**APPROVED**

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

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

**Wednesday,** **July 12, 2023 – 9:30 a.m.**

Attendance

*Members:*

|  |  |  |  |
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|  |  |  | |
| Allen, Thresa | Avangrid Renewables (Avangrid) | | Via Teleconference |
| Blakey, Eric | Pedernales Electric Cooperative (PEC) | |  |
| Burke, Tom | RWE Renewables (RWE) | | Via Teleconference |
| Campo, Curtis | Garland Power and Light (GP&L) | | Via Teleconference |
| Chambers, Joshua | APG&E | | Via Teleconference |
| Cochran, Seth | DC Energy | |  |
| DeLeon, Amanda | Tenaska Power Services (Tenaska) | | Via Teleconference |
| Detelich, David | CPS Energy | | Via Teleconference |
| Dreyfus, Mark | City of Eastland | |  |
| Farhangi, Anoush | Demand Control 2 | | Via Teleconference |
| Goff, Eric | Consumer – Residential | |  |
| Gross, Blake | AEP Service Corporation (AEPSC) | |  |
| Hanson, Kevin | National Grid Renewables (NG Renewables) | | Via Teleconference |
| Holt, Blake | Lower Colorado River Authority (LCRA) | | Alt. Rep. for Emily Jolly |
| Lee, Jim | CenterPoint Energy (CNP) | |  |
| Lindberg, Ken | Bryan Texas Utilities (BTU) | | Via Teleconference |
| Matt, Kevin | Reliant Energy Retail Services (Reliant) | | Alt. Rep. for Bill Barnes Via Teleconference |
| Nguyen, Andy | Constellation Energy Generation (Constellation) | | Via Teleconference |
| Pokharel, Nabaraj | Consumer – Residential | | Alt. Rep. for Eric Goff NPRR1186 Only Via Teleconference |
| Rich, Katie | Golden Spread Electric Cooperative (GSEC) | |  |
| Roberts, Vincent | Texas-New Mexico Power (TNMP) | | Via Teleconference |
| Sams, Bryan | Calpine Corporation (Calpine) | | Via Teleconference |
| Smith, Mark | CMC Steel Texas (CMC Steel) | | Via Teleconference |
| Turner, Lucas | South Texas Electric Cooperative (STEC) | | Via Teleconference |
| Velasquez, Ivan | Oncor Electric Delivery (Oncor) | |  |
| Xie, Fei | Austin Energy | | Alt Rep. for Erika Bierschbach |

The following proxy was assigned:

