
TAC Update

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TAC Chair and Vice Chair

ERCOT Board Meeting
September 20, 2011

Summary of TAC Update

Revision Requests Unanimously Recommended for Approval by TAC:

- NPRR321, Allow Change to Energy Offer Curve MW Amounts in the Adjustment Period for Qualifying Facilities.
- NPRR348, Generation Resource Start-Up and Shut-Down Process
- NPRR354, Revisions to Non-Spin Performance Criteria Language and Provision for ICCP Telemetry of Non-Spin Deployment
- NPRR358, Clarification of Responsible Entity for Binding Obligations
- NPRR360, Summary Report of HDL and LDL
- NPRR374, Modification of SCR Process and Urgency Requirements
- NPRR375, Extend the Reporting Horizon for CDR Inputs
- NPRR380, Minor Changes to Default Uplift Invoice
- NPRR382, Verbal RUC Committed or Decommitted Resources Report
- NPRR383, Unconfirmed Trades Reports
- NPRR384, Revisions to Support SCR766 , Load Zone and Hub LMPs Distributed by ICCP

Summary of TAC Update

Revision Requests Non-Unanimously Recommended for Approval by TAC:

- NPRR365, Change in Resource Outage Approvals from Eight to 45 Days (formerly “Change in Resource Outage Approvals from Eight to 90 Days”) – URGENT
- NPRR379, EILS Dispatch Sequence and Performance Criteria Upgrades
- NPRR396, Reduce Standard O&M Costs – URGENT

Impact Assessment for Parking Deck NPRRs Non-Unanimously Recommended for Approval by TAC:

- NPRR207, Unit Deselection
- NPRR210, Wind Forecasting Change to P50, Synchronization with PRR841
- NPRR222, Half-Hour Start Unit RUC Clawback
- NPRR240, Proxy Energy Offer Curve
- NPRR241, Aggregate Incremental Liability (AIL) Calculation and Credit Reports Publish Corrections
- NPRR244, Clarification of Other Binding Documents
- NPRR256, Sync with PRR787, Add Non-Compliance Language to QSE Performance Standards
- NPRR272, Definition and Participation of Quick Start Generation Resources

Summary of TAC Update

Review of Revision Request Changes to Project Prioritization List

Notice of Guide Revisions Approved by TAC

Holistic Approach to Congestion Irresolvable by SCED (Vote)

Quarterly Emerging Technologies Integration Plan

Endorsement of ERCOT Independent Review of the Laredo to Lower Rio Grande Valley Project

Future Agenda Items

**Revision Requests Unanimously Recommended
for Approval by TAC**

NPRR321, Allow Change to Energy Offer Curve MW Amounts in the Adjustment Period

Purpose (Calpine)	This NPRR would provide the ability for Resources to change the amounts of power in their Energy Offer Curves in the Adjustment Period.
TAC Decision	On 8/4/11, TAC unanimously voted to recommend approval of NPRR321 as recommended by PRS in the 7/21/11 PRS Report.
Effective Date/Priority	Upon System Implementation – Priority High; Rank 13.2
ERCOT Impact	\$55k - \$60k (PPL Funding); impacts to Current Day Reports (CDR), Market Information System (MIS), and Market Management System (MMS).
Cost Benefit Analysis Highlights	<p>Net (Cost) - Benefit of \$52k; Cost Benefit Ratio of 1.9</p> <ul style="list-style-type: none"> • More efficient SCED optimization and less MW error to be picked up by Regulation Service in the Load Frequency Control function by using more accurate and attainable MW amounts from Resources • Help eliminate unnecessary Generation Resource Energy Deployment Performance (GREDP) error and Base Point Deviation MW amounts • Result in lower cost of Regulation Service costs by eliminating Dispatch MW error in SCED

NPRR348, Generation Resource Start-Up and Shut-Down Process

Purpose (ERCOT)	This NPRR removes Protocol language concerning the use of the “ONTEST” Resource Status during start-up and shut-down and adds language to address the start-up and shut-down processes. This NPRR also adds a new “SHUTDOWN” Resource Status for use in telemetry only for shutdown operations.
TAC Decision	On 8/4/11, TAC unanimously voted to recommend approval of NPRR348 as recommended by PRS in the 7/21/11 PRS Report.
Effective Date/Priority	Upon System Implementation – Priority Critical; Rank 8.4
ERCOT Impact	\$115k - \$130k (PPL Funding); impacts to MMS, Settlements & Billing (S&B), Energy Management System (EMS), CDR, Commercial Systems Integration (CSI), Information Services Master (ISM) and MIS.
Cost Benefit Analysis Highlights	<p>Net (Cost) - Benefit of \$410k; Cost Benefit Ratio of 4.42</p> <ul style="list-style-type: none">• Increases situational awareness for ERCOT Operators by allowing them to better distinguish between Generation Resources that are testing vs. those starting up or shutting down.• Improves frequency control by requiring Generation Resources to follow SCED dispatch instruction when receiving Base Points at or above their LSL, even during startup or shutdown and by allowing SCED to ramp Resources offline during the shutdown process.

NPRR354, Revisions to Non-Spin Performance Criteria Language and Provision for ICCP Telemetry of Non-Spin Deployment

Purpose (WMS)	This NPRR clarifies the performance criteria for Non-Spinning Reserve (Non-Spin) Service deployments, adds language for provision of a Non-Spin deployment flag to QSEs via Inter-Control Center Communications Protocol (ICCP), and adds a requirement for XML notification to all QSEs when Non-Spin is deployed.
TAC Decision	On 8/4/11, TAC unanimously voted to recommend approval of NPRR354 as recommended by PRS in the 7/21/11 PRS Report.
Effective Date/Priority	Upon System Implementation – Priority High; Rank 31
ERCOT Impact	\$100k - \$110k (PPL Funding); impacts to EMS, Enterprise Integration (EI), Enterprise Information System (EIS), and MIS.
Cost Benefit Analysis Highlights	<p>Net (Cost) - Benefit of \$260k; Cost Benefit Ratio of 3.36</p> <ul style="list-style-type: none"> • Enhance reliability by ensuring QSEs receive timely notification of their Non-Spin deployments and improves ability to know when PRC is tight allowing the market to take necessary actions to provide capacity. • Provide clarify for operating parameters for QSEs and Resource Entities • Potentially lowers energy prices due to more efficient deployment of Non-Spin Resources

NPRR358, Clarification of Responsible Entity for Binding Obligations

Purpose (ERCOT)	This NPRR replaces the term “Generation Entity” with “Resource Entity,” where appropriate, to provide clarity that for binding obligations the Resource Entity is designated as the Entity obligated under the Protocols. This NPRR also modifies the definition of Generation Entity.
TAC Decision	On 8/4/11, TAC unanimously voted to recommend approval of NPRR358 as recommended by PRS in the 7/21/11 PRS Report.
Effective Date/Priority	October 1, 2011
ERCOT Impact	No impacts.

