

Nodal Program Update

Mike Cleary

Sr. VP and Chief Technology Officer

ERCOT Board of Directors

16 February 2010

Agenda

- Program Status
- Market Readiness
- Financials
- Appendix



288 Days to Go-Live

0 Items Impacting Go-Live Date

Market Trials 3.0:

- 247 of 275 QSEs Qualified for MMS transaction submittal
 - 79 / 86 QSEs w/ Resources
- 97 % of Generation Qualified

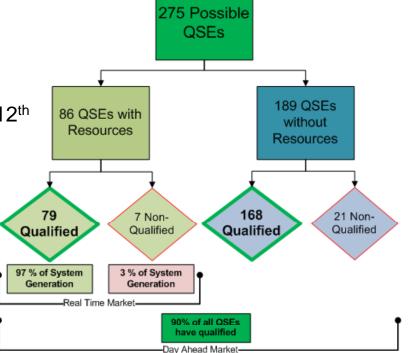
Congestion Revenue Rights (CRR)

- 54 of 80 CRRAH Qualified to date
- 1st Monthly Auction for March ran on February 12th
 - 38 MP's participated 12,208 total submittals
 - » 3,103 cleared transactions

Real Time Markets / Outage Scheduler

- Started Feb 1st
 - Window Closes for Qualification on Aug 13th
 - Real-Time LMPs posting every 5 minutes
 - Reports available on Nodal MIS to all MPs
 - Running on CIM model NMMS/EMS/MMS
 - QSE dashboards posting on Fridays to reflect submission performance metrics (Feb 11th)
- Outage Scheduler available to QSEs and TSPs

March 1st starts Six month LMP analysis



288 Days to Go-Live

0 Items Impacting Go-Live Date

• Market Trials 4.0: DAM/RUC

- Starting Thursday Apr 1st, for Operating Day Friday April 2nd
 - On Schedule
 - Submission Qualifications underway in Market Trials 2.1

• Market Trials 5.0: Full Functionality

- Starting May 3rd
 - 2 Week Slippage
 - Mitigation plan in place to pull back on track
 - » Overtime and budget monitoring

Market Readiness

- 27 of 35 outreach sessions completed
- Market Trials Kickoff
- Executive Briefing

Key Takeaways:

- Continue ramp-up of participation in Real-Time Market
 - Offers- Periodic exhausting of offers, LMP goes to cap (\$2,250)
 - Telemetry- Continued QSE/TSP focus on telemetered data
- Continue to increase CRR Auction participation
- Metrics/progress beginning to light up for market trials
- Need TSP commitment to submit outstanding model updates and perform validation by 2/29/2010



