**APPROVED**

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

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

**Wednesday, June 7, 2017 – 9:30 a.m.**

Attendance

*Members:*

|  |  |  |
| --- | --- | --- |
| Allen, Thresa  | Avangrid Renewables |  |
| Bierschbach, Erika | Austin Energy |  |
| Brewster, Chris | City of Eastland |  |
| Carpenter, Jeremy | Tenaska |  |
| Coleman, Diana | OPUC |  |
| Downey, Marty | Viridity Energy |  |
| Dumas, John | LCRA |  |
| Franklin, Russell | Garland Power and Light |  |
| Goff, Eric | Citigroup Energy |  |
| Greer, Clayton | Morgan Stanley |   |
| Gross, Blake | AEP Service Corporation |  |
| Helton, Bob | Dynegy |  |
| Henson, Martha | Oncor | Alt. Rep. for T. Woodruff |
| Kee, David | CPS Energy |  |
| Clif Lange | South Texas Electric Cooperative |  |
| Lindberg, Ken | Bryan Texas Utilities |  |
| Maduzia, Franklin | Dow Chemical |  |
| Messer, Tayaun | Brazos Electric Power Cooperative |  |
| Moore, Sheri | CenterPoint Energy | Alt. Rep. for D. Plunkett |
| Morris, Sandy | Direct Energy |  |
| Sams, Bryan | Reliant Energy Retail Services |  |
| Schwarz, Brad | Sharyland |  |
| Shaw, Marka | Exelon |  |
| Such, Chris | E. On |  |
| Thurnher, Greg | Shell Energy |  |
| Trefny, Floyd | Nucor | Alt. Rep. for Mark Smith |
|  |  |  Via Teleconference |
| Wilson, Joe Dan | Golden Spread Electric Cooperative |   |

The following proxies were assigned:

* Clint Sandidge to Bryan Sams
* Chris Such to Bob Helton at 12:26 p.m.
* John Dumas to Clif Lange 1:51 p.m.

*Guests:*

|  |  |  |
| --- | --- | --- |
| Abbott, Kristin | PUCT | Via Teleconference |
| Ainspan, Malcolm | NRG | Via Teleconference |
| Ashley, Kristy | CES |  |
| Bailey, Dan | Garland Power and Light | Via Teleconference |
| Barnes, Bill | NRG | Via Teleconference |
| Brandt, Adrianne | CPS Energy |  |
| Bryant, Mark | PUCT | Via Teleconference |
| Bunch, Kevin | EDF Trading | Via Teleconference |
| Burke, Tom | Golden Spread Electric Cooperative |  |
| Campos, Laura | Austin Energy | Via Teleconference |
| Castillo, Ernest | CPS Energy | Via Teleconference |
| Coleman, Katie | Texas Industrial Energy Consumers |  |
| English, Barksdale | Austin Energy | Via Teleconference |
| Garza, Beth | Potomac Economics | Via Teleconference |
| Gedrich, Brian | GridLiance |  |
| Graham, Greg | Texas Reliability Entity | Via Teleconference |
| Griffey, Charles | Texas Industrial Energy Consumers  |  |
| Haley, Ian | Vistra Energy |  |
| Harvey, Julia | PUCT | Via Teleconference |
| Hudis, Gabriella | Gabel Associates, Inc. | Via Teleconference |
| Hughes, Darren | LCRA | Via Teleconference |
| Jones, Randy | Calpine | Via Teleconference |
| Juricek, Michael | Oncor | Via Teleconference |
| Lee, Jim | AEP |  |
| Li, Young | Potomac Economics | Via Teleconference |
| Meno, Hugo | Electric Power Engineers |  |
| Moeller, Jason | LCRA | Via Teleconference |
| Moss, Steven | E. On | Via Teleconference |
| Neaase, Nelson | Nelson H. Nease, PC | Via Teleconference |
| Orenstein, James | Solar Synergy  | Via Teleconference |
| Powell, Christian | LCRA |  |
| Reedy, Steve | Potomac Economics |  |
| Reid, Walter | Wind Coalition |  |
| Robertson, Jennifer | LCRA |  |
| Rothschild, Eric | GDS Associates | Via Teleconference |
| Siddiqi, Shams | Crescent Power |  |
| Sithuraj, Murali | Austin Energy |  |
| Smith, Caitlin | Jewell and Assoc.  |  |
| Smith, Tom | Public Citizen | Via Teleconference |
| Teng, Shuye | Austin Energy | Via Teleconference |
| Thompson, David | Pedernales Electric Cooperative |  |
| Turner, Lucas | South Texas Electric Cooperative | Via Teleconference |
| Varnell, John | Tenaska | Via Teleconference |
| Wallin, Shane | City of Denton | Via Teleconference |
| Whittle, Brandon | Megawatt Analytics |   |
| Wittmeyer, Bob | DME |  |

