

# ***Technical Advisory Committee***

***Presentation to the  
ERCOT Board of Directors  
August 16, 2005***

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## **Overview**

- 1 urgent PRR for approval.
- 5 PRRs on normal timeline for approval.
- 1 SCR for approval.
- RMS Update:
  - 1 RMGRR for notice.
  - Residential survey endorsement for annual load profile validation.
- WMS Update: resolution on fuel oil storage service.
- ROS Update: 3 OGRRs for notice.
- Market Participant Default Taskforce update.

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# PRR 614 – Balancing Bids for Replacement Capacity (URGENT)

- Voted “Urgent” by PRS—need to coordinate with RPRS implementation in EMMS 4.0.
- PRR submitted by Exelon (IPM).
- Clarifies the required BES bids from a QSE awarded RPRS—consistent with BES bids of units receiving an OOMC instruction.
- Benefit: Improves accuracy of BES bids and ensures BES deployment respects unit limits.
- TAC recommended approval unanimously.
- All market segments were present.
- Effective upon system implementation.
- Priority 1.1 and 32.6 rank.

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## PRR 614 – Balancing Bids for Replacement Capacity

### Impact Analysis

<i>Item Reviewed</i>	<i>No Impact</i>	<i>Impact</i>	<i>Description</i>
<b>Budget</b>		★	< \$100 K
<b>Staffing</b>	★		
<b>Computer Systems</b>		★	Database changes
<b>Business Functions</b>	★		
<b>Grid Operations</b>	★		
<b>Credit Monitoring/Liability</b>	★		

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# PRR 568 – Change Initial Settlement from 17 to 10 Days

- PRR submitted by TXU Energy.
- Changes the day the Initial Settlement statement is issued from 17 days to 10 days following the Operating Day.
- Benefit: Reduces overall credit exposure and collateral requirements due to the quicker issuance of the Initial Settlement.
- PRS recommended approval unanimously.
- All market segments were present.
- Transition plan developed by COPS approved by TAC: requires an affirmative vote of approval before implementation.

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## **PRR 568 – Change Initial Settlement from 17 to 10 Days**

### **Impact Analysis**

<i>Item Reviewed</i>	<i>No Impact</i>	<i>Impact</i>	<i>Description</i>
<b>Budget</b>	★		Change to occur through O&M \$
<b>Staffing</b>	★		No FTE – Impact for analysis
<b>Computer Systems</b>	★		Minor changes to systems
<b>Business Functions</b>	★		Change in process timing
<b>Grid Operations</b>	★		
<b>Credit Monitoring/Liability</b>	★		Supports

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# PRR 588 – Testing of Quick Start Units in the BES Market

- PRR submitted by Austin Energy (Muni).
- PRR memorializes April 14, 2005 market notice on quick start unit testing requirement.
- PRR limits UBES bid quantities to the tested quantity available through ERCOT's test procedure.
  - Test procedure is in a pending OGRR.
- Benefit: Resolves ERCOT's concern that reliance on quick start units in the BES market may negatively affect reliability.
- TAC recommended approval with 1 opposed (IOU) and 5 abstentions (consumer).
- All market segments were present.
- Effective September 1, 2005.

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## PRR 588 – Testing of Quick Start Units in the BES Market

### Impact Analysis

<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>	★		

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# PRR 590 – Update Unit Telemetry Requirement

- PRR submitted by ERCOT
- Responds to Patton #14: ERCOT institute procedures to monitor whether QSEs are meeting their reserve obligations in real time.
- Adds requirement for QSEs to provide RT AGC status and ramp rate for all online units
- Benefit:
  - Improves ERCOT’s ability to determine if QSE can meet RRS obligation
  - Provides expanded data for historical analysis of events
- TAC recommended approval unanimously
- All market segments were present
- Effective upon system implementation
- 2006 Priority 1.2, rank 83

## PRR 590 – Update Unit Telemetry Requirement

### Impact Analysis

<i>Item Reviewed</i>	<i>No Impact</i>	<i>Impact</i>	<i>Description</i>
<b>Budget</b>		★	Less than \$100K
<b>Staffing</b>		★	ST- testing; LT - minor impact
<b>Computer Systems</b>		★	SCADA, ICCP & RTU
<b>Business Functions</b>		★	Add process for new data
<b>Grid Operations</b>	★		
<b>Credit Monitoring/Liability</b>	★		

## PRR 595 – Protocol Section 10

- PRR submitted by TXU ED on behalf of Meter Working Group
- Conforms Section 10, Metering, to current market and ERCOT processes
- Benefit: Improves clarity and accuracy of the Protocols
- TAC recommended approval unanimously
- All market segments were present
- Effective September 1, 2005

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## PRR 595 – Protocol Section 10

### Impact Analysis

<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>	★		

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## PRR 597 – Texas Test Plan Team

- PRR submitted by AEP on behalf of TTPT
- Updates Protocols for current ERCOT processes
- Benefit: Improves accuracy of Protocols
- TAC recommended approval unanimously
- All market segments were present
- Effective September 1, 2005

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## PRR 597 – Texas Test Plan Team

