**APPROVED**

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

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

**Wednesday, June 6, 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 |  |
| Moss, Steven | E. ON | Alt. Rep. for Chris Such |
| Schwarz, Brad | Sharyland Utilities |  |
| Shaw, Marka | Exelon |  |
| Powell, Christian | LCRA | Alt. Rep. for John Dumas |
| Smith, Mark | Nucor |  |
| Surendran, Resmi | Shell Energy |  |
| Whittle, Brandon | Calpine Energy Solutions | Alt. Rep. for Clint Sandidge |
| Wilson, Joe Dan | Golden Spread Electric Cooperative |  |
| Woodruff, Taylor | Oncor |  |

The following proxy was assigned:

* Shannon Caraway to Steven Moss

*Guests:*

|  |  |  |
| --- | --- | --- |
| Abbott, Kristin | PUCT | Via Teleconference |
| Abbot, William | PUCT | Via Teleconference |
| Ainspan, Malcolm | NRG | Via Teleconference |
| Anderson, Kevin | Customized Energy Solutions |  |
| Ayers-Brasher, Jennifer | E. ON | Via Teleconference |
| Blevins, Chad | Grid Economics | Via Teleconference |
| Bruce, Mark | Cratylus Advisors | Via Teleconference |
| Bryant, Mark | PUCT | Via Teleconference |
| Bunch, Kevin | EDF Energy Services |  |
| Burke, Tom | Golden Spread Electric Cooperative | Via Teleconference |
| Chhajed, Pushkar | LCRA | Via Teleconference |
| Cochran, Seth | DC Energy |  |
| Cripe, Ramsey | Schneider Engineering | Via Teleconference |
| Daigneault, Ralph | Potomac Economics | Via Teleconference |
| De La Rosa, Lewis | Texas Reliability Entity | Via Teleconference |
| Donohoo, Ken | EPE Consulting | Via Teleconference |
| Dubberly, Aaron | Tenaska Power Services | Via Teleconference |
| Eckhoff, Christina | Texas Reliability Entity | Via Teleconference |
| Elliott, Christopher | Bank of America Merrill Lynch | Via Teleconference |
| English, Barksdale | Austin Energy | Via Teleconference |
| Haley, Ian | Luminant Generation |  |
| Hall, Tim | Southern Power |  |
| Harris, Brenda | Oxy |  |
| Henson, Martha | Oncor |  |
| Howe, Larry | Texas Solar Energy Society | Via Teleconference |
| Hughes, Darren | LCRA | Via Teleconference |
| Jarman, Scott | Austin Energy | Via Teleconference |
| Jonas, Todd | Tenaska Power Services |  |
| Juricek, Michael | Oncor | Via Teleconference |
| Kroskey, Tony | Brazos Electric Cooperative | Via Teleconference |
| Lee, Jim | AEP Service Corporation |  |
| Lookadoo, Heddie | NRG | Via Teleconference |
| Nathan, Robert | CPS Energy |  |
| Paff, Tom | Duke Energy | Via Teleconference |
| Palani, Ananth | Garland Power and Light | Via Teleconference |
| Penny, Kevin | CPS Energy |  |
| Ranaweera, Aruna | E. ON | Via Teleconference |
| Reid, Walter | Wind Coalition |  |
| Rich, John | NextEra |  |
| Robertson, Jennifer | LCRA | Via Teleconference |
| Ross, Richard | AEP Service Corporation | Via Teleconference |
| Sams, Bryan | NRG |  |
| Scott, Kathy | CenterPoint Energy | Via Teleconference |
| Shields, Christopher | Christopher Shields, PC | Via Teleconference |
| Siddiqi, Shams | Crescent Power |  |
| Smith, Caitlin | Jewell and Associates |  |
| Stanfield, Leonard | Invenergy |  |
| Sumbera, Darrell | CenterPoint Energy | Via Teleconference |
| True, Roy | ACES Power | Via Teleconference |
| Turner, Lucas | South Texas Electric Cooperative | Via Teleconference |
| Varnell, John | Tenaska | Via Teleconference |
| Velasquez, Ivan | Oncor |  |
| Viswanathan, Jay | PNT Financial | Via Teleconference |
| Wieck, John | Golden Spread Electric Cooperative | Via Teleconference |
| Whitworth, Dough | Texas Reliability Entity | Via Teleconference |
| Wittmeyer, Bob | DME |  |
| Zerwas, Rebecca | NRG |  |

