**DRAFT**

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

**ERCOT Austin – 7620 Metro Center Drive – Austin, Texas 78744**

**Wednesday, February 6, 2019 – 9:30 a.m.**

Attendance

*Members:*

|  |  |  |
| --- | --- | --- |
| Barnes, Bill | Reliant Energy Retail Services |  |
| Bierschbach, Erika | Austin Energy |  |
| Caraway, Shannon | Solar Prime |  |
| Carpenter, Jeremy | Tenaska Power Services |  |
| Coleman, Diana | OPUC |  |
| Downey, Marty | Electranet Power |  |
| Evans, Mike | Brazos Electric Cooperative |  |
| Franklin, Russell | Garland Power and Light |  |
| Goff, Eric | Citigroup Energy |  |
| Greer, Clayton | Morgan Stanley | Via Teleconference |
| Gross, Blake | AEP Service Corporation |  |
| Haley, Ian | Calpine Corporation | Alt. Rep. for Brandon Whittle |
| Johnson, Anthony | CenterPoint Energy |  |
| Kee, David | CPS Energy |  |
| Lange, Clif | South Texas Electric Cooperative |  |
| Lindberg, Ken | Bryan Texas Utilities |  |
| Maduzia, Franklin | Dow Chemical |  |
| Mauldin, Jamie | City of Eastland |  |
| Morris, Sandy | Direct Energy |  |
| Parker, Ty | Infinite Energy |  |
| Ritch, Katie | Golden Spread Electric Cooperative | Alt. Rep. for Joe Dan Wilson |
| Robertson, Jennifer | LCRA | Alt. Rep. for John Dumas |
| Schwarz, Brad | Sharyland Utilities |  |
| Shaw, Marka | Exelon |  |
| Surendran, Resmi | Shell Energy |  |
| Turner, Lucas | South Texas Electric Cooperative | Alt. Rep. for Clif Lange |
| Velasquez, Ivan | Oncor |  |

The following proxies were assigned:

• Thresa Allen to Shannon Caraway

• Mark Smith to Franklin Maduzia

*Guests:*

|  |  |  |
| --- | --- | --- |
| Ainspan, Malcolm | NRG | Via Teleconference |
| Anderson, Kevin | Customized Energy Solution | Via Teleconference |
| Bruce, Mark | Cratylus Advisors | Via Teleconference |
| Bryant, Mark | PUCT | Via Teleconference |
| Bunch, Kevin | EDF Energy Services |  |
| Choi, John | OCI Solar Power | Via Teleconference |
| Cochran, Seth | DC Energy |  |
| Cripe, Ramsey | Schneider Engineering | Via Teleconference |
| Daigneault, Ralph | Potomac Economics |  |
| Detelich, David | CPS Energy | Via Teleconference |
| Garza, Beth | Potomac Economics | Via Teleconference |
| Gregg, Michele | TCPA |  |
| Hall, Tim | Southern Power Co. |  |
| Harris, Brenda | Oxy |  |
| Henderson, Natasha | Golden Spread Electric Cooperative |  |
| Henry, Mark | Texas Reliability Entity | Via Teleconference |
| Hejkal, John | Tenaska Power Services |  |
| Hourihan, Mike | CP Power Energy | Via Teleconference |
| Huber, Grant | Cypress Creek Renewables |  |
| Jewell, Michael | Cypress Creek Renewables |  |
| Juricek, Mike | Oncor | Via Teleconference |
| Kroskey, Tony | Brazos Electric Cooperative | Via Teleconference |
| Lee, Jim | AEP Service Corporation |  |
| Lookadoo, Heddie | NRG | Via Teleconference |
| McCamant, Frank | McCamant Consulting | Via Teleconference |
| Oltmanns, Steve | GE | Via Teleconference |
| Pollo, Kevin | CPS Energy |  |
| Powell, Christian | Pedernales Electric Cooperative |  |
| Rainwater, Kim | Environmental Defense Fund |  |
| Reed, Carolyn | CenterPoint Energy | Via Teleconference |
| Reedy, Steve | Potomac Economics |  |
| Reid, Walter | Advance Power Alliance |  |
| Ritch, John | NextEra Energy |  |
| Robinson, Rhonda | Calpine | Via Teleconference |
| Romero, Lara | ACES Power | Via Teleconference |
| Shumate, Walt | Shumate & Associates |  |
| Siddiqi, Shams | Crescent Power |  |
| Sithuraj, Murali | Austin Energy |  |
| Smith, Caitlin | Invenergy |  |
| Stanfield, Leonard | Invenergy |  |
| Teng, Shuye | Austin Energy | Via Teleconference |
| Tran, Diane | TIEC |  |
| Varnell, John | Tenaska Power Services | Via Teleconference |
| Williams, Alexandra | EDF Energy Services |  |
| Wittington, Pam | Jewell and Associates |  |
| Wittmeyer, Bob | DME |  |
| Younger, Joseph | Texas Reliability Entity | Via Teleconference |

