

Technical Advisory Committee

Presentation to the
ERCOT Board of Directors
August 18, 2009

TAC Report Summary

- 8 PRRs for Board approval
- 8 NPRRs for Board approval
- 1 RMGRR for Board approval
- Report on Approved Market Guide Revision Requests
- Single Entry Model Go-Live
- Update on nodal metrics development
- Update on wind metrics development
- LaaRs Study
- Preview: Future Board meetings

Protocol Revision Requests

PRR 787 Add Non-Compliance Language to QSE
Performance Standards

PRR 801 Manual TCR Adjustments

PRR 805 Adding POLR Customer Class and AMS Meter
Flag to the Database Query Function on the MIS

PRR 810 Remove McCamey Congestion Management

PRR 814 NO_x Emissions Allowance Index Price

PRR 816 CRE Determination Criteria – URGENT

PRR 819 Changes to Support Revisions to the PUCT
POLR and Expedited Switch Rules – URGENT

PRR 820 Definition for Transmission and/or
Distribution Service Provider – URGENT

PRR 787 Add Non-Compliance Language to QSE Performance Standards (formerly “Add Violation Language to QSE Performance Standards”)

Purpose (IPA)	Adds language to the Protocols that defines if and when a non-compliance event occurs in regards to QSE performance standards	
Benefit	Increased clarity and transparency of the Protocols.	
Market Impact	N/A	
System Change	No	
Assumptions	N/A	
TAC Vote	TAC unanimously recommend approval as amended by 07/08/09 ERCOT comments. All Market Segments were present.	
CEO Determination	No opinion on necessity prior to TNMID	
Effective Date	September 1, 2009	

PRR 787 Add Non-Compliance Language to QSE Performance Standards

<i>Item Reviewed</i>	<i>No Impact</i>	<i>Impact</i>	<i>Description</i>
<i>Budget</i>	★		
<i>Staffing</i>	★		
<i>Computer Systems</i>	★		
<i>Business Functions</i>	★		
<i>Grid Operations</i>	★		
<i>Credit Monitoring/ Liability</i>	★		

PRR 801 – Manual TCR Adjustments

Purpose (ERCOT)	Revises Section 7.5.3.1, Annual and Monthly Auction Summary, to provide a description of the process used by ERCOT to achieve revenue neutrality in the monthly TCR auction.	
Benefit	Reduce impact to Balancing Energy Neutrality Adjustment (BENA) and reduce amount of oversold TCRs.	
Market Impact	N/A	
System Change	No	N/A
Assumptions	N/A	
TAC Vote	TAC recommended approval as amended by ERCOT comments with one opposing vote from the IOU Segment and one abstention from the IOU Segment. All Market Segments were present.	
CEO Determination	No nodal impacts. No opinion on necessity before TNMID.	
Effective Date	September 1, 2009	

PRR 801 – *Manual TCR Adjustments*

<i>Item Reviewed</i>	<i>No Impact</i>	<i>Impact</i>	<i>Description</i>
<i>Budget</i>	★		
<i>Staffing</i>	★		
<i>Computer Systems</i>	★		
<i>Business Functions</i>	★		
<i>Grid Operations</i>	★		
<i>Credit Monitoring/ Liability</i>	★		

PRR 805 – Adding POLR Customer Class and AMS Meter Flag to the Database Query Function on the MIS

Purpose (Texas SET)	This PRR will allow Market Participants (MPs) to see the POLR Customer class and the AMS meter flag when querying Electric Service Identifiers (ESI IDs) through the look-up function on the MIS.	
Benefit	Market Participants will be able to identify the POLR Customer class of an ESI ID as well as whether or not the meter is an AMS meter.	
Market Impact	N/A	
System Change	Yes	Project Required - Expected delivery Q1 or Q2 of 2010
Assumptions	N/A	
TAC Vote	TAC unanimously recommended approval as amended by TAC. All Market Segments were present.	
CEO Determination	pending	
Effective Date	Upon System Implementation	

PRR 805 – Adding POLR Customer Class and AMS Meter Flag to the Database Query Function on the MIS

