

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
July 20, 2010 at 10:00 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
Bermudez, Jorge		Unaffiliated
Bivens, Danny	Office of Public Utility Counsel	Residential Consumer (Alternate
		Representative for Sheri Givens)
Crowder, Calvin	American Electric Power Service Corporation	Investor Owned Utility
Dalton, Andrew	Valero Services, Inc.	Industrial Consumer (Proxy for
Daton, Midrew	valero services, me.	Nick Fehrenbach beginning with
		Agenda Item 15)
Doggett, Trip	ERCOT	President and Chief Executive
		Officer
Dreyfus, Mark	Austin Energy	Municipal
Espinosa, Miguel		Unaffiliated
Fehrenbach, Nick	City of Dallas	Commercial Consumer (Proxy to
		Andrew Dalton beginning with
		Agenda Item 15)
Gent, Michehl		Unaffiliated, Acting Board
		Chairman
Helton, Bob	International Power America	Independent Generator
	Services	
Karnei, Clifton	Brazos Electric Power Cooperative,	Cooperative
	Inc.	
Patton, A.D.		Unaffiliated
Ryall, Jean	Constellation Energy Commodities Group	Independent Power Marketer
Smitherman, Barry T.	Public Utility Commission of Texas	Commission Chairman
Zlotnik, Marcie	StarTex Power	Independent Retail Electric
		Provider



Staff and Guests:

Anderson, Ken	Commissioner, Public Utility Commission of Texas	
Ashley, Kristy	Exelon	
Bevill, Jennifer	AEP Energy Partners	
Bevill, Rob	GMEC	
Bojorquez, Bill	Hunt Transmission	
Brandt, Adrianne	Austin Energy	
Brenton, Jim	ERCOT	
Brewster, Chris	City of Eastland	
Bruce, Mark	Stratus Energy Group	
Burkhalter, Robert	ABB	
Cleary, Mike	ERCOT	
Clemenhagen, Barbara	Topaz Power Management	
Day, Betty	ERCOT	
Doll, Laura	ERCOT Unaffiliated Director-Elect	
Dumas, John	ERCOT	
Fox, Kip	AEP	
Feuerbacher, Paula	ERCOT	
Forfia, David	ERCOT	
Gage, Theresa	ERCOT	
Goff, Eric	Reliant	
Grendel, Steve	ERCOT	
Gresham, Kevin	E.ON Climate & Renewables	
Grimes, Mike	Horizon Wind Energy	
Hampton, Brenda	Luminant	
Hobbs, Kristi	ERCOT	
Jones, Brad	Luminant Energy	
Jones, Liz	Oncor	
Jones, Sam	ERCOT, Former Chief Executive Officer	
Kahn, Bob	ERCOT, Former Chief Executive Officer	
Leady, Vickie	ERCOT	
Magness, Bill	ERCOT	
Manning, Charles	ERCOT	
McIntyre, Ken	ERCOT	
McClellan, Suzi	Good Company Associates	
Morgan, Richard	ERCOT	
Morris, Sandy	LCRA	
Natay, James	Texas Industrial Energy Consumers	
Nelson, Donna	Commissioner, Public Utility Commission of Texas	
Noel, Tom	ERCOT, Former Chief Executive Officer	
Ogleman, Kenan	CPS Energy	
Oldham, Phillip	Texas Industrial Energy Consumers	
Petterson, Michael	ERCOT	
Pieniazek, Adrian	NRG Texas	



Prochazka, Scott	CenterPoint Houston Electric, Segment Alternate
Roark, Dottie	ERCOT
Saathoff, Kent	ERCOT
Sandidge, Clint	Sempra Energy Solutions
Seely, Chad	ERCOT
Stewart, Roger	LCRA
Sweatman, Tom	ERCOT, Former Chief Executive Officer
Walker, DeAnn	CenterPoint Energy
Walker, Mark	NRG Texas, Segment Alternate
Whittle, Brandon	DB Energy Trading, Segment Alternate
Wilkins, Pat	Tres Amigas
Woodfin, Dan	ERCOT
Wullenjohn, Bill	ERCOT
Yager, Cheryl	ERCOT

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

Michehl Gent, ERCOT Acting Board Chairman, called the meeting to order at approximately 10:15 a.m., pointed out the Antitrust Admonition and determined a quorum was present. Chairman Gent noted that Danny Bivens, Alternate Representative for the Office of Public Utility Counsel and Residential Consumer Segment, was attending the meeting in place of Sherry Givens.

Chairman Gent welcomed Jorge Bermudez as ERCOT's newest Unaffiliated Director, pending Public Utility Commission of Texas (Commission) approval, whose term began on July 1, 2010. He also welcomed Laura Doll who was elected on July 15, 2010, as an ERCOT Unaffiliated Director by ERCOT's Corporate Members, pending Commission approval, for a term to begin on August 1, 2010. He noted that Ms. Doll was an invited guest of the Board during this meeting.

Barry T. Smitherman, Commission Chairman, called an Open Meeting of the Commission to order to consider matters which had been duly posted with the Texas Secretary of State for July 20, 2010.

Chairman Gent noted that Mr. Bermudez was now a member of the Finance and Audit (F&A) Committee, he was now a member of the H.R. and Governance (HR&G) Committee, and Laura Doll would be a member of the HR&G Committee upon the commencement of her Board term. He also directed the Board members' attention to the copies of supplemental information provided to the Board at the inception of the meeting.

Chairman Gent took the Agenda Items in the following order for scheduling convenience.

Consent Agenda (Agenda Item 2)

Chairman Gent requested the removal of all items from the Consent Agenda except for the following item:



• Agenda Item 3 – June 15, 2010 Joint Nominating Committee and Board of Directors Meeting Minutes.

Chairman Gent noted that ERCOT Legal requested that Nodal Protocol Revision Request (NPRR) 091 be removed from the Consent Agenda and recommended that no action be taken until the appeals deadline for the related Commission substantive rule has expired. He further noted that A.D. Patton requested that NPRR213 be removed from the Consent Agenda so that it could be discussed in conjunction with Protocol Revision Request (PRR) 846. He added that Dr. Patton requested the removal of System Change Request (SCR) 756 from the Consent Agenda to discuss its impact on Nodal system resources. Chairman Gent advised that he requested the removal of NPRR222 and the remaining items (with the exception of Agenda Item 3) to be removed from the Consent Agenda in order to discuss them in further detail.

Bob Helton moved to approve the June 15, 2010 Joint Nominating Committee and Board of Directors Meeting Minutes as presented on the Consent Agenda. Andrew Dalton seconded the motion. The motion passed by unanimous voice vote with no abstentions.

Approval of June 15, 2010 Joint Nominating Committee and Board of Directors Meeting Minutes (Agenda Items 3)

The minutes of the June 15, 2010 Joint Nominating Committee and Board of Directors Meeting were approved as part of the Consent Agenda under Agenda Item 2.

Chief Executive Officer (CEO) Update (Agenda Item 4)

Trip Doggett, ERCOT President and CEO, reviewed the CEO Update presentation with the Board members and responded to their questions. Chairman Gent commended ERCOT staff on the extraordinary development of the new load forecasting model and its use in the preparation of the slide on the impact of economy and weather on load forecast error. Mr. Doggett recognized Calvin Opheim, ERCOT Manager of Load Forecasting and Analysis, and ERCOT staff for the development of this new model which enables real-time sensitivity analysis. Clifton Karnei inquired about the percentage of accuracy of such analysis of the impact of economy and weather on load forecast error. Mr. Doggett responded that he would prefer that Mr. Opheim review the percentage of accuracy at the August 2010 Board meeting, but he generally estimated that the accuracy could be as high as approximately 90 percent, accounting for the possibility of some modeling inaccuracy. Chairman Gent observed that ERCOT's next-day forecasting maximum error rate of approximately 3.5 percent is substantially lower than most independent system operators and regional transmission organizations.

Financial Summary Report (Agenda Item 5)

Chairman Gent invited comments or questions regarding the Financial Summary Report. Chairman Smitherman inquired about the accounting treatment of the \$3.2 million received from The Reserve as "Other Revenue" in the Base Operations Analysis of Adequacy of System Administration Fee for the Six Months Ended June 30, 2010. Michael Petterson, ERCOT Controller, acknowledged Chairman Smitherman's concern. Mr. Karnei suggested that ERCOT



received a recovery in excess of its accrual and that ERCOT staff should categorize these funds accordingly. Chairman Gent suggested that these funds be identified in a separate line item. Mr. Karnei supported this suggestion. Mr. Petterson agreed to make such modifications.

