**APPROVED**

**Minutes of the Technical Advisory Committee (TAC) Meeting – Webex Only**

**Monday, June 24, 2024 – 9:30 a.m.**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | | |  | | |  | | |
| *TAC Representatives:* |  | | |  | | | |
| Barnes, Bill | Reliant Energy Retail Services (Reliant) | | |  | | | |
| Blakey, Eric | Pedernales Electric Cooperative (PEC) | | |  | | | |
| Bonskowski, Ned | Luminant Generation (Luminant) | | |  | | | |
| Carpenter, Jeremy | Tenaska Power Services (Tenaska) | | |  | | | |
| Dreyfus, Mark | City of Eastland | | |  | | | |
| Fehrenbach, Nick | City of Dallas | | |  | | | |
| Franklin, Russell | Garland Power and Light (GP&L) | | |  | | | |
| Gaytan, Jose | Denton Municipal Electric (DME) | | |  | | | |
| Goff, Eric | Residential Consumer | | |  | | | |
| Haley, Ian | Morgan Stanley | | |  | | | |
| Helton, Bob | ENGIE North America (ENGIE) | | |  | | | |
| Hendrix, Chris | Demand Control 2 | | |  | | | |
| Holt, Blake | Lower Colorado River Authority (LCRA) | | |  | | | |
| Kee, David | CPS Energy | | |  | | | |
| Kent, Garret | CMC Steel Texas (CMC Steel) | | |  | | | |
| Loving, Alicia | Austin Energy | | |  | | | |
| Martin, Collin | Oncor Electric Delivery (Oncor) | | |  | | | |
| Mercado, David | CenterPoint (CNP) | | |  | | | |
| Nix, Keith | Texas-New Mexico Power Company (TNMP) | | |  | | | |
| Packard, John | South Texas Electric Cooperative (STEC) | | |  | | | |
| Pokharel, Nabaraj | Office of Public Utility Counsel (OPUC) | | |  | | | |
| Ross, Richard | AEP Service Corporation (AEPSC) | | |  | | | |
| Sams, Bryan | Calpine Corporation (Calpine) | | |  | | | |
| Schmitt, Jennifer | Rhythm Ops | | |  | | | |
| Schubert, Eric | Lyondell Chemical | | |  | | | |
| Smith, Caitlin | Jupiter Power | | |  | | | |
| Surendran, Resmi | Shell Energy North America (SENA) | | |  | | | |
| Wise, Mike | Golden Spread Electric Cooperative (GSEC) | | |  | | | |
|  | | |  | |  | |
|  | |  | | |  | |

The following proxies were assigned:

