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 January 15, 2008 at 10:00 a.m.

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

Meeting Attendance:

Board Members:

<u>Director</u>	<u>Affiliation</u>	Segment
Armentrout, Mark		Unaffiliated; Board Chairman
Ballard, Don	OPUC	Consumers/Residential & Small Commercial
Cox, Brad	Tenaska Power Services	Independent Power Marketers
Espinosa, Miguel		Unaffiliated
Fehrenbach, Nick	City of Dallas	Consumers/Commercial; Proxy for
		Andrew Dalton
Gallagher, Carolyn Lewis		Unaffiliated
Gent, Michehl		Unaffiliated; Board Vice-Chairman
Helton, Bob	International Power	Independent Generators
	America	
Crowder, Calvin	Electric Transmission	Segment Alternate - Investor-Owned
	Texas	Utilities
Kahn, Bob	ERCOT President/CEO	
Karnei, Clifton	Brazos Electric Coop	Electric Cooperatives
Newton, Jan		Unaffiliated
Smitherman, Barry T.	PUCT Chairman	PUCT
Thomas, Robert	Green Mountain Energy	Independent Retail Electric Providers
Wilkerson, Dan	Bryan Texas Utilities	Municipally-Owned Utilities

Staff and Guests:

Parsley, Julie	PUCT Commissioner
Hudson, Paul	PUCT Commissioner
Allen, Tom	SUEZ
Ashley, Kristy	Exelon
Bartley, Steve	CPS Energy
Bell, Wendell	TPPA
Bojorquez, Bill	ERCOT
Brandt, Adrianne	PUCT
Brewster, Chris	City of Eastland

Bruce, Mark
Carlson, Trent
Cochran, Seth
Coffing, Timothy
Coleman, Katie
Comstock, Read
Crowder, Calvin

FPL Energy
Reliant
Sempra
Luminant
TIEC
Strategic
AEP / ETT

Crozier, Richard Brownsville Public Utility Board

Damen, Lauren
Day, Betty
Drost, Wendell
Firestone, Joel
Fleming, Kevin
PUCT Staff
ERCOT
AREVA
Direct Energy
Oxford Commercial

Forfia, David ERCOT

Formier, M Competitive Assets

Gage, Theresa ERCOT Goff, Eric Constellation

Goodson, Susan Public Utility Commission

Grable, Mike ERCOT

Greer, Clayton J Aron & Company

Grendel, Steve ERCOT Haas, Jason PUCT

Hanson, Pat Public Utility Commission of Texas

Heino, Shari Mathews & Freeland

Hendrix, Larry Lower Colorado River Authority

Hobbs, Kristi ERCOT

Houston, John CenterPoint Energy

Jones, Randy Calpine
Kelso, King King Energy
Leech, Bob Citigroup
List, Amanda Strategic

Mendez-Lewis, Maria Comptroller's Office

Morris, Sandy Lower Colorado River Authority

Oldham, Phillip TIEC

Orr, John Constellation

Owens, Frank TMPA
Parviz, Adib APX
Pitts, John TREIA

Rexrode, Caryn Customized Energy Solutions

Roark, Dottie ERCOT

Robinson, Lane Texas Regional Entity

Seely, Chad ERCOT Seymour, Cesar SUEZ

Shumate, Walt Shumate & Associates

Smithson, Dave Public Utility Commission

Torrent, Gary Lehman Brothers

Troxtell, David ERCOT

Vincent, Susan Texas Regional Entity
Walker, DeAnn CenterPoint Energy

Wallace, Mark NRG Texas Wulleniohn, William ERCOT

Zlotnik, Marcie StarTex Power

1. Call to Order/Announcements

Mark Armentrout, Chairman, called the meeting to order at approximately 10:10 a.m., pointed out the Antitrust Admonition and determined a quorum was present. Chairman Smitherman called to order an open meeting of the Public Utility Commission of Texas (PUCT).

Chairman Armentrout thanked ERCOT management and staff for a good 2007.

