

Meeting Minutes

Operating Reliability Subcommittee

May 5, 2020

WebEx meeting

Introductions and Chair's Remarks

The Operating Reliability Subcommittee (ORS) met on May 5, 2020 via WebEx Only. The meeting agenda and the attendance list are affixed as Exhibits A and B, respectively.

NERC Antitrust Compliance Guidelines, Public Announcement, and Participant Conduct Policy

ORS Chair Chris Pilog convened the meeting at 11:00 a.m. Eastern on May 5. Secretary Darrell Moore announced that a quorum was present, read the Notice of Public Meeting and referred the Subcommittee to the NERC Antitrust Compliance Guidelines.

Agenda

1. **Meeting Minutes* – (Approve)** the subcommittee approved the minutes of the Feb 11-12, 2020 ORS meeting. Bryan Woods made a motion to approve the minutes as amended with the necessary corrections.
2. **Balancing Authority-to-Reliability Plans** – Updates have been made to Western Interconnection (WI) Balancing Authority (BA) areas due to the changes across the WI Reliability Coordinators (RC) footprints.
3. **RC Reliability Plans** – The ORS endorsed the following RC Reliability Plans with minor changes and additions to the plans. The ORS will present PJM Interconnection LLC (PJM), Midcontinent Independent System Operator, Inc. (MISO) and the Tennessee Valley Authority (TVA's) RC Reliability Plans to the Reliability and Security Technical Committee (RSTC) during the June 2020 RSTC meeting held via WebEx.
 - a. PJM RC Reliability Plans with minor changes in the appendix and updated hyperlinks. Updated name change for Transmission Owner (TO) in the Transmission Owner Operator list
 - b. MISO Reliability RC Plans changes included integrating new TO Republic Transmission into MISO on June 1, 2020.
 - c. TVA Reliability RC Plans had minor changes and was an off cycle review. References to Alcoa Power Generating Inc. (APGI) and Electric Energy Incorporate (EEI) were removed as member entities.
4. **Resources Subcommittee (RS) update to ORS** – Sandip Sharma provided an update on the RS activities and their working groups. Sandip discussed several key efforts that the RS supports in the area of frequency and balancing. Sandip provided an overview of the RS structure and the various performance standards that the RS supports. Sandip also noted that the RS is in the process of updating their scope document to reflect the recent changes to the NERC committee structure.

There is a desire to the continued interaction between the RS and the ORS on frequency events, it was noted that the ORS could have the ability to collaborate with the RS Frequency Working Group on some frequency events that reach a certain threshold.

5. **RSTC and ORS 2019 Work Plan Update – Chair Pilong** No changes to ORS work plan, the plan will be updated to coincide with the RSTC work plan and updates.
6. **RSTC Update – Stephen Crutchfield** provided an update on the RSTC membership, the March 4, 2020 meeting highlights, Executive Committee, the Nominating Subcommittee, and the Transition Plans. Stephen noted that the Sector Representatives were approved by the Board at its February 6, 2020 meeting. Stephen provided an overview of the at-large members and reviewed items that were discussed during the March 4, 2020 meeting. The RSTC has been holding weekly conference calls to develop the transition plan. Stephen also noted that the RSTC membership will be reviewing existing subgroups and work plans through the end of May.
7. **SMS – Timothy Fritch** provided an overview of the Synchronized Measurement Subcommittee (SMS) and some of the work that they are doing in the area of Oscillation Detection and Analysis. The group has mainly been focused on Oscillation Analysis utilizing PMUs, and inverter based resource monitoring. The group is currently developing a paper for providing guidance to entities on oscillation studies, alarm thresholds and mitigations for local and system oscillations. Tim noted that moving forward the SMS will be focusing more on real-time events and applications and would like to work closer with the ORS. With the current changes across the NERC committee structure there may be some opportunities for SMS to have better alignment with other subcommittees like the ORS.
8. **Operations Review – All RC members** of the subcommittee discussed COVID-19 and operating events that occurred within their reliability footprints during the spring months.
 - a. The Bulk Electric System (BES) performed well throughout the spring season, with no major issues. RCs are monitoring their load forecasting closer due to the impacts of COVID-19.
 - b. Several RCs reported mild to warmer weather and flooding across their footprints during the spring months.
 - c. Several RCs reported colder than normal weather across their footprints during the spring months including record snowpack.
 - d. Several RCs experienced above average rain and some RCs experienced dryer than normal conditions, to include wildfire activity across their footprints.
 - e. Most RCs experienced lower loads, and varying peaks across the weekends and week days due to COVID-19 impacts on society and businesses. Some RCs are not experiencing any changes to their load pattern in general. Several RCs are beginning to see their load increase as summer approaches.
 - f. Some RCs set new peaks across their footprints for the month of April.
 - g. During the month of February 2020 thru April 2020, RCs experienced wet, dry, and cooler than normal temperatures and some tornadic conditions across their footprints depending on their geographic location. Some RCs experienced colder than normal temperatures and set all-time

demand and generation peaks across their footprint. There were no Energy Emergency Alerts (EEA) 3s declared across the RC Footprints. Some RCs set new wind penetration records. There were no gas or fuel issues.