Commissioner Kenneth Anderson inquired about the \$1.9 million over run in revenue-funded base projects caused by even budget spread and expense timing. Mr. Petterson responded that ERCOT uses an assumption of an even spread over the 12 months of the year for project expenditures and that actual expenditures were accelerated during the first part of the year in part due to the recognition of the Nodal implementation system freeze around May or June 2010. Commissioner Anderson commented that, with regard to the detailed monthly holdings schedule of investments supporting the quarterly investment review provided to the Finance and Audit (F&A) Committee, ERCOT's investments were heavily weighted toward repurchase agreements for their return on investment. He inquired whether the repurchase agreements were mostly overnight or longer term. Cheryl Yager, ERCOT Treasurer, replied that most of the repurchase agreements are fairly short term (generally under seven days). Commissioner Anderson noted the concentration of the same counterparties with regard to these funds and inquired about the frequency of ERCOT's evaluation of counterparty credit. Ms. Yager responded that counterparty credit is reviewed on a monthly basis, but that this review is not full scope. She added that all of the repurchase agreements are backed 100 percent by U.S. Treasuries in accordance and in compliance with ERCOT's Investment Corporate Standard. Commissioner Anderson noted the underlying holdings of the various funds are comprised of a small group of the same entities. Ms. Yager noted that there are limited number of funds which provide investment in strictly U.S. Treasuries. She added that the next level of investment includes funds comprised of U.S. Treasuries and repurchase agreements which are backed by U.S. Treasuries.

Market Operations Report (Agenda Item 6)

Chairman Gent invited comments or questions regarding the Market Operations Report. Chairman Smitherman inquired about the changes in zonal congestion compared to June 2009. Kent Saathoff, ERCOT Vice President of System Planning and Grid Operations, responded that zonal congestion last June was due to issues with unit outages, particularly in the south load zone, and that some new generation in the south load zone had been initiated since last June. Chairman Smitherman inquired as to whether this improvement would continue throughout July and August 2010, given those infrastructure improvements. Mr. Saathoff responded that he would expect them to do so, absent any unforeseen circumstances.

Information Technology (IT) and Facilities Report (Agenda Item 7)

Richard Morgan, ERCOT Vice President and Chief Information Officer, highlighted that ERCOT had no service level agreement-impacting outages during June 2010. He noted the dedication of ERCOT's IT staff to achieve this accomplishment, which was a first-time occurrence during his tenure with ERCOT. Mr. Morgan also highlighted benefits to be derived from ERCOT's Information Lifecycle Management Project which focuses on the analysis and structuring of data to lower storage costs and noted the forecast for a 60 percent reduction in capital costs for new storage acquisitions. Mr. Morgan responded to Board members' questions as to the IT and Facilities Report.



Grid Operations and Planning Report (Agenda Item 8)

Chairman Gent invited comments or questions regarding the Grid Operations and Planning Report. Mr. Saathoff responded to Board members' questions regarding the Grid Operations and Planning Report. Dr. Patton commended ERCOT staff for their handling of the Energy Emergency Alert (EEA) Level 1 event on June 23, 2010. Chairman Smitherman commented that he would still like to receive a one-page summary description of the operational requirements and lessons learned from having 7,000 megawatts of wind on the grid as requested during the June 15, 2010 Joint Nominating Committee and Board Meeting. Chairman Smitherman inquired whether the generation of wind above 5,000 megawatts during the hottest part of the day in mid-June 2010 was an isolated incident. Mr. Saathoff responded that this occurrence was more of a one-time event due to widespread thunderstorms in West Texas. Chairman Smitherman requested a daily wind penetration report, particularly in light of the development of the Competitive Renewable Energy Zones (CREZ). Andrew Dalton inquired whether the wind report could particularly identify coastal wind generation. Mr. Doggett asked to discuss this with Mr. Dalton prior to committing to the preparation of the report with this data, due to the small amount of coastal wind generation.

In response to Chairman Smitherman's inquiry, Mr. Saathoff advised that a one-page summary description of how ERCOT has successfully integrated a large amount of wind power into the system had been prepared and would be distributed to Chairman Smitherman shortly.

2010-2011 Ancillary Service Methodology Update (Agenda Item 9)

John Dumas, ERCOT Manager of Operations Planning, presented the draft 2010-2011 Ancillary Service Methodology Update in response to the Board's request in April 2010 for an update on ERCOT's perspective on recommended ancillary services for the Nodal market. Chairman Gent commended Mr. Dumas and ERCOT staff for their efforts with regard to Non-Spinning Reserve Service methodology, including its successful application during the EEA Level 1 event of June 23, 2010. Mr. Dumas responded to Board members' questions regarding this subject. Dr. Patton inquired about the procurement and deliverability of ancillary services by location. Mr. Doggett suggested that Mr. Dumas contact Dr. Patton to discuss individually at a later time. Dr. Patton accepted Mr. Doggett's suggestion.

ERCOT's 40th Anniversary Presentation (Agenda Item 12)

Chairman Gent conducted ERCOT's 40th Anniversary Presentation. Chairman Gent observed that the National Academy of Engineering identified the electric system as the greatest single achievement of the last century. He applauded ERCOT for being the gold standard in the industry – the best of the best. He commended the contributions of ERCOT's leaders over the last 40 years, including Jerry Farrington, Erle Nye, Don Jordan, Elof Soderberg, Dick Brooks, Linn Draper and Mike Greene. He recognized the contributions of the late Harold Tynan and Craig McNeese, both Executive Secretaries for ERCOT. Chairman Gent then introduced former ERCOT Chief Executive Officers, Tom Sweatman, Tom Noel, Tom Schrader (by audio clip), Sam Jones, and Bob Kahn, who all provided their perspectives on ERCOT. Chairman Gent and



the Board applauded the efforts of the former ERCOT Chief Executive Officers and Mr. Doggett.

Lunch (Agenda Item 13)

The meeting adjourned for lunch at approximately 11:57 a.m. and reconvened at approximately 1:04 p.m.

<u>Update on PRR763 – Use of ERCOT Wind Power Forecasts in Day-Ahead Resource Plans</u> (Agenda Item 10)

Mr. Dumas provided the Board members with the Update on PRR763, Use of ERCOT Wind Power Forecasts in Day-Ahead Resource Plans, and responded to Board members' questions on this subject. Based on Mr. Dalton's inquiries, Chairman Gent requested further updates on this topic on a quarterly basis until year end (that is, two additional updates).

Overview of Voltage Ride-Through Study Pursuant to Operating Guide Revision Request OGRR208 (Agenda Item 11)

Dan Woodfin, Director of System Planning, presented the Overview of Voltage Ride-Through Study Pursuant to OGRR208 and responded to Board members' questions on this subject. Mr. Karnei complimented ERCOT staff on this study. Mr. Woodfin advised that the improvements in modeling used for this study will be used going forward in all of ERCOT's analyses and expects that the methodology for aggregation for this study will be published. He opined that this aggregation methodology could become the industry standard for developing models for wind farms. Calvin Crowder inquired about the effect of a trip of wind causing a trip of synchronous generation. Mr. Woodfin responded that he would provide Mr. Crowder with an answer at a later time. Mr. Crowder inquired about the status of the CREZ Reactive Study. Mr. Woodfin responded that the intent is to complete the CREZ Reactive Study by this fall and file it with the Commission. Chairman Gent requested that Mr. Woodfin present the CREZ Reactive Study to the Board in close proximity to the time that he reported to the Commission. Mr. Woodfin continued to answer the Board members' questions on this subject.

Technical Advisory Committee (TAC) Report (Agenda Items 16, 16a, 16b, 16c, 16d and 16e)

Chairman Gent invited Brad Jones, TAC Chair, to provide a report on recent TAC activities.

Protocol Revision Requests (PRRs) (Agenda Item 16a)

PRR845

PRR845 – Definition for IDR Meters and Optional Removal of IDR Meters at a Premise Where an Advanced Meter Can be Provisioned [Retail Metering Working Group (RMWG)].

Proposed Effective Date: August 1, 2010



Chief Executive Officer (CEO) Determination: No opinion on whether or not PRR845 is necessary prior to the Texas Nodal Market Implementation Date.

ERCOT Impact Analysis: No budgetary impact; no ERCOT staffing impacts; no impacts to ERCOT computer systems; no impacts to ERCOT business functions; no impacts to ERCOT grid operations and practices.

Revision Description: This PRR clarifies the meaning of IDR Meter and provides for optional removal of IDR Meters under certain conditions for Premises where an Advanced Meter can be provisioned by the Transmission and/or Distribution Service Provider (TDSP). In addition, due to the proposed definition of an IDR Meter, Protocol references to IDR and/or IDR Meter are being updated to ensure appropriate understanding and usage of the terms.

Procedural History: PRR845 was posted on January 22, 2010. On February 18, 2010, the Protocol Revision Subcommittee (PRS) unanimously voted to recommend approval of PRR845 as amended by the February 9, 2010 ERCOT comments. On March 25, 2010, PRS voted to table PRR845. There was one (1) abstention from the Independent Generator Market Segment. On April 22, 2010, PRS unanimously voted to recommend approval of PRR845 as amended by the April 8, 2010 RMWG comments. On May 20, 2010, PRS voted to endorse and forward the April 22, 2010 PRS Report and Impact Analysis for PRR845 to TAC. There was one (1) abstention from the Municipal Market Segment. On June 3, 2010, TAC unanimously voted to recommend approval of PRR845 as recommended by PRS in the May 20, 2010 PRS Report.