2. <u>Election of CEO and Ratification of Other Officers</u>

Mr. Espinosa moved to approve the Resolution attached hereto as Attachment A, electing Bob Kahn to serve as ERCOT President and Chief Executive Officer (CEO) for the year 2008 and approving the following slate of Officers for the year 2008:

Raymond A. Giuliani – Vice-President and Chief of Market Operations

Ronald J. Hinsley - Vice-President and Chief Information Officer

Steve Byone - Vice-President and Chief Financial Officer

Nancy Capezzuti - Vice-President of Human Resources and Organizational Development

Bill Bojorquez - Vice-President of System Planning

Kent Saathoff - Vice-President of System Operations

Michael G. Grable - Vice-President, General Counsel and Corporate Secretary

Mr. Gent seconded the motion. The motion passed by unanimous voice vote, with no abstentions.

3. Consent Agenda

The following items were handled in the consent agenda:

- Item 4 Approval of Minutes
- Item 8b (PRR738, PRR744, PRR748)

Mr. Kahn pointed out, with respect to PRR744, that best practices require obtaining financial data from the Qualified Scheduling Entity (QSE) and its Guarantor, if any. Nonetheless, ERCOT staff realizes that Market Participants have chosen to vary from the best practice.

Mr. Helton moved to approve the items on the Consent Agenda. Mr. Fehrenbach seconded the motion. The motion passed by unanimous voice vote with no abstentions.

Chairman Armentrout then thanked Suzi McClellan for her service on the ERCOT Board of Directors for the last few years and invited Don Ballard, Ms. McClellan's replacement, to introduce himself. Mr. Ballard stated he was with the Texas Workforce Commission for the last five years before moving to the Office of Public Utility Counsel (OPUC). He previously worked at the Public Utility Commission of Texas (PUCT) and the Attorney General's office.

4. Approval of Minutes

This item was handled in the consent agenda.

5. Chief Executive Officer Report

Bob Kahn, ERCOT President and Chief Executive Officer (CEO), reported that the Capacity, Demand and Reserves report shows favorable numbers with respect to reserve margins compared with previous data.

Mr. Kahn also mentioned that a vendor, Oliver Wyman, is concluding its credit study and a report will come to the Directors in February 2008. In light of preliminary study results, ERCOT financial personnel are looking at various credit-related issues. Mr. Karnei, Chair of the Finance & Audit (F&A) Committee, mentioned that PJM Interconnection, LLP (PJM) recently had \$80 million in credit defaults recently and, therefore, this is a timely issue.

6. Operating Reports

Chairman Armentrout invited comments or questions regarding the Financial Summary, Market Operations Report, Grid Operations Report and Information Technology (IT) Report.

Chairman Armentrout commented that he considers the continuing downward trend in switching activity a signal that the market is working. Mr. Gent asked a question about using August 2006 as the peak reference point in the Market Operations Report. Ray Giuliani, Vice-President and Chief of Market Operations, stated that the peak has remained essentially the same since that time. Kent Saathoff, Vice-President of System Operations, concurred.

7. Nodal Update and Budget Presentation

Jerry Sullivan, Executive Director of the Texas Nodal Market Implementation Program (TNMIP), provided an update on the Program. He stated that the "Cost" category has moved to

"red" status due to the estimate at completion for the TNMIP exceeding 10% more than the original \$263 million budget.

He then explained that, as part of the TNMIP, approximately 3,500 requirements were developed from approximately 1,700 Protocols subsections. This work yielded over 1,900 test scripts, of which 1,176 have passed testing so far. Currently, Load Frequency Control (LFC) is going through testing and the TNMIP is going through some significant milestones. The Program team remains confident the new market design can be implemented by December 1, 2008.

Mr. Sullivan then presented some of the major risks facing the TNMIP. The delivery date for the Market Management System (MMS) will have the highest impact on the TNMIP timeline. However, the likelihood of a delay is low. Infrastructure constraints (power, space, cooling) are causing difficulty for the team, but they have developed work-arounds. Finally, integration of the Common Information Module (CIM) poses a threat to a timely go-live. Mr. Gent asked whether the vendors are taking CIM integration seriously. Ron Hinsley, ERCOT CIO, stated that this is a bit of an issue, but there are reasons for the issues. Mr. Sullivan stated he visited Areva's office recently to discuss this issue.

