

GENERAL SESSION MINUTES OF THE RELIABILITY AND MARKETS COMMITTEE MEETING OF ELECTRIC RELIABILITY COUNCIL OF TEXAS, INC.

8000 Metropolis Drive (Building E), Suite 100, Boardroom B Austin, Texas 78744 February 26, 2024

Pursuant to notice duly given, the meeting of the Reliability and Markets (R&M) Committee of the Board of Directors (Board) of Electric Reliability Council of Texas, Inc. (ERCOT), convened on the above-referenced dates.

Meeting Attendance:

Committee Members:

Director	Affiliation/Role (if any)	Voting Category
Aguilar, Carlos	N/A	Voting
England, Julie	N/A	Voting
Flexon, Bob (Chair)	N/A	Voting
Hjaltman, Courtney	Office of Public Utility Counsel (OPUC), Public Counsel	Voting

Other Board Members:

Director	Affiliation/Role (if any)	Voting Category
Capuano, Linda	N/A	Voting
Cobos, Lori	Public Utility Commission of Texas (PUCT, Commission), Commissioner	Non-Voting
Flores, Bill	N/A	Voting
Heeg, Peggy	N/A	Voting
Vegas, Pablo	ERCOT President and Chief Executive Officer (CEO)	Non-Voting

Officers and Guests:

Officer/Guest	Role	
Day, Betty	ERCOT Vice President of Security and Compliance and Chief	
	Compliance Officer	
Hobbs, Kristi	ERCOT Vice President of System Planning and Weatherization	
Jackson, Kathleen	PUCT Commissioner	
Levine, Jonathan	ERCOT Assistant General Counsel and Assistant Corporate	
	Secretary	



Martinez, Adam	ERCOT Vice President of Enterprise Risk and Strategy	
Mereness, Matt	ERCOT Senior Director of Strategic Market Design Programs and	
	Delivery	
Ögelman, Kenan	ERCOT Vice President of Commercial Operations	
Parakkuth, Jayapal	ERCOT Senior Vice President and Chief Information Officer	
Rainwater, Kim	ERCOT Corporate Counsel	
Rickerson, Woody	ERCOT Senior Vice President and Chief Operating Officer	
Rosel, Austin	ERCOT Director of Settlements, Retail, and Credit	
Spak, Mara	ERCOT Vice President of Human Resources	
Tamby, Jeyant	ERCOT Senior Vice President and Executive Advisor	
Tirupati, Venkat	ERCOT Vice President of DevOps and Grid Transformation	
Woodfin, Dan	ERCOT Vice President of System Operations	
Zerwas, Rebecca	ERCOT Director of State Policy and PUC Relations	
Zheng, Wen	Potomac Economics, ERCOT Independent Market Monitor (IMM),	
	Deputy Director	

Call General Session to Order (Agenda Item 1)

Bob Flexon, R&M Committee Chair, determined that a quorum was present and called the R&M Committee meeting to order at approximately 12:30 p.m. Chair Flexon highlighted the Antitrust Admonition and addressed the following Agenda Items in the order below.

Notice of Public Comment, if Any (Agenda Item 2)

Chair Flexon announced that on the agenda for the meeting, which was posted publicly on February 19, 2024, ERCOT had provided instructions for members of the public who were interested in commenting in person, and to date, no individuals had expressed interest in commenting, which Jonathan Levine confirmed.

December 18-19, 2023 General Session Meeting Minutes (Agenda Item 3)

Chair Flexon entertained a motion to approve the December 18-19, 2023 General Session Meeting Minutes (Minutes).

Julie England moved to approve the Minutes as presented. Carlos Aguilar seconded the motion. The motion passed by unanimous voice vote with no abstentions.

Review of Committee Charter (Agenda Item 4)

Chair Flexon presented the Review of Committee Charter. Chair Flexon announced revisions proposed to the Charter were included in the meeting materials, along with his memo that the proposed revisions would clarify the Committee's current practices and add reference to the Board Policies and Procedures. Chair Flexon suggested a vote on the proposed revisions during the April 22, 2024 Committee meeting, to coincide with proposed updates to the Board Policies and Procedures.

Recommendation regarding Market Credit Risk Corporate Standard (Agenda Item 5)

Austin Rosel presented the Recommendation regarding Market Credit Risk Corporate Standard. Mr. Rosel reviewed ERCOT staff's recommended changes to ERCOT's Market Credit Risk



Corporate Standard during the Committee's annual review. The meeting materials included proposed revisions to strike references to the Board's former Credit Work Group (CWG), which no longer exists.

Mr. Aguilar moved to recommend the Board approve the revised Market Credit Risk Corporate Standard. Ms. England seconded the motion. The motion passed by unanimous voice vote with no abstentions.

