



Business Integration Update

Board of Directors Meeting

19 April 2011

Today's Agenda

- **Project Prioritization Process Overview**
- **2011 Release Schedule and Project Portfolio**
- **Stabilization & Deferred Defects Update**
- **Project Issue Update**
- **Data Center Update**
- **Appendix**
 - Project Updates

Project Prioritization Process Overview

- **ERCOT Submittal of Revision Requests (NPRR, SCR and/or Guide RRs)**
 - Draft Revision Request is reviewed by ERCOT leadership and SME's to determine if the draft has enough value to proceed with an Impact (IA) and Cost Benefit Analysis (CBA).
 - ERCOT submits internally approved Revision Requests into the stakeholder process for consideration.
 - Language, Impact and Cost Benefit Analysis reviewed and modified as needed at the subcommittee level, PRS and TAC.
 - In consultation with ERCOT, TAC recommends for approval, rejects or remands Revision Requests and prioritizes on the Project Priority List (PPL).
 - If above the cutline, the project costs and schedule is factored into the current year project portfolio.
- **Market Submittal**
 - Revision Request is submitted by Market Participant and considered by the appropriate subcommittee.
 - Upon subcommittee language recommendation, ERCOT completes the IA and in conjunction with Market Participants, completes the CBA.
 - Language, Impact and Cost Benefit Analysis reviewed and modified as needed at the subcommittee level, PRS and TAC.
 - In consultation with ERCOT, TAC recommends for approval, rejects or remands Revision Requests and prioritizes on the PPL.
 - If approved Revision Request is prioritized above the cutline, the project costs and schedule is factored into the current year project portfolio.
- **Internal ERCOT Projects (IT Infrastructure, software upgrades, security, etc)**
 - Draft Project Charter reviewed by ERCOT leadership to determine if the proposal has enough value to develop an IA & CBA.
 - IA & CBA reviewed by ERCOT leadership and project proposal is either approved or rejected.
 - If approved and funding is available, the project is added to the PPL if less than \$1 million.
 - If greater than \$1 million Board approval is required.
 - ERCOT internal projects will not move an approved PUCT or Market project below the PPL cutline unless agreed to by ERCOT and stakeholders.

Project Prioritization List (PPL) <http://www.ercot.com/services/projects/index>

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	June 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	1		Board Approved	Various	Data Center Buildout	\$30M-\$40M	Execution	Oct 2009	Feb 2012	PPL	ERCOT
1- Critical	2		Board Approved	99911	Minor Cap - Critical	\$500k-\$1M	Execution	Jan 2011	Dec 2011	PPL	ERCOT
1- Critical	3.5	SCR760	Board Approved	New	Recommended Changes Needed for Information Model Mgr and Topology Processor for Planning Models	\$500k-\$1M	Planning	Apr 2011	Feb 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	Not Started	TBD	TBD	PPL	ERCOT
1- Critical	6		Board Approved	10052_01	Settlement System Upgrade	\$1M-\$2M	Planning	Mar 2010	TBD	PPL	ERCOT
1- Critical	7		Board Approved	11004_01	Cyber Security Project #2	\$250k-\$500k	Not Started	TBD	TBD	PPL	ERCOT
1- Critical	8		Board Approved	11005_01	IT Security Infrastructure Upgrade	\$100k-\$250k	Not Started	TBD	TBD	PPL	ERCOT
1- Critical	9		Board Approved	11006_01	MarkeTrak Upgrade and Enhancements (PLANNING)	\$100k-\$250k	Not Started	July 2011	TBD	PPL	PUCT / Market
1- Critical	9.41	NPRR285	Board Approved	NPRR285	Generation Resource Base Point Deviation Charge Corrections	\$30k-\$40k	Execution	Apr 2011	May 2011	Post Go-Live	Market
1- Critical	9.42	NPRR282	Board Approved	NPRR282	Dynamic Ramp Rates Use in SCED	\$30k-\$35k	Planning	Apr 2011	June 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	9.44		Board Approved		Planning Model	Funded by Stabilization Project	Complete	2010	Apr 2011	Post Go-Live	Nodal Post Go-Live



