**APPROVED**

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

**Webex Only**

**Wednesday, May 5, 2021– 9:30 a.m.**

Attendance

*Members:*

|  |  |  |
| --- | --- | --- |
|  |  |  |
| Barnes, Bill | Reliant Energy Retail Services |  |
| Bierschbach, Erika | Austin Energy |  |
| Burke, Tom | Invenergy |  |
| Carpenter, Jeremy | Tenaska Power Services |  |
| Claiborn-Pinto, Shawnee | OPUC |  |
| Cochran, Seth | DC Energy |  |
| Detelich, David | CPS Energy |  |
| Downey, Marty | Jupiter Power |  |
| Dumas, John | Lower Colorado River Authority |  |
| Evans, Mike | Brazos Electric Cooperative |  |
| Farhangi, Anoush | Demand Control 2 |  |
| Greer, Clayton | Morgan Stanley |  |
| Gross, Blake | AEP Service Corporation |  |
| Haley, Ian | Luminant Generation |  |
| Johnson, Anthony | CenterPoint Energy |  |
| Lange, Clif | South Texas Electric Cooperative |  |
| Lindberg, Ken | Bryan Texas Utilities |  |
| Mauldin, Jamie | City of Eastland |  |
| McNamara, Grace | Chariot Energy |  |
| Roberts, Bobby | TNMP |  |
| Sandidge, Clint | Calpine Energy Solutions |  |
| Sefa, Fanar | Blue Cube Operations |  |
| Simpson, Lori | Exelon |  |
| Smith, Mark | Nucor |  |
| Surendran, Resmi | Shell Energy |  |
| Turner, Lucas | South Texas Electric Cooperative | Alt. Rep. for Clif Lange |
| Velasquez, Ivan | Oncor |  |
| Wilson, Joe Dan | Golden Spread Electric Cooperative |  |

The following proxy was assigned:

* Russell Franklin to Ken Lindberg

*Guests:*

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| --- | --- | --- |
|  |  |  |
| Ainspan, Malcolm | NRG |  |
| Aldridge, Ryan | AB Power Advisors |  |
| Alford, Anthony | CenterPoint Energy |  |
| Allen, Thresa | Avangrid Renewables |  |
| Anderson, Kevin | Customized Energy Solutions |  |
| Ashley, Kristy | Customized Energy Solutions |  |
| Benson, Mariah | PUCT |  |
| Bivens, Carrie | Potomac Economics |  |
| Black Huynh, Emily | EDF Energy |  |
| Blackburn, Don | Hunt Energy Network Power |  |
| Blakey, Eric | Just Energy |  |
| Boisseau, Heather | Lower Colorado River Authority |  |
| Bridges, Robert | CenterPoint Energy |  |
| Bruce, Mark | Cratylus Advisors |  |
| Chamberlin, Jennifer | Power Energy Management |  |
| Chatlani, Varsha | Boston Energy |  |
| Coleman, Diana | CPS Energy |  |
| Cripe, Ramsey | Schneider Engineering |  |
| Daigneault, Ralph | Potomac Economics |  |
| Deaville, Chris | Enchanted Rock |  |
| Dreyfus, Mark | MD Energy Consulting |  |
| Foreman, Mark | Tenaska Power Services |  |
| Gaytan, Jose | Denton Municipal Electric |  |
| Graham, Sophie | Adapt 2 Solutions |  |
| Hanson, Kevin | National Grid |  |
| Hayden, Jolly | GDS Associates |  |
| Henson, Martha | Oncor |  |
| Huynh, Thuy | Potomac Economics |  |
| Jewell, Michael | Jewell and Associates |  |
| Jolly, Emily | Lower Colorado River Authority |  |
| Jones, Randy | Mountaineer Market Advisors |  |
| Kee, David | CPS Energy |  |
| Kilroy, Taylor | TPPA |  |
| Krajecki, Jim | Customized Energy Solutions |  |
| Kroskey, Tony | Brazos Electric Cooperative |  |
| Marsh, Tony | Legends Unity |  |
| Mathew, Paul | CenterPoint Energy |  |
| McCamant, Frank | McCamant Consulting |  |
| McClellan, Suzi | Good Company Associates |  |
| McMurray, Mark | BTU |  |
| Mendoza, Albert | Occidental |  |
| Mercado, David | CenterPoint Energy |  |
| Miller, Alexandra | EDF Renewables |  |
| Nguyen, Andy | Lower Colorado River Authority |  |
| Osmond, Mark | Pearl Street Merchant Energy |  |
| Pak, Sam | Oncor |  |
| Pelletier, Eveline | Hydroquebec |  |
| Powell, Christian | Pedernales Electric Cooperative |  |
| Price, Chris | 61 Commodities |  |
| Pyka, Greg | Schneider Engineering |  |
| Rainwater, Kim | Lower Colorado River Authority |  |
| Reid, Mike | Air Liquide |  |
| Reid, Walter | Advanced Power Alliance |  |
| Richmond, Michele | TCPA |  |
| Rich, Katie | Golden Spread Electric Cooperative |  |
| Robinson, Rhonda | Calpine |  |
| Sager, Brenden | Austin Energy |  |
| Sams, Bryan | Calpine |  |
| Schumate, Walt |  |  |
| Siddiqi, Shams | Crescent Power Consulting |  |
| Sithuraj, Murali | Austin Energy |  |
| Smith, Caitlin | AB Power Advisors |  |
| Smith, Chase | Southern Power |  |
| Smith, Christopher | Austin Energy |  |
| Smith, Mark | Nucor |  |
| Tran, Diane | TIEC |  |
| True, Roy | ACES Power |  |
| Varnell, John | Tenaska Power Services |  |
| Walke, Pranil | Calpine |  |
| Wall, Perrin | CenterPoint Energy |  |
| Wallin, Shane | DME |  |
| Wiegand, Sheri | TXU |  |
| Wittmeyer, Bob | Longhorn Power |  |
| Zhou, Emily | Potomac Economics |  |