* Resmi Surendran to Seth Cochran

*Guests:*

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|  |  |  | |
| Abbott, Kristin | Austin Energy | | Via Teleconference |
| Ainspan, Malcolm | NRG | | Via Teleconference |
| Aldridge, Ryan | AB Power Advisors | | Via Teleconference |
| Anderson, Connor | AB Power Advisors | | Via Teleconference |
| Ashley, Kristy | CES | | Via Teleconference |
| Barati, Camron | Potomac Economics | | Via Teleconference |
| Batra-Shrader, Monica | Enchanted Rock | | Via Teleconference |
| Berry, Danny | LCRA | | Via Teleconference |
| Bezwada, Neelima | Potomac Economics | | Via Teleconference |
| Bivens, Carrie | Potomac Economics | |  |
| Block, Laurie | L Block Consulting | | Via Teleconference |
| Boggs, Callie | Eric Winters Goff, LLC | | Via Teleconference |
| Bonskowski, Ned | Luminant Corporation | | Via Teleconference |
| Bunyan, Michael | ENGIE | | Via Teleconference |
| Callender, Hudson | CPS Energy | | Via Teleconference |
| Coleman, Diana | CPS Energy | | Via Teleconference |
| Conant, Portia | Yes Energy | | Via Teleconference |
| Cortez, Sarai | Trailstone Via Teleconference | | Via Teleconference |
| Cripe, Ramsey | Schneider Engineering | | Via Teleconference |
| Daigneault, Ralph | Potomac Economics | | Via Teleconference |
| Deaville, Chris | Enchanted Rock | | Via Teleconference |
| DeLeon, Seth | DME | | Via Teleconference |
| Dharme, Neeraja | EDFT | | Via Teleconference |
| Fisher, Jr., Arthur | Grenergy USA | | Via Teleconference |
| Franchetti, Peter | Morgan Stanley | | Via Teleconference |
| Garcia, Miguel | SMT Energy | | Via Teleconference |
| Gelston, Andrew |  | | Via Teleconference |
| Geron, Adam |  | | Via Teleconference |
| Ghoshal, Orijit | esVolta | | Via Teleconference |
| Gursel, Deren | Morgan Stanley | | Via Teleconference |
| Haley, Ian | Morgan Stanley | | Via Teleconference |
| Hall, Matthew | Invenergy | | Via Teleconference |
| Headrick, Bridget | CES | |  |
| Henson, Martha | Oncor | | Via Teleconference |
| Horstmyer, Reid | Dynasty Power | | Via Teleconference |
| Huynh, Thuy | Potomac Economics | | Via Teleconference |
| Hughes, Lindsey | Broad Reach Power | | Via Teleconference |
| Inman, Grant | BP | | Via Teleconference |
| Jewell, Michael | Jewell and Associates | | Via Teleconference |
| Jones, Randy | Mountaineer Market Advisors | | Via Teleconference |
| Kirby, Brandon | GEUS | | Via Teleconference |
| Korde, Kshitij | NG Renewables | | Via Teleconference |
| Koz, Brian |  | | Via Teleconference |
| Kroskey, Tony | Brazos Electric Cooperative | | Via Teleconference |
| Lasher, Warren | Lasher Energy Consulting | | Via Teleconference |
| Lewis, William |  | | Via Teleconference |
| Lotter, Eric | GridMonitor | | Via Teleconference |
| Lu, Bo | Broad Reach Power | | Via Teleconference |
| McCamant, Frank | McCamant Consulting | | Via Teleconference |
| McClellan, Suzi | Good Company Associates | | Via Teleconference |
| McIntyre, Ken | Plus Power | | Via Teleconference |
| Mickey, Joel | Broad Reach Power | | Via Teleconference |
| Musher, Danny | Key Capture Energy | | Via Teleconference |
| Nguyen, Duy | Hunt Energy | |  |
| Noyes, Theresa | LCRA | |  |
| Ok, Brendan | PUCT | | Via Teleconference |
| Okenfuss, James | Savion | | Via Teleconference |
| Petajasoja, Ida | STEM | | Via Teleconference |
| Pyka, Greg | Schneider Engineering | | Via Teleconference |
| Ramaswamy, Ramya | PUCT | | Via Teleconference |
| Ratliff, Shannon |  | | Via Teleconference |
| Reimers, Andrew | Lancium | | Via Teleconference |
| Richmond, Michele | Competitive Power | | Via Teleconference |
| Ritch, John | NextEra Energy | |  |
| Rodrigo, Dilhan | TC Energy | | Via Teleconference |
| Rosenthal, Peter | CCI | | Via Teleconference |
| Sersen, Juliana | Baker Botts | | Via Teleconference |
| Showalter, Dana | Plus Power | | Via Teleconference |
| Siddiqi, Shams | Crescent Power | | Via Teleconference |
| Smith, Stephanie | Eolian Energy | | Via Teleconference |
| Stafford, Will | GSEC | | Via Teleconference |
| Stephenson, Zach | TEC | |  |
| Teng, Shuye | LCRA | | Via Teleconference |
| Trefny, Floyd |  | | Via Teleconference |
| True, Roy | ACES Power | | Via Teleconference |
| Uy, Manny | Hunt Energy | | Via Teleconference |
| Viswanathan, Jay |  | | Via Teleconference |
| Wardle, Scott | Oxy | | Via Teleconference |
| Watson, Mark |  | | Via Teleconference |
| Williams, Wes | BTU | | Via Teleconference |
| Wilson, Joe Dan | GSEC | | Via Teleconference |
| Wittmeyer, Bob | Longhorn Power | |  |
| Wu, Tiffany | PUCT | | Via Teleconference |
| Yong, Chen | LCRA | | Via Teleconference |
| Zang, Hailing | TC Energy | | Via Teleconference |
| Zhang, Wen | Potomac Economics | | Via Teleconference |