- 9. Use of Proxy Flow gates – 1 ea. Linwood Ross** of VACAR South presented a Proxy Flow gate on the Nagel-Cane River 230kV line. Linwood noted that there is ongoing transmission work to complete upgrades required for Combined Cycle Units that will be coming online. This work will be completed by May 22, 2020.

10. Energy Emergency Alert Level 3 – N/A

11. Interconnection Frequency Monitoring

- a. Eastern – Terry Williams: Nothing to report.
- b. ERCOT – Jimmy Hartmann: Nothing to report.
- c. Western – Tim Reynolds: Nothing to report.
- d. Quebec – Stéphane Desbiens: Nothing to report.
- e. Review of Frequency Monitor Criteria – Terry Williams of TVA discussed the criteria that TVA is using as the current frequency monitor for the Eastern Interconnection (EI). Upon discussion of whether this current criteria still meets the objective of the frequency monitor, the ORS will revisit this topic during the September ORS meeting. The ORS will continue to collaborate and discuss this topic at the September ORS meeting to determine if the frequency monitoring is still warranted or should be retired since the current BAAL standard has been in place over the past several years and includes frequency monitoring.

- 12. Grid Security Emergency (GSE) Communication – Lynna Estep** provided an update on the Grid Security Emergency (GSE). Lynna discussed how the Grid Security Emergency would work, and what it applies to. Including Cyber Attacks, Physical Attacks, GMD Events, and EMP Attacks. Lynna noted that it does not apply to natural disasters (e.g., fire, hurricane, etc.). Lynna provided a timeline for the GSE activities that have taken place to date and noted that the GSE Communications Project Team was formed in late 2019. Members of the project team include NATF Members, NERC ORS Executive Committee, NERC Staff, NERC E-ISAC staff, and NATF Staff.

- 13. RCIS Practice/Alignment Document Update – Chris Pilong** provided an update and noted that the RCIS document had been sent out to the ORS members for comment. The comments were accepted and included in the updates to the final version of the RCIS document. Chris Wakefield made a motion to accept the document as written and a second motion was made to accept the changes for the final document. The new version 5 will be posted on the RCIS site.

- 14. SAFNR v3 Update – Darrell Moore and Mike Legatt** provided an update on the current status of providing SAFNR to the RCs. Darrell noted that the vendor is currently working on a tool to assist with the implementation of the RC models and will be working with each of the RCs to bring their models into SAFNR v3. Mike also provided an update on their work with the models and the ongoing efforts to incorporate oscillation detection into SAFNR and the work with University of Tennessee at Knoxville (UTK) on oscillation detection.

- 15. Interchange Distribution Calculator (IDC) Steering Committee (SC) Update – Chris Wakefield** provided an update of the ongoing work within the IDC SC. Chris noted that the Parallel Flow Visualization (PFV) will be on hold until Q4 2020 or Q1 of 2021. They are continuing to work on change orders. There is still some solutions to discuss with EIDSN and conversations that needs to take place within the RCIS 2021 project amongst EIDSN, the RCs, and NERC.
- 16. Round Table Open Discussion – (All)** the group agreed to change the weekly NERC RC Emergency Pandemic calls to bi-weekly. Sam Chanoski provided an update on GridEx VI and noted that they are seeking greater input from the RC organizations to help enhance the experience and continue to advance GridEx across the RC footprints. They also discussed the recent Executive Order (EO) and what this potentially means for the BES.

Adjourn

There being no further business before the ORS, Chair Pulong adjourned the meeting on Tuesday May 5, 2020 at 4:00 p.m. Eastern.

