

# *Technical Advisory Committee*

Presentation to the  
ERCOT Board of Directors  
October 20, 2009

# *TAC Report Summary*

- 6 PRRs for Board approval
- 5 NPRRs for Board approval
- Report on Approved Guide Revision Requests
- Notice of PRR Rejection
- Unfunded Projects List Quarterly Report
- Designation of 2010 Closely Related Elements
- Report on PRR 763 implementation
- Preview: Future Board meetings

# *Protocol Revision Requests*

PRR 811 Real Time Production Potential

PRR 817 Cease Late Payment Charges for Defaulted Entities

PRR 822 Removing Access to Restricted Computer Systems, Control Systems, and Facilities - URGENT

PRR 823 Clarifying Language for Resource 12-Month Rolling Outage Schedule Format and Reporting Requirement

PRR 829 Total Transmission Capacity Correction

PRR 831 Annual Transmission Congestion Rights Auction Amounts - URGENT

# *PRR811, Real Time Production Potential*

<b>Purpose (Wind Coalition)</b>	Establishes a requirement for Wind Generation Resources (WGRs) to telemeter a Real Time signal indicating the Real Time Production Potential which will be a function of wind and turbine availability at the time	
<b>Benefit</b>	Increase wind generation production by providing more complete information to ERCOT	
<b>Market Impact</b>	N/A	
<b>System Change</b>	No	N/A
<b>Assumptions</b>	N/A	
<b>TAC Vote</b>	TAC unanimously recommended approval; all Market Segments were present.	
<b>CEO Determination</b>	No opinion for go-live	
<b>Effective Date</b>	December 1, 2009	

# *PRR811, Real Time Production Potential*

<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>	★		

# *PRR817, Cease Late Payment Charges for Defaulted Entities*

<b>Purpose (ERCOT)</b>	Modifies language to enable ERCOT to cease charging late fees to defaulting Entities prior to the initiation of the Uplift process, if ERCOT has determined that the recovery of late fees from the defaulting Entity is unlikely. Clarifies how much security may be held back to be used to pay minor items as they come due to reduce the market admin burden of processing short payments.	
<b>Benefit</b>	Removes the administrative complexities related to separating late fees and principal balances owed to QSEs, as required by the Uplift process to ensure that late fees are not uplifted to the market	
<b>Market Impact</b>	N/A	
<b>System Change</b>	No	N/A
<b>Assumptions</b>	N/A	
<b>TAC Vote</b>	TAC unanimously recommended approval; all Market Segments were present.	
<b>CEO Determination</b>	No opinion for go-live	
<b>Effective Date</b>	November 1, 2009	

# *PRR817, Cease Late Payment Charges for Defaulted Entities*

<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>	★		

# *PRR822, Removing Access to Restricted Computer Systems, Control Systems and Facilities – Urgent*

<b>Purpose (TRE)</b>	Defines the requirement for all Market Participants and ERCOT to have processes in place for removing access to restricted computer systems, control systems, and Facilities when access is no longer required. This PRR also defines the reporting requirement for incidents where improper access by terminated employees, contractors, consultants and affiliates has occurred.	
<b>Benefit</b>	Improved protection of restricted computer systems, control systems and Facilities, and also the creation of the requirement to report violations.	
<b>Market Impact</b>	N/A	
<b>System Change</b>	No	N/A
<b>Assumptions</b>	N/A	
<b>TAC Vote</b>	TAC voted to recommended approval as amended by TAC. There were 7 abstentions: 1 Independent Generator; 1 Independent REP; 3 Investor Owned Utility; 2 Independent Power Marketer. All Market Segments were present for the vote.	
<b>CEO Determination</b>	No opinion for go-live	
<b>Effective Date</b>	TAC recommends 01/01/10 effective date	



# *PRR822, Removing Access to Restricted Computer Systems, Control Systems and Facilities – 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>	★		

# PRR 822 – Overview of TAC action

- TAC addressed concerns expressed last month about ROS comments which only applied to NERC-registered entities. TAC-recommended language applies to all Market Participants and ERCOT
- Although identification of restricted systems and facilities rests with each Market Participant, the requirement to develop procedures, follow the procedures, and notify the TRE of any incidents arising from violations of restricted systems or facilities from former employees and contractors is mandatory
- TAC attempted to balance system security needs with jurisdictional concerns, the realities of physical and time constraints, and reasonable standards for corporate practices
- TAC recommends January 1, 2010 effective date to allow Market Participants the time needed to ensure development of adequate procedures to meet the new Protocol requirement

