**APPROVED**

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

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

**Wednesday, August 2, 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 |  |
| Johnson, Ryan | Brazos Electric Power Cooperative | Alt. Rep. for R. True |
|  |  | Via Teleconference |
| Kee, David | CPS Energy |  |
| Lange, Clif | South Texas Electric Cooperative |  |
| Lindberg, Ken | Bryan Texas Utilities |  |
| Maduzia, Franklin | Dow Chemical |  |
| Morris, Sandy | Direct Energy |  |
| Plunkett, Derenda | CenterPoint Energy |  |
| Sams, Bryan | Reliant Energy Retail Services |  |
| Sandidge, Clint | Calpine Energy Solutions |  |
| Schwarz, Brad | Sharyland |  |
| Smith, Mark | Nucor |  |
| Such, Chris | E. On |  |
| Surendran, Resmi | Shell Energy | Alt. Rep. for G. Thurnher |
| Wilson, Joe Dan | Golden Spread Electric Cooperative |   |
| Woodruff, Taylor | Oncor |  |

The following proxies were assigned:

* Marka Shaw to Chris Such
* Sandy Morris to Bryan Sams at 11:45 a.m.
* Theresa Allen to Chris Such at 1:30 p.m.

*Guests:*

|  |  |  |
| --- | --- | --- |
| Abbott, Kristin | PUCT | Via Teleconference |
| Ainspan, Malcolm | NRG | Via Teleconference |
| Amthor, Corey  | Enchanted Rock |  |
| Arrigo, Garrett | Shell Energy | Via Teleconference |
| Barnes, Bill  | Reliant Energy Retail Services |  |
| Bearden, Joel | XO Energy | Via Teleconference |
| Boyd, Phillip |  | Via Teleconference |
| Brandt, Adrianne | CPS Energy |  |
| Bruce, Mark | Cratylus Advisors |  |
| Bryant, Mark | PUCT | Via Teleconference |
| Bunch, Kevin | EDF Energy Services |  |
| Burke, Tom | Golden Spread Electric Cooperative |  |
| Chhajed, Pushkar | LCRA | Via Teleconference |
| Coleman, Katie | Texas Industrial Energy Consumers | Via Teleconference |
| Comstock, Read | Source Power and Gas Energy | Via Teleconference |
| Coon, Patrick |  | Via Teleconference |
| Dawar, Vikas | Austin Energy | Via Teleconference |
| Day, Smith | DME | Via Teleconference |
| Fletcher, Blake |  |  |
| Fox, Kip | AEP Service Corporation |  |
| Graham, Greg | Texas Reliability Entity | Via Teleconference |
| Haley, Ian | Vistra Energy |  |
| Harvey, Julia | PUCT | Via Teleconference |
| Henson, Martha | Oncor |  |
| Hourihan, Mike | CPower Energy | Via Teleconference |
| Hudis, Gabriella | Gabel Associates, Inc | Via Teleconference |
| Huynh, Thuy | Potomac Economics | Via Teleconference |
| Jernigan, Jerry | WatchTower Risk, LLC | Via Teleconference |
| Johnson, David | IVG | Via Teleconference |
| Johnson, Ryan | ACES Power | Via Teleconference |
| Jones, Randy | Calpine |  |
| Juricek, Michael | Oncor | Via Teleconference |
| Lee, Jim | AEP Service Corporation |  |
| Li, Young | Potomac Economics | Via Teleconference |
| Matos, Christopher | PUCT | Via Teleconference |
| Moeller, Jason | LCRA | Via Teleconference |
| Moore, Sheri | CenterPoint Energy |  |
| Moss, Steven | E.ON |  |
| Mueller, Paula | Texas Reliability Entity | Via Teleconference |
| Neaase, Nelson | Nelson H. Nease, PC | Via Teleconference |
| Poonawala, Adnan | Just Energy | Via Teleconference |
| Powell, Christian | LCRA |  |
| Reedy, Steve | Potomac Economics |  |
| Reid, Walter | Wind Coalition |  |
| Ricketts, David | Vistra Energy | Via Teleconference |
| Robertson, Jennifer | LCRA |  |
| Ross, Richard | AEP Service Corporation | Via Teleconference |
| Rothschild, Eric | GDS Associates | Via Teleconference |
| Siddiqi, Shams | Crescent Power |  |
| Sithuraj, Murali | Austin Energy |  |
| Slagel, Ron | MICS | Via Teleconference |
| Thompson, David | Pedernales Electric Cooperative |  |
| Thomson, Thayil | Power Costs | Via Teleconference |
| Turner, Lucas | South Texas Electric Cooperative | Via Teleconference |
| Varnell, John | Tenaska | Via Teleconference |
| Vinson, Paul | CPS Energy |  |
| Wan, Josephine | Austin Energy | Via Teleconference |
| Watson, Mark | SP Global | Via Teleconference |
| White, Lauri | AEP Service Corporation | Via Teleconference |
| Whittle, Brandon | Megawatt Analytics |   |
| Wittmeyer, Bob | DME |  |
| Whitworth, Doug | Texas Reliability Entity  | Via Teleconference |
| Zerwas, Rebecca | NRG |  |