Mr. Sullivan then presented information on recent updates to the estimates-at-completion (EAC) for the various projects in the TNMIP. At this point, the EAC forecast is \$319.5 million. Chairman Armentrout stated that, in his words, the forecast has increased because:

- the Program's scope increased as a result of Nodal Protocol Revisions;
- some vendors' work has come in over budget; and
- control/management issues.

Mr. Sullivan agreed with that assessment.

Chairman Armentrout pointed out that a Resolution was distributed to increase the TNMIP budget to \$311.3 million. Mr. Karnei pointed out that the F&A Committee recommends authorizing a filing with the PUCT to increase the Nodal Surcharge. Mr. Karnei moved to approve the Resolution attached hereto as Attachment B. Mr. Wilkerson seconded the motion. Chairman Armentrout opened the floor to discussion.

Mr. Fehrenbach asked whether changing the "go-live" date would affect the EAC. Mr. Sullivan replied that extending the schedule would increase the cost of the TNMIP. He estimated that a three month delay would add approximately \$36 million to the cost.

Ms. Gallagher asked for a probability that the EAC would increase again before December 1, 2008. Mr. Sullivan stated that the requirements have been completed and most vendor contracts have been entered. He believes the uncertainty on costs is less than twenty-five percent.

Commissioner Hudson pointed out that two of the budgeted line items are training items (for Market Participants and ERCOT). He wants to ensure training does not get over-looked due to

budget constraints.

Mr. Cox asked if the May 2008 Board meeting would be a good time to take a hard look at the TNMIP status in light of the importance of the MMS delivery scheduled for April. Mr. Sullivan agreed that May 2008 would be a good time to conduct such a review.

The motion passed by a voice vote of thirteen in favor and two opposed (Messrs. Fehrenbach and Dalton) with no abstentions.

8. Technical Advisory Committee (TAC) Report

Chairman Armentrout invited Mark Dreyfus, TAC Chair, to report on recent TAC activities.

a. Confirmation of TAC Chair and Vice-Chair

Mr. Espinosa moved to approve the Resolution attached hereto as Attachment C, confirming Mark Dreyfus of Austin Energy as TAC Chair and Mark Bruce of FPL Energy as TAC Vice-Chair for the year 2008. Mr. Kahn seconded the motion. The motion passed by unanimous voice vote with no abstentions.

Mr. Dreyfus stated that some Market Participants have expressed concern about "work-arounds" occurring in order to timely implement the Nodal market design and they remain open to communication regarding this issue. Chairman Armentrout stated that "work-arounds" are part of project management and the Transition Plan Task Force (TPTF) and TAC need to make practical decisions to ensure timely/cost-effective implementation of the Nodal market design.

b. Protocol Revision Requests (PRRs),

The following items were handled in the Consent Agenda:

- PRR738
- PRR744
- PRR748

PRR727 – Process for Transition to Nodal Market Protocol Provisions

This PRR authorizes an orderly transition from the zonal Protocols to the nodal Protocols and provides a transparent mechanism to retire zonal Protocol sections and implement nodal Protocol sections. This PRR also requires two notices to Market Participants: the first market notice thirty days prior to the retirement or effective date and the second market notice no less than ten days prior to the retirement date of a zonal Protocol or effective date of a nodal Protocol. On June 21, 2007, PRS unanimously voted to refer PRR727 to the Transition Plan Task Force (TPTF) for recommendation on to how to resolve potential conflicts and how to process zonal Settlements after the start of the Texas Nodal Market, including any settlement disputes. On September 20,

2007, PRS unanimously voted to recommend approval of PRR727 as revised by PRS and TPTF comments. All Market Participants attended the vote. On October 18, 2007, PRS unanimously voted to forward the Impact Analysis and the PRS Recommendation Report to TAC with all Market Segments present for the vote. On November 1, 2007, TAC unanimously voted to refer PRR727 to TPTF to consider the definition of the term "grave" as used in Section 21.12.4 and to refer two policy issues to TPTF: (1) consideration of a longer notice period in the event of a delay in nodal market implementation; and (2) consideration of how a reversion to zonal market systems should be limited by time and/or scope. All Market Segments attended the vote. On November 29, 2007, TAC voted to recommend approval of PRR727 as revised by TPTF with one abstention (Independent Power Marketer (IPM) Segment). All Market Segments attended the vote. ERCOT credit staff and the Credit Work Group (WG) have reviewed PRR727 and do not believe that it requires changes to credit monitoring activity or the calculation of liability.

