
TAC Update

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TAC Chair and Vice Chair

ERCOT Board Meeting

July 19, 2011

Summary of TAC Update

Revision Requests Unanimously Recommended for Approval by TAC:

- NPRR314, Requirement to Post Generation Resources Temporal Constraints
- NPRR319, Required Documentation to Recover Fuel Costs for RUC Deployments
- NPRR324, Conductor/Transformer Transmission Facility Rating
- NPRR328, Clarifies Duplicative or Vague Requirements Related to Reactive Resources (formerly “Removes ERCOT Requirement for Reactive Resource Planning and the Associated Compliance Process”)
- NPRR332, Revise QSGR Processes for COP Reporting of QSGR Assigned Off-Line Non-Spin and Application of Emergency Operations Settlement
- NPRR333, Removal of Redundant Reporting Requirement Related to Equipment Ratings
- NPRR337, Correct Section Reference in Section 1.3.1.1 Pertaining To Protected Information of DC Ties
- NPRR338, Modifications to Support Revenue Neutrality
- NPRR344, Define RMR Fuel Adder
- NPRR346, Removal of Redundant Posting Requirement Related to Electrical Bus Changes

Summary of TAC Update

Revision Requests Unanimously Recommended for Approval by TAC (continued):

- NPRR376, CRR Volume Limitation Enhancements – URGENT
- NPRR387, Hydro RRS Deployment Under Frequency Relay Set Point – URGENT
- Impact Assessment of Parking Deck NPRR258, Sync with PRR824 and PRR833 and Additional Clarifications
- SCR761, Provide Price Republication Notifications via API and Provide Price Corrections via XML
- SCR762, Enable a Single Step Cancel/Resubmit of Trades
- SCR763, Modify COP Validation Rule for RRS
- PGRR006, New Planning Guide Section 6.5, Annual Load Data Request

Revision Requests Non-Unanimously Recommended for Approval by TAC:

- NPRR312, Clarification of QSE Requirements for Split Generation Resources – URGENT

Summary of TAC Update

Review of Revision Request Changes to Project Prioritization List

Notice of Guide Revisions Approved by TAC

Day Ahead Market Collateral Parameters Process (Vote)

Quarterly Emerging Technologies Integration Plan

Future Agenda Items

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

NPRR314, Requirement to Post Generation Resources Temporal Constraints

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| Purpose (Luminant) | This NPRR adds language to specify the need for ERCOT to post to the MIS Certified Area the current time since a Generation Resource last went Off-Line and the corresponding startup time ERCOT is using for of all Off-Line Generation Resources which may be considered in any RUC process. |
| TAC Vote | On 6/2/11, TAC unanimously voted to recommend approval of NPRR314 as recommended by PRS in the 5/19/11 PRS Report. |
| Effective Date/Priority | Upon System Implementation – Priority High; Rank 15.4 |
| ERCOT Impact | \$32k - \$39k (2011 Post Go-Live Funding); impacts to Market Management System (MMS), Current Day Reports (CDR), Market Information System (MIS), and Enterprise Information System (EIS). |
| Cost Benefit Analysis Highlights | <p>Net (Cost) - Benefit of \$124k; Cost Benefit Ratio of 4.44</p> <ul style="list-style-type: none"> • Increased reliability by allowing QSEs with Resources the ability to verify temporal constraints ERCOT is using in RUC process so that commitment decisions are made with accurate information. • Improve RUC process by avoiding the commitment of Resources which are unavailable within needed timeframe. • Prohibition of inaccurate RUC commitments will decrease need for Settlement disputes. |

NPRR319, Required Documentation to Recover Fuel Costs for RUC Deployments

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| Purpose (ERCOT) | This NPRR clarifies what type of documentation QSEs must submit to ERCOT as proof of natural gas purchases when requesting additional compensation for fuel costs incurred when providing RUC services. The NPRR further clarifies which documents are deemed acceptable as proof of fuel purchases and directs QSEs to request ERCOT Board approval for documentation not covered by the Nodal Protocols. |
| TAC Vote | On 6/2/11, TAC unanimously voted to recommend approval of NPRR319 as recommended by PRS in the 5/19/11 PRS Report. |
| Effective Date/Priority | August 1, 2011 |
| ERCOT Impact | No impacts |