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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	New	Change SASM Offer Procedures	\$15k-\$20k	Execution	Apr 2011	May 2011	Post Go-Live	Market
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	Execution	Sept 2010	TBD	PPL	ERCOT
2-High	12		Board Approved	10031_01	Enterprise Records Management Automation (ERMA)	<\$50k	Execution	Jan 2010	Apr 2011	PPL	ERCOT
2-High	12.5		ERCOT Approved	11009_01	Fire Alarm System Upgrade	\$100k-\$250k	Closing	Feb 2011	Apr 2011	PPL	ERCOT
2-High	12.75	NPRR323	Board Approved	New	Correct DAM Credit Exposure Language and Enable Qualified Expiring CRRs to Offset PTP Bid Exposure	\$375k-\$475k	Planning	Apr 2011	Sept 2011	Post Go-Live	Market
2-High	14	NPRR293	Board Approved	New	Requirement to Post PTP Obligation Quantities Awarded in DAM	\$12k-\$15k	Execution	Apr 2011	May 2011	Post Go-Live	Market
2-High	14	NPRR303	Board Approved	New	Requirement to Post PTP Options Cleared in the DAM or Taken to Real Time	<\$5k	Execution	Apr 2011	May 2011	Post Go-Live	Market
2-High	15		Board Approved		Parking Deck Initiatives	\$2.0M-\$2.5M	Execution	Feb 2011	Mar 2012	Post Go-Live	Nodal Post Go-Live
2-High	15.1	NPRR208	Board Approved	New	Registration & Settlement of Distributed Generation (DG) <1 MW	\$5k-\$10k	Planning	Apr 2011	Sept 2011	Post Go-Live	Market
2-High	15.2	NPRR251	Board Approved	New	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	June 2011	Sept 2011	Post Go-Live	Market
2-High	16		Board Approved		Decommissioning Efforts	\$275k-\$325k	Execution	Jan 2011	July 2011	Post Go-Live	Nodal Post Go-Live
2-High	17		Board Approved		Program Risk Items	\$500k-\$1M	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	June 2011	Post Go-Live	Nodal Post Go-Live

PPL Cutline	Board-Authorized 2011 Project Budget = \$41,900,000	Forecast:	\$37,234,802	Variance = \$4,665,198
Nodal Post Go-Live	Board-Authorized 2011 Post Go-Live Budget = \$25,191,000	Forecast:	\$25,450,000	Variance = (\$259,000)