<i>Item Reviewed</i>	<i>No Impact</i>	<i>Impact</i>	<i>Description</i>
<i>Budget</i>			<i>\$50 - \$100 K</i>
<i>Staffing</i>			<i>Resource availability currently being reviewed.</i>
<i>Computer Systems</i>			<i>Texas Market Link, Information Services Master, TIBCO, Retail Application Programmatic Interface</i>
<i>Business Functions</i>			
<i>Grid Operations</i>			
<i>Credit Monitoring/ Liability</i>			

PRR 805 Issues on Remand from the Board

- Added reference to PUCT Substantive Rule 25.43(c) for definition of “POLR Customer class”
- Received comments from PUCT Staff that AMS meter flag and POLR Customer class are not considered proprietary information
- TAC unanimously recommends PRR 805 as a tool to lower a significant barrier to the adoption of advanced metering system (AMS) products and services. Providing the AMS meter flag in the ESI ID look-up function on the TML will enable the offering of AMS products and services at the time of customer enrollment. If PRR 805 is delayed beyond the TNMID, there will likely be more than 2 million advanced meters deployed in Texas but with only a small number of customers enrolled in programs which utilize the AMS functionality.

PRR 810 – Remove McCamey Congestion Management

Purpose (Potomac)	The need to manage congestion related to high levels of wind generation is no longer unique to the McCamey Area. Line and voltage equipment upgrades in the McCamey Area have greatly increased the capability to export generation from the area.	
Benefit	This allows ERCOT operators to consistently analyze all Resources and will allow more effective Congestion management throughout the West zone.	
Market Impact	N/A	
System Change	No	N/A
Assumptions	N/A	
TAC Vote	TAC recommended approval with one abstention from the Independent Generator Segment. All Market Segments were present.	
CEO Determination	No objection.	
Effective Date	September 1, 2009	

PRR 810 – *Remove McCamey Congestion Management*

<i>Item Reviewed</i>	<i>No Impact</i>	<i>Impact</i>	<i>Description</i>
<i>Budget</i>	★		
<i>Staffing</i>	★		
<i>Computer Systems</i>	★		
<i>Business Functions</i>	★		
<i>Grid Operations</i>	★		
<i>Credit Monitoring/ Liability</i>	★		

PRR814, NO_x Emissions Allowance Index Price (NO_xEAIP) – URGENT

Purpose (Luminant)	Establishes a definition for NO _x Emissions Allowance Index Price (NO _x EAIP) that relies on a published cost index for NO _x emissions allowances. Provides Qualified Scheduling Entities (QSEs) with an option to either provide detailed documentation or the actual cost of NO _x emissions allowances.	
Benefit	Provides QSEs with an option to use a published index price to validate any emissions allowance costs claimed for verifiable cost purposes in the provision of Replacement Reserve, OOMC or OOME Service	
Market Impact	N/A	
System Change	No	N/A
Assumptions	ERCOT does not anticipate any incremental staffing impacts if the number of verifiable cost disputes continue to remain at current levels	
TAC Vote	TAC recommended approval as recommended by PRS with 4 opposing votes from the Consumer Segment and 5 abstentions (4 IREP and 1 Consumer). All Market Segments were present.	
CEO Determination	No opinion on whether PRR is necessary prior to TNMID	
Effective Date	September 1, 2009	

PRR814, NO_x Emissions Allowance Index Price (NO_xEAIP) – URGENT

<i>Item Reviewed</i>	<i>No Impact</i>	<i>Impact</i>	<i>Description</i>
<i>Budget</i>	★		
<i>Staffing</i>	★		If the number of dispute increases significantly then ERCOT may have to revise its staffing impacts
<i>Computer Systems</i>	★		
<i>Business Functions</i>	★		
<i>Grid Operations</i>	★		
<i>Credit Monitoring/ Liability</i>	★		

PRR816, CRE Determination Criteria – URGENT

Purpose (CMWG)	Establishes a set of four criteria for determining if a candidate contingency/limiting element pair qualify as a Closely Related Element (CRE)	
Benefit	Clarifies CRE selection process—should facilitate mid-year updates if any are needed.	
Market Impact	No	
System Change	No	N/A
Assumptions	N/A	
TAC Vote	TAC recommended approval as recommended by PRS with 1 abstention from the IOU Segment. All Market Segments were present.	
CEO Determination	No opinion on whether PRR is necessary prior to TNMID	
Effective Date	September 1, 2009	

