**APPROVED**

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

**Wednesday, October 30, 2024 – 9:00 a.m.**

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| --- | --- | --- |
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| *TAC Representatives:* |  |  |
| Barnes, Bill | Reliant Energy Retail Services (Reliant) |  |
| Bevill, Rob | Texas-New Mexico Power Company (TNMP) |  |
| Blakey, Eric | Pedernales Electric Cooperative (PEC) |  |
| Bonskowski, Ned | Luminant Generation (Luminant) |  |
| Campo, Curtis | Garland Power and Light (GP&L) |  |
| Carpenter, Jeremy | Tenaska Power Services (Tenaska) |   |
| Dreyfus, Mark | City of Eastland |  |
| Fehrenbach, Nick | City of Dallas |  |
| Gaytan, Jose | Denton Municipal Electric (DME) |  |
| Goff, Eric | Residential Consumer |  |
| Haley, Ian | Morgan Stanley  |  |
| Harpole, Jay | APG&E |  |
| 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 Energy |  |
| Morais, Matt | National Grid Renewables (NG Renewables) |  |
| 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:

* Mike Wise to Blake Holt
* Jennifer Schmitt to Bill Barnes

*Guests:*

|  |  |  |
| --- | --- | --- |
| Ainspan, Malcolm | NRG |  |
| Aldridge, Ryan | AB Power Advisors |  |
| Allen, Thresa | Avangrid Renewables |  |
| Amirazodi, Roozbeh | Rhythm Ops |  |
| Anderson, Connor | AB Power Advisors |  |
| Anderson, Kevin | Customized Energy Solutions (CES) |  |
| Ashley, Kristy | CES |  |
| Basaran, Harika | PUCT |  |
| Beard, Mason | Hunt Energy |  |
| Beckman, Kara | NextEra Energy |  |
| Berry, DJ | LCRA |  |
| Bertin, Suzanne |  |  |
| Bivens, Carrie | NextEra Energy |  |
| Blackburn, Don | Hunt Energy Network |  |
| Block, Laurie | L Block Consulting, LLC |  |
| Borer, Taylor | City of Garland |  |
| Brasel, Kade | CPS Energy |  |
| Brereton, Beverly | Enel |  |
| Burkhead, Brett | Calpine |  |
| Carrasco, Carlos | Haynes Boone |  |
| Chatlani, Varsha | BETM |  |
| Clark, Jack | Spearmint Energy |  |
| Clark, Leah | City of Georgetown |  |
| Cochran, Seth | Vitol |  |
| Cogan, Brandon | AEP |  |
| Coleman, Diana | CPS Energy |  |
| Crist, Kelly | ENGIE |  |
| Detelich, David | CPS Energy |  |
| Dharme, Neeraja | EDFT |  |
| Dietert, Cole | EPE Consulting |  |
| Donohoo, Ken | OwlERC, LLC |  |
| Duensing, Allison | Sarac Energy |  |
| Elen, Mary | OPUC |  |
| Ellis, Jeff | AEP |  |
| English, Barksdale | PUCT |  |
| Gauldin, Julie | PUCT |  |
| Gilman, Portia | Yes Energy |  |
| Greer, Clayton | Cholla, Inc. |  |
| Hale, Josh | Southern Power |  |
| Hall, Matthew | Invenergy |  |
| Harvey, Julia | Texas Electric Cooperatives (TEC)  |  |
| Headrick, Bridget | CES |  |
| Henson, Martha | Oncor |  |
| Huang, Mandy | Invenergy |  |
| Hubbard, John Russ | Texas Industrial Energy Consumers (TIEC) |  |
| Huynh, Thuy | Potomac Economics |  |
| Inman, Grant | BP |  |
| Jamar, Ben | ECI |  |
| Jewell, Michael | Michael Jewell and Associates  |  |
| Jha, Monica | Vistra |  |
| John, Ebby | CNP |  |
| Johnson, Natalie | Enel |  |
| Jones, Dan |  |  |
| Jones, Liz | Oncor |  |
| Jones, Monica | CNP |  |
| Kasali, Tosin | Hecate Grid |  |
| Keen, Chris | Granicus |  |
| Keller, Jenna | PUCT |  |
| Langdon, James | Vistra |  |
| Le, Don |  |  |
| Lee, Jim | CNP |  |
| Leverett, Travis | WETT, LLC |  |
| Levine, Jon | Baker Botts |  |
| Loew, Beverly | Eric Winters Goff, LLC |  |
