



**GENERAL SESSION MINUTES OF THE BOARD OF DIRECTORS MEETING OF
ELECTRIC RELIABILITY COUNCIL OF TEXAS, INC.**

Electric Reliability Council of Texas, Inc.
7620 Metro Center Drive, Room 206
Austin, Texas 78744
December 10, 2019 at 9:00 a.m.

Pursuant to notice duly given, the meeting of the Board of Directors (Board) of Electric Reliability Council of Texas, Inc. (ERCOT), convened on the above-referenced date.

Meeting Attendance:

Board Members:

Director	Affiliation	Segment
Bluntzer, Rick	Just Energy Texas, LP	Independent Retail Electric Provider
Bulger, Terry	Unaffiliated	Unaffiliated Director
Cobos, Lori	Office of Public Utility Counsel (OPUC)	Consumer – Residential
Cramton, Peter	Unaffiliated	Unaffiliated Director
Crowell, Craven (Chairman)	Unaffiliated	Unaffiliated Director (Proxy for Unaffiliated Director Karl Pfirrmann)
Emery, Keith	Tenaska Power Services Co.	Independent Power Marketer
Fehrenbach, Nick	City of Dallas	Consumer – Commercial
Gresham, Kevin	RWE Renewables Americas LLC	Independent Generator
Harper, Sam	Chaparral Steel Midlothian, LP	Consumer – Industrial
Karnei, Clifton	Brazos Electric Power Cooperative, Inc.	Cooperative
Magness, Bill	ERCOT	President and Chief Executive Officer (CEO)
Mercado, Kenny	CenterPoint Energy, Inc.	Investor-Owned Utility
Shellman, Carolyn	CPS Energy	Municipal
Walker, DeAnn	Public Utility Commission of Texas (PUCT, Commission)	Chairman
Walsh, Judy (Vice Chair)	Unaffiliated	Unaffiliated Director



Segment Alternates, Officers and Guests:

Berg, Bill	Exelon Corporation (Independent Generator Segment Alternate)
Bivens, Carrie	ERCOT Manager of Forward Markets
Botkin, Shelly	PUCT Commissioner
Carpenter, Mark	Oncor Electric Delivery Company (Investor-Owned Utility Segment Alternate)
Cochran, Seth	DC Energy Texas, LLC (Independent Power Marketer Segment Alternate)
Day, Betty	ERCOT Vice President of Governance, Risk and Compliance and Chief Compliance Officer
Dreyer, Jerry	ERCOT Senior Vice President and Chief Information Officer
Garza, Beth	Potomac Economics, ERCOT Independent Market Monitor (IMM), Director
Lange, Clif	South Texas Electric Cooperative Inc., TAC Vice Chair
Ledy, Vickie	ERCOT Assistant General Counsel and Assistant Corporate Secretary
Levine, Jonathan	ERCOT Senior Corporate Counsel
Lyons, Glen	ExxonMobil Power and Gas Services, Inc. (Consumer – Industrial Segment Alternate)
Maggio, Dave	ERCOT Senior Manager of Market Analysis and Validation
Mago, Nitika	ERCOT Supervisor of Operations Analysis
Mereness, Matt	ERCOT Director of Compliance
Ögelman, Kenan	ERCOT Vice President of Commercial Operations
Rickerson, Woody	ERCOT Vice President of Grid Planning and Operations
Ross, Ned	Direct Energy (Independent Retail Electric Provider Segment Alternate)
Sargent, Jackie	Austin Energy (Municipal Segment Alternate)
Schwartz, Mark	Golden Spread Electric Cooperative, Inc. (Cooperative Segment Alternate)
Seely, Chad V.	ERCOT Vice President, General Counsel and Corporate Secretary
Spak, Mara	ERCOT Vice President of Human Resources
Tamby, Jeyant	ERCOT Senior Vice President and Chief Administrative Officer
Taylor, Sean	ERCOT Vice President and Chief Financial Officer

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

Craven Crowell, Board Chairman, determined that a quorum was present and called the Board General Session meeting to order at approximately 9:00 a.m.

Chairman Crowell recognized DeAnn Walker, Chairman of the PUCT. Chairman Walker called an Open Meeting of the Commission in order to consider matters which had been duly posted with the Texas Secretary of State for December 10, 2019.

Chairman Crowell noted the Antitrust Admonition and announced that Unaffiliated Director Karl Pfirrmann had provided his proxy to Unaffiliated Director Craven Crowell. Chairman Crowell



announced the Forty-Ninth Annual Meeting of ERCOT Membership would be held later that day at the Austin Marriott South at 11:00 a.m. Chairman Crowell addressed the following Agenda Items in the order below.

