

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

April 16, 2012; 9:00 a.m. to 12:00 p.m.; and Continuing April 17, 2012; 9:00 a.m. to 4:00 p.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:

Affiliation	Segment
Topaz Power Holdings LLC	Independent Generator Segment Alternate
Unaffiliated	Unaffiliated Director
Valero Services, Inc.	Industrial Consumer (except for Agenda
	Items 6 and 7)
ERCOT	President and Chief Executive Officer
	(CEO)
Austin Energy	Municipal [except for Nodal Protocol
	Revision Requests (NPRRs) 327 and 450
	portions of Agenda Item 13a]; Proxy to
	Clifton Karnei for NPRR 451 and 327
	portions of Agenda Item 13a and Agenda
	Items 14 through 27
City of Dallas	Commercial Consumer
Office of Public Utility Counsel	Residential Consumer
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Stream Energy	Independent Retail Electric Provider
Decree Electric D	(REP)
	Cooperative; Proxy for Jorge Bermudez;
Cooperative, Inc.	Proxy for Mark Dreyfus for NPRRs 451
	and 327 portions of Agenda Item 13a and
Public Litility Commission of	Agenda Items 14 through 27
•	Chairman (except for Agenda Items 6 and 7)
	Unaffiliated Director
Chairmatou	Chairmated Difector
CenterPoint Energy Houston	Investor Owned Utility
	mivestor owned ounity
Constellation Energy	Independent Power Marketer (except for
	Topaz Power Holdings LLC Unaffiliated Valero Services, Inc. ERCOT Austin Energy City of Dallas Office of Public Utility Counsel Stream Energy Brazos Electric Power Cooperative, Inc. Public Utility Commission of Texas (PUCT) Unaffiliated CenterPoint Energy Houston Electric LLC



	Commodities Group	NPRR327 portion of Agenda Item 13a)
Walsh, Judy	Unaffiliated	Unaffiliated Director
(Vice Chair)		

Guests:

Bowling, Shannon	Cirro Group (Independent REP Segment Alternate)	
Brown, Jeff	Shell Energy North America (US) LP (Independent Power Marketer	
	Segment Alternate) (Except for Agenda Items 1 through 4)	
Day, Betty	ERCOT Vice President of Business Integration	
Dreyer, Jerry	ERCOT Vice President and Chief Information Officer	
Dumas, John	ERCOT Director of Wholesale Market Operations	
Hellinghausen, Bill	EDF Trading	
Hobbs, Kristi	ERCOT Manager of Market Rules and Stakeholder Support	
Jones, Dan	Potomac Economics Director, ERCOT Independent Market Monitor	
Leady, Vickie	ERCOT Assistant General Counsel and Assistant Corporate Secretary	
Magness, Bill	ERCOT Vice President, General Counsel and Corporate Secretary	
Manning, Chuck	ERCOT Vice President of Human Resources and Chief Compliance Officer	
Mickey, Joel	ERCOT Director Market Design and Development	
Newell, Sam	The Brattle Group	
Ogelman, Kenan	CPS Energy, Technical Advisory Committee (TAC) Chair	
Petterson, Mike	ERCOT Vice President of Finance and Treasury	
Ruane, Mark	ERCOT Vice President of Credit and Enterprise Risk Management	
Saathoff, Kent	ERCOT Vice President of Grid Operations and System Planning	
Schwertner, Ray	Garland Power & Light (Municipal Segment Alternate) (Agenda Items 1	
	through 4 only)	
Seely, Chad	ERCOT Assistant General Counsel	
Wattles, Paul	ERCOT Senior Market Design Analyst	

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

Craven Crowell, Board Chairman, determined a quorum was present and called the meeting to order at approximately 9:04 a.m. Chairman Crowell noted the Antitrust and Security Admonition. He announced that Clifton Karnei held a proxy for Jorge Bermudez and that Barbara Clemenhagen was attending as the Segment Alternate for the Independent Generator Segment in Kevin Gresham's absence. Chairman Crowell briefly reviewed the Board meeting schedule for April 16 and 17, 2012. He provided a statement on the importance of resource adequacy in the ERCOT Region and ERCOT's ongoing resource adequacy efforts. Chairman Crowell reported on ERCOT's engagement of The Brattle Group to evaluate the ERCOT market's investment incentives related to resource adequacy.

Chairman Crowell addressed the following Agenda Items in the order below.

Status Update of The Brattle Group's Evaluation of ERCOT Investment Incentives (Agenda Item 2)

Chairman Crowell introduced Joel Mickey, ERCOT Director of Market Design and Development. Mr. Mickey announced that The Brattle Group would provide a presentation and introduced Sam Newell, Principal of The Brattle Group. Mr. Newell reviewed the Status Update of The Brattle Group's



Evaluation of ERCOT Investment Incentives presentation with the Board. Mr. Newell responded to questions and comments from the Board.

