**APPROVED**

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

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

**Monday, December 4, 2023 – 9:30 a.m.**

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| *TAC Representatives:* | |  | | |  | | |
| Barnes, Bill | | Reliant Energy Retail Services (Reliant) | | |  | | |
| Bonskowski, Ned | | Luminant Generation (Luminant) | | |  | | |
| Carpenter, Jeremy | | Tenaska Power Services (Tenaska) | | |  | | |
| Cochran, Seth | | DC Energy | | |  | | |
| Dreyfus, Mark | | City of Eastland | | |  | | |
| Fehrenbach, Nick | | City of Dallas | | |  | | |
| Franklin, Russell | | Garland Power and Light (GP&L) | | | Via Teleconference | | |
| Gaytan, Jose | | Denton Municipal Electric (DME) | | | Via Teleconference | | |
| Goff, Eric | | Residential Consumer | | |  | | |
| Hanson, Kevin | | National Grid Renewables (NG Renewables) | | |  | | |
| Harpole, Jay | | AP Gas & Electric (APG&E) | | | Via Teleconference | | |
| Helton, Bob | | ENGIE North America (ENGIE) | | |  | | |
| Hendrix, Chris | | Demand Control 2 | | |  | | |
| Jolly, Emily | | Lower Colorado River Authority (LCRA) | | |  | | |
| Kee, David | | CPS Energy | | |  | | |
| Kent, Garret | | CMC Steel Texas (CMC Steel) | | |  | | |
| Lee, Jim | | CenterPoint Energy (CNP) | | | Alt. Rep. for David Mercado | | |
| Loving, Alicia | | Austin Energy | | |  | | |
| Martin, Collin | | Oncor Electric Delivery (Oncor) | | |  | | |
| Mercado, David | | CenterPoint Energy (CNP) | | |  | | |
| Nix, Keith | | Texas-New Mexico Power Company (TNMP) | | | Via Teleconference | | |
| Pokharel, Nabaraj | | Office of Public Utility Counsel (OPUC) | | |  | | |
| Powell, Christian | | Pedernales Electric Cooperative (PEC) | | |  | | |
| Rich, Katie | | Golden Spread Electric Cooperative (GSEC) | | | Alt. Rep. for Mike Wise | | |
| Ross, Richard | | AEP Service Corporation (AEPSC) | | |  | | |
| Sams, Bryan | | Calpine Corporation (Calpine) | | |  | | |
| Schmitt, Jennifer | | Rhythm Ops | | | Via Teleconference | | |
| Smith, Caitlin | | Jupiter Power | | |  | | |
| Surendran, Resmi | | Shell Energy North America (SENA) | | |  | | |
| Turner, Lucas | | South Texas Electric Cooperative (STEC) | | | Alt. Rep. for Clif Lange Via Teleconference | | |
| Wise, Mike | | GSEC | | | Via Teleconference | | |
| Withrow, David | | AEPSC | | | Alt. Rep. for Richard Ross | | |
|  | | | |  | |  |
|  | | |  | | |  |

The following proxy was assigned:

* Bill Smith to Mike Reid
* Eric Goff to Nabaraj Pokharel for NOGRR245; Combined Ballot

