**DRAFT**

**Minutes of the Technical Advisory Committee (TAC) Meeting**

**ERCOT Austin – 8000 Metropolis Drive (Building E), Suite 100 – Austin, Texas 78744**

**Thursday, February 27, 2025 – 9:30 a.m.**

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| *TAC Representatives:* |  |  |
| Barnes, Bill | Reliant Energy Retail Services (Reliant) |  |
| Bonskowski, Ned | Vistra Operations Company (Vistra) |  |
| Campo, Curtis | Garland Power and Light (GP&L) | Alt. Rep for Russell Franklin Via Teleconference |
| Carpenter, Jeremy | Tenaska Power Services (Tenaska) |  |
| Cochran, Seth | Vitol, Inc. |  |
| Dreyfus, Mark | City of Eastland |  |
| Fehrenbach, Nick | City of Dallas |  |
| Gaytan, Jose | Denton Municipal Electric (DME) |  |
| Goff, Eric | TAC Residential Consumer |  |
| Haley, Ian | Morgan Stanley |  |
| Harpole, Jay | APG&E | Via Teleconference |
| Helton, Bob | ENGIE North America (ENGIE) | Via Teleconference |
| Hendrix, Chris | Demand Control 2 | Via Teleconference |
| Henson, Martha | Oncor Electric Delivery (Oncor) |  |
| Holt, Blake | Lower Colorado River Authority (LCRA) |  |
| John, Ebby | CenterPoint Energy (CNP) | Alt Rep. for David Mercado |
| Kee, David | CPS Energy |  |
| Kent, Garret | CMC Steel Texas (CMC Steel) |  |
| Loving, Alicia | Austin Energy |  |
| Minnix, Kyle | Brazos Electric Cooperative (Brazos) |  |
| Nix, Keith | Texas-New Mexico Power Company (TNMP) | Via Teleconference |
| Packard, John | South Texas Electric Cooperative (STEC) | Via Teleconference |
| Pokharel, Nabaraj | Office of Public Utility Counsel (OPUC) |  |
| Sams, Bryan | Calpine Corporation (Calpine) |  |
| Schmitt, Jennifer | Rhythm Ops |  |
| Schubert, Eric | Lyondell Chemical |  |
| Smith, Caitlin | Jupiter Power |  |
| Thomas, Shane | Shell Energy North America (SENA) | Alt. Rep. for Resmi Surendran Via Teleconference |
| Withrow, David | AEP Service Corporation (AEPSC) | Alt. Rep. for Richard Ross |
| Wise, Mike | Golden Spread Electric Cooperative (GSEC) | Via Teleconference |
|  |  |  |