NPRR360, Summary Report of HDL and LDL

Purpose (MIS User Group)	This NPRR creates a new posting for the sum of High Dispatch Limit (HDL) and the sum of Low Dispatch Limit (LDL) and any Generation Resource instances of manual overrides of HDL or LDL to the MIS Public Area after every Security-Constrained Economic Dispatch (SCED) run. This NPRR also adds the requirement to post any QSE instances of manual overrides of HDL and LDL for a Generation Resource to the MIS Certified Area after every SCED run.
TAC Decision	On 8/4/11, TAC unanimously voted to recommend approval of NPRR360 as recommended by PRS in the 7/21/11 PRS Report.
Effective Date/Priority	Upon System Implementation – Priority High; Rank 32.5
ERCOT Impact	\$30k - \$35k (PPL Funding); impacts to CDR, MIS, Information Services Master (ISM Database), and Market Information Repository (MIR).
Cost Benefit Analysis Highlights	<ul style="list-style-type: none"> • Allow Real-Time operations data to be accessible to Market Participants so they have visibility to Generation Resources restricted from full economic consideration by SCED. • Provide the market visibility to the sum of the MW quantities Dispatched by SCED and the amount of Dispatch room remaining until scarcity prices appear. • Provides transparency into the outputs of SCED, which is beneficial to Market Participants in pursuing their business interests.

NPRR374, Modification of SCR Process and Urgency Requirements

Purpose (ERCOT)	This NPRR consolidates the System Change Request (SCR) process and NPRR process so that the governing subcommittee for both SCRs and NPRRs is the PRS. This NPRR also modifies the requirements for Urgency.
TAC Decision	On 8/4/11, TAC unanimously voted to recommend approval of NPRR374 as recommended by PRS in the 7/21/11 PRS Report.
Effective Date/Priority	October 1, 2011
ERCOT Impact	No impacts

NPRR375, Extend the Reporting Horizon for CDR Inputs

Purpose (ERCOT)	This NPRR extends existing reporting requirements for Mothballed Generation Resource return-to-service probabilities, Generation Resources with associated Load, and Switchable Generation Resources, from five to ten years.
TAC Decision	On 8/4/11, TAC unanimously voted to recommend approval of NPRR375 as recommended by PRS in the 7/21/11 PRS Report.
Effective Date/Priority	October 1, 2011
ERCOT Impact	No impacts

NPRR380, Minor Changes to Default Uplift Invoice

Purpose (ERCOT)	This NPRR provides minor corrective and clarifying changes to the allocation methodology used for the Default Uplift Invoice.
TAC Decision	On 8/4/11, TAC unanimously voted to recommend approval of NPRR380 as recommended by PRS in the 7/21/11 PRS Report and as amended by the 7/27/11 ERCOT comments.
Effective Date/Priority	October 1, 2011
ERCOT Impact	No impacts

NPRR382, Verbal RUC Committed or Decommitted Resources Report

Purpose (MIS User Group)	This NPRR creates two new reports on the MIS Secure Area for verbal Reliability Unit Commitment (RUC) commitments/decommitments, one following the Day-Ahead RUC (DRUC) and one following the Hourly RUC (HRUC) to stay consistent with the current RUC data delivery process.
TAC Decision	On 8/4/11, TAC unanimously voted to recommend approval of NPRR382 as recommended by PRS in the 7/21/11 PRS Report.
Effective Date/Priority	Upon System Implementation – Priority High; Rank 32.6
ERCOT Impact	\$25k - \$30k (PPL Funding); impacts to CDR, MIS, and MMS; enhancement to operator business processes related to Verbal Dispatch Instructions (VDIs); operator training to support VDI posting requirements.
Cost Benefit Analysis Highlights	<ul style="list-style-type: none"> • Provides Market Participant access to additional RUC data to allow for understanding of the total population of RUC'ed units and a better view of the energy supply stack. • Enables historical analysis for estimating future transmission needs. • Expected potential labor savings for QSE who have units committed or decommitted by VDI. Report will make it easier to confirm VDIs after the fact.

NPRR383, Unconfirmed Trades Reports

Purpose (MIS User Group)	This NPRR creates a new report for unconfirmed trades on the MIS Certified Area that will provide timely information regarding the trades that have not yet been confirmed for the upcoming hour and all remaining hours of the RUC Study Period so that Market Participants may make adjustments as necessary to conduct business.
TAC Decision	On 8/4/11, TAC unanimously voted to recommend approval of NPRR383 as recommended by PRS in the 7/21/11 PRS Report.
Effective Date/Priority	Upon System Implementation – Priority High; Rank 32.7
ERCOT Impact	\$25k - \$30k (PPL Funding); impacts to CDR, MIS, and MMS.
Cost Benefit Analysis Highlights	<p>Net (Cost) - Benefit of \$80k; Cost Benefit Ratio of 3.67</p> <ul style="list-style-type: none">• Assists in resolving disputes by indicating which party did or did not confirm specific trades.• Provides historical information that would be difficult to reconstruct manually.