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| *Guests:* |  | |  | |
| Abbott, Kristin | Austin Energy | | Via Teleconference | |
| Adams-Heard, Rachel | Bloomberg News | | Via Teleconference | |
| Ainspan, Malcolm | NRG | | Via Teleconference | |
| Aldridge, Ryan | AB Power Advisors | | Via Teleconference | |
| Allen, Thresa | Avangrid Renewables | | Via Teleconference | |
| Anderson, Connor | AB Power Advisors | | Via Teleconference | |
| Anderson, Kevin | CES | | Via Teleconference | |
| Anderson, Lyrae | Akuo Energy | | Via Teleconference | |
| Ansede, Antonio | WETT | | Via Teleconference | |
| Ashley, Kristy | CES | | Via Teleconference | |
| Azari, David | Invenergy | | Via Teleconference | |
| Bansal, Apoorva | NextEra Energy | | Via Teleconference | |
| Barati, Camron | Potomac Economics | | Via Teleconference | |
| Barr, Bill | LCRA | | Via Teleconference | |
| Batra-Shrader, Monica | Enchanted Rock | | Via Teleconference | |
| Bernier, Benjamin | Mercuria | | Via Teleconference | |
| Bertin, Suzanne |  | | Via Teleconference | |
| Bezwada, Neelima | Potomac Economics | | Via Teleconference | |
| Bivens, Carrie |  | | Via Teleconference | |
| Blackburn, Don | Hunt Energy Network | | Via Teleconference | |
| Blakey, Eric | PEC | |  | |
| Block, Laurie | L Block Consulting, LLC | | Via Teleconference | |
| Brown, Chris | PUCT | | Via Teleconference | |
| Bruce, Mark | Cratylus Advisors | | Via Teleconference | |
| Bunyan, Mike | ENGIE | | Via Teleconference | |
| Callender, Hudson | CPS Energy | | Via Teleconference | |
| Cannon, Thure | Texas Pipeline Association | | Via Teleconference | |
| Carter, Brock | Austin Energy | | Via Teleconference | |
| Carvalho, Raphael | Omega | | Via Teleconference | |
| Cheng, Yong | LCRA | | Via Teleconference | |
| Chwialkowski, Todd | EDF Renewable Energy | | Via Teleconference | |
| Childress, John | kWantix | | Via Teleconference | |
| Clark, Jack | NextEra Energy | | Via Teleconference | |
| Clifford, Ryan |  | | Via Teleconference | |
| Coleman, Diana | CPS Energy | |  | |
| Collard, Brad | PEC | | Via Teleconference | |
| Conant, Portia | Yes Energy | | Via Teleconference | |
| Cook, Kristin | Southern Power | | Via Teleconference | |
| Cooksey, Matthew | OPUC | | Via Teleconference | |
| Cortez, Sarai | Trailstone Group | | Via Teleconference | |
| Cox, Jason | EQ Energy Advisors | | Via Teleconference | |
| Cripe, Ramsey | Schneider Engineering | | Via Teleconference | |
| Daigneault, Ralph | Potomac Economics | | Via Teleconference | |
| DeLeon, Seth | DME Power | | Via Teleconference | |
| Dernulc, Lawrence | Invenergy | | Via Teleconference | |
| Donohoo, Ken | APA; OwlERC | |  | |
| Duensing, Allison | Sarac Energy | | Via Teleconference | |
| Farris, W. | Solea Energy | | Via Teleconference | |
| Fleming, Jacki | Talen Energy | | Via Teleconference | |
| Frazier, Amanda | Treaty Oak Clean Energy | | Via Teleconference | |
| Garza, Beth |  | | Via Teleconference | |
| Gelston, Andrew |  | | Via Teleconference | |
| George, Sini | Got Rhythm | | Via Teleconference | |
| Glotfelty, Jim | Public Utility Commission of Texas (PUCT) Commissioner | | Via Teleconference | |
| Goff, Eric | NextEra Energy for NOGRR245 Only | |  | |
| Gomez, Juan | Uptime Solar | | Via Teleconference | |
| Griffith, Scott |  | | Via Teleconference | |
| Hale, Josh | Southern Power | | Via Teleconference | |
| Haley, Ian | Morgan Stanley | |  | |
| Hall, Matthew | Invenergy | | Via Teleconference | |
| Hamer, Neal | Invenergy | | Via Teleconference | |
| Hankins, Laura | LCRA | | Via Teleconference | |
| Headrick, Bridget | CES | |  | |
| Henson, Martha | Oncor | |  | |
| Hernandez-Vargas, Evelyn | Nordex | | Via Teleconference | |
| Hjaltman, Courtney | OPUC | | Via Teleconference | |
| Hohenshilt, Jennifer | Talen Energy | | Via Teleconference | |
| Holt, Blake | LCRA | |  | |
| Hubbard, John Russ | TIEC | |  | |
| Ingraham, Deborah | Acciona | | Via Teleconference | |
| Lance, Jessie | PUCT | | Via Teleconference | |
