**APPROVED**

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

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

**Wednesday, November 7, 2018 – 9:30 a.m.**

Attendance

*Members:*

|  |  |  |
| --- | --- | --- |
| Barnes, Bill | Reliant Energy Retail Services |   |
| Bierschbach, Erika | Austin Energy |  |
| 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 |  |
| Gross, Blake | AEP Service Corporation |   |
| 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 |  |
| Paez, Richard | Infinite Energy | Alt. Rep. for Steve MaddenVia Teleconference |
| Robertson, Jennifer | LCRA | Alt. Rep. for John Dumas |
| Schwarz, Brad | Sharyland Utilities |  |
| Shaw, Marka | Exelon |  |
| Smith, Mark | Nucor |   |
| Such, Chris | E.ON |  |
| Surendran, Resmi | Shell Energy |  |
| Velasquez, Ivan | Oncor | Alt. Rep. for Taylor Woodruff |
| Whittle, Brandon | Calpine  | Alt. Rep. for Clint Sandidge |
| Wilson, Joe Dan | Golden Spread Electric Cooperative |   |

The following proxies were assigned:

* Sandy Morris to Bill Barnes at 11:15 a.m.

*Guests:*

|  |  |  |
| --- | --- | --- |
| Abbott, Kristin | PUCT | Via Teleconference |
| Ainspan, Malcolm | NRG | Via Teleconference |
| Anderson, Kevin | Customized Energy Solutions |  |
| Ashley, Kristy | Customized Energy Solutions |  |
| Bonbick, Sarah | LCRA |  |
| Bruce, Mark | Cratylus Advisors | Via Teleconference |
| Bryant, Mark | PUCT | Via Teleconference |
| Carden, Kevin | Astrape Consulting | Via Teleconference  |
| Carroll, Rebecca | The Brattle Group | Via Teleconference |
| Cochran, Seth | DC Energy |  |
| Cripe, Ramsey | Schneider Engineering | Via Teleconference |
| Detelich, David | CPS Energy | Via Teleconference |
| Elliott, Christopher | Bank Of America Merrill Lynch | Via Teleconference |
| Fossum, Drew | Tenaska Power Services |  |
| Gregg, Michele | TCPA | Via Teleconference |
| Griffiths, Meghan | Jason Walker | Via Teleconference |
| Haley, Ian | Luminant Generation |   |
| Hall, Tim | Southern Power Co. |  |
| Helton, Bob | ENGIE |  |
| Henson, Martha | Oncor |  |
| Hourihan, Mike | CP Power Energy | Via Teleconference |
| Hudis, Gabrilla | Gabel Associates | Via Teleconference |
| Hughes, Darren | LCRA | Via Teleconference |
| Johnson, David | IVG | Via Teleconference |
| Jonas, Todd | Tenaska Power Services |  |
| Jones, Randy | Mountaineer | Via Teleconference |
| Juricek, Michael | Oncor | Via Teleconference |
| Kroskey, Tony | Brazos Electric | Via Teleconference |
| Kueker, Dan | Brazos Electric | Via Teleconference |
| Lookadoo, Heddie | NRG | Via Teleconference |
| Marengo, Delette | Tenaska Power Services |  |
| Nease, Nelson | Nelson H. Nease, PC | Via Teleconference |
| Newell, Sam | The Brattle Group | Via Teleconference |
| Powell, Christian | Pedernales Electric Cooperative |  |
| Reedy, Steve  | Potomac Economics | Via Teleconference |
| Reid, Walter | Wind Coalition | Via Teleconference |
| Robinson, Rhonda | Calpine | Via Teleconference |
| Sams, Bryan | NRG |   |
| Shumate, Walt | Shumate & Associates |  |
| Siddiqi, Shams | Crescent Power |   |
| Sithuraj, Murali | Austin Energy |  |
| Smith, Caitlin | Invenergy |  |
| Stanfield, Leonard | Invenergy |  |
| True, Roy | ACES Power | Via Teleconference |
| Turner, Lucas | South Texas Electric Cooperative | Via Teleconference |
| Van Booven, Ashley | New Braunfels Utilities | Via Teleconference |
| Wallin, Shane | DME |  |
| Watson, Mark |  |  |
| Wittmeyer, Bob | DME |   |
| Ye, Lei | Austin Energy | Via Teleconference |
| Younger, Joseph | Texas Reliability Entity | Via Teleconference |