*Guests:*

|  |  |  |
| --- | --- | --- |
| Ainspan, Malcolm | NRG | Via Teleconference |
| Aldridge, Ryan | AB Power Advisors | Via Teleconference |
| Allen, Marty | Oncor | Via Teleconference |
| Anderson, Connor | AB Power Advisors | Via Teleconference |
| Anderson, Kevin | Customized Energy Solutions (CES) | Via Teleconference |
| Appian, Sourabh | Appian Way Energy | Via Teleconference |
| Ashley, Kristy | CES | Via Teleconference |
| Batra-Shrader, Monica | Enchanted Rock | Via Teleconference |
| Benson, Mariah | Texas Public Power Association (TPPA) | Via Teleconference |
| Bernier, Benjamin | Mercuria | Via Teleconference |
| Bertin, Suzanne |  | Via Teleconference |
| Bevill, Rob | TNMP |  |
| Blakey, Eric | Pedernales Electric Cooperative (PEC) |  |
| Block, Laurie | L Block Consulting, LLC | Via Teleconference |
| Bordegaray, Charlotte |  | Via Teleconference |
| Brannon-Links, Jake | CSD Energy | Via Teleconference |
| Brown, Chris | PUCT | Via Teleconference |
| Carswell, Cory |  | Via Teleconference |
| Chan, Vanessa | Enel | Via Teleconference |
| Coleman, Diana | CPS Energy | Via Teleconference |
| Cook, Kristin | Southern Power | Via Teleconference |
| Crist, Kelly | CNP | Via Teleconference |
| Dharme, Neeraja | EDFT | Via Teleconference |
| Dillavou, Hayden |  | Via Teleconference |
| Dowling, Chase | Base Power Company |  |
| Downey, Adrienne | NEE | Via Teleconference |
| Dugkhuntod, Theerakul |  | Via Teleconference |
| Dwyer, Davida | PUCT | Via Teleconference |
| Gauldin, Julie | PUCT | Via Teleconference |
| George, Ian |  | Via Teleconference |
| Greer, Clayton | Cholla | Via Teleconference |
| Hemmeline, Charlie | American Clean Power Association |  |
| Hopley, George | ENGIE | Via Teleconference |
| Jamar, Ben | ECI | Via Teleconference |
| Jewell, Michael | Jewell and Associates | Via Teleconference |
| Jha, Monica | Vistra | Via Teleconference |
| Jones, Liz | Oncor | Via Teleconference |
| Jones, Monica | CNP | Via Teleconference |
| Joyce, Kevin | Tesla | Via Teleconference |
| Kasali, Tosin | Hecate Grid | Via Teleconference |
| Keller, Jenna | PUCT | Via Teleconference |
| Khayat, Maribel | CNP | Via Teleconference |
| Kirby, Brandon | GEUS | Via Teleconference |
| Kleckner, Tom | RTO Insider |  |
| Kremling, Barry | GVEC | Via Teleconference |
| Khayat, Maribel | CNP | Via Teleconference |
| Lee, Jim | CNP |  |
| Loew, Beverly | Eric Winters Goff, LLC | Via Teleconference |
| Lotter, Eric | GridMonitor | Via Teleconference |
| Macaraeg, Tad | Stem | Via Teleconference |
| Macias, Jesse | AEP Texas | Via Teleconference |
| Martin, Loretto | Reliant | Via Teleconference |
| Matos, Chris | Google |  |
| McClellan, Suzi | Good Company Associates | Via Teleconference |
| McDonald, Jeff | Potomac Economics |  |
| McKeever, Debbie | Oncor |  |
| McWyman, Constance |  | Via Teleconference |
| Morris, Sandy | WETT | Via Teleconference |
| Neel, Evan | Lancium | Via Teleconference |
| Nguyen, Andy | Constellation Energy |  |
| Nicholson, Tyler | PUCT | Via Teleconference |
| Price, Mark | DC Energy | Via Teleconference |
| Pueblos, Jameel | Occidental Chemical | Via Teleconference |
| Ramaswamy, Ramya | PUCT | Via Teleconference |
