**APPROVED**

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

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

**Wednesday, May 3, 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 |  |
| Franklin, Russell | Garland Power and Light |  |
| Goff, Eric | Citigroup Energy |  |
| Greer, Clayton | Morgan Stanley |   |
| Gross, Blake | AEP Service Corporation |  |
| Helton, Bob | Dynegy |  |
| Hughes, Darren  | LCRA | Alt. Rep. for J. Dumas |
| Kee, David | CPS Energy |  |
| Lindberg, Ken | Bryan Texas Utilities |  |
| Maduzia, Franklin | Dow Chemical |  |
| Messer, Tayaun | Brazos Electric Power Cooperative |  |
| Morris, Sandy | Direct Energy |  |
| Plunkett, Derenda | CenterPoint Energy |  |
| Sams, Bryan | Reliant Energy Retail Services |  |
| Schwarz, Brad | Sharyland |  |
| Shaw, Marka | Exelon |  |
| Such, Chris | E. On |  |
| Thurnher, Greg | Shell Energy |  |
| Turner, Lucas | South Texas Electric Cooperative | Alt. Rep. for C. Lange |
| Wilson, Joe Dan | Golden Spread Electric Cooperative |   |
| Woodruff, Taylor | Oncor |  |

*Guests:*

|  |  |  |
| --- | --- | --- |
| Ainspan, Malcolm | NRG | Via Teleconference |
| Anderson, Kevin | CES |  |
| Bearden, Joel | XO Energy | Via Teleconference |
| Blakey, Eric | Just Energy | Via Teleconference |
| Bone, Gavin | CPS Energy |  |
| Brandt, Adrianne | CPS Energy |  |
| Bryant, Mark | PUCT | Via Teleconference |
| Burke, Tom | Golden Spread Electric Cooperative |  |
| Cochran, Seth | DC Energy |  |
| Coleman, Katie | Texas Industrial Energy Consumers |  |
| Cripe, Randy | Schneider Engineering | Via Teleconference |
| Denney, Kristi | Potomac Economics | Via Teleconference |
| Detelich, David | CPS Energy | Via Teleconference |
| Elliott, Christopher | Bank of America Merrill Lynch | Via Teleconference |
| English, Barksdale | Austin Energy | Via Teleconference |
| Foos, Richard | Calpine |   |
| Haley, Ian | Luminant |  |
| Harvey, Julia | PUCT | Via Teleconference |
| Henson, Martha | Oncor |  |
| Herman, Tom | Shell Energy | Via Teleconference |
| Hudis, Gabriella | Gabel Associates, Inc | Via Teleconference |
| Hughes, Lindsey | Competetive Power | Via Teleconference |
| Juricek, Michael | Oncor | Via Teleconference |
| Kroskey, Tony | Brazos Electric  | Via Teleconference |
| Labatt, Louis | CPS Energy | Via Teleconference |
| Le, Don | Lone Star Transmission |  |
| Mueller, Paula | Texas Reliability Entity | Via Teleconference |
| Neaase, Nelson | Nelson H. Nease, PC | Via Teleconference |
| Parker, Ryan | Calpine | Via Teleconference |
| Powell, Christian | LCRA |  |
| Reedy, Steve | Potomac Economics |  |
| Reeve, Adam | REsurety | Via Teleconference |
| Reid, Walter | Wind Coalition |  |
| Robinson, Rhonda | Calpine | Via Teleconference |
| Rochelle, Jennie | CES | Via Teleconference |
| Scheffler, Harvey | CPS Energy | Via Teleconference |
| Siddiqi, Shams | Crescent Power |  |
| Sithuraj, Murali | Austin Energy |  |
| Slagel, Ron | MICS | Via Teleconference |
| Smith, Tom | Public Citizen |  |
| Thompson, David | Pedernales Electric Cooperative |  |
| Varnell, John | Tenaska | Via Teleconference |
| Walker, Mark | NRG |  |
| Wan, Josephine | Austin Energy | Via Teleconference |
| White, Lauri | AEP | Via Teleconference |
| Whittle, Brandon | Megawatt Analytics |   |
| Wittmeyer, Bob | DME |  |

