

# *Technical Advisory Committee*

Presentation to the  
ERCOT Board of Directors  
March 17, 2009

# *TAC Report Summary*

- 3 PRRs for Board approval
- 2 NPRRs for Board approval
- 1 LPGRR for Board approval
- Report: 2 OGRRs approved by TAC
- Report: 1 NOGRR approved by TAC
- Report: TAC Action on ERCOT CRE Request
- Update: PRRs 776 and 791
- Update: TAC Response to PUCT and TRE
- Update: Quarterly Renewables Report to PUCT
- Update: Stakeholder engagement in nodal project
- Update: LaaRs Study

# *Protocol Revision Requests*

PRR 784 Delete Use of Boundary Generation Resources  
to Resolve CRE Congestion

PRR 785 Timing for Required Black Start Unit Load  
Carrying Test

PRR 786 Modifications to EILS Settlement

## *PRR 784 – Delete Use of Boundary Generation Resources to Resolve CRE Congestion*

Purpose (J Aron, IPM)	Removes language regarding resolution of congestion on a CRE by Boundary Generation Resources (Sec. 7.3.2)	
Benefit	Clarifies current protocols to match ERCOT operations.	
Market Impact	N/A	
System Change	No	N/A
Assumptions	N/A	
TAC Vote	TAC recommended approval as presented by PRS with 2 opposing votes (Independent Generator and IOU); all Market Segments were present	
Effective Date	April 1, 2009	

## *PRR 784 – Delete Use of Boundary Generation Resources to Resolve CRE Congestion*

<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 785 – Timing for Required Black Start Unit Load Carrying Test*

Purpose (ERCOT)	Changes the required Black Start unit load carrying test from once every 6 years to once every 5 years.	
Benefit	Reduces NERC compliance violation risk.	
Market Impact	More frequent load carrying tests.	
System Change	No	N/A
Assumptions	N/A	
TAC Vote	TAC unanimously recommended approval as presented by PRS; all Market Segments were present	
Effective Date	April 1, 2009	

## *PRR 785* – *Timing for Required Black Start Unit Load Carrying Test*

<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 786 – Modifications to EILS Settlement*

Purpose (Luminant, IOU on behalf of SDAWG)	Clarifies that 1 <sup>st</sup> settlement uses QSE LRS; introduces a resettlement based on True-Up LRS; removes conflicting dispute language; clarifies dispute submission deadlines; and moves language on settlement timing to Section 9.5.5.	
Benefit	Eliminates confusion and allows more accurate uplift of EILS Cost to each QSE representing load.	
Market Impact	Improved process and data information for the market.	
System Change	No	N/A
Assumptions	N/A	
TAC Vote	TAC unanimously recommended approval as presented by PRS; all Market Segments were present	
Effective Date	March 1, 2009	



## *PRR 786* – *Modifications to EILS Settlement*

<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 135 Deletion of UFE Zone Analysis Language

NPRR 161 Clarification of Establishing Decision-making  
Authority of Managed Capacity

## *NPRR 135– Deletion of UFE Analysis Zone Language*

Purpose (ERCOT)	Deletes outdated section pertaining to UFE analysis.	
Benefit	Clarifies Protocols.	
Market Impact	N/A	
System Change	No	N/A
Assumptions	N/A	
TAC Vote	TAC recommended approval as presented by PRS with 1 abstention (IOU); all Market Segments were present	
Effective Date	Posting approved by ERCOT CEO – Effective upon Texas Nodal implementation; no incremental impact to nodal budget or schedule	

## *NPRR 135– Deletion of UFE Analysis Zone 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>	★		
<i>Business Functions</i>	★		
<i>Grid Operations</i>	★		
<i>Credit Monitoring/ Liability</i>	★		

# *NPRR 161 – Clarification of Establishing Decision-making Authority of Managed Capacity*

Purpose (ERCOT)	Clarifies the obligation to provide ERCOT designated decision-making authority over Resources when considering pricing safeguards and testing competitiveness in resolving system constraints.	
Benefit	Clarifies Protocols.	
Market Impact	Resource entities submit designation of decision-making authority directly to ERCOT (not through QSE).	
System Change	No	N/A
Assumptions	N/A	
TAC Vote	TAC recommended approval as presented by PRS with 1 abstention (IOU); all Market Segments were present	
Effective Date	Posting approved by ERCOT CEO – Effective upon Texas Nodal implementation; no incremental impact to nodal budget or schedule; requires “essentiality designation” by TPTF.	

