

Technical Advisory Committee

Presentation to the
ERCOT Board of Directors
February 17, 2009

TAC Report Summary

- 6 PRRs for Approval
- TAC recommendation regarding SCR 745
- TIEC Appeal of TAC Action (PRRs 776 and 791)
- TAC Actions regarding nodal implementation
- 2009 Ancillary Services Procurement Methodology changes
- Prioritized wind integration issues

Protocol Revision Requests

PRR 782 Cleanup and Corrections to Terminology and Transaction Timings in Protocols Sec. 15, Customer Registration

PRR 793 WGR QSE Scheduling Metric - URGENT

PRR 794 Meteorological Data Required from QSEs Representing WGRs

PRR 795 90-Day Transmission Outage Scheduling Timeline - URGENT

PRR 798 Update Trading Hub Conversion - URGENT

PRR 799 ERCOT CEO Approval of NPRRs and SCRs Prior to Posting on MIS - URGENT

PRR 782 – Clean-up & Corrections to Terminology & Transaction Timings in Protocol Section 15, Customer Registration

Purpose (Green Mountain, IREP & CenterPoint Energy, IOU for TX SET)	Corrects and clarifies the transaction timing descriptions to make them consistent with current processes and Appendix D, Transaction Timing Matrix, in the Retail Market Guide	
Benefit	Clarifies current market processes.	
Market Impact	Increased clarity and accuracy of the Protocols.	
System Change	No	N/A
Assumptions	N/A	
TAC Vote	TAC unanimously recommended approval; all Market Segments were present	
Effective Date	March 1, 2009	

PRR 782 – *Clean-up & Corrections to Terminology & Transaction Timings in Protocol Section 15, Customer Registration*

<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 793 – WGR QSE Scheduling Metric -- URGENT

Purpose (CPS Energy, Muni on behalf of QMWG)	Provides details for WGR-only QSEs such that the scheduling metric will apply to more operating hours	
Benefit	Conforms the WGR QSE scheduling practices to ERCOT control process.	
Market Impact	Improves operational efficiency.	
System Change	No	N/A
Assumptions	N/A	
TAC Vote	TAC unanimously recommended approval; all Market Segments were present	
Effective Date	March 1, 2009	

PRR 793 – WGR QSE Scheduling Metric -- 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 794— Meteorological Data Required from QSEs Representing WGRs -- URGENT

Purpose (CPS Energy, Muni on behalf of QMWG)	Requires WGR to provide real-time meteorological data to ERCOT through its selected QSE; requires ERCOT to establish procedures specifying the data's accuracy requirements	
Benefit	Allows for improved wind power potential forecasting by ERCOT.	
Market Impact	Improves capacity planning by ERCOT.	
System Change	No	N/A
Assumptions	N/A	
TAC Vote	TAC unanimously recommended approval as amended by TAC; all Market Segments were present	
Effective Date	April 1, 2009	

*PRR 794— Meteorological Data Required from QSEs
Representing WGRs -- 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 795 – 90-Day Transmission Outage Scheduling *Timeline -- URGENT*

Purpose (ERCOT)	Requires ERCOT to coordinate outages submitted with more than 90 days notice at least 75 days prior to the outage; clarifies 3 to 8 day timeline to eliminate overlap in requirements.	
Benefit	Increase accuracy of TCR model; reduce timeline confusion.	
Market Impact	Enhance TCR holder's ability to mitigation congestion risk by providing more detailed TCR cases..	
System Change	No	N/A
Assumptions	N/A	
TAC Vote	TAC unanimously recommended approval; all Market Segments were present	
Effective Date	March 1, 2009	

PRR 795 – 90-Day Transmission Outage Scheduling Timeline -- 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 798— Update Trading Hub Conversion -- URGENT