Consent Agenda; Unopposed Revision Requests Recommended by Technical Advisory Committee (TAC) for Approval (Agenda Items 2, 2.1, and 2.1.1 – 2.1.14)

Chairman Crowell presented the Consent Agenda. Bill Magness reviewed the cost impacts of the Revision Requests on the Consent Agenda. There were no questions or comments from Board members. Chairman Crowell entertained a motion for the approval of the Consent Agenda as follows:

- NPPRR849, Clarification of the Range of Voltage Set Points at a Generation Resource's POI;
- NPPRR902, ERCOT Critical Energy Infrastructure Information;
- NPPRR928, Cybersecurity Incident Notification;
- NPPRR937, Distribution Voltage Level Block Load Transfer (BLT) Deployment;
- NPPRR941, Create a Lower Rio Grande Valley Hub;
- NPPRR957, RTF-4 Definition of Energy Storage Resource and Related Registration and Telemetry Requirements;
- NPPRR965, GREDP Shutdown Exemption;
- NPPRR968, Revise EEA Level 3 Triggers from 1375 MW to 1430 MW to Align with New Most Severe Single Contingency Value;
- NPPRR969, Clean-up of Protocol 19.8, Retail Market Testing;
- NPPRR972, Enhancing Existing CRR Transaction Limit Process;
- PGRR071, Update Interconnection Process Timetables to Align with NPPRR926;
- SCR800, Addition of DC Tie Ramp to GTBD Calculation;
- SCR805, Provide Early Access to Certain 60-Day Reports to TSPs Upon Request; and
- VCMRR025, Related to NPPRR957, RTF-4 Definition of Energy Storage Resource and Related Registration and Telemetry Requirements.

Kenny Mercado moved to approve the Consent Agenda as presented. Clifton Karnei seconded the motion. The motion passed by unanimous voice vote with no abstentions.

October 8, 2019 General Session Meeting Minutes (Agenda Item 3)

Chairman Crowell entertained a motion to approve the October 8, 2019 General Session Meeting Minutes (Minutes).

Peter Cramton moved to approve the Minutes as presented. Keith Emery seconded the motion. The motion passed by unanimous voice vote with no abstentions.

Chief Executive Officer (CEO) Presentation; CEO Update (Agenda Item 4 and 4.1)

Mr. Magness presented the CEO Update. Mr. Magness reported the 2020-21 Biennial Budget was approved by the Commission and reported on major project updates.

Mr. Magness thanked PUCT Commissioner Arthur D'Andrea and Terry Bulger for attending the GridEx V training exercise. He also recognized Michael Allgeier and other staff members



involved for their work on behalf of ERCOT in planning and implementing ERCOT's involvement in a successful GridEx V training. He recognized several ERCOT staff members for their contributions on the Data Center Technology Refresh, Generation 4 (DC4) project and extended his appreciation to the team for their great work.

At Chairman Crowell's request, Mr. Magness announced that he and Chairman Walker had met with the North American Electric Reliability Corporation (NERC) Board of Directors in November 2019, and he and Chairman Walker commented on the meeting.

Confirmation of 2020 TAC Representatives (Agenda Item 5)

Chairman Crowell entertained a motion for the confirmation of 2020 TAC Representatives.

Mr. Emery moved to confirm the 2020 TAC representatives, as presented. Kevin Gresham seconded the motion. The motion passed by unanimous voice vote with no abstentions.

Independent Market Monitor (IMM) Report (Agenda Item 6)

Beth Garza presented the IMM Report and responded to questions and comments from Board members.

TAC Report (Agenda Item 7)

Clif Lange presented the TAC Report. There were no questions or comments from Board members.

Real-Time Co-Optimization Task Force (RTCTF) Update (Agenda Item 7.1)

Matt Mereness, RTCTF Chair, presented the RTCTF Update and responded to questions and comments from Board members.

2020 ERCOT Methodologies for Determining Minimum Ancillary Service Requirements (Agenda Item 8)

Nitika Mago presented the 2020 ERCOT Methodologies for Determining Minimum Ancillary Service Requirements and responded to questions and comments from Board members.

Carolyn Shellman moved to approve the 2020 ERCOT Methodologies for Determining Minimum Ancillary Service Requirements as presented. Mr. Cramton seconded the motion. The motion passed by unanimous voice vote with no abstentions.

Price Corrections – Current Structure and Future Steps (Agenda Item 9)

Kenan Ögelman presented the Price Corrections – Current Structure and Future Steps. There were no questions or comments from Board Members.

