**DRAFT**

**Minutes of the Wholesale Market Subcommittee (WMS) Meeting**

**ERCOT Austin – 8000 Metropolis Drive (Building E), Suite 100 – Austin, Texas 78744**

**Wednesday, April 6, 2022 – 9:30 a.m.**

Attendance

*Members:*

|  |  |  |
| --- | --- | --- |
|  |  |  |
| Allen, Thresa | Avangrid Renewables | Via Teleconference |
| Barnes, Bill | Reliant Energy Retail Services |  |
| Bierschbach, Erika | Austin Energy | Via Teleconference |
| Burke, Tom | RWE Renewables |  |
| Cochran, Seth | DC Energy |  |
| Couch, Andrea | TNMP | Via Teleconference |
| DeLeon, Amanda | Tenaska Power Services | Via Teleconference |
| Detelich, David | CPS Energy | Via Teleconference |
| Dreyfus, Mark | City of Eastland | Alt. Rep. for Jamie Mauldin |
| Farhangi, Anoush | Demand Control 2 | Via Teleconference |
| Franklin, Russell | Garland Power & Light  | Via Teleconference |
| Foster, Ashley | The Dow Chemical Company | Via Teleconference |
| Goff, Eric | Residential Consumer |   |
| Greer, Clayton | Morgan Stanley |  |
| Gross, Blake | AEP Service Corporation |  |
| Haley, Ian | Luminant Generation |  |
| Hunsaker, David | Chariot Energy | Via Teleconference |
| Lange, Clif | South Texas Electric Cooperative | Via Teleconference |
| Lindberg, Ken | Bryan Texas Utilities | Via Teleconference |
| Nguyen, Andy | Lower Colorado River Authority |  |
| Pokharel, Nabaraj | Residential Consumer | Alt. Rep. for Eric Goff re: NPRR1100 Via Teleconference |
| Powell, Christian | Pedernales Electric Cooperative |  |
| Ritch, John | Gexa Energy |  |
| Sams, Bryan | Calpine Corporation |  |
| Smith, Mark | Nucor | Via Teleconference |
| Surendran, Resmi | Shell Energy |  |
| Turner, Lucas | South Texas Electric Cooperative | Alt. Rep. for Clif Lange |
| Velasquez, Ivan | Oncor |  |
| Wall, Perrin | CenterPoint Energy |  |
| Wilson, Joe Dan | Golden Spread Electric Cooperative | Via Teleconference |

