



**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
October 8, 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 <i>(Not Present for Agenda Items 1 - 6)</i>
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
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
Pfaffmann, Karl	Unaffiliated	Unaffiliated Director
Ross, Ned	Direct Energy	Independent Retail Electric Provider Segment Alternate <i>(Seated for Agenda Items 1 – 6 Only)</i>



Shellman, Carolyn	CPS Energy	Municipal
Walker, DeAnn	Public Utility Commission of Texas (PUCT)	Chairman
Walsh, Judy (Vice Chair)	Unaffiliated	Unaffiliated Director

Segment Alternates, Officers and Guests:

Bivens, Carrie	ERCOT Manager 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) <i>(Not Present for Agenda Items 1 – 4)</i>
D'Andrea, Arthur	PUCT Commissioner
Day, Betty	ERCOT Vice President of Governance, Risk and Compliance and Chief Compliance Officer
Fox, Kip	Electric Transmission Texas (ETT)
Garza, Beth	Potomac Economics, ERCOT Independent Market Monitor (IMM), Director
Helton, Bob	ENGIE Resources LLC, Technical Advisory Committee (TAC) Chair
Lange, Clif	South Texas Electric Cooperative Inc., TAC Vice Chair
Leady, 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
Mereness, Matt	ERCOT Director of Compliance
Ögelman, Kenan	ERCOT Vice President of Commercial Operations
Reedy, Steve	Potomac Economics, ERCOT IMM, Deputy Director
Rickerson, Woody	ERCOT Vice President of Grid Planning and Operations
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 Human Resources
Tamby, Jeyant	ERCOT Senior Vice President and Chief Administrative Officer
Taylor, Sean	ERCOT Vice President and Chief Financial Officer
Woodfin, Dan	ERCOT Senior Director Systems Operations

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 9:01 a.m.



Chairman Crowell recognized DeAnn Walker, Chairman of the PUCT. Chairman Walker called an Open Meeting of the Commission to order to consider matters which had been duly posted with the Texas Secretary of State for October 8, 2019. Chairman Walker announced Commissioner Shelly Botkin had been reappointed to serve at the PUCT for a term set to expire on September 1, 2025.

Chairman Crowell noted the Antitrust Admonition, announced that Ned Ross, Independent Retail Electric Provider Segment Alternate, was attending in Rick Bluntzer's temporary absence, and 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, 2.1.1 – 2.1.22, and 2.2)

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 reported that Carolyn Shellman would be abstaining from the vote with respect to Agenda Item 2.2, Applications for Permanent Site-Specific Exemption – CPS Energy, due to her employment with CPS Energy.

Chairman Crowell reported that subsequent to TAC's vote to recommend approval of Nodal Operating Guide Revision Request (NOGRR) 191, Related to Nodal Protocol Revision Request (NPRR) 939, Modification to Load Resources Providing RRS to Maintain Minimum PRC on Generators During Scarcity Conditions, ERCOT submitted comments on September 26, 2019 to align proposed language with the incorporation into the Nodal Operating Guides of NOGRR187, Related to NPRR863, Creation of ERCOT Contingency Reserve Service and Revisions to Responsive Reserve. Chairman Crowell entertained a motion for the approval of the Consent Agenda as follows, each as recommended for approval by TAC unless otherwise noted:

- NPRR918, Validation for PTP Obligations with Links to an Option;
- NPRR930, Process, Pricing, and Cost Recovery for Delayed Resource Outages – URGENT;
- NPRR936, CRR Account Holder Limits;
- NPRR939, Modification to Load Resources Providing RRS to Maintain Minimum PRC on Generators During Scarcity Conditions;
- NPRR940, Removal of Language Related to NPRR664, Fuel Index Price for Resource Definition and Real-Time Make-Whole Payments for Exceptional Fuel Cost Events;
- NPRR948, Instrument Transformer Testing Schedule and Removal of Reference to Fiber-Optic Current Transformers;
- NPRR950, Switchable Generation Resources Providing Black Start Service – URGENT;
- NPRR951, Active and Inactive SCED Constraint Reporting;
- NPRR952, Use of Katy Hub for the Fuel Index Price;
- NPRR954, Allow Opt Out of 867 EPS Data;
- NPRR958, Modifications to Wind and Solar Capacity Calculations in the CDR;



