**APPROVED**

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

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

**Wednesday, January 10, 2018 – 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 |  |
| Kee, David | CPS Energy |  |
| Lange, Clif | South Texas Electric Cooperative |  |
| Lindberg, Ken | Bryan Texas Utilities  |  |
| Maduzia, Franklin | Dow Chemical |  |
| Mauldin, Jamie | City of Eastland |  |
| Moore, Sheri | CenterPoint Energy |  |
| Morris, Sandy | Direct Energy |  |
| Powell, Christian | LCRA | Alt. Rep. for J. Dumas |
| Sandidge, Clint | Calpine Energy Solutions |  |
| Shaw, Marka | Exelon |  |
| Smith, Mark | Nucor |  |
| Such, Chris | E. ON |  |
| Surendran, Resmi | Shell Energy |  |
| Wilson, Joe Dan | Golden Spread Electric Cooperative |   |
| Woodruff, Taylor | Oncor |  |

The following proxy was assigned:

* Brad Schwarz to Blake Gross

*Guests:*

|  |  |  |
| --- | --- | --- |
| Ainspan, Malcolm | NRG | Via Teleconference |
| Anderson, Kevin | CES Energy |  |
| Blakey, Eric | Just Energy | Via Teleconference |
| Bruce, Mark | Cratylus Advisors |  |
| Bryant, Mark | PUCT | Via Teleconference |
| Bunch, Kevin | EDF Energy Services |  |
| Cochran, Seth | DC Energy |  |
| Cripe, Ramsey | Schneider Engineering |  |
| Daigneault, Ralph | Potomac Economics |  |
| Dawar, Vika | Austin Energy | Via Teleconference |
| Detelich, David | CPS Energy | Via Teleconference |
| Donohoo, Ken | EPE Consulting | Via Teleconference |
| Eckhoff, Christina | Texas Reliability Entity | Via Teleconference |
| Foos, Richard | Calpine | Via Teleconference |
| Galliguez, Percy | Brazos Electric Cooperative | Via Teleconference |
| Garza, Beth | Potomac Economics |  |
| Haley, Ian | Vistra Energy |   |
| Hourihan, Mike | CPower Energy | Via Teleconference |
| Hudis, Gabriella | Gabel Associates | Via Teleconference |
| Hughes, Darren | LCRA | Via Teleconference |
| Kayser, Liz | PUCT | Via Teleconference |
| Kueker, Dan | Brazos Electric Cooperative | Via Teleconference |
| Lee, Jim | AEP Service Corporation | Via Teleconference |
| Maye, Shelly-Ann | Wind of Texas | Via Teleconference |
| Mueller, Paula | Texas Reliability Entity | Via Teleconference |
| Paff, Tom | Duke Energy | Via Teleconference |
| Reid, Walter | Wind Coalition | Via Teleconference |
| Robinson, Rhonda | Calpine | Via Teleconference |
| Rochelle, Jennifer | CES |  |
| Romero, Lara | ACES | Via Teleconference |
| Siddiqi, Shams | Crescent Power |  |
| Sithuraj, Murali | Austin Energy |  |
| Smith, Caitlin | Jewell and Associates |  |
| Stanfield, Leonard | Invenergy | Via Teleconference |
| Thompson, David | PEC |  |
| Varnell, John | Tenaska | Via Teleconference |
| Vinson, Paul | CPS Energy |  |
| Wallin, Shane | DME |  |
| Whittle, Brandon | Megawatt Analytics |   |
| Whitworth, Doug | Texas Reliability Entity | Via Teleconference |
| Wittmeyer, Bob | DME |  |

*ERCOT Staff:*

|  |  |  |
| --- | --- | --- |
| Albracht, Brittney |  | Via Teleconference |
| Anderson, Conner |  | Via Teleconference |
| Bigbee, Nathan |  |  |
| Bivens, Carrie |  |  |
| Boswell, Bill |  | Via Teleconference |
| Bracy, Phil |  |  |
| Butterfield, Lindsay |  | Via Teleconference |
| Change, Sean |  | Via Teleconference |
| Chen, Jian |  | Via Teleconference |
| Chu, Zhengguo |  | Via Teleconference |
| Clifton, Suzy |  | Via Teleconference |
| Day, Betty |  | Via Teleconference |
| Gonzalez, Ino |  |   |
| Guo, Jack |  | Via Teleconference |
| Hanson, Kevin |  | Via Teleconference |
| Hobbs, Kristi |  | Via Teleconference |
| Holt, Blake |  | Via Teleconference |
| Hui, Hailong |  | Via Teleconference |
| Jones, Dan |  |  |
| Kane, Erika |  | Via Teleconference |
| Krein, Steve |  | Via Teleconference |
| Landry, Kelly |  |  |
| Levine, Jon |  | Via Teleconference |
| Mago, Nitika |  | Via Teleconference |
| Matevosyan, Julia |  | Via Teleconference |
| Mickey, Joel |  |  |
| Moorty, Sai |  |  |
| Moreno, Alfredo |  | Via Teleconference |
| Phillips, Cory |  |   |
| Raish, Carl |  |  |
| Roberts, Randy |  | Via Teleconference |
| Rosel, Austin |  | Via Teleconference |
| Ruane, Mark |  |  |
| Shaw, Pam |  |  |
| Stice, Clayton |  |  |
| Thompson, Chad |  | Via Teleconference |
| Townsend, Aaron |  | Via Teleconference |
| Warnken, Pete |  | Via Teleconference |
| Wattles, Paul |  | Via Teleconference |
| Zhang, Wen |  | Via Teleconference |

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

Antitrust Admonition

Phil Bracy directed attention to the Antitrust Admonition, which was displayed.