NPRR384, Revisions to Support SCR766 , Load Zone and Hub LMPs Distributed by ICCP

Purpose (ERCOT)	This NPRR clarifies language that supports system changes proposed in System Change Request (SCR) 766, Load Zone and Hub LMPs Distributed by ICCP (formerly “Load Zone Price Distributed by ICCP”). SCR766 should provide quicker distribution of the Load Zone prices and the Hub prices that are available with each SCED execution.
TAC Decision	On 8/4/11, TAC unanimously voted to recommend approval of NPRR384 as recommended by PRS in the 7/21/11 PRS Report.
Effective Date/Priority	Upon System Implementation of SCR766
ERCOT Impact	No impacts (required system changes captured in SCR766)

**Revision Requests Non-Unanimously Recommended
for Approval by TAC**

NPRR365, Change in Resource Outage Approvals from Eight to 45 Days - URGENT

Purpose (ERCOT)	Consistent with Recommendation 6B of the 3/15/11, Report of the Rotating Blackout Operations Task Force of the ERCOT Board, this NPRR revises the deadline for ERCOT approval of Resource Outages from an eight-day notice to a 45-day notice.
TAC Decision	On 9/1/11, TAC voted to recommend approval of NPRR365 as recommended by PRS in the 8/18/11 PRS Report and as revised by TAC via roll call vote. TAC then voted to assign a priority of Critical and a rank of 7.5. There was one abstention from the Independent Generator Market Segment.
Effective Date/Priority	Upon System Implementation – Priority Critical; Rank 7.5
ERCOT Impact	\$100k - \$120k (PPL Funding); Two additional FTEs (Annual Recurring O&M Budget); impacts to Outage Scheduler and Web Applications; revisions to business procedures; grid operations to benefit from decreased re-coordination.
Cost Benefit Analysis Highlights	<ul style="list-style-type: none"> • Increased Outage coordination benefit (including CREZ and CSAPR) • Re-coordination of Resource Outages submitted 8-45 days prior to the Outage start date (automatically accepted under the current Protocols) • Decreased re-coordination of Transmission Outages due to change in Resource Outage approval window

NPRR379, EILS Dispatch Sequence and Performance Criteria Upgrades

Purpose (ERCOT)	This NPRR improves the operational value of Emergency Interruptible Load Service (EILS), and strengthens and clarifies a number of performance criteria for EILS.
TAC Decision	On 8/4/11, TAC voted to recommend approval of NPRR379 as amended by the 8/2/11 ERCOT comments. There was one abstention from the Independent Power Marketer (IPM) Market Segment.
Effective Date/Priority	October 1, 2011 and Upon System Implementation (for grey-boxed sections) – Priority High; Rank 14.5
ERCOT Impact	\$55k - \$65k (PPL Funding); impacts to EI, MMS, EIS, and MIS; update of ERCOT's demand response functions; update to ERCOT grid operations procedures and additional training for system operations.
Cost Benefit Analysis Highlights	<ul style="list-style-type: none"> • Improves operational value of EILS. • Strengthens and clarifies performance criteria. • Permits greater flexibility for ERCOT Operations to address Emergency Conditions which enhances reliability. • Offers clarity in the administration of EILS compliance requirements potentially increasing participation in EILS.

NPRR396, Reduce Standard O&M Costs - URGENT

Purpose (City of Eastland)	This NPRR reduces the standard O&M costs permitted to be used in lieu of actual, verifiable O&M costs by NPRR225, Standard Cost Option in Verifiable Costs, which was approved by the ERCOT Board in June 2010.
TAC Decision	On 9/1/11, TAC voted to recommend approval of NPRR396 as recommended by PRS in the 8/18/11 PRS Report and as amended by the 8/26/11 Austin Energy comments. There was one abstention from the Generator Market Segment.
Effective Date/Priority	October 1, 2011
ERCOT Impact	No impacts

**Impact Assessments for Parking Deck NPRRs
Unanimously Recommended for Approval by TAC**

NPRR207, Unit Deselection

Purpose (WMS)	This NPRR provides that ERCOT may deselect units from Reliability Unit Commitment (RUC); creates the term “RUC Notification” to refer to an ERCOT instruction preceding a Resource’s startup time; and enables the QSE to self-commit a Resource after receiving a RUC Notification but before the Resource’s startup time.
TAC Decision	On 9/1/11, TAC voted to recommend approval of the impact assessment for NPRR207. There was one abstention from the IPM Market Segment.
Effective Date/Priority	Upon System Implementation – Priority 2012; Rank 19
ERCOT Impact	\$50k - \$55k (PPL Funding); impacts to MMS.
Cost Benefit Analysis Highlights	<p>Net (Cost) - Benefit of \$1.65M; Cost Benefit Ratio of 32.08</p> <ul style="list-style-type: none"> • Lower uplifted RUC costs by delaying RUC commitments until last possible time which minimizes the over-commitment of capacity by RUC process. • Provides QSEs more information so that they may choose to self-commit to avoid a RUC clawback and thus lower RUC commitment costs that are charged to shorts and uplifted to QSEs.

NPRR210, Wind Forecasting Change to P50, Synchronization with PRR841

Purpose (Morgan Stanley)	This NPRR changes the wind forecasting methodology to use a 50% probability of exceedance calculation instead of an 80% for RUC considerations.
TAC Decision	On 9/1/11, TAC voted to recommend approval of the impact assessment for NPRR210. There was one abstention from the IPM Market Segment.
Effective Date/Priority	Upon System Implementation – Priority 2013; Rank 24
ERCOT Impact	\$45k - \$55k (PPL Funding); impacts to EMS, MMS, S&B, CSI, EIS.
Cost Benefit Analysis Highlights	<p>Net (Cost) - Benefit of \$7.45M; Cost Benefit Ratio of 150.0</p> <ul style="list-style-type: none"> WGRs are being inappropriately credited for capacity related to a P50 forecast which they only have 50% probability of providing. The P80 forecast is a better estimate of what is reliably being provided by wind resources and was the agreed level of credit they would receive in the original development of Nodal Protocols.

NPRR222, Half-Hour Start Unit RUC Clawback

Purpose (WMS)	This NPRR removes RUC Clawback on all Half-Hour Start Units that participate in the Day-Ahead Market (DAM) and during Energy Emergency Alert (EEA) events. This NPRR also changes the RUC Clawback on all Half-Hour Start Units that did not participate in the DAM to 50%.
TAC Decision	On 9/1/11, TAC voted to recommend approval of the impact assessment for NPRR222. There was one abstention from the IPM Market Segment.
Effective Date/Priority	Upon System Implementation – Priority 2012; Rank 16
ERCOT Impact	\$15k - \$20k (PPL Funding); impacts to CSI and S&B.
Cost Benefit Analysis Highlights	<ul style="list-style-type: none">• Removes the clawback from quick start units which obtain most of their revenue in just a few hours each year. Clawing back the revenues of these units because they were RUC'd is contrary to the energy only market design.• Removal of RUC Clawback for quick starts would send an appropriate signal to MPs, capital markets and manufacturers, thereby encouraging investment in more low cost operational flexibility.