*ERCOT Staff:*

|  |  |  |
| --- | --- | --- |
| Billo, Jeff |  |  |
| Bivens, Carrie |  |  |
| Bracy, Phil |  | Via Teleconference |
| Butterfield, Lindsay |  | Via Teleconference |
| Chen, Jian |  | Via Teleconference |
| Clifton, Suzy |  |  |
| Gonzalez, Ino |  | Via Teleconference |
| Hanson, Kevin |  | Via Teleconference |
| Landry, Kelly |  |  |
| Levine, Jon |  | Via Teleconference |
| Moorty, Sai |  |  |
| Morehead, Juliana |  | Via Teleconference |
| Moreno, Alfredo |  | Via Teleconference |
| Ögelman. Kenan |  |  |
| Phillips, Cory |  | Via Teleconference |
| Pritchard, Lloyd |  | Via Teleconference |
| Reed, Bobby |  | Via Teleconference |
| Rosel, Austin |  | Via Teleconference |
| Ruane, Mark |  |   |
| Shaw, Pam |  |  |
| Stice, Clayton |  | Via Teleconference |
| Surendran, Resmi |  |  |
| Teixeira, Jay |  | Via Teleconference |
| Xiao, Hong |  | Via Teleconference |
| Zeplin, Rachel |  | Via Teleconference |

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

Antitrust Admonition

Jeremy Carpenter directed attention to the Antitrust Admonition, which was displayed.

Agenda Review

There were no changes to the agenda. Market Participants requested an update on the status of ERCOT’s recommendation regarding Switchable Generation Resources and the related whitepaper. Mr. Carpenter stated that ERCOT has requested additional time on this matter and that ERCOT would provide an update at the June 7, 2017 WMS meeting.

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

*April 5, 2017*

**Bob Helton moved to approve the April 5, 2017 WMS meeting minutes as submitted. Taylor Woodruff seconded the motion. The motion carried unanimously.**

Technical Advisory Committee (TAC) Update and Assignments

Mr. Carpenter reminded Market Participants that TAC did not meet in April, but conducted a WebEx informational session on April 24, 2017, prior to consideration of the Congestion Revenue Right (CRR) Activity Calendar and Nodal Operating Guide Revision Request (NOGRR) 167, Alignment with NPRR776, Voltage Set Point Communication, by email vote.

ERCOT Operations and Market Items (see Key Documents)

*Series Capacitors Update*

Jeff Billo presented the status and implementation timeline for Nodal Protocol Revision Request (NPRR) 562, Subsynchronous Resonance. Mr. Billo identified current series capacitors and the related Resources, and the associated level of risk. He stated that ERCOT will continue to monitor transmission Outages that cause Subsynchronous Resonance (SSR) vulnerability and that ERCOT will take the appropriate action, as specified by the Protocols. In response to Market Participants questions, Mr. Billo stated ERCOT was in the process of communicating the operating plans to Resource Entities with units that would become vulnerable to SSR in the event of five or six concurrent transmission Outages. Mr. Billo stated that ERCOT would also be coordinating with Transmission Service Providers (TSPs) to identify transmission options for Resource Entities with units that would become vulnerable to SSR in the event of four or less concurrent transmission Outages. Market Participants requested ERCOT provide an additional update on the status of NPRR562 at the July 12, 2017 WMS Meeting.

New Protocol Revision Subcommittee (PRS) Referrals

*NPRR821, Elimination of the CRR Deration Process*

Seth Cochran reviewed NPRR821 and opined the current CRR deration process raises market equitability and efficiency issues. Market Participants and ERCOT staff reviewed the history of the CRR deration process. Market Participants opposed to NPRR821 opined the current design is embedded in systems and preserves value for entities using CRRs to hedge congestion risk, and that NPRR821 as proposed would allow for risk to be shifted from traders to Loads. Steve Reedy stated the Independent Market Monitor (IMM) supports behavioral rules as a way to reduce market manipulation rather than the current deration process that punishes participants by geographic area, that there are sufficient tools in place to identify market manipulation, and that they are indifferent with regard to the assignment of risk to the CRR Account Holder or Load. Market Participants further discussed the merits of NPRR821 and requested additional review by WMS.