*ERCOT Staff:*

|  |  |  |
| --- | --- | --- |
| Albracht, Brittney |  |  |
| Anderson, Connor |  | Via Teleconference |
| Bivens, Carrie |  |  |
| Blevins, Bill |  |  |
| Bracy, Phil |  | Via Teleconference |
| Chang, Sean |  | Via Teleconference |
| Chen, Jian |  | Via Teleconference |
| Clifton, Suzy |  |  |
| Covington, Austin |  | Via Teleconference |
| Gonzalez, Ino |  |  |
| Guo, Jack |  | Via Teleconference |
| Hanson, Kevin |  | Via Teleconference |
| Hilliard, Marie |  | Via Teleconference |
| Holt, Blake |  | Via Teleconference |
| Hui, Hailong |  | Via Teleconference |
| Hull, Gibson |  | Via Teleconference |
| Jones, Dan |  |  |
| Kane, Erika |  | Via Teleconference |
| Maggio, Dave |  |  |
| Mickey, Joel |  |  |
| Morehead, Juliana |  | Via Teleconference |
| Moreno, Alfredo |  | Via Teleconference |
| Phillips, Cory |  |  |
| Ruane, Mark |  |  |
| Shanks, Magie |  | Via Teleconference |
| Shaw, Pam |  |  |
| Smith, Nathan |  | Via Teleconference |
| Stice, Clayton |  |  |
| Thomas, Shane |  | Via Teleconference |
| Thompson, Chad |  | Via Teleconference |
| Townsend, Aaron |  | Via Teleconference |
| Wattles, Paul |  |  |

***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

Mr. Kee reviewed items scheduled for a vote and noted changes to the order for which items would be taken up.

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

*November 7, 2018*

*January 9, 2019*

**Diana Coleman moved to approve the November 7, 2018 and January 9, 2019 WMS meeting minutes as submitted. Blake Gross seconded the motion. The motion carried unanimously.**

Technical Advisory Committee (TAC) Update and Assignments

Mr. Kee reviewed the disposition of items considered at the January 30, 2019 TAC meeting and encouraged Market Participants to view the Market Impacts of Reliability Unit Commitments (RUCs) presentation given by ERCOT, archived at <http://www.texasadmin.com/tx/ercot/technical_advisory/20190130/>.

2019 WMS Working Group Leadership (see Key Documents)

**Ian Haley moved to approve the 2019 WMS working group leadership as submitted. Sandy Morris seconded the motion. The motion carried unanimously.**

Mr. Kee expressed appreciation for the 2019 WMS working group leadership and encouraged Market Participants to consider leadership roles for the Congestion Management Working Group (CMWG), Demand Side Working Group (DSWG) and Metering Working Group (MWG).

2019 WMS Goals see (Key Documents)

Market Participants reviewed 2018 Goals and offered clarifications to develop 2019 Goals, including Real-Time co-optimization and energy storage. Mr. Kee requested that Market Participants offer any additional revisions to the 2019 Goals for consideration at the March 6, 2019 WMS meeting.

