**AGENDA**

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

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

**Thursday, October 3, 2019 / 9:30 a.m.**

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

Meeting Number: 297 962 409

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 | 9:35 a.m. |
|  | * **August 8, 2019** * **September 5, 2019** |  |  |
| 4. | Technical Advisory Committee (TAC) Update | K. Bunch | 9:40 a.m. |
| 5. | ERCOT Reports |  | 9:45 a.m. |
|  | * Operations Report | ERCOT Staff |  |
|  | * System Planning Report | F. Huang |  |
|  | * Inverter-Based Resources Update | F. Huang |  |
|  | * Energy Storage Update | S. Sharma |  |
| 6. | **New Protocol Revision Subcommittee (PRS) Referrals (Vote)** | K. Bunch | 10:15 a.m. |
|  | *No referrals from 9/12/2019 PRS Meeting* |  |  |
| 7. | Revision Requests Tabled at PRS, Referred to ROS (Possible Vote) | K. Bunch | 10:15 a.m. |
|  | * NPRR955, Define Limited Impact Remedial Action Scheme (RAS) (OWG) |  |  |
| 8. | **Urgency Vote(s) Vote** | K. Bunch | 10:15 a.m. |
|  | **NOGRR197, Align Responsive Reserve (RRS) Manual Deployment Requirements with Current Practice** |  |  |
| 9. | **ROS Revision Requests (Vote)** | K. Bunch | 10:30 a.m. |
|  | ***Language Review*** |  |  |
|  | * **NOGRR197, Align Responsive Reserve (RRS) Manual Deployment Requirements with Current Practice** |  |  |
|  | * **RRGRR021, Dynamic Model Requirement for TSAT** | P. Gnanam |  |
|  | *Impact Analysis Review (None)* |  |  |
| 10. | Revision Requests Tabled at ROS (Possible Vote) | K. Bunch | 10:55 a.m. |
|  | * PGRR073, Related to NPRR956, Designation of Providers of Transmission Additions |  |  |
|  | * NOGRR183, Remedial Action Scheme (RAS) Submittal and Review Requirements (PLWG/OWG) |  |  |
|  | * NOGRR190, Related to NPRR937, Distribution Voltage Level Block Load Transfer (BLT) Deployment (OWG) |  |  |
|  | * NOGRR195, Generator Voltage Control Tolerance Band | F. Garcia |  |
| 11. | Performance Disturbance Compliance Working Group (PDCWG) | C. Mulholland | 11:25 a.m. |
|  | * NPRR963, Creation of Generation and Controllable Load Resource Group (GCLR Group) (PDCWG) (Possible Vote) |  |  |
|  | * **Methodology to Calculate Responsive Reserve Service (RRS) Limits (Vote)** |  |  |
| 12. | Planning Working Group (PLWG) | T. Cook | 11:40 a.m. |
|  | * NPRR964, Improvement of RMR Process and Removal of Synchronous Condenser Unit and Agreement (PLWG) |  |  |
|  | * PGRR071, Update Interconnection Process Timetables to Align with NPRR926 (PLWG) |  |  |
| 13. | Steady State Working Group (SSWG) | B. Hithersay | 11:555 a.m. |
|  | * NPRR953, Addition of Relay Loadability Rating Definition (SPWG) (SSWG) (Possible Vote) |  |  |
| 14. | Planning Geomagnetic Disturbance Task Force (PGDTF) | A. Amahatsion | 12:00 p.m. |
|  | * PGDTF Scope (Possible Vote) |  |  |
| 15. | Other Business | K. Bunch | 12:10 a.m. |
|  | * 2020 ERCOT Membership/Segment Representative Elections | S. Clifton |  |
|  | * Review Open Action Items |  |  |
|  | * No Report: |  |  |
|  | * + Black Start Working Group (BSWG) |  |  |
|  | * + Dynamics Working Group (DWG) |  |  |
|  | * + Network Data Support Working Group (NDSWG) |  |  |
|  | * + Operations Training Working Group (OTWG)   + Operations Working Group (OWG)   + System Protection Working Group (SPWG)   + Voltage Profile Working Group (VPWG) |  |  |
|  | Adjourn | K. Bunch | 12:15 a.m. |
|  | Future ROS Meetings |  |  |
|  | * November 7, 2019 |  |  |
|  | * December 5, 2019 |  |  |

| Open Action Items | Responsible | Assigned |
| --- | --- | --- |
| SCT Directive 9: Ancillary Services; Issues related to study of frequency overshoot and LRs UFR setting | DWG |  |
| 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 |
| SCT Directive 9: Ancillary Services; Margin between min RRS Procurement & Contingency Reserve Requirements | OWG/PDCWG |  |
| TAC Assignment: Reliability considerations regarding Outage Activity Related to Operating Condition Notice (OCN) | ROS assigned to OWG to look at Operating Guides to confirm consistent after WMS/WMWG review the issues | 07/11/2019 |
| SCT Directive 9: Ancillary Services; Address issues related to NSRS and Regulation Service | PDCWG |  |
| BAL-001-TRE Standard Workshop Items | PDCWG |  |
| SCT Directive 3: Determination of Ramp Rate Restrictions | PDCWG | 03/07/2019 |
| Include Solar in monthly report | PDCWG | 07/11/2019 |
| Review ramp rate of DC ties in GTBD calculation | PDCWG | 07/11/2019 |
| Evaluating and improving ERCOT’s Dynamic Frequency Response Model | PDCWG | 07/11/2019 |
| TAC Assignment: Energy Storage Issue 2: Battery Energy Storage Operational Requirements   1. Address whether batteries should have different operational requirements when charging and discharging | ROS  PDCWG – Open meeting | 07/11/2019  07/11/2019 |
| TAC Assignment: Energy Storage Issue 5: Operations System Design Changes | ROS | 07/11/2019 |
| TAC Assignment: Energy Storage Issue 6: State of Charge/Limited Duration Considerations   * Develop appropriate battery state of charge requirements/procedures for Reliability-Unit Commitment (RUC) | ROS/WMS  OWG | 07/11/2019  08/08/2019 |
| TAC Assignment: Energy Storage Issue 7: Alternative Device Modeling Options | ROS/WMS | 07/11/2019 |