**Mr. Helton moved to request PRS continue to table NPRR821 to allow additional time for review by the Congestion Management Working Group (CMWG). Greg Thurnher seconded the motion. The motion carried unanimously.**

*NPRR822, Designate Resource Node Procedure an Other Binding Document and Adjust the Process for Retiring Resource Nodes*

**Eric Goff moved to endorse NPRR822 as amended by the 4/18/17 ERCOT comments. Chris Such seconded the motion. The motion carried unanimously.**

*Associated Revisions to the Procedure for Identifying Resource Nodes*

**Mr. Goff moved to endorse the associated revisions to the Procedure for Identifying Resource Nodes as amended by the 4/18/17 ERCOT comments. Mr. Such seconded the motion. The motion carried unanimously.**

*NPRR827, Disallow PTP Obligation Bid Award where Clearing Price exceeds Bid Price – Urgent*

Market Participants discussed the merits of NPRR827 and noted the intent for an interim solution that would disallow ERCOT from awarding Point-to-Point (PTP) Obligations in the Day-Ahead Market (DAM) where the corresponding clearing price is greater than the bid price for the PTP Obligation until a long term solution can be developed. ERCOT staff noted the May 1, 2017 Qualified Scheduling Entity (QSE) Managers Working Group (QMWG) discussion and stated that ERCOT could implement NPRR827 as a manual process within a minimum threshold. Market Participants and ERCOT staff discussed specific threshold values of $0.25/ Megawatt Hour (MWh) and $0.50/MWh to effectuate the appropriate tolerance and offered revisions to NPRR827.

**Clayton Greer moved to endorse NPRR827 as revised by WMS. Mr. Goff seconded the motion. The motion carried with one objection from the Independent Retail Electric Provider (IREP) (Direct Energy) Market Segment.** Market Participants agreed that the revisions provided by WMS are intended as a temporary placeholder for additional revisions that more clearly specify the parameters for the Protocol provision that PTP Obligations will not be settled where the DAM clearing price for the PTP Obligation is greater than the PTP Obligation bid price.

SMOGRR021, Settlement Metering Operating Guide Revision Request Process

Kelly Landry reviewed the Settlement Metering Operating Guide Revision Request (SMOGRR) process as proposed by SMOGRR021.

**Sandy Morris moved to recommend approval of SMOGRR 021 as recommended by the Metering Working Group (MWG) in the 4/20/17 MWG report. Bryan Sams seconded the motion. The motion carried unanimously.**

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

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

Market Participants discussed the merits of NPRR768. Mr. Goff noted ERCOT’s position on NPRR768, and stated QMWG extensively reviewed and supported NPRR768 as revised by the 4/25/17 South Texas Electric Cooperative (STEC) comments with the inclusion of a negative price adder. Market Participants further discussed the issues and expressed concern for equability in pricing adjustments with neighboring Independent System Operators (ISOs) in emergency situations. ERCOT staff stated the requested analysis of emergencies in other jurisdictions was still being developed. Market Participants requested proponents of the negative price adder provide comments prior to the June 7, 2017 WMS meeting.

**Mr. Greer moved to request PRS continue to table NPRR768 to allow additional time for review by WMS. Mr. Helton seconded the motion. The motion carried unanimously.**

*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.

Notice of Withdrawal

*NPRR816, Clarification of Definitions of FIP and FOP*

Mr. Carpenter noted the withdrawal of NPRR816.

MWG

No update was provided.

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

Josephine Wan reviewed recent MCWG activities.