Mr. Helton moved to approve PRR845 as presented. Mr. Crowder seconded the motion. The motion passed by unanimous voice vote with no abstentions.

PRR846

PRR846 – Deadlines for Initiating Alternative Dispute Resolution [Horizon Wind Energy]. Proposed Effective Date: August 1, 2010

CEO Determination: No opinion on whether or not PRR846 is necessary prior to the Texas Nodal Market Implementation Date.

ERCOT Impact Analysis: No budgetary impact; no ERCOT staffing impacts; no impacts to ERCOT computer systems; no impacts to ERCOT business functions; no impacts to ERCOT grid operations and practices.

Revision Description: This PRR amends Section 20.3, Informal Dispute Resolution, to establish deadlines for the Alternative Dispute Resolution (ADR) procedures.

Procedural History: PRR846 was posted on February 15, 2010. On February 17, 2010, the motion to grant PRR846 Urgent status failed, via PRS email vote. On February 18, 2010, the motion to re-urge Urgency for PRR846 failed, via PRS roll call vote. On March 25, 2010, PRS unanimously voted to recommend approval of PRR846 as amended by the March 17, 2010 ERCOT comments and as revised by PRS. On April 22, 2010, PRS unanimously voted to table PRR846 for one (1) month. On May 20, 2010, PRS voted to endorse and forward the March 25, 2010 PRS Report as amended by the May 17, 2010 Horizon Wind Energy comments and as revised by PRS and Impact Analysis for PRR846 to TAC via roll call vote. On June 3, 2010, TAC voted to recommend approval of PRR846 as recommended by PRS in the May 20, 2010 PRS Recommendation Report. There was one (1) opposing vote from the Independent Generator Market Segment and three (3) abstentions from the Consumer, Investor Owned Utility (IOU) and the Independent Generator Market Segments.



Chairman Gent requested that Mr. Jones provide the Board with background on and reasons for any opposing votes or abstentions with regard to all future items submitted to the Board for approval by TAC. Mr. Jones committed to coordinating with the Board members who represent the segment in question so that they are aware of the background.

Dr. Patton inquired about the opposing vote on PRR846. Adrian Pieniazek of NRG Texas identified himself as the opposing vote on PRR846 at TAC and advised that the opposing vote was cast due to ERCOT being uncomfortable with the proposed two time lines, not the concept, of PRR846. Chairman Gent requested additional background from ERCOT. Bill Magness, ERCOT Interim Vice President and General Counsel, noted that ERCOT was not opposed to the imposition of deadlines with regard to the Alternative Dispute Resolution (ADR) process, but that ERCOT expressed concern with the proposed division of currently uniform schedules for settlement disputes and other types of Protocol disputes in two different schedules. Mr. Magness added that ERCOT also expressed concern with the proposed time lines for these two different schedules — that is, 60 days for the initial ADR meeting for settlement disputes and 20 days for the initial ADR meeting for other disputes. He commented that the proposed 20-day timeline could pose potential limitations and challenges for ERCOT staff in light of the upcoming implementation of the new Nodal market and the Nodal Protocols. Mr. Magness continued that ERCOT had requested a longer timeline for disputes (for instance, 90 days) and, at a minimum, the same timeline for all types of disputes.

Chairman Gent asked Mr. Jones to comment on the proposed timelines. Mr. Jones deferred to the author of PRR846 and NPRR213, Mike Grimes of Horizon Wind Energy, who was in attendance. Mr. Grimes provided the reasoning for the bifurcation of the timelines and the shortening of the timeline with regard to the non-settlement disputes. Mr. Helton added that the shortening of the deadline was limited to non-settlement disputes for the purposes of expediting disputes for which ERCOT had already made a decision. Mr. Jones mentioned that no TAC members voted against NPRR213, which is similar to PRR846 for the Nodal market. Mr. Helton noted that NPRR213 should be given separate consideration due to its application to the new Nodal market. Chad Seely, ERCOT Senior Corporate Counsel, pointed out that ERCOT Legal is not privy to all actions by ERCOT staff under the Protocols and may first learn of a dispute when an ADR request is filed. He continued that the shortened timeline may present timing challenges for ERCOT Legal to coordinate with ERCOT subject matter experts, particularly during the implementation of the new Nodal market. Mr. Crowder inquired as to whether ERCOT Legal drew a distinction between PRR846 and NPRR213. Mr. Seely responded that he did not, but was focused primarily on NPRR213, due to the upcoming market implementation. Mr. Crowder inquired the significance of the lack of opposing votes to NPRR213. Mr. Seely did not think it would be appropriate to respond. Mr. Pieniazek clarified that he was not able to attend the vote on NPRR213 and that he apparently did not have a clear communication with his alternative representative about his intended opposing vote on NPRR213. Mr. Crowder inquired about the 20-day timeline. Mr. Seely and Mr. Magness responded that 60 days would be better, but 90 days would be preferred in light of the new Nodal market. Mr. Dalton, Mr. Helton and Mr. Grimes discussed the proposed 20-day timeline. Chairman Gent suggested that Mr. Jones consult with ERCOT Legal to propose a resolution.



Mr. Crowder moved to remand PRR846 and NPRR213 to TAC with instruction for TAC to confer with ERCOT Legal to develop mutually-agreeable revisions for consideration by the Board at a later time. Mr. Dalton seconded the motion. The motion passed by unanimous voice vote with no abstentions.

PRR847

PRR847 – Additional Exemptions for Uninstructed Resource Charge [Formosa].

Proposed Effective Date: August 1, 2010

CEO Determination: No opinion on whether or not PRR847 is necessary prior to the Texas Nodal Market Implementation Date.

ERCOT Impact Analysis: No budgetary impact; no ERCOT staffing impacts; no impacts to ERCOT computer systems; existing business functions can accommodate this PRR; no impacts to ERCOT grid operations and practices.

Revision Description: This PRR proposes two changes to Section 6.8.1.15.1, Uninstructed Resource Charge Process: (1) when a Qualified Scheduling Entity (QSE) is given a verbal Dispatch Instruction from ERCOT, the QSE shall be exempt from any Uninstructed Resource Charge during the specified verbal Dispatch Instruction time period, provided that the QSE followed instructions to within the Schedule Control Error (SCE) of the verbal Dispatch Instruction given; and (2) after a Load acting as a Resource (LaaR) has been activated, the QSE representing the LaaR can request a three hour extension for scheduling under paragraph (11) of Section 6.10.6, Ancillary Service Deployment Performance Conditions, and during this rescheduling time, a Private Use Network shall not incur Uninstructed Resource Charges for three hours as the Load returns back to service.

Procedural History: PRR847 was posted on March 15, 2010. On April 22, 2010, PRS unanimously voted to table PRR847. On May 20, 2010, PRS unanimously voted to recommend approval of PRR847 as amended by the May 13, 2010 Formosa comments. On June 17, 2010, PRS unanimously voted to endorse and forward the May 20, 2010 PRS Report as amended by the June 7, 2010 ERCOT comments as revised by PRS and the Impact Analysis for PRR847 to TAC. On July 1, 2010, TAC unanimously voted to recommend approval of PRR847 as recommended by PRS in the June 17, 2010 PRS Report with an effective date of August 1, 2010.

Mr. Fehrenbach inquired about the intention of the exemption language of new paragraph (4) of Nodal Protocol Section, 6.8.1.15.1, Unintended Resource Charge Process of PRR847.

Mr. Fehrenbach moved to remand PRR847 for clarification of the exemption language of new Paragraph (4) of 6.8.1.15.1 (Unintended Resource Charge Process). Dr. Patton seconded the motion. Mr. Helton inquired about the requested clarification. The motion passed by voice vote with one opposed (Andrew Dalton) and no abstentions.

Mr. Dalton inquired about whether TAC would continue to be submitting PRRs to the Board, given the anticipated Nodal Go-Live date of December 1, 2010. Mr. Jones responded that additional new PRRs would not be timely. He added that the PRRs which the Board remanded during this meeting may not necessarily be resubmitted to the Board due to the timeframe, but he would seek further guidance from TAC. Kristi Hobbs, ERCOT Manager of Market Rules and Stakeholder Support, advised that only urgent PRRs which require revisions between the present



and Nodal Go-Live, if any, might be submitted to the Board in the future. Mr. Crowder requested that TAC consider tabling those PRRs that are not critical rather than bringing them to the Board due to the Board's need to focus on other critical matters. He further requested that TAC identify the urgency of any PRRs brought to the Board in the future, which Mr. Jones agreed to do.