| Lotter, Eric | GridMonitor |  |
| Macaraeg, Tad | Stem |  |
| Macias, Jesse | AEP Texas |  |
| Matos, Chris | Google  |  |
| McClellan, Suzi | Good Company Associates |  |
| McDonald, Jeff | Potomac Economics |  |
| McKeever, Debbie | Oncor |  |
| Morris, Sandy | WETT |  |
| Moser, Jesse | NextEra  |  |
| Neel, Evan | Lancium |  |
| Neville, Zach | CES |  |
| Nicholson, Tyler | PUCT |  |
| Oliver, Jon | PUCT |  |
| Pawar, Aasawari  | Orsted |  |
| Pearson, Kelsey | Longhorn Power |  |
| Pietrucha, Doug | AEE |  |
| Pittman, Michael |  |  |
| Price, Mark | DC Energy |  |
| Puram, Rakesh | Power Advisory, LLC |  |
| Rasmussen, Erin | AEP |  |
| Reed, Ronald | CNP |  |
| Reedy, Steve | CIM View Consulting |  |
| Rich, Katie | Luminant |  |
| Richmond, Michele | Texas Competitive Power Advocates (TCPA) |  |
| Ritch, John | Trafigura |  |
| Rochelle, Jenni | CES |  |
| Sablosky, Maximillian | Qcells |  |
| Safko, Trevor | LCRA |  |
| Sager, Brenden | Austin Energy |  |
| Schwarz, Brad | Sharyland |  |
| Scott, Kathy | CNP |  |
| Sersen, Juliana | Baker Botts |  |
| Shaffer, Jarred | Office of Texas Governor Greg Abbott |  |
| Shetty, Aditi | Auroraer |  |
| Sirhan, Andre | OCI Energy  |  |
| Smith, Mark | Mark Smith Law, LLC |  |
| Snyder, Bill | AEP Texas |  |
| Stephenson, Zach | Texas Electric Cooperatives (TEC) |  |
| Sweet, Regina | Onward Energy |  |
| Tay, Sing | AES |  |
| Teng, Shuye | Constellation Energy |  |
| Thomas, Shane | SENA |  |
| Townsend, Paul | TCPA |  |
| True, Roy | ACES |  |
| Turner, Lucas | STEC |  |
| Van Ness, Zach | Matrix Renewables |  |
| Van Winkle, Kim | PUCT |  |
| Wagner, Julie | PUCT |  |
| Wall, Perrin | CNP |  |
| Walke, Pranil | Calpine |  |
| Walker, Floyd | PUCT |  |
| Watson, Markham  |  |  |
| Williams, Wes | BTU |  |
| Wilson, Joe Dan | GSEC |  |
| Withrow, David | AEP |  |
| Wittmeyer, Bob | Longhorn Power |  |
| Xie, Fei | Austin Energy |  |
| Zang, Hailing | TC Energy |  |
| Zerwas, John | Hunt Utility  |  |
| Zhang, Mandy | GEUS |  |
|  |  |  |
| *ERCOT Staff:* |  |  |
| Abbott, Kristin |  |  |
| Albracht, Brittney |  |  |
| Allen, James |  |  |
| Anderson, Troy |  |  |
| Arth, Matt |  |  |
| Benavides, Marcos |  |  |
| Bigbee, Nathan |  |  |
| Billo, Jeff |  |  |
| Boren, Ann |  |  |
| Carswell, Cory |  |  |
| Chambers, Jason |  |  |
| Cheng, Yong |  |  |
| Clifton, Suzy  |  |  |
| Collins, Keith |  |  |
| Cosway, Chris |  |  |
| Cyphers, Darrell |  |  |
| Dashnyam, Sanchir |  |  |
| Day, Betty |  |  |
| Drake, Gordon |  |  |
| Dwyer, Davida |  |  |
| El-Madhoun, Mohamed |  |  |
| Findley, Samantha |  |  |
| Finke, Sidne |  |  |
| Fohn, Doug |  |  |
| Garcia, Freddy |  |  |
| Garza, Christian |  |  |
| Golen, Robert |  |  |
| González, Ino |  |  |
| Gnanam, Prabhu |  |  |
| Gross, Katherine |  |  |
| Hobbs, Kristi |  |  |
| Holland, Caleb |  |  |
| Kansal, Prashant |  |  |
| Magarinos, Marcelo |  |  |
| Maggio, Dave |  |  |
| McGuire, Josh |  |  |
| Mereness, Matt |  |  |
| Miller, Megan |  |  |
| Moreno, Alfredo |  |  |
| Navarro Catan, Manuel |  |  |
| Phillips, Cory |  |  |
| Ramirez-Burgueno, Daniel |  |  |
| Ramthun, Eli |  |  |
| Rosel, Austin |  |  |
| Schmidt, Matthew |  |  |
| Scott, Vicki |  |  |
| Sherry, Daniel |  |  |
| Snitman, Julie |  |  |
| Thompson, Chad |  |  |
| Troublefield, Jordan |  |  |
| Wasik-Gutierrez, Erin |  |  |
| Zhang, Bryan |  |  |