NPRR324, Conductor/Transformer Transmission Facility Rating

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| Purpose (ERCOT) | This NPRR adds the Conductor/Transformer Rating, normally used for Rate C in the Annual Planning Model, as a fourth Transmission Facility Rating and adds the description from the Operating Guides to the Rating terms definitions in the Nodal Protocols. |
| TAC Vote | On 6/2/11, TAC unanimously voted to recommend approval of NPRR324 as recommended by PRS in the 5/19/11 PRS Report. |
| Effective Date/Priority | August 1, 2011 |
| ERCOT Impact | No impacts |

NPRR328, Clarifies Duplicative or Vague Requirements Related to Reactive Resources

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| Purpose (ERCOT) | This NPRR removes or clarifies duplicate or vague requirements related to reactive Resources. |
| TAC Vote | On 6/2/11, TAC unanimously voted to recommend approval of NPRR328 as recommended by PRS in the 5/19/11 PRS Report. |
| Effective Date/Priority | August 1, 2011 |
| ERCOT Impact | No impacts |

NPRR332, Revise QSGR Processes for COP Reporting of QSGR Assigned Off-Line Non-Spin and Application of Emergency Operations Settlement

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| Purpose (ERCOT) | <p>This NPRR:</p> <ul style="list-style-type: none">• Clarifies the Current Operating Plan (COP) reporting requirements for a Quick Start Generation Resource (QSGR) that is providing Off-Line Non-Spinning Reserve (Non-Spin) Service in an amount that is greater than the High Sustained Limit (HSL) minus Low Sustained Limit (LSL); and• Removes the requirement for a QSE to contact the ERCOT Operator to request a "manual override" when a QSGR it represents is first deployed by Security-Constrained Economic Dispatch (SCED) from a zero Base Point to a Base Point that is less than the QSGR's physical LSL. Emergency operations Settlement provisions for QSGR deployments by SCED will be managed internally by ERCOT. |
| TAC Vote | On 6/2/11, TAC unanimously voted to recommend approval of NPRR332 as recommended by PRS in the 5/19/11 PRS Report and as revised by TAC. |
| Effective Date/Priority | August 1, 2011 |
| ERCOT Impact | Less than \$5k (2011 O&M Budget) ; updated business procedures. |

NPRR333, Removal of Redundant Reporting Requirement Related to Equipment Ratings

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| Purpose (ERCOT) | This NPRR removes a redundant requirement for ERCOT to produce a report regarding equipment Ratings. |
| TAC Vote | On 6/2/11, TAC unanimously voted to recommend approval of NPRR333 as recommended by PRS in the 5/19/11 PRS Report. |
| Effective Date/Priority | August 1, 2011 |
| ERCOT Impact | No impacts |

NPRR337, Correct Section Reference in Section 1.3.1.1 Pertaining To Protected Information of DC Ties

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| Purpose (ERCOT) | This NPRR aligns the Nodal Protocols with the zonal Protocols by correcting the section reference in Section 1.3.1.1 to reflect the actual section that contains the Direct Current Tie (DC Tie) Schedule Information that is considered Protected Information. |
| TAC Vote | On 6/2/11, TAC unanimously voted to recommend approval of NPRR337 as recommended by PRS in the 5/19/11 PRS Report. |
| Effective Date/Priority | August 1, 2011 |
| ERCOT Impact | No impacts |

NPRR338, Modifications to Support Revenue Neutrality

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| Purpose (ERCOT) | This NPRR deducts the amount collected for the shortfall charges for Congestion Revenue Right Owners from the amount received on all Real-Time Market Invoices prior to prorating the payout to the RTM Invoice Recipients. It also adds language to allow ERCOT to resettle the Day-Ahead Market in the event that a DAM Settlement error, which does not otherwise meet the Protocol requirements for resettlement, will impact ERCOT's ability to achieve revenue neutrality. |
| TAC Vote | On 6/2/11, TAC unanimously voted to recommend approval of NPRR338 as recommended by PRS in the 5/19/11 PRS Report. |
| Effective Date/Priority | Upon System Implementation – Priority High; Rank 21. |
| ERCOT Impact | \$4k - \$5k (2011 Post Go-Live Funding); impacts to Settlements and Billing system |
| Cost Benefit Analysis Highlights | <ul style="list-style-type: none">• Helps maintain ERCOT's revenue neutrality and ensure accurate settlement of the Day Ahead Market.• Enhances the Settlements and Billing system to support updated logic when refunding Real-Time Invoices. |