2011 Release Schedule and Project Portfolio

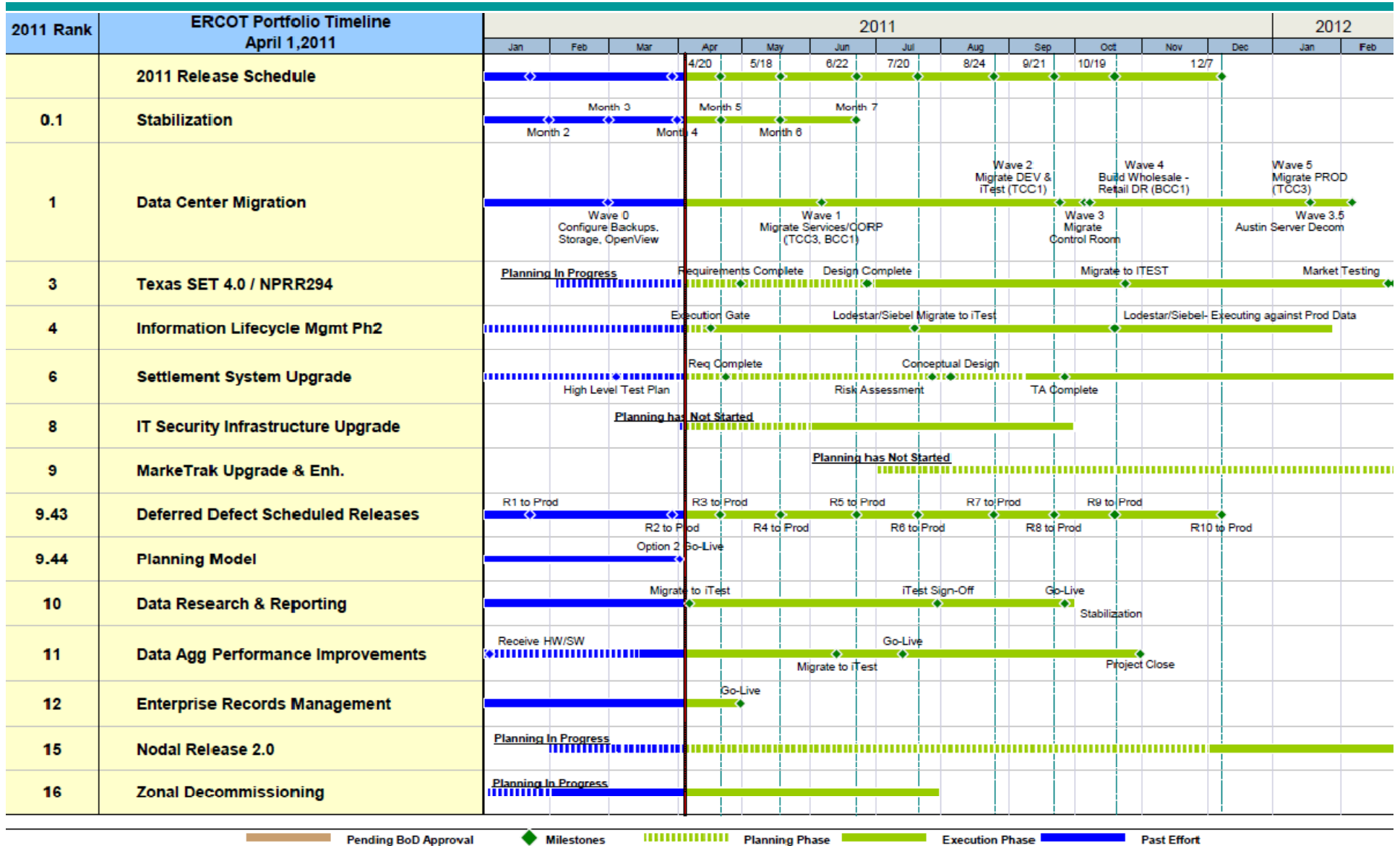
- **2011 Release Schedule**

- 1 Deferred Defect scheduled release every other month starting January 2011 until May 2011.
 - Allowed for longer stabilization period with fewer releases
 - A bundle of Stabilization and Deferred Defects, very few NPRRs.
 - Emergency stabilization releases have occurred and are considered off cycle releases.
- 1 Deferred Defect scheduled release a month starting June 2011.
 - A bundle of Stabilization, Deferred Defects, and NPRRs with low resource, low integrated system impacts and critical/high priority.
 - Emergency stabilization releases may continue to occur and are considered off cycle releases.

- **2011 Project Portfolio View**

- Inputs
 - PPL items approved as part of the 2011 budget process
 - Selected BoD approved pre-Nodal go-live Parking Deck items
 - Post Nodal go-live BoD approved NPRRs or SCRs
 - Pending TAC or BoD approval NPRRs or SCRs
 - Gives a forward looking view of project milestones against the rest of the project portfolio
- Milestones are based on actual or draft project plans and projected resource availability
- Gives a rolling 12 month view.

