



Date: June 8, 2010
To: ERCOT Board of Directors
From: Brad Jones, Technical Advisory Committee (TAC) Chair
Subject: Nodal Protocol Revision Requests (NPRRs)

Issue for the ERCOT Board of Directors

ERCOT Board of Directors (ERCOT Board) Meeting Date: June 15, 2010

Agenda Item No.: 11b

Issue:

Consideration of the following NPRRs:

- NPRR091 – Scarcity Pricing and Mitigated Offer Cap During the Period Commencing on the Nodal Market Implementation Date and Continuing for a Total of Forty-Five (45) Days
- NPRR146 – Inter-Control Center Communications Protocol (ICCP) Telemetry Information Submittals
- NPRR210 – Wind Forecasting Change to P50, Synchronization with Protocol Revision Request (PRR) 841
- NPRR212 – Disputing Fuel Oil Price (FOP) Costs
- NPRR217 – Resolution of Alignment Item A58 - Use of Different Computational Modules
- NPRR221 – Day-Ahead Market (DAM) and Real-Time Market (RTM) Default Allocation Changes
- NPRR222 – Half-Hour Start Unit Reliability Unit Commitment (RUC) Clawback (Companion to NPRR207)
- NPRR223 – Resolution of Alignment Item A73 Removal of Independent Market Monitor (IMM) and Public Utility Commission (PUC) Staff Nightly Report
- NPRR225 – Standard Cost Option in Verifiable Costs

Background/History:

Unless otherwise noted: (i) all Market Segments were present for each vote and (ii) ERCOT Credit Staff and the Credit Work Group (CWG) have reviewed the revision request and do not believe it requires changes to credit monitoring activity or the calculation of liability.

- **NPRR091 – Scarcity Pricing and Mitigated Offer Cap During the Period Commencing on the Nodal Market Implementation Date and Continuing for a Total of Forty-Five (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 fifty thousand dollar (\$50,000) to one hundred thousand dollar (\$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 one hundred eighty dollars (\$180) or eighteen (18) 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 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 one hundred eighty dollars (\$180) per MWh with a heat rate of eighteen (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.

- **NPRR146 – ICCP Telemetry Information Submittals [AEP].**

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

CEO Determination: Partially no opinion on whether or not NPRR146 is necessary prior to the Texas Nodal Market Implementation Date. Grey-boxed language is not necessary prior 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. Impact Analysis for grey-boxed portion will be conducted at a future date due to “Not Needed for Go-Live” designation by the ERCOT CEO.

Revision Description: This NPRR requires that changes to an existing Network Operations Model Change Request (NOMCR) that modify only ICCP data object names be submitted prior to the completion of the testing for the Network Operations Model in which the Transmission Elements represented by the ICCP data object names were first modeled.

Procedural History: NPRR146 was posted on July 31, 2008. On August 21, 2008, PRS unanimously voted to refer NPRR146 to the TPTF for review. On September 24, 2008, PRS unanimously voted to recommend approval of NPRR146 as amended by the September 2, 2008 TPTF comments. On October 23, 2008, PRS unanimously voted to table NPRR146 until the November 20, 2008 PRS meeting. On November 20, 2008, PRS unanimously voted to refer NPRR146 to TPTF for further consideration. On December 18, 2008, PRS unanimously voted to recommend approval of NPRR146 as amended by the December 17, 2008 TPTF comments. The Independent Generator Market Segment was not present for the vote. On January 22, 2009, PRS unanimously voted to table NPRR146. On February 19, 2009, PRS unanimously voted to forward the PRS Recommendation Report to TAC and note to TAC that NPRR146 has been approved post-Nodal Go-Live as stated in the February 18, 2009 ERCOT comments and therefore would be slated to be in a future release. On March 5, 2009, TAC unanimously voted to table NPRR146 pending a recommendation from PRS on the “parking deck” procedure for post-Nodal Go-Live NPRRs and to reevaluate the projected system impacts of NPRR146. All Market Segments were present for the vote. On January 6, 2010, TAC unanimously voted to table NPRR146 for one (1) month. On February 4, 2010, TAC unanimously voted to table NPRR146 indefinitely. On April 8, 2010, TAC unanimously voted to table NPRR146 for one (1) month. On May 6, 2010, TAC unanimously voted to table NPRR146. On June 3, 2010, TAC voted to recommend approval of NPRR146 as revised by the May 28, 2010 ERCOT comments and as amended by TAC and to assign a priority of High to the proposed grey-boxed language. There was one (1) objection from the Municipal Market Segment and one (1) abstention from the Independent Generator Market Segment.