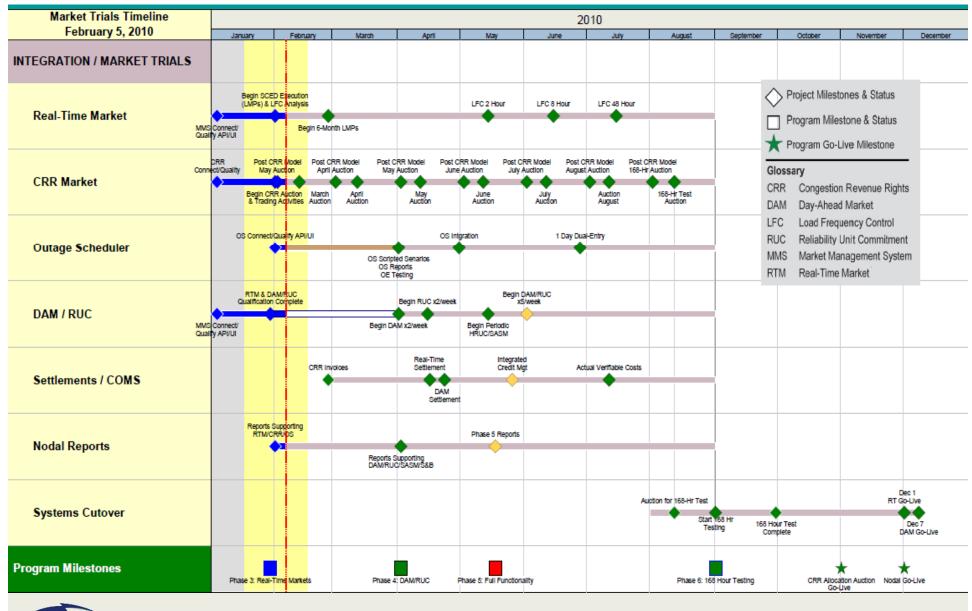
16 February 2010

Integrated Nodal Timeline

Nodal Program Timeline					2009									20	010					
February 5, 2010	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	Мау	Jun	Jul	Aug	Sep	Oct	Nov	De
Applications																				
MMS Functional Acceptance Testing				MMSS FAT C	mplete															
CMM Functional Acceptance Testing				CMM 4.1 FAT O	Complete				CMM	EZ FAT CO	riplete									
Independent Market Monitor																			_	
Break Fix																				
SEM										Ĩ						1		Complete		-
System & External Verification Testing		FAT	SAT	EDS								_				Mestone & Status I Interim External Mile	istono & Status	On back		
SEM Go-Live		CEN No.			CEN Collins										A Program	Go-Live Milestone			but will not affect mi will offect mitestone	
ntegration (INT) & Market Trials (MT) Phases		SEM MOD	eing cuideine	s Postaci Final Nodal CIM Mos TAC/800 Approval o	F SEM Go-Live											men information Mod		MVS Marke	et Management Syste	
INT 2.1 Testing			_			- ,	Phase 2.1 INT	Testing Complete							CRR Care DAM Day	it Monitoring Manage gestion Revenue Rigt Ahead Market	ment Ri	RTM Real-	Time Market	
Market Trials 2.1 External Testing					Ph	sse 2.1 Kickoff				NT Phone	2.1 Complete				FAT FUN	Delivery System dianal Acceptance Te 1 Frequency Control	sting	RUC Reia	bility Unit Commitme Acceptance Testing	e.
INT 3 Testing	_					-Y			Phase 3 INT Test							8080	Security Constraint			
					_				Run D 3 Kickoff			MT Phase 3 Compl								
Market Trials 3 External Testing	_							Phase		2										
INT 4 Testing							_				Phase 4 Kicks	RUC RUC	C-21r							
Market Trials 4 External Testing										1	+ DA	Malaweek DAMI	UC/RTM/S&B							
INT 5 Testing											-		Phase 5 I	NT Testing Comp Br L	inte C-48ty					
Market Trials 5 External Testing												R	n Full Nodel Sy		٠		MT Phase 5	Complete		
INT 6 Tesing															•	Phase 6 INT T	esting Complete			
Market Trials 6 External Testing																Begin 24x7	1020-1	e Complete		Com
eadiness																Support				
Market Readiness				P Training rolets	~	nduct Site Vielte					Site Visite Com	piele						Stand By	Site Visits	
External Outreach			_	•		1: 2.1 Connectiv	the Tant		MRS 2: Mark	at Trials		Market Readiness		<u> </u>		t5 4: 168 Hour Ter			ning Complete	
Market Training						+				and to M		•			-	+			•	
Metrics Tracking & Assessment		Metrice							Metrica M										Conduct Me	
ERCOT Readiness								MT3 De	P Complete		MT4 PnP Compl	MTS De	P Complete		NERC:	ERT Go-Live			ERT Post-G	
Internal Processes, Procedures & Training											•		•	l Į	MTS PhP Com	O	OT Personnel	1	•	<u> </u>
System Cutover								_				- Cree	Qo-Live		Ge-	•	Training			
Operational Readiness							• 3-6		System Ave		Spring	System	Cutover Plans		System	Cutover Plans				
Environment Configuration & Management						NPRO	D Build		Monitori	1	Health	check	SLA Conform	ance Monitoring						
							all DST althcheck	Phase 3,4 & 5 Run Books			Phase 4 Perform	mance Verification a	5			Periodical Perform	ance Verification	4		
Load & Performance; Failover & Fallback; Security Testing				Phase	21 Performance				-		Fallover/Se	cuity Testing	•			Fallover/Securi	ty Testing			
occurry resulty						Phase 2 Securit	1 Initial ty Testa	P	Failover/Security	Vertication	an &	Phase 5 Perio Failover	mance Vertical Security Testin	son & g				Cutover	Node	Go-Live
Program Milestones					*													•	* 1	*
Planning Nodal Enhancements				SEM	xo-cive	Phase 2.1 Mar	tet Connectivity		Phase 3: Real-TI	ine Markeb	Phase	4 DAM/RUC	Phase 5: Full Functional	ty .	Planning Nod	Phase 6: 16 al Enhancemente	Hour Testing	CRR Alb	cation Auction	



2010 Market Trials Timeline





Program Milestone Schedule Mitigation

Phase 5: *Full Functionality*

Integration Testing Schedule is still two weeks behind: No Impact on Go-Live

- Scope
 - End to end integration testing
 - Begin HRUC/SASM
 - Daylight Savings time change verification
 - Phase 5 performance verification

Mitigation Strategy

- Continue to leverage weekend overtime for Phase 5 test
- Prioritize and phase in the delivery of reports during Market Trials
- Prioritize Testing to ensure the critical functionality and reports are completed first
- Prioritize must have End-to-End scenarios
- Continue to efficiently schedule testing and release management windows



Nodal Program Risks & Issues

Risk/Issue	Impacted Milestone	Target	Category	Probability	Severity	Status
Integration Testing - Risk Continued risk around technology delivery of business systems integration due to complexity and continuing maturing of application and data dependencies.	Program	May 2010	Scope / Schedule / Budget	Low	Med	 Phase 3 complete Phase 4 On track; planning complete, execution in progress
Market Interaction Operating Level Agreements (OLAs)Need to determine operating level agreements associated with market interactions to assist ERCOT in establishing operational thresholds:-Network Model Load Frequency-DAM Sizing; -CRR sizing -Reporting	Program	April/ May 2010	Scope / Budget	High	Low	 On track Phase 3 complete Phase 4 and 5 OLA definitions in process NATF and NDSWG heavily involved in issue. Joint working session scheduled for 02/16/10 On track; presented to NATF on 02/02/10 On track; ERCOT is researching comparable CRR market sizes in PJM, CAISO, and MISO On track
Inadequate Backup for ICCP Failure: Current Protocol Language does not allow ERCOT to use State Estimator results as a backup input to SCED, LFC, & NSA processes in the event of an ICCP failure from both sources of Resource Status.	Program	April/ May 2010	Scope / Schedule / Budget	High	High	ERCOT working on an impact analysis and NPRR language for consideration



Nodal Program Risks & Issues

Risk/Issue	Impacted Milestone	Target	Category	Probability	Severity	Status
Reconciling Protocols, Systems and Market Expectations Experience by other ISOs in deploying nodal markets has shown that expectations of the market participants are often missed, despite best efforts at defining tariffs or protocol requirements. ERCOT needs to assume such a risk exists for this nodal implementation as well.	Phase 3	Complete				• Complete
Credit Management – Business & Technical Exposure Credit Management rules and exposure calculations will change significantly with the implementation of the Nodal Program. During the requirements and design phase of the program stakeholder concerns have been expressed that may result in requested system changes as the program moves into Market Testing of Credit Management.	Phase 5	July 2010	Scope / Schedule / Budget	High	Med	ERCOT business and Nodal Program reviewing Credit concerns and next steps.