*ERCOT Staff:*

|  |  |  |
| --- | --- | --- |
| Albracht, Brittney |  | Via Teleconference |
| Anderson, Conner |  | Via Teleconference |
| Billo, Jeff |  |  |
| Bivens, Carrie |  |  |
| Boren, Ann |  | Via Teleconference |
| Bracy, Phil |  | Via Teleconference |
| Butterfield, Lindsay |  | Via Teleconference |
| Change, Sean |  | Via Teleconference |
| Chen, Jian |  | Via Teleconference |
| Clifton, Suzy |  |  |
| Du, Pengwei |  | Via Teleconference |
| Gonzalez, Ino |  | Via Teleconference |
| Hailu, Ted |  | Via Teleconference |
| Hanson, Kevin |  | Via Teleconference |
| Landry, Kelly |  |  |
| Lee, Anson |  |  |
| Morehead, Juliana |  | Via Teleconference |
| Ögelman, Kenan |  |  |
| Patterson, Mark |  |  |
| Phillips, Cory |  |  |
| Ruane, Mark |  |   |
| Shaw, Pam |  |  |
| Stice, Clayton |  |  |
| Thompson, Chad |  |  |
| Wattles, Paul |  | Via Teleconference |
| Weaver, Eileen |  | Via Teleconference |
| Zhang, Wen |  | Via Teleconference |

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

Jeremy Carpenter called the June 7, 2017 WMS meeting to order at 9:30 a.m. Mr. Carpenter recognized Clint Sandidge, newly elected Independent Retail Electric Provider (IREP) Market Segment Representative.

Antitrust Admonition

Jeremy Carpenter 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)

*May 3, 2017*

**Diana Coleman moved to approve the May 3, 2017 WMS meeting minutes as submitted. Blake Gross seconded the motion. The motion carried unanimously.**

Technical Advisory Committee (TAC) Update and Assignments

Mr. Carpenter reviewed the disposition of items considered at the May 25, 2017 TAC meeting.

*Southern Cross Project*

Market Participants discussed directives under Public Utility Commission of Texas (PUCT) Project No. 46304, Oversight Proceeding Regarding ERCOT Matters Arising Out of Docket No. 45624 (Application of the City of Garland to Amend a Certificate of Convenience and Necessity for the Rusk to Panola Double-Circuit 345-KV Transmission Line in Rusk and Panola Counties), and proposed meetings with the Reliability Operations Subcommittee (ROS). Market Participants requested pertinent issues be vetted by WMS working groups prior to the joint meetings. Mr. Carpenter encouraged Market Participants to consider the issues and that assignments to working groups would be considered at the July 12, 2017 WMS meeting.

ERCOT Operations and Market Items (see Key Documents)

*Analysis of ERS responses during pricing and 4CP events*

Mark Patterson presented the analysis and summary of Emergency Response Service (ERS) during 4-Coincident Peak (4-CP), near 4-CP and pricing event days. Market Participants discussed the results of the analysis and requested ERCOT provide recommendations to maximize the value from the ERS program or incorporate their price response, regardless of circumstances into the market. Kenan Ögelman offered to provide available options and the mechanics of these options to WMS.

New Protocol Revision Subcommittee (PRS) Referrals

*Nodal Protocol Revision Request (NPRR) 825, Require ERCOT to Declare an Emergency Condition Prior to Curtailing any DC Tie Load*

Shams Siddiqi reviewed the history of the Direct Current Tie (DC Tie) Load curtailments; NPRR818, Allow Curtailment of DC Tie Load Prior to Declaring Emergency Condition; and requested NPRR825 and the related issues of price formation and export curtailment be reviewed by the Qualified Scheduling Entity (QSE) Managers Working Group (QMWG). Clayton Greer opined that the purchase of counter flow would allow the opportunity to sell at higher prices, and expressed concern that ERCOT could curtail and force a Market Participant to sell at a lower price. Mr. Ögelman reminded Market Participants of the current Settlement process, that ERCOT does not have authority to buy counter flows across DC Ties, and that ERCOT has serious concerns having to declare an emergency to cut exports.