Executive Session (Agenda Items 3 and 4)

Chairman Crowell adjourned the meeting into Executive Session at approximately 9:16 a.m. on Monday, April 16, 2012. Chairman Crowell recessed Executive Session at approximately 12:10 p.m. on Monday, April 16, 2012.

Reconvene Open Session and Announce Proxies at 9:00 a.m. on Tuesday, April 17, 2012 (Agenda Item 5)

Chairman Crowell determined a quorum was present and reconvened the Open Session of the Board Meeting at approximately 9:00 a.m., on Tuesday, April 17, 2012. He announced that Clifton Karnei held a proxy for Jorge Bermudez and that Barbara Clemenhagen was attending as the Segment Alternate for the Independent Generator Segment in Kevin Gresham's absence. He reported that the Board did not vote on any Executive Session items on the prior day.

Consent Agenda (Agenda Item 6)

Chairman Crowell entertained a motion for the approval of the Consent Agenda as follows:

- Unopposed Revision Requests Recommended by the Technical Advisory Committee (TAC) for Approval:
 - Nodal Protocol Revision Request (NPRR) 393, Security Constrained Economic Dispatch (SCED) Constraint Management Transparency;
 - NPRR394, Outage Reporting;
 - NPRR397, Balance of the Day Ancillary Service Market;
 - NPRR402, Clarification of Pre-Day-Ahead Market (DAM) Reliability Unit Commitment (RUC) Instruction Sequence;
 - NPRR419, Revise Real-Time Energy Imbalance and Reliability Must Run (RMR) Adjustment Charge;
 - NPRR421, Clarification of RMR Notification;
 - NPRR424, Reactive Capability Testing Requirements for Intermittent Renewable Resources (IRRs);
 - NPRR430, Corrections Related to NPRR357, Revisions to Collateral Requirements Concerning Congestion Revenue Rights (CRR) Auctions, and Clarification to Collateral Requirements;
 - NPRR431, Board Priority Revision Requests;
 - NPRR433, Clarification of Ancillary Service Obligation Calculation Process;
 - NPRR448, Clarification of Database Query Results URGENT;
 - NPRR449, Reduce Maximum CRR Transaction Limit in Auctions URGENT;
 - Planning Guide Revision Request (PGRR) 010, New Planning Guide Section 6.7, ERCOT Data Dictionary;
 - PGRR012, Dynamics Working Group Guidelines;
 - PGRR013, New Section 6.3, Process for Developing Short Circuit Cases [Portion of System Protection Working Group (SPWG) Procedures];
 - PGRR014, Synchronization with NPRR374, Modification of System Change Request (SCR) Process and Urgency Requirements;



- SCR768, Automatic Non-Spin Redeployment and Deployment Based on Resource Availability;
 and
- SCR769, Congestion Revenue Rights Account Holder (CRRAH) Digital Certificate New Role for Read Only Access.

Karl Pfirrmann moved to approve the Consent Agenda as presented. Sheri Givens seconded the motion. The motion passed by unanimous voice vote with no abstentions.

Approval of February 21, 2012 Board of Directors Meeting Minutes (Agenda Item 7)

Chairman Crowell entertained a motion to approve the February 21, 2012 Board of Directors Meeting minutes (Minutes) as presented.

Mr. Pfirrmann moved to approve the Minutes as presented. Ms. Givens seconded the motion. The motion passed by unanimous voice vote with no abstentions.

CEO Update (Agenda Item 9)

H.B. "Trip" Doggett, ERCOT President and CEO, provided Board members with the CEO Update, which included a brief overview of Governor Rick Perry's tour of the ERCOT Taylor facility, and responded to questions and comments from Board members. Mr. Doggett recognized Dottie Roark, ERCOT Manager of Corporate Communications, for her contributions and years of service to ERCOT.

Financial Summary and Operating Reports (Agenda Item 10)

Mr. Doggett entertained questions on the Financial Summary Report, but there were none. He reviewed highlights from the newly formatted Operating Reports. Mr. Doggett noted that the supporting data for the Operating Reports will be posted monthly on the ERCOT website. He encouraged feedback from the Board with regard to any suggested changes. Chairman Crowell thanked Judy Walsh, Board Vice Chair, for her assistance in creating this new format. Vice Chair Walsh acknowledged ERCOT staff and thanked them for their assistance. There were no questions or comments from Board members regarding the Operating Reports.

Update on March 16, 2012 Special Meeting of Corporate Members (Agenda Item 8)

Bill Magness, ERCOT Vice President, General Counsel and Corporate Secretary, provided an update on the March 16, 2012 Special Meeting of Corporate Members and indicated that the meeting was canceled as the required number of Corporate Member ballots supporting Michehl Gent's re-election was timely received prior to the meeting. Mr. Magness reported that ERCOT filed its petition for PUCT approval of Mr. Gent's re-election as an Unaffiliated Director and that this matter may be considered by the PUCT at either the April 27, 2012 or May 18, 2012 PUCT Open Meeting.