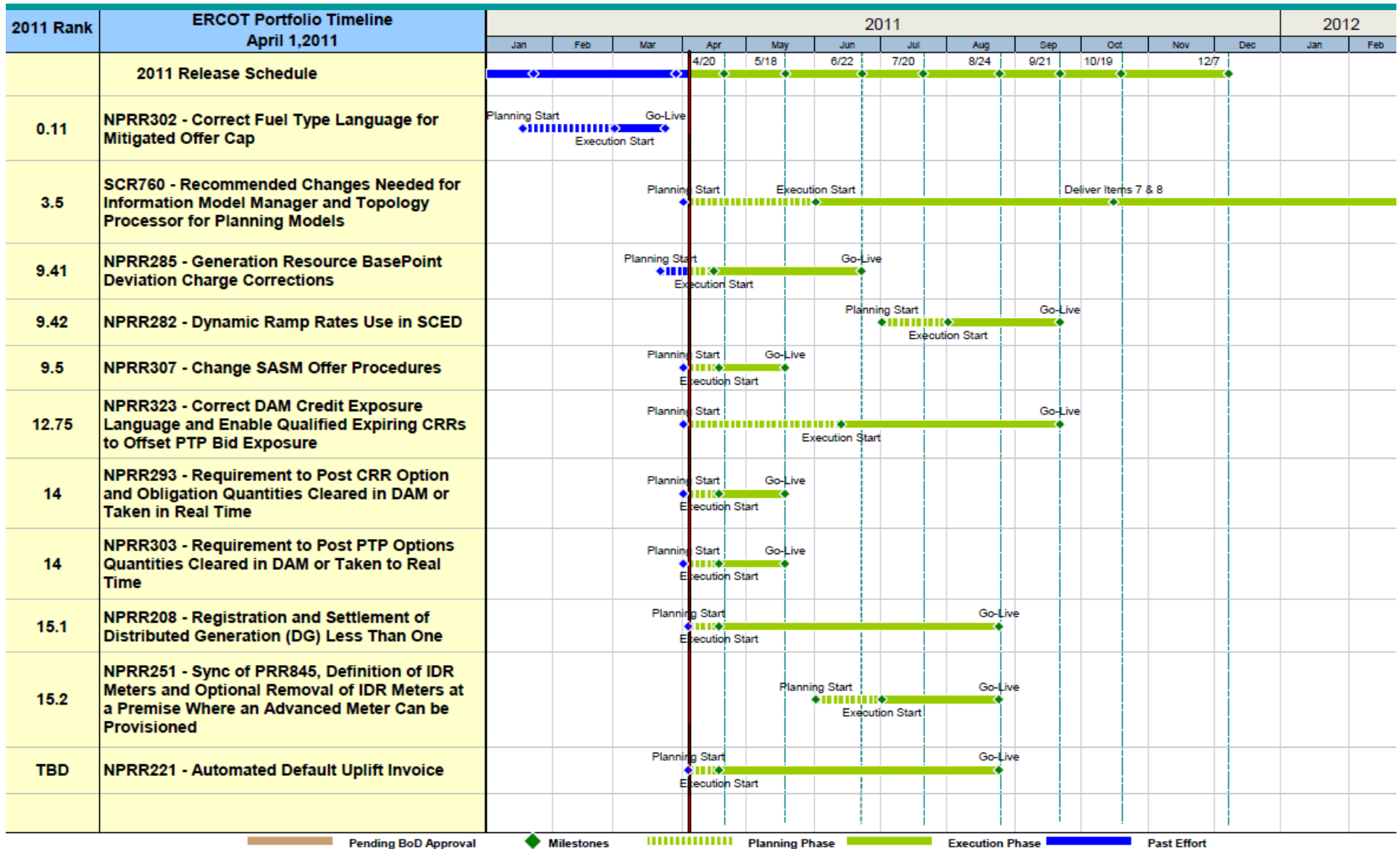
ERCOT Portfolio Status Report (as of 4/7/2011)



█ Pending BoD Approval
 ◆ Milestones
 ▤ Planning Phase
 ▬ Execution Phase
 ▬ Past Effort



ERCOT Portfolio Status Report (as of 4/7/2011)



Summary of Defects by Target Delivery (Stabilization & Deferred) (as of 4/7/2011)

