



**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
August 30, 2023

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 date.

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, Public Counsel	Voting
Swainson, John	N/A	Voting

Other Board Members:

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

Officers and Guests:

Officer/Guest	Role
Barnes, Bill	Reliant Energy Retail Services
Berlin, Anna	ERCOT Associate Corporate Counsel



Black, Robert	ERCOT Vice President of Public Affairs
Cobos, Lori	PUCT Commissioner (<i>Not Present for Agenda Items 1 – 3</i>)
Day, Betty	ERCOT Vice President of Security and Compliance and Chief Compliance Officer
Gross, Katherine	ERCOT Senior Corporate Counsel
Hobbs, Kristi	ERCOT Vice President of Corporate Strategy and PUC Relations
Levine, Jonathan	ERCOT Assistant General Counsel and Assistant Corporate Secretary
Mago, Nitika	ERCOT Manager of Balancing Operations Planning
McAdams, Will	PUCT Commissioner
Ögelman, Kenan	ERCOT Vice President of Commercial Operations
Parakkuth, Jayapal	ERCOT Vice President and Chief Information Officer
Rainwater, Kim	ERCOT Corporate Counsel
Rickerson, Woody	ERCOT Vice President of System Planning and Weatherization
Rosel, Austin	ERCOT Director of Settlements, Retail, and Credit
Rychetsky, Penny	ERCOT Director of Internal Audit
Sams, Bryan	Calpine Corporation, Technical Advisory Committee (TAC) Representative, Independent Generator Segment
Seely, Chad V.	ERCOT Senior Vice President, General Counsel and Corporate Secretary
Smith, Stephanie	Eolian, LP
Spak, Mara	ERCOT Vice President of Human Resources
Tamby, Jeyant	ERCOT Senior Vice President, Chief Administrative Officer and Chief of Staff (<i>Via Teleconference</i>)
Taylor, Sean	ERCOT Vice President and Chief Financial Officer
Woodfin, Dan	ERCOT Vice President of System Operations

Call General Session to Order and Announce Proxies (Agenda Item 1)

Bob Flexon, R&M Committee Chair, determined that a quorum was present and called the meeting to order at approximately 1:31 p.m. Chair Flexon highlighted the Antitrust Admonition and welcomed new Board member Linda Capuano.

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

Chair Flexon announced that on the agenda for the meeting, which was posted publicly on August 23, 2023, 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 Chad Seely confirmed.

June 19, 2023 General Session Meeting Minutes (Agenda Item 3)

Chair Flexon entertained a motion to approve the June 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.



Proposed Revisions to Committee Charter (Agenda Item 4)

Chair Flexon recognized PUCT Interim Chair Kathleen Jackson, who called an Open Meeting of the Commission to order to consider matters that had been duly posted with the Texas Secretary of State for August 30, 2023.

Chair Flexon presented the Proposed Revisions to Committee Charter. He indicated the meeting materials include draft R&M Committee Charter revisions ahead of a vote at a future meeting and summarized the proposed revisions. Chair Flexon invited feedback from Committee members ahead of the October 2023 Committee meeting.

Recommendations regarding Non-Unanimous and other Selected Revision Requests Recommended by TAC for Board Approval; TAC Report regarding Non-Unanimous and Other Selected Revision Requests Recommended by TAC for Board Approval (Agenda Items 5 and 5.1)

Chair Flexon invited Bryan Sams to present the TAC Report, including four Revision Requests that TAC non-unanimously recommended for approval.

NPRR1165, Revisions to Requirements of Providing Audited Financial Statements and Providing Independent Amount (Agenda Item 5.1.1)

Mr. Sams presented the TAC recommendation regarding NPRR1165. Kenan Ögelman reported that ERCOT staff agreed with TAC's recommendation and commented regarding ERCOT staff's reasons for filing the NPRR and how it aligns with NPRR1112, Elimination of Unsecured Credit Limits.

Courtney Hjaltman moved to recommend that the Board recommend approval of NPRR1165 as recommended by TAC. Ms. England seconded the motion. The motion passed by unanimous voice vote with no abstentions.

NPRR1186, Improvements Prior to the RTC+B Project for Better ESR State of Charge Awareness, Accounting, and Monitoring – URGENT; ERCOT Comments on NPRR1186; TAC Recommendation Opposition on NPRR1186 of Eolian, LP; TAC Advocate Presentation of TAC Action on NPRR1186 (Agenda Items 5.1.2 – 5.1.2.3)

Mr. Sams presented the TAC recommendation regarding NPRR1186. Chair Flexon recognized Bill Barnes, who was appointed TAC Advocate for NPRR1186. Mr. Barnes summarized TAC Representatives' positions and collective recommendation for the Board to recommend approval of NPRR1186. Dan Woodfin commented regarding the TAC Advocate summary of the stakeholder process for NPRR1186.

Stephanie Smith presented Eolian, LP's TAC Recommendation Opposition on NPRR1186. Discussion by Committee members, other Board members, and Ms. Smith included potential impacts of NPRR1186 on market incentives for longer-duration batteries and possible timelines for resolving issues around the NPRR.