Nodal Protocol Revision Requests (NPRRs) (Agenda Item 16b)

NPRR207

NPRR207 – Unit Deselection (formerly "Hour Start Unit Deselection and Half Hour Start Unit RUC Clawback") [Wholesale Market Subcommittee (WMS)].

Proposed Effective Date: Partially Upon Texas Nodal Market Implementation. Grey-boxed items will be post Texas Nodal Market Implementation Date.

Chief Executive Officer (CEO) Determination: Grey-boxed portions of NPRR207 are not necessary prior to the Texas Nodal Market Implementation Date. No opinion on whether or not remaining language revisions are necessary prior to the Texas Nodal Market Implementation Date.

ERCOT Impact Analysis: No budgetary impact; no ERCOT staffing impacts; no impacts to ERCOT computer systems; no impacts to ERCOT business functions; no impacts to ERCOT grid operations and practices. The Impact Analysis for the grey-boxed language will be conducted at a future date.

Revision Description: This NPRR would provide that ERCOT may deselect units from RUC processes. The NPRR also creates the term "RUC Notification" to refer to an ERCOT instruction preceding a Resource's startup time. The NPRR enables the Qualified Scheduling Entity (QSE) to self-commit, a Resource after receiving a RUC Notification but before the Resource's startup time.

Procedural History: NPRR207 was posted on January, 22, 2010. On February 18, 2010, the Protocol Revision Subcommittee (PRS) voted to recommend approval of NPRR207 as submitted, to forward NPRR207 to TAC, and to recommend a priority of High. There was one (1) abstention from the Consumer Market Segment. On March 4, 2010, TAC unanimously voted to table NPRR207 for one (1) month. On April 8, 2010, TAC unanimously voted to remand NPRR207 to PRS. On April 22, 2010, PRS voted to recommend approval of NPRR207 as amended by the April 22, 2010 WMS comments and as revised by PRS. There was one (1) abstention from the Consumer Market Segment. On May 6, 2010, TAC unanimously voted to table NPRR207. On June 3, 2010, TAC unanimously voted to table NPRR207 and to request that WMS review ERCOT's draft deselection procedures. On July 1, 2010, TAC unanimously voted to recommend approval of NPRR207 as amended by the May 26, 2010 WMS comments as revised by TAC, to assign a priority of High for the grey-boxed portion, and to recommend that ERCOT incorporate the revisions to the ERCOT RUC desk procedure relating to NPRR207 proposed in the June 24, 2010 Nodal Advisory Task Force (NATF) comments.

Mr. Crowder moved to approve NPRR207 as presented. Mr. Karnei seconded the motion. The motion passed by unanimous voice vote with no abstentions.



NPRR208

NPRR208 – Registration and Settlement of DG Less Than One MW [Non-Opt-In Entity Distributed Renewable Generation Task Force (NOIE DRG TF)].

Proposed Effective Date: Partially Upon Texas Nodal Market Implementation. Grey-boxed items will be post Texas Nodal Market Implementation Date.

CEO Determination: Grey-boxed sections of NPRR208 are not necessary prior to the Texas Nodal Market Implementation Date. No opinion on whether or not remaining revisions of NPRR208 is necessary prior to the Texas Nodal Market Implementation Date.

ERCOT Impact Analysis: No budgetary impact; no ERCOT staffing impacts; no impacts to ERCOT computer systems; no impacts to ERCOT business functions; no impacts to ERCOT grid operations and practices. The Impact Analysis for the grey-boxed language will be conducted at a future date.

Revision Description: The NPRR includes proposed language changes by the NOIE DRG Settlements Task Force in regards to the registration requirements for DG greater than fifty (50) kilowatts (kWs) and less than or equal to one (1) MW. In addition, this NPRR synchronizes language approved through PRR756, Distributed Renewable Generation Modifications, with some recommended revisions consistent with the NOIE DRG Settlements Task Force discussions. PRR756 was approved by the ERCOT Board on May 20, 2008 and was implemented on November 21, 2009.

Procedural History: NPRR208 was posted on January 25, 2010. On February 18, 2010, PRS voted to recommend approval of NPRR208 as amended by the January 29, 2010 Profiling Working Group (PWG) comments. There were two (2) abstentions from the Consumer and Independent Generator Market Segments. On March 25, 2010, PRS voted to endorse and forward the February 18, 2010 PRS Report as amended by the March 2, 2010 ERCOT comments and as revised by PRS and Impact Analysis for NPRR208 to TAC. There was one (1) abstention from the Consumer Market Segment. On April 8, 2010, TAC unanimously voted to table NPRR208 for one (1) month. On May 6, 2010, TAC voted to recommend approval of NPRR208 as recommended by PRS in the March 25, 2010 PRS Recommendation Report and as revised by TAC. There was one (1) opposing vote from the Consumer Market Segment and one (1) abstention from the Independent Retail Electric Provider (IREP) Market Segment. On May 18, 2010, the ERCOT Board remanded NPRR208 to TAC. On June 3, 2010, TAC unanimously voted to refer NPRR208 to the Commercial Operations Subcommittee (COPS). On July 1, 2010, TAC voted to recommend approval of NPRR208 as amended by the June 24, 2010 ERCOT comments with a recommended priority of High/Medium to the grey-boxed language. There were two (2) abstentions from the Consumer Market Segment.

Chairman Gent inquired about the two abstentions. Mr. Jones replied that they were from the Industrial Consumer Market Segment and deferred to Mr. Dalton. Mr. Dalton noted that the abstentions related to the recommendation for some of the gray-box language as a High-Medium priority status rather than Critical priority status for go live. Mr. Dalton continued that the higher priority post-go-live would ensure that the Commission's regulations are compatible with the Protocols.

Mark Dreyfus moved to approve NPRR208. Mr. Dalton seconded the motion. Mr. Magness clarified that the motion was made for NPRR208 with a priority of Critical for the grey-



boxed language. Mr. Dreyfus and Mr. Dalton agreed. The motion passed by unanimous voice vote with no abstentions.

NPRR213

NPRR213 – Deadlines for Initiating ADR [Horizon Wind Energy].

Proposed Effective Date: Upon Texas Nodal Market Implementation.

CEO Determination: Necessary prior to the Texas Nodal Market Implementation Date.

ERCOT Impact Analysis: No budgetary impact; no ERCOT staffing impacts; no impacts to ERCOT computer systems; no impacts to ERCOT business functions; no impacts to ERCOT grid operations and practices.

Revision Description: This NPRR amends Section 20, ADR Procedures, to establish deadlines for the ADR procedures.

Procedural History: NPRR213 was posted on February 25, 2010. On March 25, 2010, PRS unanimously voted to recommend approval of NPRR213 as amended by the March 18, 2010 ERCOT comments and as revised by PRS. On April 22, 2010, PRS unanimously voted to table NPRR213 for one (1) month. On May 20, 2010, PRS voted to endorse and forward the March 25, 2010 PRS Report as amended by the May 17, 2010 Horizon Wind Energy comments and as revised by PRS and Impact Analysis for NPRR213 to TAC via roll call vote. On June 3, 2010, TAC voted to table NPRR213 for one (1) month. There was one (1) opposing vote from the Independent Generator Market Segment and three (3) abstentions from the Consumer, Investor Owned Utility (IOU) and Independent Generator Market Segments. On July 1, 2010, TAC unanimously voted to recommend approval of NPRR213 as recommended by PRS in the May 20, 2010 PRS Report.

During the discussion of PRR846 during Agenda Item 16a (above), the Board unanimously passed a motion to remand PRR846 and NPRR213 to TAC with instruction for TAC to confer with ERCOT Legal to develop mutually-agreeable revisions for consideration by the Board at a later time.

NPRR224

NPRR224 – Remove Dynamic Rating Requirements for Annual Planning Models [Steady State Working Group (SSWG)].

Proposed Effective Date: Upon Texas Nodal Market Implementation.

CEO Determination: No opinion on whether or not NPRR224 is necessary prior to the Texas Nodal Market Implementation Date.

ERCOT Impact Analysis: No budgetary impact; no ERCOT staffing impacts; no impacts to ERCOT computer systems; no impacts to ERCOT business functions; no impacts to ERCOT grid operations and practices.

Revision Description: This NPRR removes the use of Dynamic Rating for Annual Planning Models.

Procedural History: NPRR224 was posted on April 9, 2010. On April 22, 2010, PRS unanimously voted to refer NPRR224 to the Reliability and Operations Subcommittee (ROS). On May 20, 2010, PRS voted to recommend approval of NPRR224 as submitted. There was one (1) opposing vote from the Independent Generator Market Segment. On June 17, 2010, PRS



voted to endorse and forward the May 20, 2010 PRS Report and Impact Analysis for NPRR224 to TAC. There was one (1) opposing vote from the Independent Generator Market Segment. On July 1, 2010, TAC voted to recommend approval of NPRR224 as recommended by PRS in the June 17, 2010 PRS Report as revised by TAC. There was one (1) abstention from the Municipal Market Segment.