*ERCOT Staff:*

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| --- | --- | --- |
|  |  |  |
| Albracht, Brittney |  |  |
| Anderson, Connor |  |  |
| Anderson, Troy |  |  |
| Barati, Camron |  |  |
| Bernecker, John |  |  |
| Billo, Jeff |  |  |
| Boren, Ann |  |  |
| Bracy, Phil |  |  |
| Cheng, Yong |  |  |
| Clifton, Suzy |  |  |
| Comstock, Read |  |  |
| Covington, Austin |  |  |
| Dansro, Ben |  |  |
| Gonzalez, Ino |  |  |
| Hailu, Ted |  |  |
| Holt, Blake |  |  |
| Hunsucker, Brett |  |  |
| Jones, Dan |  |  |
| Kane, Erika |  |  |
| Kersulis, Jonas |  |  |
| Khodabakhsh, Fred |  |  |
| Maggio, Dave |  |  |
| Mago, Nitika |  |  |
| Mantena, Dan |  |  |
| Martinez, Adriana |  |  |
| Morehead, Juliana |  |  |
| Moreno, Alfredo |  |  |
| Patterson, Mark |  |  |
| Phillips, Cory |  |  |
| Ragsdale, Kenneth |  |  |
| Raish, Carl |  |  |
| Roberts, Randy |  |  |
| Rosel, Austin |  |  |
| Ruane, Mark |  |  |
| Shanks, Magie |  |  |
| Sharma, Sandip |  |  |
| Shaw, Pamela |  |  |
| Singh, Vijay |  |  |
| Solis, Stephen |  |  |
| Stice, Clayton |  |  |
| Thompson, Chad |  |  |
| Townsend, Aaron |  |  |
| Troublefield, Jordan |  |  |
| Tucker, Don |  |  |
| Urquhart, Thomas |  |  |
| Warnken, Pete |  |  |
| Wattles, Paul |  |  |
| Xiao, Hong |  |  |
| Zhang, Wen |  |  |

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

Antitrust Admonition

Ivan Velasquez directed attention to the Antitrust Admonition, which was displayed.

Agenda Review

There were no changes to the agenda.