| Luckey, Nicole | Invenergy | | Via Teleconference | |
| Jewell, Michael | Jewell and Associates | | Via Teleconference | |
| Jones, Broadus |  | | Via Teleconference | |
| Jones, Dan |  | | Via Teleconference | |
| Jones, Randy | Mountaineer Market Advisors | | Via Teleconference | |
| Kansal, Prashant | Tesla | | Via Teleconference | |
| Keefer, Andrew | City of Denton | | Via Teleconference | |
| Keller, Jenna | Potomac Economics | | Via Teleconference | |
| Kilroy, Taylor | Texas Public Power Association (TPPA) | | Via Teleconference | |
| Kneisley, Ben | Just Energy | | Via Teleconference | |
| Koz, Brian |  | | Via Teleconference | |
| Kremling, Barry | Guadalupe Valley Electric Cooperative | | Via Teleconference | |
| Lasher, Warren | Lasher Energy Consulting | | Via Teleconference | |
| Lee, Jim | CenterPoint Energy | |  | |
| Lehmann, Phillip | PUCT | | Via Teleconference | |
| Leverett, Travis | WETT | | Via Teleconference | |
| Lewis, William | Payless Power | | Via Teleconference | |
| Lockhart, Heather | Vistra | | Via Teleconference | |
| Lotter, Eric | GridMonitor | | Via Teleconference | |
| Macaraeg, Tad | Stem | | Via Teleconference | |
| Malik, Naureen | Bloomberg News | | Via Teleconference | |
| Maxymillian, Kris | Morgan Lewis | | Via Teleconference | |
| Maynez, Andres | Orsted | | Via Teleconference | |
| McClellan, Suzi | Good Company Associates | | Via Teleconference | |
| McD Wyman, Constance |  | | Via Teleconference | |
| McIntyre, Ken | Plus Power | | Via Teleconference | |
| McKeever, Debbie | Oncor | |  | |
| McMurray, Creighton | PUCT | | Via Teleconference | |
| McMurray, Mark | BTU | | Via Teleconference | |
| Miller, Alexandra | EDF Renewables | | Via Teleconference | |
| Milton, Carrie | Potomac Economics | | Via Teleconference | |
| Mindham, David | EDP | | Via Teleconference | |
| Mitasev, Alex | Avangrid | | Via Teleconference | |
| Moore, Sylvain | Boralex Inc. | | Via Teleconference | |
| Morris, Sandy | WETT | | Via Teleconference | |
| Naulty, Terrance | DME | | Via Teleconference | |
| Nicholson, Tyler | PUCT | | Via Teleconference | |
| Noyes, Theresa | LCRA | | Via Teleconference | |
| Nguyen, Andy | Constellation Energy Generation | |  | |
| Noyes, Thresa | LCRA | | Via Teleconference | |
| Ok, Brendan | PUCT | | Via Teleconference | |
| Okenfuss, James | SENA | | Via Teleconference | |
| Okoro, Ikenna |  | | Via Teleconference | |
| ONeill, Holly | SENA | | Via Teleconference | |
| Orr, Rob | Lone Star Transmission | | Via Teleconference | |
| Pappu, Aja | Invenergy | | Via Teleconference | |
| Passman, Rachel | Gabel Associates | | Via Teleconference | |
| Patton, David | Potomac Economics | | Via Teleconference | |
| Pedigo, Susannah | Vesper Energy | | Via Teleconference | |
| Petäjäsoja, Ida |  | | Via Teleconference | |
| Petersen, Brock | Satoshi Energy | | Via Teleconference | |
| Petry, Ben |  | | Via Teleconference | |
| Pfefferle, Ryan | Oxy | | Via Teleconference | |
| Philips, Marjorie | LS Power | | Via Teleconference | |
| Pietrucha, Doug | Texas Advanced Energy | | Via Teleconference | |
| Pyka, Greg | Schneider Engineering | | Via Teleconference | |
| Quezada, Robert | AES | | Via Teleconference | |
| Ramaswamy, Ramya | PUCT | | Via Teleconference | |
| Ratliff, Shannon | The University of Texas System | | Via Teleconference | |
| Reasor, Deidra | Guadalupe Valley Electric Cooperative | | Via Teleconference | |
| Reedy, Steve | CIM View Consulting | |  | |
| Rich, Katie | GSEC | | Via Teleconference | |
| Richmond, Michele | Texas Competitive Power Advocates (TCPA) | | Via Teleconference | |
| Sager, Brenden | Austin Energy | | Via Teleconference | |
| Schwartz, Eric | IBV Energy | | Via Teleconference | |
| Schwarz, Brad | Sharyland | | Via Teleconference | |
| Scott, Kathy | CNP | |  | |
| Sersen, Juliana | Baker Botts | | Via Teleconference | |
| Siddiqi, Shams | Crescent Power Consulting | | Via Teleconference | |
| Singer, Chad | Raven Volt | | Via Teleconference | |