*Guests:*

|  |  |  |
| --- | --- | --- |
|  |  |  |
| Ainspan, Malcolm | NRG | Via Teleconference |
| Aldridge, Ryan | AB Power  | Via Teleconference |
| Anderson, Connor | AB Power Advisors | Via Teleconference |
| Anderson, Kevin | CES | Via Teleconference |
| Ashley, Kristy | Customized Energy Solutions |  |
| Benson, Mariah | PUCT | Via Teleconference |
| Blackburn, Don | Hunt Energy Network Power  | Via Teleconference |
| Blakey, Eric | Just Energy | Via Teleconference |
| Bruce, Mark | Cratylus Advisors | Via Teleconference |
| Chamberlin, Jennifer  | CPower | Via Teleconference |
| Claiborn-Pinto, Shawnee | PUCT | Via Teleconference |
| Coleman, Diana | CPS Energy | Via Teleconference |
| Comstock, Read | AB Power Advisors | Via Teleconference |
| Coultas, Ann | Enel Green Power | Via Teleconference |
| Evans, Mike | Brazos Electric Cooperative | Via Teleconference |
| Fazio, Danielle | Engelhart | Via Teleconference |
| Frank, Arushi | Tesla | Via Teleconference |
| Goff, Eric | Tesla | NPRR1100 Only |
| Graham, Sophie | Adapt2 Solutions | Via Teleconference |
| Haguewood, Ben | PUCT | Via Teleconference |
| Hartman, Carla | Adapt 2 | Via Teleconference |
| Hanson, Kevin | National Grid | Via Teleconference |
| Haguewood, Ben | PUCT | Via Teleconference |
| Headrick, Bridget | CES | Via Teleconference |
| Henry, Mark | Texas Reliability Entity | Via Teleconference |
| Henson, Martha | Oncor | Via Teleconference |
| Hubbard, John Russ | TIEC | Via Teleconference |
| Kee, David | CPS Energy | Via Teleconference |
| Kroskey, Tony | Brazos Electric Cooperative | Via Teleconference |
| Lee, Jim | TEC |  |
| Lookadoo, Heddie | Shell Energy | Via Teleconference |
| Lotter, Eric | GridMonitor | Via Teleconference |
| Petäjäsoja Ida | inBalance | Via Teleconference |
| Ramaswamy, Ramya | PUCT | Via Teleconference |
| Reedy, Steve | CIM View Consulting | Via Teleconference |
| Reid, Walter | Advanced Power Alliance |  |
| Rich, Katie | Golden Spread Electric Cooperative | Via Teleconference |
| Richmond, Michele | TCPA | Via Teleconference |
| Sandidge, Clint | Calpine  | Via Teleconference |
| Sager, Brenden | Austin Energy | Via Teleconference |
| Scott, Kathy | CenterPoint Energy |  |
| Siddiqi, Shams | Crescent Power Consulting | Via Teleconference |
| Singhrastogi, Rama | PUCT | Via Teleconference |
| Sithuraj, Murali | Austin Energy | Via Teleconference |
| Smith, Chase | Southern Power Company |  |
| Thurnher, Greg | MP2 Energy | Via Teleconference |
| True, Roy | ACES Power | Via Teleconference |
| Uy, Manny | Hunt Energy |  |
| Varnell, John | Tenaska Power Services | Via Teleconference |
| Villasana, Kristi | NBU | Via Teleconference |
| Walker, Floyd | PUCT | Via Teleconference |
| Williams, Lori | BTU | Via Teleconference |
| Wittmeyer, Bob | Longhorn Power | Via Teleconference |
| Wu, Tiffany | PUCT  | Via Teleconference |
| Yu, Joel | Enchanted Rock | Via Teleconference |

*ERCOT Staff:*

|  |  |  |
| --- | --- | --- |
|  |  |  |
| Albracht, Brittney |  | Via Teleconference |
| Anderson, Troy |  |  |
| Ayson, Janice |  | Via Teleconference |
| Barati, Camron |  | Via Teleconference |
| Bigbee, Nathan |  | Via Teleconference |
| Billo, Jeff |  | Via Teleconference |
| Boren, Ann |  |  |
| Clifton, Suzy |  |  |
| Day, Betty |  | Via Teleconference |
| Dwyer, Davida |  | Via Teleconference |
| Flores, Isabel |  | Via Teleconference |
| Garcia, Freddy |  |   |
| Gonzalez, Ino |  | Via Teleconference |
| Guiyab, Rochie |  | Via Teleconference |
| Hartmann, Jimmy |  | Via Teleconference |
| Holt, Blake |  | Via Teleconference |
| Huang, Fred |  |   |
| Hunsucker, Brett |  | Via Teleconference |
| Jenkins, Darrell |  | Via Teleconference |
| Jin, Julie |  | Via Teleconference |
| Kane, Erika |  | Via Teleconference |
| Kapiloff, Leonard |  | Via Teleconference |
| Khodabakhsh, Fred |  | Via Teleconference |
| Krein, Steve |  | Via Teleconference |
| Maggio, Dave |  | Via Teleconference |
| Mago, Nitika |  | Via Teleconference |
| Maul, Donald |  | Via Teleconference |
| McGuire, Josh |  | Via Teleconference |
| Moreno, Alfredo |  | Via Teleconference |
| Patterson, Mark |  |  |
| Phillips, Cory |  |  |
| Ragsdale, Kenneth |  | Via Teleconference |
| Raish, Carl |  | Via Teleconference |
| Roberts, Randy |  | Via Teleconference |
| Rosel, Austin |  | Via Teleconference |
| Ruane, Mark |  |  |
| Sharma, Sandip |  | Via Teleconference |
| Shaw, Pamela |  | Via Teleconference |
| Solis, Stephen |  | Via Teleconference |
| Troublefield, Jordan |  |  |
| Tucker, Don |  | Via Teleconference |
| Urquhart, Thomas |  | Via Teleconference |
| Warnken, Pete |  | Via Teleconference |
| Wattles, Paul |  | Via Teleconference |
| Woodfin, Dan |  | Via Teleconference |
| Xiao, Hong |  | Via Teleconference |

*Unless otherwise indicated, all Market Segments participated in the votes.*

Antitrust Admonition

Resmi Surendran directed attention to the Antitrust Admonition, which was displayed.