Earned Value for the Nodal Program

\$90.0 Chart only uses values associated with Internal Labor Costs, External Resource Costs, Administrative & Employee Expenses, Vendor and Backfill \$80.0 \$70.0 The metrics were set to 0 starting in September 2009 to coincide with Q4 EAC Reforecast. \$60.0 The Planned Value for January-December 2010 coincides with \$ Millions Q1 EAC Reforecast. CPI = 1.07 \$50.0 PFI = .98 \$40.0 \$30.0 Planned Value \$24,171,474 Earned Value \$23,446,330 Actual Cost \$22,087,033 \$20.0 \$10.0 \$-Sep-09 Jun-10 Oct-09 Nov-09 Dec-09 Jan-10 Feb-10 Mar-10 Apr-10 May-10 Jul-10 Aug-10 Sep-10 Oct-10 Nov-10 Dec-10 Planned Value \$-\$6.5 \$12.7 \$18.4 \$24.2 \$30.0 \$36.4 \$42.4 \$48.1 \$53.9 \$58.2 \$62.2 \$66.1 \$69.7 \$73.0 \$76.0 🛨 Earned Value \$-\$5.8 \$12.0 \$17.4 \$23.4 Actual Cost \$-\$5.8 \$11.2 \$16.4 \$22.1

Nodal Program



10

Participant Readiness Touch Points

		20	10	
	February	March	April	Мау
Meetings	• NATF 2/2, 2/16,2/19)	• NATF 3/2	• NATF 4/6	• NATF 5/4
Training	 Nodal 101 LSE 201 Basic Training Generation 101, 201 CRR – instructor-led Settlement Workshop Operations Seminar 	 Nodal 101 LSE 201 Basic Training Generation 101, 201 CRR – instructor-led Settlement Workshop Operations Seminar 	 Nodal 101 Trans 101 Generation 101, 201 CRR – instructor-led NMMS Economics of LMP Combined Cycle Workshop 	 Nodal 101 Trans 101 Generation 101, 201 CRR – instructor-led NMMS Economics of LMP
Outreach	 5 site visits Additional Phase 3 metrics Standby site visits mitigation approach 	 4 site visits Scheduled Site Visits conclude MRS #3 March 25th 	 Standby site visits Phase 4 metrics launch 	 Standby site visits Metrics monitoring
Market trials	 Weekly calls Phase 3 Market Trials initiates QSE OS qualification Phase 4 Handbooks DAM/RUC MIS 	 Weekly calls Phase 3 Execution Phase 4 Handbooks Updates to prior handbooks LFC individual QSE tests 	 Weekly calls Phase 4 Market Trials initiates Phase 5 Handbooks Updates to prior handbooks Credit 	 Weekly calls 2 hr system-wide LFC test Phase 5 Market Trials initiates



	Course	Start Date	Location
	Generation 201	February 9	Suez Energy (Houston)
	Generation 101	February 16	Austin Airport Marriott South (Austin)
	Network Model Management	February 18	ERCOT Met Center (Austin)
\Rightarrow	Settlements Workshop – RUC/RTM	February 23	ERCOT Met Center (Austin)
	ERCOT Nodal 101	February 25	ERCOT Met Center (Austin)
	Load Serving Entity 201	March 3	ERCOT Met Center (Austin)
	Economics of LMP	March 8	Norris Conference Center (Houston)
	Basic Training Program	March 8	Austin Airport Marriott South (Austin)
	Congestion Revenue Rights	March 9	Norris Conference Center (Houston)
\Rightarrow	Settlements Workshop – RUC/RTM	March 9	City of Garland Fire Building (Dallas)
4	Settlements Workshop – RUC/RTM	March 23	Calpine (Houston)

Enrollment at: http://nodal.ercot.com/training/courses/index.html



Wind Panel Hosted by Horizon Wind February 16, 2010 Houston, TX 9-3pm

Retail Panel Hosted by StarTex February 17, 2010 Houston, TX 9-3pm

Agenda:

- Outreach: Program Update
- Outreach: Real-Time Market
- Outreach: Merged DAM&RUC
- Credit Management
- Wind Resource discussion

Agenda:

- Outreach: Program Update
- Outreach: Merged DAM&RTM
- Outreach: CRR Auction
- Credit Management
- Retail operations discussion