| Slaughter, Jeff | Just Energy | | Via Teleconference | |
| Smith, Mark | Steel Mills | |  | |
| Snyder, Bill | AEP | | Via Teleconference | |
| Spencer, Mark | LS Power | | Via Teleconference | |
| Stephens, VA | PUCT | | Via Teleconference | |
| Stephenson, Zach | Texas Electric Cooperatives | | Via Teleconference | |
| Tay, Sing | AES | | Via Teleconference | |
| Terk, Eliav | Trafigura | | Via Teleconference | |
| Thomas, Wayne | BTU | | Via Teleconference | |
| Tomaino, Christian | Tenaska | | Via Teleconference | |
| Trevino, Melissa | Occidental | | Via Teleconference | |
| True, Roy | ACES | | Via Teleconference | |
| Uy, Manny | Hunt Energy | | Via Teleconference | |
| Van Winkle, Kim | PUCT | | Via Teleconference | |
| Waldoch, Connor |  | | Via Teleconference | |
| Walker, Floyd | PUCT | | Via Teleconference | |
| White, Jennifer | PUCT | | Via Teleconference | |
| White, Lauri | AEP Texas | |  | |
| Wiegand, Sheri | Vistra | | Via Teleconference | |
| Will, Lloyd James | LW Consulting | | Via Teleconference | |
| Williams, Wes | Bryan Texas Utilities (BTU) | |  | |
| Wittmeyer, Bob | Longhorn Power | | Via Teleconference | |
| Wu, Tiffany | PUCT | | Via Teleconference | |
| Xie, Fei | Austin Energy | | Via Teleconference | |
| Yi, Tony | Gridstor | | Via Teleconference | |
| Zang, Hailing | TC Energy | | Via Teleconference | |
| Zang, Yang | WETT | | Via Teleconference | |
| Zarnikau, Jay | University of Texas at Austin | | Via Teleconference | |
| Zhang, Bryan | Potomac Economics | | Via Teleconference | |
| Zhang, Wen | Potomac Economics | | Via Teleconference | |
|  | |  | |  |
| *ERCOT Staff:* | |  | |  |
| Albracht, Brittney | |  | |  |
| Anderson, Troy | |  | |  |
| Arth, Matt | |  | |  |
| Azeredo, Chris | |  | | Via Teleconference |
| Badri, Sreenivas | |  | | Via Teleconference |
| Bigbee, Nathan | |  | | Via Teleconference |
| Billo, Jeff | |  | | Via Teleconference |
| Blevins, Bill | |  | | Via Teleconference |
| Boren, Ann | |  | |  |
| Carswell, Cory | |  | | Via Teleconference |
| Chu, Zhengguo | |  | | Via Teleconference |
| Clifton, Suzy | |  | |  |
| Cyphers, Darrell | |  | | Via Teleconference |
| Devadhas Mohanadha, Thinesh | |  | | Via Teleconference |
| Day, Betty | |  | | Via Teleconference |
| Du, Pengwei | |  | | Via Teleconference |
| Dwyer, Davida | |  | |  |
| El-Madhoun, Mohamed | |  | | Via Teleconference |
| Fohn, Doug | |  | | Via Teleconference |
| Garcia, Freddy | |  | | Via Teleconference |
| Gnanam, Prabhu | |  | | Via Teleconference |
| Golen, Robert | |  | |  |
| Hahne, Cynthia | |  | | Via Teleconference |
| Hanson, Pamela | |  | |  |
| Hobbs, Kristi | |  | | Via Teleconference |
| Huang, Fred | |  | | Via Teleconference |
| Kang, Sun Wook | |  | |  |
| King, Ryan | |  | |  |
| Lee, Alex | |  | | Via Teleconference |
| Li, Weifeng | |  | | Via Teleconference |
| Li, Ying | |  | | Via Teleconference |
| Magarinos, Marcelo | |  | | Via Teleconference |
| Maggio, Dave | |  | | Via Teleconference |
| Mago, Nitika | |  | |  |
| Mantena, Dan | |  | | Via Teleconference |
| Matlock, Robert | |  | | Via Teleconference |
| McGuire, Joshua | |  | | Via Teleconference |
| Mereness, Matt | |  | |  |
| Miller, Megan | |  | | Via Teleconference |
| Moreno, Alfredo | |  | | Via Teleconference |
| Ögelman, Kenan | |  | |  |
| Phillips, Cory | |  | |  |
| Rickerson, Woody | |  | | Via Teleconference |
| Rosel, Austin | |  | | Via Teleconference |
| Schmall, John | |  | | Via Teleconference |
| Shanks, Magie | |  | | Via Teleconference |
| Solis, Stephen | |  | | Via Teleconference |
| Stice, Clayton | |  | | Via Teleconference |
| Sweeney, Carolyn | |  | | Via Teleconference |
| Thomas, Shane | |  | | Via Teleconference |
| Tirupat, Venkat | |  | | Via Teleconference |
| Troublefield, Jordan | |  | |  |
| Urquhart, Ike | |  | | Via Teleconference |
| Wasik-Gutierrez, Erin | |  | |  |
| Woodfin, Dan | |  | | Via Teleconference |
| You, Haibo | |  | | Via Teleconference |
| Young, Matt | |  | |  |