Mr. Jones clarified that there was not an abstention from the Municipal Market Segment as reported in his presentation and that the vote at TAC was unanimous.

Mr. Crowder moved to approve NPRR224 as presented. Mr. Karnei seconded the motion. The motion passed by unanimous voice vote with no abstentions.

Mr. Dalton inquired whether NPRRs 224, 226, 227, 229, 230, 235 and 239 were intended to be effective on Nodal Go-Live. Mr. Jones replied affirmatively. Mr. Dalton also inquired whether these particular NPRRs are necessary for Nodal Go-Live, whether they have an impact on Nodal Go-Live at this juncture and whether they require any major system changes. Mr. Jones replied that there was no system impact.

NPRR226

NPRR226 - Procedure for Setting DAM Credit Requirement Parameters (formerly "Procedure for Setting DAM Auction Credit Requirement Parameters") [ERCOT].

Proposed Effective Date: Upon Texas Nodal Market Implementation.

CEO Determination: Necessary prior to the Texas Nodal Market Implementation Date.

ERCOT Impact Analysis: No budgetary impact; no ERCOT staffing impacts; no impacts to ERCOT computer systems; no impacts to ERCOT business functions; no impacts to ERCOT grid operations and practices.

Revision Description: This NPRR provides language revisions to align the Nodal Protocols with the procedure developed to implement the changes approved by the ERCOT Board in NPRR206, Nodal Market Day-Ahead Market Credit Requirements, on February 16, 2010.

Procedural History: NPRR226 was posted on April 16, 2010. On May 20, 2010, PRS voted to recommend approval of NPRR226 as amended by the May 19, 2010 WMS comments. There were three (3) abstentions from the Independent Power Marketer (IPM), Consumer, and Municipal Market Segments. On June 17, 2010, PRS voted to endorse and forward the May 20, 2010 PRS Report as revised by PRS and Impact Analysis for NPRR226 to TAC. There were two (2) abstentions from the IPM and Consumer Market Segments. On July 1, 2010, TAC voted to recommend approval of NPRR226 as recommended by PRS in the June 17, 2010 PRS Report. There was one (1) abstention from the Municipal Market Segment.

Mr. Dalton moved to approve NPRRs 226, 227, 229, 230, 235 and 239 as presented. Mr. Karnei seconded the motion. Mr. Magness directed the Board's attention to ERCOT's July 15, 2010 comments filed with NPRR230 subsequent to the distribution of the Board materials. Mr. Dalton requested that NPRR230 be removed from this grouping and Mr. Karnei agreed to such removal. The motion to approve NPRRs 226, 227, 229, 235 and 239 as presented passed by unanimous voice vote with no abstentions.



NPRR227

NPRR227 – Termination of Access Privileges to Restricted Computer Systems and Control Systems [ERCOT].

Proposed Effective Date: Upon Texas Nodal Market Implementation.

CEO Determination: Necessary prior to the Texas Nodal Market Implementation Date.

ERCOT Impact Analysis: No budgetary impact; no ERCOT staffing impacts; no impacts to ERCOT computer systems; no impacts to ERCOT business functions; no impacts to ERCOT grid operations and practices.

Revision Description: This NPRR synchronizes the Nodal Protocols with the language in the zonal Protocols pursuant to PRR822, Termination of Access Privileges to Restricted Computer Systems, Control Systems and Facilities formerly Removing of Access to Restricted Computer Systems, Control Systems, and Facilities. PRR822 was approved by the ERCOT Board on October 21, 2009.

Procedural History: NPRR227 was posted on April 23, 2010. On May 20, 2010, PRS unanimously voted to recommend approval of NPRR227 as submitted. On June 17, 2010, PRS unanimously voted to endorse and forward the May 20, 2010 PRS Report and Impact Analysis for NPRR227 to TAC. On July 1, 2010, TAC unanimously voted to recommend approval of NPRR227 as recommended by PRS in the June 17, 2010 PRS Report.

During the discussion of NPRR226 during Agenda Item 16b (above), the Board unanimously passed a motion to approve NPRRs 226, 227, 229, 235 and 239 as presented.

NPRR229

NPRR229 - Additions to Section 2, Definitions and Acronyms [ERCOT].

Proposed Effective Date: Upon Texas Nodal Market Implementation.

CEO Determination: No opinion on whether or not NPRR229 is necessary prior to the Texas Nodal Market Implementation Date.

ERCOT Impact Analysis: No budgetary impact; no ERCOT staffing impacts; no impacts to ERCOT computer systems; no impacts to ERCOT business functions; no impacts to ERCOT grid operations and practices.

Revision Description: This NPRR incorporates certain definitions and acronyms from the zonal Protocols for terms that are used in the Nodal Protocols but are not defined in Section 2, Definitions and Acronyms.

Procedural History: NPRR229 was posted on April 29, 2010. On May 20, 2010, PRS unanimously voted to recommend approval of NPRR229 as submitted. On June 17, 2010, PRS unanimously voted to endorse and forward the May 20, 2010 PRS Report as revised by PRS and Impact Analysis for NPRR229 to TAC. On July 1, 2010, TAC unanimously voted to recommend approval of NPRR229 as recommended by PRS in the June 17, 2010 PRS Report as revised by TAC.

During the discussion of NPRR226 during Agenda Item 16b (above), the Board unanimously passed a motion to approve NPRRs 226, 227, 229, 235 and 239 as presented.



NPRR230

NPRR230 — Resolution of Alignment Items A40, A108, A127 and A138 and Clarification/Updates to Load and Demand Forecast, Statement of Opportunities, and Long Term Wind Power Forecast [ERCOT].

Proposed Effective Date: Upon Texas Nodal Market Implementation.

CEO Determination: Necessary prior to the Texas Nodal Market Implementation Date.

ERCOT Impact Analysis: No budgetary impact; no ERCOT staffing impacts; no impacts to ERCOT computer systems; no impacts to ERCOT business functions; no impacts to ERCOT grid operations and practices.

Revision Description: This NPRR resolves Alignment Items A40, A108, A127, and A138 and provides clarification of the three-year Load and Demand forecast requirements as well as consistency for the medium-term System Adequacy Report. The requirement to develop profile functionality for a Long-Term Wind Power Forecast has been removed.

Procedural History: NPRR230 was posted on May 7, 2010. On May 20, 2010, PRS unanimously voted to recommend approval of NPRR230 as revised by PRS. On June 17, 2010, PRS voted to endorse and forward the May 20, 2010 PRS Report and Impact Analysis for NPRR230 to TAC. There was one (1) abstention from the Independent Generator Market Segment. On July 1, 2010, TAC voted to recommend approval of NPRR230 as recommended by PRS in the June 17, 2010 PRS Report. There was one (1) abstention from the Municipal Market Segment.

At Chairman Gent's request, Ms. Hobbs identified ERCOT's July 15, 2010 comments to NPRR230 which corrected an incorrect section reference.

Mr. Helton moved to approve NPRR230 with ERCOT staff's modifications. Mr. Crowder seconded the motion. The motion passed by unanimous voice vote with no abstentions.

NPRR235

NPRR235 – Resolution of Alignment Items A36 and A131 and Clarification of Miscellaneous Requirements [ERCOT].

Proposed Effective Date: Upon Texas Nodal Market Implementation.

CEO Determination: Necessary prior to the Texas Nodal Market Implementation Date.

ERCOT Impact Analysis: No budgetary impact; no ERCOT staffing impacts; no impacts to ERCOT computer systems; no impacts to ERCOT business functions; no impacts to ERCOT grid operations and practices.

Revision Description: This NPRR resolves Alignment Items A36 and A131 by clarifying Market Information System (MIS) posting requirements and validation of QSE telemetry for Ancillary Services Resource Responsibility and clarifies RUC initialization to data bases.

Procedural History: NPRR235 was posted on May 13, 2010. On May 20, 2010, PRS voted to approve NPRR235 as submitted. There was one (1) abstention from the Consumer Market Segment. On June 17, 2010, PRS unanimously voted to endorse and forward the May 20, 2010 PRS Report and Impact Analysis for NPRR235 to TAC. On July 1, 2010, TAC voted to recommend approval of NPRR235 as recommended by PRS in the June 17, 2010 PRS Report. There was one (1) abstention from the Municipal Market Segment.



During the discussion of NPRR226 during Agenda Item 16b (above), the Board unanimously passed a motion to approve NPRRs 226, 227, 229, 235 and 239 as presented.

NPRR239

NPRR239 – Ramp Rate Limitation of 10% per minute of On-Line Installed Capability for Wind-powered Generation Resources [ERCOT].

Proposed Effective Date: Upon Texas Nodal Market Implementation.

CEO Determination: Necessary prior to the Texas Nodal Market Implementation Date.