- **NPRR210 – Wind Forecasting Change to P50, Synchronization with PRR841 [Morgan Stanley].**

Proposed Effective Date: Partially Upon Texas Nodal Market Implementation. Grey-boxed item (2) of Section 5.7.4, RUC Make-Whole Charges, will be Post Texas Nodal Market Implementation Date.

CEO Determination: Partially necessary prior to the Texas Nodal Market Implementation Date. Grey-boxed item (2) of Section 5.7.4 is not 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. Impact Analysis for grey-boxed portion will be conducted at a future date due to “Not Needed for Go-Live” designation by the ERCOT CEO.

Revision Description: This NPRR changes the wind forecasting methodology to use a fifty

percent (50%) probability of exceedance calculation instead of an eighty percent (80%) for RUC considerations. This NPRR would align the Nodal Protocols with changes made to the zonal Protocols pursuant to PRR841, Revise Total ERCOT Wind Power Forecast (TEWPF), which was approved by the ERCOT Board on March 23, 2010.

Procedural History: NPRR210 was posted on February 9, 2010. On February 18, 2010, PRS voted to recommend approval of NPRR210 as amended by the February 11, 2010 Luminant comments and as revised by PRS. There was one (1) opposing vote from the Independent Generator Market Segment and three (3) abstentions from the Municipal, IOU, and IREP Market Segments. On March 25, 2010, PRS voted to endorse and forward the February 18, 2010 PRS Report for NPRR210 as revised by PRS to TAC. There was one (1) opposing vote from the Independent Power Marketer (IPM) Market Segment and four (4) abstentions from the Consumer, IOU (2), and IPM Market Segments. On April 8, 2010, TAC unanimously voted to remand NPRR210 to PRS. On April 22, 2010, PRS unanimously voted to table NPRR210. On May 20, 2010, PRS voted to recommend approval of NPRR210 as recommended by PRS in the March 25, 2010 PRS Report and as revised by PRS and to assign a priority of High to the proposed grey-boxed language. There was one (1) abstention from the IREP Market Segment. On June 3, 2010, TAC unanimously voted to recommend approval of NPRR210 as recommended by PRS in the May 20, 2010 PRS Report and to assign a priority of High to the proposed grey-boxed language.

- **NPRR212 – Disputing FOP Costs [CPS Energy].**

Proposed Effective Date: Upon Texas Nodal Market Implementation.

CEO Determination: No opinion on whether or not NPRR212 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 allows for disputes of FOP.

Procedural History: NPRR212 was posted on February 11, 2010. On February 18, 2010, PRS unanimously voted to recommend approval of NPRR212 as amended by the February 17, 2010 WMS comments. On March 25, 2010, PRS unanimously voted to table NPRR212. On April 22, 2010, PRS unanimously voted to table NPRR212. On May 20, 2010, PRS unanimously voted to endorse and forward the February 18, 2010 PRS Report as amended by the May 17, 2010 CPS Energy comments and as revised by PRS and the Impact Analysis to TAC. On June 3, 2010, TAC unanimously voted to recommend approval of NPRR212 as recommended by PRS in the May 20, 2010 PRS Report.

- **NPRR217 – Resolution of Alignment Item A58 - Use of Different Computational Modules [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 clarifies the Security Sequence since ERCOT does not

use the same computational modules to perform both the Real-Time sequence and Day-Ahead and hour-ahead security analysis.