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

Caitlin Smith called the December 4, 2023 meeting to order at 9:30 a.m.

Antitrust Admonition

Ms. Smith directed attention to the displayed Antitrust Admonition.

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

*October 24, 2023*

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

In Memoriam Brad Jones

Participants discussed the December 2, 2023 Celebration of Life for Brad Jones, his dedication as ERCOT interim CEO following winter storm Uri, his contributions to the utility industry throughout his career, and reflected on special memories. Ms. Smith noted that a scholarship has been established at Texas Tech University to honor Jones’ legacy and information is available at: [www.give.ttu.edu/bradjones](http://www.give.ttu.edu/bradjones).

Meeting Updates

*November Public Utility Commission of Texas (PUCT) Meetings*

Ms. Smith presented highlights of the November 2, 2023 and November 30, 2023 Public Utility Commission of Texas (PUCT) meetings, including discussion on Nodal Protocol Revision Request (NPRR) 1186, Improvements Prior to the RTC+B Project for Better ESR State of Charge Awareness, and the memo filed by PUCT Commissioner Jim Glotfelty. Ms. Smith noted that NPRR1186 is anticipated to be discussed at the December 14, 2023 PUCT Open meeting.

Review of ERCOT Market Impact Statements/Opinions and Independent Market Monitor (IMM) Opinion (see Key Documents)

Ann Boren presented the ERCOT Market Impact Statements and ERCOT Opinions for Revision Requests to be considered by TAC. Wen Zhang presented the IMM opinions for Revision Requests to be considered by TAC.