NPRR240, Proxy Energy Offer Curve

Purpose (IMM)	This NPRR states that the Entity with decision making authority over how a Resource or Split Generation Resource is offered or scheduled shall be responsible for all offers associated with each Resource, including offers represented by a proxy Energy Offer Curve.
TAC Decision	On 9/1/11, TAC voted to recommend approval of the impact assessment for NPRR240. There was one abstention from the IPM Market Segment.
Effective Date/Priority	Upon System Implementation – Priority 2013; Rank 17
ERCOT Impact	\$50k - \$60k (PPL Funding); impacts to MMS and EIS.
Cost Benefit Analysis Highlights	<ul style="list-style-type: none">• Provides transparency as to which offer curves were partially constructed using the proxy methodology.

NPRR241, Aggregate Incremental Liability (AIL) Calculation and Credit Reports Publish Corrections

Purpose (ERCOT)	This NPRR updates the AIL calculation to reflect Max (Average Daily Transaction Extrapolated (ADTE) during the previous 60-day period) instead of ADTE to match Estimated Aggregate Liability (EAL) calculation; removes Flowgate Rights (FGRs)-related Credit Monitoring and Management Report; corrects Credit Monitoring and Management Reports format from Extensible Markup Language (XML) to Microsoft Excel (XLS) format; and updates the posting requirements of Future Credit Exposure (FCE) Details Reports.
TAC Decision	On 9/1/11, TAC voted to recommend approval of the impact assessment for NPRR241. There was one abstention from the IPM Market Segment.
Effective Date/Priority	Upon System Implementation – Priority 2013; Rank 25
ERCOT Impact	\$100k - \$120k (PPL Funding); impacts to Credit Monitoring and Management System (CMM).
Cost Benefit Analysis Highlights	<p>Net (Cost) - Benefit of \$990k; Cost Benefit Ratio of 10.0</p> <ul style="list-style-type: none"> • Provides a report in a machine consumable format and saves some QSEs from having to manually convert the credit reports.

NPRR244, Clarification of Other Binding Documents

Purpose (ERCOT)	This NPRR clarifies the concept of “Other Binding Documents” and the revision process to better align with item (j) of the Public Utility Regulatory Act, Tex. Util. Code Ann. § 39.151 (Vernon 1998 & Supp. 2007) (PURA), Essential Organizations, and P.U.C. Subst. R. 25.503, Oversight of Wholesale Market Participants, with respect to governing documents that are public and in effect in the ERCOT Region.
TAC Decision	On 9/1/11, TAC voted to recommend approval of the impact assessment for NPRR244. There was one abstention from the IPM Market Segment.
Effective Date/Priority	Upon System Implementation
ERCOT Impact	\$10k - \$15k (O&M Budget); impacts to ercot.com and MIS.
Cost Benefit Analysis Highlights	Net (Cost) - Benefit of \$567k; Cost Benefit Ratio of 44.62 • Provides easy access to business procedure documents by MPs.

NPRR256, Sync with PRR787, Add Non-Compliance Language to QSE Performance Standards

Purpose (Luminant)	This NPRR aligns the Nodal Protocols with changes implemented from PRR787, Add Non-Compliance Language to QSE Performance Standards, approved by the ERCOT Board on 8/18/09, and addresses the exclusion of Generation Resource Energy Deployment Performance (GREDP) during testing periods.
TAC Decision	On 9/1/11, TAC voted to recommend approval of the impact assessment for NPRR256. There was one abstention from the IPM Market Segment.
Effective Date/Priority	Upon System Implementation – Priority 2013; Rank 26
ERCOT Impact	\$120k - \$135k (PPL Funding); impacts to EIS.
Cost Benefit Analysis Highlights	<p>Net (Cost) - Benefit of \$90k; Cost Benefit Ratio of 1.7</p> <ul style="list-style-type: none"> • Provides appropriate and detailed performance and testing metrics. • Ensures that metrics are physically attainable based on Resource conditions or constraints. • Provides sufficient detail for Texas Reliability Entity to calculate and oversee these metrics when measuring compliance. • Automating the calculation versus manual implementation will save ERCOT one-half FTE.

NPRR272, Definition and Participation of Quick Start Generation Resources

Purpose (ERCOT)	This NPRR provides language for effective participation of Quick Start Generation Resources (QSGRs) in Security-Constrained Economic Dispatch (SCED).
TAC Decision	On 9/1/11, TAC voted to recommend approval of the impact assessment for NPRR272. There was one abstention from the IPM Market Segment.
Effective Date/Priority	Upon System Implementation – Priority 2012; Rank 18
ERCOT Impact	\$145k - \$160k (PPL Funding); impacts to EMS, MMS, CSI, S&B, CDR and EIS.
Cost Benefit Analysis Highlights	<p>Net (Cost) - Benefit of \$1.05M; Cost Benefit Ratio of 8.0</p> <ul style="list-style-type: none"> • Allows QSGRs to make capacity available to SCED and provides a market mechanism to solving short supply conditions without having to take command and control actions. • Provides visibility to operators as to what quick start units are available and participating in the market.

Review of Recommended Revision Request Changes to Project Prioritization List (PPL)