* Eric Blakey to Blake Holt
* Jay Harpole to Chris Hendrix

*Guests:*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Aldridge, Ryan | AB Power Advisors | |  | |
| Allen, Thresa | Avangrid Renewables | |  | |
| Amirazodi, Roozbeh | Got Rhythm | |  | |
| Anderson, Connor | AB Power Advisors | |  | |
| Anklam, Rob | NG Renewables | |  | |
| Ashley, Kristy | Customized Energy Solutions (CES) | |  | |
| Basaran, Harika | Public Utility Commission of Texas (PUCT) | |  | |
| Beckman, Kara | NextEra Energy | |  | |
| Benson, Mariah | Texas Public Power Association (TPPA) | |  | |
| Berg, Justin | Equilibrium Energy | |  | |
| Bernier, Benjamin | Mercuria | |  | |
| Berry, Danny | LCRA | |  | |
| Bevill, Rob | TNMP | |  | |
| Bivens, Carrie | NextEra Energy | |  | |
| Blackburn, Don | Hunt Energy | |  | |
| Boggs, Callie | Eric Winters Goff, LLC | |  | |
| Briggs, Lindsay | EPE Consulting | |  | |
| Brown, Chris | PUCT | |  | |
| Bulzak, Jacob | PUCT | |  | |
| Buongiorno, Anna | Scout Clean Energy | |  | |
| Chan, Vanessa | Enel | |  | |
| Cheng, Yong | LCRA | |  | |
| Chwialkowski, Todd | EDF Renewables | |  | |
| Clark, Jack | Spearmint Energy | |  | |
| Cockrell, Justin | DC Energy | |  | |
| Coleman, Diana | CPS Energy | |  | |
| Cortez, Sarai | Trailstone | |  | |
| Cox, Jason | EQ Energy Advisors | |  | |
| Davis, Julie | OPUC | |  | |
| Detelich, David | CPS | |  | |
| Dharme, Neeraja | EDFT | |  | |
| Duke, Krista | PUCT | |  | |
| Escala Roque, Carlos | NextEra Energy | |  | |
| Garrett, Bob | Key Capture Energy | |  | |
| Gauldin, Julie | PUCT | |  | |
| Grey, Bruce | Samsung | |  | |
| Hall, Matthew | Invenergy | |  | |
| Harvey, Julia | Texas Electric Cooperatives (TEC) | |  | |
| Heith, Mattie | Calpine | |  | |
| Henry, Mark | Texas Reliability Entity (Texas RE) | |  | |
| Henson, Martha | Oncor | |  | |
| Hering, David | BTU | |  | |
| Hjaltman, Courtney | OPUC | |  | |
| Hubbard, John Russ | Texas Industrial Energy Consumers (TIEC) | |  | |
| Huang, Mandy | Grid Beyond | |  | |
| Ingraham, Deborah | Acciona Energy | |  | |
| Jewell, Michael | Jewell and Associates | |  | |
| Jha, Monica | Vistra | |  | |
| John, Ebby | CNP | |  | |
| Keefer, Andrew | DME | |  | |
| Keen, Chris | Granicus | |  | |
| Keusch, Stephanie | AB Power Advisors | |  | |
| Kirby, Brandon | GEUS | |  | |
| Kirby, Trevor |  | |  | |
| Koz, Brian |  | |  | |
| Kremling, Barry | GVEC | |  | |
| Lee, Jim | CNP | |  | |
| Lin, Blake | Potomac Economics | |  | |
| Loew, Beverly | Eric Winters Goff, LLC | |  | |
| Lotter, Eric | GridMonitor | |  | |
| Macaraeg, Tad | Stem | |  | |
| Martin, Loretto | NRG | |  | |
| McClellan, Suzi | Good Company Associates | |  | |
| McD Wyman, Constance |  | |  | |
| McKeever, Debbie | Oncor | |  | |
| McMurray, Creighton | Spencer Fane | |  | |
| Mechler, Robert | LS Power | |  | |
| Melaerts, Sebastien | 61 Commodities | |  | |
| Miller, Alex | EDF Renewables | |  | |
| Morris, Sandy | WETT | |  | |
| O’Neil, Jennifer | Texas Pipelines | |  | |
| Orr, Rob | Lone Star Transmission | |  | |
| Pfefferle, Ryan | Occidental Chemical | |  | |
| Pietrucha, Doug | AEE | |  | |
| Poonawala, Adnan | ENGIE | |  | |
| Price, Chris |  | |  | |
| Pyka, Greg | SEnergy | |  | |
| Ratliff, Shannon |  | |  | |
| Reasor, Deidra | GVEC | |  | |
| Reedy, Steve | CIM View Consulting | |  | |
| Reimers, Andrew | Potomac Economics | |  | |
| Rich, Katie | Luminant | |  | |
| Richmond, Michele | Texas Competitive Power Advocates (TCPA) | |  | |
| Ritch, John | Trafigura | |  | |
| Rochelle, Jenni | CES | |  | |
| Ruehl, John | Deriva Energy | |  | |
| Ryall, Jean |  | |  | |
| Safko, Trevor | LCRA | |  | |
| Sager, Brenden | Austin Energy | |  | |
| Schatz, John | Luminant Generation | |  | |
| Schwarz, Brad | Sharyland | |  | |
| Scott, Kathy | CNP | |  | |
| Sersen, Juliana | Baker Botts | |  | |
| Siddiqi, Shams | Crescent Power Consulting | |  | |
| Sills, Kevin | GP&L | |  | |
| Sirhan, Andrew | OCI Solar Power | |  | |
| Snyder, Bill | AEP Texas | |  | |
| Stephenson, Zach | TEC | |  | |
| Thomas, Shane | SENA | |  | |
| Townsend, Paul | TCPA | |  | |
| True, Roy | ACES | |  | |
| Turner, Lucas | STEC | |  | |
| Turner, Ronnie |  | |  | |
| Utomi, Samuel | Leeward Energy | |  | |
| Velasquez, Ivan | Oncor | |  | |
| Wagner, Julia | PUCT | |  | |
| Walker, Floyd | PUCT | |  | |
| Wall, Perrin | CNP | |  | |
| Whitehurst, Stacy | TNMP | |  | |
| Williams, Mary Elen | OPUC | |  | |
| Wilson, Joe Dan | GSEC | |  | |
| Withrow, David | AEP | |  | |
| Wittmeyer, Bob | Longhorn Power | |  | |
| Woods, Brad | Texas RE | |  | |
| Xie, Fei | Austin Energy | |  | |
| Zambrano, Tadeo | SEnergy | |  | |
| Zhang, Mandy | GEUS | |  | |
|  | |  | |  |
| *ERCOT Staff:* | |  | |  |
| Albracht, Brittney | |  | |  |
| Anderson, Troy | |  | |  |
| Arth, Matt | |  | |  |
| Azeredo, Chris | |  | |  |
| Billo, Jeff | |  | |  |
| Boren, Ann | |  | |  |
| Carswell, Cory | |  | |  |
| Chen, Jian | |  | |  |
| Chu, Zhengguo | |  | |  |
| Clifton, Suzy | |  | |  |
| Collins, Keith | |  | |  |
| Cyphers, Darrell | |  | |  |
| Day, Betty | |  | |  |
| Drake, Gordon | |  | |  |
| Dwyer, Davida | |  | |  |
| Garcia, Freddy | |  | |  |
| Golen, Robert | |  | |  |
| González, Ino | |  | |  |
| Gross, Katherine | |  | |  |
| Hanson, Pamela | |  | |  |
| Hartmann, Jimmy | |  | |  |
| Herrera, Shane | |  | |  |
| Hinojosa, Luis | |  | |  |
| Holden, Curry | |  | |  |
| Johnson, Blane | |  | |  |
| Khodabakhsh, Fred | |  | |  |
| King, Ryan | |  | |  |
| Luker, Bryan | |  | |  |
| Maggio, Dave | |  | |  |
| Mago, Nitika | |  | |  |
| Mantena, Dan | |  | |  |
| McGuire, Josh | |  | |  |
| Mereness, Matt | |  | |  |
| Moreno, Alfredo | |  | |  |
| Neel, Evan | |  | |  |
| Patterson, Mark | |  | |  |
| Phillips, Cory | |  | |  |
| Rainwater, Kim | |  | |  |
| Rickerson, Woody | |  | |  |
| Rosel, Austin | |  | |  |
| Sanchez, Daniel | |  | |  |
| Schmidt, Matthew | |  | |  |
| Shanks, Magie | |  | |  |
| Smith, Ira | |  | |  |
| Springer, Agee | |  | |  |
| Wasik-Gutierrez, Erin | |  | |  |
| Zhang, Bryan | |  | |  |