*ERCOT Staff:*

|  |  |  |
| --- | --- | --- |
| Albracht, Brittney |  | Via Teleconference |
| Anderson, Connor |  | Via Teleconference |
| Bracy, Phil |  | Via Teleconference |
| Chang, Sean |  | Via Teleconference |
| Clifton, Suzy |  |  |
| Covington, Austin |  | Via Teleconference |
| Fohn, Douglas |  | Via Teleconference |
| Gleason, Brandon |  |  |
| Gnanam, Prabhu |  | Via Teleconference |
| Gonzalez, Ino |  |  |
| Guo, Jack |  |  |
| Hailu, Ted |  |  |
| Hui, Hailong |  | Via Teleconference |
| Kane, Erika |  | Via Teleconference |
| Landry, Kelly |  |  |
| Lasher, Warren |  |  |
| Levine, Jon |  |  |
| Liu, Cong |  | Via Teleconference |
| Maggio, Dave |  |  |
| Mantena, Dan |  |  |
| Mickey, Joel |  |  |
| Moorty, Sai |  | Via Teleconference |
| Morehead, Juliana |  |  |
| Moreno, Alfredo |  | Via Teleconference |
| Ögelman, Kenan |  |  |
| Opheim, Calvin |  | Via Teleconference |
| Pagliai, Dave |  | Via Teleconference |
| Phillips, Cory |  |  |
| Raish, Carl |  |  |
| Rickerson, Woody |  |  |
| Roberts, Randy |  | Via Teleconference |
| Rosel, Austin |  | Via Teleconference |
| Ruane, Mark |  |  |
| Shanks, Magie |  | Via Teleconference |
| Shaw, Pam |  |  |
| Smith, Nathan |  | Via Teleconference |
| Stice, Clayton |  |  |
| Thomas, Shane |  | Via Teleconference |
| Warnken, Pete |  | Via Teleconference |
| Weaver, Eileen |  | Via Teleconference |
| Xiao, Hong |  | 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 at this meeting and noted changes to the order for which items would be taken up.

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

*May 2, 2018*

**Diana Coleman moved to approve the May 2, 2018 WMS meeting minutes as submitted. Taylor Woodruff seconded the motion. The motion carried with two abstentions from the Cooperative (STEC) and Independent Generator (Calpine) Market Segments.**

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

Mr. Kee reviewed the disposition of items considered at the May 28, 2018 TAC meeting.

*Settlements Working Group*

Mr. Kee summarized the TAC Subcommittee restructuring changes, including Settlement related items being assigned to WMS. Market Participants debated whether WMS or a related working group could absorb the issues or if a new working group should be created. Some Market Participants opined that the complexity of Settlement issues would be better vetted within its own working group that could meet on an ad hoc basis to maximize meeting efficiencies. Mr. Kee encouraged Market Participants to attend the June 13, 2018 Settlements Working Group meeting and stated its leadership and scope would be considered at the July 11, 2018 WMS meeting.

*Settlement Stability Reporting*

Mr. Kee stated that the 2nd Quarter 2018 Settlement Stability report will be presented at the August 8, 2018 WMS meeting and that future reports will be reviewed by the Settlements Working Group.

*DC Tie Curtailments Reporting*

Mr. Kee requested the Qualified Scheduling Entity (QSE) Managers Working Group (QMWG) review the issues of market impacts and Direct Current Tie (DC Tie) curtailments.

*Market Interface Service Provider (MISP) outage*

Mark Ruane reviewed the March 28, 2018 Market Interface Service Provider (MISP) event and presented potential ERCOT actions to provide transparency, develop a better understanding of the exposure to ERCOT from third party vendors, and improve the reporting process. Market Participants briefly debated the issues. Kenan Ögelman reminded Market Participants that the retail issues were being addressed by the Retail Market Subcommittee (RMS), however, ERCOT wanted to take this opportunity to look for any additional gaps including communication issues and requested Market Participant input. Mr. Kee requested Market Participants provide input prior to the June 28, 2018 TAC meeting.