New NPRRs Recommended for Board Approval

2011 Priority	2011 Rank	Source Doc	Approval Status	Project Number	Project Name	2011 Budget Range	Project Status	Projected Start Date	Projected End Date	Funding Source	Source
1- Critical	7.5	NPRR365	Pending Board Approval	NPRR365	Change in Resource Outage Approvals from Eight to 90 Days	\$100k-\$120k	Not Started	TBD	TBD	PPL	ERCOT
1- Critical	8.4	NPRR348	Pending Board Approval	NPRR348	Generation Resource Start-Up and Shut-Down Process	\$115k-\$130k	Not Started	TBD	TBD	PPL	ERCOT
2-High	13.2	NPRR321	Pending Board Approval	NPRR321	Allow Change to Energy Offer Curve MW Amounts in the Adjustment Period for Qualifying Facilities	\$55k-\$60k	Not Started	TBD	TBD	PPL	Market
2-High	14.5	NPRR379	Pending Board Approval	NPRR379	EILS Dispatch Sequence and Performance Criteria Upgrades	\$55k-\$65k	Not Started	TBD	TBD	PPL	ERCOT
2-High	31	NPRR354	Pending Board Approval	NPRR354	Revisions to Non-Spin Performance Criteria Language and Provision for ICCP Telemetry of Non-Spin Deployment	\$100k-\$110k	Not Started	TBD	TBD	PPL	Market
2-High	32.5	NPRR360	Pending Board Approval	NPRR360	Summary Report of HDL and LDL	\$30k-\$35k	Not Started	TBD	TBD	PPL	Market
2-High	32.6	NPRR382	Pending Board Approval	NPRR382	Verbal RUC Committed or Decommitted Resources Report	\$25k-\$30k	Not Started	TBD	TBD	PPL	Market
2-High	32.7	NPRR383	Pending Board Approval	NPRR383	Unconfirmed Trades Reports	\$25k-\$30k	Not Started	TBD	TBD	PPL	Market
\$505k-\$580k											

Project Prioritization List (PPL) – 9/12/2011

2011 Priority	2011 Rank	Source Doc	Approval Status	Project Number	Project Name	2011 Budget Range	Project Status	Projected Start Date	Projected End Date	Funding Source	Source
1- Critical	0.1		Board Approved		Nodal Stabilization	\$10M-\$12M	Execution	Dec 2010	Dec 2011	Post Go-Live	Nodal Post Go-Live
1- Critical	0.11	NPRR302	Board Approved	NPRR302	Correct Fuel Type Language for Mitigated Offer Cap	<\$5k	Complete	Jan 2011	Mar 2011	Post Go-Live	Market
1- Critical	0.12		Board Approved		Planning Model	Funded by Stabilization	Complete	2010	Apr 2011	Post Go-Live	Nodal Post Go-Live
1- Critical	1		Board Approved	11000_01 10015_01 10016_01	Data Center Buildout	\$25M-\$30M	Execution	Oct 2009	Feb 2012	PPL	ERCOT
1- Critical	1.5		ERCOT Approved	80001_01	Met Center Disposition	<\$20k	Complete	2009	Jan 2011	PPL	ERCOT
1- Critical	2		Board Approved	99911	Minor Cap - Critical	\$500k-\$1M	Execution	Jan 2011	Dec 2011	PPL	ERCOT
1- Critical	3	NPRR294	Board Approved	11002_01	Texas SET 4.0	\$1M-\$2M	Execution	Feb 2011	June 2012	PPL	PUCT / Market
1- Critical	3.5	SCR760	Board Approved	SCR760	Recommended Changes Needed for Information Model Mgr and Topology Processor for Planning Models	\$500k-\$1M	Execution	Apr 2011	June 2012	Post Go-Live	Market
1- Critical	4		Board Approved	90006_02	Information Lifecycle Mgmt – Mkt Systems, Archive, Reporting	\$1M-\$2M	Execution	Jan 2010	Jan 2014	PPL	ERCOT
1- Critical	5		Board Approved	11003_01	Cyber Security Project #1	\$500k-\$1M	Planning	June 2011	Sept 2012	PPL	ERCOT
1- Critical	6		Board Approved	10052_01	Settlement System Upgrade	\$1M-\$2M	Planning	Mar 2010	2013	PPL	ERCOT
1- Critical	7		Board Approved	005_01	Cyber Security Project #2	\$250k-\$500k	Planning	June 2011	May 2012	PPL	ERCOT
1- Critical	7.5	NPRR365	Pending Board Approval	NPRR365	Change in Resource Outage Approvals from Eight to 90 Days	\$100k-\$120k	Not Started	TBD	TBD	PPL	ERCOT

Project Prioritization List (PPL) – 9/12/2011

2011 Priority	2011 Rank	Source Doc	Approval Status	Project Number	Project Name	2011 Budget Range	Project Status	Projected Start Date	Projected End Date	Funding Source	Source
1- Critical	8		Board Approved	11005_01	IT Security Infrastructure Upgrade	\$100k-\$250k	Execution	May 2011	Oct 2011	PPL	ERCOT
1- Critical	8.4	NPRR348	Pending Board Approval	NPRR348	Generation Resource Start-Up and Shut-Down Process	\$115k-\$130k	Not Started	TBD	TBD	PPL	ERCOT
1- Critical	8.5	NPRR258	Board Approved	NPRR258	Sync with PRR824 and PRR833	\$55k-\$60k	Planning	Aug 2011	Oct 2011	Post Go-Live	Parking Deck
1- Critical	9		Board Approved	11006_01	MarkeTrak Upgrade and Enhancements (PLANNING)	\$100k-\$250k	Planning	Aug 2011	June 2012	PPL	PUCT / Market
1- Critical	9.2	NPRR329	Board Approved	NPRR329	Security Classification Changes for Extracts/Reports	\$5k-\$10k	Complete	Apr 2011	May 2011	Post Go-Live	Market
1- Critical	9.21	SCR764	Board Approved	SCR764	Public Access to Select MIS Dashboards	\$80k-\$125k	Execution	June 2011	Dec 2011	Post Go-Live	Market
1- Critical	9.22	NPRR350	Board Approved	NPRR350	Change to the Security Classification of the System Ancillary Service Capacity Monitor Dashboard	\$5k-\$10k	Complete	June 2011	Aug 2011	Post Go-Live	Market
1- Critical	9.25	SCR765	Board Approved	SCR765	Public Aggregated Wind Dashboard	\$37k-\$45k	Execution	Aug 2011	Dec 2011	Post Go-Live	Market
1- Critical	9.3	NPRR339	Board Approved	NPRR339	Modifications to Heuristic Rules to Determine LMP at De-energized Electrical Bus and Treatment of CRR Offers at De-energized Settlement Points	<\$100k	Complete	June 2011	July 2011	Post Go-Live	ERCOT
1- Critical	9.41	NPRR285	Board Approved	NPRR285	Generation Resource Base Point Deviation Charge Corrections	\$30k-\$40k	Complete	Apr 2011	May 2011	Post Go-Live	Market
1- Critical	9.42	NPRR282	Board Approved	NPRR282	Dynamic Ramp Rates Use in SCED	\$30k-\$35k	Complete	May 2011	July 2011	Post Go-Live	Market