Procedural History: NPRR217 was posted on March 23, 2010. On April 22, 2010, PRS voted to recommend approval of NPRR217 as submitted. There was one (1) abstention from the Independent Generator Market Segment. On May 20, 2010, PRS unanimously voted to endorse and forward the April 22, 2010 PRS Report and Impact Analysis to TAC. On June 3, 2010, TAC unanimously voted to recommend approval of NPRR217 as recommended by PRS in the May 20, 2010 PRS Report.

- **NPRR221 – DAM and RTM Default Allocation Changes [MCWG].**

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 prior to the Texas Nodal Market Implementation Date (to support uplift of DAM defaults, ERCOT will utilize the ‘Miscellaneous Invoice’ as a work-around. There will be a cost impact after the Texas Nodal Market Implementation Date. Those costs have not yet been determined); no project required prior to the Texas Nodal Market Implementation Date – after the Texas Nodal Market Implementation Date, ERCOT will initiate a project to make system changes which support an automated Default Uplift Invoice; no additional full-time equivalents (FTEs) needed – ongoing support will be absorbed by current staff; no impacts to ERCOT computer systems; current business processes will be modified to accommodate NPRR221; no impacts to ERCOT grid operations and practices.

Revision Description: This NPRR changes the way default amounts (amounts owed to ERCOT by defaulting Counter-Party one hundred eighty (180) days after the default occurs) in the DAM and RTM are allocated. This NPRR assigns a share of the default to each Counter-Party based on the greatest of the Counter-Party’s MWh activity in either the Congestion Revenue Right (CRR) market or DAM or RTM at the Counter-Party level for the calendar month prior to the month in which the default occurs.

Procedural History: NPRR221 was posted on March 30, 2010. On April 22, 2010, PRS voted to recommend approval of NPRR221 as revised by PRS. There was one (1) opposition from the Consumer Market Segment and one (1) abstention from the IPM Market Segment. On May 20, 2010, PRS voted to endorse and forward the April 22, 2010 PRS Report as amended by the May 7, 2010 ERCOT comments and Impact Analysis for NPRR221 to TAC. There was one (1) opposing vote from the Consumer Market Segment. On June 3, 2010, TAC voted to recommend approval of NPRR221 as recommended by PRS in the May 20, 2010 PRS Report. There was one (1) opposing vote from the IREP Market Segment and one (1) abstention from the Consumer Market Segment. *This NPRR does not have any credit implications or change the method used to calculate credit requirements. Implementation of this NPRR would allow short pays to be allocated to a greater number of Market Participants in the ERCOT Market.*

- **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 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.

- **NPRR223 – Resolution of Alignment Item A73 – Removal of IMM and PUC Staff Nightly Report [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 removes a reporting requirement. There are no specific reporting requirements from the IMM and PUC for ERCOT to provide a nightly report. Based on IMM requirements, a nightly report is not required.

Procedural History: NPRR223 was posted on April 9, 2010. On April 22, 2010, PRS unanimously voted to recommend approval of NPRR223 as submitted. On May 20, 2010, PRS unanimously voted to endorse and forward the April 22, 2010 PRS Report and Impact Analysis for NPRR223 to TAC. On June 3, 2010, TAC unanimously voted to recommend approval of NPRR223 as recommended by PRS in the May 20, 2010 PRS Report as revised by TAC.

- **NPRR225 – Standard Cost Option in Verifiable Costs [WMS].**

Proposed Effective Date: Upon Texas Nodal Market Implementation.

CEO Determination: No opinion on whether or not NPRR225 is necessary prior to the Texas Nodal Market Implementation Date.

ERCOT Impact Analysis: No budgetary impact; no additional Full Time Equivalents (FTEs) needed - ongoing support will be absorbed by current staff; no impacts to ERCOT computer systems; current business processes will be modified to accommodate NPRR225; no impacts to ERCOT grid operations and practices.

Revision Description: This NPRR provides the option for the election of standard Operations and Maintenance (O&M) costs as a component of Startup Costs and minimum energy costs in place of filing verifiable costs through January 1, 2012.