| Rasmussen, Erin | AEP | Via Teleconference |
| Reedy, Steve | CIM View Consulting |  |
| Reimers, Andrew | Potomac Economics |  |
| Rich, Katie | Vistra |  |
| Richmond, Michele | Texas Competitive Power Advocates (TCPA) | Via Teleconference |
| Ritch, John | Trafigura | Via Teleconference |
| Rochelle, Jennifer | CES | Via Teleconference |
| Safko, Trevor | LCRA |  |
| Schavrien, Nick | LS Power | Via Teleconference |
| Scott, Kathy | CNP |  |
| Snyder, Bill | AEP |  |
| Stephenson, Zach | Texas Electric Cooperatives (TEC) | Via Teleconference |
| True, Roy | ACES | Via Teleconference |
| Turner, Lucas | STEC | Via Teleconference |
| Uy, Manny | Hunt Energy | Via Teleconference |
| Van Ness, Zach | Matrix Renewables | Via Teleconference |
| Van Winkle, Kim | PUCT | Via Teleconference |
| Varada, Pavan |  | Via Teleconference |
| Velasquez, Ivan | Oncor | Via Teleconference |
| Walker, Floyd | PUCT |  |
| Wang, Shawn | NextEra Energy | Via Teleconference |
| Welch, Matt | GSEC | Via Teleconference |
| Wilson, Joe Dan | GSEC | Via Teleconference |
| Wittmeyer, Bob | Longhorn Power |  |
| Zang, Hailing | TC Energy | Via Teleconference |
|  |  |  |
| *ERCOT Staff:* |  |  |
| Albracht, Brittney |  |  |
| Anderson, Troy |  |  |
| Benavides, Marcos |  |  |
| Billo, Jeff |  |  |
| Boren, Ann |  |  |
| Castillo, Leo |  | Via Teleconference |
| Cheng, Yong |  | Via Teleconference |
| Clifton, Suzy |  |  |
| Collins, Keith |  |  |
| Cosway, Chris |  | Via Teleconference |
| Devadhas Mohanadhas, Thinesh |  | Via Teleconference |
| Drake, Gordon |  | Via Teleconference |
| El-Madhoun, Mohamed |  | Via Teleconference |
| Fabricant, Samuel |  | Via Teleconference |
| Fernandes, Jennifer |  | Via Teleconference |
| Gallo, Andrew |  | Via Teleconference |
| Garcia, Freddy |  | Via Teleconference |
| Golen, Robert |  | Via Teleconference |
| Gonzales, Nathan |  |  |
| González, Ino |  |  |
| Gross, Katherine |  |  |
| Hailu, Ted |  | Via Teleconference |
| Herrera, Shane |  | Via Teleconference |
| Hinojosa, Luis |  | Via Teleconference |
| Jayachandran, Marilyn |  | Via Teleconference |
| Kansal, Prashant |  | Via Teleconference |
| King, Ryan |  | Via Teleconference |
| Kooiman, Elizabeth |  | Via Teleconference |
| Magarinos, Marcelo |  | Via Teleconference |
| Mago, Nitika |  |  |
| Maggio, Dave |  | Via Teleconference |
| Mahoud, Thair |  | Via Teleconference |
| Matlock, Robert |  | Via Teleconference |
| McGuire, Josh |  | Via Teleconference |
| Mereness, Matt |  |  |
| Moreno, Alfredo |  | Via Teleconference |
| Nguyen, Betty |  | Via Teleconference |
| Phillips, Cory |  |  |
| Rosel, Austin |  |  |
| Sanchez, Daniel |  | Via Teleconference |
| Schmall, John |  | Via Teleconference |
| Shanks, Magie |  | Via Teleconference |
| Sills, Alex |  | Via Teleconference |
| Snitman, Julie |  | Via Teleconference |
| Springer, Agee |  | Via Teleconference |
| Taurozzi, Tina |  | Via Teleconference |
| Thompson, Chad |  | Via Teleconference |
| Troublefield, Jordan |  |  |
| Zapanta, Zaldy |  | Via Teleconference |
| Zapanta, Rizaldy |  | Via Teleconference |
| Wasik-Gutierrez, Erin  Zerwas, Rebecca |  |  |
| Woodfin, Dan |  | Via Teleconference |