NPRR344, Define RMR Fuel Adder

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| Purpose (ERCOT) | This NPRR defines the term “fuel adder” as reported by Resource Entities when filing Reliability Must-Run (RMR) contracts. The NPRR also clarifies that the fuel adder will be true-up to reflect actual fuel costs incurred. |
| TAC Vote | On 6/2/11, TAC unanimously voted to recommend approval of NPRR344 as recommended by PRS in the 5/19/11 PRS Report. |
| Effective Date/Priority | August 1, 2011 |
| ERCOT Impact | No impacts |

NPRR346, Removal of Redundant Posting Requirement Related to Electrical Bus Changes

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| Purpose (ERCOT) | This NPRR removes a redundant requirement for ERCOT to produce a report regarding Electrical Bus changes. |
| TAC Vote | On 6/2/11, TAC unanimously voted to recommend approval of NPRR346 as recommended by PRS in the 5/19/11 PRS Report. |
| Effective Date/Priority | Upon System Implementation – Priority High; Rank 22 |
| ERCOT Impact | Less than \$2.5k (2011 Post Go-Live Funding); impacts to MIS |
| Cost Benefit Analysis Highlights | <ul style="list-style-type: none">• Less redundant reporting by ERCOT and enables clearer visibility into the market. |

NPRR376, CRR Volume Limitation Enhancements - URGENT

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| Purpose (DC Energy) | <p>This NPRR establishes that CRR Account Holders are not included in the CRR transaction volume limitation process if they do not own open CRR positions or have credit allocated to the CRR Auction. This NPRR also expands ERCOT's requirement to notify CRR Account Holders about issues pertaining to the transaction limitation. Finally, this NPRR provides ERCOT with discretion (but not a requirement) to bypass round two bidding in the event of a de minimis overrun of the available transaction count.</p> |
| TAC Vote | <p>On 7/7/11, TAC unanimously voted to recommend approval of NPRR376 as recommended by PRS in the 6/23/11 PRS Report and as revised by TAC with a recommended priority of Critical and rank of 9.46.</p> |
| Effective Date/Priority | <p>Upon System Implementation – Priority Critical; Rank 9.46</p> |
| ERCOT Impact | <p>\$50k - \$55k (2011 Post Go-Live Funding); impacts to CRR and EIS</p> |
| Cost Benefit Analysis Highlights | <p>Net (Cost) - Benefit of \$327k; Cost Benefit Ratio of 7.17</p> <ul style="list-style-type: none"> • Allow for more efficient use of CRR volume limitation and improved communication. • Allow more transactions to be considered for clearing results which should lead to more efficient CRR pricing. • May increase CRR Auction revenue to Load by awarding more CRRs. |

NPRR387, Hydro RRS Deployment Under Frequency Relay Set Point - URGENT

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| Purpose (LCRA) | This NPRR clarifies that for hydro Generation Resources operating in the synchronous condenser fast-response mode to provide RRS, the initiation setting of the automatic under frequency relay setting shall not be lower than 59.80 Hz; includes language to address the instances when a hydro Generation Resource operating in synchronous condenser fast-response mode is triggered by an under frequency relay device without a corresponding RRS deployment by ERCOT; and is the companion NPRR to Nodal Operating Guide Revision Request (NOGRR) 068, Hydro-Responsive Reserve. |
| TAC Vote | On 7/7/11, TAC unanimously voted to recommend approval of NPRR387 as recommended by PRS in the 6/23/11 PRS Report. |
| Effective Date/Priority | August 1, 2011 |
| ERCOT Impact | No impacts |