RSVP required due to room limitations, but WebEx available

Wind- http://www.ercot.com/calendar/2010/02/20100216-MT

Retail- http://www.ercot.com/calendar/2010/02/20100217-MT



16 February 2010

Market Participant Site Visits

Confirmed 🗌 Completed 🖌 27 Outreach Site Visits have been completed Entity Entity Date Date NRG TEXAS POWER ✓ LOWER COLORADO RIVER AUTHORITY 9-Oct 15-Dec DIRECT ENERGY LP 5-Jan 14-Oct ✓ CALPINE CORP 6-Jan CPS ENERGY ✓ AUSTIN ENERGY 20-Oct 13-Jan ☑ BTU (Bryan Texas Utilities) SERVICES 21-Oct ✓ CITY OF GARLAND **OCCIDENTAL** 20-Jan 29-Oct GDF SUEZ ENERGY MARKETING \checkmark 26-Jan TENASKA POWER SERVICES ✓ ANP FUNDING 3-Nov OPTIM ENERGY 27-Jan ✓ LUMINANT ENERGY 5-Nov 3-Feb ✓ INVENERGY WIND DEVELOPMENT 10-Nov I E. ON 9-Feb 11-Nov Z EXELON WIND PANEL (Houston) 16-Feb ☑ AMERICAN ELECTRIC POWER SERVICE 12-Nov RETAIL PANEL (Houston) 17-Feb CONSTELLATION ENERGY 17-Nov \checkmark TRI-EAGLE ENERGY 18-Feb ✓ PSEG ENERGY RESOURCES 18-Nov NEXTERA ENERGY 26-Feb J ARON 19-Nov □ XTEND ENERGY LP 2-Mar FULCRUM POWER 2-Dec 9-Mar ✓ EAGLE ENERGY PARTNERS I LP 3-Dec BRAZOS ELECTRIC 10-Mar ✓ STEC 9-Dec □ SHELL ENERGY 11-Mar **BP ENERGY COMPANY** 10-Dec **FORMOSA UTILITY** 16-Mar 18-Mar **WESTAR**



Active MP Metrics (as of 2/12/2010)

Metric Name	Current Score (as of 2/12/2010)	Applies to	Weight	Green %	Yellow %	Red %	Not Scored %	Primary Criteria	Notes
	Green	QSERs	Generation Ratio Share	97.2%	2.8%	0.0%	0.0%	Successful submission of RT and	79/86 QSERS Qualified (including sub-QSEs).
MP3 Market Submissions Connectivity Qualification	Amber	QSEs	Even weighting	88.9%	5.8%	1.1%	4.2%	DAM transactions (275 total entities included sub-QSEs).	168/189 QSEs qualified (including sub-QSEs). Below 95% threshold for overall GREEN.
	Green	QSERs	Generation Ratio Share	87.7%	0.6%	0.0%	11.7%	100% expected State Estimator telemetry submitted.	42/45 QSERs completed (parent QSEs only). 3492/3500 SE points provided (99.1%).
MP6 Telemetry Compliance with Nodal Protocols 3.10.7.5	Green	QSERs	Generation Ratio Share	87.7%	0.0%	0.6%	11.7%	100% expected SCED telemetry submitted.	42/45 QSERs completed (parent QSEs only. 7621/7633 SCED points provided (99%).
	Green/White only	TSPs	Ownership Ratio Share	83.4%	0.0%	0.0%	16.6%	100% expected TSP telemetry per ICCP Handbook submitted	15/20 TSPs completed. 12600/12956 TSP CB and LD points provided (94.9%).
MP11 Resource Registration	Green	REs	Registered MW Capacity Ratio Share	97.9%	1.3%	0.8%		RARF validated, Decision Making Authority form submitted, and GENMAP validated	151/159 Resources completed (95%).
MP15-A Real-time Market Participation	Green/White only	QSERs	Generation Ratio Share	9.8%	0.0%	0.0%		Weekly average of daily SCED submissions (energy offer curves and/or	13/86 QSERs above 95% weekly average for SCED submissions. AMBER/RED scores light up 2/24/2010 .
MP15-B CRR Connectivity Qualification	Red	CRRAHs	Even weighting	71.6%	6.2%	11.1%	11.1%	Successful submission CRR transactions	57/83 CRRAHs qualified. 13 CRRAHs non-responsive to outreach calls. Greater than 5% overall RED.
MP20 Outage Scheduler Connectivity Qualification	Green/White only	QSERs	Generation Ratio Share	34%	0.0%	0.0%	66%	Successful submission of OS transactions	13/86 QSERS qualified. AMBER/RED scores light up 4/7/2010 after OS window closes.
zuanneation	Green/White only	TSPs	Ownership Ratio Share	6%	0%	0%	94%		1/20 TSPs qualified.
							GREEN	Submissions complete	
	m / 0010					45	AMBER	Submissions not complete, but	actively working with ERCOT



RED

ERCOT Board of Directors Submissions not complete, participation not adequate

Red Market Participants (in order of importance)

M3 Market Submissions Connectivity Qualification

Total: 189 QSEs without Resources (including sub-QSEs) * Green: 168 complete Amber: 11 (working with ERCOT) Red: 2 (unresponsive). New: 8 (allowed 30 day grace period) UBS AG LONDON BRANCH VANTAGE WIND SERVICES LLC

EDISON MISSION MARKETING AND TRADING INC

MP6 Telemetry Compliance with Nodal Protocols 3.10.7.5

Total: 45 QSEs with Resources (parent QSEs only) **Green:** 42

Amber: 1 for State Estimator points (< 100% and >= 80% telemetry provided)

Red: 1 for SCED points (< 80% telemetry provided).

MP15-B CRR Connectivity Qualification

Total: 81 CRRAHs Green: 58 complete Amber: 5 Amber (working with ERCOT) Red: 9 (unresponsive) New: 9 (allowed 30 day grace period)

The applicable primary contact for each Market Participant has been contacted via phone and e-mail by ERCOT's Wholesale Client Services Department notifying them of the change to RED status. AMBRIDGE ENERGY LLC (CRRAH) COMMERCE ENERGY INC (CRRAH) CREDIT SUISSE ENERGY LLC (CRRAH) FRANKLIN POWER LLC (CRRAH) MERRILL LYNCH COMMODITIES INC (CRRAH) PEPCO ENERGY SERVICES INC (CRRAH) PRIVATEMARKETS INC (CRRAH) STAR ELECTRICITY LLC DBA STARTEX POWER (CRRAH) VELOCITY AMERICAN ENERGY MASTER I LP (CRRAH)

* MP3 applies to QSEs with and without Resources. Currently, the only Market Participants with a RED status for MP3 are QSEs without Resources.