*ERCOT Staff:*

|  |  |  |
| --- | --- | --- |
| Adams, John |  | Via Teleconference |
| Albracht, Brittney |  | Via Teleconference |
| Anderson, Connor |  | Via Teleconference |
| Billo, Jeff |  | Via Teleconference |
| Bivens, Carrie |  |  |
| Boswell, Bob |  | Via Teleconference |
| Bracy, Phil |  | Via Teleconference |
| Butterfield, Lindsay |  | Via Teleconference |
| Chang, Sean |  | Via Teleconference |
| Chen, Jian |  | Via Teleconference |
| Clifton, Suzy |  |  |
| Gonzalez, Ino |  | Via Teleconference |
| Guo, Jack |  | Via Teleconference |
| Hanson, Kevin |  | Via Teleconference |
| Krein, Steve |  | Via Teleconference |
| Landry, Kelly |  |  |
| Lee, Alex |  | Via Teleconference |
| Levine, Jon |  | Via Teleconference |
| Maggio, Dave |  |  |
| Magarinos, Marcelo |  | Via Teleconference |
| Mago, Nitika |  | Via Teleconference |
| Morehead, Juliana |  | Via Teleconference |
| Moreno, Alfredo |  | Via Teleconference |
| Ögelman, Kenan |  |  |
| Patterson, Mark |  |  |
| Phillips, Cory |  |   |
| Pritchard, Lloyd |  | Via Teleconference |
| Ragsdale, Ken |  |  |
| Ruane, Mark |  |   |
| Searcy, Robbie |  | Via Teleconference |
| Sharma, Sandip |  |  |
| Shaw, Pam |  |  |
| Stice, Clayton |  |  |
| Thomas, Shane |  |  |
| Townsend, Aaron |  | Via Teleconference |
| Wattles, Paul |  | 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.

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

*July 12, 2017*

**Bryan Sams moved to approve the July 12, 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)

*Nodal Protocol Revision Request (NPRR) 768, Revisions to Real-Time On-Line Reliability Deployment Price Adder Categories - Potential Negative Impacts of a Large DC Tie in ERCOT*

Market Participants discussed the potential impacts of a large Direct Current Tie (DC Tie) with the implementation of NPRR768. Some Market Participants expressed concern for negative impacts that may occur with the Southern Cross entrance into the ERCOT market. Other Market Participants objected to delaying market solutions proposed in NPRR768 for events that have not yet occurred. Market Participants and ERCOT Staff further discussed the issues. Market Participants offered to provide clarifications for compromise language to include a Megawatt (MW) cap on the total adjustment for DC Tie imports during any single Security-Constrained Economic Dispatch (SCED) interval.