Procedural History: NPRR225 was posted on April 12, 2010. On April 22, 2010, PRS voted to recommend approval of NPRR225 as amended by the April 22, 2010 CPS Energy comments and as revised by PRS. There was one (1) opposing vote from the Consumer Market Segment and two (2) abstentions from the IOU and IREP Market Segments. On



May 20, 2010, PRS voted to endorse and forward the April 22, 2010 PRS Report as amended by the May 11, 2010 ERCOT comments and Impact Analysis for NPRR225 to TAC. There was one (1) opposing vote from the Consumer Market Segment and one (1) abstention from the IREP Market Segment. On June 3, 2010, TAC voted to recommend approval of NPRR225 as recommended in the May 20, 2010 PRS Report and as revised by TAC. There were ten (10) abstentions from the Cooperative (2), IPM (4), IREP, IOU (2), and Municipal Market Segments.

The TAC Reports, Impact Analyses, and CEO Revision Request Reviews for these NPRRs are included in the ERCOT Board meeting materials. In addition, these NPRRs and supporting materials are posted on the ERCOT website at the following link: <http://nodal.ercot.com/protocols/npr/index.html>.

Key Factors Influencing Issue:

PRS met, discussed the issues, and submitted reports to TAC regarding the NPRRs described herein. TAC considered the issues and voted to take action on the NPRRs as described above.

Alternatives:

1. Approve the TAC recommendation on NPRRs 091, 146, 210, 212, 217, 221, 222, 223, and/or 225 as described above or as modified by the ERCOT Board;
2. Reject the TAC recommendation on NPRRs 091, 146, 210, 212, 217, 221, 222, 223, and/or 225;
3. Defer decision on the TAC recommendation on NPRRs 091, 146, 210, 212, 217, 221, 222, 223, and/or 225; or
4. Remand NPRRs 091, 146, 210, 212, 217, 221, 222, 223, and/or 225 to TAC with instructions.

Conclusion/Recommendation:

As more specifically described above, TAC recommends that the ERCOT Board approve NPRRs 091, 146, 210, 212, 217, 221, 222, 223, and 225 as described herein.



ELECTRIC RELIABILITY COUNCIL OF TEXAS, INC.
BOARD OF DIRECTORS RESOLUTION

WHEREAS, the Electric Reliability Council of Texas, Inc. (ERCOT) Board of Directors (Board) deems it desirable and in ERCOT's best interest to approve the following NPRRs:

- NPRR091 – Scarcity Pricing and Mitigated Offer Cap During the Period Commencing on the Nodal Market Implementation Date and Continuing for a Total of Forty-Five (45) Days
- NPRR146 – Inter-Control Center Communications Protocol (ICCP) Telemetry Information Submittals
- NPRR210 – Wind Forecasting Change to P50, Synchronization with Protocol Revision Request (PRR) 841
- NPRR212 – Disputing Fuel Oil Price (FOP) Costs
- NPRR217 – Resolution of Alignment Item A58 - Use of Different Computational Modules
- NPRR221 – Day-Ahead Market (DAM) and Real-Time Market (RTM) Default Allocation Changes
- NPRR222 – Half-Hour Start Unit Reliability Unit Commitment (RUC) Clawback (Companion to NPRR207)
- NPRR223 – Resolution of Alignment Item A73 Removal of Independent Market Monitor (IMM) and Public Utility Commission (PUC) Staff Nightly Report
- NPRR225 – Standard Cost Option in Verifiable Costs

THEREFORE be it RESOLVED, that the ERCOT Board hereby approves 091, 146, 210, 212, 217, 221, 222, 223, and 225.

CORPORATE SECRETARY'S CERTIFICATE

I, Bill Magness, Interim Corporate Secretary of ERCOT, do hereby certify that, at its June 15, 2010 meeting, the ERCOT Board of Directors passed a motion approving the above Resolution by _____.

IN WITNESS WHEREOF, I have hereunto set my hand this ____ day of June, 2010.

Bill Magness
Interim Corporate Secretary