16 February 2010



Monthly Financial Review

Don Jefferis Interim Director – Nodal Financial Management Office 16 February 2010

Approved Forecast to Actual Comparison Month of January 2010

Forecast Cumulative

Variance

Line	Cost Summary	Forecast	Actual	Forecast Variance	(Pending Contingency Mgmt Disposition)
1	Internal Labor Costs	\$2.1	\$2.3	(0.2)	(\$0.2)
2	Backfill Labor Costs	0.2	0.1	0.1	0.1
3	External Resource Costs	3.4	3.2	0.2	0.2
4	Software & Software Maintenance	0.3	0.2	0.1	0.1
5	Hardware & Hardware Maintenance	1.0	0.8	0.2	0.2
6	Other	0.1	0.0	0.1	0.1
7	Sub-total Direct Project Costs	\$7.1	\$6.6	\$0.5	\$0.5
8	Board Discretionary Fund	\$0.0	\$0.0	\$0.0	\$0.0
9	Allocations	\$0.4	\$0.3	\$0.1	\$0.1
10	Finance Charges	1.1	1.1	0.0	0.0
11	Sub-total Indirect Project Costs	\$1.5	\$1.4	\$0.1	\$0.1
12					
13	Total	\$8.6	\$8.0	\$0.6	\$0.6
nounte	in millions				

Amounts in millions

Favorable / (Unfavorable)



Financial Review - LTD Performance through January 2010

Nodal Program

Approved Forecast to Actual Comparison

Life-to-Date through January 2010

					Forecast
Line	Cost Summary	Forecast	Actual	Variance	Remaining
1	Internal Labor Costs	\$58.5	\$58.7	(\$0.2)	\$25.1
2	Backfill Labor Costs	5.5	5.4	0.1	\$1.8
3	External Resource Costs	258.0	257.8	0.2	24.5
4	Software & Software Maintenance	25.9	25.8	0.1	3.2
5	Hardware & Hardware Maintenance	52.1	51.9	0.2	3.2
6	Other	2.1	2.0	0.1	11.3
6a	Sales Tax Refund	(\$7.3)	(\$7.3)	0.0	0.0
7	Sub-total Direct Project Costs	\$394.8	\$394.3	\$0.5	\$69.1
8	Board Discretionary Fund	\$0.0	\$0.0	\$0.0	\$105.5
9	Allocations	\$20.4	\$20.3	\$0.1	\$2.6
10	Finance Charges	27.0	27.0	0.0	24.4
11	Sub-total Indirect Project Costs	\$47.4	\$47.3	\$0.1	\$27.0
12					
13	Total	\$442.2	\$441.6	\$0.6	\$201.6

Amounts in millions

Favorable / (Unfavorable)

Note 1: Forecast consists of actuals through January 2010 and re-forecast February 2010 forward

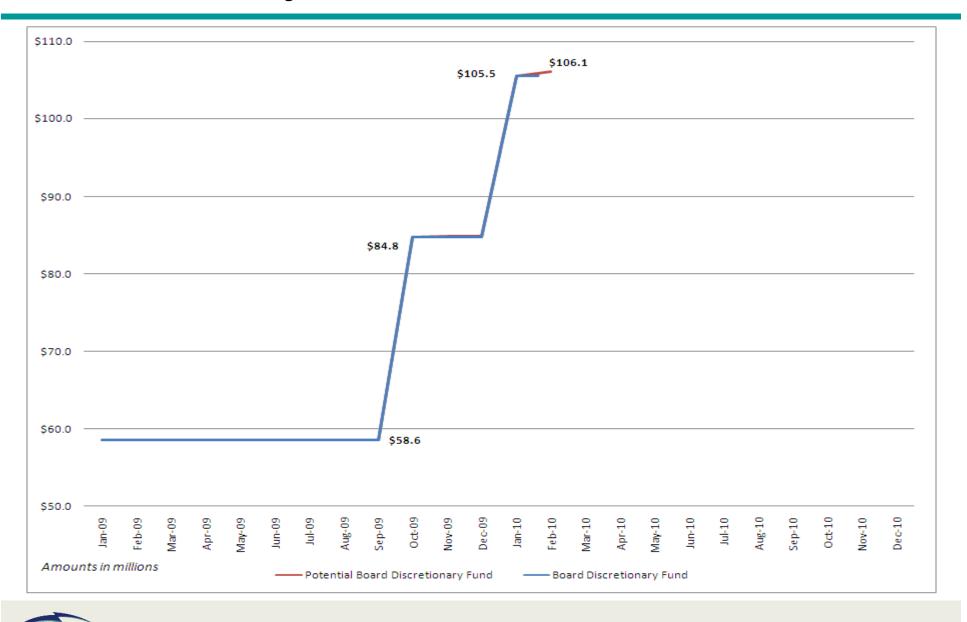
Note 2: Actual amounts in 2009 are preliminary and unaudited

		S	Sources (A	dditions)					
Date	Beginning Balance	Direct Program Costs	Facilities & Support Allocations	Finance Charge	Sales Tax Refund	Direct Program Costs	CTO Risk Contingency Fund	Facilities & Support Allocations	Finance Charge	Ending Balance
09/30/09	\$58.6	21.7	1.8	15.1		(10.1)	(2.3)			\$84.8
12/31/09	\$84.8	12.1	0.7	11.7	7.3		(10.8)	(0.3)		\$105.5