NPRR258, Synchronization with PRR824 and PRR833 and Additional Clarifications

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| Purpose (PDCWG) | This NPRR synchronizes the Nodal Protocols with PRR824, Primary Frequency Response from WGRs, and PRR833, Primary Frequency Response Requirement from Existing WGRs; refines and clarifies the definition of Generation Resource Energy Deployment Performance; moves the definition of Measurable Event to Section 2.1, Definitions; and adds a definition for Dead Band. |
| TAC Vote | On 7/7/11, TAC unanimously voted to recommend approval of the impact assessment for NPRRR258 as recommended by PRS in the 6/23/11 PRS Report – Impact Assessment. |
| Effective Date/Priority | Upon System Implementation – Priority Critical; Rank 8.5 |
| ERCOT Impact | \$55k - \$60k (2011 Post Go-Live Funding); impacts to EMS. |
| Cost Benefit Analysis Highlights | <ul style="list-style-type: none"> • Enhances reliability of the grid. • Ensures that EPFR calculation in EMS will reflect the generator settings more accurately and that generation Resources understand Primarily Frequency Response is a reliability function that must provide or arrange to be delivered on their behalf. |
| Additional Information | On 11/16/10, the Board approved NPRR258 as recommended by TAC in the 11/4/10 TAC Report. NPRR258 was included in the Parking Deck due to its “not needed for go-live” status. The NPRR258 impact assessment is being presented to the Board for consideration of whether or not the changes should be authorized. |

SCR761, Provide Price Republication Notifications via API and Provide Price Corrections via XML

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| Purpose (DTE Energy Trading) | This SCR requires ERCOT to: <ul style="list-style-type: none">• Provide Application Programmatic Interface (API) notification of all republished corrected prices; and• Always publish all price corrections in Extensible Markup Language (XML) format using the same XML Schema Definition (XSD) that it is using for the regular price publication. |
| TAC Vote | On 6/2/11, TAC unanimously voted to recommend approval of SCR761 as recommended by PRS in the 5/19/11 PRS Report. |
| Effective Date/Priority | Upon System Implementation – Priority High; Rank 12.78 |
| ERCOT Impact | \$50k - \$63k (2011 Post Go-Live Funding); impacts to CDR, MIS, ERCOT.com, and MMS. |
| Cost Benefit Analysis Highlights | Net (Cost) - Benefit of \$103k; Cost Benefit Ratio of 2.81 <ul style="list-style-type: none">• Increased market transparency.• Reduce the time/cost to all MPs and ERCOT by enabling automated retrieval of changed prices and by decreasing time spent on analysis and charge disputes due to missing ERCOT price corrections.• Reduces MP time to daily monitor emails for price changes. |

SCR762, Enable a Single Step Cancel/Resubmit of Trades

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| Purpose (ERCOT) | This SCR modifies the Market Management System (MMS) such that submission of a trade that has already been confirmed causes the confirmed trade to be overwritten by the new submission and marked as unconfirmed. |
| TAC Vote | On 6/2/11, TAC unanimously voted to recommend approval of SCR762 as recommended by PRS in the 5/19/11 PRS Report. |
| Effective Date/Priority | Upon System Implementation – Priority High; Rank 12.77 |
| ERCOT Impact | \$25k - \$30k (2011 Post Go-Live Funding); impacts to MMS. |
| Cost Benefit Analysis Highlights | <p>Net (Cost) - Benefit of \$892k; Cost Benefit Ratio of 32.86</p> <ul style="list-style-type: none">• Increased efficiency of trade submission process by reducing the number of requests to MMS to complete a trade modification.• Trading process becomes more reliable with only one submission step therefore avoiding labor effort to resolve trading errors. |

SCR763, Modify COP Validation Rule for RRS

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| Purpose (ERCOT) | This SCR modifies the existing Current Operating Plan (COP) validation to use the highest Emergency Ramp Rate value from the registered Emergency Ramp Rate curve as an input to the COP validation check of Responsive Reserve (RRS) responsibility. |
| TAC Vote | On 6/2/11, TAC unanimously voted to recommend approval of SCR763 as recommended by PRS in the 5/19/11 PRS Report. |
| Effective Date/Priority | Upon System Implementation – Priority High; Rank 12.79 |
| ERCOT Impact | \$10k - \$15k (2011 Post Go-Live Funding); impacts to MMS. |
| Cost Benefit Analysis Highlights | <p>Net (Cost) - Benefit of \$40k; Cost Benefit Ratio of 4.08</p> <ul style="list-style-type: none">• May reduce the frequency of COP rejections when the RRS Responsibility is valid.• Makes the selection of the Emergency Ramp Rate used by the DAM constraint consistent with the COP validation rule.• Reduction in the frequency of SASMs executed because a more appropriate Emergency Ramp Rate is used. |