## *NPRR 161 – Clarification of Establishing Decision-making Authority of Managed Capacity*

<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>	★		

# *Load Profile Guide Revision Request*

## LPGRR 032 Profile Decision Tree Changes for Advanced Meters

- Allows 15-Minute Settlement of ESI IDs with Advanced Meters
- TAC unanimously recommended approval; all market segments were present
- Requires Board approval because ERCOT system change is required for implementation
- System change can be incorporated into existing project for Advanced Metering – Interim Settlement Solution at no additional cost

# *Operating Guide Revision Requests*

## OGRR 219 Time Error Correction - URGENT

- Submitted by ERCOT Staff to enable participation in a NERC field trial to evaluate removal of the time error correction as a reliability standard
- Unanimously approved by TAC; all market segments were present

## OGRR 220 Synchronization with PRR 799, ERCOT CEO Approval of NPRRs and SCRs Prior to Posting on MIS - URGENT

- Unanimously approved by TAC; all market participants were present



# *Nodal Operating Guide Revision Request*

## NOGRR 023 Hotline Changes for QSEs Representing Multiple Entities

- Synchronizes Nodal Operating Guide to conform with OGRR 214
- No impact to nodal project, no impact to staffing or grid operations
- Unanimously approved by TAC; all market segments were present

# ERCOT CRE Request

- On March 4, ERCOT requested the addition of 2 new North to Houston Closely Related Elements (CREs)
  - Flewellen-Peters 138kV transmission line
  - Hockley-Tomball 138kV transmission line
- ERCOT requested use of the CREs during periods when any of the double circuits feeding the Houston area from the North are unavailable during the construction work associated with the Singleton substation cut in

# ERCOT CRE Request

- On March 5, TAC discussed the following issues related to the ERCOT CRE request:
  - Temporary nature of the CREs
    - Expected to be removed from the CRE list after Singleton is online
  - Conditional nature of the CREs
    - To be used as needed during construction outages
  - Expected effectiveness of the CREs and impacts on MCPE
    - Concerns about repeating ineffective and expensive N\_S congestion management during Spring 2008
  - TCR market impacts from approving or rejecting the CREs
    - Concerns about annual TCRs already sold, monthly TCRs available for auction, possibility of overselling TCRs leading to uplifted costs

# ERCOT CRE Request

- Because TAC voted by e-mail, a motion to reject the ERCOT request was made to provide a meaningful outcome to the vote
- The motion to reject the ERCOT request failed a TAC e-mail vote by 1 vote
- Per Protocols Sec. 7.2.3, the lack of TAC action resulted in the CREs being approved
- CREs expected to be removed from the list upon Singleton-related construction completion
  - Target completion date is April 20

# Update: PRRs 776 and 791

## ■ 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

# Update: PRRs 776 and 791

- TAC activity on March 5
  - Motion to approve 776
    - Motion failed by 1 vote
  - Motion to approve 776/791 combo
    - Motion failed by 1 vote
  - No motion to approve 791 alone
  - PRRs 776 and 791 remain tabled at TAC
  - Most current version of language for each of the 3 options provided for the Board's information
  - On March 10, ERCOT filed comments regarding implementation of each of the 3 options
    - 776 alone: 1 month, minor costs
    - 776/791 combo: 3-6 months, \$50-100k
    - 791 alone: 3-6 months, \$50-100k



# TAC Response to PUCT and TRE

- When the original Nodal Protocols were developed, the ERCOT Independent Market Monitor and Texas Regional Entity did not exist
- In August 2008, the Board approved NPRR 097 which incorporated the IMM and TRE into the Nodal Protocols
- At the time NPRR 097 was approved, PUCT Staff and TRE requested a detailed performance monitoring and compliance program be included in the Nodal Operating Guide since such details were not included in NPRR 097

# TAC Response to PUCT and TRE

- PUCT Executive Director and TRE CEO requested update from TAC on plan for developing detailed performance monitoring and compliance regime
- TAC response is included in Board materials
- TAC plan is to have performance metrics defined by July 31 in order to allow ERCOT sufficient time to develop forms and reports prior to nodal Go-Live
- The development of the required performance metrics will be accomplished through NOGRR 025 which is currently under consideration by the Reliability and Operations Subcommittee and Wholesale Market Subcommittee



# Quarterly Renewables Report to PUCT

- PUCT Final Order on Rehearing in Docket No. 33672 *Staff Petition for Designation of Competitive Renewable Energy Zones* requires ERCOT and market participants, through the designated committee (TAC), to file a report not less than quarterly on progress addressing reliability issues under study relating to wind integration
- First quarterly report prepared by TAC is included in Board materials
- Report is expected to be filed and presented at the March 27 PUCT Open Meeting

# Stakeholder Engagement in Nodal Project

- On March 5, TAC dissolved the TPTF effective immediately
- TAC established an interim procedure for ERCOT Staff to seek market participant feedback on nodal implementation issues as they arise
- New stakeholder group focused on nodal project delivery and readiness will likely be formed
- NPRR “parking deck” under development for those NPRRs which will not be incorporated into the Go-Live version of the Nodal Protocols

# LaaRs Study Update

- The Dynamics Work Group is currently studying the levels of LaaRs providing RRS at 2,300 MW of total Responsive Reserves
- Study is on track to be completed in May

