**APPROVED**

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

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

**Wednesday, May 4, 2022 – 9:30 a.m.**

Attendance

*Members:*

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

*Guests:*

|  |  |  |
| --- | --- | --- |
|  |  |  |
| Abbott, Kristin | Austin Energy | 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 |
| Bivens, Carrie | Potomac Economics | Via Teleconference |
| Blakey, Eric | Just Energy | Via Teleconference |
| Boisseau, Heather | LCRA | Via Teleconference |
| Bruce, Mark | Cratylus Advisors | Via Teleconference |
| Claiborn-Pinto, Shawnee | PUCT | Via Teleconference |
| Coleman, Diana | CPS Energy | Via Teleconference |
| Daigneault, Ralph | Potomac Economics | Via Teleconference |
| De La Rosa, Lewis | Texas Reliability Entity | Via Teleconference |
| DeLeon, Seth | DME | Via Teleconference |
| Gaytan, Jose | Denton Municipal Electric | Via Teleconference |
| Goff, Eric | Tesla | NPRR1100 Only |
| Haguewood, Ben | PUCT | Via Teleconference |
| Headrick, Bridget | CES |  |
| Hendrix, Chris | Demand Control 2 | Via Teleconference |
| Hubbard, John | TIEC |  |
| Huynh, Thuy | Potomac Economics | Via Teleconference |
| Kee, David | CPS Energy | Via Teleconference |
| Kilroy, Taylor | TPPA | Via Teleconference |
| Kolb, Lloyd | Invenergy | Via Teleconference |
| Kroskey, Tony | Brazos Electric Cooperative | Via Teleconference |
| Lookadoo, Heddie | Shell Energy | Via Teleconference |
| Lotter, Eric | GridMonitor | Via Teleconference |
| Okenfuss, James | Savion Energy | Via Teleconference |
| Petäjäsoja Ida | inBalance | Via Teleconference |
| Pyka, Greg | Schneider Engineering | Via Teleconference |
| Ramaswamy, Ramya | PUCT | Via Teleconference |
| Reedy, Steve | CIM View Consulting | Via Teleconference |
| Reid, Walter | Advanced Power Alliance | Via Teleconference |
| Rich, Katie | GSEC |  |
| Sager, Brenden | Austin Energy | Via Teleconference |
| Schwarz, Brad | Sharyland | Via Teleconference |
| Siddiqi, Shams | Crescent Power Consulting | Via Teleconference |
| Smith, Chase | Southern Power Company |  |
| Townsend, Aaron | Potomac Economics | Via Teleconference |
| Thurnher, Greg | MP2 Energy | Via Teleconference |
| True, Roy | ACES Power | Via Teleconference |
| Turner, Lucas | STEC | Via Teleconference |
| Uy, Manny | Hunt Energy | Via Teleconference |
| Varnell, John | Tenaska | Via Teleconference |
| Villasana, Kristi | NBU | Via Teleconference |
| White, Laurie | AEPSC | Via Teleconference |
| Williams, Wes | BTU | Via Teleconference |
| Wittmeyer, Bob | Longhorn Power | Via Teleconference |

*ERCOT Staff:*

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| --- | --- | --- |
|  |  |  |
| Albracht, Brittney |  | Via Teleconference |
| Anderson, Troy |  | Via Teleconference |
| Bigbee, Nathan |  | Via Teleconference |
| Boren, Ann |  | Via Teleconference |
| Chu, Zhengguo |  | Via Teleconference |
| Clifton, Suzy |  |  |
| Covington, Austin |  | Via Teleconference |
| Garcia, Freddy |  | Via Teleconference |
| Gonzalez, Ino |  | Via Teleconference |
| Johnson, Blane |  | Via Teleconference |
| Khodabakhsh, Fred |  | Via Teleconference |
| King, Charles |  | Via Teleconference |
| Lee, Alex |  | Via Teleconference |
| Maggio, Dave |  |  |
| Mago, Nitika |  | Via Teleconference |
| Mantena, Dan |  | Via Teleconference |
| Matlock, Robert |  | Via Teleconference |
| Moorty, Sai |  |  |
| Neel, Evan |  | Via Teleconference |
| Phillips, Cory |  | Via Teleconference |
| Roberts, Randy |  |  |
| Ruane, Mark |  |  |
| Singh, Vijay |  | Via Teleconference |
| Troublefield, Jordan |  |  |
| 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.

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

*April 6, 2022*

Market Participants reviewed the April 6, 2022 WMS Meeting Minutes. Ms. Surendran noted this item 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 April 13, 2022 TAC meeting and April 18, 2022 Special TAC meeting. Mark Ruane summarized the Securitization discussion at the April 13, 2022 TAC meeting and stated that ERCOT anticipates issuing market notices the week of May 9 through May 13, 2022 for the notifications of miscellaneous invoices for Securitization Public Utility Regulatory Act (PURA) Subchapter M default charges and Subchapter N estimated escrow deposit requirements.