Day-Ahead Market Price Correction for Operating Days September 16-23, 2019 (Agenda Item 9.1)

Carrie Bivens presented the Day-Ahead Market Price Correction for Operating Days September 16-23, 2019, and she and Mr. Ögelman responded to questions and comments from Board members.



Mr. Mercado moved that the Board (1) determine that the Day-Ahead Locational Marginal Prices (DALMPs), Day-Ahead Settlement Point Prices (DASPPs) and Market Clearing Prices for Capacity (MCPCs) affected by a software error on Operating Days September 16-23, 2019 were significantly affected by such software error, and (2) authorize ERCOT staff to implement the appropriate price corrections pursuant to paragraph (5) of Protocol Section 4.5.3. Terry Bulger seconded the motion. The motion passed by unanimous voice vote with no abstentions.

Real-Time Market Price Correction for Operating Days October 16-20, 23-24, 26 & 29-31, 2019 and November 4 & 6, 2019 (Agenda Item 9.2)

Dave Maggio presented the Real-Time Market Price Correction for Operating Days October 16-20, 23-24, 26 & 29-31, 2019 and November 4 & 6, 2019 and responded to questions and comments from Board members.

Mr. Cramton moved that the Board (1) determine that certain Real-Time Locational Marginal Prices (RTLMPs), Real-Time Settlement Point Prices (RTSPPs), Real-Time Settlement Point Prices Energy-Weighted (RTSPPEWs) and EPS Meter Prices (RTRMPRs) for Operating Days October 16-20, 23-24, 26 & 29-31, 2019 and November 4 & 6, 2019 were significantly affected by software errors, and (2) authorize ERCOT staff to implement the appropriate price corrections pursuant to paragraph (6) of Protocol Section 6.3. Mr. Mercado seconded the motion. The motion passed by unanimous voice vote with no abstentions.

Finance and Audit (F&A) Committee Report (Agenda Item 10)

Mr. Bulger, F&A Committee Chairman, reported that the F&A Committee met the prior day and highlighted items discussed at the F&A Committee meeting. Mr. Bulger commended ERCOT staff on a successful 2019 System and Organization Control audit, which was expected to be issued with an unqualified (clean) opinion and with one internal control testing exception, which has since been remediated. There were no questions or comments from Board members.

Acceptance of 2019 System and Organization Control (formerly "Service Organization Control") Audit Report (Agenda Item 10.1)

Mr. Bulger moved to accept the 2019 System and Organization Control Audit Report as recommended by the F&A Committee. Mr. Karnei seconded the motion. The motion passed by unanimous voice vote with no abstentions.

Human Resources and Governance (HR&G) Committee Report; 2020 ERCOT Key Performance Indicators (KPIs) (Agenda Items 11 and 11.1)

Mr. Emery, HR&G Committee Vice Chairman, reported that the HR&G Committee met the prior day and highlighted items discussed at the HR&G Committee meeting. There were no questions or comments from Board members.

Mr. Emery moved to approve the 2020 ERCOT KPIs as presented. Mr. Cramton seconded the motion. The motion passed by unanimous voice vote with no abstentions.



Nominating Committee Report (Agenda Item 12)

Chairman Crowell, who also serves as Nominating Committee Chairman, reported that the Nominating Committee met the prior day and highlighted items discussed at the Nominating Committee meeting. There were no questions or comments from the Board members.

Other Business (Agenda Item 13)

No other business was discussed at this time.

Recess for ERCOT Forty-Ninth Annual Membership Meeting

Chairman Crowell recessed the General Session at approximately 10:19 a.m. for the Forty-Ninth Annual Membership Meeting at Austin Marriott South and announced that the Board would convene in Executive Session upon return from the Membership meeting.

Executive Session

Following the Annual Membership Meeting, Chairman Crowell convened Executive Session at approximately 1:30 p.m. Chairman Crowell reconvened General Session at approximately 1:59 p.m.

Vote on Matters from Executive Session (Agenda Item 14)

Chairman Crowell entertained motions for two matters discussed during Executive Session.

Mr. Bulger moved to select the 2020 Independent System and Organization Control Auditor as recommended by the F&A Committee and as discussed during Executive Session. Mr. Karnei seconded the motion. The motion passed by unanimous voice vote with no abstentions.

Mr. Bulger moved to approve the Contract Matter as recommended by the F&A Committee and as discussed during Executive Session. Mr. Karnei seconded the motion. The motion passed by unanimous voice vote with no abstentions.

Adjournment (Agenda Item 15)

Chairman Crowell adjourned the meeting at approximately 2:00 p.m.

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

A handwritten signature in blue ink, reading "Vickie G. Leady".

Vickie G. Leady
Assistant Corporate Secretary