PRR816, CRE Determination Criteria – URGENT

<i>Item Reviewed</i>	<i>No Impact</i>	<i>Impact</i>	<i>Description</i>
<i>Budget</i>	★		
<i>Staffing</i>	★		
<i>Computer Systems</i>	★		
<i>Business Functions</i>		★	<i>Existing business processes will be revised to accommodate this revision request.</i>
<i>Grid Operations</i>	★		
<i>Credit Monitoring/ Liability</i>	★		

*PRR819, Changes to Support Revisions to the PUCT POLR and Expedited Switch Rules – **URGENT***

Purpose (Texas SET)	Provides that ERCOT shall identify ESI IDs acquired in a Mass Transition to a POLR; also implements changes to expedite the customer switching process.	
Benefit	Compliance with PUCT rules	
Market Impact	N/A	
System Change	Yes	MORO cart
Assumptions	N/A	
TAC Vote	TAC unanimously recommended approval recommended by PRS. All Market Segments were present.	
CEO Determination	Necessary prior to the Texas Nodal Market Implementation Date	
Effective Date	Upon ERCOT Board approval and System Implementation	

*PRR819, Changes to Support Revisions to the PUCT POLR and Expedited Switch Rules – **URGENT***

<i>Item Reviewed</i>	<i>No Impact</i>	<i>Impact</i>	<i>Description</i>
<i>Budget</i>		★	<i>\$500k to \$1M (managed under Project 90024_01)</i>
<i>Staffing</i>	★		
<i>Computer Systems</i>		★	<i>TIBCO, Siebel, Paperfree, ERCOT.com, Retail Testing, EIS</i>
<i>Business Functions</i>		★	
<i>Grid Operations</i>	★		
<i>Credit Monitoring/ Liability</i>	★		

PRR820, Definition for Transmission and/or Distribution Service Provider - URGENT

Purpose (ERCOT)	Modifies the definition for TDSP to include Entities that were selected to own and operate Transmission Facilities listed in the PUCT Order in Docket No. 35665.	
Benefit	Facilitates the Competitive Renewable Energy Zone (CREZ) registration.	
Market Impact	N/A	
System Change	No	N/A
Assumptions	N/A	
TAC Vote	TAC unanimously recommended approval as recommended by PRS. All Market Segments were present.	
CEO Determination	Necessary prior to the Texas Nodal Market Implementation Date	
Effective Date	September 1, 2009	

PRR820, Definition for Transmission and/or Distribution Service Provider - URGENT

<i>Item Reviewed</i>	<i>No Impact</i>	<i>Impact</i>	<i>Description</i>
<i>Budget</i>	★		
<i>Staffing</i>	★		
<i>Computer Systems</i>	★		
<i>Business Functions</i>	★		
<i>Grid Operations</i>	★		
<i>Credit Monitoring/ Liability</i>	★		

Nodal Protocol Revision Requests

NPRR 171 Synchronization of PRR 805, Adding POLR Customer Class and AMS Meter Flag to the Database Query Function on the MIS

NPRR 175 Hub Bus List Clarification

NPRR 176 Resource Status Input to RUC and Ancillary Service Awards from RUC

NPRR 177 Synchronization of Nodal Protocols with PRR 808, Clean-up and Alignment of RECs Trading Program Language with PUCT Rules

NPRR 178 Regulation Reduction (GS-FR3) and Reg-Up/Reg-Down Allocation to QSEs

Nodal Protocol Revision Requests

NPRR 180 Reconciliation of CRR Related Protocol Language

NPRR 182 Non-Protocol Postings on the Market
Information System

NPRR 187 Definition for Transmission and/or Distribution
Service Provider

NPRR 171 – Synchronization of PRR805, Adding POLR Customer Class and AMS Meter Flag to the Database Query Function on the MIS

