**AGENDA**

**ERCOT Reliability Operations Subcommittee (ROS) Meeting**

ERCOT Austin / 7620 Metro Center Drive / Austin, Texas 78744

**Thursday, February 6, 2019 / 9:30 a.m.**

[**http://ercot.webex.com**](http://ercot.webex.com)

Meeting Number: 623 475 799

Meeting Password: ROS

Teleconference: 1.877.668.4493

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| 1. | Antitrust Admonition | K. Bunch | 9:30 a.m. |
| 2. | Agenda Review | K. Bunch |  |
| 3. | **Approval of ROS Meeting Minutes (Vote)** | K. Bunch | 9:35a.m. |
|  | * **January 9, 2019** |  |  |
| 4. | Technical Advisory Committee (TAC) Update | K. Bunch | 9:40 a.m. |
| 5. | **2020 ROS Working Group/Task Force Leadership (Vote)** | K. Bunch | 9:45 a.m. |
| 6. | 2020 ROS Goals (Possible Vote) | K. Bunch | 9:50 a.m. |
| 7. | ERCOT Reports |  | 9:55 a.m. |
|  | * Operations Report | ERCOT Staff |  |
|  | * System Planning Report | J. Billo |  |
|  | * Inverter-Based Resources Update | J. Billo |  |
|  | * ERCOT Interconnection Inertia Analysis | J. Matevosjana |  |
|  | * MIS/ERCOT.com Enhancements | A. Lofton |  |
| 8. | **New Protocol Revision Subcommittee (PRS) Referrals (Vote)** | K. Bunch | 10:35 a.m. |
|  | * **NPRR987, BESTF-3 Energy Storage Resource Contribution to Physical Responsive Capability and Real-Time On-Line Reserve Capacity Calculations** |  |  |
|  | * **NPRR989, BESTF-1 Energy Storage Resource Technical Requirements** |  |  |
| 9. | Revision Requests Tabled at PRS, Referred to ROS (Possible Vote) | K. Bunch | 10:50 a.m. |
|  | * NPRR953, Addition of Relay Loadability Rating Definition |  |  |
| 10. | **ROS Revision Requests (Vote)** | K. Bunch | 10:55 a.m. |
|  | ***Impact Analysis Review*** |  |  |
|  | * **NOGRR202, Align Nodal Operating Guide with the Posting Timeline in Procedure for Calculating Responsive Reserve (RRS) Limits for Individual Resources** |  |  |
|  | * **PGRR075, Dynamic Model Quality Requirement** |  |  |
|  | * **NOGRR196, Related to NPRR973, Add Definitions Generator Step-Up and Main Power Transformer** |  |  |
|  | * **PGRR074, Related to NPRR973, Add Definitions Generator Step-Up and Main Power Transformer** |  |  |
|  | * **RRGRR022, Related to NPRR973, Add Definitions Generator Step-Up and Main Power Transformer** |  |  |
|  | ***Language Review*** |  |  |
|  | * **NOGRR205, Clarification to Grey-boxed Language in Section 4.8.1** |  |  |
|  | * **PGRR077, DC Tie Planning Assumptions** |  |  |
| 11. | Revision Requests Tabled at ROS (Possible Vote) | K. Bunch | 11:20 a.m. |
|  | * PGRR073, Related to NPRR956, Designation of Providers of Transmission Additions |  |  |
|  | * PGRR076, Improvements to Generation Resource Interconnection or Change Request (GINR) Process (PLWG) |  |  |
|  | * RRGRR021, Dynamic Model Requirement for TSAT |  |  |
|  | * NOGRR200, Delete Remaining Grey-Boxed Language Associated with NOGRR025, Monitoring Programs for QSEs, TSPs, and ERCOT |  |  |
| 12. | Network Data Support Working Group (NDSWG) | B. Ravulapati | 11:50 a.m. |
|  | * NPRR979, Incorporate State Estimator Standards and Telemetry Standards into Protocols (NDSWG) (Possible Vote) |  |  |
|  | * NOGRR199, Related to NPRR979, Incorporate State Estimator Standards and Telemetry Standards into Protocols (NDSWG) (Possible Vote) |  |  |
| 13. | Operations Working Group (OWG) | OWG Leadership | 12:00 p.m. |
|  | * NOGRR195, Generator Voltage Control Tolerance Band (OWG) (VPWG) (Possible Vote) |  |  |
|  | * NOGRR204, Related to NPRR989, BESTF-1 Energy Storage Resource Technical Requirements (OWG) (PDCWG) (Possible Vote) |  |  |
| 14. | Dynamic Working Group (DWG) | DWG Leadership | 12:10 p.m. |
|  | * **DWG Procedure Manual Updates (Vote)** |  |  |
| 15. | Steady State Working Group (SSWG) | SSWG Leadership | 12:25 p.m. |
| 16. | Performance Disturbance Compliance Working Group (PDCWG) | PDCWG Leadership | 12:35 p.m. |
| 17. | Operations Training Group (OTWG) | OTWG Leadership | 12:45 p.m. |
| 18. | Planning Geomagnetic Disturbance Task Force (PGDTF) | PGDTF Leadership | 12:50 p.m. |
| 19. | Voltage Profile Working Group (VPWG) | VPWG Leadership | 1:00 p.m. |
| 20. | Other Business | K. Bunch | 1:10 p.m. |
|  | * DGR Workshop III and IV | Blevins/Stice |  |
|  | * Reactive Power Coordination (RPC) Workshop | S. Solis |  |
|  | * Review Open Action Items |  |  |
|  | * No Report: |  |  |
|  | * + Black Start Working Group (BSWG) |  |  |
|  | * + Planning Working Group (PLWG) |  |  |
|  | * + System Protection Working Group (SPWG) |  |  |
|  | Adjourn | K. Bunch | 1:30 p.m. |
|  | Future ROS Meetings |  |  |
|  | * March 5, 2020 |  |  |
|  | * April 2, 2020 |  |  |

| Open Action Items | Responsible | Assigned |
| --- | --- | --- |
| Inverter-Based Resource Issue 3, Voltage Ride through | DWG | 07/11/2019 |
| Inverter-Based Resource Issue 4, Dynamic Models | DWG | 07/11/2019 |
| ERCOT Nodal ICCP Communication Handbook – update to include review of what is binding and what is nonbinding, consider what is in reference material, OBD and Operating Guide, and then figure out repository | NDSWG | 05/02/2019  04/04/2019 |
| TAC Assignment: Reliability considerations regarding Outage Activity Related to Operating Condition Notice (OCN) | OWG to look at Operating Guides to confirm consistent after WMS/WMWG review the issues | 07/11/2019 |
| Evaluating and improving ERCOT’s Dynamic Frequency Response Model | PDCWG | 07/11/2019 |
| *Southern Cross Directives*  SCT Directive 3: Determination of Ramp Rate Restrictions  Directive 9, Ancillary Services   * Issues related to study of frequency overshoot and LRs UFR setting * Margin between min RRS Procurement & Contingency Reserve Requirements   Address issues related to NSRS and Regulation Service | ROS  PDCWG  DWG  OWG/PDCWG  PDCWG | 03/07/2019 |
| TAC Assignment: Summer Assessment Items   * Switchable Generation Resources (SWGRs) with Exelon items * Emergency Response Service (ERS) * Process for Summer demand response study (RMS,WMS then ROS) * Non-Frequency Responsive Capacity (NFRC) versus Physical Responsive Capability (PRC) reserves when Gen RRS is released | OWG  OWG  ROS  PDCWG | 12/05/2019 |