

# Minutes - DRAFT

## Essential Reliability Services Working Group

### Face to Face Meeting

August 2, 2017 | 12:00 – 5:00 p.m. Eastern Time

August 3, 2017 | 8:00 a.m. – 12:00 p.m. Eastern Time

#### Meeting Location:

NERC Offices  
3353 Peachtree Road NE  
Suite 600, North Tower  
Atlanta, GA 30326

In Person Participation: [MEETING REGISTRATION](#)

Remote Participation: Click on the registration link below for WebEx and receive access to the conference

Teleconference: +1-415-655-0002 US Toll | +1-416-915-8942 Canada Toll

#### **WebEx August 2<sup>nd</sup> Meeting**

WebEx URL: [Join WebEx meeting](#)

Meeting number (access code): **738 102 706**

Meeting password: **ERSWG2017**

#### **WebEx August 3<sup>rd</sup> Meeting**

WebEx URL: [Join WebEx meeting](#)

Meeting number (access code): **732 532 670**

Meeting password: **ERSWG2017**

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#### Agenda Items

**Wednesday, August 2, 2017 (Lunch Provided)**

**12:00 – 1:00 PM Working Lunch**

**1:00 – 1:30 PM** (Times listed are consistent with the agenda and do not reflect actual time of discussions)

##### **1. Administrative**

- a. Welcome and Introductions – *Nicole Segal, NERC Staff*
- b. [NERC Antitrust Compliance Guidelines](#) – *Nicole Segal, NERC Staff*
- c. Facilities & Safety Briefing – *Janelle Law, NERC Staff*
- d. Chairs Reports– *Brian Evans-Mongeon, and Todd Lucas ERSWG Co-Chairs*
  - i. Chairs' comments – Commended the work of the group. Noted that there are paths to completion on many aspects of frequency, ramping, voltage, and some aspects of DER. The chairs indicated a possibility that the ERSWG may be able to dissolve at the end of the year, with the exception of select activities. Leaders asked participants for engagement during the meeting.
  - ii. Review June 7, 2017 Meeting Minutes – Approved after receiving no comments.

- iii. Review Agenda – Noted that Clyde Loutan will not be present to give CAISO Presentation in person. Welcomed Dave Haas, who will be presenting on the Vermont system later in the agenda, and joins ERSWG and DERWG.
- iv. Next meeting confirmation/Future Meetings –
  - (1) September 13, 2017 – 12 PM to 5 PM, Quebec City, Quebec, Canada
  - (2) November (Need and Location are TBD). – Could be done as a webinar if needed. Necessity for this meeting will be based on outcomes from the work today and tomorrow.
- v. IEEE 1547 Workshop August 9, at FERC Offices in Washington D.C. ([IEEE Registration Link](#))

### **1:30-3:30 PM**

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## **2. Measures 1 – Measures 4 Frequency Response Update – Frequency Subgroup**

- a. Updates from the Resources Subcommittee’s July meeting relative to the historical perspectives from each of the interconnections and the advancing the data into the SOR processes.
  - i. Troy Blaylock informed the ERSWG on progress. Measure 1: Troy indicated that the RS has completed its review of the historical data and that the RS is ready to move the data along to the PAS for ultimate inclusion in the SOR process. Measure 2: effort is underway to develop load damping factors for use in ROCOF calculations. Measure 4: Reviewed presentation from Resource Subcommittee (RS) showing frequency response following frequency events for 2016. The ERSWG agreed that the RS has demonstrated their ability to take over the historical measures. They agreed that the RS still some more work to do to refine the Measure 4 sub-measures, and will work with another year of data. The ERSWG is comfortable handing-off of this measure to the RS. The Policy Subgroup of ERS was tasked with beginning work on a technical brief; likely one technical brief covering all measures (Measures 1 through Measure 4).
- b. Update on development of forward looking Measure 1 - Measure 4 analysis methods
  - ii. Julia Matesovajana reviewed analysis approaches used in ERCOT, Quebec, Eastern Interconnection, and Western Interconnection. ERS discussed future direction to analyze inertia and frequency trends in the East and West including the use of 5-years out spring light-load case as starting point. The ERSWG affirmed support for the presented approach. A feeder document has been developed for input to the 2017 Long Term Reliability Assessment (LTRA). The proposed document will be provided to the ERSWG for review, with responses requested by August 21, 2017. A revised draft of the document is anticipated by the end of September.
- c. Discussion on the discontinuance/retention of Measure 3
  - i. Troy Blaylock updated the ERSWG on progress. The subgroup is bringing in historical data from 2-3 BAs in east and west; and will need to do further analysis on this data before developing recommendations on the value of collecting either historical or forward looking BA level data . Further discussion/decision will occur at the September and or November meetings.

**3:30 – 3:45 PM Break**

**3:45 – 5:00 PM**

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**3. Measure 6 BA Level Net Demand Ramping Variability – Ramping Subgroup**

- a. Update on historical CPS1 analysis (Measure 6)
  - i. Rodney O’Bryant presented the analysis approach developed by the subgroup. BAs in East and West that have increasing trends for number of CPS1 exceedances were selected for outreach. Causes for increasing trends vary by entity. The subgroup has developed a final disposition paper. The ERSWG agreed that policy subgroup should draft a technical brief for using CPS1 metric for historical Measure 6. It is intended and recommended that the continuing historical Measure 6 process, analysis, and BA outreach will be managed under the Resources Subcommittee.
- b. Update on future ramping document for LTRA (coordination with RAS)
  - i. Rodney O’Bryant presented the proposed process. Under the draft process, the Reliability Assessments Subcommittee (RAS) will request BA screening data via the LTRA, perform screening and outreach with BAs. The subgroup has asked for recommended changes; with a target completion by Sept 15, 2017. The ERSWG agreed with the direction and supports subgroup’s coordination with RAS.

