**APPROVED**

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

**Webex Only**

**Wednesday, November 4, 2020– 9:30 a.m.**

Attendance

*Members:*

|  |  |  |
| --- | --- | --- |
|  |  |  |
| Allen, Thresa | Avangrid Renewables |  |
| Barnes, Bill | Reliant Energy Retail Services |  |
| Bierschbach, Erika | Austin Energy |  |
| Bunch, Kevin | EDF Trading North America  |  |
| Caraway, Shannon | Solar Prime |  |
| Carpenter, Jeremy | Tenaska Power Services |  |
| Claiborn-Pinto, Shawnee | OPUC |  |
| Dumas, John | Lower Colorado River Authority |  |
| Evans, Mike | Brazos Electric Cooperative |  |
| Franklin, Russell | Garland Power and Light |  |
| Greer, Clayton | Morgan Stanley |  |
| Gross, Blake | AEP Service Corporation |  |
| Haley, Ian | Luminant Generation |  |
| Johnson, Anthony | CenterPoint Energy |  |
| Kee, David | CPS Energy |  |
| Lange, Clif | South Texas Electric Cooperative |  |
| Lindberg, Ken | Bryan Texas Utilities |  |
| Mauldin, Jamie | City of Eastland |  |
| Morris, Sandy | Direct Energy |  |
| Roberts, Bobby | TNMP |  |
| Sams, Bryan | Calpine Corporation |  |
| Sefa, Fanar | Olin Corporation |  |
| Smith, Mark | Nucor |  |
| Surendran, Resmi | Shell Energy  |  |
| Velasquez, Ivan | Oncor |  |
| Wilson, Joe Dan | Golden Spread Electric Cooperative |  |

The following proxy was assigned:

* Ian Haley to Bryan Sams

*Guests:*

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|  |  |  |
| Ainspan, Malcolm | NRG |  |
| Aldridge, Ryan | AB Power Advisors |  |
| Alford, Anthony | CenterPoint Energy |  |
| Anderson, Kevin | Customized Energy Solutions |  |
| Bivens, Carrie | Potomac Economics |  |
| Blakey, Eric | Just Energy |  |
| Boisseau, Heather | LCRA |  |
| Bonskowski, Ned | Luminant |  |
| Bruce, Mark | Cratylus Advisors |  |
| Burke, Tom | Invenergy |  |
| Clemenhagen, Barbara | Customized Energy Solutions |  |
| Cochran, Seth | DC Energy |  |
| Coleman, Diana | CPS Energy |  |
| Cripe, Ramsey | Schneider Engineering |  |
| Crouch, Rebekah | New Braunfels Utilities  |  |
| Daigneault, Ralph | Potomac Economics |  |
| Detelich, David | CPS Energy |  |
| Donohoo, Kenneth | EPE Consulting |  |
| Downey, Marty |  |  |
| Dreyfus, Mark | MD Energy Consulting |  |
| Godinez, Gabriel | American Electric Power |  |
| Goff, Eric |  |  |
| Harvey, Julia | Texas Electric Cooperatives |  |
| Helton, Bob | ENGIE |  |
| Henry, Mark | Texas Reliability Entity |  |
| Henson, Martha | Oncor |  |
| Hourihan, Mike | CPower Energy Management  |  |
| Huynh, Thuy | Potomac Economics |  |
| Jewell, Michael | Jewell and Associates |  |
| Jolly, Emily | Lower Colorado River Authority |  |
| Khayat, Maribel | CenterPoint Energy |  |
| Kroskey, Tony | Brazos Electric Cooperative |  |
| Lui, Meng | Tenaska |  |
| McClellan, Suzi | Good Company & Associates  |  |
| McKeever, Debbie | Oncor |  |
| Mendoza, Albert | Occidental |  |
| Miller, Daniel | DC Energy |  |
| Musher, Danny | Key Capture Energy |  |
| Nguyen, Andy | LCRA |  |
| Pelletier, Eveline | Hydroquebec |  |
| Powell, Christian | Pedernales Electric Cooperative |  |
| Rainwater, Kim | LCRA |  |
| Reedy, Steve | Potomac Economics |  |
| Reid, Mike | Air Liquide |  |
| Reid, Walter | Advanced Power Alliance |  |
| Ritch, John | NextEra Energy |  |
| Rich, Katie | Golden Spread Electric Cooperative |  |
| Schumate, Walt |  |  |
| Siddiqi, Shams | Crescent Power  |  |
| Simpson, Lori | Exelon |  |
| Sithuraj, Murali | Austin Energy |  |
| Smith, Caitlin | AB Power Advisors |  |
| Smith, Chris  | Austin Energy |  |
| Tran, Diane | TIEC |  |
| Totten, Jess | Osprey Energy |  |
| True, Roy | ACES Power |  |
| Turner, Lucas | South Texas Electric Cooperative |  |
| Varnell, John | Tenaska Power Services |  |
| Wallin, Shane | DME Power  |  |
| Wittmeyer, Bob | Longhorn Power |  |
| Zarnikau, Jay | Frontier Energy |  |