- NPRR959, Creation of a Panhandle Region for Calculation of Seasonal Peak Average Capacity Contributions for Wind;
- NPRR960, Phased Approach and Clarifications for NPRR863, Creation of ERCOT Contingency Reserve Service and Revisions to Responsive Reserve;
- NPRR961, Related to NOGRR194, Relocate Black Start Training Attendance Requirements to Nodal Operating Guides;
- NPRR962, Publish Approved DC Tie Schedules;
- NOGRR191, Related to NPRR939, Modification to Load Resources Providing RRS to Maintain Minimum PRC on Generators During Scarcity Conditions, as amended by the September 26, 2019 ERCOT comments;
- NOGRR194, Relocate Black Start Training Attendance Requirements to Nodal Operating Guides;
- PGRR072, Treatment of Generation Resource Retirement and Mothball in Regional Transmission Plan and Geomagnetic Disturbance Vulnerability Assessment;
- SCR803, Enhance Wind Integration Report and Create Solar Integration Report and Solar Dashboard;
- SCR804, ERCOT GridGeo Access for Transmission Operators;
- SMOGRR022, Related to NPRR948, Instrument Transformer Testing Schedule and Removal of Reference to Fiber-Optic Current Transformers;
- VCMRR023, Related to NPRR940, Removal of Language Related to NPRR664, Fuel Index Price for Resource Definition and Real-Time Make-Whole Payments for Exceptional Fuel Cost Events; and
- Applications for Permanent Site-Specific Exemption from Compliance with Paragraph (6) of Protocol Section 10.3.2.3, Generating Netting for ERCOT-Polled Settlement Meters (Air Liquide Large Industries U.S. LP and CPS Energy).

Clifton Karnei moved to approve the Consent Agenda as presented. Kenny Mercado seconded the motion. The motion passed by unanimous voice vote with one abstention on Agenda Item 2.2, Applications for Permanent Site-Specific Exemption – CPS Energy (Carolyn Shellman).

August 13, 2019 General Session Meeting Minutes (Agenda Item 3)

Chairman Crowell entertained a motion to approve the August 13, 2019 General Session Meeting Minutes (Minutes).

Peter Cramton moved to approve the Minutes as presented. Mr. Mercado seconded the motion. The motion passed by unanimous voice vote with two abstentions (Sam Harper and Ned Ross).

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

Mr. Magness presented the CEO Update. He extended his appreciation to everyone who attended ERCOT's Market Segment meetings. Mr. Magness announced Manager of Operations Planning Sandip Sharma will lead ERCOT's Battery Energy Storage Task Force (BESTF), and thanked the ERCOT grid operators who led ERCOT through a record-setting peak and two Energy Emergency Alerts (EEAs) on August 13 and 15, 2019. There were no questions or comments from Board members.



Summer 2019; Summer 2019 Operational and Market Review (Agenda Items 5 and 5.1)

Mr. Magness introduced Dan Woodfin and Carrie Bivens, who presented the Summer 2019 Operational and Market Review. Mr. Woodfin and Ms. Bivens responded to questions and comments from Board members and noted a minor correction to the presentation which would be posted to the ERCOT website

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

Beth Garza presented the IMM Report. Ms. Garza, Steve Reedy and Kenan Ögelman responded to questions and comments from Board members.

Real-Time Co-Optimization (RTC); Real-Time Co-Optimization Task Force (RTCTF) Update (Agenda Items 7 and 7.1)

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

Board Education on RTC (Agenda Item 7.2)

Mr. Mereness and Dave Maggio presented the Board Education on RTC and responded to questions and comments from Board members.

Break

Chairman Crowell recessed the General Session for break at approximately 11:08 a.m. and reconvened the General Session at approximately 11:25 a.m.

TAC Report (Agenda Item 8)

Bob Helton, TAC Chairman, presented the TAC Report. Mr. Helton, Mr. Magness and Woody Rickerson responded to questions and comments from Board members.