*Unless otherwise indicated, all Market Segments participated in the votes.*

Caitlin Smith called the June 24, 2024 meeting to order at 9:30 a.m.

Antitrust Admonition

Ms. Smith directed attention to the displayed Antitrust Admonition and noted that the Antitrust Guidelines are available for review on the ERCOT website.

Approval of TAC Meeting Minutes (see Key Documents)[[1]](#footnote-2)

*May 22, 2024*

Ms. Smith noted this item could be considered in the [Combined Ballot](#Combined_Ballot).

Meeting Updates

*June 13, 2024 Public Utility Commission of Texas (PUCT) Meeting*

*June 17, 2024 and June 18, 2024 ERCOT Board (Board) and Committee Meetings*

Ms. Smith reviewed the disposition of items considered at the June 13, 2024 PUCT meeting; June 17, 2024 ERCOT Board (Board) Committee meetings; and June 18, 2024 Board meeting, including Nodal Operating Guide Revision Request (NOGRR) 245, Inverter-Based Resource (IBR) Ride-Through Requirements, and noted that it was tabled and may be considered at a Special Board meeting in July.

Review of Revision Request Summary/ERCOT Market Impact Statement/Opinions (See Key Documents)

Ann Boren presented a Revision Request Summary, including the ERCOT Market Impact Statements, ERCOT Opinions, Credit Finance Subgroup (CFSG) Review, budgetary impacts, and reasons for revisions for Revision Requests to be considered by TAC. Ms. Boren noted the Independent Market Monitor (IMM) opinions for Revision Requests to be considered by TAC.