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

*Scope of Real-Time co-optimization*

Bryan Sams reviewed recent SAWG activities and provided updates on the economically optimal reserve margin and Real-Time co-optimization.

Emerging Technologies Working Group (ETWG)

*Utility of ETWG*

*Revisions to ETWG Scope*

Mr. Carpenter noted that the utility of ETWG and the revisions to the ETWG Scope would be considered at the June 7, 2017 WMS Meeting.

QMWG (see Key Documents)

Mr. Goff reviewed recent QMWG activities. Mr. Goff requested additional direction from WMS with regard to the different reliability actions included or not included in the Operating Reserve Demand Curve (ORDC) and Real-Time Deployment Price Adders that were discussed under the assignment of NPRR768, Revisions to Real-Time On-Line Reliability Deployment Price Adder Categories, and what the current scope should be, along with the scope of revisions to Ancillary Services. Some Market Participants opined that when NPRR626, Reliability Deployment Price Adder (formerly “ORDC Price Reversal Mitigation Enhancements), was passed, it was the market compromise for Shadow Price adjustments made in the reliability deployment price adder and that it was not appropriate to keep reviving the same issues. Mr. Carpenter requested Market Participants be prepared to consider the issues at the June 7, 2017 WMS meeting.

*Private Use Network Load Distribution Factors*

Mr. Reedy reviewed the Private Use Network Load Distribution Factors (LDFs) and how current modeling creates an opportunity for inefficient market outcomes in DAM transactions as presented at the May 1, 2017 QMWG meeting. Mr. Reedy noted that Market Participants were in agreement that the issue needed to be resolved, but the need for an urgent NPRR was debatable. Mr. Reedy compared this issue to the dead bus issue, highlighting that while both affect revenue neutrality, there were significant differences in the magnitude of the issues and rarity of event occurrence.

Market Participants discussed the trading issues and uplift costs and requested ERCOT provide analysis of the CRR Auction Revenue Distribution (CARD) from CRRs sinking into Private Use Network Resource Nodes and the impact to open CRR positions.

**Mr. Thurnher moved to waive notice in order to consider including Private Use Network buses in LDFs. Mr. Greer seconded the motion. The motion carried unanimously.**

**Mr. Thurnher moved to endorse the concept of including Private Use Network buses in LDFs. Mr. Greer seconded the motion.** Market Participants, ERCOT and the Independent Market Manager (IMM) staff discussed the history of the current model in the Nodal design and that appropriate changes now desired be made through the Revision Request process. ERCOT staff noted that NPRR831, Inclusion of Private Use Networks in Load Zone Price Calculations, would be considered for urgency at the May 11, 2017 PRS meeting. **Mr. Thurnher withdrew his motion.**

CMWG (see Key Documents)

*2017 CMWG Leadership*

**Sandy Morris moved to confirm Ian Haley as 2017 CMWG Chair and David Detelich as 2017 CMWG Vice Chair. Bryan Sams seconded the motion. The motion carried unanimously.**

Mr. Haley reviewed recent CMWG activities, and stated they requested ERCOT provide additional data and analysis to further consider transmission losses in Real-Time Settlement and in transmission planning criteria. Market Participants and ERCOT staff discussed the two separate approaches to the issues; noting that WMS had assigned CMWG to consider how losses are used for the purposes of commercial transactions and how to improve that process; and that at this time there is no action item for the Steady State Working Group (SSWG), but that the Reliability and Operations Subcommittee (ROS) had indicated they may review the current SSWG procedures for loss calculations.

Other Business (see Key Documents)

*Process Changes June 1, 2017*

Mr. Landry reviewed the SMOGRR and Verifiable Cost Manual Revision Request (VCMRR) process changes to be implemented on June 1, 2017.

*No Report*

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

Adjournment

Mr. Carpenter adjourned the May 3, 2017 WMS meeting at 12:36 p.m.

1. <http://www.ercot.com/calendar/2017/5/3/108821-WMS> [↑](#footnote-ref-1)