Recommendations regarding R&M Charter Revision Requests; PUCT Remand of NPRR1186, Improvements Prior to the RTC+B Project for Better ESR State of Charge Awareness, Accounting and Monitoring (Agenda Items 6 – 6.1)

Dan Woodfin presented ERCOT staff's recommendation regarding PUCT Remand of NPRR1186, which would modify NPRR1186 according to the Commission's order that suggested to remove language that would have required each Qualified Scheduling Entity (QSE) that relies on an Energy Storage Resource (ESR) to provide Ancillary Services to ensure that the Resource maintains sufficient State of Charge (SOC) to fulfill each Ancillary Service it provides. The Board's directive to ERCOT staff when recommending approval of NPRR1186 prior to Commission remand was to file one or more Revision Requests to strengthen related financial and compliance penalties, and staff had subsequently submitted NPRR1209, Board Priority – State Of Charge Ancillary Service Failed Quantity Allocations under NPRR1149. Committee members and Mr. Woodfin discussed frequency of reporting on the monitoring of all Resources for capacity sufficiency compliance, including Ancillary Services, as well as discussing similar future compliance monitoring for Aggregate Distributed Energy Resources (ADERs).

Courtney Hjaltman moved to recommend that the Board (1) recommend approval of NPRR1186 as amended by the 2/12/24 ERCOT comments; and (2) direct ERCOT staff to withdraw NPRR1209. Ms. England seconded the motion. The motion passed by unanimous voice vote with no abstentions.

Recommendation regarding TNMP Pecos County Transmission Improvement Regional Planning Group (RPG) Project (Agenda Item 7)

Kristi Hobbs presented the Recommendation regarding TNMP Pecos County Transmission Improvement RPG Project, including ERCOT staff's recommendation that the Board designate the project as critical to the reliability of the ERCOT System pursuant to PUCT Substantive Rule 25.101 [16 Tex. Admin. Code § 25.101]. Committee members and Ms. Hobbs discussed ERCOT staff's recommendation for Option 1 over other options of similar cost, primarily based on the Option 1 benefits for long-term Load-serving capability. Committee members, Woody Rickerson, and Ms. Hobbs discussed the project's proposed right-of-way and the Commission's process for Certificates of Convenience and Necessity (CCN).

Mr. Aguilar moved to recommend that the Board (1) endorse the need for the Tier 1 TNMP Pecos County Transmission Improvement RPG Project (Option 1), which ERCOT staff has independently reviewed and which TAC has voted unanimously to endorse, based on ERCOT reliability planning criteria; and (2) designate the project as critical to the reliability of the ERCOT System pursuant to PUCT Substantive Rule 25.101(b)(3)(D). Ms.



England seconded the motion. The motion passed by unanimous voice vote with no abstentions.

Recommendation regarding Aggregate Distributed Energy Resource (ADER) Pilot Project – Phase 2 (Agenda Item 8)

Kenan Ögelman presented ERCOT staff's recommendation to close Phase 1 of the ADER Pilot Project and move to Phase 2 to further evaluate the participation of ADERs in the ERCOT wholesale market, as described in the Phase 2 Governing Document included in the meeting materials. Mr. Ögelman also presented a status update on the Pilot Project. Committee members and Mr. Ögelman discussed the primary reasons for inability to qualify for participation in the Pilot Project, as well as the 9 participants who have qualified and Phase 2 participation goals. Discussion also included how participants are aggregating Resources and serving as their Retail Electric Providers (REPs); coordinating with Transmission and/or Distribution Service Providers (TDSPs) on feasibility; and working with, or serving as, a Qualified Scheduling Entity (QSE) to offer the aggregated Resources into the wholesale market.

Ms. England moved to recommend the Board approve ERCOT to continue to conduct the ADER Pilot Project, as modified by the Phase 2 Governing Document. Ms. Hjaltman seconded the motion. The motion passed by unanimous voice vote with no abstentions.

Independent Market Monitor (IMM) Report (Agenda Item 9)

Wen Zheng presented the IMM Report. Committee members, Ms. Zheng, and Mr. Rickerson discussed increases in gas peaking units in the interconnection queue since April of 2023. Committee members and Ms. Zheng discussed the Peaker Net Margin (PNM), Cost of New Entry (CONE), and reinvestment economics. Committee members, Ms. Zheng, and Mr. Ögelman discussed fuel price calculations for 2023 compared to 2022 and price signals for new investment. Commissioner Cobos and Ms. Zheng discussed CONE for the years 2019 through 2023 and how many of those years PNM has exceeded CONE; ERCOT's ongoing CONE study; and frequency for updating the CONE. Committee members and Ms. Zheng discussed variables impacting pricing during hot summer months and calculation of the year's wholesale energy costs, and discussed with Mr. Woodfin and Mr. Ögelman use of ERCOT Contingency Reserve Service (ECRS). Committee members and Ms. Zheng discussed calculation of wholesale energy costs during Winter Storm Heather [January 13-17, 2024], as well as reliability risks.