*NPRR821, Elimination of the CRR Deration Process - Alternative Solutions*

Steve Reedy reviewed the Congestion Revenue Right (CRR) Settlement process, related aspects of the Day-Ahead Market (DAM), Simultaneous Feasibility Test (SFT) and the potential revenue insufficiency covered by the CRR Balancing Account or by derating. John Dumas expressed support for NPRR821, acknowledged it may lack the necessary support to pass and offered a compromise solution wherein Loads would be able to hedge their position in Real-Time. Market Participants and ERCOT Staff further discussed alternative solutions to address the market issues in the CRR deration process and requested additional review by the Congestion Management Working Group (CMWG). Mr. Carpenter referred the issue to CMWG.

*Southern Cross Project*

Market Participants and ERCOT Staff discussed a potential joint workshop or meeting following the September 6, 2017 WMS meeting. Market Participants requested to vet the issues with the ability to exercise participatory voting and Mr. Carpenter offered to confirm meeting dates with the Reliability and Operations Subcommittee (ROS) leadership.

*Quarterly SASM Report*

Dave Maggio provided an update on the Quarterly Supplemental Ancillary Services Market (SASM) report presented to the Qualified Scheduling Entity (QSE) Managers Working Group (QMWG), noting that post implementation of NPRR589, Ancillary Service Offers in the Supplemental Ancillary Services Market, no additional issues have been identified and no further action is required.

*Working Group Enhancements (TAC/Subcommittee Structural and Procedural Review)*

Mr. Carpenter conveyed the TAC request that consideration be given to the structure and efficiency of meetings for working groups under WMS and noted the prior discussions regarding the Emerging Technologies Working Group (ETWG).

*Review RUC Operating Procedure (TAC Action Item)*

Market Participants briefly discussed the Reliability Unit Commitment (RUC) review and Mr. Carpenter offered to seek further direction from TAC and ERCOT Staff as to the scope of the assignment.

ERCOT Operations and Market Items (see Key Documents)

*Analysis of the Impact of 4CP Response on Real time Prices*

Mr. Carpenter noted the analysis is still being developed and stated that this item is postponed to the September 6, 2017 WMS meeting.

*ERCOT’s Response to ERS Capacity from ERS Generators Self-deploying during Pricing Events*

Mark Patterson presented ERCOT’s response to the capacity issue from Emergency Response Service (ERS) Generators self-deploying during pricing events, stating ERCOT considered several options, including changing the availability metric. In order to change behavior ERCOT proposed a clawback provision to be imposed over a three year time period. Some Market Participants supported ERCOT’s proposal, but noted a long term solution would be to include ERS in SCED. Corey Amthor reviewed the history of ERS generation stating that it developed following the 2011 Energy Emergency Alert (EEA) event when Resource adequacy was the priority, stated that considerable capital investments were made based on that priority, and expressed concern with changing the applicable rules now due to lower prices. Other Market Participants strongly opposed the ERCOT proposal and opined that ERS was a failed program and that Non-Spinning Reserve (Non-Spin) was the preferred solution to the reliability issues. Mr. Carpenter encouraged Market Participants interested in pursuing the issue proceed through the stakeholder Revision Request process and thanked ERCOT Staff for their efforts.

New Protocol Revision Subcommittee (PRS) Referrals

*NPRR834, Clarifications for Repossessions of CRRs by ERCOT*

**Taylor Woodruff moved to request PRS continue to table NPRR834 to allow additional time for review by the CMWG. Russell Franklin seconded the motion. The motion carried unanimously.**

*NPRR835, Removing the Capacity Limits from Resources Providing Fast Responding Regulation Service (FRRS)*

Market Participants discussed the merits of NPRR835. Market Participants opposed to NPRR835 opined the use of batteries as a subset of Resources providing Fast Responding Regulation Service (FRRS) was not necessary.