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

Caitlin Smith called the October 30, 2024 meeting to order at 9:00 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)

*September 19, 2024*

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

Meeting Updates

*September/October ERCOT Board/PUCT Meetings*

Ms. Smith reviewed the disposition of item considered at the September 26, 2024 and October 3, 2024 Public Utility Commission of Texas (PUCT) meeting and the October 10, 2024 ERCOT Board of Directors (Board) meeting.

*Subcommittee Reporting to the Board*

Ms. Smith highlighted improvements in the stakeholder process, including presenting Subcommittee activities in the TAC report presented at the October 10, 2024 Board meeting.

*Nodal Operating Guide Revision Request (NOGRR) 245, Inverter-Based Resource (IBR) Ride-Through Requirements Update*

Ms. Smith reminded participants of the Board action on NOGRR245 at the August 20, 2024 Board meeting, including bifurcating details of the exemption process in a subsequent NOGRR to be filed as a Board Priority Revision Request. Ann Boren stated that the exemption process related to NOGRR245 would be vetted through a PUCT rulemaking and a subsequent Board Priority NOGRR would be filed to comply. Barksdale English reviewed the rulemaking process and timeline for consideration of the issues in anticipation of PUCT action in early Spring 2025.

Board Remand of Nodal Protocol Revision Request (NPRR) 1190, High Dispatch Limit Override Provision for Increased Load Serving Entity Costs (see Key Documents)

Ms. Smith summarized the Board action to remand NPRR1190 to TAC.

*ERCOT Presentation*

Austin Rosel presented the background and procedural history of NPRR649, Lost Opportunity Payments for HDL Manual Overrides, highlighted current protocol language that requires the Qualified Scheduling Entity (QSE) to have either a Day-Ahead Market (DAM) obligation or a bilateral contract to prove the financial loss, summarized the solutions proposed in NRR1190, and reviewed the history of NPRR1190 in the stakeholder process. Doug Fohn reviewed the issues and scenarios leading to inconsistent results that NPRR1190 would address.

*Wholesale Market Subcommittee (WMS)/Wholesale Market Working Group (WMWG) Discussion Summary*

Eric Blakey summarized stakeholder review of NPRR1190 at WMS and WMWG meetings and WMS action on NPRR1190 at the May 1, 2024 WMS meeting. Mr. Blakey presented the timeline for additional action on NPRR1190 as it proceeded through the stakeholder process.

*Consumer Presentation*

Eric Schubert reviewed the 10/2/24 Joint Consumer comments to NPRR1190 and potential solutions to avoid subsidizing participants who choose not to hedge their risks.

Mr. English reviewed PUCT Staff concerns with concepts in NPRR1190, including the breadth of scenarios for entities to claim make whole payments. Some Market Participants reiterated their concerns for a solution to enhance fairness with regard to the eligibility to recover costs associated with a specific type of financial loss. Participants discussed the anticipated infrequency of using this solution due to the rare instance of High Dispatch Limit (HDL) overrides, the more significant issue of Locational Marginal Prices (LMPs) and Security-Constrained Economic Dispatch (SCED), ability to hedge and bilateral market solutions, market efficiencies, and unintended consequences. Some participants requested additional time to review the issues and potential solutions.

**Eric Goff moved to table NPRR1190. Mr. Schubert seconded the motion. The motion carried with one opposing vote from the Cooperative (LCRA) Market Segment.** *(Please see ballot posted with Key Documents.)*

Ms. Smith encouraged interested parties to submit comments in advance of the November 20, 2024 TAC meeting.

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

Ms. 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; noting that the IMM had not provided opinions on Revision Requests in advance of the TAC meeting. Jeff McDonald noted the Independent Market Monitor (IMM) did not have opinions on the Revision Requests other than what had been expressed at various stakeholder meetings. Participants discussed a formal process for IMM opinions to TAC.