**Bryan Sams moved to request PRS continue to table NPRR825 to allow additional time for review by QMWG. Greg Thurnher seconded the motion. The motion carried unanimously.**

*NPRR826, Mitigated Offer Caps for RMR Resources*

Market Participants discussed the merits of NPRR826. Some Market Participants requested additional time to consider the report referenced in the 5/10/17 NRG comments as a proposed long term solution and for additional direction from the PUCT. Other Market Participants expressed support for NPRR826 and objected to proposed delays in consideration of the extensive vetting at WMS and QMWG meetings. ERCOT Staff requested additional time to review NPRR826 for clarifications.

**John Dumas moved to table NPRR826 for one month. Clif Lange seconded the motion. The motion carried with one objection from the IREP (Reliant) Market Segment and two abstentions from the IREP (Direct Energy) and Independent Power Marketer (IPM) (Shell Energy) Market Segments.**

*NPRR828, Include Fast Frequency Response as a Subset of Responsive Reserve*

Market Participants discussed the merits of NPRR828. In response to Market Participants questions, ERCOT Staff stated that NPRR828 implements one of the improvements under the Future Ancillary Services Team (FAST) effort and that the related Revision Requests, including NPRR815, Revise the Limitation of Load Resources Providing Responsive Reserve (RRS) Service, can be implemented together without any adverse impacts. Some Market Participants expressed the concern that continued discussion of the future of Ancillary Services would be unproductive. Other Market Participants requested additional review by QMWG.

**Mr. Dumas moved to request PRS continue to table NPRR828 to allow additional time for review by QMWG. Mr. Greer seconded the motion. The motion carried unanimously.**

*NPRR829, Incorporate Real-Time Non-Modeled Telemetered Net Generation by Load Zone into the Estimate of RTL*

Marty Downey reviewed NPRR829. Market Participants and ERCOT Staff discussed that although NPRR829 provides an opportunity for a QSE representing a Non-Modeled Generator to provide Real-Time telemetry of the net generation of those Non-Modeled Generators, participation would be voluntary and is likely to be limited. Mr. Downey noted that the parameters of the telemetry need to be defined to preserve confidentiality. Market Participants and ERCOT Staff further discussed a proposed implementation timeline of late 2019 or 2020 due to the Credit Monitoring and Management Application (CMM) project, and that the definition of “Non-Modeled Generators” should be further vetted to resolve ambiguity in the related concepts.

**Mr. Thurnher moved to endorse NPRR829 as amended by the 5/16/17 Shell Energy comments. Mr. Greer seconded the motion. The motion carried with two abstentions from the Consumer (Nucor) and Investor Owned Utility (IOU) (CenterPoint) Market Segments.**

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

*NPRR807, Day-Ahead Market Price Correction*

*NPRR814, Modify Black Start Procurement Cycle*

*NPRR817, Create a Panhandle Hub*

*NPRR819, Resettlement Clean-Ups*

WMS took no action on these items

*NPRR768, Revisions to Real-Time On-Line Reliability Deployment Price Adder Categories*

Market Participants reviewed NPRR768 and the equability in pricing adjustments described in the 6/1/17 TIEC comments.

**Eric Goff moved to endorse NPRR768 as amended by the 6/1/17 TIEC comments. Mr. Lange seconded the motion. The motion carried with four abstentions from the IOU (CenterPoint), IREP (Reliant), IPM (Morgan Stanley), and Independent Generator (Exelon) Market Segments.**

*NPRR821, Elimination of the CRR Deration Process*

Market Participants reviewed NPRR821 and the history of the current Congestion Revenue Right (CRR) deration process. Market Participants supporting NPRR821 opined that the current CRR deration process can have a significant financial impact on Loads using Resources to hedge during an unplanned Outage and that eliminating it does not create uplift. Other Market Participants expressed support for the 6/5/17 Luminant comments stating that the current CRR deration process provides benefits including greater certainty with regard to Generation and Load and the prevention of some uplift. Other participants expressed a concern for the loss of the CRR values, and the potential for gaming.