ERCOT Impact Analysis: No budgetary impact; no ERCOT staffing impacts; no impacts to ERCOT computer systems; no impacts to ERCOT business functions; no impacts to ERCOT grid operations and practices.

Revision Description: This NPRR proposes a requirement that certain Wind-powered Generation Resources (WGRs) limit the unit ramp rate to ten percent (10%) per minute of their nameplate rating as registered with ERCOT. The proposed language is based on the concept set forth in zonal Protocol Section 6.5.13, WGR Ramp Rate Limitations.

Procedural History: NPRR239 was posted on May 13, 2010. On May 20, 2010, PRS voted to recommend approval of NPRR239 as submitted. There were two (2) abstentions from the Consumer and Independent Generator Market Segments. On June 17, 2010, the motion to endorse and forward the May 20, 2010 PRS Report as amended by the June 10, 2010 Wind Coalition comments and Impact Analysis for NPRR239 to TAC failed via roll call vote. PRS then voted to endorse and forward the May 20, 2010 PRS Report and Impact Analysis for NPRR239 to TAC. There were three (3) abstentions from the Consumer (2) and Municipal Market Segments. On July 1, 2010, TAC voted to recommend approval of NPRR239 as recommended by PRS in the June 17, 2010 PRS Report. There was one (1) abstention from the Municipal Market Segment.

During the discussion of NPRR226 during Agenda Item 16b (above), the Board unanimously passed a motion to approve NPRRs 226, 227, 229, 235 and 239 as presented.

System Change Request (SCR) (Agenda Item 16e)

SCR756

SCR756 – Enhancement to the MarkeTrak Application [MarkeTrak Task Force (MTTF)]. Proposed Effective Date: Post Texas Nodal Market Implementation Date.

Chief Executive Officer (CEO) Determination: Not necessary prior to the Texas Nodal Market Implementation Date.

ERCOT Impact Analysis: To be determined - Due to "Not Needed for Go-Live" designation by the ERCOT CEO, the Impact Analysis for this item will be conducted at a future date.

Revision Description: This SCR will add functionality to the MarkeTrak Issue Resolution Tool to improve and standardize Market Participant administration functions, implement ERCOT validations requested by the MTTF, and redesign the workflows to leverage potential vendor upgrades to the MarkeTrak application.



Procedural History: SCR756 was posted on May 6, 2010. On June 10, 2009, the Retail Market Subcommittee (RMS) unanimously voted to recommend approval of SCR756 as submitted. On July 15, 2009, RMS unanimously voted to refer SCR756 to the MTTF. On August 12, 2009, RMS unanimously voted to table SCR756. On May 12, 2010, RMS unanimously voted to endorse and forward the June 10, 2009 RMS Recommendation Report as amended by the May 5, 2010 MTTF comments and Impact Analysis for SCR756 to the Protocol Revision Subcommittee (PRS) with a recommended priority of Critical. On May 20, 2010, PRS unanimously voted to endorse and forward the May 12, 2010 RMS Report and Impact Analysis for SCR756 to TAC and to recommend a priority of Critical. On June 3, 2010, TAC unanimously voted to recommend approval of SCR756 as recommended by PRS in the May 20, 2010 PRS Report with a recommended priority of Critical. *Credit review not applicable*.

Mr. Karnei moved to approve SCR756 as presented. Ms. Zlotnik seconded the motion. Dr. Patton requested confirmation that SCR756 would not impede work on the Nodal program, which Mr. Doggett confirmed. Chairman Gent, Mr. Jones, Mr. Dalton and Mike Cleary, ERCOT Senior Vice President and Chief Operating Officer, discussed the Nodal parking deck process and status. Ms. Zlotnik moved to approve SCR756 as presented. Danny Bivens seconded the motion. The motion passed by unanimous voice vote with no abstentions.

Mr. Jones reviewed the status of the Nodal parking deck with the Board members.

Tabled Nodal Protocol Revision Requests (NPRRs) (Agenda Item 16c)

Tabled NPRR222

NPRR222 - Half-Hour Start Unit RUC Clawback (Companion to NPRR207) [WMS].

Proposed Effective Date: Post Texas Nodal Market Implementation Date.

CEO Determination: Not necessary prior to the Texas Nodal Market Implementation Date.

ERCOT Impact Analysis: To be determined; Due to "Not Needed for Go-Live" designation by the ERCOT CEO, the Impact Analysis for this item will be conducted at a future date.

Revision Description: This NPRR removes RUC Clawback on all Half-Hour Start Units (a) that participate in the Day-Ahead Market (DAM) and (b) during Energy Emergency Alert (EEA) events. This NPRR also changes the RUC Clawback on all Half-Hour Start Units that did not participate in the DAM to fifty percent (50%).

Procedural History: NPRR222 was posted on April 22, 2010. On April 22, 2010, PRS unanimously voted to recommend approval of NPRR222 as submitted. On May 20, 2010, PRS unanimously voted to endorse and forward the April 22, 2010 PRS Report and Impact Analysis for NPRR222 to TAC and to recommend a priority of High. On June 3, 2010, TAC unanimously voted to recommend approval of NPRR222 as recommended by PRS in the May 20, 2010 PRS Report and to recommend a priority of High. On June 15, 2010, the ERCOT Board tabled NPRR222.

Mr. Jones noted that NPRR222 had been tabled until TAC approval of NPRR207, that NPRR207 had been approved by the Board earlier in the meeting during Agenda Item 16b (above), and that NPRR222 was now ready for Board approval.



Mr. Helton moved to approve NPRR222 as presented. Mr. Bivens seconded the motion. The motion passed by unanimous voice vote with two abstentions (Mr. Crowder and Mr. Dalton).

The discussion regarding Tabled NPRR091 continued later during the meeting.

Planning Guide Revision Request (PGRR) (Agenda Item 16d)

PGRR001

PGRR001 – Planning Guide – Section 2, Process for Planning Guide Revision [Planning Working Groups (PLWGs)] – URGENT.

Proposed Effective Date: August 1, 2010

Chief Executive Officer (CEO) Determination: Necessary prior to the Texas Nodal Market Implementation Date.

ERCOT Impact Analysis: No budgetary impact; no ERCOT staffing impacts; no impacts to ERCOT computer systems; no impacts to ERCOT business functions; no impacts to ERCOT grid operations and practices.

Revision Description: This PGRR proposes a process for revising the Planning Guide in Section 2 of the Planning Guide.

Procedural History: PGRR001 was posted on June 3, 2010. On June 10, 2010, the Reliability and Operations Subcommittee (ROS) unanimously voted to grant Urgent status to PGRR001. ROS then unanimously voted to table PGRR001. On June 25, 2010, ROS unanimously voted to recommend approval of PGRR001 as amended by the June 18, 2010 CenterPoint comments as revised by ROS. On July 1, 2010, TAC unanimously voted to recommend approval of PGRR001 as amended by the June 28, 2010 ERCOT comments and the June 30, 2010 PSEG TX comments and as revised by TAC.

Mr. Jones explained the PGRR approval process and noted the distinctions from other guide revision request processes.

Mr. Crowder moved to approve PGRR001 as presented. Mr. Dalton seconded the motion. The motion passed by unanimous voice vote with no abstentions.

Mr. Jones requested additional Board guidance in the future on whether all guide revision requests should be treated similarly to the PGRR approval process.

Mr. Jones continued with the TAC Report and responded to Chairman Gent's questions regarding special protection system monitoring requirement. Ms. Hobbs responded to Commissioner Anderson's questions regarding guide revision requests.

The discussion regarding the TAC Report and the guide revision requests continued later in the meeting.



Tabled NPRRs (Agenda Item 16c) -- Continued

Tabled NPRR091

NPRR091 – Scarcity Pricing and Mitigated Offer Cap During the Period Commencing on the Nodal Market Implementation Date and Continuing for a Total of 45 Days [Transition Plan Task Force (TPTF)].

Proposed Effective Date: Upon Texas Nodal Market Implementation.

Chief Executive Officer (CEO) Determination: No opinion on whether or not NPRR091 is necessary prior to the Texas Nodal Market Implementation Date.

ERCOT Impact Analysis: Estimated cost in the \$50,000 to \$100,000 range; temporary staffing impacts to develop functionality; ERCOT Market Management System (MMS) and Market Information System (MIS) will be modified for implementation of NPRR091; no significant additional high-level impacts to business functions or grid operations and practices are anticipated.

Revision Description: This NPRR adds a provision to Section 3.19, Constraint Competitiveness Tests, that all transmission constraints are treated as non-competitive constraints during an initial thirty (30) Operating Day period, beginning with the Texas Nodal Market Implementation Date; and a new Section 4.4.11.2, Scarcity Pricing and Mitigated Offer Cap During Nodal Startup, which requires that the System-Wide Offer Cap (SWCAP) be set to the higher of \$180 or 18 million British thermal units (mmBtu) heat rate times the Fuel Index Price (FIP) during an initial forty-five (45) Operating Day period, beginning with the Texas Nodal Market Implementation Date. This new Section also establishes an Energy Offer Curve floor adjusted to -\$50 per megawatt hour (MWh).