# *PRR823, Clarifying Language for Resource 12-Month Rolling Planned Outage Schedule Format and Reporting Requirement*

<b>Purpose (Calpine)</b>	Clarifies language regarding the requirement for Resource Entities to input a 12-month rolling schedule for Outages in the Outage Scheduler application	
<b>Benefit</b>	Clarity of the requirement for submitting 12-month Outage schedules	
<b>Market Impact</b>	N/A	
<b>System Change</b>	No	N/A
<b>Assumptions</b>	N/A	
<b>TAC Vote</b>	TAC unanimously recommended approval; all Market Segments were present.	
<b>CEO Determination</b>	No opinion for go-live	
<b>Effective Date</b>	December 1, 2009	

# *PRR823, Clarifying Language for Resource 12- Month Rolling Planned Outage Schedule Format and Reporting Requirement*

<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>	★		

# *PRR829, Total Transmission Capacity Correction - Urgent*

<b>Purpose (ERCOT)</b>	Replaces the acronym Total Transfer Capability (TTC) with Total Transmission Capacity (TTC), defined in Section 2.2, Acronyms	
<b>Benefit</b>	Diminish exposure to finding of non-compliance with the NERC Reliability Standards	
<b>Market Impact</b>	N/A	
<b>System Change</b>	No	N/A
<b>Assumptions</b>	N/A	
<b>TAC Vote</b>	TAC unanimously recommended approval; all Market Segments were present.	
<b>CEO Determination</b>	No opinion for go-live	
<b>Effective Date</b>	November 1, 2009	

# *PRR829, Total Transmission Capacity Correction - 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>			<i>Credit Review Pending</i>

# *PRR831, Annual Transmission Congestion Rights (TCR) Auction Amount – Urgent*

<b>Purpose (ERCOT)</b>	Revises the amount of Transmission Congestion Rights (TCRs) sold in the annual TCR auction from 40% to 30%	
<b>Benefit</b>	Reduce the impact to Balancing Energy Neutrality Adjustment (BENA)	
<b>Market Impact</b>	N/A	
<b>System Change</b>	No	N/A
<b>Assumptions</b>	N/A	
<b>TAC Vote</b>	TAC unanimously recommended approval; all Market Segments were present.	
<b>CEO Determination</b>	No opinion on go-live	
<b>Effective Date</b>	November 1, 2009	

# *PRR831, Annual Transmission Congestion Rights (TCR) Auction Amount – 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>	★		<i>Credit Review Pending</i>



# ***Nodal Protocol Revision Requests***

NPRR 174 FIP Modifications in Verifiable Startup and Minimum Energy Cost and Recovery of Exceptional Fuel Costs During RUC Intervals

NPRR 189 Ancillary Service Deployment Clarification

NPRR 191 Synchronization of PRR 189, Changes to Support Revisions to the PUCT POLR and Expedited Switch Rules

NPRR 193 Application of nodal Implementation Surcharge in Verifiable Costs

NPRR 195 Removal of McCamey Congestion Management from Nodal Protocols

# *NPRR174, FIP Modifications in Verifiable Startup and Minimum Energy Cost and Recovery of Exceptional Fuel Costs During RUC Intervals*

<b>Purpose (WMS)</b>	Modifies the verifiable Startup Cost and verifiable minimum energy cost calculation to include a 50 cent adder for the Fuel Index Price (FIP). This NPRR also allows through the dispute process for the recovery of the difference between the Reliability Unit Commitment (RUC) Guarantee based on the actual price paid for delivered natural gas and a fuel price of $FIP * 1.X$	
<b>Benefit</b>	Shares the risk associated with costs recovery for actual natural gas cost between the Qualified Scheduling Entity (QSE) providing the RUC committed Resource and the Load Serving Entity (LSE)	
<b>Market Impact</b>	N/A	
<b>System Change</b>	No	N/A
<b>Assumptions</b>	N/A	
<b>TAC Vote</b>	TAC voted to recommend approval as amended by NRG and City of Eastland comments with 2 abstentions – Consumer and Independent REP segments; all Market Segments were present	
<b>CEO Determination</b>	No opinion on whether NPRR is necessary prior to TNMID	

# *NPRR174, FIP Modifications in Verifiable Startup and Minimum Energy Cost and Recovery of Exceptional Fuel Costs During RUC Intervals*

<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>	★		

# *NPRR189, Ancillary Service Deployment Clarification*

<b>Purpose (ERCOT)</b>	Clarifies the difference between Ancillary Service capacity deployment and energy deployment and how it affects Security-Constrained Economic Dispatch (SCED)	
<b>Benefit</b>	More clarity regarding Ancillary Service deployment	
<b>Market Impact</b>	N/A	
<b>System Change</b>	No	N/A
<b>Assumptions</b>	N/A	
<b>TAC Vote</b>	TAC unanimously recommended approval; all Market Segments were present.	
<b>CEO Determination</b>	Necessary prior to go-live	

# *NPRR189, Ancillary Service Deployment 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>	★		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>	★		