Protocol Revision Subcommittee (PRS) Report (see Key Documents)

Diana Coleman reviewed PRS activities and presented Revision Requests for TAC consideration.

*Nodal Protocol Revision Request (NPRR) 1190, High Dispatch Limit Override Provision for Increased Load Serving Entity Costs*

Some Market Participants raised concerns that NPRR1190 incorrectly expands the opportunity for Entities to receive compensation for scheduled-but-not-provided energy under out-of-market ERCOT actions, requested input from the IMM, and requested additional time to consider the issues. Supporters of NPRR1190 noted the infrequent occurrence of the conditions covered by NPRR1190 and the language which prevents recovery of lost opportunity costs stemming from a High Dispatch Limit (HDL) override.

**Eric Goff moved to table NPRR1190. Eric Schubert seconded the motion. The motion failed with 19 objections from the Cooperative (4) (GSEC, LCRA, PEC, STEC), Independent Generator (4) (Calpine, Jupiter Power, ENGIE, Luminant), Independent Power Marketer (IPM) (2) (Tenaska, Morgan Stanley), Independent Electric Retailer (IREP) (1) (Reliant), Investor Owned Utility (IOU) (4) (TNMP, CNP, Oncor, AEPSC) and Municipal (4) (GP&L, DME, CPS Energy, Austin Energy) Market Segments and two abstentions from the IPM (SENA) and IREP (Rhythm Ops) Market Segments.** *(Please see ballot posted with Key Documents.)*

**Blake Holt moved to recommend approval of NPRR1190 as recommended by PRS in the 6/13/24 PRS Report. Bill Barnes seconded the motion. The motion carried with six objections from the Consumer (6) (Residential, OPUC, City of Eastland, City of Dallas, CMC Steel, Lyondell Chemical) Market Segment and one abstention from the IREP (Rhythm Ops) Market Segment.** *(Please see ballot posted with Key Documents.)*

*NPRR1215, Clarifications to the Day-Ahead Market (DAM) Energy-Only Offer Calculation*

*NPRR1225, Exclusion of Lubbock Load from Securitization Charges*

Ms. Smith noted these items could be considered in the [Combined Ballot](#Combined_Ballot).

*NPRR1216, Implementation of Emergency Pricing Program*

Dave Maggio reviewed the 6/18/24 ERCOT comments to NPRR1216. Ms. Smith noted this item could be considered in the [Combined Ballot](#Combined_Ballot).

Revision Requests Tabled at TAC (See Key Documents)

*NPRR1230, Methodology for Setting Transmission Shadow Price Caps for an IROL in SCED – URGENT*

Ms. Smith reminded participants of the NPRR1230 discussion at the May 31, 2024 Special TAC meeting and requested an update from ERCOT Staff on the timeline for providing additional analysis. Freddy Garcia stated that ERCOT was still developing the analysis and anticipated bringing forward at the July 31, 2024 TAC meeting. Mr. Garcia noted that Urgent status was initially requested on NPRR1230 to potentially implement by Summer 2024, however, since that is unlikely, the Revision Request could proceed on the normal timeline.

*Other Binding Document Revision Request (OBDRR) 046, Related to NPRR1188, Implement Nodal Dispatch and Energy Settlement for Controllable Load Resources*

TAC took no action on this item.

*OBDRR051, Related to NPRR1216, Implementation of Emergency Pricing Program*

Ms. Smith noted this item could be considered in the [Combined Ballot](#Combined_Ballot).

Retail Market Subcommittee (RMS) Report (See Key Documents)

John Schatz reviewed RMS activities, including the Retail Market Qualification testing (Flight 0923) required for all Competitive Retailers (CRs) and Transmission and/or Distribution Service Providers (TDSPs), encouraged Load Serving Entities (LSEs) to attend the June 25, 2024 Texas SET V5.0 Orientation, and responded to participant questions and concerns.

Reliability and Operations Subcommittee (ROS) Report (see Key Documents)

*Planning Guide Revision Request (PGRR) 106, Clarify Projects Included in Transmission Project Information and Tracking (TPIT) Report*

Katie Rich reviewed ROS activities and presented PGRR106 for TAC consideration. Ms. Smith noted this item could be considered in the [Combined Ballot](#Combined_Ballot).