Amounts in Millions

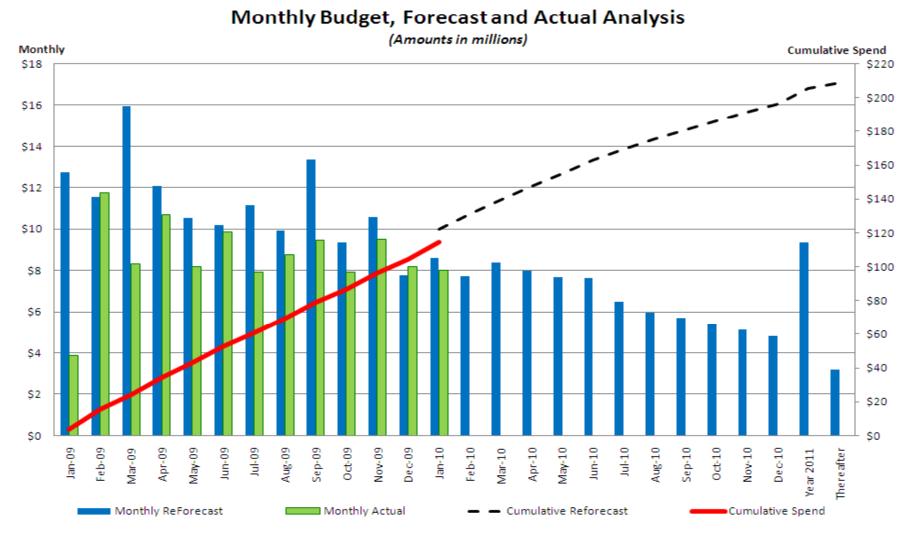


Board Discretionary Fund



ERCO

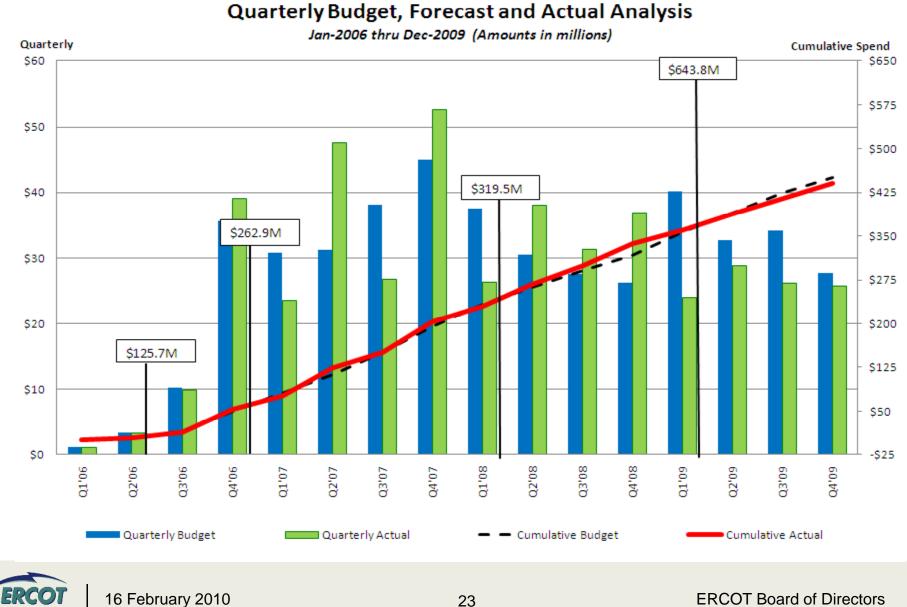
Program Cost Management – 2009 and 2010 Forecast



Note: Year 2011 and thereafter are finance charges



Program Cost Management - 2006 to 2009 Quarterly



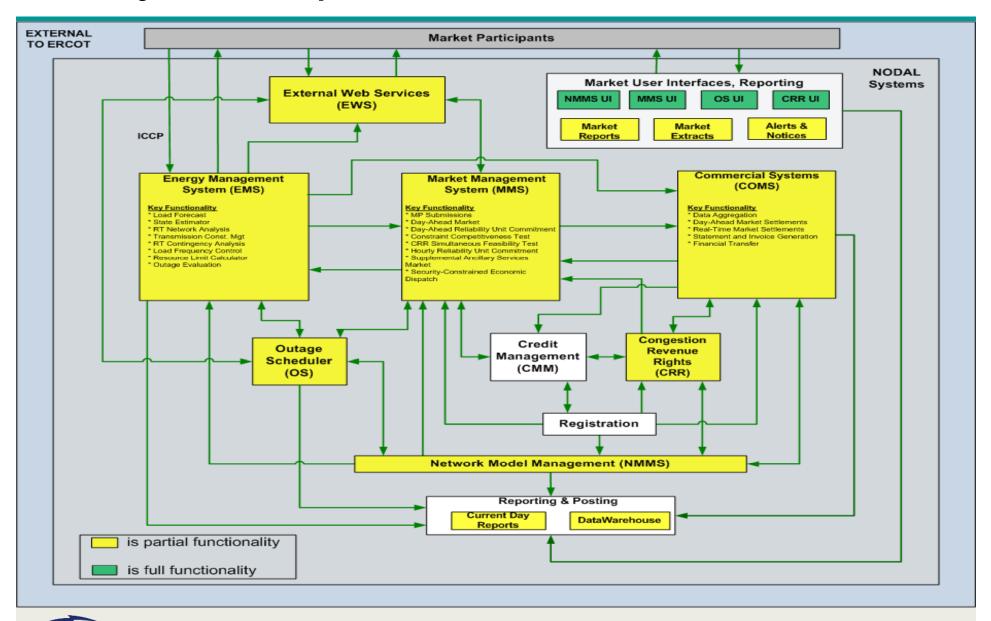
Questions?