*ERCOT Staff:*

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| --- | --- | --- |
|  |  |  |
| Albracht, Brittney |  |  |
| Anderson, Troy |  | Via Teleconference |
| Arth, Matt |  | Via Teleconference |
| Billo, Jeff |  |  |
| Boren, Ann |  | Via Teleconference |
| Carswell, Cory |  | Via Teleconference |
| Chen, Jian |  |  |
| Christy, Steve |  | Via Teleconference |
| Chu, Zhengguo |  | Via Teleconference |
| Clifton, Suzy |  |  |
| Day, Juliana |  | Via Teleconference |
| Devadhas Mohanadha, Thinesh |  | Via Teleconference |
| Dwyer, Davida |  | Via Teleconference |
| Duus, Tim |  | Via Teleconference |
| Falade, David |  | Via Teleconference |
| Fohn, Doug |  | Via Teleconference |
| Gaddy, Jerry |  | Via Teleconference |
| Gonzalez, Ino |  |  |
| Green, Alex |  | Via Teleconference |
| Hahne, Cynthia |  | Via Teleconference |
| Hailu, Ted |  | Via Teleconference |
| Hartmann, Jimmy |  | Via Teleconference |
| Heinrich, Holly |  | Via Teleconference |
| Holden, Curry |  | Via Teleconference |
| Kersulis, Jonas |  | Via Teleconference |
| Kevil-Yeager, Scott |  | Via Teleconference |
| Lee, Raymund |  | Via Teleconference |
| Ki, Weifeng |  | Via Teleconference |
| Magarinos, Marcelo |  | Via Teleconference |
| Mago, Nitika |  |  |
| Mereness, Matt |  |  |
| McGuire, Joshua |  | Via Teleconference |
| Moorty, Sai |  |  |
| Moreno, Alfredo |  |  |
| Patterson, Mark |  |  |
| Phillips, Cory |  | Via Teleconference |
| Reddy, Samara |  | Via Teleconference |
| Rosel, Austin |  | Via Teleconference |
| Schmidt, Matthew |  | Via Teleconference |
| Shanks, Magie |  | Via Teleconference |
| Shaw, Pamela |  | Via Teleconference |
| Smith, Nathan |  | Via Teleconference |
| Thomas, Shane |  | Via Teleconference |
| You, Haibo |  | Via Teleconference |
| Zhou, Emily |  | Via Teleconference |

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

Eric Blakey called the July 12, 2023 WMS meeting to order at 9:30 a.m.

Antitrust Admonition

Mr. Blakey directed attention to the Antitrust Admonition, which was displayed.

Agenda Review

Mr. Blakey reviewed the agenda.

Technical Advisory Committee (TAC) Update

Mr. Blakey reviewed the disposition of items considered at the June 27, 2023 TAC meeting and noted that the Independent Market Monitor (IMM) will present the 2022 State of the Market Report for the ERCOT Electricity Markets at the September 6, 2023 WMS Meeting.

*Meeting Administration Requests*

Jim Lee summarized the TAC discussion regarding meeting administration, including the Public Utility Commission of Texas (PUCT) Staff request that working group and task force agendas and materials be posted seven days prior to the meeting date, that any meeting cancellations or changes to hybrid or Webex-only meetings be communicated to the appropriate ERCOT ListServ, and that combined ballots be used for unanimous items only.

ERCOT Operations and Market Items (see Key Documents)[[1]](#footnote-1)

*ERCOT Contingency Reserve Service (ECRS) Update*

Alfredo Moreno presented the analysis on ECRS deployments for the periods of June 10 through June 18, and June 20, 2023, change in Non-Spinning Reserve (Non-Spin) resource mix after ECRS go-live, and additional information regarding the June 20, 2023 ECRS deployment, including the amounts of deployment by Resource type. Mr. Moreno also provided links that Market Participants may use in extrapolating additional data on ECRS performance, as requested at the June 27, 2023 TAC meeting. Market Participants expressed concern for distinguishing Battery Resources as a separate line item in the System Ancillary Service Capacity Monitor on the Grid Information dashboard on ercot.com, and methodology used for each Security-Constrained Economic Dispatch (SCED) interval, and requested additional review by the Wholesale Market Working Group (WMWG). Carrie Bivens also requested a deep dive of the July 10, 2023 ECRS deployment by WMWG. Mr. Blakey referred the issues to WMWG.