Dan Woodfin presented ERCOT's comments regarding NPRR1186. Committee members, Mr. Woodfin, and Nitika Mago discussed State of Charge (SOC) validation, weekly feedback to Ancillary Service providers regarding insufficient SOC, and consequences for failure to provide



required Ancillary Services. Committee members and Mr. Woodfin discussed incentives under the current and proposed market rules for longer-duration batteries, such as those with a four-hour capability that can accordingly provide Non-Spinning Reserve Service (Non-Spin). Along with other Board members, Commissioners, and Mr. Ögelman, they also discussed NPRR1186 as an interim measure pending completion of the Real-Time Co-optimization and Single-Model Energy Storage Resource (RTC+B) project to identify and account for Resource SOC sufficiency to meet Ancillary Service obligations for which payment is received. Mr. Barnes commented on the extent of Energy Storage Resource (ESR) operator support and opposition regarding the NPRR. Committee members discussed whether to remand NPRR1186 to TAC in its entirety, or to remand with instructions to TAC to address only the scarcity deployment issue discussed by ERCOT staff in its presentation and comments.

John Swainson moved to recommend that the Board remand NPRR1186 to TAC to address the limited scarcity deployment issue discussed by ERCOT staff in its presentation, and to direct TAC to present an updated recommendation to the Board at the October 17, 2023 Board meeting. Mr. Aguilar seconded the motion. The motion passed by unanimous voice vote with no abstentions.

OBDRR048, Implementation of Operating Reserve Demand Curve (ORDC) Multi-Step Price Floor (Agenda Item 5.1.3)

Mr. Sams presented the TAC recommendation regarding OBDRR048. Mr. Ögelman reported that ERCOT staff agreed with TAC's recommendation. Committee members, other Board members, Commissioners, and Mr. Ögelman discussed the Commission's adoption of metrics for data analysis and reporting related to implementation of the ORDC multi-step price floor.

Mr. Aguilar moved to recommend that the Board recommend approval of OBDRR048 as recommended by TAC. Mr. Swainson seconded the motion. The motion passed by unanimous voice vote with one abstention (Ms. Hjaltman).

VCMRR034, Excluding RUC Approved Fuel Costs from Fuel Adders (Agenda Item 5.1.4)

Mr. Sams presented the TAC recommendation regarding VCMRR034. Mr. Ögelman reported that ERCOT staff agrees with TAC's recommendation and described ERCOT's basis for filing VCMRR034.

Mr. Swainson moved to recommend that the Board recommend approval of OBDRR048 as recommended by TAC. Ms. England seconded the motion. The motion passed by unanimous voice vote with no abstentions.

Recommendation regarding Modifications to Letter of Credit and Surety Bond Standard Forms and Repeal of Guarantee Agreement Standard Forms (Agenda Item 6)

Mr. Ögelman presented the Recommendation regarding Modifications to Letter of Credit and Surety Bond Standard Forms and Repeal of Guarantee Agreement Standard Forms. Committee members, other Board members, and Mr. Seely discussed the use of outside counsel to verify the forms' standard terms and appropriate cadence for form review.



Ms. England moved to recommend that the Board approve the proposed modifications to Letter of Credit and Surety Bond Standard Forms and repeal of the Guarantee Agreement Standard Forms, as presented. Mr. Swainson seconded the motion. The motion passed by unanimous voice vote with no abstentions.

Recommendation regarding CPS Energy – San Antonio South Reliability Regional Planning Group Project (Agenda Item 7)

Woody Rickerson presented the CPS Energy – San Antonio South Reliability Regional Planning Group Project, which ERCOT staff independently reviewed and which TAC voted unanimously to endorse, based on North American Electric Reliability Corporation (NERC) and ERCOT reliability planning criteria, including ERCOT staff's recommendation that the project be designated as critical to the reliability of the ERCOT System pursuant to PUCT Substantive Rule 25.101(b)(3)(D). Committee members and Mr. Rickerson discussed the project review timeline, from initial need identification in 2021 through Board consideration in August 2023. Committee members, Commissioners, Mr. Rickerson, and Mr. Seely discussed the status of the Southern Spirit (formerly Southern Cross) Transmission Project.

Mr. Aguilar moved to recommend that the Board (1) endorse the need for the Tier 1 CPS Energy – San Antonio South Reliability Regional Planning Group Project (Option 5), which ERCOT staff has independently reviewed and which TAC has voted unanimously to endorse, based on NERC and 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). Mr. Swainson seconded the motion. The motion passed by unanimous voice vote with no abstentions.

Committee Briefs (Agenda Item 8)

Chair Flexon invited ERCOT staff to present the Committee Briefs.

System Planning and Weatherization Update (Agenda Item 8.1)

Mr. Rickerson presented the System Planning and Weatherization Update. Commissioners and Mr. Rickerson discussed recent Commission proceedings to interpret PUCT rules for facility weatherization and how the Commission rules compare to NERC standards. Commissioners and Mr. Rickerson discussed the interconnection process for new large loads, as well as the prioritization of dispatchable resources, but not co-located energy storage and generation resources specifically, in the interconnection queue.