Appendix



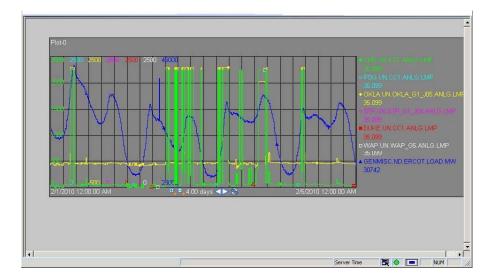
Nodal Systems Blueprint - Market Trials - Phase 3 - Feb. 1st



Real Time Market / LFC Update

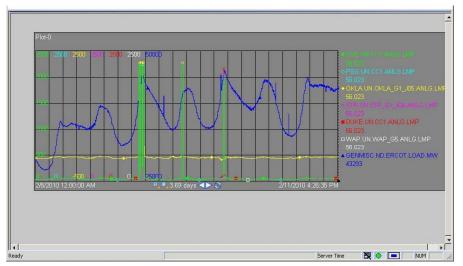
SCED Week 1

The lack of offer curves was apparent with the amount of time the LMP's were at \$2250 during Week 1.



SCED Week 2

During Week 2 offer curve submissions clearly demonstrate better LMP's and hitting \$2250 mainly during morning peaks.



Nodal Program Risks & Issues: Definitions

Definitions for Category, Probability and Severity of Risks & Issues:

• Category

- <u>Scope</u>: Will require a scope change
- <u>Schedule</u>: Will require a schedule change
- <u>Budget</u>: Will require a budget change

• Probability

- <u>High</u> : Expected to require Change Request over the next 1-3 months
- <u>Medium</u>: Expected to require Change Request over the next 4-10 months
- <u>Low</u>: Not expected to require a Change Request

• Severity

- <u>High</u>: Milestone impact, or budget impact >\$500,000
- <u>Medium</u>: Milestone impact but expected to be mitigated, or budget impact between \$0 - \$500,000
- Low: No milestone impact, or no budget impact



Defect Definitions

Severity		Definition							
Severity 1: Data loss/critical error	such as syste	ender unavailable the critical functions of the system un m errors, application failures, loss of data, incorrect calc o access database, and inability to display information to	ulations, inability to transfer						
Severity 2: Loss of functionality w/o workaround	available. The	Defects that render unavailable partial functionality of the system under test with no workaround available. These include errors such as incorrect information displayed to the user, information not updating correctly, extracts failing, and missing export files.							
Severity 3: Loss of functionality with workaround	available. The	efects that render unavailable partial functionality of the system under test with a workaround vailable. These include errors such as incorrect message displayed, optional information missing r not displayed correctly, not receiving e-mail notifications, and incorrect defaults.							
Severity 4: Partial loss of a feature set		Defects that affect a feature that is not executed on a frequent basis and there is not a significant mpact on the system. These include errors such as help information, filtering, and consistent naming.							
Severity 5: Cosmetic/documentation error	stability of the	re cosmetic and need to be resolved, but are not a factor system. These include errors such as field alignment, re s, column order and documentation that is inconsistent	eport formatting, drop down						
		Prescription in Quality Center							
	Priority 1	Must fix ASAP							
	Priority 2	Must fix prior to Go-Live							
	Priority 3	Not critical to fix before Go-Live							
	Priority 4	Minor system/user impact							
	Priority 5	No system/user impact							



Protocol Traceability Effort Update

Tier 1 Sections										
	PTE Traced Items	Research Items	In Progress: Business Procedures	In Progress: Reports/ Extracts	PTE Alignment Items					
Section 3 – Management Activities for the ERCOT system (Dec NATF)	928	171	550	193	67					
Section 4 – Day Ahead Operations (Nov NATF)	635	66	63	76	3					
Section 5 – Transmission Security Analysis and RUC (Nov NATF)	166	30	53	15	10					
Section 6 – Adjustment Period and Real- Time Operations (Jan NATF)	926	71	441	55	39					
Section 7 – Congestion Revenue Rights (Oct NATF)	445	54	58	27	1					
Section 8 – Performance Monitoring (Jan NATF)	226	32	130	82	9					
Section 9 – Settlement & Billing (Nov NATF)	408	0	128	55	2					
Section 16.11 – Financial Security for Counter Parties (Dec NATF)	198	2	33	25	3					
Section 17 – Market Monitoring & Data Collection (Dec NATF)	25	7	21	1	6					
Total	3956	433	1477	529	140					



16 February 2010

Alignment Item Categories

	Total		Cate	egory of Align	ment Items	
	Alignment Items	NPRR	TBD / need category	Business Requirement Update	Business Procedures Revision	Other
Section 3 – Management Activities for the ERCOT system	67	6	31	19	7	4 - Report
Section 4 – Day Ahead Operations	3	2	0	1	0	0
Section 5 – Transmission Security Analysis and RUC	10	5	0	2	3	0
Section 6 – Adjustment Period and Real-Time Operations	39	11	6	12	6	4- Report
Section 7 – Congestion Revenue Rights	1	0	0	0	0	Handbook
Section 8 – Performance Monitoring	9	2	1	3	2	1- Report
Section 9 – Settlement & Billing	2	2	0	0	0	0
Section 16.11 – Financial Security for Counter Parties	3	1	0	1	1	0
Section 17 – Market Monitoring & Data Collection	6	1	2	1	1	1- Report
Total	140	30	40	39	20	11



The SMEs are transitioning to ERT team.

ERT and PMO will prioritize the remaining work within the ERCOT Readiness activities.