Summary of Defects by Target Delivery

System	Open Stabilization Priority 2 Target Apr/May 2011								Priority 4 & 5 Defects (Potential Future Work)		Total Defects
		Group 3 5/2011	Group 4 6/2011	Group 5 7/2011	Group 6 8/2011	Group 7 9/2011	Unassigned	Total	Deferred Defects	Stabilization	
<i>MMS</i>	24	20	12	1			13	46	12	77	159
<i>EMS</i>	28	11	37	9	14	14	133	218	115	42	403
<i>COMS</i>	12	4	1				25	30	23	21	86
<i>CMM</i>	7	16					9	25	2	7	41
<i>NMMS</i>		6	4	6	8	9	6	39	8	2	49
<i>OS</i>	5	10	12	3	5	2	6	38	39	6	88
<i>CRR</i>								0	4	6	10
<i>MIS</i>		1						1	5	10	16
<i>CDR</i>	1	2					2	4		4	9
<i>EIS(EDW)</i>		1						1	2		3
<i>EIP</i>	7	8	3	5			7	23	5	23	58
<i>MPIM</i>	1	1					2	3		1	5
<i>Planning Model</i>							2	2	4	3	9
Total	85	80	69	24	27	25	205	430	219	202	936

Summary Stabilization & Deferred Defect Changes (as of 4/7/11)

	Dec 03 to Jan 07	Jan 08 to Feb 03	Feb 04 to Feb 28	Mar 1 to Mar 31	Apr 1 to Apr 7	May to Jun	Jun to Jul
Stabilization defects (changes since last report)							
New Priority 1, 2 Defects	111	56	86	26	6		
New Deferred Defects	92	95	38	105	25		
Defects Resolved	90	51	60	133	20		
Deferred defects (changes since last report)							
Defects Resolved	83	41	9	45	7		

ERCOT Projects Issue Update

Project Name	Scope	Objectives	Current Status	Issue	Potential Risks	Risk Probability
Data Center Migration	Replace data center hardware that is approaching end of life and migrate hardware to new Taylor and Bastrop data centers	Reduce level of risk of hardware failure and resulting impact on critical business functions	Connectivity between the data centers required for storage and server migration is completed. Wave 1 in progress. - 32 servers completed. - 198 in progress. - 123 to be scheduled.	Server migrations remain about two weeks behind schedule due to issues with the storage hardware connectivity. This is being corrected by submitting requests for server migrations 2 - 3 weeks in advance in order to complete storage allocation and other tasks ahead of schedule.	Schedule slippage due to higher than expected migration complexity	Medium
Information Lifecycle Mgmt Phase 2	Define and implement ERCOT's Information Lifecycle Management (ILM) to a defined group of Commercial System databases.	Free up usable storage quickly and control future growth rates by applying ERCOT ILM standards and policies.	Developing detailed execution schedule and evaluating resource constraints for delivery.	Human and system resources are constrained by higher priority efforts. Contract labor and tight coordination will be used to mitigate the increased risk to the delivery timeline.	delivery timelines may be impacted by resource availability	High
Settlement System Upgrade	Create a custom settlement solution that can be maintained by ERCOT staff. It will include the removal of the Oracle Lodestar Billing Expert application.	Replace all Lodestar proprietary code, data structures and tools with an ERCOT supported solution that does not require a maintenance agreement with an outside vendor.	Continuing to map requirements to each module and reviewing the different concepts that can be used for the design.	Human resources are constrained by higher priority efforts. Contract labor may be used to mitigate the increased risk to the delivery timeline.	Resource availability and delivery timelines may be impacted by stabilization.	High

Questions?