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

Caitlin Smith called the February 27, 2025 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)

*January 22, 2025*

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

Meeting Updates

*February Board Meeting*

Ms. Smith reviewed the disposition of item considered at the February 4, 2025 ERCOT Board of Directors (ERCOT Board) meeting.

*February Public Utility Commission of Texas (PUCT) Meeting*

*Aggregate Distributed Energy Resource (ADER) Pilot Program*

Dave Maggio summarized the February 6, 2025 PUCT Staff memo and February 13, 2025 PUCT Open meeting discussion and recommendation on PUCT Project No. 53911, Aggregate Distributed Energy Resource ERCOT Pilot Project. Mr. Maggio highlighted work completed by the ADER Task Force in previous phases; presented key issues in Phase 3 changes for consideration in the Aggregate Distributed Energy Resource Pilot Project Governing Document; reviewed the timeline for consideration by the ERCOT Board at its June 24, 2025 meeting; and requested stakeholder engagement in the appropriate forum. Stakeholders discussed efficiencies in the stakeholder process and expressed support for the Wholesale Market Subcommittee (WMS) to consider the issues. Ms. Smith referred the issues to WMS.

2025 TAC Goals/Strategic Objectives (Vote) (See Key Documents)

Ms. Smith reminded participants of the January 22, 2025 TAC discussion on an alternate approach to TAC goals to include TAC Strategic Objectives aligned with the ERCOT Board Strategic Objectives, along with utilization of the Action Items list for specific items for TAC. Ms. Henson summarized TAC and Subcommittee leadership discussions, presented draft TAC Strategic Objectives, and requested TAC consideration. Participants offered clarifications to the draft TAC Strategic Objectives. Ms. Smith noted this item could be considered in the [Combined Ballot](#Combined_Ballot).

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, CFSG Review, budgetary impacts, and reasons for revisions for Revision Requests to be considered by TAC. Jeff McDonald reviewed the Independent Market Monitor (IMM) Opinions for Revision Requests to be considered by TAC.

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

Andy Nguyen reviewed PRS activities and presented a revision request for TAC consideration.

*Nodal Protocol Revision Request (NPRR) 1241, Firm Fuel Supply Service (FFSS) Availability and Hourly Standby Fee*

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

*Project Update*

Troy Anderson highlighted the ERCOT Project update discussion at the February 12, 2025 PRS meeting and reviewed the major projects and prioritization related to those projects. Mr. Anderson presented the 2022-2024 Impact Analysis Accuracy Results report, identified significant variances in the Impact Analysis cost or duration range, and responded to participant questions and concerns.

Revision Requests Tabled at TAC (See Key Documents)

*NPRR1190, High Dispatch Limit Override Provision for Increased Load Serving Entity Costs*

Ms. Smith reminded participants of the ERCOT Board action to remand NPRR1190 to TAC. Bill Barnes reviewed the 1/20/25 Reliant comments to NPRR1190. Blake Holt summarized NPRR1190 discussion at the January 30, 2025 Wholesale Market Working Group (WMWG) and February 2, 2025 WMS meeting, stated consensus on NPRR1190 was not reached, and noted that alternatives to the solution proposed in the 1/20/25 Reliant comments were not put forward. Austin Rosel reviewed the 2/26/25 ERCOT comments. Eric Goff reviewed the 2/26/25 Residential Consumer comments to NPRR1190. Some participants restated their objection to NPRR1190 in principle.

**Mr. Barnes moved to recommend approval of NPRR1190 as recommended by TAC in the 6/24/24 TAC Report as amended by the 2/26/25 ERCOT comments. Ned Bonskowski seconded the motion. The motion carried with four objections from the Consumer (Residential Consumer, OPUC, CMC Steel, Lyondell Chemical) Market Segment.** *(Please see ballot posted with Key Documents.)*

*NOGRR264, Related to NPRR1235, Dispatchable Reliability Reserve Service as a Stand-Alone Ancillary Service*

TAC took no action on this item. Ms. Smith encouraged interested participants to attend the February 28, 2025 DRRS Workshop.

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

Debbie McKeever reviewed RMS activities and noted that the May RMS meeting has been rescheduled to May 13, 2025.

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

Katie Rich reviewed ROS activities.

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

Mr. Holt reviewed WMS activities, and presented a Revision Request for TAC consideration.

*Verifiable Cost Manual Revision Request (VCMRR) 042, SO2 and NOx Emission Index Prices Used in Verifiable Cost Calculations*

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

Credit Finance Sub Group (CFSG) Report (See Key Documents)

Loretto Martin reviewed CFSG activities.

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

*NPRR1268, RTC – Modification of Ancillary Service Demand Curves*

*NPRR1269, RTC+B Three Parameters Policy Issues*

*NPRR1270, Additional Revisions Required for Implementation of RTC*

Matt Mereness reviewed RTCBTF activities, including the March/April 2025 timeline for the Qualified Scheduling Entities (QSEs)/Vendor Submission Sandbox and Telemetry Points to be added to network model and noted that RTCBTF and ERCOT Staff will continue to focus on handbooks and training development for upcoming Real-Time Co-optimization plus Batteries (RTC+B) project trials. Andrew Reimers provided an overview of NPRR1268 and the 2/5/25 IMM comments. Dave Maggio reviewed the 2/19/25 ERCOT comments to NPRR1268. Michele Richmond reviewed the 2/25/25 TCPA comments to NPRR1268. Mr. Maggio provided an overview of NPRR1269. Mr. Reimers reviewed the 2/6/25 IMM comments to NPRR1269. Mr. Mereness provided an overview of NPRR1270. Mr. Mereness presented next steps and encouraged participants to attend the March 5, 2025 RTCBTF meeting to further discuss the three Revision Requests. Ms. Smith reviewed the Revision Request timeline for NPRR1268, NPRR1269 and NPRR1270 to be considered at the March 23, 2025 TAC meeting.