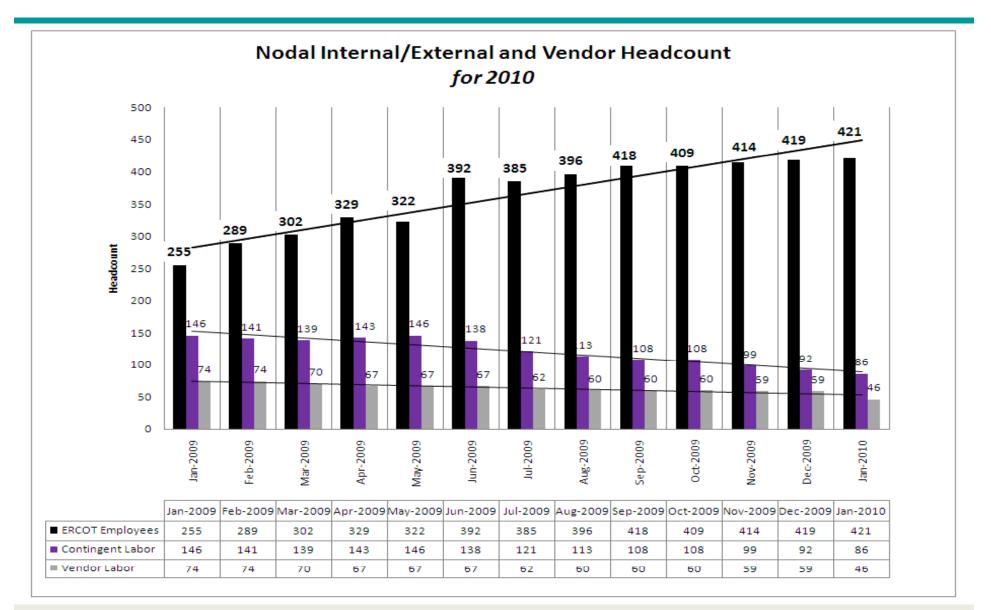
- NPRRs SMEs work with Business Owners to draft NPRRs to put through CEO review process and governance process
- Alignment Items
 - TBD Category
 - Business Requirement Updates
 - Business Procedures Revisions
 - Other
- Research Items
- In Progress Business Procedures
- In Progress Reports / Extracts

ERT and PMO will report to market closure of items



16 February 2010

Nodal Internal/External and Vendor Headcount 2010





Program Issue: Market Interaction Operating Level Agreements

Potential Milestone Impact: Phase 3 RTM, Phase 4 DAM/RUC, Phase 5 Full, Go-Live Need to determine service level agreements associated with market interactions to **ISSUE:** assist ERCOT in establishing operational thresholds. ERCOT is responsible for Market Interaction OLA ensuring any market thresholds required before Go-Live are defined, managed through the appropriate stakeholder processes and communicated in a timely fashion. Life Cycle State Plan Manage **Mitigation Plans** Who **Current Status Target Date** March 1. ORT to define OLA with business and **ORT**, Market Continuing to define Market OLAs for all the market for each phase. subsequent Market Trial Phases as part of Trials the ORT project plan: Phase 2.1: Complete Phase 3: Complete Phase 4: OLA Definitions in Progress PMO. ORT. 2. PMO working with ORT to ensure January, April, Continuous communication will be consistent communications and work May, August delivered to the internal and external Market Trials planning is in place to deliver the stakeholders in support of each market appropriate OLA and market throttling delivery. recommendations for each market release.

Program Risk: Integration Testing

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Risk: Integration Testing				Continued risk around technology delivery of business systems integration due to complexity and continuing maturing of application and data dependencies.				
	Risk Life C	ycle State						
Define	Plan	Manage	Watch					
Mitigation Plans				Who	Target Date	Current Status		
 Planned Integration Test phases and associated functional and technology components. Created effort-based testing delivery work plan to prioritize and align deliverables to key external milestones. Instituted daily PMO meetings to manage and mitigate day-to-day risks to scope and schedule deliverables. 				PMO	Ongoing	Nodal Program Release Scope and Schedule defined to ensure delivery. Program Status Report and Dashboard in place to track progress.		

Program Issue: Network Model Load Frequency

◇ Potential Milestone Impact: Overall Program

ISSUE: Network Model Load Frequency		Model updates for Nodal will require more attention and coordination by both MPs and ERCOT to ensure alignment. ERCOT has determined that a bi-monthly Nodal database load represents the most manageable solution for updating the						
Life Cycle State		real-time environment when Nodal begins in December 2010.						
Plan	Manage							
Mitigation Plans		Who	Target Date	Current Status				
 Define and document Initial Model Load Process. 		ERT	Complete	Initial Process Documented, to be updated based on feedback from Testing and Operations teams.				
2. Validate and improve the Model Load Process over the next several months based on a Zonal Bi-Weekly load timeframe.			INT, INF	January - March	Initial loads completed, targeting mid January Model load to align with Zonal schedule.			

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Program Risk: Reconciling Protocols, Systems, and Market Expectations

\diamond Pote	ential Mil	lestone I	mpact:	Market Trials				
Risk: Reconciling Protocols, Systems and Market Expectations Risk Life Cycle State				Experience with deploying nodal markets by other ISOs has shown that expectations of the market participants are often missed, despite best efforts at defining tariffs or protocol requirements. ERCOT needs to assume such a risk exists for this				
Define	Plan	Manage	Watch	nodal implementation as well.				
Mitigation Plans				Who	Target Date	Current Status		
 Assess maturity and readiness of software in the initial nodal release, focusing on new/tailored capability for Texas Nodal. 			B. Day K. Farley	Complete	Complete			
2. Add team members to the nodal program with Texas market experience to ensure readiness for Market Trials. SMEs to discussion alignment issues with ERCOT business owners. SMEs to report the results of the assessment to the ERCOT business owners for resolution.				V. Gates	Complete	Complete		
3. Keep the oversight groups apprised of progress.				M. Cleary	Complete	Complete		