Project Prioritization List (PPL) – 9/12/2011

2011 Priority	2011 Rank	Source Doc	Approval Status	Project Number	Project Name	2011 Budget Range	Project Status	Projected Start Date	Projected End Date	Funding Source	Source
1- Critical	9.43		Board Approved		Deferred Defects and Workaround Processes	\$2M-\$3M	Execution	Dec 2010	Dec 2011	Post Go-Live	Nodal Post Go-Live
1- Critical	9.44	NPRR347	Board Approved	NPRR347	Single Daily Settlement Invoice and Updates to Credit Calculations	\$430k-\$460k	Not Started	TBD	TBD	Post Go-Live	ERCOT
1- Critical	9.45	NPRR322	Board Approved	NPRR322	Real-Time PTP Option Modeling	\$100k-\$105k	Not Started	TBD	TBD	Post Go-Live	Market
1- Critical	9.46	NPRR376	Board Approved	NPRR376	CRR Volume Limitation Enhancements	\$50k-\$55k	Execution	July 2011	Sept 2011	Post Go-Live	Market
2-High	9.5	NPRR307	Board Approved	NPRR307	Change SASM Offer Procedures	\$15k-\$20k	Complete	Apr 2011	May 2011	Post Go-Live	Market
2-High	9.5	NPRR341	Board Approved	NPRR341	Remove Ancillary Service Offers from SASM that do not Meet the Lead Time	\$10k-\$15k	Complete	June 2011	July 2011	Post Go-Live	ERCOT
2-High	10		Board Approved	50088_01	Data Research and Reporting	\$500k-\$1M	Execution	Nov 2006	Sept 2011	PPL	ERCOT
2-High	10.3		ERCOT Approved	001-47	Compliance Software	\$250k-\$500k	Planning	July 2011	TBD	PPL	ERCOT
2-High	10.5		ERCOT Approved	001-47	RARF Upgrade for Wind, Solar and Storage Resources	\$100k-\$250k	Planning	Aug 2011	TBD	PPL	ERCOT
2-High	11		Board Approved	10055_01	Data Agg Performance Improvements	\$250k-\$500k	Execution	Sept 2010	Oct 2011	PPL	ERCOT
2-High	12		Board Approved	10031_01	Enterprise Records Management Automation (ERMA)	<\$50k	Complete	Jan 2010	June 2011	PPL	ERCOT
2-High	12.5		ERCOT Approved	11009_01	Fire Alarm System Upgrade	\$100k-\$250k	Complete	Feb 2011	June 2011	PPL	ERCOT

Project Prioritization List (PPL) – 9/12/2011

2011 Priority	2011 Rank	Source Doc	Approval Status	Project Number	Project Name	2011 Budget Range	Project Status	Projected Start Date	Projected End Date	Funding Source	Source
2-High	12.75	NPRR323	Board Approved	NPRR323	Correct DAM Credit Exposure Language and Enable Qualified Expiring CRRs to Offset PTP Bid Exposure	\$375k-\$475k	Complete	Apr 2011	Aug 2011	Post Go-Live	Market
2-High	12.76	NPRR310	Board Approved	NPRR310	Expand Output Schedule Acceptable Range to Include HSL and LSL	\$10k-\$15k	Execution	Aug 2011	Dec 2011	Post Go-Live	Market
2-High	12.77	SCR762	Board Approved	SCR762	Enable a Single Step Cancel/Resubmit of Trades	\$25k-\$30k	Execution	Aug 2011	Sept 2011	Post Go-Live	ERCOT
2-High	12.78	SCR761	Board Approved	SCR761	Provide Price Republication Notifications via API and Provide Price Corrections via XML	\$50k-\$63k	Planning	Aug 2011	Dec 2011	Post Go-Live	Market
2-High	12.79	SCR763	Board Approved	SCR763	Modify COP Validation Rule for RRS	\$10k-\$15k	Planning	Aug 2011	Dec 2011	Post Go-Live	ERCOT
2-High	12.8	NPRR320	Board Approved	NPRR320	Minimum PTP Option Bid and Settlement	\$110k-\$120k	Execution	June 2011	Oct 2011	Post Go-Live	Market
2-High	12.9	NPRR326	Board Approved	NPRR326	Adjust the Calculation of the Real-Time Settlement Point Price for a Resource Node	\$15k-\$20k	Not Started	Sept 2011	Dec 2011	Post Go-Live	ERCOT
2-High	13	NPRR290	Board Approved	NPRR290	ERCOT Publication of DAM PSS/E Files	\$25k-\$30k	Execution	July 2011	Dec 2011	Post Go-Live	Market
2-High	13.1	NPRR343	Board Approved	NPRR343	CRR Bid and PTP Obligation Bid Criteria Change	\$400k-\$450k	Planning	June 2011	Dec 2011	Post Go-Live	ERCOT
2-High	13.2	NPRR321	Pending Board Approval	NPRR321	Allow Change to Energy Offer Curve MW Amounts in the Adjustment Period for Qualifying Facilities	\$55k-\$60k	Not Started	TBD	TBD	PPL	Market

Project Prioritization List (PPL) – 9/12/2011

2011 Priority	2011 Rank	Source Doc	Approval Status	Project Number	Project Name	2011 Budget Range	Project Status	Projected Start Date	Projected End Date	Funding Source	Source
2-High	14	NPRR293	Board Approved	NPRR293	Requirement to Post PTP Obligation Quantities Awarded in DAM	\$12k-\$15k	Complete	Apr 2011	May 2011	Post Go-Live	Market
2-High	14	NPRR303	Board Approved	NPRR303	Requirement to Post PTP Options Cleared in the DAM or Taken to Real Time	<\$5k	Complete	Apr 2011	May 2011	Post Go-Live	Market
2-High	14.5	NPRR379	Pending Board Approval	NPRR379	EILS Dispatch Sequence and Performance Criteria Upgrades	\$55k-\$65k	Not Started	TBD	TBD	PPL	ERCOT
2-High	15		Board Approved		Parking Deck Initiatives	\$1.0M-\$1.5M	Execution	Feb 2011	Mar 2012	Post Go-Live	Nodal Post Go-Live
2-High	15.1	NPRR208	Board Approved	NPRR208	Registration & Settlement of Distributed Generation (DG) <1 MW	\$5k-\$10k	Complete	Apr 2011	Aug 2011	Post Go-Live	Parking Deck
2-High	15.2	NPRR251	Board Approved	NPRR251	Sync PRR845, Definition for IDR Meters and Optional Removal of IDR Meters at a Premise Where an Advanced Meter Can be Provisioned	\$30k-\$50k	Planning	Sept 2011	Dec 2011	Post Go-Live	Parking Deck
2-High	15.3	NPRR316	Board Approved	NPRR316	Negative Self-Arranged Ancillary Services Quantity	\$15k-\$20k	Planning	June 2011	Dec 2011	Post Go-Live	Market
2-High	15.4	NPRR314	Board Approved	NPRR314	Requirement to Post Generation Resources Temporal Constraints	\$32k-\$39k	Not Started	TBD	TBD	Post Go-Live	Market
2-High	16		Board Approved		Decommissioning Efforts	\$275k-\$325k	Execution	Jan 2011	Jan 2012	Post Go-Live	Nodal Post Go-Live
2-High	17		Board Approved		Program Risk Items	\$1.0M-\$1.5M	Execution	Mar 2011	Dec 2011	Post Go-Live	Nodal Post Go-Live