*ERCOT Staff:*

|  |  |  |
| --- | --- | --- |
| Albracht, Brittney |  | Via Teleconference |
| Anderson, Connor |  |   |
| Bigbee, Nathan |  |  |
| Bivens, Carrie |  |  |
| Blevins, Bill |  |  |
| Butterfield, Lindsay |  |  |
| Chen, Jian |  | Via Teleconference |
| Clifton, Suzy |  |  |
| Gonzalez, Ino |  |   |
| Holt, Blake |  | Via Teleconference |
| Hughes, Lindsey |  | Via Teleconference |
| Jones, Dan |  |  |
| Kane, Erika |  | Via Teleconference |
| Maggio, Dave |  |  |
| Mereness, Matt |   |   |
| Mickey, Joel |  |  |
| Phillips, Cory |  |   |
| Roberts, Randy |  | Via Teleconference |
| Ruane, Mark |  |  |
| Shaw, Pam |  |  |
| Smith, Nathan |  | Via Teleconference |
| Warnken, Pete |  | Via Teleconference |

***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)

*October 10, 2018*

**Diana Coleman moved to approve the October 10, 2018 WMS meeting minutes as submitted. Anthony Johnson seconded the motion. The motion carried unanimously.**

Technical Advisory Committee (TAC) Update and Assignments

Mr. Kee reminded Market Participants that TAC had not met since the October 10, 2018 WMS meeting.

ERCOT Operations and Market Items (see Key Documents)

*Market Equilibrium and Economically Optimal Planning Reserve Margin Study*

Pete Warnken introduced The Brattle Group and Astrape Consulting Staff to summarize highlights of their studies on the Market Equilibrium Reserve Margin and Economically Optimal Reserve Margin as presented at the October 19, 2018 Supply Analysis Working Group (SAWG) meeting and reminded Market Participants that comments on the studies need to be submitted by November 26, 2018. Sam Newell reviewed the concepts in the study and stated that the projected 2022 Market Equilibrium Reserve Margin is 10.25% compared to 11.5% in 2014. Kevin Carden summarized the drivers of the projected change and Rebecca Carroll reviewed the sensitivities to key uncertainties.

*Unregistered Distributed Generation (DG) Report 2018 Q3 Update*

Connor Anderson presented the 3rd Quarter 2018 Unregistered DG report and noted the significant increase in solar generation from 2016 to 2018.

New Protocol Revision Subcommittee (PRS) Referrals

*Nodal Protocol Revision Request (NPRR) 901, Switchable Generation Resource Status Code*

Bill Blevins stated that creating a new Resource Status code for Switchable Generation Resources (SWGRs) operating in another region provides greater transparency for operations and reporting and reviewed the timeline to implement NPRR901. Dan Jones summarized discussions at the Qualified Scheduling Entity (QSE) Managers Working Group (QMWG) meetings regarding compensation and Settlement issues. Resmi Surendran summarized the 10/11/18 Shell Energy comments and expressed concern for advancing NPRR901 without addressing recovery of the reasonable costs of switchable grid generators. Todd Jonas summarized the 10/11/18 Tenaska comments and expressed concern for the unintended consequences of NPRR901. Market Participants and ERCOT Staff debated the Settlement issues and potential clarifications. Market Participants offered clarifications to include a status change of “unavailable for RUC or verbal dispatch.”

**Ms. Surendran moved to endorse NPRR901 as amended by the 10/11/18 Tenaska comments and as revised by WMS. Clayton Greer seconded the motion.** Market Participants further debated the issues.

**Joe Dan Wilson moved to table NPRR901. Ken Lindberg seconded the motion. The motion failed via roll call vote, with 12 objections from the Consumer (4) (City of Eastland, OPUC, Dow Chemical, Nucor), Independent Power Marketer (IPM) (3) (Citigroup Energy, Morgan Stanley, Shell Energy), Independent Retail Electric Provider (IREP) (Reliant), and Investor Owned Utility (IOU) (4) (Oncor, AEPSC, CenterPoint, Sharyland) Market Segments, and four abstentions from the Independent Generator (E.ON), IPM (Tenaska), and IREP (2) (Direct Energy, Infinite Energy) Market Segments.** *(Please see ballot posted with Key Documents.)*

Nathan Bigbee reminded Market Participants of the reliability issues and the intent to codify the process for emergency situations. Market Participants offered additional clarifications to specify for emergency conditions verses status code for “unavailable for RUC or verbal dispatch” and reviewed the Revision Request approval process and timeline.

**Mr. Wilson moved to amend the main motion to endorse NPRR901 as amended by the 10/11/18 Tenaska comments and as revised by WMS. Clif Lange seconded the motion.** Market Participants further debated the issues.