Purpose (Texas SET)	Will allow Market Participants to see the POLR Customer class and the AMS meter flag when querying Electric Service Identifiers (ESI IDs) through the look-up function on the MIS.	
Benefit	Market Participants will be able to identify the POLR Customer class of an ESI ID as well as whether or not the meter is an AMS meter.	
Market Impact	N/A	
System Change	No	N/A
Assumptions	N/A	
TAC Vote	TAC unanimously recommended approval. All Market Segments were present.	
CEO Determination	Necessary prior to the Texas Nodal Market Implementation Date	

***NPRR 171 – Synchronization of PRR805, Adding POLR
Customer Class and AMS Meter Flag to the Database
Query Function on the MIS***

<i>Item Reviewed</i>	<i>No Impact</i>	<i>Impact</i>	<i>Description</i>
<i>Budget</i>	★		
<i>Staffing</i>	★		
<i>Computer Systems</i>	★		
<i>Business Functions</i>	★		
<i>Grid Operations</i>	★		
<i>Credit Monitoring/ Liability</i>	★		

NPRR175 – Hub Bus List Clarification

Purpose (ERCOT)	Updates the Hub lists to reflect the current network model by removing Hub Bus SHRTP which was a construct of planning and does not exist; and also by renaming Hub Bus FPPYD, which was actually two substations that were amalgamated for planning reasons, to FPPYD1 and FPPYD2.	
Benefit	Provides clarification of Protocol language to ensure that Hub prices are calculated correctly and as expected.	
Market Impact	N/A	
System Change	No	N/A
Assumptions	N/A	
TAC Vote	TAC unanimously recommended approval as amended by ERCOT comments. All Market Segments were present.	
CEO Determination	Necessary prior to the Texas Nodal Market Implementation Date	

NPRR175 – Hub Bus List Clarification

<i>Item Reviewed</i>	<i>No Impact</i>	<i>Impact</i>	<i>Description</i>
<i>Budget</i>	★		
<i>Staffing</i>	★		
<i>Computer Systems</i>	★		
<i>Business Functions</i>	★		
<i>Grid Operations</i>	★		
<i>Credit Monitoring/ Liability</i>	★		

NPRR 176 – Resource Status Input to RUC and Ancillary Service Awards from RUC

Purpose (ERCOT)	Resources committed by Day-Ahead Market (DAM) are not considered as On-Line by Reliability Unit Commitment (RUC) unless a Qualified Scheduling Entity (QSE) has changed the Resource Status to On-Line in the Current Operating Plan (COP) for that hour.	
Benefit	Clarifies Nodal Protocols	
Market Impact	No	
System Change	No	N/A
Assumptions	N/A	
TAC Vote	TAC unanimously recommended approval as recommended by PRS. All Market Segments were present.	
CEO Determination	Necessary prior to the Texas Nodal Market Implementation Date	

NPRR 176 – *Resource Status Input to RUC and Ancillary Service Awards from RUC*

<i>Item Reviewed</i>	<i>No Impact</i>	<i>Impact</i>	<i>Description</i>
<i>Budget</i>	★		
<i>Staffing</i>	★		
<i>Computer Systems</i>	★		Due to current system design, there would be a Nodal impact if this NPRR is not approved
<i>Business Functions</i>	★		
<i>Grid Operations</i>	★		
<i>Credit Monitoring/ Liability</i>	★		

NPRR177 – Synchronization of Nodal Protocols with PRR808, Clean-up and Alignment of RECs Trading Program Language with PUCT Rules

Purpose (ERCOT)	Synchronizes the Nodal Protocols with Protocol Revision Request (PRR) 808, Clean-up and Alignment of RECs Trading Program Language with PUCT Rules.	
Benefit	Synchronizes Protocols	
Market Impact	N/A	
System Change	No	N/A
Assumptions	N/A	
TAC Vote	TAC unanimously recommended approval as recommended by PRS. All Market Segments were present.	
CEO Determination	Necessary prior to the Texas Nodal Market Implementation Date	

NPRR177 – Synchronization of Nodal Protocols with PRR808, Clean-up and Alignment of RECs Trading Program Language with PUCT Rules

<i>Item Reviewed</i>	<i>No Impact</i>	<i>Impact</i>	<i>Description</i>
<i>Budget</i>	★		
<i>Staffing</i>	★		
<i>Computer Systems</i>	★		
<i>Business Functions</i>	★		
<i>Grid Operations</i>	★		
<i>Credit Monitoring/ Liability</i>	★		