Wholesale Market Subcommittee (WMS) Report (see Key Documents)

*Verifiable Cost Manual Revision Request (VCMRR) 039, Related to NPRR1216, Implementation of Emergency Pricing Program*

Jim Lee reviewed WMS activities and presented VCMRR039 for TAC consideration. Ms. Smith noted this item could be considered in the [Combined Ballot](#Combined_Ballot). Mr. Lee noted the discussion at the June 18, 2024 Board meeting on the potential reliability impact on ERCOT capacity from recent Environmental Protection Agency (EPA) rules; highlighted Wholesale Market Working Group (WMWG) discussions on the WMS Open Action item, Review impacts of existing and proposed EPA regulations on the ERCOT market and the reliability of the ERCOT grid and the future Resource mix; and requested TAC direction on the issues. Market Participants requested WMS continue to review the current Open Action item as requested.

Large Flexible Load Task Force (LFLTF) Report

Agee Springer reviewed LFLTF activities, including NPRR1234, Interconnection Requirements for Large Loads and Modeling Standards for Loads 25 MW or Greater and the related PGRR115.

Real-Time Co-optimization plus Batteries Task Force (RTCBTF) (see Key Documents)

Matt Mereness reviewed RTCBTF activities, including the timeline for ERCOT to release the go-live schedule, potential Market Trial Sequence, and RTC+B Revision Request Next Steps.

ERCOT Reports (see Key Documents)

*2025 Ancillary Service Methodology Discussion Kick Off*

Nitika Mago presented the 2025 Ancillary Service Methodology review timeline for stakeholder discussion at working groups and subcommittees prior to consideration at the September 25, 2024 TAC meeting, October 10, 2024 ERCOT Board meeting, and future November or December 2024 PUCT meeting. Ms. Mago encouraged interested stakeholders to attend the July 23, 2024 WMWG meeting and July 24, 2024 Performance, Disturbance, Compliance Working Group (PDCWG) meeting to provide feedback on the proposed Ancillary Services Methodology.

Other Business (see Key Documents)

*PUC Ancillary Services Study Update*

Andrew Reimers presented the IMM Probabilistic Model for determining optimal Ancillary Services procurement, summarized the model approach, reviewed the calculations and historical basis, and noted time constraints in responding to the PUCT request. Mr. Reimers responded to participant questions and concerns and noted that this study would not include future Load forecasts.

Jeff Billo highlighted the ongoing Ancillary Services initiatives, noted recent changes and changing system needs, reviewed statistical analysis questions, and presented ERCOT recommendations and Next Steps. Mr. Billo stated that ERCOT did not anticipate potential changes developed in the PUCT Ancillary Services Study would be included in the 2025 Ancillary Services methodology due to time constraints, but offered to provide updates at future TAC meetings.

Harika Basaran summarized the Legislative mandate in Senate Bill 3 from the 87th Regular Texas Legislative Session and reviewed the proposed timeline to enable the PUCT to approve its final study and recommendations to submit to the 88th Legislature as part of the Biennial Agency report. Ms. Basaran requested that stakeholders provide feedback on desired information for IMM and ERCOT Staff to present at the August 28, 2024 TAC Workshop for the Ancillary Services Study.

Combined Ballot

**Ned Bonskowski moved to approve the Combined Ballot as follows:**

* **To approve the May 22, 2024 TAC Meeting Minutes as presented**
* **To recommend approval of NPRR1215 as recommended by PRS in the 6/13/24 PRS Report**
* **To recommend approval of NPRR1216 as recommended by PRS in the 6/13/24 PRS Report as amended by the 6/18/24 ERCOT comments**
* **To recommend approval of NPRR1225 as recommended by PRS in the 6/13/24 PRS Report**
* **To recommend approval of OBDRR051 as submitted**
* **To recommend approval of PGRR106 as recommended by ROS in the 6/6/24 ROS Report**
* **To recommend approval of VCMRR039 as recommended by WMS in the 6/5/24 WMS Report**

**Mr. Holt seconded the motion. The motion carried** **unanimously.** *(Please see ballot posted with Key Documents.)*

Ms. Smith adjourned the June 24, 2024 TAC meeting at 12:00 p.m.

1. Key Documents referenced in these minutes may be accessed on the ERCOT website at:

   <https://www.ercot.com/calendar/06242024-TAC-Meeting-_-Webex> [↑](#footnote-ref-2)