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

*April 7, 2021*

Market Participants reviewed the April 7, 2021 WMS Meeting Minutes. Mr. Velasquez noted this item could be considered for inclusion in the [Combined Ballot.](#Combined_Ballot)

Technical Advisory Committee (TAC) Update (see Key Documents)

*Emergency Conditions List*

Mr. Velasquez reviewed the disposition of items considered at the April 28, 2021 TAC meeting, including the 2021 TAC Goals and summarized the Emergency Conditions List discussion on prioritization and process for modifications to the list. Market Participants reviewed the WMS items and assignments to WMS working groups. Mr. Velasquez encouraged Market Participants to review the draft 2021 WMS Goals for consideration at the June 2, 2021 WMS meeting.

*Remaining Key Topic Concepts (KTCs) from Battery Energy Storage Task Force (BESTF)*

*KTC 15-3 Switchable Resources*

*KTC 15-4 Provisions Associated with Delayed Outages*

*KTC 15-6 Reliability-Must-Run (RMR) and Must Run Alternative (MRA) Services*

Market Participants discussed the TAC assignment to review the remaining KTCs outside the scope of BESTF in consideration of current priorities, and requested the Wholesale Market Working Group (WMWG) consider the issues after the Reliability and Operations Subcommittee (ROS) concludes their review.

Other Binding Document Revision Request (OBDRR) 026, Change Shadow Price Caps to Curves and Remove Shift Factor Threshold (see Key Documents)

Carrie Bivens summarized OBDRR026. Market Participants discussed OBDRR026, the 4/28/21 DC Energy comments and 5/4/21 Joint Commenters comments, and requested further review of the issues by the Congestion Management Working Group (CMWG). Mr. Velasquez noted this item could be considered for inclusion in the [Combined Ballot.](#Combined_Ballot)

OBDRR029, Revisions to Demand Response Data Definitions and Technical Specifications (see Key Documents)

*Nodal Protocol Revision Request (NPRR) 1071, Minor Revisions to the Reporting of Demand Response by Retail Electric Providers and Non-Opt-In Entities*

Carl Raish summarized OBDRR029, NPRR1071, the April 14, 2021 RMS comments to OBDRR029 and NPRR1071, and reviewed the timeline for the 2021 Demand Response survey process. Mr. Velasquez noted these items could be considered for inclusion in the [Combined Ballot.](#Combined_Ballot)

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

*NPRR1070, Planning Criteria for GTC Exit Solutions*

Alexandra Miller summarized NPRR1070. Market Participants requested review of the issues by the WMWG. David Detelich encouraged Market Participants to attend the May 17, 2021 Joint Operations Working Group (OWG), Planning Working Group (PLWG), and WMWG meeting to discuss the issues. Mr. Velasquez noted this item could be considered for inclusion in the [Combined Ballot.](#Combined_Ballot)

WMWG (see Key Documents)

Mr. Detelich reviewed WMWG activities, including the Emergency Conditions List assignment items.

*Security-Constrained Economic Dispatch (SCED) and Ancillary Services for Behind-the-Meter Resources*

Mr. Detelich summarized WMWG discussions on Behind-the-Meter Resources participating in SCED and Ancillary Services, including significant changes required for this concept, and stated that in consideration of prioritization of ERCOT Resources for the Extreme Cold Winter Event issues and the Passport program, the sponsor does not wish to proceed at this time.

*Day-Ahead Market (DAM) Performance Issue (DAM Delays)*

Mr. Detelich summarized WMWG discussions of the detailed analysis of DAM performance and potential improvements presented by ERCOT. Alfredo Moreno presented the analysis and ERCOT recommendation to establish the DAM daily submission limits for Point-to-Points (PTPs) based on PTP intervals, and stated that if WMS advanced the recommendation, ERCOT would file a System Change Request (SCR) for Stakeholder consideration.

**Bill Barnes moved to endorse the ERCOT recommendation as presented to establish DAM daily submission limits for PTPs based on PTP Intervals. Mr. Detelich seconded the motion.** **The motion carried via roll call vote with 2 abstentions from the Independent Generator (Luminant) and Independent Power Marketer (IPM) (Shell Energy) Market Segments.** *(Please see ballot posted with Key Documents.)*

Revision Requests Tabled at PRS, Referred to WMS (see Key Documents)

*NPRR981, Day-Ahead Market Price Correction Process (WMWG)*

*NPRR1056, Market Impact Generic Transmission Constraint (GTC) Notification*

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

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

WMS took no action on these items.