Project Prioritization List (PPL) – 9/12/2011

2011 Priority	2011 Rank	Source Doc	Approval Status	Project Number	Project Name	2011 Budget Range	Project Status	Projected Start Date	Projected End Date	Funding Source	Source
2-High	18		Board Approved	10018_01	Annual Storage Growth	<\$50k	Execution	Jan 2011	Apr 2011	PPL	ERCOT
2-High	19		Board Approved		Hardware and Software Systems License & Maintenance	\$7M-\$8M	Execution	Jan 2011	Dec 2011	Post Go-Live	Nodal Post Go-Live
2-High	20	NPRR221	ERCOT Approved	NPRR221	Automate Default Invoice	\$50k-\$75k	Complete	Apr 2011	Aug 2011	Post Go-Live	ERCOT
2-High	20.5	NPRR357	Board Approved	NPRR357	Revisions to Collateral Requirements Concerning CRR Auctions	\$95k-\$105k	Not Started	TBD	TBD	Post Go-Live	Market
2-High	21	NPRR338	Board Approved	NPRR338	Modifications to Support Revenue Neutrality	\$4k-\$5k	Planning	Sept 2011	Oct 2011	Post Go-Live	ERCOT
2-High	22	NPRR346	Board Approved	NPRR346	Removal of Redundant Posting Requirement Related to Electrical Bus Changes	<\$2.5k	Execution	Aug 2011	Sept 2011	Post Go-Live	ERCOT
2-High	23		ERCOT Approved	004-01	Cyber Security Project #3	\$250k-\$500k	Planning	June 2011	Mar 2012	PPL	ERCOT
2-High	25		ERCOT Approved		Cyber Security Facilities Remodeling	\$200k-\$250k	Planning	June 2011	Feb 2012	PPL	ERCOT
2-High	25		ERCOT Approved		Human Resources Facilities Remodeling	\$250k-\$300k	Planning	June 2011	Feb 2012	PPL	ERCOT
2-High	26		ERCOT Approved		Impact Assessment Labor Funds	\$100k	Execution	Apr 2011	Dec 2011	PPL	ERCOT
2-High	27		ERCOT Approved		Shipping/Receiving Remodeling	\$200k-\$250k	Planning	June 2011	Feb 2012	PPL	ERCOT
2-High	30	NPRR313	Board Approved	NPRR313	Updating the Term Resource Plan to Current Operating Plan / Availability Plan	\$80k-\$85k	Not Started	TBD	TBD	Post Go-Live	Market

Project Prioritization List (PPL) – 9/12/2011

2011 Priority	2011 Rank	Source Doc	Approval Status	Project Number	Project Name	2011 Budget Range	Project Status	Projected Start Date	Projected End Date	Funding Source	Source
2-High	31	NPRR354	Pending Board Approval	NPRR354	Revisions to Non-Spin Performance Criteria Language and Provision for ICCP Telemetry of Non-Spin Deployment	\$100k-\$110k	Not Started	TBD	TBD	PPL	Market
2-High	32	NPRR355	Board Approved	NPRR355	Adjust the Calculation of the Real-Time Settlement Point Price for a Load Zone	\$60k-\$75k	Not Started	TBD	TBD	Post Go-Live	ERCOT
2-High	32.5	NPRR360	Pending Board Approval	NPRR360	Summary Report of HDL and LDL	\$30k-\$35k	Not Started	TBD	TBD	PPL	Market
2-High	32.6	NPRR382	Pending Board Approval	NPRR382	Verbal RUC Committed or Decommited Resources Report	\$25k-\$30k	Not Started	TBD	TBD	PPL	Market
2-High	32.7	NPRR383	Pending Board Approval	NPRR383	Unconfirmed Trades Reports	\$25k-\$30k	Not Started	TBD	TBD	PPL	Market
2-High	33	NPRR359	Board Approved	NPRR359	Monthly TDSP Load Report	\$15k-\$20k	Not Started	TBD	TBD	Post Go-Live	Market
2-High	34	NPRR361	Board Approved	NPRR361	Real-Time Wind Power Production Data Transparency	\$10k-\$15k	Not Started	TBD	TBD	Post Go-Live	Market
2-High	36		ERCOT Approved	001-43	EDW Platform Evaluation	\$250k-\$300k	Planning	June 2011	Dec 2011	Post Go-Live	ERCOT
2-High	40	SCR766	Board Approved	SCR766	Load Zone Price Distributed by ICCP	\$13k-\$15k	Planning	Aug 2011	Oct 2011	Post Go-Live	Market
PPL Outline and Summary					2011 Project Budget = \$36,364,000		\$31,757,480	Variance = \$4,606,520			
Nodal Post Go-Live Summary					Nodal Post Go-Live Budget = \$25,191,000		\$26,249,924	Variance = (\$1,058,924)			

Notice of Guide Revisions Approved by TAC

RMGRR100, Texas SET 4.0 including: Acquisition and Transfer of Customers from one REP to Another; Meter Tampering Transactional Solution

This RMGRR defines the process for Mass Transition of Electric Service Identifiers from one Competitive Retailer (CR) to another CR when transitioning due to an acquisition as introduced with NPRR294, Texas SET 4.0 Including: Acquisition and Transfer of Customers From One REP to Another; Meter Tampering Transactional Solution.