ERCOT Operations and Market Items (see Key Documents)

*2021 Annual Unaccounted For Energy (UFE) Report*

Randy Roberts summarized the 2021 Annual UFE analysis report and highlighted impacts from Winter Storm Uri. Mr. Roberts reminded Market Participants of the WMS Parking Lot Action Item to the Wholesale Market Working Group (WMWG) to review the actual loss factors compared to calculated losses in modeling. Mr. Roberts stated that ERCOT anticipates presenting analysis for Phase 1, ERCOT wide Energy Management Systems (EMS) calculated losses for settlement, at a future WMWG meeting, and following the discussion, ERCOT may offer to sponsor a Revision Request to address the issues. Mr. Roberts noted that Phase 2, analysis pertaining to losses for Non-Opt-In Entities (NOIEs) whose metering captures transmission losses, remains on hold indefinitely as this phase of the project would have major system impacts.

*2021 Annual and 2022-Q1 Unregistered Distributed Generation (DG) Reports*

Dan Mantena presented the 2021 Annual Unregistered DG and 2022 1st Quarter Unregistered DG reports.

*Settlement Stability Report 2022 Q2 Update*

Austin Covington presented the 2nd Quarter 2022 Settlement Stability Report.

New Protocol Revision Subcommittee (PRS) Referrals (see Key Documents)

*NPRR1126, Default Uplift Allocation Enhancement*

Seth Cochran summarized NPRR1126 and discussion of the concepts at previous Market Credit Working Group (MCWG) meetings. Market Participants requested further discussion of NPRR1126 by MCWG. Ms. Surendran noted this item could be considered for inclusion in the [Combined Ballot.](#Combined_Ballot)

*NPRR1128, Allow FFR Procurement up to FFR Limit Without Proration*

Shams Siddiqi summarized NPRR1128. Market Participants requested further discussion of the issues at WMWG. Ms. Surendran noted this item could be considered for inclusion in the [Combined Ballot.](#Combined_Ballot)

WMWG (see Key Documents)

Bryan Sams reviewed WMWG activities and summarized discussion from the April 22, 2022 Reliability Unit Commitment (RUC) Workshop.

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

*NPRR981, Day-Ahead Market Price Correction Process*

*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*

*NPRR1118, Clarifications to the OSA Process*

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

WMS took no action on these items.

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

Market Participants reviewed NPRR1058. Some Market Participants requested additional time to review NPRR1058. Ms. Surendran noted that NPRR1058 would be considered at the June 1, 2022 WMS meeting.

*NPRR1100, Emergency Switching Solutions for Energy Storage Resources*

Eric Goff reviewed NPRR1100 and noted that at the April 14, 2022 PRRS meeting, PRS granted Urgent status. Andy Nguyen summarized the 5/2/22 LCRA comments. Nathan Bigbee summarized the 5/3/22 ERCOT comments.

**Clayton Greer moved to endorse NPRR1100 as amended by the 5/3/22 ERCOT comments. Bill Barnes seconded the motion. The motion carried unanimously.** *(Please see ballot posted with Key Documents.)*

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.

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

*SAWG Leadership*

Ms. Surendran noted the SAWG request for WMS consideration of Ian Haley of Luminant Generation, as SAWG Vice-Chair and stated that this item could be considered for inclusion in the [Combined Ballot.](#Combined_Ballot)

Combined Ballot

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

* **To approve the April 6, 2022 WMS Meeting Minutes as presented**
* **To request PRS continue to table NPRR1126 for further discussion by MCWG**
* **To request PRS continue to table NPRR1128 for further discussion by WMWG**
* **To approve Ian Haley of Luminant, as SAWG Vice-Chair**

**Clif Lange seconded the motion. The motion carried unanimously.** *(Please see ballot posted with Key Documents.)*

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

Greg Thurnher summarized DSWG activities.

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

*Nodal Settlement of Controllable Load Resources Discussion*

Katie Rich summarized CMWG activities, including discussion of Settlement options for Controllable Load Resources. Sai Moorty summarized the ERCOT solution proposed in Option 1 and stated that ERCOT anticipates filing a Revision Request after additional vetting of the issues at future Large Flexible Load Task Force (LFLTF) meetings. Mr. Siddiqi presented an alternative proposal, noting that this option would continue to allow for netting of 4-Coincident Peak (4-CP) and Load Ratio Share (LRS) cost allocation and provide an incentive for Loads to become Controllable Load Resources.

Other Business

*Review Open Action Items*

WMS took no action on this item.

*No Report*

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

Adjournment

Ms. Surendran adjourned the May 4, 2022 WMS meeting at 12:01 p.m.

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

   <https://www.ercot.com/calendar/event?id=1623079888167> [↑](#footnote-ref-1)