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

Diana Coleman reviewed PRS activities and presented Revision Requests for TAC consideration. Ms. Coleman noted that NPRR1247, Incorporation of Congestion Cost Savings Test in Economic Evaluation of Transmission Projects, was discussed at the October 29, 2024 Planning Working Group (PLWG) meeting and is anticipated to be considered at the November 7, 2024 ROS meeting, November 14, 2024 PRS Meeting with request for Urgent status, November 20, 2024 TAC meeting, and December 3, 2024 Board meeting.

*NPRR1180, Inclusion of Forecasted Load in Planning Analyses*

Troy Anderson presented the 10/28/24 Revised Impact Analysis for NPRR1180. Michelle Richmond reviewed the 10/29/24 TCPA comments to NPRR1180. Some participants raised concerns with the lack of transparency and standardization for incorporating anticipated load into planning studies and discussed paths forward for potential future refinements to address these concerns. Other participants expressed support for other concepts to be considered in a subsequent NPRR, noting the extensive time for NPRR1180 to proceed through the stakeholder process.

**Mark Dreyfus moved to recommend approval of NPRR1180 as recommended by PRS in the 10/17/24 PRS Report; and 10/28/24 Revised Impact Analysis. Mr. Goff seconded the motion.**

**Bob Helton moved to table NPRR1180. Resmi Surendran seconded the motion.** Participants noted the Revision Request timeline for Planning Guide Revision Request (PGRR) 107, Related to NPRR1180, Inclusion of Forecasted Load in Planning Analyses, and discussed tabling NPRR1180 awaiting PGRR107 consideration at the November 20, 2024 TAC meeting. Participants discussed voting efficiencies in considering NPRR1180. Mr. Helton withdrew his motion. Ms. Surendran removed her second. Mr. Dreyfus withdrew his motion. Mr. Goff removed his second. Ms. Smith noted that the motion to table NPRR1180 could be considered in the [Combined Ballot](#Combined_Ballot).

*NPRR1245, Additional Clarifying Revisions to Real-Time Co-Optimization*

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

*NPRR1248, Correction to NPRR1197, Optional Exclusion of Load from Netting at EPS Metering Facilities which Include Resources*

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

*NPRR1249, Publication of Shift Factors for All Active Transmission Constraints in the RTM*

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

Revision Requests Tabled at TAC (See Key Documents)

*Other Binding Document Revision Request (OBDRR) 052, Related to NPRR1246, Energy Storage Resource Terminology Alignment for the Single-Model*

*NOGR264, Related to NPRR1235, Dispatchable Reliability Reserve Service as a Stand-Alone Ancillary Service*

TAC took no action on these items.

OBDRR053, Alignment with NPRR1131, Controllable Load Resource Participation in Non-Spin, and Minor Clean-Ups (see Key Documents)

Ms. Boren provided an overview of OBDRR053. Ms. Smith noted this item could be considered in the [Combined Ballot](#Combined_Ballot).

Retail Market Subcommittee (RMS) Report

Debbie McKeever reviewed RMS activities, including Texas SET V5.0 flight testing.

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

Katie Rich reviewed ROS activities, including NPRR1247 discussion at ROS and PLWG meetings, and presented Revision Requests for TAC consideration.

*Planning Guide Revision Request (PGRR116), Related to NPRR1240, Access to Transmission Planning Information*

*NOGRR266, Related to NPRR1239, Access to Market Information*

*NOGRR267, Related to NPRR1240, Access to Transmission Planning Information*

Participants requested tabling PGRR116, NOGRR266, and NOGRR267 awaiting PRS consideration of NPRRs 1239 and 1240. Ms. Smith noted these items could be considered in the [Combined Ballot](#Combined_Ballot).

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

Mr. Blakey reviewed WMS activities and noted that WMS would be reviewing the aging items and efficiencies on the WMS Open Action Items list at the November 6, 2024 WMS meeting.

CFSG Report (See Key Documents)

*Approval of CFSG Membership*

Brenden Sager reviewed CFSG activities and presented the following designated CFSG member for TAC approval:

* Brian Kozlowski, Wolframium Power LP, Independent Power Marketer (IPM)

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

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

*Endorse RTC+B Market Trials Plan*

Matt Mereness reviewed RTCBTF activities; highlighted the RTCBTF issues list, provided an update on RTCBTF policy parameters, and noted that ERCOT, in collaboration with the RTCBTF, will develop a single NPRR to capture “TAC-approved items” and values being vetted into the protocols. Mr. Mereness presented the RTC+B Market Trials plan, summarized discussion on the concepts at previous RTCBTF meetings, and requested TAC endorsement of the plan. Ms. Smith noted this item could be considered in the [Combined Ballot](#Combined_Ballot).