*ERCOT Staff:*

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| --- | --- | --- |
|  |  |  |
| Albracht, Brittney |  |  |
| Anderson, Connor |  |  |
| Barati, Camron |  |  |
| Billo, Jeff |  |  |
| Boren, Ann |  |  |
| Boswell, Bill  |  |  |
| Bracy, Phil |  |  |
| Clifton, Suzy |  |  |
| Comstock, Read |  |  |
| Covington, Austin |  |  |
| Du, Pengwei |  |  |
| Garcia, Freddy |  |  |
| Gonzalez, Ino |  |  |
| Hanson, Kevin |  |  |
| Holt, Blake |  |  |
| House, Donald |  |  |
| Huang, Fred |  |  |
| Hughes, Lindsey |  |  |
| Hull, Gibson |  |  |
| Jones, Dan |  |  |
| Krein, Steve |  |  |
| Lasher, Warren |  |  |
| Lee, Alex |  |  |
| Maggio, Dave |  |  |
| Mago, Nitika |  |  |
| Morehead, Juliana |  |  |
| Moreno, Alfredo |  |  |
| Patterson, Mark |  |  |
| Phillips, Cory |  |  |
| Rios, Diana |  |  |
| Roberts, Randy |  |  |
| Rosel, Austin |  |  |
| Ruane, Mark |  |  |
| Sharma, Sandip |  |  |
| Shaw, Pamela |  |  |
| Stice, Clayton |  |  |
| Thompson, Chad |  |  |
| Troublefield, Jordan |  |  |
| Townsend, Aaron |  |  |
| Tucker, Don |  |  |
| Warnken, Pete |  |  |
| Wattles, Paul |  |  |
| Woodfin, Dan |  |  |
| Xiao, Hong |  |  |

***Unless otherwise indicated, all Market Segments were present for a vote.***

Antitrust Admonition

David Kee 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)

*October 7, 2020*

Market Participants reviewed the October 7, 2020 WMS Meeting Minutes. Mr. Kee noted this item could be considered for inclusion in the [Combined Ballot](#Combined_Ballot).

Technical Advisory Committee (TAC) Update and Assignments

Mr. Kee reviewed the disposition of items considered at the September 23, 2020 TAC meeting. Mr. Kee summarized the Day-Ahead Market (DAM) performance and delays discussion and the informal request for WMS to review the issues. ERCOT Staff offered to present to WMS the array of potential solutions and analyses when finalized.

ERCOT Operations and Market Items (See Key Documents)

*2020 Q3 Unregistered Distributed Generation (DG) Report*

Connor Anderson presented the 3rd Quarter 2020 Unregistered DG Report.

*2020 Q3 Settlement Stability Report*

Austin Covington presented the 3rd Quarter 2020 Settlement Stability Report.