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

Martha Henson reviewed PRS activities and presented Revision Requests for TAC consideration.

*NPRR1181, Submission of Seasonal Coal and Lignite Inventory Declaration*

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

*NPRR1201, Limitations on Resettlement Timeline and Default Uplift Exposure Adjustments*

Some Market Participants expressed concern for the one year resettlement timeline in NPRR1201, the Alternative Dispute Resolution (ADR) process, and potential impacts to court-ordered resettlements or resettlements from ADRs pending a court order. Kenan Ögelman confirmed that such resettlements would not be impeded by NPRR1201. Ms. Smith noted this item could be considered for inclusion in the [Combined Ballot](#CombinedBallot).

*NPRR1204, Considerations of State of Charge with Real-Time Co-Optimization Implementation – URGENT*

Market Participants reviewed the Business case for NPRR1204. Ms. Smith noted this item could be considered for inclusion in the [Combined Ballot](#CombinedBallot).

Revision Requests Tabled at TAC (See Key Documents)

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

Stephen Solis presented an overview of NOGRR245 and summarized the 12/2/23 ERCOT comments Mr. Solis reviewed the revised Revision Request timeline for NOGRR245 consideration at the February 27, 2024 ERCOT Board (Board) meeting and April 11, 2024 PUCT Open meeting and responded to Market Participant questions and concerns. Eric Goff, representing NextEra Energy Services (NextEra) on NOGRR245 stated NextEra would be developing additional comments to request more specificity on the “upgrade kit,” including the cost component and definition; what is sole authority and details on operational restrictions; and include a bifurcated option for existing IBRs verses new. TAC took no action on this item.

*NPRR1193, Related to SMOGRR027, Move OBD to Settlement Metering Operating Guide – EPS Metering Design Proposal*

TAC took no action on this item.

*NPRR1203, Implementation of Dispatchable Reliability Reserve Service – URGENT*

Mr. Ögelman reviewed the 12/1/23 Request for Withdrawal for NPRR1203. Participants discussed the new NPRR for a standalone Dispatchable Reliability Reserve Service (DRRS) product and requested consideration of a workshop forum when ERCOT develops draft concepts.

**Kent Garret moved to approve the 12/1/23 Request for Withdrawal for NPRR1203. Mr. Goff seconded the motion. The motion carried with two abstentions from the Cooperative (LCRA) and Independent Generator (Luminant) Market Segments.** *(Please see ballot posted with Key Documents.)*

*Other Binding Document (OBDRR) 049, ORDC Changes Related to NPRR1203, Implementation of Dispatchable Reliability Reserve Service*

*OBDRR050, Non-Spin Changes Related to NPRR1203, Implementation of Dispatchable Reliability Reserve Service*

Ms. Smith noted the 12/1/23 ERCOT Request for Withdrawal of both OBDRR049 and OBDRR050. TAC took no action on these items.

*OBDRR046, Related to NPRR1188, Implement Nodal Dispatch and Energy Settlement for Controllable Load Resources*

TAC took no action on this item.

*Planning Guide Revision Request (PGRR105, Deliverability Criteria for DC Ties Imports*

TAC took no action on this item.

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

Debbie McKeever reviewed RMS activities and presented a Revision Request for TAC consideration

*Retail Market Guide Revision Request (RMGRR) 176, Addition of Market Processes Specific to LP&L – URGENT*

Market Participants reviewed the 11/14/23 Impact Analysis for RMGRR176. Ms. Smith noted this item could be considered for inclusion in the [Combined Ballot](#CombinedBallot).

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

Katie Rich reviewed ROS activities.

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

*WMS Procedures*

Eric Blakey reviewed WMS activities and presented WMS Procedures for TAC consideration. Ms. Smith noted this item could be considered for inclusion in the [Combined Ballot](#CombinedBallot).

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

Brenden Sager reviewed CFSG activities.