Update of Stakeholder Process and Communication Discussion

Ms. Smith provided an update on recent improvements to the stakeholder process and communication of issues to the Board, including PUCT Staff participating at stakeholder meetings, potential ERCOT comments filed to enhance the Board’s understanding of the positions and analysis on contentious Revision Requests, and including Subcommittee activities in the TAC Report to the Board. Ms. Smith noted that Board Chairman Bill Flores anticipated attending the November 20, 2024 TAC meeting.

ERCOT Reports (see Key Documents)

*AEPSC Brownsville Area Improvements Transmission Project*

Prabhu Gnanam presented the ERCOT independent review of the AEPSC Brownsville Area Improvements Tier 1 Regional Planning Group (RPG) Project and recommendation of Option 2A to address the reliability needs in the Brownsville area in Cameron County. Ms. Smith noted this item could be considered in the [Combined Ballot](#Combined_Ballot).

*Reduce per Congestion Revenue Right (CRR) Account Holder Transaction Limit*

Mr. Mereness reminded participants of the CRR performance issues discussed at the August 28 and September 19, 2024 TAC meetings, noted potential solutions discussed at subsequent Congestion Management Working Group (CMWG) and WMS meetings, reviewed the problem statement and analysis, and presented the ERCOT bridge solution to immediately mitigate frequency of oversubscription and triggering the Transaction Adjustment Period. In response to participant questions and concerns, Mr. Mereness stated that ERCOT will continue to collaborate with CMWG to develop long term solutions to the issues. Ms. Smith noted this item could be considered in the [Combined Ballot](#Combined_Ballot).

*ERCOT’s Framework for Evaluating Market Design*

Keith Collins summarized discussion of ERCOT’s framework for evaluating market design as discussed at the August 20, 2024 Board meeting and October 7, 2024 WMS meeting, noted the feedback received, reviewed the framework attributes, and requested participants provide formal feedback on the specific questions presented. Ms. Boren requested participants forward their comments to the Revision Request mailbox at RevisionRequest@ercot.com. Ms. Smith encouraged interested parties to provide formal comments for discussion at the January 22, 2025 TAC meeting.

*Large Load Interconnection Status Update*

Chris Cosway presented the Large Load interconnection report and responded to participant questions and concerns.

Other Business (see Key Documents)

*2025 ERCOT Membership / Segment Representative Elections*

Suzy Clifton reminded Market Participants that the Membership Record date is Friday, November 1, 2024; noted that, on September 20, 2024, Membership Services sent Market Notice M-A092024-01, General, ERCOT Membership Application for 2025 Membership Year Now Available Online, and on October 11, 2024, reminder Market Notice M-A092024-02; and stated that 2025 Segment Representative Elections for TAC and Subcommittees would begin Tuesday, November 5, 2024.

*TAC Procedure Improvements*

Ms. Smith reminded participants of the challenges with numerous authors as NOGRR245 advanced through the stakeholder process, noted that Protocol Section 21, Revision Request Process, requires identification of authorship of all comments, and requested TAC feedback on potential changes to allow flexibility to have a consolidated authorship version of a Revision Request. Participants discussed the issues and Ms. Smith offered to work with ERCOT Staff to develop the Revision Request for formal stakeholder consideration.

Combined Ballot

**Mr. Helton moved to approve the Combined Ballot as follows:**

* **To approve the September 19, 2024 TAC meeting minutes as presented**
* **To table NPRR1180**
* **To recommend approval of NPRR1245 as recommended by PRS in the 10/17/24 PRS Report**
* **To recommend approval of NPRR1248 as recommended by PRS in the 10/17/24 PRS Report**
* **To recommend approval of NPRR1249 as recommended by PRS in the 10/17/24 PRS Report**
* **To recommend approval of OBDRR053 as submitted and the 10/17/24 Impact Analysis**
* **To table PGRR116**
* **To table NOGRR266**
* **To table NOGRR267**
* **To approve the CFSG membership addition as presented (Brian Kozlowski, Wolframium Power LP, IPM)**
* **To endorse the RTC+B Market Trials Plan as presented**
* **To endorse AEPSC Brownsville Area Improvements Transmission Project – Option 2A**
* **To approve a CRR Account Holder transaction limit for all Long-Term Auction Sequences of 3,000**

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

Ms. Smith adjourned the October 30, 2024 TAC meeting at 2:40 p.m.

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

<https://www.ercot.com/calendar/10302024-TAC-Meeting-_-Webex> [↑](#footnote-ref-2)