*NPRR1063, Dynamic Rating Transparency*

Seth Cochran summarized NPRR1063, the 4/21/21 DC Energy comments and 5/4/21 ROS comments. Mr. Velasquez noted this item could be considered for inclusion in the [Combined Ballot.](#Combined_Ballot)

Market Credit Working Group (see Key Documents)

Brenden Sager reviewed MCWG activities, including NPRR1073, Market Participant Application Changes and NPRR1074, “mp” Definition Revision, and summarized ERCOT’s estimated uplift allocations and process.

CMWG (see Key Documents)

Katie Rich reviewed CMWG activities, including OBDRR026 and NPRR1063.

*NOGRR215, Limit Use of Remedial Action Schemes*

WMS took no action on this item.

Resource Cost Working Group (RCWG) (see Key Documents)

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

Market Participants and the Independent Market Monitor (IMM) Staff discussed VCMRR031. Market Participants requested RCWG review the issues after the Public Utility Commission of Texas (PUCT) provides further direction on the issues. WMS took no action on this item.

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

*SAWG Scope*

Caitlin Smith reviewed SAWG activities and presented the SAWG Scope. Mr. Velasquez noted this item could be considered for inclusion in the [Combined Ballot.](#Combined_Ballot)

Combined Ballot

**Fanar Sefa moved to approve the Combined Ballot as follows:**

* **To approve the April 7, 2021 WMS Meeting Minutes as submitted**
* **To request TAC continue to table OBDRR026 for review by CMWG**
* **To endorse OBDRR029 as submitted**
* **To endorse NPR1071 as submitted**
* **To request PRS continue to table NPRR1070 for review by WMWG**
* **To endorse NPRR1063 as amended by 4/21/21 DC Energy comments**
* **To approve the SAWG Scope as presented**

**Shawnee Claiborn-Pinto seconded the motion. The motion carried unanimously via roll call vote.** *(Please see ballot posted with Key Documents.)*

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

Christian Powell summarized DSWG activities, including the Emergency Response Service (ERS) Performance review and Lessons Learned, and DSWG Goals.

ERCOT Operations and Market Items

*High Dispatch Limit (HDL)/Low Dispatch Limit (LDL) overrides during the February winter event*

This item was deferred to the June 2, 2021 WMS meeting.

*2020 Unaccounted For Energy (UFE) Analysis Report*

Randy Roberts summarized the 2020 UFE analysis report and in response to Market Participant questions, stated that the negative UFE trending was related to seasonal transmission loss factors. Pamela Shaw further stated that a more holistic review of the issues is anticipated after the Energy Management Systems (EMS) project is completed. Market Participants requested ERCOT present the UFE outcomes from Winter Storm Uri at the June 2, 2021 WMS meeting and offered clarifications to the Emergency Conditions list.

*2020 Annual and 2021 Q1 Unregistered Distributed Generation (DG) Reports*

Connor Anderson presented the 2020 Annual Unregistered DG and 2021 1st Quarter Unregistered DG reports.

*Settlement Stability Report Q1 2021*

Austin Covington presented the 1st Quarter 2021 Settlement Stability Report.

Other Business

*ERCOT Operations Message - Advance Action Notice (AAN) Reserve Capacity deficiency*

Dave Maggio stated that following the April 29, 2021 Operations Message wherein ERCOT issued an Advance Action Notice (AAN) for an April 30, 2021 Outage Adjustment Evaluation (OAE) and potential Outage Schedule Adjustment (OSA), ERCOT noted discrepancies in the Protocol language and is developing clarifications to align the Protocols and the greybox language in NPRR930, Weekly RUC Modifications for Forecasted Emergency Conditions.

*Review Open Action Items*

Market Participants reviewed the Open Action Items and removed the following completed items:

* Clarify if Load shifting facilitated by behind-the-meter battery storage systems qualifies as Demand Response (WMWG)
* TAC Assignment: Review Day-Ahead Market (DAM) Performance and (DAM delays) (WMWG)

*No Report*

* Market Settlement Working Group (MSWG)
* Metering Working Group (MWG)

Adjournment

Mr. Velasquez adjourned the May 5, 2021 WMS meeting at 2:19 p.m.

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

   http://www.ercot.com/calendar/2021/5/5/213949-WMS [↑](#footnote-ref-1)