PGRR006, New Planning Guide Section 6.5, Annual Load Data Request

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| Purpose (PLWG) | This PGRR adds new Section 6.5 to the Planning Guide. A portion of the proposed language in new Section 6.5 currently exists in Nodal Operating Guide Section 5.1.3, Load Forecasts. This language is deemed appropriate to be part of the Planning Guide and will be removed from the Nodal Operating Guides through Nodal Operating Guide Revision Request (NOGRR) 058, Deletion of Section 5, Planning. |
| TAC Vote | On 6/2/11, TAC unanimously voted to recommend approval of PGRR006 as revised by the 5/31/11 PLWG comments. |
| Effective Date/Priority | August 1, 2011 |
| ERCOT Impact | No impacts |

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

NPRR312, Clarification of QSE Requirements for Split Generation Resources – URGENT

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| Purpose (ERCOT) | This NPRR defines Master QSE, clarifies the designation and responsibilities of the Master QSE for a Generation Resource that has been split to function as two or more Split Generation Resources (SGRs), and clarifies the responsibilities of the QSEs for such SGRs. This NPRR also addresses Settlement and billing disputes related to the application of integrated Real-Time telemetry from a Generation Resource that has been split to function as two or more SGRs. |
| TAC Vote | On 7/7//11, TAC voted to recommend approval of NPRR312 as revised by TAC. There were two abstentions from the Independent Generator and Independent Power Marketer Market Segments. |
| Effective Date/Priority | August 1, 2011 |
| ERCOT Impact | No impacts |

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

New NPRRs/SCRs 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 | 8.5 | NPRR258 | Pending Board Approval | NPRR258 | Sync with PRR824 and PRR833 | \$55k-\$60k | Not Started | TBD | TBD | Post Go-Live | Parking Deck |
| 1- Critical | 9.46 | NPRR376 | Pending Board Approval | NPRR376 | CRR Volume Limitation Enhancements | \$50k-\$55k | Not Started | TBD | TBD | Post Go-Live | Market |
| 2-High | 12.77 | SCR762 | Pending Board Approval | SCR762 | Enable a Single Step Cancel/Resubmit of Trades | \$25k-\$30k | Not Started | Aug 2011 | Sept 2011 | Post Go-Live | ERCOT |
| 2-High | 12.78 | SCR761 | Pending Board Approval | SCR761 | Provide Price Republication Notifications via API and Provide Price Corrections via XML | \$50k-\$63k | Not Started | Aug 2011 | Dec 2011 | Post Go-Live | Market |
| 2-High | 12.79 | SCR763 | Pending Board Approval | SCR763 | Modify COP Validation Rule for RRS | \$10k-\$15k | Not Started | Aug 2011 | Sept 2011 | Post Go-Live | ERCOT |
| 2-High | 15.4 | NPRR314 | Pending Board Approval | NPRR314 | Requirement to Post Generation Resources Temporal Constraints | \$32k-\$39k | Not Started | TBD | TBD | Post Go-Live | Market |
| 2-High | 21 | NPRR338 | Pending Board Approval | NPRR338 | Modifications to Support Revenue Neutrality | \$4k-\$5k | Not Started | July 2011 | Aug 2011 | Post Go-Live | ERCOT |
| 2-High | 22 | NPRR346 | Pending Board Approval | NPRR346 | Removal of Redundant Posting Requirement Related to Electrical Bus Changes | <\$2.5k | Not Started | TBD | TBD | Post Go-Live | ERCOT |
| | | | | | | \$226k-\$270k | | | | | |

Project Prioritization List (PPL) – 7/11/2011

| 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 | Oct 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 | Planning | 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 | Planning | Apr 2011 | Apr 2013 | Post Go-Live | Market |
| 1- Critical | 4 | | Board Approved | 90006_02 | Information Lifecycle Mgmt – Mkt Systems, Archive, Reporting | \$1M-\$2M | Planning | Jan 2010 | Jan 2012 | PPL | ERCOT |
| 1- Critical | 5 | | Board Approved | 11003_01 | Cyber Security Project #1 | \$500k-\$1M | Planning | June 2011 | Jan 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 | 11004_01 | Cyber Security Project #2 | \$250k-\$500k | Initiation | June 2011 | Jan 2012 | PPL | ERCOT |
| 1- Critical | 8 | | Board Approved | 11005_01 | IT Security Infrastructure Upgrade | \$100k-\$250k | Execution | May 2011 | Aug 2011 | PPL | ERCOT |