# *NPRR191, Synchronization of PRR819, Changes to Support Revisions to the PUCT POLR and Expedited Switch Rules*

<b>Purpose (Texas SET)</b>	Synchronizes the Nodal Protocols with Protocol Revision Request (PRR) 819, Changes to Support Revisions to the PUCT POLR and Expedited Switch Rules, which provides that ERCOT shall identify, for 60 days, Electric Service Identifiers (ESI IDs) acquired in a Mass Transition to a Provider of Last Resort (POLR) so that Customers that switch from the POLR are not charged for an out-of-cycle meter read and it will also implement changes necessary to expedite the Customer switching process	
<b>Benefit</b>	Facilitates compliance with Public Utility Commission of Texas (PUCT) rules	
<b>Market Impact</b>	N/A	
<b>System Change</b>	No	N/A
<b>Assumptions</b>	N/A	
<b>TAC Vote</b>	TAC unanimously recommended approval; all Market Segments were present.	
<b>CEO Determination</b>	Necessary prior to go-live	

# *NPRR191, Synchronization of PRR819, Changes to Support Revisions to the PUCT POLR and Expedited Switch 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>	★		

# *NPRR193, Application of Nodal Implementation Surcharge in Verifiable Costs*

<b>Purpose (WMS)</b>	Allows Resources to include in their verifiable costs the Nodal Implementation Surcharge for periods while ramping up from breaker close to Low Sustained Limit (LSL)	
<b>Benefit</b>	Ensures Generation Resources recover their full cost of operations including the fixed cost of the Nodal Implementation Surcharge	
<b>Market Impact</b>	N/A	
<b>System Change</b>	No	N/A
<b>Assumptions</b>	N/A	
<b>TAC Vote</b>	TAC unanimously recommended approval; all Market Segments were present.	
<b>CEO Determination</b>	No opinion on go-live	



# *NPRR193, Application of Nodal Implementation Surcharge in Verifiable Costs*

<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>	★		

# *NPRR195, Removal of McCamey Congestion Management from Nodal Protocols*

<b>Purpose (ERCOT)</b>	Removes the unique congestion management procedures for the McCamey Area from the Nodal Protocols, consistent with Zonal Protocol revisions made pursuant to Protocol Revision Request (PRR) 810, Remove McCamey Congestion Management, which was approved by the ERCOT Board on August 18, 2009. This NPRR removes all mention of McCamey Flowgate Rights (MCFRIs) while leaving intact the description of Flowgate Rights (FGRs) and related Settlement equations	
<b>Benefit</b>	Synchronized Zonal and Nodal Protocols	
<b>Market Impact</b>	N/A	
<b>System Change</b>	No	N/A
<b>Assumptions</b>	N/A	
<b>TAC Vote</b>	TAC recommended approval with 1 abstention from the Independent Generator segment; all Market Segments were present.	
<b>CEO Determination</b>	Necessary for go-live	

# *NPRR195, Removal of McCamey Congestion Management from nodal Protocols*

<i>Item Reviewed</i>	<i>No Impact</i>	<i>Impact</i>	<i>Description</i>
<i>Budget</i>	★		
<i>Staffing</i>	★		There is a reduction in workload due to this NPRR but not enough to alter current staffing projections.
<i>Computer Systems</i>	★		
<i>Business Functions</i>	★		
<i>Grid Operations</i>	★		
<i>Credit Monitoring/ Liability</i>	★		

## *Guide Revision Requests approved by TAC*

OGRR 225 Quick Start Units Qualification Ramp Period

OGRR 235 Total Transmission Capacity Correction

NOGRR 030 Synchronization - Total Transmission Capacity  
Correction

RMGRR 080 Define E-Mail Address Format for the Detail Record  
in the Customer Billing Contact Information File

CMGRR 010 Synchronization of Competitive Metering Guide with  
PRR 804, Revisions to Section 21 Appeal Process

COPMGRR 012 Creating Section 11, Disputes and Data Extract  
Variances

LPGRR 034 Profile Model Spreadsheets – Calendar Extension and  
Delete Unused Models

# *Notice of PRR Rejection*

PRR 828 Remove QSE SCE Performance Exemption for  
QSEs with Only Uncontrollable Renewable  
Resources On-line

# Unfunded Projects List Quarterly Report

- There are currently no unfunded projects

# 2010 CRE Recommendation

- TAC recommendation for 2010 Closely Related Elements (with associated list of no Boundary Generation Resources) was unanimously adopted with all market segments present
- Recommended list includes 25 CREs
- Four of the recommended CREs are new for 2010
  - Rothwood – King 345A
  - Rothwood – Kuykendahl
  - Springvalley – McGregor
  - Springvalley – Cottonwood

# Preview: next Board meeting

- Revised Ancillary Services Procurement Methodology
- Quarterly Renewables Report to the PUCT