Break

Chair Flexon recessed General Session for break at approximately 3:38 p.m. and reconvened General Session at approximately 3:55 p.m.

System Operations Update (Agenda Item 8.2)

Dan Woodfin presented the System Operations Update. Committee members, other Board members, and Mr. Woodfin discussed the relative contributions to recent peak Demand records of economic growth and high temperatures.



Pablo Vegas announced that ERCOT had issued a Conservation Appeal for 6:00 p.m. to 9:00 p.m. today due to low wind output and thermal outages during the solar ramp down.

Update on Reliability Standard Study Results (Agenda Item 8.1.1)

Mr. Rickerson presented the Update on Reliability Standard Study Results. Committee members and Mr. Rickerson discussed integration into the study process of the impact of weatherization on reliability, keeping the Board informed throughout the study process, and the ongoing analysis of Value of Lost Load (VOLL). Committee members requested that the initial scenario analysis results that ERCOT staff intends to present to the PUCT also be shared with the Board.

West Texas Synchronous Condenser Project (Agenda Item 8.1.2)

Mr. Rickerson presented the West Texas Synchronous Condenser Project. Committee members, other Board members, Commissioners, and Mr. Rickerson discussed cost, pairing, energy usage, value, and potential Tier 1 project status of the proposed synchronous condensers as part of a suite of initiatives to increase system strength in West Texas; potential future requirements for Inverter-Based Resources, including the requirement to be grid-forming; and the timeline for installation of the synchronous condensers, assuming approval of the related projects.

Commercial Markets Update (Agenda Item 8.3)

Mr. Ögelman presented the Commercial Markets Update, including an update on Aggregate Distributed Energy Resource (ADER) Pilot Project participation. Committee members and Mr. Ögelman discussed resource qualification for the pilot project and the types of technology participating. Committee members, other Board members, Commissioners, and Mr. Ögelman discussed liquidity and procurement of the ERCOT Contingency Reserve Service (ECRS) product.

ERCOT Staff Response to Independent Market Monitor State of the Market Report Recommendations (Agenda Item 8.3.1)

Mr. Ögelman presented the ERCOT Staff Response to Independent Market Monitor (IMM) State of the Market Report Recommendations. Committee members, other Board members, and Mr. Ögelman discussed prioritization of initiatives due to resource limitations and the potential to use artificial intelligence (AI) in response to the IMM's recommendation for a multi-interval Real-Time Market that looks ahead at system conditions and makes binding, optimized, forward dispatch.

Real-Time Co-optimization Update (Agenda Item 8.3.2)

Mr. Ögelman and Kristi Hobbs presented the Real-Time Co-optimization Update. Committee members, other Board members, and Mr. Ögelman discussed how implementation of NPRR1186 would address SOC in the interim to the RTC+B project and how SOC issues are being addressed by other Independent System Operators (ISOs). Commissioners and Mr. Ögelman discussed batteries as a reliability solution and the practicalities of using Reliability Unit Commitment (RUC) for batteries.

Market Credit Update (Agenda Item 8.4)

Mr. Ögelman presented the Market Credit Update, highlighting new data since submission of meeting materials, including two defaults of traders in which Market Participant collateral



covered the shortfall. Committee members, other Board members, Mr. Ögelman, and Austin Rosel discussed the significant increase in Total Potential Exposure (TPE) from \$1.46 Billion in June 2023 to approximately \$3.4 Billion in August, correlating to high prices in July and August and all of which is secured by collateral. Along with Sean Taylor, they discussed distribution of interest income on cash collateral.

Technology and Projects Update (Agenda Item 8.5)

Chair Flexon indicated that rather than an update to the R&M Committee, pending the expected Board approval to form the Technology and Security Committee at tomorrow's Board meeting, the next technology and projects update would be planned for the Technology and Security Committee in October.

Revision Request Status Update (Agenda Item 8.6)

Ms. Hobbs presented the Revision Request Status Update, including requesting Committee feedback on pending NPRR1156, Priority Revision Request Process. Committee members raised no objection to ERCOT supporting withdrawal of NPRR1156 with potential for a future proposal to add a priority process to supplement current processes for urgent Revision Requests.

Future Agenda Items (Agenda Item 9)

Mr. Ögelman presented the Future Agenda Items, highlighting items anticipated for the October 16, 2023 Committee meeting, possibly including NPRR1186 depending on the action taken by the Board. Mr. Ögelman confirmed remanding NPRR1186 to TAC for reconsideration of the limited scarcity deployment issue would not delay the RTC+B project.

Other Business (Agenda Item 10)

No other business was discussed at this time.

Vote on Matters from Executive Session; Adjournment (Agenda Items 11 – 12)

Chair Flexon announced that the Committee would not meet in Executive Session. Chair Flexon adjourned the meeting at approximately 5:24 p.m.

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

A handwritten signature in blue ink that reads "Jonathan M. Levine".

Jonathan M. Levine
Assistant Corporate Secretary