Agenda Review

Ms. Surendran reviewed items scheduled for a vote and noted changes to the agenda in consideration of the April 6, 2022 Special Protocol Revision Subcommittee (PRS) Meeting.

Approval of WMS Meeting Minutes (see Key Documents)[[1]](#footnote-1)

*February 2, 2022*

*March 2, 2022*

Market Participants reviewed the February 2, 2022 and March 2, 2022 WMS Meeting Minutes. Ms. Surendran noted these items could be considered for inclusion in the [Combined Ballot.](#Combined_Ballot)

Technical Advisory Committee (TAC) Update

Ms. Surendran reviewed the disposition of items considered at the March 30, 2022 TAC meeting.

ERCOT Operations and Market Items

*M-A040422-01, Three-Part Supply Offers used in the Reliability Unit Commitment (RUC) Optimization*

Dave Maggio summarized the parameter setting error ERCOT identified in the RUC process that impacted the RUC optimization, noted that ERCOT sent a Market Notice on April 4, 2022, and stated that because the issue did not affect RUC settlement or Day-Ahead Market (DAM) or Real-Time Market (RTM) pricing outcomes, ERCOT will not be correcting any prices or performing any Market resettlement.

WMS Revision Requests (see Key Documents)

*Impact Analysis*

*Settlement Metering Operating Guide Revision Request (SMOGRR) 025, Modifications to Line Loss Compensation Requirement for EPS Metering*

Market Participants reviewed the Impact Analysis for SMOGRR025. Ms. Surendran noted this item could be considered for inclusion in the [Combined Ballot.](#Combined_Ballot)

Wholesale Market Working Group (WMWG) (see Key Documents)

Bryan Sams reviewed WMWG activities.

Revision Requests Tabled at PRS or ROS and Referred to WMS (see Key Documents)

*NPRR981, Day-Ahead Market Price Correction Process*

*NPRR1058, Resource Offer Modernization for Real-Time Co-Optimization*

*NPRR1067, Market Entry Qualifications, Continued Participation Requirements, and Credit Risk Assessment*

*NPRR1070, Planning Criteria for GTC Exit Solutions*

*NPRR1084, Improvements to Reporting of Resource Outages and Derates*

*NPRR1088, Applying Forward Adjustment Factors to Forward Market Positions and Un-applying Forward Adjustment Factors to Prior Market Positions*

*Nodal Operating Guide Revision Request (NOGRR) 215, Limit Use of Remedial Action Schemes*

*NPRR1118, Clarifications to the OSA Process*

WMS took no action on these items.

*NPRR1100, Emergency Switching Solutions for Energy Storage Resources*

Mr. Sams summarized NPRR1100 discussion at the March 25, 2022 WMWG meeting. Eric Goff reviewed NPRR1100 and stated that while Tesla supports the stakeholder process, in consideration of the pending project timeline, Tesla will seek consideration of NPRR1100 at the April 14, 2022 PRS meeting. ERCOT Staff summarized the 4/5/22 ERCOT comments to NPRR1100, potential Settlement impacts, and the ERCOT proposed Wholesale Storage Load (WSL) reconciliation process. Market Participants expressed concern for potential impacts to Transmission and/or Distribution Service Provider (TDSP) systems and requested additional time to review NPRR1100 and the ERCOT proposed WSL reconciliation process. Mr. Goff offered to host a Market call for interested parties prior to the April 14, 2022 PRS meeting. WMS took no action on this item.