ERCOT Operations and Market Items (see Key Documents)

*Unregistered Distributed Generation (DG) Report 2018 Q4 Update*

Conner Anderson presented the 4th Quarter 2018 Unregistered DG Report and responded to questions and comments from Market Participants.

New Protocol Revision Subcommittee (PRS) Referrals

*Nodal Protocol Revision Request (NPRR) 917, Nodal Pricing for Settlement Only Distribution Generators (SODGs) and Settlement Only Transmission Generators (SOTGs)*

Paul Wattles summarized NPRR917, history of pricing for Settlement Only Generators (SOGs), and the January 11, 2019 DSWG discussion. Some Market Participants supported the proposed enhancements to the Nodal Market design and stated that it provides better pricing outcomes and dispatching behavior, but expressed concern for impacts to existing Resources. Other Market Participants expressed concern for potential market manipulations, impacts to the Congestion Revenue Right (CRR) values, risks to current contractual agreements, and compliance issues. In response to Market Participants’ request for a delayed implementation timeline or grandfathering existing Resources, Mr. Wattles stated that NPRR917 intends to cover all SODGs and SOTGs, but that ERCOT will consider any proposals that emerge from the stakeholder process. Mr. Wattles noted that the NPRR would currently impact four SOTGs and more than 200 SODGs with over 800 MW of capacity and stated that with the continuing Load growth in the DG sector it is important to get the right price signals now and consider long term solutions to other issues in subsequent Revision Requests.

**Ms. Morris moved to request PRS continue to table NPRR917 for further consideration by the CMWG, the Market Settlements Working Group (MSWG), and the Wholesale Market Working Group (WMWG). The motion carried unanimously.**

Mr. Kee requested that CMWG review the impacts to CRR values and potential hedging issues, and WMWG review potential grandfather provisions and impacts on Private Use Networks (PUNS) and existing Resources. Mr. Kee further requested that MSWG review the Settlement equations after CMWG and WMWG provide their recommendations.

Other Binding Documents Revision Request (OBDRR) 009, ORDC OBD Revisions for ERCOT-Directed Actions Related to DC Ties

Shams Siddiqi summarized OBDRR009 and stated that its function is not related to NPRR904 although the issues in enhancing the market design when curtailing imports and exports are related. Market Participants and ERCOT Staff discussed the alignment issues in NPRR904 and OBDRR009. Market Participants requested ERCOT consider NPRR904 in developing the Impact Analysis for OBDRR009, if possible.

**Eric Goff moved to endorse OBDRR009 as submitted. Resmi Surendran seconded the motion. The motion carried with six abstentions from the Consumer (4) (City of Eastland, Dow Chemical, Nucor, OPUC), Independent Retail Electric Provider (IREP) (Direct Energy), and Investor Owned Utility (IOU) (AEP) Market Segments.**

WMWG

Mr. Goff summarized recent WMWG activities, including review of Revision Requests and issues assigned to WMWG.

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

*NPRR838, Updated O&M Cost for RMR Resources*

*NPRR872, Modifying the SASM Shadow Price Cap*

*NPRR903, Day-Ahead Market Timing Deviations*

*NPRR904, Revisions to Real-Time On-Line Reliability Deployment Price Adder for ERCOT-Directed Actions Related to DC Tie*

WMS took no action on these items.

*NPRR885, Must-Run Alternative (MRA) Details and Revisions Resulting from PUCT Project No. 46369, Rulemaking Relating to Reliability Must-Run Service*

Mr. Goff summarized NPRR885 and the 1/22/19 ERCOT comments. Market Participants discussed the impacts to implementing NPRR885 in consideration of potential Revision Requests and projects related to Real-Time co-optimization.