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

*Nodal Protocol Revision Request (NPRR) 1181, Submission of Seasonal Coal and Lignite Inventory Declaration*

Mr. Blakey summarized NPRR1181 discussion at the June 14, 2023 PRS Meeting and noted this item could be considered for inclusion in the [Combined Ballot.](#Combined_Ballot)

NPRR1186, Improvements Prior to the RTC+B Project for Better ESR State of Charge Awareness, Accounting, and Monitoring – Urgent (See Key Documents)

Nitika Mago provided an overview of NPRR1186 and the request for Urgent Status, summarized discussion of the concepts at the June 22, 2023 Changes to improve monitoring and/or modeling of Energy Storage Resources (ESRs) in ERCOT workshop, noted that ERCOT anticipated filing additional clarifications on the State of Charge (SOC) following stakeholder comments, and encouraged Market Participants to attend the July 19, 22023 workshop to discuss NPRR1186 and associated potential improvements prior to Real-Time Co-optimization (RTC) & Single-Model ESR (“RTC+B”). Eric Goff summarized the 7/7/23 Joint Commenters comments. Mr. Blakey noted that NPRR1186 would be considered at the 7/13/23 PRS meeting. WMS took no action on this item.

Other Binding Document Revision Request (OBDRR) 047, Revisions to ERS Procurement Methodology regarding Unused Funds from Previous Terms (see Key Documents)

Mark Patterson provided an overview of OBRR047 and encouraged Market Participants to attend the July 14, 2023 Demand Side Working Group (DSWG) to further discuss the issues. WMS took no action on this item.

Wholesale Market Working Group (WMWG)

John Ritch reviewed WMWG activities.

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

*RCWG Scope*

Dana Showalter reviewed RCWG activities, encouraged Market Participants to participate in an upcoming RCWG & WMWG joint workshop on Reliability Unit Commitment (RUC) and Verifiable Costs anticipated to be scheduled in the first or second week of September 2023, and presented the draft RCWG Scope for WMS consideration. Mr. Blakey noted that the RCWG Scope could be considered for inclusion in the [Combined Ballot.](#Combined_Ballot)

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

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

*NPRR1070, Planning Criteria for GTC Exit Solutions*

*NPRR1162, Single Agent Designation for a QSE and its Sub-QSEs for Voice Communications over the ERCOT WAN*

*NPRR1172, Fuel Adder Definition, Mitigated Offer Caps, and RUC Clawback*

*NPRR1179, Fuel Purchase Requirements for Resources Submitting RUC Fuel Costs*

WMS took no action on these items.

WMS Revision Requests (see Key Documents)

*Impact Analysis*

*VCMRR034, Excluding RUC Approved Fuel Costs from Fuel Adders*

Market Participants reviewed the 6/21/22 Impact Analysis for VCMRR034. Mr. Blakey noted this item could be considered for inclusion in the [Combined Ballot.](#Combined_Ballot)

WMS Revision Requests Tabled at WMS (see Key Documents)

*VCMRR033, Excluding Exceptional Fuel Costs from Fuel Adders*

*VCMRR037 Related to NPRR1172, Fuel Adder Definition, Mitigated Offer Caps, and RUC Clawback*

WMS took no action on these items.

*VCMRR035, Allow Verified Contractual Costs in Fuel Adder Calculation*

Market Participants discussed that the purpose of VCMRR035 was addressed in recently implemented NPRR1177, Enhance Exceptional Fuel Cost Process, and that the sponsor of VCMRR035 does not oppose its rejection. Mr. Blakey noted this item could be considered for inclusion in the [Combined Ballot.](#Combined_Ballot)

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

*SAWG Leadership*

Kevin Hanson reviewed SAWG activities, and encouraged Market Participants to consider leadership opportunities.

Combined Ballot

**Mark Dreyfus moved to approve the Combined Ballot as follows:**

* **To request PRS continue to table NPRR1181 for further review by WMWG**
* **To approve the RCWG Scope as submitted**
* **To endorse and forward to TAC the 6/7/23 WMS Report and 6/21/23 Impact Analysis for VCMRR034**
* **To reject VCMRR035**

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

Other Business (see Key Documents)

*2024 Meeting Schedule*

Suzy Clifton presented the 2024 Meeting Schedule for Stakeholder review. Mr. Blakey stated that WMS would confirm the 2024 WMS meeting dates at the August 2, 2023 WMS meeting.

*Review Open Action Items*

Mr. Lee encouraged working group leadership to provide quarterly updates on items assigned on the Open Action Items List, beginning with the August 2, 2023 WMS meeting.

*No Report*

* Congestion Management Working Group (CMWG)
* DSWG
* Market Settlement Working Group (MSWG)
* Meter Working Group (MWG)

Adjournment

Mr. Blakey adjourned the July 12, 2023 WMS meeting at 11:44 a.m.

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

   <https://www.ercot.com/calendar/07122023-WMS-Meeting> [↑](#footnote-ref-1)