Project Prioritization List (PPL) – 7/11/2011

| 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 | 8.5 | NPRR258 | Pending Board Approval | NPRR258 | Sync with PRR824 and PRR833 | \$55k-\$60k | Not Started | TBD | TBD | Post Go-Live | Parking Deck |
| 1- Critical | 9 | | Board Approved | 11006_01 | MarkeTrak Upgrade and Enhancements (PLANNING) | \$100k-\$250k | Not Started | July 2011 | 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 | Planning | 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 | Planning | June 2011 | Aug 2011 | Post Go-Live | Market |
| 1- Critical | 9.25 | SCR765 | Board Approved | SCR765 | Public Aggregated Wind Dashboard | \$37k-\$45k | Not Started | Aug 2011 | Oct 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 | Execution | June 2011 | Sept 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 | Execution | May 2011 | July 2011 | Post Go-Live | Market |
| 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 | 9.45 | NPRR322 | Board Approved | NPRR322 | Real-Time PTP Option Modeling | \$100k-\$105k | Not Started | TBD | TBD | Post Go-Live | Market |
| 1- Critical | 9.46 | NPRR376 | Pending Board Approval | NPRR376 | CRR Volume Limitation Enhancements | \$50k-\$55k | Not Started | TBD | TBD | Post Go-Live | Market |

Project Prioritization List (PPL) – 7/11/2011

| 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 | 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 | Execution | 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 | 11 | | Board Approved | 10055_01 | Data Agg Performance Improvements | \$250k-\$500k | Planning | Sept 2010 | Oct 2011 | PPL | ERCOT |
| 2-High | 12 | | Board Approved | 10031_01 | Enterprise Records Management Automation (ERMA) | <\$50k | Closing | 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 |
| 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 | Execution | Apr 2011 | Sept 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 | Not Started | Aug 2011 | Sept 2011 | Post Go-Live | Market |
| 2-High | 12.77 | SCR762 | Pending Board Approval | SCR762 | Enable a Single Step Cancel/Resubmit of Trades | \$25k-\$30k | Not Started | Aug 2011 | Sept 2011 | Post Go-Live | ERCOT |
| 2-High | 12.78 | SCR761 | Pending Board Approval | SCR761 | Provide Price Republication Notifications via API and Provide Price Corrections via XML | \$50k-\$63k | Not Started | Aug 2011 | Dec 2011 | Post Go-Live | Market |
| 2-High | 12.79 | SCR763 | Pending Board Approval | SCR763 | Modify COP Validation Rule for RRS | \$10k-\$15k | Not Started | Aug 2011 | Sept 2011 | Post Go-Live | ERCOT |

Project Prioritization List (PPL) – 7/11/2011

| 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 | 12.8 | NPRR320 | Board Approved | NPRR320 | Minimum PTP Option Bid and Settlement | \$95k-\$110k | Planning | 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 | TBD | TBD | Post Go-Live | ERCOT |
| 2-High | 13 | NPRR290 | Board Approved | NPRR290 | ERCOT Publication of DAM PSS/E Files | \$20k-\$25k | Not Started | July 2011 | Aug 2011 | Post Go-Live | Market |
| 2-High | 13.1 | NPRR343 | Board Approved | NPRR343 | CRR Bid and PTP Obligation Bid Criteria Change | \$400k-\$450k | Not Started | June 2011 | Dec 2011 | Post Go-Live | ERCOT |
| 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 | 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 | Execution | 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 | Not Started | Sept 2011 | Oct 2011 | Post Go-Live | Parking Deck |
| 2-High | 15.3 | NPRR316 | Board Approved | NPRR316 | Negative Self-Arranged Ancillary Services Quantity | \$15k-\$20k | Not Started | June 2011 | Sept 2011 | Post Go-Live | Market |
| 2-High | 15.4 | NPRR314 | Pending Board Approval | 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 | Sept 2011 | Post Go-Live | Nodal Post Go-Live |