Procedural History: NPRR091 was posted on December 5, 2007. On December 13, 2007, the Protocol Revision Subcommittee (PRS) unanimously voted to table NPRR091. On January 17, 2008, PRS voted to table NPRR091 until the February 21, 2008 PRS meeting. The motion passed with one (1) abstention from the Independent Retail Electric Provider (IREP) Market Segment. On February 21, 2008, PRS voted to set the values of the X at \$180 per MWh with a heat rate of 18 mmBtu per MWh, and establish an Energy Offer Curve floor of -\$50 per MWh. The motion passed by roll call vote. On March 20, 2008, PRS unanimously voted to table NPRR091 pending development of the final Impact Analysis. On May 22, 2008, PRS unanimously voted to table NPRR091 pending development of the final Impact Analysis. On July 17, 2008, PRS voted to endorse the Impact Analysis and PRS Recommendation Report for NPRR091 and forward the documents to TAC. There was one (1) opposing vote from the Consumer Market Segment and one (1) abstention from the Investor Owned Utility (IOU) Market Segment. On August 7, 2008, TAC voted to table NPRR091 until the TAC meeting following the establishment of a revised Texas Nodal Market Implementation Date. There were four (4) opposing votes from the Consumer Market Segment. On January 6, 2010, TAC voted to table NPRR091 for one (1) month. There was one (1) opposing vote from the IREP Market Segment. On February 4, 2010, the motion to recommend approval of NPRR091 as recommended by PRS in the July 17, 2008 PRS Report and as revised by TAC failed via roll call vote. TAC then voted to table NPRR091 for one (1) month. There was one (1) opposing vote from the IREP Market Segment. On March 4, 2010, TAC unanimously voted to table NPRR091 and request that the Wholesale Market Subcommittee (WMS) provide comments on the Options under consideration. On April 8, 2010, TAC unanimously voted to recommend approval of



NPRR091 as recommended by PRS in the July 17, 2008 PRS Report and as amended by the March 29, 2010 WMS comments. TAC then unanimously voted to reconsider NPRR091. Upon reconsideration, TAC unanimously voted to refer NPRR091 to WMS. On June 3, 2010, TAC unanimously voted to recommend approval of NPRR091 as amended by the May 26, 2010 WMS comments. On June 15, 2010, the ERCOT Board tabled NPRR091.

Mr. Magness noted that ERCOT Legal was recommending that the Board further defer the currently tabled NPRR091 until the August 17, 2010 Board meeting to allow the running of the applicable appeals deadline. There were no objections.

TAC Report (Agenda Items 16) - Continued

Chairman Gent requested that Mr. Jones provide more information with regard to the guide revision requests approved by TAC, which Mr. Jones agreed to do. Commissioner Anderson noted his concern that guide revision requests are adopted without Board approval and his preference to avoid any unforeseen issues. Commissioner Anderson further noted his support for Chairman Gent's suggestion to add a couple of descriptive lines for each guide revision request. Mr. Jones reminded the Board of his commitment to identify for the Board any matters which may be controversial at TAC. Mr. Dalton advised that the HR&G Committee considered possible modifications to the Bylaws in relation to matters which require Board approval and that the HR&G Committee will likely have a recommendation for the Board at the August 17, 2010 Board meeting.

Chairman Gent invited Mr. Jones to report on the TAC meeting earlier in the morning. Mr. Jones advised that TAC met earlier in the morning and that TAC unanimously approved a resolution on its Network Operations Model Go-Live certification which had been distributed to the Board. Mr. Jones noted that TAC identified its existing concerns in the TAC resolution, but that TAC voted to proceed with the certification.

Network Operations Model Go-Live (Agenda Item 17)

Mr. Cleary provided a brief update on the Network Operations Model Go-Live certification and process. The Board members discussed generally the Network Operations Model Go-Live certification by the Board and the proposed wording of the Board resolution. Chairman Gent requested that the discussion be deferred until the end of the Board meeting.

TAC Report (Agenda Items 16) - Continued

Mr. Jones apprised the Board of TAC's approval of a set of guiding principles of the Nodal market. Due to time constraints, Chairman Gent requested that Mr. Jones review this subject with the Board at the August 2010 Board meeting. Mr. Jones agreed to do so.

Finance & Audit (F&A) Committee Report (Agenda Items 18)

Mr. Karnei, F&A Committee Chairman, reported that the F&A Committee met earlier in the morning and considered in part the following matters:



- Internal Audit status reports;
- Mid-year update on 2010 Internal Audit plan;
- Ethics Point update;
- Review of assumptions for preparation of the 2011 annual operating budget and discussion of budget approval schedule;
- Quarterly investment review, including an update on the recovery from The Reserve;
- Credit briefing on potential credit risk and Nodal credit status; and
- Future agenda items.

Mr. Dalton inquired whether the F&A Committee would be considering Market Reform's analysis of credit exposure for PJM Interconnection in 2008. Mr. Karnei noted that he was not aware that Market Reform had been engaged to analyze ERCOT's credit exposure, but requested that ERCOT staff include a comparison of ERCOT's market to other markets in their analysis, including any lessons learned from other markets. Mr. Crowder commended Mr. Petterson and the ERCOT Finance team for their work on the creation of the budget assumptions. Mr. Crowder requested, for future Board and Commission feedback, a proposed reconciliation of funds for the 2011 budget (including the Board discretionary fund and the favorable variance in the current Nodal budget) and post-Nodal costs related to the Nodal parking deck items in relation to Nodal fee.

Chairman Smitherman noted that Commission staff has been working with ERCOT staff on developing the 2011 budget and inquired whether progress had been made, including the timetables. Mr. Karnei deferred to Mr. Petterson. Mr. Doggett replied that Commission staff had received previous budgets for formatting feedback, but that he was not aware that any timeline had been discussion with Commission staff. He noted that there was likely an opportunity for additional communication. Mr. Petterson replied that only the schedule that had been shared with the Board had been communicated to Commission staff and that no feedback was received on this particular timeline. Chairman Smitherman requested that the F&A Committee consider this ERCOT and Commission staff collaboration as part of the budgeting process. Mr. Karnei agreed to place this topic on the August 17, 2010 F&A Committee meeting agenda for an update by ERCOT staff on their outreach efforts to the Commission staff. Mr. Doggett advised that ERCOT staff would meet with Commission staff within the following week, assuming Commission staff's availability, to share a draft budget format. Chairman Smitherman also inquired about the budget assumptions and proposed a holistic examination of these matters. Mr. Crowder noted that there was a policy question of using funds for Nodal to complete the post-Nodal parking decks items or allowing those funds to be charged to the base rate, thereby reducing the Nodal payment. Mr. Doggett replied that ERCOT staff intended to address this later in the meeting. Commissioner Donna Nelson acknowledged the issues of defects, but commented that she was reluctant to shift funds in the administration fee since she believed that ERCOT needed to implement the Market Reform recommendations and to cut costs. Commissioner Anderson added that ERCOT should provide a realistic number for issues that could develop immediately post-go-live for Nodal market stabilization. Mr. Cleary responded that the timeframe for such stabilization would be six months after Nodal Go-Live. Mr. Crowder noted the F&A Committee's request to ERCOT staff to categorize Nodal costs, including trailing costs. Mr. Cleary discussed the expected process of such stabilization. Commissioner Anderson



stated that he generally agreed with Commissioner Nelson, but that there needed to be a realistic understanding of the stabilization process and its funding. Mr. Dalton also noted his support for a global review of the issues surrounding the transition.

Mr. Crowder inquired about the enterprise risk report and its color coding as to certain items. Mr. Saathoff and Chuck Manning, ERCOT Vice President and Chief Compliance Officer, responded to his questions.

Jean Ryall inquired about the cost of the parking deck items and the pre- and post-go-live defects. Mr. Cleary responded that these costs have not been calculated at this time and provided a general timeline for their calculation. Ms. Ryall requested a summary of the parking deck items and the defects (including their severity). Mr. Cleary agreed to do so and noted that the parking deck items which have been approved were contained in the earlier TAC Report. Ms. Ryall also requested a cost estimate for running redundant zonal systems during the Nodal transition. Mr. Cleary agreed to provide her with one.

After further discussion, Commissioner Nelson remarked that Nodal is not under budget. She added that she believed that budget had been created with a contingency within a contingency despite assurances to the contrary. She commended Mr. Cleary for his excellent management of the Nodal budget and for his return of money to the Board discretionary fund. Chairman Gent noted that most of the Board agreed with Commissioner Nelson with regard to certain aspects of her comments.