Darrell Moore

Darrell Moore
Secretary

Agenda

Operating Reliability Subcommittee

May 5, 2020 | 11:00 a.m. – 5:00 p.m. Eastern

[WebEx Only \(Updated\)](#)

Dial-in Number: + 1-415-655-0002 US Toll (Canadian Toll) + 1-416-915-8942

Meeting Number Access Code: 478 378 447 | Security Code: 246810

Introductions and Chair's Remarks

NERC Antitrust Compliance Guidelines, Public Announcement, and Participant Conduct Policy

Agenda

1. Administrative

- a. Arrangements, Safety Briefing – Chair Piong
- b. Announcement of Quorum – Secretary
 - i. Operating Reliability Subcommittee (ORS) Roster*
- c. Parliamentary Procedures* – Secretary
- d. Balancing Authority-to-Reliability Coordinator Mapping* – Secretary
- e. Future Meetings – Secretary
 - i. Sept 9-10, 2020 | Salt Lake City Utah | Hosted by WECC
 - ii. Nov 4-5, 2020 | Taylor TX | Hosted by ERCOT
 - iii. Feb 9-10, 2020 | Tampa FL | Hosted by FRCC RC (Tentative)
 - iv. Schedule future meetings

2. Meeting Minutes* (Approve) – Chair Chris Piong

- a. [Minutes](#) of Feb 11-12, 2020 Operating Reliability Subcommittee Meeting

3. Reliability Plans* Chair Piong

- a. Periodic Review of Reliability Plans
 - i. Guideline for Approving Regional and Reliability Coordinator Reliability Plans*
- b. New or Revised Reliability Plans for Endorsement
 - i. PJM Reliability RC Plans*
 - ii. MISO Reliability Plans*

- iii. TVA Reliability Plans*
- 4. Review of 2020 ORS Work Plan* – All**
- 5. RSTC 2020 Work Plan Update* – Steve Crutchfield**
- 6. Resource Subcommittee Update – Sandip Sharma**
- 7. SMS Update- Timothy Fritch**
- 8. RSTC Update* – Steve Crutchfield**
- 9. Operations Review – All**
 - a. Operations Review
 - b. Use of Proxy Flowgate
 - c. Energy Emergency Alert Level 3
- 10. TVA Reliability Coordinator Responsibilities as Eastern Interconnection Frequency Monitor – Terry Williams***
- 11. Interconnection Frequency Monitoring***
 - a. Frequency Monitor Reports and Frequency Excursions
 - b. Frequency Monitor criteria (Terry Williams)
 - i. Eastern – Terry Williams
 - ii. ERCOT – Jimmy Hartmann
 - iii. Western – Tim Reynolds
 - iv. Quebec – Stéphane Desbiens
 - c. Review of Frequency Monitor Criteria – Chair Pilog
- 12. Grid Security Emergency (GSE) Communications – Lynna Estep***
- 13. RCIS Practice/Alignment Update* – Chair Pilog**
- 14. SAFNR v3 Update**
- 15. IDC SC Update – Chris Wakefield**
- 16. Round Table Open Discussion (Open) – All**

*Background materials included.

Attendees
Operating Reliability Subcommittee Meeting
May 5, 2020
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Officers	
Chair	Christopher Pilong (PJM RC) (Phone)
Vice Chair	Jimmy Hartmann (ERCOT RC) (Phone)
Secretary and Staff Coordinator	Darrell Moore (NERC) (Phone)

Members			
Organization	Name	Organization	Name
AESO RC	Darren Wilkie (Phone)	Peak Reliability RC	Not Present
BC Hydro RC	Asher Steed (Phone)	RC West	Tim Beach (Phone)
FRCC RC	Raj Venkat (Phone)	Southeastern RC	Chris Wakefield (Phone)
HQT RC	Stéphane Desbiens (Phone)	SPP RC	Bryan Wood (Phone)
IESO RC	Kyle Russell (Phone)	TVA RC	Terry Williams (Phone)
ISO-NE RC	John Norden (Phone)	VACAR South RC	Linwood Ross (Phone)
MISO RC	Raja Thappetaobula (Phone)	WAPA/MRO	Steve Sanders (Phone)
NCEMC	Richard McCall (Phone)	We Energies	Not Present
NYISO	Lacy Skinner (Phone)	WECC	Tim Reynolds (Phone)

Guests			
Industry Guests			
Organization	Name	Organization	Name
City of Tallahassee	Alan Gale	SERC	Martin Sas (Phone)
	Carlos Pesantez (Phone)	ResilientGrid	Michael Legatt (Phone)
SERC	Dave Krueger (Phone)	NAES	Mickey Bellard (Phone)
ERO Insider	Holden Mann (Phone)	ERCOT	Sandip Sharma
ANL	Jim Kavicky (Phone)	TVA	Timothy Fritch (Phone)
SOS	Linda Perez	FRCC RC	Vince Ordax (Phone)
NATF	Lynna Estep (Phone)	SPP	Yasser Bahbaz (Phone)
Hydro Quebec	Marie-Ève Bergeron (Phone)		

NERC Staff			
Bill Graham (Phone)	Sam Chanoski (Phone)	Stephanie Lawrence (Phone)	Stephen Crutchfield (Phone)
Tony Burt (Phone)			