**Mr. Goff moved to endorse NPRR885 as amended by the 1/22/19 ERCOT Comments, and requested PRS consider a priority and rank for NPRR885 that prioritizes Real-Time co-optimization. The motion carried with one abstention from the Independent Generator (Calpine) Market Segment.**

*NPRR896, Reliability Must-Run and Must-Run Alternative Evaluation Process*

**Mr. Goff moved to endorse NPRR896 as submitted. Ms. Coleman seconded the motion. The motion carried with one abstention from the Independent Generator (Calpine) Market Segment.**

*NPRR912, Settlement of Switchable Generation Resources (SWGRs) Instructed to Switch to ERCOT*

Mr. Goff summarized NPRR912 and the January 25, 2019 WMWG discussion. Market Participants discussed the 2/4/19 Joint comments, debated the risk and impacts to SWGRs and Generation Resources in RUC, and offered clarifications to limit Settlement for SWGRs to the lower of $4,500 per MWh or the System-Wide Offer Cap (SWCAP), and that time period costs could be incurred.

**Bill Barnes moved to endorse NPRR912 as amended by the 2/4/19 Joint Comments as revised by WMS. Mr. Haley seconded the motion. The motion carried via roll call vote with three abstentions from the Cooperative (GSEC), Independent Generator (Exelon), and Independent Power Marketer (IPM) (Shell Energy) Market Segments.** *(Please see ballot posted with Key Documents)[[2]](#footnote-2)*

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

Caitlin Smith summarized recent SAWG activities, including review of Revision Requests and issues assigned to SAWG.

MSWG (see Key Documents)

Heddie Lookadoo reviewed recent MSWG activities, including potential clarification to the MSWG scope. Ms. Lookadoo stated that the Nodal Handbook is outdated and requested WMS direction in replacing with the ERCOT Settlement Matrix. Some Market Participants requested MSWG look at meeting efficiencies with the MWG. Mr. Kee stated that the MSWG scope would be considered at the March 6, 2019 WMS meeting. Market Participants discussed a thorough review of the mechanics and pricing impacts in NPRR850, Market Suspension and Restart. Mr. Kee requested that MSWG review the issues and provide recommendations in the form of best practices or draft Revision Requests.

CMWG

Mr. Haley reviewed CMWG activities, including Revision Requests and issues assigned to CMWG and encouraged Market Participants to consider 2019 CMWG leadership roles. Market Participants and ERCOT Staff discussed the issues of a Market Participant default in the CRR Auction and the importance of flexible solutions. Mr. Kee requested that CMWG review the current CRR Auction design and impacts from potential defaults.

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

Christian Powell reviewed DSWG activities, including Revision Requests and issues assigned to DSWG.

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

Clayton Greer reviewed MCWG activities, including Revision Requests and issues assigned to MCWG. Mr. Greer summarized the January 23, 2019 MCWG discussion of potential clarifications to the ERCOT market entry qualifications and liquidation process following the GreenHat Energy, LLC default in the PJM market.

Other Business

*Real-Time Co-optimization Workshop*

Mr. Kee reminded Market Participants of the Real-Time co-optimization Workshop on March 6, 2019 at 1:30 p.m. at ERCOT.

*Review of Open Action Items*

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

* TAC Assignment: RUC for Capacity
* Review issue of procuring Non-Spin Reserve (Non-Spin) and the alignment of Ancillary Services
* Review changes to ERCOT Business Practices and communication to the Market
* Evaluate the Non-Spin procurement methodology
* Review the issue of price suppression caused by testing and the need for updating the Reliability Deployment Price Adder
* Review potential solutions for High Dispatch Limit (HDL)/ Low Dispatch Limit (LDL) Override that occurred on 2/10/18 based on Resource Limit Calculator Logic
* Review NPRR879, SCED Base Point and Performance Evaluation Changes for IRRs that Carry Ancillary Services

*No Report*

* MWG
* Resource Cost Working Group (RCWG)

Adjournment

Mr. Kee adjourned the February 6, 2019 WMS meeting at 12:21 p.m.

1. <http://www.ercot.com/calendar/2019/2/6/165223-WMS> [↑](#footnote-ref-1)
2. <http://www.ercot.com/mktrules/issues/NPRR912#keydocs> [↑](#footnote-ref-2)