**Thursday, August 3, 2017**

**8:00 – 9:00 AM**

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**4. Voltage and Reactive Capability on the System – Voltage Subgroup**

- a. Perspectives on Forward Looking Voltage/Reactive needs
  - i. The ERSWG discussed data availability for assessing trends in system voltage and reactive needs. Indication of voltage problems and trends are of interest to the Performance Analysis Subcommittee (PAS) and a potential topic for the State of Reliability (SOR) Report. A potential interest item is the trend toward more reactive support devices, in terms of areas or interconnections (e.g., how much are the devices replacing the reactive support from generators). The challenges in getting a forward looking measure were discussed. A recommendation was made to instead seek data on reactive power devices for historical analysis. The ERSWG agreed to discuss approaches with the Planning Committee (PC), such as utilizing the Transmission Availability Data System (TADS) working group to obtain data on failure/misoperation of FACTS devices, SVCs. This item will be discussed at the Planning Committee.

**5. Short Circuit Ratio Discussion Measure 10 – Mohamed Osman**

- a. Update on Short Circuit Model
  - i. Mohamed presented short circuit case benchmarking approach, initial findings, and future steps. Discrepancies are reported through the NERC regional entities for further effort. A

white paper has been developed and circulated with the regions for comments and edit. ERS members suggested including a clear purpose statement in the white paper.

**9:00 –10:30 AM**

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**6. Distributed Energy Resources – DER Subgroup**

- a. Provide a status update on MOD-32 SAR
  - i. Brian Evans-Mongeon reported that the Standards Committee (SC) accepted the SAR and combined with a related SAR to become Project 2017-07. SARs are posted for comment through August 30. Nominations are being solicited for the project through August 14.
- b. Update on draft technical brief/reliability guide to provide guidance on DER data needs for TPs, BAs, & TOPs/RCs.
  - ii. Rich Hydzik provided an overview of the guideline. It was aimed at raising awareness about DER data needs. More detailed guidelines should be developed by another group (e.g., LMTF's guideline in development). The current draft provides considerations for various functional entities in regards to DER related data needs. The ERSWG also discussed concerns with DER impacts, such as interaction with UFLS and DER impacts during restoration scenarios. The ERSWG agreed that the PC should consider addressing DER impact on UFLS, and the potential need for entities to review UFLS feeders. The ERSWG discussed concerns with DER impact on a full restoration scenario. Potentially, an over frequency scenario could occur in an island being energized if DER began supplying when not expected. The ERSWG agreed that, as a first guideline, there should not be an expectation that it is perfect. The guideline will help raise industry awareness and should evolve. The draft guide is expected to be ready for December 2017.
  - iii. Discussion points for consideration in the guideline document:
    - (1) Promote awareness of what is on the system.
    - (2) DER location is critical information for planners and operators
    - (3) Flexibility is needed in terms of data granularity as entity needs will differ.
    - (4) The intended audience is to be industry/entity level (OC/PC). The policy subgroup will adapt information from the technical guideline to help inform regulator/policy decisions. Example data can be show in an appendix.
- c. Discussion on T-D interface topics (in reference to existing DER Final Report documentation)
  - i. Work with IEEE has been initiated. ERS discussed the opportunity to potentially contribute during a future IEEE meeting session or paper opportunity.
- d. Load Forecasting Progress
  - i. The ERSWG discussed the issue of having an accurate load forecast given penetration and trends in DER. They recognized the need to improve resources for load forecasters that can better account for DER. They discussed the possibility of working in conjunction with and or taking advantage of new guidance, such as LMTF guidelines or the data collection guidance. The ERSWG noted that load forecasting practices across the industry are not clear. Some entities use multiple tools. It was suggested to conduct an information

gathering effort to find out what the industry is doing, share information, and develop best practices. Participants discussed whether this should be an ERSWG activity, or OC? Or RS? The ERSWG discussed activity underway on load forecasting within IEC, which should result in a Technical Report examining integration of wind and solar in load forecasting. The ERSWG agreed to seek input from the PC on next steps.

**10:30 – 10:45 AM Break**

**10:45 –11:30 AM**

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**7. Policy Subcommittee – Policy Subgroup**

- a. Updates on reaching out to policy makers and any other on-going activities
  - i. Mark Ahlstrom reported that he participated in the Variable Energy Resources (VER) workshop for the past 2 days; Reviewing posted guideline on Incorporating VER in Weak Grid. Comments are due by August 25. The ERSWG is invited to contribute. Nicole Segal reported that there is a Sept 19-20, 2017 D.C. Workshop on Non-Synchronous Generation Attributes and System Operations sponsored by the NAGF & UVIG. He also reported working with IEEE TF on frequency response and contributing; trying to foster some common terminology.

**11:30 AM – 12:00 PM**

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**8. Other Measures, Open Issues and New Items**

- a. Vermont System Planning Committee – Discussion on the Sheldon/High gate Export Limit.
  - i. Dave Haas provided an informational brief. The ERSWG is familiar with challenges of renewable integration in dense areas. The presentation illustrates that integrating renewables presents challenges that are relevant to ERS even though the area is less populated.
- b. Round table and parking lot discussion – No new issues were presented.
- c. Reminder next meeting: **Quebec City, Quebec, Canada, Hotel cutoff August 21, 2017 12:00 PM**

**ADJOURN**