Election to 2018 WMS Chair and Vice Chair

Mr. Bracy reviewed the leadership election process codified in the Technical Advisory Committee Procedures and opened the floor for nominations.

**Taylor Woodruff nominated David Kee for 2018 WMS Chair.** Mr. Kee accepted the nomination. **Mr. Kee was named 2018 WMS Chair by acclamation.**

**Bill Barnes nominated Resmi Surendran for 2018 WMS Vice Chair.** Ms. Surendran accepted the nomination. **Ms. Surendran was named 2018 WMS Vice Chair by acclamation.**

Agenda Review

There were no changes to the agenda.

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

*November 1, 2017*

**Joe Dan Wilson moved to approve the November 1, 2017 WMS meeting minutes as submitted. Diana Coleman seconded the motion. The motion carried unanimously.**

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

Mr. Kee reviewed the disposition of items considered at the November 30, 2017 TAC meeting.

*TAC Subcommittee Restructuring Discussion*

Mr. Kee stated the ERCOT Board has directed TAC to review potential impacts of consolidating the Commercial Operations Subcommittee (COPS) and the Retail Market Subcommittee (RMS) to maximize meeting efficiencies.

*Review changes to ERCOT Business Practices and communication to the Market*

Market Participants briefly discussed the issue of timely communications when ERCOT system changes impact their systems. Mr. Kee referred the issue to the Qualified Scheduling Entity (QSE) Managers Working Group (QMWG).

*Evaluate the Non-spin Procurement Methodology*

Mr. Kee referred the issue of evaluating the Non-Spinning Reserve Service (Non-Spin) procurement methodology to QMWG.

ERCOT Operations and Market Items (see Key Documents)

*Commercial Impacts from Hurricane Harvey*

Pam Shaw presented the commercial operation impacts from Hurricane Harvey and noted that overall commercial operations and market outcomes were stable. ERCOT Staff and Market Participants discussed communication failures experienced in ERCOT-Polled Settlement (EPS) Meter data collection, Real-Time Market (RTM) and Day-Ahead Market (DAM) congestion, and pricing impacts in the South and Houston zones. ERCOT Staff and Market Participants further discussed the significant Load Distribution Factor (LDF) mismatch in the Costal and Southern Weather Zones and challenges to improve performance during extreme events. Mr. Kee referred the issue to QMWG.

*Real-Time Co-optimization training and scope discussion*

Dan Jones stated that ERCOT intends to provide an overview of the basic mechanics of Real-Time Co-optimization at the January 31, 2018 WMS Meeting and encouraged Market Participants to submit questions or requests prior to the meeting. In response to Market Participant questions on the Cost Benefit Analysis, Independent Market Monitor (IMM) Staff provided a summary of the proposed methodology to evaluate Real-Time Co-optimization performance. IMM Staff stated the information would be published and that an update is anticipated to be provided to the Public Utility Commission of Texas (PUCT) in February or March 2018.

NPRR852, CRR Activity Calendar Approval Process

Carrie Bivens provided an update on Nodal Protocol Revision Request (NPRR) 852 and reminded Market Participants that upon implementation, WMS will approve the annual updates to the Congestion Revenue Right (CRR) activity calendar.

NPRR861, Clarification of ERCOT’s Authority to Protect Its Jurisdictional Status

ERCOT Staff and Market Participants discussed the merits of NPRR861, the directive to ERCOT in PUCT Project No. 46665, and the potential actions ERCOT could take in order to prevent a change to its or Market Participants’ jurisdictional status with respect to the Federal Energy Regulatory Commission (FERC).

**Mr. Barnes moved to endorse NPRR861 as submitted. Clint Sandidge seconded the motion. The motion carried unanimously.**

NPRR864, RUC Modifications to Consider Market-Based Solutions

Ms. Surendran reviewed NPRR864, stating the intent was to modify the Reliability Unit Commitment (RUC) process to allow market based solutions prior to ERCOT actions and that urgency was requested so that it could be implemented prior to Summer 2018. Ms. Surendran stated that in review of potential impacts, ERCOT Staff identified other potential solutions. Market Participants and ERCOT Staff discussed the merits of NPRR864, alternate solutions and the proposed timeline. Joel Mickey expressed concern for the proposed timeline with the additional vetting needed and encouraged Market Participants to consider proposing an interim solution as a separate initiative. No action was taken on this item.

New Protocol Revision Subcommittee (PRS) Referrals

*NPRR851, Procedure for Managing Disconnections for Bidirectional Electrical Connections at Transmission Level Voltages*

Market Participants discussed the merits of NPRR851 and requested additional time to review the proposed defined term, “ERCOT Retail Electric Utility (EREU)”.