Project Prioritization List (PPL) – 7/11/2011

| 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 | 17 | | Board Approved | | Program Risk Items | \$1.0M-\$1.5M | Execution | Mar 2011 | Dec 2011 | Post Go-Live | Nodal Post Go-Live |
| 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 | Execution | Apr 2011 | Aug 2011 | Post Go-Live | ERCOT |
| 2-High | 21 | NPRR338 | Pending Board Approval | NPRR338 | Modifications to Support Revenue Neutrality | \$4k-\$5k | Not Started | July 2011 | Aug 2011 | Post Go-Live | ERCOT |
| 2-High | 22 | NPRR346 | Pending Board Approval | NPRR346 | Removal of Redundant Posting Requirement Related to Electrical Bus Changes | <\$2.5k | Not Started | TBD | TBD | Post Go-Live | ERCOT |
| 2-High | 23 | | ERCOT Approved | | Cyber Security Project #3 | \$250k-\$500k | Initiation | June 2011 | Dec 2011 | PPL | ERCOT |
| 2-High | 25 | | ERCOT Approved | | Cyber Security Facilities Remodeling | \$200k-\$250k | Planning | June 2011 | TBD | PPL | ERCOT |
| 2-High | 25 | | ERCOT Approved | | Human Resources Facilities Remodeling | \$250k-\$300k | Planning | June 2011 | TBD | 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 | TBD | PPL | ERCOT |
| PPL Cutline and Summary | | | | | 2011 Project Budget = \$36,364,000 | Spend = \$31,954,266 | Variance = \$4,409,734 | | | | |
| Nodal Post Go-Live Summary | | | | | 2011 Post Go-Live Budget = \$25,191,000 | Spend = \$22,923,840 | Variance = \$2,267,160 | | | | |

Notice of Guide Revisions Approved by TAC

NOGRR063, Additional Method for Submitting Back-up Control Plans

The NOGRR provides an additional method of submitting back-up control plans.

NOGRR064, QSE Acknowledgement of VSS Dispatch Instructions

The NOGRR revises language in Section 2.7.4.1 to be consistent with paragraph (3) of Section 2.2.10, Generation Resource Response Time Requirements. Section 2.7.4.1 requires Qualified Scheduling Entities (QSEs) to respond within two minutes of receipt of a Dispatch Instruction from ERCOT for Voltage Support Service (VSS) while paragraph (3) of Section 2.2.10 requires a response within five minutes.

NOGRR066, ERCOT WAN Connection Termination Requirement

The NOGRR deletes the requirement to terminate the Wide Area Network (WAN) connection at the Market Participant's control center.

NOGRR068, Hydro-Responsive Reserve

The NOGRR adds frequency requirement for the deployment of synchronous condenser fast response service to the Nodal Operating Guide.

Day Ahead Market Collateral Parameters Process

Protocol Section 4.4.10, Credit Requirement for DAM Bids and Offers, requires Board approval of any revisions to the Procedures for Setting Nodal Day-Ahead Market Credit Requirement Parameters.

The May 25, 2011 Credit Work Group and June 15, 2011 Wholesale Market Subcommittee (WMS) recommended revisions the Day Ahead Market credit parameters procedures to:

1. Allow ERCOT greater flexibility in setting pre-Day Ahead Market collateral requirements;
2. Simplify the procedure for new Counter Parties entering the market; and
3. Delete the references to the first days of the Nodal market.

On July 7, 2011, TAC unanimously voted to recommend approval of the revised “Procedures for Setting Nodal Day-Ahead Market Credit Requirement Parameters” as recommended by the Credit Work Group and WMS.

Quarterly Emerging Technologies Integration Plan

TAC unanimously endorsed the First Quarter 2011 Emerging Technologies Integration Plan (ETIP) to the Public Utility Commission of Texas

Future Agenda Items

Update on Holistic Approach to Congestion Irresolvable by SCED

NPRR299, Remove Requirement for ERCOT Board Approval of PUCT, IMM, and FERC Required Reports

NPRR313, Updating the Term Resource Plan to Current Operating Plan/Availability Plan (formerly “Updating the Term Resource Plan to Current Operating Plan”)

NPRR355, Adjust the Calculation of the Real-Time Settlement Point Price for a Load Zone

NPRR356, EEA Changes Related to Dispatch Instructions and BLTs

NPRR359, Monthly TDSP Load Report

NPRR361, Real-Time Wind Power Production Data Transparency

NPRR362, Changes to PRC Calculation

SCR766, Load Zone Price Distributed by ICCP

PGRR005, New Planning Guide Section 4, Transmission Planning Criteria (formerly “New Planning Guide Section 5, Planning Criteria”)