Data Center Migration Project Update

Board of Directors Meeting

19 April 2011

Data Center Migration Overview

- **Project Overview**

- Replace and move servers to new facilities
 - Taylor – Primary Production Environment
 - Bastrop – Back-Up (Disaster Recovery) / Secondary Production Environment
- Re-configure existing Taylor Data Center – Development and iTest

- **Project Approach**

- Project is divided into 6 distinct waves
- Wave 0 – Equipment Installs (cabinets, racks, chassis, cabling, etc)
- Wave 1 – Corporate and Services
- Wave 2 – Development and Integrated Test
- Wave 3 – EMMS and Austin Control Room
- Wave 4 – Bastrop Disaster Recovery Environment
- Wave 5 – Remaining Production moved to new Taylor Data Center

Current Migration Current Status (as of 4/8/2011)

WAVES	Start	Finish	Percentage of Total Moves	Percent in Progress	Percent Complete	Percent Time Elapsed
WAVE 1 -Corporate and Supporting Infrastructure	3/1/2011	6/6/2011	19.0%	54.1%	11.1%	40.0%
WAVE 1.5 Virtual Host Migration	3/21/2011	4/27/2011	15.4%	74.9%	0.0%	50.0%
WAVE 2 Development and Testing	5/16/2011	9/23/2011	35.5%		0.0%	
WAVE 3 EMMS and Austin Control Room	7/4/2011	10/5/2011	3.1%		0.0%	
WAVE 4 Bastrop Disaster Recovery Environment	7/1/2011	10/7/2011	4.1%		0.0%	
WAVE 5 Production moved to TCC3	9/12/2011	1/17/2012	22.9%		0.0%	
Overall	3/1/2011	1/17/2012	100.0%	10.3%	2.1%	12.0%

Data Center Financials

Cost Categories	LTD Actuals Thru 3.31.2011	Total Forecast	Project Budget
Internal Labor	1,236,089	4,632,412	
External Services	1,656,041	2,887,674	
Hardware & Hardware Licenses	22,060,556	26,715,584	
Software & Software Licenses	3,798,881	4,561,618	
Hardware & Software Maintenance	640,480	1,682,366	
Other	313,909	527,623	
Financing	42,103	341,475	
Subtotal	29,748,059	41,348,751	40,519,188
Contingency	-	3,322,969	4,152,532
Total Project	29,748,059	44,671,720	44,671,720

Appendix

ERCOT Projects Update

<u>Project Name</u>	<u>Scope</u>	<u>Objectives</u>	<u>Current Status</u>	<u>Issue</u>	<u>Potential Risks</u>	<u>Risk Probability</u>
Stabilization	Evaluate and remediate ERCOT Nodal Operational Issues including higher than normal: production outages, issue analysis, software defect remediation, stakeholder support, and request for information volumes	Maintain Nodal Operational Stability during the first months of System Operations	<u>Defects Resolved Apr (20)</u> 2 Market Facting Defects 18 Internal Defects <u>Remaining in Apr/May (85)</u> 5 Market Facting Defects 80 Internal Defects	None	Issue volumes are higher than expected Complexity of issues is greater than expected System design changes are implemented before systems are fully stabilized	Medium
Deferred Defects	Evaluate and remediate the defects that were deferred from the Nodal Project	Continue to improve the operational efficiency of the Nodal Applications and reduce the impact of workarounds for both ERCOT and Market Participants	<u>Defects Resolved Apr (7)</u> 1 Market Facting Defects 6 Internal Defects <u>Remaining in Apr/May (80)</u> 16 Market Facting Defects 64 Internal Defects	None	Resource availability and delivery timelines may be impacted by Stabilization efforts	Medium
Data Center Migration	Replace data center hardware that is approaching end of life and migrate hardware to new Taylor and Bastrop data centers	Reduce level of risk of hardware failure and resulting impact on critical business functions	Connectivity between the data centers required for storage and server migration is completed. Wave 1 in progress. - 32 servers completed. - 198 in progress. - 123 to be scheduled.	Server migrations remain about two weeks behind schedule due to issues with the storage hardware connectivity. This is being corrected by submitting requests for server migrations 2 - 3 weeks in advance in order to complete storage allocation and other tasks ahead of schedule.	Schedule slippage due to higher than expected migration complexity	Medium
Planning Model	Build Annual Planning Models from the NMMS Database also used to build Network Operations Model and CRR models for the Market	Attain much higher level of consistency between Operations and Planning models than experienced in the past	Completed based on 'Option 2' method for creating model as re-defined by ROS and TAC.	None	None	-
Zonal Decommission	The complete decommission (hardware, software, network, data, instances) of all systems that will no longer be used after Nodal Go-Live.	Track and coordinate ERCOT assets (hardware, software) as they are being decommissioned or repurposed back into the ERCOT Asset pool.	Planning underway	None	Zonal data retrieval may be requested to be retained beyond the decommissioning project end date.	Medium
Information Lifecycle Mgmt Phase 2	Define and implement ERCOT's Information Lifecycle Management (ILM) to a defined group of Commercial System databases.	Free up usable storage quickly and control future growth rates by applying ERCOT ILM standards and policies.	Developing detailed execution schedule and evaluating resource constraints for delivery.	Human and system resources are constrained by higher priority efforts. Contract labor and tight coordination will be used to mitigate the increased risk to the delivery timeline.	Delivery timelines may be impacted by resource availability.	High
Settlement System Upgrade	Create a custom settlement solution that can be maintained by ERCOT staff. It will include the removal of the Oracle Lodestar Billing Expert application.	Replace all Lodestar proprietary code, data structures and tools with an ERCOT supported solution that does not require a maintenance agreement with an outside vendor.	Continuing to map requirements to each module and reviewing the different concepts that can be used for the design.	Development resources pulled for impact analysis for new NPRR's.	Delivery timelines may be impacted by resource availability.	Medium