*Proposed Changes to AS Methodology for 2021*

Nitika Mago presented the proposed ERCOT Methodologies for Determining Minimum Ancillary Service Requirements for 2021. Market Participants discussed the methodology, the 125 MW Responsive Reserve (RRS) limit proposed in Other Binding Document Revision Request (OBDRR) 025, Clarification for the RRS Limit on Individual Non-Thermal Generation Resources, and potential Primary Frequency Response (PFR) limits for energy storage investments. Market Participants requested the Wholesale Market Working Group (WMWG) review the total amount of PFR that can come from Energy Storage Resources (ESRs), and with ERCOT determine if there will be any limits applied to ESRs so that Stakeholders can identify restrictions applicable to developing projects. Mr. Kee noted this item could be considered for inclusion in the [Combined Ballot](#Combined_Ballot).

Nodal Protocol Revision Request (NPRR) 994, Clarify Generator Interconnection Neutral Project Classification (see Key Documents)

Mr. Kee summarized the October 7, 2020 WMS discussion on NPRR994. Ivan Velasquez reviewed the 11/2/20 TSP Joint comments. Walter Reid summarized the 9/2/20 APA comments.

**Ian Haley moved to endorse NPRR994 as amended by the 4/15/20 ERCOT comments. Bill Barnes seconded the motion. The motion carried via roll call vote with four objections from the Independent Generator (2) (Avangrid Renewables, Solar Prime) and Independent Power Marketer (IPM) (2) (EDF Trading, Morgan Stanley) Market Segments, and two abstentions from the Consumer (Nucor) and IPM (Tenaska) Market Segments. *(Please see ballot posted with Key Documents.)***

WMWG (see Key Documents)

David Detelich reviewed recent WMWG activities.

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

*NPRR981, Day-Ahead Market Price Correction Process*

*NPRR1017, Management of Congestion Revenue Rights (CRRs) and Resource Node Removal*

*NPRR1023, Change to CRR Repossession Process*

WMS took no action on these items.

*NPRR995, RTF-6 Create Definition and Terms for Settlement Only Energy Storage*

Bob Wittmeyer summarized Resource Definition Task Force (RTF) discussions on NPRR995. Paul Wattles summarized NPRR995, WMS discussions on Settlement issues for Settlement Only Distribution Energy Storage (SODES) and Settlement Only Transmission Energy Storage (SOTES) and for the newly defined Non-Wholesale Storage Load (WSL) Settlement Only Charging Load, and the 10/28/20 ERCOT comments. Mr. Kee noted this items could be considered for inclusion in the [Combined Ballot](#Combined_Ballot).

*NPRR1024, Determination of Significance with Respect to Price Correction*

Dave Maggio summarized NPRR1024 and the September 2 and October 7, 2020 WMS discussions. Austin Rosel presented the additional ERCOT analysis of the price correction impact on Settlements using price correction criteria for two different solutions. Market Participants discussed the appropriate threshold, impacts to counter-parties, and administrative costs in resettlement and offered clarifications to determine the appropriate threshold. ERCOT Staff offered to develop additional clarifications for consideration at the December 2, 2020 WMS meeting. WMS took no action on this item.

*NPRR1040, Compliance Metrics for Ancillary Service Supply Responsibility (WMWG)*

*Comments*

Mr. Detelich summarized WMWG discussions on NPRR1040. John Dumas summarized the 10/27/20 LCRA STEC Reliant comments. Some Market Participants expressed support for Board consideration of the compliance metrics.