NPRR178 – Regulation Reduction (GS-FR3) and Reg-Up/Reg-Down Allocation to QSEs

Purpose (ERCOT)	<p>Changes to the regulation reduction calculation to account for movements in generation due to units getting updated Base Points from Load Frequency Control (LFC).</p> <p>The other change is regarding the Regulation Up (Reg-Up)/Regulation Down (Reg-Down) allocation to Qualified Scheduling Entities (QSEs) to take out the constraint for each four-second interval, since the full amount of Reg-Up/Reg-Down responsibility is realizable in five minutes and compliance is also on a five-minute basis.</p>	
Benefit	Better frequency control	
Market Impact	N/A	
System Change	No	N/A
Assumptions	N/A	
TAC Vote	TAC unanimously recommended approval as recommended by PRS. All Market Segments were present.	
CEO Determination	Necessary prior to the Texas Nodal Market Implementation Date	

NPRR178 – *Regulation Reduction (GS-FR3) and Reg-Up/Reg-Down Allocation to QSEs*

<i>Item Reviewed</i>	<i>No Impact</i>	<i>Impact</i>	<i>Description</i>
<i>Budget</i>	★		
<i>Staffing</i>	★		
<i>Computer Systems</i>	★		Due to current system design, there would be a Nodal impact if this NPRR is not approved
<i>Business Functions</i>	★		
<i>Grid Operations</i>	★		
<i>Credit Monitoring/ Liability</i>	★		

NPRR180, Reconciliation of CRR Related Protocol Language

Purpose (ERCOT)	Removes requirement to hold CRR models static for two months prior to the auction, thus enabling CRR group to perform updates to CRR model, revises protocols to state that the facilitation of bilateral trades will occur on the MIS Certified Area, not the Secured Area, removes the wording to clarify that bilateral trades of PTP Options with Refund and PTP Obligations with Refund will not occur in DAM, and amends protocols to clarify that all available FGR capacity is available in CRR Auctions, not just that offered by CRR Account Holders.	
Benefit	Enable ERCOT to use the most recent and updated information when creating the CRR Auction models. It will also ensure that the CRR application is in exact compliance with the Nodal Protocols	
Market Impact	N/A	
System Change	No	N/A
Assumptions	N/A	
TAC Vote	TAC unanimously recommended approval as recommended by PRS. All Market Segments were present.	
CEO Determination	Necessary prior to the Texas Nodal Market Implementation Date	

NPRR180, Reconciliation of CRR Related Protocol Language

<i>Item Reviewed</i>	<i>No Impact</i>	<i>Impact</i>	<i>Description</i>
<i>Budget</i>	★		
<i>Staffing</i>	★		
<i>Computer Systems</i>	★		Due to current system design, there would be a Nodal impact if this NPRR is not approved
<i>Business Functions</i>	★		
<i>Grid Operations</i>	★		
<i>Credit Monitoring/ Liability</i>	★		

NPRR182, Non-Protocol Postings on the Market Information System

Purpose (ERCOT)	Allows ERCOT to put information, not specifically required in the Nodal Protocols but required by market guides, on the Market Information System (MIS) under one of the three classifications, i.e., Public, Secure or Certified. Adds the State Estimator Standards to the list of Other Binding Documents named in the Protocols	
Benefit	Provides MIS information clarity and consistency	
Market Impact	N/A	
System Change	No	N/A
Assumptions	N/A	
TAC Vote	TAC unanimously recommended approval as recommended by PRS. All Market Segments were present.	
CEO Determination	Necessary prior to the Texas Nodal Market Implementation Date	

NPRR182, Non-Protocol Postings on the Market Information System

<i>Item Reviewed</i>	<i>No Impact</i>	<i>Impact</i>	<i>Description</i>
<i>Budget</i>	★		
<i>Staffing</i>	★		
<i>Computer Systems</i>	★		Due to current system design, there would be a Nodal impact if this NPRR is not approved
<i>Business Functions</i>	★		
<i>Grid Operations</i>	★		
<i>Credit Monitoring/ Liability</i>	★		