ERCOT Recommendation to PUC Project No. 46304, Oversight Proceeding Regarding ERCOT Matters Arising Out of PUC Docket No. 45624 Relating to DC Tie Project Proposed by Southern Cross Transmission, LLC, Directive 4 – ERCOT Determination regarding Development of Methodology for Outage Coordination (Agenda Item 9)

Mr. Mereness presented the ERCOT Recommendation to PUC Project No. 46304, Oversight Proceeding Regarding ERCOT Matters Arising Out of PUC Docket No. 45624 Relating to DC Tie Project Proposed by Southern Cross Transmission, LLC, Directive 4 – ERCOT Determination regarding Development of Methodology for Outage Coordination. There were no questions or comments from Board members.

Mr. Mercado moved to accept ERCOT staff's determination on Directive 4 that no further modifications to ERCOT's Outage Coordination systems are necessary to facilitate Outage Coordination following the interconnection of the Southern Cross Transmission, LLC (SCT) Direct Current Tie (DC Tie) because improvements introduced by NPRR825, Require ERCOT to Issue a DC Tie Curtailment Notice Prior to Curtailing any DC Tie Load, coupled with ERCOT's ability to curtail DC Tie flows as necessary, enable ERCOT to reliably and cost-effectively manage the impacts of Outages. Karl



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

Electric Transmission Texas (ETT) Update on CREZ Work (Agenda Item 10)

Chairman Crowell introduced Kip Fox of Electric Transmission Texas (ETT) and expressed appreciation on behalf of the Board for Mr. Fox's attendance. Mr. Fox presented the ETT Update on CREZ Work and responded to questions and comments from Board members.

South Central Cold Weather Event – ERCOT Assessment of FERC/NERC Recommendations (Agenda Item 11)

Mr. Rickerson presented the South Central Cold Weather Event – ERCOT Assessment of FERC/NERC Recommendations. Chairman Walker commented on the report and thanked Mr. Rickerson and ERCOT staff for their efforts.

Finance and Audit (F&A) Committee Report (Agenda Item 12)

Terry Bulger, F&A Committee Chair, reported that the F&A Committee met the prior day and highlighted items discussed at the F&A Committee meeting. There were no questions or comments from Board members.

Human Resources and Governance (HR&G) Committee Report; Ratification of Officers (Agenda Items 13 and 13.1)

Karl Pfirmsmann, HR&G Committee 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. Pfirmsmann invited Mr. Magness to discuss Ratification of Officers and the retirement of Michael Petterson, former Vice President and Chief Financial Officer, in the near future. Mr. Magness also announced that Mara Spak had been promoted to Vice President of Human Resources and Sean Taylor had been promoted to Vice President and Chief Financial Officer. Mr. Magness thanked Mr. Petterson for his years of dedicated service and wished him well.

Mr. Magness moved to approve the ratification of Mara Spak as Vice President of Human Resources and Sean Taylor as Vice President and Chief Financial Officer, as recommended by the HR&G Committee. Mr. Pfirmsmann seconded the motion. The motion passed by unanimous voice vote with no abstentions.

Other Business (Agenda Item 14)

No other business was discussed at this time.

Executive Session; Vote on Matters from Executive Session; and Adjournment (Agenda Items 15 and 16)

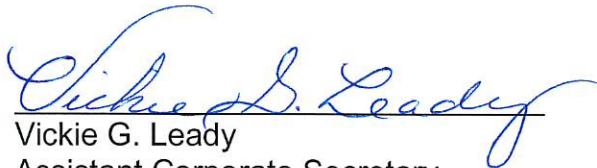
Chairman Crowell announced that no voting items from Executive Session were expected; accordingly, he would adjourn the meeting immediately upon conclusion of Executive Session. Chairman Crowell recessed General Session at approximately 12:22 p.m. to convene Executive Session at approximately 12:37 p.m.



There were no voting items from Executive Session.

Chairman Crowell adjourned the meeting upon the conclusion of Executive Session at approximately 2:21 p.m.

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


Vickie G. Leady
Assistant Corporate Secretary