**Mr. Dumas moved to endorse NPRR1040 as amended by the 10/27/20 LCRA STEC Reliant comments. Clayton Greer seconded the motion. The motion carried via roll call vote with five abstentions from the Consumer (4) (OPUC, City of Eastland, Nucor, Olin) and Independent Generator (Luminant) Market Segments.** *(Please see ballot posted with Key Documents.)*

Congestion Management Working Group (see Key Documents)

*NOGRR215, Limit Use of Remedial Action Schemes*

Katie Rich summarized CMWG activities, including the November 2, 2020 joint CMWG and Operations Working Group (OWG) meeting to discuss NOGRR215. Ms. Rich encouraged Market Participants to attend the December 17, 2020 CMWG meeting to further discuss NOGRR215 and the Remedial Action Scheme (RAS) issues. WMS took no action on NOGRR215.

Combined Ballot

**Shannon Caraway moved to approve the Combined Ballot as follows:**

* **To approve the October 7, 2020 WMS meeting minutes as submitted**
* **To endorse the ERCOT Methodologies for Determining Minimum Ancillary Service Requirements for 2021 as recommended by ERCOT**
* **To endorse NPRR995 as amended by the 10/28/20 ERCOT comments**

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

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

Caitlin Smith reviewed SAWG activities, including the Astrape update on the 2020 Reserve Margin Study.

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

Mr. Barnes reviewed MCWG activities.

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

Christian Powell reviewed DSWG activities, including behind the meter battery energy storage issues in providing Ancillary Services and qualifying as Demand Response, and requested WMS direction on the issues. Market Participants and ERCOT Staff discussed the potential solutions, settlement issues and policy considerations. In consideration of the scope of DSWG, Mr. Kee requested the WMWG review the ESR issues.

Meter Working Group (MWG) (see Key Documents)

Gabriel Godinez summarized MWG activities.

Other Business (see Key Documents)

*Assigning a Locational Marginal Price (LMP) to de-energized Electrical Buses*

Alfredo Moreno presented information on Heuristic mappings, including changes to assigning a LMP to de-energized electrical buses in consideration of Generic Transmission Constraints (GTCs).

*Review of Open Action Items*

Market Participants discussed clarifications to the Open Action Items list and removed the following items;

* Review impacts on Capacity, Demand, and Reserves (CDR) from monthly generation interconnection report (SAWG)
* Constraint Definitions (WMWG)
* Deep Dive of potential issues in the Low System-Wide Offer Cap (LCAP) Methodology if cumulative Peaker Net Margin (PNM) exceeds $315,000 MWs a year and there are insufficient Ancillary Service offers in the DAM (WMWG)
* Evaluate moving the deadline for revising energy offer curves closer to Real-Time operations (WMWG)
* Review parameters/calculation for Operating Reserve Demand Curve (ORDC) to account for Emergency Response Service o Emergency Response Service (ERS) deployment (WMWG)
* Review Process for EMR to set expectations for the 2020 Spring transmission Outage Season and what is best way to support that process – Other Binding Document, business process manual etc. (WMWG)
* Review the availability and performance metrics for self-deployment, the reliability deployment price adder ramp, and the Transmission and/or Distribution Service Provider (TDSP) Load management programs (WMWG)
* TAC Assignment: Summer Assessment Items
	+ Switchable Generation Resources (SWGRs)
	+ ERS
	+ Credit/Collateral for Qualified Scheduling Entity (QSE) representing Resource only
	+ Usage of Operating Condition Notices (OCNs) for projected reserve capacity shortage
	+ Evaluate current Texas Commission on Environmental Quality (TCEQ) enforcement discretion process
	+ Process for Summer Demand Response study

*2021 ERCOT Membership/Segment Representative Elections*

Suzy Clifton reminded Market Participants that the membership date of record is Friday, November 6, 2020, highlighted changes in membership and fee submittal due to COVID19 restrictions, and stated that 2021 Segment Representative Elections would begin on Monday, November 9, 2020.

*No Report*

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

Adjournment

Mr. Kee adjourned the November 4, 2020 WMS meeting at 1:47 p.m.

1. Key Documents referenced in these minutes may be accessed on the ERCOT website at: http://www.ercot.com/calendar/2020/11/4/189357-WMS [↑](#footnote-ref-1)