**Clayton Greer moved to reject NPRR835. Mr. Dumas seconded the motion.** Market Participants supporting NPRR835 stated that since Resources capable of providing FRRS are becoming more available in ERCOT, removing the limits will allow additional capacity to be available, which should lower costs and increase reliability; and that the intent was to allow ERCOT to make those changes during the annual review of the Ancillary Service Methodology which was more efficient than Protocol changes.

Sandip Sharma reminded Market Participants that ERCOT did not propose increasing the limits and encouraged Market Participants to review the 7/11/17 ERCOT comments. Market Participants further discussed the merits of NPRR835 and requested additional review by the QMWG.

**Marty Downey moved to request PRS continue to table NPRR835 to allow additional time for review by QMWG. Chris Such seconded the motion. The motion carried with four objections from the Independent Power Marketer (IPM) (2) (Morgan Stanley, Citigroup) and Cooperative (2) (LCRA, STEC) Market Segments.**

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

Market Participants and ERCOT Staff discussed the merits of NPRR837 and the need for vetting by both ROS and CMWG.

**Mr. Greer moved to request PRS continue to table NPRR837 to allow additional time for review by CMWG. Clif Lange seconded the motion. The motion carried unanimously.**

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

**Mr. Sams moved to request PRS continue to table NPRR838 to allow additional time for review by the Resource Cost Working Group (RCWG). Blake Gross seconded the motion. The motion carried unanimously.**

VCMRR019, Verifiable Cost Process Clarifications

**Mr. Sams moved to recommend approval of Verifiable Cost Manual Revision Request (VCMRR) 019 as submitted. 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*

*NPRR814, Modify Black Start Procurement Cycle*

*NPRR819, Resettlement Clean-Ups*

ERCOT Staff requested additional time to review NPRR819 for impacts due to additional requirements for proposed changes in the 2% Settlement threshold.

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

Market Participants requested additional time to consider the market impacts of NPRR828 following vetting of the reliability issues at the August 4, 2017 ROS meeting.

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

WMS took no action on these items.

*NPRR825, Require ERCOT to Declare an Emergency Condition Prior to Curtailing any DC Tie Load*

**Eric Goff moved to endorse NPRR825 as amended by the 7/19/17 Morgan Stanley comments. Mr. Sams seconded the motion. The motion carried unanimously.**

Supply Analysis Working Group (SAWG)

Mr. Sams reviewed recent SAWG activities, including the proposed SAWG scope and encouraged Market Participants to attend the August 18, 2017 SAWG meeting.

QMWG (see Key Documents)

Mr. Goff reviewed recent QMWG activities.

CMWG (see Key Documents)

Ian Haley reviewed recent CMWG activities and requested WMS direction with regard to the review of the process for economic consideration for Outage Scheduling. Market Participants discussed the current vetting of the issue at the Outage Coordination Working Group (OCWG) and questioned the value of continued discussion at CMWG. Mr. Carpenter encouraged Market Participants interested in CMWG recommendations on the issue to notify Mr. Haley prior to the September 6, 2017 WMS meeting.

RCWG (see Key Documents)

Paul Vinson reviewed recent RCWG activities.

Other Business

*High Impact Transmission Elements (HITE) List*

Martha Henson provided an update on the HITE list and encouraged Market Participants interested in participating to provide their submission to the OCWG listserve by Thursday, August 3, 2017. Ms. Henson stated endorsement of the HITE list would be considered at the September 6, 2017 WMS meeting.

*Review of Open Action Items*

WMS took no action on these items.

*No Report*

* Demand Side Working Group (DSWG)
* ETWG
* Market Credit Working Group (MCWG)
* Metering Working Group (MWG)

Adjournment

Mr. Carpenter adjourned the August 2, 2017 WMS meeting at 2:08 p.m.

1. <http://www.ercot.com/calendar/2017/8/2/108833-WMS>

 [↑](#footnote-ref-1)