### Impact Analysis

<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>	★		

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# SCR 742 Automated Retail Transaction Verification

- Creates a test environment allowing Market Participants to conduct automated pre-testing of retail transactions.
- Benefits:
  - Reduced effort and cost to complete certification testing;
  - Quicker time-to-market for new Competitive Retailers; and
  - Improvements in quality of transactions & data.
- TAC approved unanimously.
- All market segments present.
- Effective upon system implementation.
- 2006 Priority 2.3

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## SCR 742 – Automated Retail Transaction Verification

### Impact Analysis

<i>Item Reviewed</i>	<i>No Impact</i>	<i>Impact</i>	<i>Description</i>
<b>Budget</b>		★	4-HL (\$500k - \$1 mm)
<b>Staffing</b>		★	1-2 FTEs
<b>Computer Systems</b>		★	New interface to testing env
<b>Business Functions</b>		★	Support for MPs and app maintenance
<b>Grid Operations</b>	★		
<b>Credit Monitoring/Liability</b>	★		

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## RMGRR 023 Inadvertent Gain Process

- Defines the responsibilities of CRs (both the original and the gaining CR) in the event of an inadvertently transferred retail account.
- Minor revisions to TDSPs' responsibilities for inadvertently transferred accounts.
- Benefits: formalizes processes—consistent with PUC customer protection rules—for orderly & timely reversal of inadvertently transferred retail accounts.

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## Load Profile Validation: Residential Survey

- Last Fall, the ERCOT Board suspended the 2004 annual validation of residential load profiles pending collection of improved residential data.
- In June 2005, ERCOT conducted a pilot survey of residential customers, objectives:
  - Improve algorithm predicting presence of residential electrical heat, and
  - Collect data for development of new profile types.

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## Load Profile Validation: Residential Survey (con't)

- Pilot Survey:
  - Surveyed 1,000 residential customers across all weather zones.
  - Valid response rate: 9.4%.
- August 2005: TAC endorsed ERCOT/RMS's recommendation to conduct full survey of 40,000 residential accounts.
- September 2005: Full survey to be conducted.
- Nov – Dec 2005: Profile Working Group to initiate 2006 residential load profile validation based on review and analysis of survey responses; 2005 validation is currently underway.

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## Alternative Fuel Resolution

- Long simmering issue: should fuel oil storage be compensated as an ancillary service?
- April 2004: TAC directed ROS to examine fuel source reliability in ERCOT.
- October 2004: ROS conducted a survey of dual fuel resource capabilities in ERCOT.
- February 2005, TAC assignments:
  - ROS to revise EECF for advanced market notice of possible fuel curtailments (complete);
  - WMS to examine an emergency demand-side services (PRR currently under consideration); and
  - WMS to examine whether fuel oil storage should be compensated as an ancillary service.

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## Alternative Fuel Resolution (con't)

- July 2005: TAC adopted a resolution advising against creating an alternative fuel ancillary service:
  - Critical dependency on natural gas resources across ERCOT.
  - Limited quantity of dual-fuel resources in ERCOT.
  - Fuel oil storage and capability would prove inadequate to prevent firm load shedding in a widespread natural gas curtailment.
  - Fuel oil is maintained by some entities in ERCOT based on business priorities.
- Outstanding issues:
  - Development of a winter season assessment (ERCOT and market participant discussions are ongoing).
  - Reconsideration of gas curtailment priority.

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## OGRR 163 – State Estimator Observability and Redundancy Requirements

- Implements recommendations from a TAC approved ERCOT white paper (12-04-04)
- Formalizes process used by ERCOT to require additional telemetry as inputs to the state estimator. Defines TDSP/QSE options and responsibilities upon receiving a request.
- Benefit: Enhances accuracy of ERCOT's network model.

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## OGRR 166 – Double Circuit Contingencies

- Specifies circumstances under which ERCOT will consider outages on a double circuit as either a single or double contingency.
- Benefit: Improves clarity and accuracy of the Operating Guides

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## OGRR 167 – LaaR Underfrequency Relay (UFR) Interruption Time

- Establishes for LaaRs a interruption total time limit of 30 cycles including all relay and breaker interruption
- Benefit: Clarification and consistency with language used for UFR trip time setting for firm load.

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## Market Participant Default Joint WMS/RMS Task Force

- Post-triggering event issues addressed by RMS.
  - Short-term recommendations:
    - If the defaulting LSE does not cure, LSE must provide ERCOT customer information;
    - POLR is to submit off-cycle, unprotected switch within 5 retail business days;
    - Educational seminar for POLRs, TDSPs, ERCOT, and PUC Staff.
  - Long-term recommendations still under discussion.

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## Market Participant Default Joint WMS/RMS Task Force (con't)

- Pre-triggering event issues addressed by WMS.
- PRRs under development/discussion:
  - Use of a virtual QSE for tracking and scheduling in the event of an LSE no longer represented by a QSE.
  - Creation of an Emergency QSE by an LSE in the event of a QSE default.
  - Allowing QSEs to continue scheduling bilateral contracts to lessen Market impacts.
  - Timeline issues.

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