**Mr. Wilson moved to table NPRR901. Marka Shaw seconded the motion. The motion failed via roll call vote, with 13 objections from the Consumer (4) (City of Eastland, OPUC, Dow Chemical, Nucor), IPM (3) (Citigroup Energy, Morgan Stanley, Shell Energy), IREP (2) (Reliant, Electranet), and IOU (4) (Oncor, AEPSC, CenterPoint, Sharyland) Market Segments, and three abstentions from the IPM (Tenaska), and IREP (2) (Direct Energy, Infinite Energy) Market Segments.** *(Please see ballot posted with Key Documents.)*

In response to Market Participant questions, Mr. Bigbee stated there are five SWGRs in the ERCOT Region. Market Participants discussed alternative solutions including manual verses automated processes and reviewed the timeline for urgency. Mr. Kee requested QMWG review the following SWGRs issues:

* transparency for operators of SWGRs status
* process of switching Resources
* compensation
* allocation of compensation
* transparency of time frame, duration and switching procedures
* impact on Real-Time Market
* mitigation on pricing in other market
* waiver of obligation in other market
* consideration of Resources already obligated

WMS took no action on NPRR901.

*NPRR903, Day-Ahead Market Timing Deviations*

Market Participants discussed the merits of NPRR903 and requested additional review of the issues by QMWG.

**Mr. Greer moved to request PRS continue to table NPRR903 to allow further review by QMWG. Bill Barnes seconded the motion. The motion carried unanimously.**

QMWG (see Key Documents)

Eric Goff summarized recent QMWG activities, including review of Revision Requests and issues assigned to QMWG.

*Wholesale Market Working Group (WMWG) Name Change Recommendation*

*WMWG Scope*

Mr. Goff reported WMWG would supplant the QMWG and reviewed the WMWG scope.

**Mark Smith moved to establish the WMWG effective January 2, 2019 and to approve the scope as submitted. Mr. Goff seconded the motion. The motion carried unanimously.**

*WMWG Leadership*

This item was deferred to the February 6, 2019 WMS meeting.

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

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

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

*NPRR891, Removal of NOIE Capacity Reporting Threshold for the Unregistered Distributed Generation Report (SAWG)*

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

WMS took no action on these items.

*NPRR850, Market Suspension and Restart*

Jennifer Robertson summarized the 11/4/18 LCRA comments and noted the change for ERCOT oversight in the event of a market restart and revised Settlement calculations.

**Mr. Barnes moved to endorse NPRR850 as amended by the 11/5/18 LCRA comments. Mr. Gross seconded the motion. The motion carried unanimously.**

*NPRR872, Modifying the SASM Shadow Price Cap*

Mr. Goff provided an update on NPRR872 and requested WMS provide direction for further review of the issues. Ms. Robertson summarized the 5/9/18 LCRA comments and 5/16/18 ERCOT comments and requested that ERCOT provide additional analysis to define the percentages used in the Demand curves and the maximum Shadow Price values. Some Market Participants expressed concern for the reliability issues related to NPRR872. Ian Haley summarized the 9/4/18 Luminant comments and stated that the issues identified have not been resolved and requested LCRA provide additional clarifications rather than ERCOT.

**Ms. Robertson moved to request ERCOT file comments to NPRR872. Mr. Wilson seconded the motion. The motion carried with three objections from the Independent Generator (Calpine), IPM (Shell Energy) and IREP (Reliant) Market Segments.**

Market Settlement Working Group (MSWG) (see Key Documents)

Mr. Kee noted the MSWG presentation was posted.

SAWG (see Key Documents)

Bryan Sams summarized recent SAWG activities.

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

Mr. Haley summarized CMWG activities, including the High Revenue Neutrality Allocation (RENA) workshop and reviewed the status of items on the CMWG Action Items List.

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

Mr. Barnes summarized MCWG activities.

Other Business

*2019 Membership/Segment Elections*

ERCOT Staff reminded Market Participants that the membership date of record is Friday, November 9, 2018 and stated that 2019 Segment Representative Elections would begin on Monday, November 12, 2018.

*Review of Open Action Items*

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

* Day-Ahead Market (DAM) Operating Day (OD) 1/23/18 Event
* Southern Cross Transmission Assignment Directive #10, Price Formation under Emergency conditions

*No Report*

* Demand Side Working Group (DSWG)
* Metering Working Group (MWG)
* Resource Cost Working Group (RCWG)

Adjournment

Mr. Kee adjourned the November 7, 2018 WMS meeting at 1:00 p.m.

1. http://www.ercot.com/calendar/2018/11/7/138558-WMS [↑](#footnote-ref-1)