Committee Briefs (Agenda Item 10)

Chair Flexon invited ERCOT staff to present the Committee Briefs.

System Planning and Weatherization Update (Agenda Item 10.1)

Ms. Hobbs presented the System Planning and Weatherization Update, including updates on the Reliability Standard, Value of Lost Load (VOLL), and CONE studies. Committee members, Ms. Hobbs, and Mr. Rickerson discussed impacts of legislation intended to encourage new interconnection requests, and interconnection requests exceeding retirements. Discussion also included potential offsetting of gains from new interconnection requests exceeding retirements depending on whether proposed rule changes are implemented by the Environmental Protection Agency (EPA). Ms. Hobbs' update also included the Permian Basin Reliability Plan Study.



System Operations Update (Agenda Item 10.2)

Dan Woodfin presented the System Operations Update, including an update on the progress of various Ancillary Services initiatives, including ECRS changes; changes to the ERCOT Methodologies for Determining Minimum Ancillary Service Requirements for PUCT approval; and a joint study for the Texas Legislature by the PUCT, IMM, and ERCOT. Additional topics in the update included preparations to use available tools to balance the ERCOT System during a total solar eclipse on Monday, April 8, 2024 and a review of the performance of ERCOT System operations during Winter Storm Heather.

Commercial Markets Update (Agenda Item 10.3)

Mr. Ögelman presented the Commercial Markets Update, including a review of market performance during Winter Storm Heather. Committee members, other Board members, Mr. Ögelman, Mr. Woodfin, and Mr. Rickerson discussed the impact on Day-Ahead Market prices of the deviation between ERCOT's Load forecast and actual Load, and Load forecasting and management of the risk of uncertainty during the Winter Storm Heather event. Mr. Ögelman's update also included ERCOT staff investigation of the potential for correcting certain prices from January in the Real-Time and Day-Ahead Markets, possibly associated with the status of parameters for line ratings and equipment ratings in Security-Constrained Economic Dispatch (SCED), for consideration during the April meetings of the R&M Committee and Board. Committee members and Mr. Ögelman discussed holistic tracking of pricing operations. Committee members and Adam Martinez discussed continuous improvement and quality assurance across the ERCOT organization.

Real-Time Co-optimization Update (Agenda Item 10.3.1)

Matt Mereness presented the Real-Time Co-optimization (RTC) Update. Committee members and Mr. Mereness discussed the lead time Market Participants need to implement technical changes.

Market Credit Update (Agenda Item 10.4)

Mr. Ögelman presented the Market Credit Update, including updates on NPRR1184, *Update to Procedures for Managing Interest on Cash Collateral*, sponsored by Tenaska, and NPRR1205, *Revisions to Credit Qualification Requirements of Banks and Insurance Companies*, sponsored by ERCOT.

Revision Request Status Update (Agenda Item 10.5)

Mr. Levine presented the Revision Request Status Update.

Future Agenda Items (Agenda Item 11)

Mr. Rickerson presented the Future Agenda Items, highlighting the methodology for determining minimum Ancillary Services requirements could be discussed in June if not finalized by the April 22, 2024 Committee meeting ahead of an April 30 deadline for modifications to the methodology. Other highlights included that annual operations and planning reports finalized in the new year could be previewed by the Committee in December and the possible April consideration of the price corrections discussed during the Commercial Operations Update (Agenda Item 10.3).



Other Business (Agenda Item 12)

Chair Flexon directed the Committee Secretary to finalize the June 19, 2023 Executive Session Meeting Minutes without a vote. Chair Flexon commented that Executive Sessions would likely be less frequently needed for the R&M Committee since most of the risk management matters that had been under the R&M Committee's oversight have moved to the Technology and Security Committee. Chair Flexon requested finalizing the minutes without a vote to avoid creating a new set of Executive Session meeting minutes.

Voting on Matters from Executive Session (Agenda Item 13)

The Committee did not meet in Executive Session.

Adjournment (Agenda Item 14)

Chair Flexon adjourned the meeting at approximately 2:54 p.m.

Committee materials and presentations from the meeting are available on ERCOT's website at https://www.ercot.com/committees/board/reliabilitymarkets.

Jonathan M. Levine

Assistant Corporate Secretary