Scenario Analysis - Natural Gas Risk Study (Agenda Item 11)

Kent Saathoff, ERCOT Vice President of Grid Operations and System Planning, presented the Scenario Analysis for Gas Risk Study, which was requested at the February 21, 2012 Board Meeting, and responded to questions and comments from Board members.

Independent Market Monitor (IMM) Report (Agenda Item 12)

Dan Jones, Director with Potomac Economics, the ERCOT IMM, provided Board members with the IMM Report and responded to questions and comments from Board members.



Technical Advisory Committee (TAC) Update (Agenda Item 13)

Kenan Ogelman, TAC Chair, presented the TAC Update and responded to questions and comments from Board members. The discussion continued later in the meeting.

Non-Unanimous Revision Requests Recommended by TAC for Approval (Agenda Item 13a)

Mr. Ogelman presented the Revision Requests, referenced below, to the Board which TAC recommended for Board Approval.

NPRR327, State Estimator Data Redaction Methodology

Mr. Ogelman, Ms. Clemenhagen and Mr. Doggett responded to Board members' questions and comments regarding NPRR327.

Chairman Crowell moved to approve NPRR327 as recommended by TAC in the March 1, 2012 TAC Report. The motion passed by voice vote with ten in favor (Chairman Crowell, Mr. Doggett, Nick Fehrenbach, Ms. Givens, Eric Hendrick, Mr. Karnei on his behalf and as proxy for Mr. Bermudez, Mr. Pfirrmann, Scott Prochazka and Vice Chair Walsh), two opposed (Ms. Clemenhagen and Andrew Dalton), and no abstentions. The discussion regarding NPRR327 continued later in the meeting.

• NPRR405, Clarification of Direct Current (DC) Tie Load into Operational Systems and Processes

Mr. Ogelman, various Board members, and Bill Hellinghausen of EDF Trading discussed NPRR405.

Mr. Dalton moved to approve NPRR405 as recommended by TAC in the February 2, 2012 TAC Report and with direction to ERCOT staff to revisit the subject matter of NPRR405 with TAC and the Board if ERCOT ever increases its total DC tie capacity above 1,500 megawatts as part of the consideration of any future project. Ms. Ryall seconded the motion. The motion passed by unanimous voice vote with no abstentions.

 NPRR450, Revise Requirements for Contracts to Procure Additional Capacity to Alleviate <u>Emergency Conditions – URGENT</u>

Mr. Ogelman and various Board members discussed NPRR450.

Mr. Pfirrmann moved to approve NPRR450 as recommended by TAC in the April 5, 2012 TAC Report. Vice Chair Walsh seconded the motion. The motion passed by unanimous voice vote with no abstentions.

• NPRR451, Implementation of New P.U.C. SUBST. Rule 25.507, Electric Reliability Council of Texas (ERCOT) Emergency Response Service (ERS) – URGENT

Mr. Ogelman noted that ERCOT staff had submitted comments on NPRR451 to the Board after the April 2012 TAC meeting. Mr. Ogelman, various Board members, Mr. Magness, Paul Wattles, ERCOT



Senior Market Design Analyst, and Chad Seely, ERCOT Assistant General Counsel, discussed NPRR451 and the related ERCOT comments. Mark Dreyfus provided his proxy to Clifton Karnei.

Ms. Ryall moved to approve NPRR451 as recommended by TAC in the April 5, 2012 TAC Report and as amended by the April 9, 2012 ERCOT comments. Mr. Dalton seconded the motion. The motion passed by unanimous voice vote with no abstentions.

Technical Advisory Committee (TAC) Update (Agenda Item 13) - Continued

Mr. Ogelman concluded the TAC Update and responded to Board members' questions and comments.

Non-Unanimous Revision Requests Recommended by TAC for Approval (Agenda Item 13a) - Continued

NPRR327, State Estimator Data Redaction Methodology – Continued

In response to Mr. Magness' clarification regarding the lack of a second on the motion to approve NPRR327 earlier in the meeting, Chairman Crowell moved to approve NPRR327 as recommended by TAC in the March 1, 2012 TAC Report. Mr. Pfirrmann seconded the motion. The motion passed by voice vote with eleven in favor (Chairman Crowell, Mr. Doggett, Mr. Fehrenbach, Ms. Givens, Mr. Hendrick, Mr. Karnei on his behalf and as proxy for both Mr. Bermudez and Mr. Dreyfus, Mr. Pfirrmann, Mr. Prochazka and Vice Chair Walsh), two opposed (Ms. Clemenhagen and Mr. Dalton), and no abstentions.

