battery energy storage and hybrid plant performance, modeling, and studies.

North American Transmission Forum (Item 8b)

Roman Carter provided an update on the activities of the NATF. Please see slides for details.

NATF Revised MOU Focus/Role

- NATF-NERC Memorandum of Understanding (April 2019)

- Advance mutual objectives and collaboration
- Leverage respective and collective strengths
- Minimize duplication of effort
- Respective roles:

ERO	NATF/Industry
<ul style="list-style-type: none"> • identify existing and emerging risks to reliability • facilitate strategies and activities to address the identified risks 	<ul style="list-style-type: none"> • characterize and validate the identified risks • implement appropriate strategies and activities among members to support mitigation of the identified risks

NATF Solution Provider

- NATF is pre-qualified organization to submit Implementation Guidance under the NERC BOT Compliance Guidance Policy
- NATF Implementation Guidance submitted to date:
 - CIP-014-2 R1 Physical Security Risk Assessment (March 2017) – ERO Endorsed
 - MOD-033-1 Methodology Reference Guide (March 2017) – ERO Endorsed
 - CIP-014-2 R4 Evaluating Potential Physical Security Attack (Sept 2017) – ERO Endorsed
 - CIP-014 R5 Physical Security Plans (Sept 2017) – ERO Endorsed
 - CIP-010-3 Software Integrity and Authenticity (November 2017) – ERO Endorsed
 - CIP-013-1 Implementation Guidance - Reliance on Independent Assessments (April 2019) – ERO Endorsed
 - CIP-005-6 Vendor Remote Access Guidance (December 2019) – Proposed

NATF Ongoing ERO Collaboration

- NATF-EPRI-NERC Resiliency Summits
 - NATF-EPRI host since 2013
 - NERC joined in 2019
- NATF-EPRI-NERC Planning and Modeling Workshops
 - Joint effort since 2017
- Electric Power Human Performance Improvement Symposium

- Collaborating since 2017
- RF and SERC “Pilot” Facility Rating and Supply Chain

NATF is in collaboration with RF and SERC regarding Facility ratings and Supply Chain

NATF Resilience Activities

- NATF-EPRI Resilience Summits
 - Conducted annually since 2013
 - Recently included NERC as co-sponsor
- Webinar series for members
 - Physical security measures for substations
 - Insider threat and protection of communication systems
 - Incident command structure, emergency response, and post-event preparation
 - Spare equipment strategies and programs for substation equipment
 - Planning for system resiliency (future)

Chair’s Closing Remarks and Adjournment (Item 9)

Chair Ford thanked participants and presenters for attending the meeting. He appreciates the input and participation and looks forward to more input and growth. As work plans are consolidated, things will become clearer.

Mark Lauby expressed his thanks and noted that the meeting was productive and he looks forward to our continued progress.

There being no further business before the Reliability and Security Technical Committee, Chair Ford adjourned the meeting on Wednesday, March 4, 2020 at 4:36 p.m. Eastern.

Next Meeting

The RSTC will meet June 10-11, 2020 with a specific location TBD.

Stephen Crutchfield

Stephen Crutchfield
Secretary

Agenda

Reliability and Security Technical Committee

March 4, 2020 | 1:00–5:00 p.m. Eastern

Atlanta Marriott Marquis Hotel
265 Peachtree Center Avenue
Atlanta, GA 30303

Conference Room: Imperial Ballroom

Dial-in: 1-415-655-0002 | Access Code: 730 127 263 | Attendee Code: If asked, just press #

Webex: [Click Here](#)

Call to Order

NERC Antitrust Compliance Guidelines and Public Announcement

Introductions and Chair's Remarks

Welcome Remarks – Mark Lauby

1. Administrative Items

- a. Arrangements
 - i. Safety Briefing and Identification of Exits (Hotel Staff)
- b. Announcement of Quorum
- c. Reliability and Security Technical Committee (RSTC) Membership 2020-2023*
 - i. [RSTC Roster](#)
 - ii. [RSTC Organization](#)
 - iii. [RSTC Charter](#)
 - iv. [Parliamentary Procedures](#)
 - v. [Participant Conduct Policy](#)

d. Future Meetings

2020 Meeting Dates	Time	Location	Hotel
June 10, 2020	1:00 to 5:00 p.m.	TBD	TBD
June 11, 2020	8:00 a.m. to 12:00 p.m.	TBD	TBD
September 15, 2020	1:00 to 5:00 p.m.	TBD	TBD
September 16, 2020	8:00 a.m. to 12:00 p.m.	TBD	TBD
December 15, 2020	1:00 to 5:00 p.m.	TBD	TBD
December 16, 2020	8:00 a.m. to 12:00 p.m.	TBD	TBD

Regular Agenda

2. Remarks and Reports

- a. Remarks - Greg Ford, RSTC Chair
- b. Introduction of Executive Committee – Chair Ford
- c. Report of February 5, 2020 Member Representatives Committee (MRC) Meeting and the February 6, 2020 Board Meeting – Chair Ford

3. Election of Nominating Subcommittee – Chair Ford

4. Committee Organization Charts* – Information

- a. Operating Committee (OC) Organization – Vice Chair Zwergel, OC Chair
- b. Planning Committee (PC) Organization – Brian Evans-Mongeon, PC Chair
- c. Critical Infrastructure Protection Committee (CIPC) Organization – Marc Child, CIPC Chair

5. 2020 Subcommittee Work Plans* – Approve - Chair Ford

- a. OC Work Plan – Vice Chair Zwergel, OC Chair
- b. PC Work Plan – Brian Evans-Mongeon, PC Chair
- c. CIPC Work Plan – Marc Child, CIPC Chair

6. RSTC Transition Plan – Discussion - Chair Ford

- a. Reliability Issues Steering Committee (RISC) Coordination*
- b. RSTC Transition Plan Tracking Document
- c. Policy Input and Industry Comments Resolution and Tracking*
- d. RSTC Agenda Template Review*
- e. RSTC 2020 Calendar Review*

7. Reliability Issues Steering Committee (RISC) Status Report – Information – Vice Chair Zwergel

8. Forum and Group Reports – Information

- a. North American Generator Forum – Allen Schriver
- b. North American Transmission Forum – Roman Carter

9. Chair’s Closing Remarks and Adjournment

*Background materials included.