ERCOT Projects Update

Data Research & Reporting	Deliver a Electric Service Identifier (ESI ID) data research and reporting tool for ERCOT Commercial Operations to provide accurate, complete and efficient reporting and research capabilities using retail transaction data.	The delivery of timely, accurate and supportable reports, creation of a framework to build additional data marts, and the assurance that the transitioned ETS data is designed to be highly reliable and recoverable, with automated auditing and notification.	Testing activities in pTest environment are now complete. Migrated code to iTest. Developed iTest testing schedule	None	Delivery timelines may be impacted by resource availability.	Low
Data Agg Performance Improvements	ERCOT has the capability to load and process Advance Metering Systems (AMS) settlement meter data in support of market forecasts for deployment.	To stress test data agg code in an environment with similar resources as production and make any necessary improvements to data agg code to ensure data agg's ability to support the volume of AMS ESIDS that will come over the next 10 years (Forecasted by ERCOT to be 7.4 million AMS ESIDS).	A solution to the data aggregation performance problem has been found. This solution showed significant performance improvements when running 3MM AMS ESID's. Migration to Production is scheduled for 4/13.	None	Unable to resolve performance issues to meet expected volumes may impact delivery schedule.	Medium
Enterprise Records Mgmt	Define and implement ERCOT strategy for managing email, documents and legal records.	Control growth of email and document archives. Support regulatory compliance activities.	Activities resumed. Pilot to begin week of 04/11.	None	Undiscovered defects arising during pilot.	Low
SCR760 Changes Needed for Information Model Manager and Topology Processor for Planning Models	Implement and support nine (9) system changes that update the NMMS Database and/or the tools used to create the Annual Planning Model.	Support additional features required by the Transmission Service Provider Planning teams in an effort to more efficiently and accurately build the Annual Planning Models.	Requirements for SCR760-7 and SCR760-8 submitted to vendor for review and estimate for SOW.	None	Inability of vendor to deliver quality software in a timely manner as scheduled.	High
NPRR 285 Generation Resource Base Point Deviation Charge Corrections	<ol style="list-style-type: none"> 1. Provide a Curtailment Flag to QSEs with Intermittent Renewable Resources (IRRs) through ICCP 2. QSEs to follow base point from SCED when the Curtailment Flag is set 3. Calculate base point deviation charge 	An IRR must comply with Dispatch Instructions when receiving a flag signifying that the IRR has received a Base Point below the HDL used by SCED	Currently in development. Market notice to follow on April 15. On track for migration to production on May 18. Effective date of base point deviation charge will be beyond the migration date to allow for QSE test period.	None	QSE preparation and testing	Low
NPRR293/303 Requirement to Post PTP Obligation Quantities Awarded in DAM (formerly "Requirement to Post CRR Option and Obligation Quantities Cleared in DAM or Taken to Real Time")	Implement the MMS (Market Management System) view and CDR (Current Day Reports) automated report generation (CSV & XML) and MIS (Market Information System) posting.	The posting of these cleared quantities by hour by Settlement Point are necessary for Market Participants to adequately evaluate the results of the DAM including the accuracy of the Network Operations Model used for the DAM.	Currently in development with a targeted implementation date of May 18.	None	Priority 1 or 2 Stabilization defects will pull resources from this effort	Low