Finance & Audit (F&A) Committee Report (Agenda Item 14)

Mr. Karnei, F&A Committee Chairman, reported that the F&A Committee met on the prior day and highlighted the items discussed at the F&A Committee Meeting.

Approval of Modifications to the Standard Form Surety Bond (Agenda Item 14a);

Approval of the F&A Committee Charter (Agenda Item 14b);

Approval of Financial Corporate Standard (Agenda Item 14c);

Approval of Investment Corporate Standard (Agenda Item 14d); and

Acceptance of 2011 Audited Financial Statements (Agenda Item 14e)

Mr. Karnei reported that the F&A Committee recommended the following to the Board:

- a. Approval of Modifications to the Standard Form Surety Bond as presented;
- b. Approval of the F&A Committee Charter as presented;
- c. Approval of the Financial Corporate Standard as presented;
- d. Approval of the Investment Corporate Standard as presented; and
- e. Acceptance of the 2011 Audited Financial Statements.

Mr. Karnei moved to approve the modifications to the standard form of Surety Bond, the F&A Committee Charter, the Financial Corporate Standard and the Investment Corporate Standard, and to accept the 2011 audited financial statements, all as recommended by the F&A Committee. Mr. Hendrick seconded the motion. The motion passed by unanimous voice vote with no abstentions.

Human Resources & Governance (HR&G) Committee Report (Agenda Item 15)



Mr. Dalton, HR&G Committee Chairman, reported that the HR&G Committee met on the prior day and highlighted the items discussed at the HR&G Committee Meeting.

Approval of HR&G Committee Charter (Agenda Item 15a)

Mr. Dalton reported that the HR&G Committee recommended Board approval of the proposed revisions to the HR&G Committee Charter as presented with one additional change (modification of reference from "organization" to "ERCOT").

Mr. Dalton moved to approve the HR&G Committee Charter as recommended by the HR&G Committee. Mr. Pfirrmann seconded the motion. The motion passed by unanimous voice vote with no abstentions.

Annual Status Report Concerning 2011 Activities of the Benefits Committee (Agenda Item 15b)

Mr. Dalton reported that the HR&G Committee recommended Board acceptance of the annual status report concerning the 2011 activities of the Benefits Committee.

Mr. Dalton moved to accept the annual status report of the 2011 activities of the Benefits Committee as recommended by the HR&G Committee. Ms. Clemenhagen seconded the motion. The motion passed by unanimous voice vote with no abstentions.

<u>Proposed Modifications to 2012 Board Meeting Schedule, including 2012 Strategic Planning Event</u> (Agenda Item 16)

Chairman Crowell invited discussion on ERCOT staff's recommendation of the proposed 2012 Board Meeting Schedule. After discussion, Chairman Crowell requested that the Board revisit this topic at the next regularly-scheduled Board meeting.

Quarterly Board Strategic Planning Update (Agenda Item 17)

Mr. Doggett provided the Quarterly Board Strategic Planning Update to the Board.

Adjunct Membership Approval of Siemens Energy for Membership Year 2012 (Agenda Item 18)

Mr. Magness presented the requested Adjunct Membership approval of Siemens Energy for Membership Year 2012.

Mr. Karnei moved to approve the Adjunct Membership of Siemens Energy for Membership Year 2012. Ms. Clemenhagen seconded the motion. The motion passed by unanimous voice vote with no abstentions.

Future Agenda Items (Agenda Item 19)

There was no discussion of future agenda items at this time.

Other Business (Agenda Item 20)

There was no discussion of other business at this time.

Executive Session (Agenda Items 21 through 27)

Chairman Crowell adjourned the meeting into Executive Session at approximately 11:50 a.m. and reconvened Open Session at approximately 12:45 p.m.



Vote on Matters from Executive Session (Agenda Item 28)

After reconvening to Open Session, Chairman Crowell called for a motion to approve matters from Executive Session.

Mr. Dalton moved to approve the Personnel matter noted in the Executive Session meeting materials as Agenda Item 22a as discussed in Executive Session. Ms. Givens seconded the motion. The motion passed by unanimous voice vote with one abstention (Mr. Doggett).

Ms. Clemenhagen moved to approve the Litigation and Regulatory matter noted in the Executive Session meeting materials as Agenda Item 26a as discussed in Executive Session. Mr. Dalton seconded the motion. The motion passed by unanimous voice vote with no abstentions.

Mr. Karnei moved to approve the Contract Matters noted in the Executive Session meeting materials as Agenda Items 27a and 27b as discussed in Executive Session. Mr. Hendrick seconded the motion. The motion passed by unanimous voice vote with no abstentions.

Adjournment (Agenda Item 29)

Chairman Crowell adjourned the meeting at approximately 12:47 p.m.

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

Bill Magness

Vice President, General Counsel and Corporate Secretary