Large Flexible Load Task Force (LFLTF) Report

Bill Blevins reviewed LFLTF activities, noted that the November 20, 2023 LFLTF meeting was cancelled as no comments were received regarding ERCOT rules related to large Load ramp rate limitations, and encouraged Participants to provide comments and attend the January 3, 2023 LFLTF meeting.

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

Matt Mereness reviewed RTCBTF activities.

2024 Ancillary Services Methodology (Vote) (see Key Documents)

*ERCOT Recommendation*

Nitika Mago summarized the ERCOT recommendation for the 2024 Ancillary Services Methodology, presented additional analyses on the Ancillary Services quantities, and reviewed the ERCOT responses to the IMM recommendations. Some Market Participants reiterated concerns with the proposed changes, including ERCOT Contingency Reserve Service (ECRS) procurements and potential inefficiencies, overlap of Non-Spinning Reserve (Non-Spin) and ECRS calculations, and potential impacts of NPRR1186, Improvements Prior to the RTC+B Project for Better ESR State of Charge Awareness, Accounting, and Monitoring.

*ROS Recommendation*

Ms. Rich reviewed the ROS recommendation for the 2024 Ancillary Services Methodology.

*WMS Recommendation*

Mr. Blakey reviewed the WMS recommendation for the 2024 Ancillary Services Methodology.

*IMM Opinion*

Dr. David Patton presented the IMM Concerns with the 2024 Ancillary Services Methodology   
and alternate solutions.

**Bryan Sams moved to endorse the 2024 Ancillary Services Methodology as recommended by ERCOT. Emily Jolly seconded the motion. The motion failed with seven objections from the Consumer (4) (City of Eastland, City of Dallas, Residential Consumer, OPUC), Cooperative (STEC), and Independent Retail Electric Providers (IREP) (2) (Demand Control 2, APG&E) Market Segments and 11 abstentions from the Consumer (2) (CMC Steel, Air Liquide), Cooperatives (2) (GSEC, PEC), Independent Power Marketer (IPM) (DC Energy), IREP (2) (Reliant, Rhythm Ops), and Municipal (4) (DME, CPS Energy, Austin Energy, GP&L) Market Segments.** *(Please see ballot posted with Key Documents).*

Market Participants discussed the potential to consider the 2024 Ancillary Services Methodology as recommended by ERCOT, if ERCOT would commit to review the Ancillary Services Methodology and potential alternate solutions prior to Summer 2024. Mr. Ögelman confirmed ERCOT’s commitment. Some Market Participants expressed concern that proposing potential changes in the Ancillary Services Methodology mid-year reduces market certainty and stated that there are resource challenges at ERCOT.

**Mr. Goff moved to endorse the 2024 Ancillary Services Methodology as recommended by ERCOT on the commitment from ERCOT to bring the methodology back up for TAC review by April 30, 2024. Mark Dreyfus seconded the motion. The motion carried with three objections from the Consumer (City of Dallas), IREP (2) (Demand Control 2, APG&E) Market Segments and six abstentions from the Cooperative (2) (PEC, STEC), Independent Generator (2) (Jupiter Power, Luminant), IREP (Rhythm Ops), and Municipal (GP&L) Market Segments.** *(Please see ballot posted with Key Documents).*

ERCOT Reports (see Key Documents)

*Outage Coordination Methodology Update*

Fred Huang reviewed the Protocol requirement for the annual review of the Outage Coordination Methodology, noted ERCOT reviewed the 2022 Outage coordination performance, stated that there are no changes to the methodology, and responded to Market Participant questions and concerns.

*Real-Time Price Correction for Operating Day October 22, 2023*

Dave Maggio summarized the error in the ERCOT Market Management System (MMS) user interface and Application Programming Interface (API) that impacted market submissions in the Real-Time Market (RTM) as well as the Day-Ahead Market (DAM); noted that ERCOT issued Market notice M-B102423-01 on October 23, 2023 and an additional Market Notice M-B102423-02 on November 3, 2023; presented the analysis of the price and Settlement impacts for Operating Day October 22, 2023, in the RTM; and stated that potential price corrections will be considered at the December 18, 2023 Reliability and Markets Committee meeting and the December 19, 2023 Board meeting.