NOGRR058, Deletion of Section 5, Planning

This NOGRR deletes Section 5 from the Nodal Operating Guide, which is being relocated to Section 5 of the Planning Guide via PGRR005, New Planning Guide Section 5, Planning Criteria.

NOGRR069, Relay Misoperation Reporting Changes for Consistency with ERO-RAPA Proposal – URGENT

This NOGRR updates ERCOT's requirements for relay misoperation reporting in order to be consistent with NERC's ERO-RAPA proposal for quarterly reporting. Changes to Section 6.2.3 govern the events that qualify as a relay misoperation while the changes to Section 8, Attachment B, govern what data must be submitted in the event of a relay misoperation.

NOGRR070, Synchronization with NPRR356, EEA Changes Related to Dispatch Instructions and BLTs

This NOGRR synchronizes the Nodal Operating Guides with NPRR356 EEA Changes Related to Dispatch Instructions and BLTs, which changes the need to issue Dispatch Instructions to suspend any ongoing ERCOT-required generating unit or Resource performance testing and moves the requirement to inquire about the availability of Block Load Transfers (BLTs) from Energy Emergency Alert (EEA) Level 2A to EEA Level 2B.

NOGRR071, Synchronization with NPRR362, Changes to PRC Calculation

This NOGRR synchronizes the Nodal Operating Guides with NPRR362, Changes to PRC Calculation, which proposes to properly reflect the current Responsive Reserve (RRS) which is supplied from Load Resources into the PRC calculation. NPRR362 also deletes the method for calculating the PRC from EEA Levels 1 & 2.

Holistic Approach to Congestion Irresolvable by SCED

- On 5/17/11, the ERCOT Board revised the ERCOT Business Practice, Setting the Shadow Price Caps and Power Balance Penalties in Security Constrained Economic Dispatch (SCED), as a result ERCOT analysis after the number of hours in which the Valley import limit was exceeded resulting in the constraint reaching the Shadow Price cap of \$5000.
- The Board also directed TAC to report back with a recommendation for a holistic methodology for setting appropriate Shadow Price caps for constraints not resolvable by SCED and a recommendation for addressing gaps between operations and planning processes to be able to identify constraints not resolvable by SCED.
- A WMS TF developed a recommendation on a holistic approach that WMS ultimately recommended to TAC.
- On 8/4/11, TAC revised the WMS recommendation and with a vote of 24 in favor, 3 opposed (Cooperative (2) and IOU) and 2 abstentions (IOU and Industrial Consumer), recommended a revised methodology for setting the maximum Shadow Price caps for constraints not resolvable by SCED.
- On 9/1/11, TAC reviewed a revised ERCOT Business Practice, Setting the Shadow Price Caps and Power Balance Penalties in SCED, and voted to confirm the draft business practice as revised by TAC reflects the 8/4/11TAC decision on Congestion irresolvable by SCED; to recommend that for any constraint deemed irresolvable in calendar year 2011, the net margin calculation will begin with 1/1/11; and to recommend an effective date of 10/1/11 for the business practice document. The vote carried with 2 abstentions from the Cooperative Market Segment.

Summary of TAC Recommendation for a Holistic Approach to Congestion Irresolvable by SCED

When is a constraint identified as irresolvable?

A non-competitive constraint is deemed irresolvable if the constraint cannot be resolved through SCED dispatch for more than two consecutive hours for more than 4 consecutive days or more than 20 hours in a rolling thirty day period. Those hours will be priced at the current shadow price cap pursuant to Section 3.5., *Current Values for the Transmission Shadow Price Caps in the ERCOT Business Practice Manual for Setting the Shadow Price Caps and Power Balance Penalties in SCED*.

Summary of TAC Recommendation for a Holistic Approach to Congestion Irresolvable by SCED

How does ERCOT determine the Irresolvable Shadow Price Cap?

- Irresolvable Shadow Price Cap in a calendar year = Minimum of A or B until net margin threshold exceeded then implement C
 - A = current value for the Transmission Shadow Price Cap in Section 3.5 of the ERCOT Business Practice Manual for Setting Shadow Price Caps and Power Balance Penalties in SCED
 - B= max of (Mitigated Offer Cap of lowest shift factor unit/shift factor of lowest unit used to resolve constraint) or \$2000 per MW
- C=If net margin exceeds \$95,000 per MW/year, then adjust Transmission Shadow Price Cap for Irresolvable Non-Competitive Constraint to maximum of (Mitigated Offer Cap of lowest shift factor unit/shift factor of lowest unit used to resolve constraint) or currently effective LCAP pursuant to PUC Subst. R. 25.505 for the remainder of the calendar year.
- C shall not exceed \$2000 per MW.
- Determine net margin based upon resource node LMP of unit with highest shift factor impact on the irresolvable constraint during congested intervals for the irresolvable constraint

Summary of TAC Recommendation for a Holistic Approach to Congestion Irresolvable by SCED

When does ERCOT terminate the Irresolvable Shadow Price Cap for the constraint?

ERCOT terminates the Irresolvable Shadow Price Cap when ERCOT determines the constraint is resolvable and ERCOT must provide 30 day notice to the market before implementation. The Irresolvable Shadow Price cap would increase to the current transmission shadow price cap pursuant to the Business Practice Manual.

Other TAC Items

Quarterly Emerging Technologies Integration Plan

On 9/1/11, TAC unanimously approved the 2nd Quarter 2011 Emerging Technologies Integration Plan as recommended by the 8/10/11 WMS. Additionally, TAC discussed the benefits of requesting the PUCT to allow moving to an annual versus quarterly report.

Endorsement of ERCOT Independent Review of the Laredo to Lower Rio Grande Valley Project

On 9/1/11, TAC unanimously voted to endorse ERCOT recommendation 1R.

Future Agenda Items

- Update on Annual TAC and TAC Subcommittee Structure Review
- NPRR364, Clarify Active and Inactive SCED Constraint Reporting
- NPRR370, Supplementary Ancillary Services Market Modifications
- NPRR389, Modification of Voltage Support Requirements to Address Existing Non-Exempt WGRs
- NPRR391, Shortening RTM Settlement and Payment Timeline and Eliminate ACH as a Mode of Payment