**Mr. Greer moved to endorse NPRR821 as submitted with a recommendation to implement as soon as possible. Mr. Dumas seconded the motion.** Market Participants discussed the 5/31/17 ERCOT comments and the appropriate implementation date taking into consideration CRRs already sold. Mr. Thurnher offered a friendly amendment to endorse NPR821 as amended by the 5/31/17 ERCOT comments. The amendment was declined. Market Participants further discussed the appropriate implementation date.

**Mr. Thurnher moved to amend the motion to endorse NPRR821 as amended by the 5/31/17 ERCOT comments, and to recommend an implementation date no earlier than July 1, 2019. David Kee seconded the motion. The motion to amend carried by roll call vote with seven objections from the Consumer (Nucor), Cooperative (4) (LCRA, STEC, Brazos, GSEC), Independent Generator (Exelon), and Municipal (Garland Power and Light) Market Segments and seven abstentions from the Independent Generator (2) (Avangrid Renewables, Dynegy), IPM (3) (Tenaska, Citigroup, Morgan Stanley), IREP (Calpine Energy Solutions), and IOU (CenterPoint Energy) Market Segments.** *(Please see ballot posted with Key Documents).*

**The motion to endorse NPRR821 as amended by the 5/31/17 ERCOT comments, and to recommend an implementation date no earlier than July 1, 2019 carried with six objections from the IREP (3) (Viridity, Reliant, Direct Energy), Municipal (2) (Bryan Texas, Austin Energy) and Consumer (Nucor) Market Segments and three abstentions from the IREP (Calpine Retail), IPM (Citigroup), and IOU (CenterPoint) Market Segments.**

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

*CRR Auction Revenue Data Request*

Market Participants discussed the merits of NPRR832, sinking and sourcing at Private Use Network Settlement Points, and the long term solutions proposed in NPRR831, Inclusion of Private Use Networks in Load Zone Price Calculations. ERCOT Staff expressed the concern that staffing resource constraints could hinder the implementation of some revision requests in favor of others.

**Mr. Thurnher moved to request PRS table NPRR832 and refer it to WMS. Mr. Greer seconded the motion. The motion carried with two objections from the Independent Generator (Avangrid Renewables, Dynegy) Market Segment and one abstention from the IOU (CenterPoint) Market Segment.**

Supply Analysis Working Group (SAWG)

*Scope of Real-Time co-optimization*

Mr. Sams reviewed recent SAWG activities and provided an update on Real-Time co-optimization.

Emerging Technologies Working Group (ETWG)

*Utility of ETWG*

*Revisions to ETWG Scope*

Market Participants and ERCOT Staff discussed the need for ETWG to continue to provide WMS with input and recommendations on emerging topics, including the Distributed Energy Resources Whitepaper.

QMWG

Mr. Goff reviewed recent QMWG activities.

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

Ian Haley reviewed recent CMWG activities and reminded Market Participants of the Extended ETT Outages on Certain CREZ 345 kV Transmission Lines in Northwest Texas WebEx Workshop on June 15, 2017 from 2:00 p.m. – 5:00 p.m. and encouraged questions to be submitted to ERCOT in advance of the WebEx event. Mr. Greer requested CMWG and ERCOT review the proposed Methodology in Economic Analysis for Transmission Planning as presented by ERCOT at the Planning Working Group (PLWG) meeting and provide their recommendation to WMS on the analysis of multiple years of data rather an average based on a single year study.

Market Credit Working Group (MCWG)

Bill Barnes reviewed recent MCWG activities.

Other Business (see Key Documents)

*HITE List*

Martha Henson provided an update on the High Impact Transmission Element (HITE) List, and the development and vetting process. Market Participants requested the Outage Coordination Working Group (OCWG) provide updates on the HITE List to WMS at the July 12, August 2, and September 6, 2017 WMS meetings.

*Review of Open Action Items*

*RDF re PRC vs ORDC (Review in 2017)*

Mr. Carpenter noted the 2017 assignment to monitor the Reserve Discount Factor (RDF) re Physical Responsive Capability (PRC) and Operating Reserve Demand Curve (ORDC) was complete following the review at the May 1, 2017 QMWG meeting, however the item will remain on the Open Action Items List so that WMS could continue on an annual basis to monitor the value of RDF brought forward by ERCOT and determine if a Revision Request is needed to make adjustments.

*No Report*

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

Adjournment

Mr. Carpenter adjourned the June 7, 2017 WMS meeting at 2:20 p.m.

1. <http://www.ercot.com/calendar/2017/6/7/108825-WMS>

 [↑](#footnote-ref-1)