**Mr. Woodruff moved to request PRS continue to table NPRR851 for one month to allow additional time for review by WMS. Mr. Barnes seconded the motion. The motion carried unanimously.**

*NPRR854, NOIE TDSP Submittal of Meters with Bidirectional Flow Caused by Generation Interconnected at Distribution Voltage*

**Clif Lange moved to endorse NPRR854 as submitted. Christian Powell seconded the motion. The motion carried unanimously.**

*NPRR856, Treatment of OFFQS Status in Day-Ahead Make Whole and RUC Settlements*

Austin Rosel reviewed NPRR856 and stated that ERCOT intended to implement a manual process until an automated solution could be identified. Market Participants discussed the merits of NPRR856 and current Alternative Dispute Resolution (ADR) issues, and requested additional time to review.

**Mr. Lange moved to request PRS continue to table NPRR856 to allow additional time for review by QMWG. Mr. Wilson seconded the motion. The motion carried unanimously.**

*NPRR857, Creation of Direct Current Tie Operator Market Participant Role*

**Ms. Surendran moved to request PRS continue to table NPRR857 to allow additional time for review by QMWG. Marty Downey seconded the motion. The motion carried unanimously.**

*SCR795, Addition of Intra-Hour Wind Forecast to GTBD Calculation*

Sandip Sharma reviewed System Change Request (SCR) 795 and stated that the software will give ERCOT the ability to forecast in Real-Time the expected MWs from ramping Wind-powered Generation Resources (WGRs) for the coming five minutes in the Generation To Be Dispatched (GTBD) calculation which would improve Security-Constrained Economic Dispatch (SCED) dispatch and ease pressure on regulation deployment. Mr. Sharma acknowledged the inherent forecast error and encouraged Market Participants’ participation in determining parameters to measure performance of the tool as the Revision Request continues through the Stakeholder process. Market Participants also expressed a concern for unintended consequences associated with changes to the GTBD calculation and the accuracy of performance measures in the intra-hour forecast, and requested additional review by the QMWG.

**Mr. Wilson moved to request PRS continue to table SCR795 to allow additional time for review by QMWG. Mr. Woodruff seconded the motion. The motion carried unanimously.**

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

*NPRR807, Day-Ahead Market Price Correction*

*NPRR832, Disallow PTP Obligation Bids and DAM Energy Bids that Sink at Private Use Network Settlement Points Without a Load Distribution Factor - Urgent*

*NPRR837, Regional Planning Group (RPG) Process Reform*

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

*NPRR845, RMR Process and Agreement Revisions*

*NPRR847, Exceptional Fuel Cost Included in the Mitigated Offer Cap*

*NPRR848, Separate Clearing Prices for RRS*

*NPRR850, Market Suspension and Restart*

WMS took no action on these items.

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

Ian Haley reviewed recent CMWG activities.

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

David Thompson reviewed recent DSWG activities, including 2017 and 2018 Goals.

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

Mr. Barnes reviewed recent MCWG activities and reminded Market Participants of the potential issues with implementation of NPRR800, Revisions to Credit Exposure Calculations to Use Electricity Futures Market Prices, with the projected lower reserve margins for Summer 2018. Mr. Barnes encouraged Market Participants to attend the upcoming Credit Training Workshop at ERCOT.

QMWG

Mr. Goff reviewed recent QMWG activities. Market Participants expressed concern for the number of issues referred to QMWG. Mr. Kee requested that QMWG review the issue and provide a recommendation at the January 31, 2018 WMS meeting.

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

Sandy Morris reviewed recent SAWG activities including 2018 Goals.

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

Paul Vinson reviewed RCWG activities. Ino Gonzalez reviewed NPRR847, Exceptional Fuel Cost

Included in the Mitigated Offer Cap, and the clarifications offered in the 12/08/17 Luminant and 1/5/18 ERCOT comments. Market Participants expressed concern for the verification of submitted cost for an Exceptional Fuel Cost event. Beth Garza cautioned Market Participants against submitting these costs without effective internal control processes in place as the market harm from incorrect submissions cannot be undone, and warned that Market Participants submitting inaccurate Exceptional Fuel Costs could be dealt with harshly. ERCOT Staff offered to provide additional clarifications to specify qualifying fuel purchases on a specific day.

Other Business

*2018 WMS Goals*

Mr. Kee encouraged Market Participants to review the 2017 WMS Goals and provide input for developing 2018 WMS Goals at the January 31, 2018 WMS Meeting.

*2018 WMS Working Group Leadership*

ERCOT Staff reminded Market Participants that 2018 WMS Working Group Leadership would be considered at the January 31, 2018 WMS Meeting.

*No Report*

* Emerging Technologies Working Group (ETWG)
* Metering Working Group (MWG)

Adjournment

Mr. Kee adjourned the January 10, 2018 WMS meeting at 1:10 p.m.

1. <http://www.ercot.com/calendar/2017/11/1/108845-WMS> [↑](#footnote-ref-1)