*NPRR1108, ERCOT Shall Approve or Deny All Resource Outage Requests*

Mr. Sams summarized NPRR1108 discussion at the March 25, 2022 WMWG meeting. Fred Huang reviewed the 3/31/22 ERCOT comments, reiterated a desire to have NPRR1108 considered at the April Board of Directors meeting, presented the ERCOT analysis and methodology to calculate the Maximum Daily Resource Planned Outage Capacity, and stated that ERCOT anticipates using the proposed methodology will provide a sufficient window to accommodate the need for Resource Planned Outages as it has more than a 15% margin above the historical Resource Planned Outages. Ian Haley summarized 3/22/22 Luminant comments to NPRR1108. Michele Richmond summarized the 3/25/22 TCPA comments to NPRR1108.

**Mr. Goff moved to endorse NPRR1108 as amended by the 3/31/22 ERCOT comments. Mark Smith seconded the motion.** Some Market Participants expressed concerns with the ERCOT proposed methodology and potential unintended consequences, and requested additional time for consideration of other potential solutions.

**Mr. Haley moved to request PRS continue to table NPRR1108. Clayton Greer seconded the motion. The motion carried via roll call vote with five objections from the Consumer (3) (City of Eastland, Nucor, Residential) and Investor Owned Utility (IOU) (2) (Oncor, CenterPoint Energy) Market Segments, and seven abstentions from the Cooperative (2) (Pedernales, LCRA), IOU (2) (AEPSC, TNMP) and Municipal (3) (Austin Energy, Bryan Texas Utilities, Garland Power and Light) Market Segments.** *(Please see ballot posted with Key Documents.)*

*NPRR1110, Black Start Requirements Update*

Mr. Sams summarized NPRR1110 discussion at the March 25, 2022 WMWG meeting. Freddy Garcia reviewed the 4/1/22 ERCOT comments and reviewed the Revision Request timeline. Some Market Participants requested additional time to review the issues.

**Ivan Velasquez moved to endorse NPRR1110 as amended by the 4/1/22 ERCOT comments. Mr. Goff seconded the motion. The motion carried via roll call vote with four abstentions from the Independent Generator (2) (Luminant, Avangrid Renewables), Independent Retail Electric Provider (IREP) (Reliant) and Municipal (CPS Energy) Market Segments.** *(Please see ballot posted with Key Documents.)*

Market Credit Working Group (MCWG) (see Key Documents)

Brenden Sager reviewed MCWG activities.

Revision Requests Tabled at WMS (see Key Documents)

*Verifiable Cost Manual Revision Request (VCMRR) 031, Clarification Related to Variable Costs in Fuel Adders*

WMS took no action on this item.

Combined Ballot

**Mr. Velasquez moved to approve the Combined Ballot as follows:**

* **To approve the February 2, 2022 and March 2, 2022 WMS Meeting Minutes as submitted**
* **To endorse and forward to TAC the 3/2/22 WMS Report and Impact Analysis for SMOGRR025**

**Bill Barnes seconded the motion. The motion carried unanimously via roll call vote.** *(Please see ballot posted with Key Documents.)*

Congestion Management Working Group (CMWG) (see Key Documents)

*Nodal Settlement of Controllable Load Resources Discussion*

Ms. Surendran noted that the CMWG report was posted and deferred discussion of the issues to the May 4, 2022 WMS Meeting.

Supply Analysis Working Group (SAWG) (see Key Documents)

Caitlin Smith reviewed SAWG activities and noted that SAWG would request ROS consideration of Mr. Haley, Luminant Generation, as SAWG Vice Chair at the May 4, 2022 WMS meeting.

Demand Side Working Group (DSWG) (see Key Documents)

Ms. Surendran noted that the 2022 DSWG Goals and Controllable Load Resource (CLR) Issues List were posted and deferred discussion of the issues to the May 4, 2022 WMS Meeting.

Other Business

*Review Open Action Items*

This item was deferred to the May 4, 2022 WMS meeting.

*No Report*

* Market Settlement Working Group (MSWG)
* Meter Working Group (MWG)
* Resource Cost Working Group (RCWG)

Adjournment

Ms. Surendran adjourned the April 6, 2022 WMS meeting at 11:30 a.m.

1. Key Documents referenced in these minutes may be accessed on the ERCOT website at:

<https://www.ercot.com/calendar/event?id=1623079856150> [↑](#footnote-ref-1)