c. Nodal Protocol Revision Requests (NPRRs),

NPRR078 - Simplifying the Dispute Process

This NPRR removes the concept of "timely" disputes ERCOT can resolve and removes the concept of disputing settlement statements. Instead, disputes filed with enough time for ERCOT personnel to resolve them, as defined in the revised Protocols, will be resolved and included in the next Settlement Statement, if granted. On August 23, 2007, PRS voted to incorporate the comments by COPS, ERCOT personnel and Constellation NewEnergy and refer the merged version to COPS and the TPTF for review. The motion passed unanimously with all Market Segments present. On September 20, 2007, PRS voted to recommend approval of NPRR078 as revised by COPS, with one abstention (Independent Generator (IG) Market Segment). All Market Segments attended for the vote. On December 13, 2007, PRS unanimously voted to recommend approval of NPRR078 as revised by ERCOT comments dated December 7, 2007. All Market Segments attended the vote. On January 3, 2008, with all Market Segments present, TAC voted to recommend approval of NPRR078, with one abstention (Consumer Market Segment). ERCOT credit staff and the Credit WG have reviewed NPRR078 and do not believe it requires changes to credit monitoring activity or the calculation of liability.

NPRR086 - Settlement Clarifications to RUC Capacity Shortfall Ratio Share Formula

This NPRR: (i) clarifies that the Capacity Shortfall Ratio Share includes DC Tie imports and exports; (ii) modifies the definition of the variable HASLADJ (High Ancillary Service Limit at Adjustment Period) used in calculating the Reliability Unit Commitment (RUC) Capacity Shortfall Ratio Share; and (iii) modifies the definition of the variable Low Sustained Limit (LSL) to reflect that its value is the same as the LSL in the Current Operating Plan (COP). On November 15, 2007, PRS unanimously voted to recommend approval of NPRR086 as submitted, with all Market Segments attending the vote. On December 13, 2007, PRS unanimously voted to forward the PRS Recommendation Report and the Impact Analysis for NPRR086 to TAC. All Market Segments attended the vote. On January 3, 2008, with all Market Segments present, TAC

voted to recommend approval of NPRR086 as amended by TAC with one abstention (Independent Generator Segment).

NPRR087 - Market Monitor Terminology Change

This NPRR replaces the term Wholesale Electric Market Monitor (WEMM) with the term Independent Market Monitor (IMM). On November 15, 2007, PRS unanimously voted to recommend approval of NPRR087 as submitted. All Market Segments attended the vote. On December 13, 2007, PRS unanimously voted to forward the PRS Recommendation Report and the Impact Analysis for NPRR087 to TAC. All Market Segments attended the vote. On January 3, 2008, with all Market Segments present, TAC voted to recommend approval of NPRR087, with one abstention (Consumer Segment).

d. Recommendation on Net Metering

Mr. Dreyfus described the background of this issue. House Bill (H.B.) 3693 (Tex. Leg., R.S. 2007) introduced the concept of net metering and created provisions with which ERCOT and others must comply by January 1, 2009 in measuring, accounting for and settling distributed renewable generation. More specifically, H.B.3693, Section 39.916(j) provides that "the independent organization identified in Section 39.151 shall develop procedures so that the amount of electricity purchased from a distributed renewable generation owner under this section is accounted for in settling the total load served by the provider that serves the owner's load by January 1, 2009."

The TAC established a task force to address issues related to metering of distributed generation and that task force conducted several meetings and made a presentation to the entire TAC.

Mr. Dreyfus informed the Directors that, as a result of those discussions, TAC recommends that the Directors forward to the PUCT a recommendation to address the threshold issue of legal interpretation of the term "net metering." Due to the extensive lead times involved in preparing to settle net metering, TAC recommends the Board advise the PUCT that a decision is needed as soon as possible.