ERCOT Operations and Market Items (see Key Documents)

*Switchable Generation Resources Update*

Mr. Ögelman provided an update on the management of Switchable Generation Resources and stated that ERCOT was continuing to negotiate agreements with other Reliability Coordinators, including the Midcontinent Independent System Operator (MISO), Southwest Power Pool (SPP), and the independent system operator for Mexico, El Centro Nacional de Control de Energía (CENACE). Mr. Ögelman reminded Market Participants that ERCOT is still pursing the command control option to address reliability issues and that ERCOT will begin working through the stakeholder process once the negotiations are complete. Mr. Ögelman stated in the interim, ERCOT will bring forward a Revision Request to clarify the current release process for switchable units. Some Market Participants reminded ERCOT that they have expressed concern for the command control option without changes to the Settlement structure on numerous occasions. Mr. Ögelman stated the Settlement structure can be addressed in subsequent Revision Requests.

Market Participants requested that ERCOT distribute the Switchable Generation Resource whitepaper, related North American Electric Reliability Corporation (NERC) rules, and Protocols related to switching in emergency situations to the WMS listserv. Mr. Ögelman encouraged Market Participants to submit written inquires in advance of the July 11, 2018 WMS meeting.

*ERCOT Analysis of 4-Coincident Peak (4-CP) and Retail Demand Response*

Carl Raish summarized the new methodology and presented the annual analysis of Load reductions associated with 4-CP transmission charges and retail Demand response.

*Unregistered Distributed Generation (DG) Report 2018 Q1 Update*

Dan Mantena presented the 1st Quarter 2018 Unregistered DG report and noted the significant increase in solar generation. In response to Market Participant questions regarding reporting requirements on Non-Opt-In Entities (NOIEs) under 50 Kilowatts (kWs), Pete Warnken stated that ERCOT recognized the need to include the additional capacity and anticipates bringing forward a Revision Request to address the issue this summer.

New Protocol Revision Subcommittee (PRS) Referrals

*Nodal Protocol Revision Request (NPRR) 869, Clarification of Language Related to Generation Netting for ERCOT-Polled Settlement Meters*

Mr. Kee stated that ERCOT requested additional time to offer clarifications to NPRR869.

**Mr. Woodruff moved to request PRS continue to table NPRR869 to allow additional time for review by WMS. Ms. Coleman seconded the motion. The motion carried unanimously.**

*NPRR871, Customer or Resource Entity Funded Transmission Projects Review Process*

Market Participants discussed the merits of NPRR871 and expressed concern for the potential impacts to the Congestion Revenue Right (CRR) process.

**Eric Goff moved to request PRS continue to table NPRR871 to allow further review by the Congestion Management Working Group (CMWG). Christian Powell seconded the motion. The motion carried unanimously.**

*NPRR872, Modifying the SASM Shadow Price Cap*

Mr. Powell reviewed NPRR872 and the additional clarifications to create a Demand curve for each Ancillary Service. Market Participants and ERCOT Staff discussed the compensation issues and additional analysis necessary to define the percentages used in the Demand curves and the maximum Shadow Price values and requested additional review by QMWG.

**Mr. Goff moved to request PRS continue to table NPRR872 to allow further review by the QMWG. Bill Barnes seconded the motion. The motion carried unanimously.**

Verifiable Cost Manual Revision Request (VCMRR) 022, Determination of Fuel Adder Price for Coal and Lignite Resources

Ino Gonzalez reviewed the history of VCMRR022 and stated that using a coal index price is the most cost effective long term solution for calculating the fuel adder for coal-fired and lignite-fired Resources. In response to Market Participants questions on future analysis of the methodology, Mr. Gonzalez stated ERCOT would review the results on an annual basis.

**Mr. Barnes moved to recommend approval of VCMRR022 as submitted. Marty Downey seconded the motion. The motion carried unanimously.**

Other Binding Document Revision Request (OBDRR) 003, Change Validation Rules to Preclude Certain Transactions at Resource Nodes within Private Use Networks

Mr. Kee reminded Market Participants that this item remains tabled until System Change Request (SCR) 796, Change Validation Rules to Preclude Certain Transactions at Resource Nodes within Private Use Networks, proceeds through the stakeholder process. WMS took no action on this item.

QMWG

Mr. Goff summarized recent QMWG activities, including review of Revision Requests assigned to QMWG.

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

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

*NPRR850, Market Suspension and Restart*

*NPRR863, Creation of Primary Frequency Response Service Product and Revisions to Responsive Reserve*

WMS took no action on these items.