*Mitigated Offer Cap (MOC) Recommendation for Energy Storage Resources*

Ryan King reviewed the relevant Protocol language for the requirement to provide a recommendation to TAC with respect to a MOC framework for Energy Storage Resources (ESRs), summarized discussions at the November 6, 2023 WMS meeting and September 21, 2023 and October 9, 2023 Congestion Management Working Group (CMWG) meetings, presented the analysis and observations, and stated that ERCOT and stakeholders recommend that no change be made to the existing MOC methodology for ESRs at this time.

*Value of Lost Load (VOLL) Study Update*

Matthew Arth provided an update on the VOLL study, presented next steps, and responded to Market Participant questions and concerns.

*West Texas Synchronous Condenser Regional Planning Group (RPG) Project (Possible Vote)*

Sun Wook Kang presented the ERCOT independent review of the West Texas Synchronous Condenser RPG Project, and the ERCOT recommendation to endorse synchronous condenser installations at six 345-kV substations: Cottonwood, Bearkat, Tonkawa, Long Draw, Reiter, and Bakersfield to reduce the reliability risk and strengthen the West Texas system. Ms. Smith noted this item could be considered for inclusion in the [Combined Ballot](#CombinedBallot).

*Texas-New Mexico Power Company (TNMP) Silverleaf and Cowpen 345/138-kV Stations RPG Project*

Robert Golen presented the ERCOT independent review of the TNMP Silverleaf and Cowpen 345/138-kV Stations RPG Project, a comparison of options, and the ERCOT recommendation for Option 1 to address the reliability need in the Reeves and Ward Counties in the Far West weather zone. Ms. Smith noted this item could be considered for inclusion in the [Combined Ballot](#CombinedBallot).

Other Business (see Key Documents)

*Revised Revision Request Submission Form and TAC Report Form*

Ms. Boren summarized discussions with ERCOT Board members for efficiencies in the Revision Request Submission Form and TAC Report form, presented the revised forms, and stated the changes will be effective January 1, 2024.

*Contract for Capacity for Winter 2023 – 2024*

Davida Dwyer noted that on November 17, 2023 ERCOT cancelled its request for proposals (“RFP”) for contracts for capacity for winter season 2023 – 2024 and issued a Market Notice, M-A100223-06. Ms. Dwyer stated that ERCOT based this decision on the limited amount of capacity offered and potentially qualified, and weighed the small amount of capacity that could have been provided and limited amount of reliability benefit against cost of procurement and administrative costs. Ms. Dwyer expressed appreciation for the workshop participation, and feedback from stakeholders on the RFP process, and stated that ERCOT is considering additional refinements to the process.

Combined Ballot

**Kevin Hanson moved to approve the Combined Ballot as follows:**

* **To approve the October 24, TAC Meeting Minutes as presented**
* **To recommend approval of NPRR1181 as recommended by PRS in the 11/9/23 PRS Report**
* **To recommend approval of NPRR1201 as recommended by PRS in the 11/9/23 PRS Report**
* **To recommend approval of NPRR1204 as recommended by PRS in the 11/9/23 PRS Report**
* **To recommend approval of RMGRR176 as recommended by RMS in the 11/7/23 RMS Report and the 11/14/23 Impact Analysis**
* **To approve the WMS Procedures as submitted**
* **To endorse the West Texas Synchronous Condenser RPG Project as recommended by ERCOT**
* **To endorse TNMP – Silverleaf and Cowpen 345/138-kV Stations RPG Project – Option 1 as recommended by ERCOT**

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

Ms. Smith adjourned the December 4, 2023 TAC meeting at 3:39 p.m.

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

   <https://www.ercot.com/calendar/12042023-TAC-Meeting>

   [↑](#footnote-ref-2)