<u>Human Resources & Governance (HR&G) Committee Report and Five-Year Strategic</u> Plan (Agenda Items 19 and 19a)

Mr. Dalton, HR&G Committee Chairman, reported that the HR&G Committee met earlier in the morning and considered in part the following matters:

- External relations update, including a review of Sunset Advisory Commission recommendations;
- Five-Year Strategic plan discussion;
- Proposed revisions to the Bylaws including those related to Texas Regional Entity separation and to procedural changes requiring Board approval of Committee actions affecting the Market, which discussion will be continued at the August 17, 2010 HR&G Committee meeting; and
- Executive session personnel discussions.

Mr. Jones provided the history of past TAC subcommittee evaluations and reported that TAC would commit to review its subcommittee for additional efficiencies and provide its report to the Board on such review.

Executive Session (Agenda Items 22 to 28)

Chairman Gent adjourned the meeting to Executive Session at approximately 3:06 p.m. Chairman Gent reconvened the meeting to General Session at approximately 5:02 p.m.



Chairman Gent called for motions on the remaining voting items.

Vote on Matters from Executive Session (Agenda Item 29)

Mr. Karnei moved to approve the modification of the June 15, 2010 Board Resolution regarding Debt Financing Authorization as discussed in Executive Session under Agenda Item 27 (Contract Matters). Mr. Dalton seconded the motion. The motion passed by unanimous voice vote of the Board with no abstentions.

Special Nodal Program (SNP) Committee Report (Agenda Item 14)

Bob Helton, SNP Committee Chairman, reported that the SNP Committee met during the prior day. Mr. Helton noted that the SNP Committee requested an overview of the ERCOT transition plan which would include future testing, definitions of those tests, expected key dates (which may be subject to further refinement), and related success criteria by the August 2010 Board meeting.

Chairman Gent announced that the Board was in agreement that all Board members should be present for future Nodal presentations, given the critical nature of Nodal and the upcoming Nodal Go-Live date. He continued that a Special Board meeting should be convened on Monday, August 16, 2010, to address Nodal matters. Mr. Helton mentioned that some topics may require extended meeting times. Chairman Gent asked that Mr. Helton provide him with advance notice of any such upcoming topics, which he agreed to do. Ms. Ryall requested clarification on whether the Nodal matters would be addressed by the full Board in the future and whether the SNP Committee would be disbanded. Chairman Gent replied that he intended the Board to address Nodal matters in the future, but that the SNP Committee would not be formally disbanded. Mr. Magness noted that the Board could address the Nodal matters, that the Board could decide whether the SNP Committee would be formally disbanded, but that the SNP Committee did not have to be formally disbanded at this time. The Board members discussed this matter further and the possibility of additional updates and meetings through Nodal Go-Live.

Nodal Program Update (Agenda Item 15)

Jason Iacobucci, ERCOT Nodal Program Manager, provided a review and background of the currently identified Nodal defects as requested by the SNP Committee at the prior day's meeting.

The Board members commented on the version issues related to the Nodal Updates and requested that revisions to the Nodal Updates maintain the same pagination. Mr. Iacobucci and Mr. Cleary agreed to address the Board's requests.

Mr. Iacobucci and Mr. Cleary responded to the Board members' questions regarding Nodal defects and the Network Operations Model Go-Live certification. Dr. Patton inquired about the seven critical defects related to the Network Model Management System (NMMS). Mr. Iacobucci agreed to provide the information on those seven defects, but cautioned that these defects may not be related to or may not have an impact on the Network Operations Model Go-



Live certification. Mr. Dalton requested that ERCOT staff provide the Board on a real-time weekly basis with slides that provide a trend related to defect testing and resolution. Mr. Iacobucci agreed to do so. Mr. Iacobucci continued to respond to Board members' questions. Ms. Ryall commented that she agreed with Mr. Dalton and requested a plan for the defect resolution which would provide an estimate of the costs associated with those defects in order to provide a complete assessment of the cost of the Nodal Program. Jerry Dreyer, ERCOT Director of Application Services, provided a rough estimate for defect resolution. Ms. Ryall requested a list of manual work-arounds necessary until the defects are resolved. Mr. Dreyer agreed to provide her with such a list.

Mr. Petterson provided the Nodal Monthly Financial Review to the Board. Chairman Smitherman requested the budgeted amounts for software and software maintenance as well as hardware and hardware maintenance when the budget was most recently revised to \$643 million. He noted that, at that time, some maintenance programs were either underfunded or unfunded and added that he wanted to get a direct comparison of those amounts. Mr. Petterson and Mr. Cleary agreed to do so. Chairman Smitherman requested possible options for the Board Discretionary Fund, which was \$113.6 million as of July 1, 2010, either offline or by the next Board meeting.

Commissioner Anderson requested the inclusion of Nodal parking deck items in the list of manual work-arounds. Mr. Helton agreed to do so.

Network Operations Model Go-Live (Agenda Item 17) - Continued

Mr. Helton directed the Board's attention to the TAC Resolution certifying the Network Operations Model Go-Live and the draft Board Resolution which generally tracked the TAC Resolution, both of which were distributed to the Board earlier in the meeting.

Dr. Patton moved to authorize and approve certification that all Market Readiness Criteria have been met for Network Operations Model go-live on September 1, 2010, with his suggested edits to the proposed Board Resolution.

Kenneth Ragsdale, ERCOT Principal of Market Design and Analysis, provided a presentation on Network Operations Model Go-Live to the Board. The Board members discussed the wording of the draft Board resolution regarding the Network Operations Model Go-Live certification. Mr. Ragsdale, Mr. Cleary and Mr. Iacobucci responded to the Board members' questions regarding Network Operations Model Go-Live certification.

Mr. Magness provided the historical background on the development of the certification process in the Protocols, a description of the certification process, the lack of defined Market Readiness Criteria in the Protocols, the development of Market Readiness Criteria by the Nodal Program, the general challenges of the process, the acknowledgment by ERCOT staff that there are issues that will need to be addressed but that should not stop the certification process for proceeding, and the need for other similar certifications in the near future. Mr. Magness and Mr. Ragsdale answered the Board members' questions regarding the certification process.



Mr. Dalton observed that, at its core, the Board's vote on this matter is a vote of confidence in ERCOT management and TAC and that he supported the motion to approve and certify Network Operations Model Go-Live. Chairman Smitherman commented on the strength of ERCOT's hybrid Board and representation of the various Market Segments, particularly during such a vote. Mr. Bivens added that he agreed with Mr. Dalton and that the process may not be perfect, but that he was ready to support moving to the next level in this overall process. Mr. Crowder agreed with Chairman Smitherman about the importance of being able to rely on the input of stakeholders. He noted that his employer, American Electric Power, is a Transmission Service Provider (TSP) that listed 47 issues which were classified as Priority 2, requiring resolution or work-arounds prior to Go-Live. He added that there were no Priority 1 issues. He added that TSPs were meeting with ERCOT weekly to resolve these issues. He concluded by mentioning that the situation was not ideal, but that TSPs were willing to move forward on this system at this time. He also noted that he had some modifications to the proposed Board Resolution language. Mr. Karnei also voiced his support for the Board's certification based on reliance on ERCOT's management and TAC and despite that his employer, Brazos Electric Power Cooperative, as a TSP had great concerns about the status of the network model. He added that he was confident that these issues will get solved. Mr. Helton solicited Laura Doll's input. Ms. Doll agreed with Mr. Dalton about being a vote of confidence. She was impressed by the comments from the Board members representing various Market Segments and their willingness to work through these issues and support the vote. She mentioned that she felt strongly about the need for some criteria. Although Ms. Doll could not vote on this matter, she commented that she would vote in favor of it if she were able to vote. Chairman Gent announced that the Board would vote now with a vote of trust in ERCOT staff, but emphasized that ERCOT staff needed to present future certification matters in a more understandable manner.

Mr. Crowder presented his three modifications to the proposed Board Resolution — clarifying the Board's review (rather than due diligence) of ERCOT staff's conclusion, adding a paragraph regarding status updates on outstanding issues and incorporating ERCOT staff's certification and the TAC Resolution. Mr. Crowder moved to authorize and approve certification that all Market Readiness Criteria have been met for Network Operations Model go-live on September 1, 2010, with his suggested edits to the proposed Board Resolution. Ms. Ryall seconded the motion. Dr. Patton noted that he was supportive of Mr. Crowder's motion and withdrew his prior motion. The motion passed by unanimous voice vote of the Board with no abstentions.

Mr. Cleary acknowledged the Board's comments and direction regarding the certification process.

Mr. Karnei advised that, despite the frustrations expressed by the TSPs, the TSPs were very appreciative of the diligent efforts of ERCOT employees in their attempts to resolve these issues, particularly late at night and on the weekends.

Other Business (Agenda Item 20)

There was no discussion of other business by the Board at this time.



Future Agenda Items (Agenda Item 21)

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

Adjournment (Agenda Item 30)

Chairman Gent adjourned the meeting at approximately 6:40 p.m.

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

Bill Magness

Interim Corporate Secretary