*NPRR807, Day-Ahead Market Price Correction*

Mr. Ögelman reviewed the history of NPRR807 and reminded Market Participants that as it proceeded through the stakeholder process, issues regarding the Alternative Dispute Resolution (ADR) procedures were identified. Mr. Ögelman stated that the dispute issues supersede the Day-Ahead Market (DAM) pricing issues and that ERCOT intends to withdraw NPRR807. Market Participants expressed support for the merits of NPRR807. Mr. Ögelman offered to bring forth an additional Revision Request to address the DAM pricing issues once potential dispute resolutions are vetted. WMS took no action on this item.

*NPRR845, RMR Process and Agreement Revisions*

Mr. Goff stated that NPRR845 was discussed extensively at previous QMWG meetings and offered additional clarifications regarding claw-back of incentive factor payments for capital costs that were later revised to no longer be capital costs as a result of changes to the Reliability Must-Run (RMR) contract.

**Mr. Goff moved to endorse NPRR845 as amended by the 1/17/18 ERCOT comments and as revised by WMS. Ken Lindberg seconded the motion. The motion carried unanimously.**

*NPRR848, Separate Clearing Prices for RRS*

Market Participants and ERCOT Staff reviewed the timeline, sponsorship, and Revision Request process for NPRR848. Market Participants expressed a concern for the lack of vetting on NPRR848 due to sponsorship issues.

**Mr. Lindberg moved to recommend PRS reject NPRR848 without addressing the merits of the NPRR. Mr. Goff seconded the motion. The motion carried with seven abstentions from the Cooperative (3) (GSEC, LCRA, STEC), Independent Retail Electric Provider (IREP) (2) (Direct Energy, Reliant), Consumer (Eastland), and Independent Generator (Exelon) Market Segments.**

*NPRR862, Updates to Address Revisions under PUCT Project 46369*

Mr. Ögelman reviewed the merits of NPRR862, reminded Market Participants that its implementation addresses regulatory changes, and requested additional concepts be considered in subsequent Revision Requests.

**Mr. Goff moved to endorse NPRR862 as amended by the 5/24/18 ERCOT comments. Mr. Barnes seconded the motion. The motion carried unanimously.**

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

Mr. Barnes reviewed recent MCWG activities, including the credit exposure update, concept for a Competitive Retailer (CR) to provide contact information to better facilitate the sale of a Retail Electric Provider’s (REP’s) portfolio in a credit default or mass transition, and the mass transition drill lessons learned.

Metering Working Group (MWG) (see Key Documents)

Darrell Sumbera reviewed recent MWG activities, including the ERCOT-Polled Settlement (EPS) metering communication issues and statistics, and reminded Transmission and/or Distribution Service Providers (TDSPs) to submit their proposed EPS metering communication solutions to ERCOT by July 1, 2018.

Other Business

*Changes to Interconnection Process*

Walter Reid expressed concern for current projects that would be impacted by ERCOT’s decision to change the interconnection process as described in the June 14, 2018 Market Notice. ERCOT Staff stated that the increased use of temporary taps created significant market and reliability impacts and therefore, Resource connections without relay-operated breakers will no longer be approved for new Full Interconnection Studies (FIS) after May 31, 2018. ERCOT Staff stated that the reliability impacts would be discussed at the June 7, 2018 Reliability and Operations Subcommittee (ROS) meeting. ERCOT Staff further reviewed the submission timelines, summarized previous contingency discussions at CMWG meetings, and confirmed this change will apply to projects in 2019 and beyond.

*Meeting Efficiencies*

Market Participants discussed meeting efficiencies for WMS working groups. Mr. Kee requested QMWG vet potential solutions to clarify the issues they address. Mr. Kee encouraged Market Participants to consider the utility of the Emerging Technologies Working Group (ETWG) and stated it would be considered at the July 11, 2018 WMS meeting.

*Meeting Materials*

Market Participants and ERCOT Staff discussed the timely posting of meeting materials for WMS meetings.

*No Report*

* CMWG
* Demand Side Working Group (DSWG)
* ETWG
* Resource Cost Working Group (RCWG)
* Supply Analysis Working Group (SAWG)

Adjournment

Mr. Kee adjourned the June 6, 2018 WMS meeting at 2:55 p.m.

1. <http://www.ercot.com/calendar/2018/6/6/138542-WMS> [↑](#footnote-ref-1)