Purpose (ERCOT)	Synchronizes Hub calculations with 2009 CSC designation.	
Benefit	Improves accuracy of the Protocols.	
Market Impact	Increased clarity and accuracy of the Protocols.	
System Change	No	N/A
Assumptions	N/A	
TAC Vote	TAC recommended approval with 2 abstentions (1 IOU and 1 IREP); all Market Segments were present	
Effective Date	Upon Board approval	

PRR 798– *Update Trading Hub Conversion -- 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 799 – ERCOT CEO Approval of NPRRs and SCRs Prior to Posting on MIS -- URGENT

Purpose (ERCOT)	Mandates ERCOT CEO approval before NPRRs may be posted to the MIS; mandates ERCOT CEO approval of SCRs that impact functionality of nodal market; provides appeal mechanism.	
Benefit	N/A	
Market Impact	N/A	
System Change	No	N/A
Assumptions	N/A	
TAC Vote	TAC recommended approval with 3 abstentions (IREP); all Market Segments were present	
Effective Date	Upon ERCOT Board Approval	

PRR 799 – ERCOT CEO Approval of NPRRs and SCRs Prior to Posting on MIS -- 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>	★		

System Change Request

SCR 745 Retail Market Outage Evaluation and Resolution

- SCR 745 developed to address root causes of unplanned retail systems outages with hardware installations and other changes to eliminate single points of failure
- SCR 745 broken into 3 Phases; Phases I and II approved by ERCOT Board on Dec. 13, 2005 and requested recommendation TAC regarding whether to proceed with Phase III after implementation and evaluation of Phases I and II
- TAC recommends the Board of Directors close SCR 745 without proceeding to Phase III

TIEC Appeal of TAC Action

■ Issue Background

- PRR 650: Addressed issue of BES price suppression due to NSRS deployment truncating scarcity signal essential to energy-only market design
- PRR 776: Changes *ex poste* price adjustment mechanism of PRR 650 which inhibits load response to price signals to an *ex ante* price adjustment to provide greater transparency
- PRR 791: Creates shortage pricing mechanism to address concerns that PRR 776 does not allow pricing to reflect scarcity conditions within the parameters set by PUCT Rule

TIEC Appeal of TAC Action

■ Procedural History

■ PRR 776

- filed Aug. 25, 2008
- PRS recommended approval with Urgent Status on Oct. 23, 2008
 - 3.500 in favor; 3.167 opposed; 2 abstentions
- TAC considered and tabled PRR 776 in Nov., Dec., Jan., and Feb.

■ PRR 791

- filed Dec. 10, 2008
- PRS recommended approval with Urgent Status
 - 3.8 in favor; 0.450 opposed; 6 abstentions
- TAC considered and tabled PRR 791 in Jan., Feb.

■ PRR 776 Discussion Group

- Met 6 times Nov.-Feb. and brought forward modifications to both 776 and 791 to address market design and technical implementation concerns. Discussion Group work is ongoing with next report expected at March 5 TAC meeting

TIEC Appeal of TAC Action

■ TIEC Appeal of TAC Action

- TAC Action was to Table PRRs 776 and 791 for one month and request the Discussion Group evaluate market impacts and address the issues associated with the requirement that NSRS be provided from off-line units

■ Procedural Issues

- Appeals process requirements
 - “Action of TAC” is appealable
 - TAC has supermajority requirement for action
- The “limbo” problem
 - Possible for no motion to achieve 67.7% support
- Issues raised by appeal of an action to Table
 - What action can the Board take related to a TAC Action to table an issue?