Mr. Dreyfus then provided detailed examples of the two ways in which the metering issue could be handled. Essentially, the issue is whether netting of generation versus load should occur "behind the meter" (i.e. one meter) or be metered separately.

Mr. Helton moved to approve the Resolution attached hereto as Attachment D. Mr. Espinosa seconded the motion. The motion passed by unanimous voice vote with no abstentions.

Finally, Mr. Dreyfus presented lists of major accomplishments of the TAC and its sub-groups during the year 2007.

Several Directors thanked the TAC for its work and contributions.

9. Finance & Audit Committee Report

Mr. Karnei, F&A Committee Chair, stated that the committee met this morning and considered the following matters:

- Messrs. Karnei and Espinosa were elected Chair and Vice-Chair, respectively
- Selection of the Chair of the Credit Working Group
- Preliminary 2007 year-end financial results
- Quarterly investment results
- Nodal budget and its financial impacts
- An agreement between ERCOT ISO and the Texas Regional Entity (RE) for support provided by ERCOT ISO to the RE
- Long-term financial planning
- Office space issues
- Internal Audit reports (thirty-five reports in 2007, up significantly from prior years)
- EthicsPoint reports
- Review of issues with Chief Audit Executive (Bill Wullenjohn)

Mr. Karnei then informed attendees that a special F&A meeting will take place on February 6, 2008 at 1:00 p.m. to review preliminary results of the Oliver Wyman work.

10. H.R. & Governance (HRG) Committee

Jan Newton, the HRG Committee Chair, stated that the committee met this morning and considered the following matters:

- Election of Ms. Newton as Chair
- Review of Board Policies and Procedures
- HRG charter and calendar
- Distribution of the self-evaluation survey
- Interest in membership in the National Association of Corporate Directors

11. Review Board Policies and Procedures

Chairman Armentrout pointed out that the HRG committee endorsed the revised Board Policies and Procedures.

Mr. Espinosa raised a question about an annual cap to the compensation of the TAC Residential Consumer Representative. A discussion took place regarding prior practices. In light of this issue, the matter was tabled pending a clarification of prior practices.

12. Removal of Assistant Corporate Secretary

Mr. Kahn moved to approve the Resolution attached hereto as Attachment E. Mr. Karnei seconded the motion. The motion passed by unanimous voice vote with no abstentions.

13. Other Business

No other business was raised.

14. Future Agenda Items

Chairman Armentrout invited anyone to raise any items they wish to be addressed at future meetings. The following items were raised:

- Status of TNMIP in light of April MMS delivery (for May 2008)
- Compliance/Internal Control Status of Implementation of Audit Responses, Internal Controls and Fraud Prevention Programs (for February 2008)
- IBM Update on Nodal (for February 2008)
- Review of the Oliver Wyman Work Project (for February 2008)
- Nodal Implementation Scripting (for May 2008)
- Review of the Strategic Plan (for July 2008)
- Review of internal controls (for July 2008)
- Review of the 2009 Goals (for August/September 2008)
- 2009 Budget (for August 2008)
- System Administration Fee Case (no date specified)
- When the "go" or "no go" decision on Nodal will occur (for August/September 2008)
- IBM Update on Nodal (for November 2008)

Chairman Armentrout pointed out that the Board Strategic Planning meeting will take place on February 20, 2008.

Lunch

The meeting adjourned for lunch at Noon.

15. Executive Session

Chairman Armentrout adjourned the meeting to Executive Session at approximately 1:00 p.m.

16. Vote on Executive Session Matters

Chairman Armentrout re-opened the open portion of the meeting when the Executive Session ended at approximately 3:15 p.m.

Mr. Fehrenbach moved to approve the Resolution attached to the Executive Session minutes as Attachment A. Mr. Helton seconded the motion. The motion passed by unanimous voice vote with two abstentions (Messrs. Dalton and Ballard).

Mr. Fehrenbach moved to approve the Resolution attached to the Executive Session minutes as Attachment B. Mr. Helton seconded the motion. The motion passed by unanimous voice vote with no abstentions.

Adjournment

Chairman Armentrout adjourned the meeting at approximately 3:20 p.m.

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

Michael G. Grable

Vice President and General Counsel