ERCOT Reports (see Key Documents)

*Large Load Interconnection Status Update*

Julie Snitman presented the Large Load interconnection report update.

*Market Design Framework Discussion*

Keith Collins stated that ERCOT anticipates facilitating a workshop to follow a future TAC meeting to further clarify the intent and purpose of the market design framework and refine the specific attributes.

*ERCOT Board/Stakeholder Engagement Update*

Rebecca Zerwas highlighted stakeholder opportunities for expanded interaction with the ERCOT Board on policy issues and high impact projects or Revision Requests, presented the revised schedule and topics for the June and September ERCOT Board meetings, and responded to participant questions and concerns. Ms. Smith requested potential segments to offer insight and perspective for these meetings and encouraged interested participants to provide feedback to Ms. Zerwas, Mr. Collins and TAC leadership.

*Segment Membership Workshop Update*

Katherine Gross reminded participants of the Membership Segment composition discussion at previous 2024 and 2025 TAC meetings, highlighted informal proposals discussed at the February 14, 2025 workshop on Segment Membership under the ERCOT Bylaws, and requested interested participants provide their redlined proposals of the ERCOT Bylaws to [membership@ercot.com](mailto:membership@ercot.com) by March 14, 2025.

*Operational Experience from Nov 10, 2024 and Introduction to NPRR1273, Appropriate Accounting for ESRs in PRC Calculation*

Nitika Mago presented analysis that ERCOT conducted for November 10, 2024, that led to the need for NPRR1273, reviewed the request for Urgent status for implementation prior to summer 2025, and stated that NPRR1273 will be considered at the March 12, 2025 PRS meeting.

*Nodal Operations Guide Revision Request (NOGRR) 245, Inverter-Based Resource (IBR) Ride- Through Requirements, Information Collection*

Andrew Gallo highlighted discussion at the February 10, 2025 NOGRR245 Workshop I, including review of the revised ride-through requirements in the Nodal Operating Guide, initial data collection process for submittal by April 1, 2025, and the DocuSign template. Mr. Gallo noted that ERCOT forwarded Market Notice, M-A010825-03 on February 19, 2025, stated that all documents can be located on the Resource Integration landing page on the ERCOT website at <https://www.ercot.com/services/rq/integration>, and requested entities that have trouble submitting the required information send an email to [NOGRR245@ercot.com](mailto:NOGRR245@ercot.com). Mr. Gallo encouraged participants to attend the March 10, 2025 NOGRR245 Workshop II.

Other Business

*Review of Action Items List*

Participants reviewed the Action Items list. Ms. Henson provided details on the TAC assignment to WMS as requested from Mr. Nguyen, (Constellation Energy) at the January 22, 2025 TAC meeting, to review the Reliability Unit Commitment (RUC) Opt-out timeline provisions to determine whether modifications are possible and review impacts to claw back during self-committed hours. Mr. Nguyen also requested an additional TAC assignment to WMS to address the ability to recognize fuel, transportation, and contractual costs and their impacts on mitigation and verifiable costs. Ms. Henson requested that WMS review the issues.

Combined Ballot

**David Kee moved to approve the Combined Ballot as follows:**

* **To approve the January 22, 2025 TAC meeting minutes as presented**
* **To approve the 2025 Strategic Objectives as revised by TAC**
* **To recommend approval of NPRR1241 as recommended by PRS in the 2/12/25 PRS Report**
* **To recommend approval of VCMRR042 as recommended by WMS in the 2/5/25 WMS Report**

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

Ms. Smith adjourned the February 27, 2025 TAC meeting at 3:29 p.m.

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

   <https://www.ercot.com/calendar/02272025-TAC-Meeting> [↑](#footnote-ref-2)