TIEC Appeal of TAC Action

- Substantive Issues
 - Load participation
 - Scarcity pricing
 - Balancing reliability needs with market considerations
 - Jurisdictional issues
- Comments filed for Board consideration
- Presentations:
 - Phillip Oldham, TIEC – Appellant
 - Brad Jones, Luminant – TAC Advocate
 - Dan Jones, Potomac Economics – IMM

TAC actions regarding nodal implementation

- TAC recommended approval of PRR 799
- TAC is undertaking a review of stakeholder interaction with ERCOT nodal implementation team and evolving the focus and level of our engagement in implementation activities as the needs of the project evolve
- TAC forwarded the statement of the TPTF on the proposed revised nodal implementation schedule for the Board's consideration

Managing Project Scope and Resources

- TAC recommended approval of PRR 799 to address concerns about continuing nodal project scope creep and to allow the nodal implementation team to be more fully focused on implementation activities
- TAC adopted motion to refocus stakeholder engagement in nodal implementation activities

Managing Project Scope and Resources

- TAC acknowledges the need for continuing and active Market Participant involvement in the ERCOT Nodal Implementation Process. Given the current status of the ERCOT Nodal Implementation Project, TAC has determined that a new direction in executing its responsibilities in this area is appropriate. Accordingly, the following actions are adopted:
- 1. It is the intent of the TAC that the Transition Plan Task Force (TPTF) Charter will be retired and that the TPTF will be dissolved at the March 5, 2009 TAC meeting.
- 2. TPTF is directed to bring a final report to TAC on March 5, 2009 containing the following elements:
 - TPTF Charter assignments completed
 - TPTF Charter assignments not yet completed
 - Identification, description, and status report of open Action Items and key issues; and
 - Any other relevant matters.
- 3. TAC will consider transition mechanisms to complete the essential TPTF Charter assignments.

Proposed Revised Nodal Schedule

- Consistent with reviews conducted during January 2009, the TPTF acknowledges:
 - its commitment to working with the ERCOT Nodal Project Team to achieve market implementation no later than December 2010;
 - ERCOT's responsiveness to the schedule related issues raised during TPTF discussions; and,
 - the improvements represented by the resulting additions and updates ERCOT has included in its nodal implementation schedule to address TPTF issues identified during its review.
- Therefore, TPTF finds that the ERCOT nodal schedule as updated represents, with reasonable certainty, an achievable progression of Market Participant tasks and activities consistent with a December 2010 Texas nodal Market Implementation Date.
- TAC forwards TPTF's finding to the Board for consideration

2009 Ancillary Services Procurement Methodology Changes

- TAC endorsed proposed changes presented to the Board this month by ERCOT Staff
- Changes address 2 key areas:
 - Optimization of NSRS procurement
 - Allowing increase in total amount of LaaRs providing RRS up to 50% of 2800 MW

Ancillary Services Procurement Optimization

- Stakeholder recommendation for optimization of NSRS procurement included in proposed 2009 Ancillary Services Procurement Methodology document
- TAC endorsed methodology to procure NSRS in smaller, more targeted 4-hour blocks
- Procurement methodology change is expected to further lower the total cost of NSRS charged to the market

LaaRs Study

- When the Board authorized increased RRS procurement (from 2300 to 2800 MW), question was raised whether amount of RRS provided by LaaRs could be increased at the higher level
- Dynamics Work Group study recommended up to 50% of RRS (at 2800 MW) can be provided by LaaRs. This recommendation is incorporated into the proposed 2009 Ancillary Services Procurement Methodology
- Next study underway to see if more than 50% of RRS can be provided by LaaRs at any procurement level

Prioritized Wind Integration Issues

- Four categories of identified issues
 - Market Design
 - System Operations
 - System Planning
 - Workshops / Training
- Four categories of issues prioritization
 - Near-term
 - Long-term
 - Unknown
 - White papers under development to frame / assess issues
 - Complete

Prioritized Wind Integration Issues

■ Current activity

- Developing first Quarterly CREZ Report to PUCT
 - One of two quarterly reports required by PUCT CREZ Order
 - Joint effort of TAC and ERCOT Staff
 - To be presented at PUCT Open Meetings
 - First report to be previewed at March Board meeting
- Preparations for Wind Workshop III
 - LVRT study requirements and data collection activity
 - Focus on wind operations in nodal market

■ Next steps

- More detailed issues prioritization
- Renewable technologies integration plan