ERCOT Projects Update

<u>Project Name</u>	<u>Scope</u>	<u>Objectives</u>	<u>Current Status</u>	<u>Issue</u>	<u>Potential Risks</u>	<u>Risk Probability</u>
NPRR307 Change SASM Offer Procedures	Modify logic to remove cap after the completion of DAM DSP to allow the resubmission of SASM Offers.	Deletes the requirement that the resubmitted SASM offers for a Resource that has been committed in a previous market should be at or below the lowest price of the previous offer up to the portion of the capacity of the previous offer that was not	Currently in development with a targeted implementation date of May 18.	None	Priority 1 or 2 Stabilization defects will pull resources from this effort.	Low
NPRR323 Correct DAM Credit Exposure Language and Enable Qualified Expiring CRRs to Offset PTP Bid Exposure	Enhance the MMS system to: 1. Support new credit validation rules 2. Reduce credit exposure for qualified PTP Obligation Bids 3. Allow ERCOT to make a QSE ineligible to receive CRR credit exposure offsetting	The change will potentially reduce the collateral burden for Qualified Scheduling Entities' (QSEs) bids while sufficiently collateralizing ERCOT.	Currently in development with a targeted implementation date of September.	None	Higher than expected defect rates.	Low
Texas SET 4.0- Acquisition and Transfer of Customers From One REP to Another; Meter Tampering Transactional Solution	TX SET Version 4.0 is the next iteration of retail market transaction enhancements and modifications to enable more efficient transaction processing and business process solidification to be supported by the Texas Electric Retail Market. The TX SET Working Group has identified a number of Change Controls that are being assembled into a project for market-wide implementation.	Implement a solution as outlined in NPRR294 to facilitate the large transition of ESI IDs as a result of an acquisition pursuant to SUBST. R 25.493, Acquisition and Transfer of Customers from one Retail Electric Provider to Another.	Currently in planning. Documenting internal requirements with a target completion date of 4/29.	None	Resource availability	Low
NPRR 208 Registration and Settlement of Distributed Generation (DG) Less Than One MW	NPRR208 - Provides market clarity on registration requirements for Distributed Generation for the Nodal market. Established a DG registration threshold (currently at 1MW)	Eliminated Resource registration requirement for DG below the DG registration threshold Allowed all DG below the DG registration threshold to be settled as negative load	Currently in Planning. Requirements scheduled to be completed by end of April.	None	Priority 1 or 2 Stabilization defects will pull resources from this effort	Low
NPRR 221 Day-Ahead Market and Real-Time Market Default Allocation Changes	NPRR221 changed the way default amounts in the Day-Ahead Market and Real-Time Market are allocated. A Default Uplift Invoice and Settlements Calculation were defined to support this change. For Nodal Go-Live this change remained a manual Business Process.	<ul style="list-style-type: none"> Build Settlement tools to support the calculation of default uplift invoice input data Define new business processes to minimize impacts when a default occurs. Lodestar changes to support the creation of Default Uplift Invoices Lodestar changes for Billing & Payment of short-pay amounts 	Currently in Planning. Requirements scheduled to be completed by end of April.	None	Priority 1 or 2 Stabilization defects will pull resources from this effort	Low