NPRR187, Definition for Transmission and Distribution Service Provider

Purpose (ERCOT)	Modifies the definition for TDSP to include Entities that were selected to own and operate Transmission Facilities listed in the PUCT Order in Docket No. 35665.	
Benefit	Facilitates the Competitive Renewable Energy Zone (CREZ) registration.	
Market Impact	N/A	
System Change	No	N/A
Assumptions	N/A	
TAC Vote	TAC unanimously recommended approval as recommended by PRS. All Market Segments were present	
CEO Determination	Necessary prior to the Texas Nodal Market Implementation Date	

NPRR187, Definition for Transmission and Distribution Service Provider

<i>Item Reviewed</i>	<i>No Impact</i>	<i>Impact</i>	<i>Description</i>
<i>Budget</i>	★		
<i>Staffing</i>	★		
<i>Computer Systems</i>	★		
<i>Business Functions</i>	★		
<i>Grid Operations</i>	★		
<i>Credit Monitoring/ Liability</i>	★		

Retail Market Guide Revision Request

RMGRR 079 Changes to Support Revisions to the PUCT POLR and Expedited Switch Rules – URGENT

- Enables ERCOT tracking of ESI IDs affected by mass transition for 60 days to ensure no off-cycle switching fees are incurred by customers who switch from POLR within 2 months following a mass transition to comply with PUCT Rule
- Also makes changes to expedite customer switching process
- CEO Determination: No nodal impacts and necessary to comply with PUCT rule
- System changes to be managed under PRR 819 Project 90024_01. Project budgeted in the \$500k to \$1M range. Project will be implemented in phases.

Market Guide Revisions Approved

RMGRR 076 Synchronization of Retail Market Guide with PRR 804, Revisions to Section 21 Appeal Process

- Provides that a failed motion to approve a revision request constitutes rejection and is subject to appeal unless the body at the same meeting later votes to recommend approval, remand, or refer the revision request.

SEM Go-Live

- TAC unanimously adopted the following motion at its Special Meeting on 08/18/09:
- TAC certifies, to the best of its knowledge on August 18, 2009, that all SEM Go-Live market readiness criteria have been met or are on schedule to be delivered according to the Go-Live sequence. TAC recommends that the Board also certify all market readiness criteria have been met for the SEM Go-Live on August 31, 2009. TAC acknowledges that the publishing of the Network Operations Model will only be available to the TSPs and that further work is needed to address long-term model posting issues related to Resource data and transmission system validation criteria. Concurrent with this certification, TAC acknowledges several outstanding issues remain to be resolved but TAC is confident resolution can be achieved. TAC requests ERCOT Staff promptly notify the NATF if any of these outstanding issues prevent proper maintenance and operation of the NMMS.

Update on nodal metrics development

- In August 2008 the Board approved NPRR 097 which incorporated the Independent Market Monitor, Texas Regional Entity, and ERCOT compliance function into the ERCOT Nodal Protocols.
- PUCT Staff requested at that time that specific nodal performance metrics be developed prior to the Texas Nodal Market Implementation Date.
- TAC is developing 2 primary documents to define the compliance measures and ERCOT reporting requirements – Nodal Operating Guide Revision Request 025 and Nodal Protocol Revision Request 192. Both of these revision requests may reach the Board as soon as September for final approval.
- Key remaining issues to be resolved primarily concern implementation for TNMID but avoiding program delay.

LaaRs study update

- LaaRs study is complete
- Recommended keeping LaaRs at no more than 50% of RRS, whether RRS is procured at 2300 MW level or 2800 MW level
- Reliability concerns raised with “overshooting” since Protocols Section 6.10.3.2 allows LaaRs to respond up to 150% of the amount requested by ERCOT
- Possible next step would be to study geographically dispersed tiered UFR settings to allow greater LaaRs participation in RRS

Preview: Future Board meetings

■ September

- 2010 CSC Recommendation
- PRR 812 Wind Generator Forecast Scheduling
- NOGRR 025 Monitoring Program for QSEs, TSPs, and ERCOT

■ October

- 2010 CRE Recommendation
- Report on effectiveness of PRR 763 Use of WGRPP as Planned Operating Level in Day-Ahead Resource Plan for WGRs