Texas Nodal Market Implementation: Program Update

ERCOT Board of Directors
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Vice President and Chief Information Officer

- **Health Indicators**
- **Highlights**
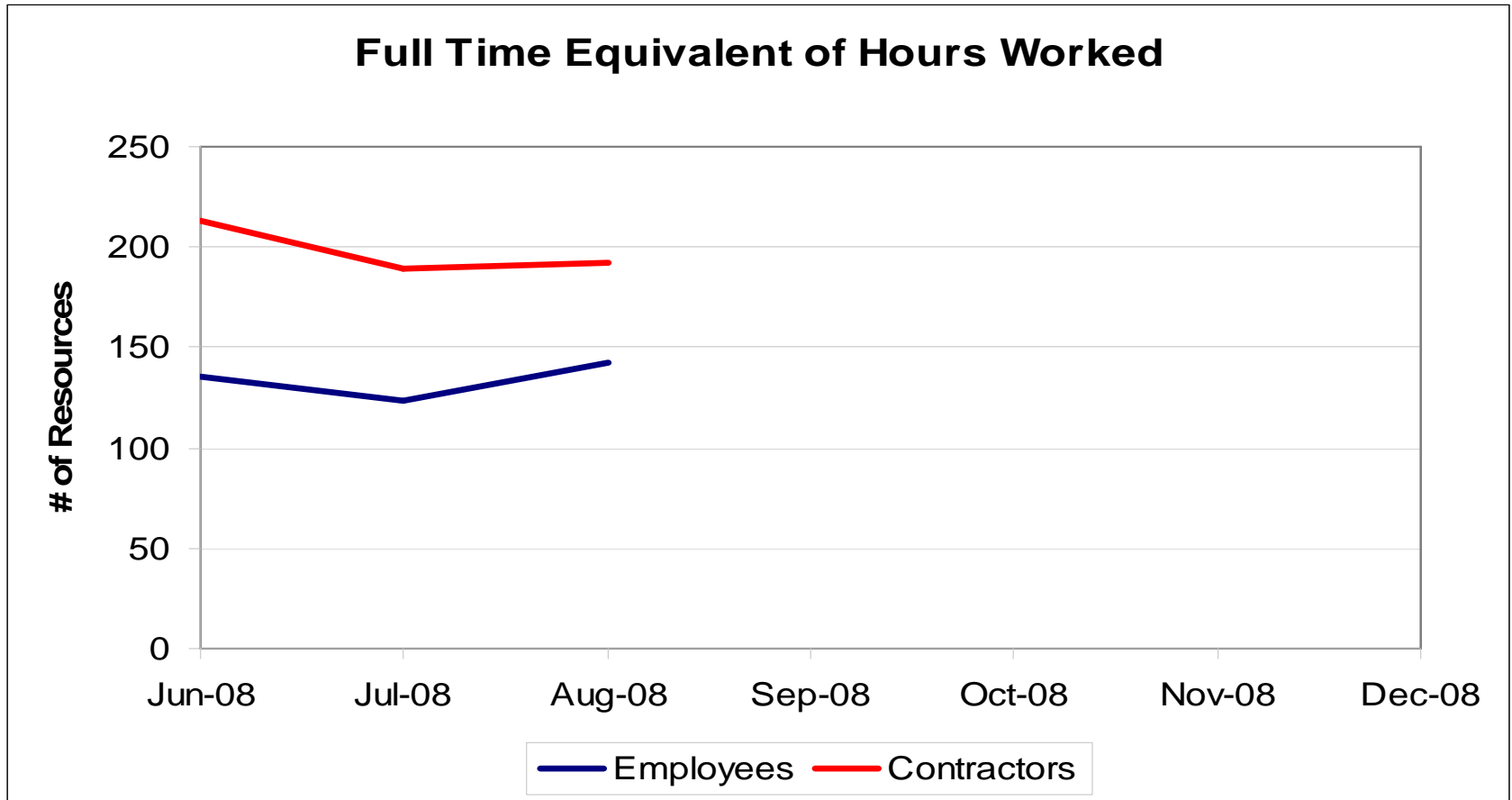- **4-month Critical Path**
- **Risks / Issues**
- **Cost**

Health Indicators

Indicator	Status	Explanation
Overall	**Red**	• Overall status remains red, driven by schedule and budget indicators
Schedule	**Red**	• Schedule remains red until the integrated schedule is approved
Budget	**Red**	• Budget remains red until new budget is finalized and approved
Scope	**Amber**	• Requirements audit in progress
Resources	**Amber**	• QA Manager onboard in late October • Addressing succession plans and individual contract extensions
Risks	**Amber**	• Program addressing risks detailed on subsequent slide
Issues	**Amber**	• Program addressing issues detailed on subsequent slide
Quality Control	**Red**	• Status driven by number of Sev 1 and 2 defects and lengthy defect turn-around time
ERCOT Readiness	**Amber**	• Status driven by ERCOT staffing, process, and training metrics (E8, 9, 1)
Market Participant Readiness	**Amber**	• Status driven by limited response from entities needing to modify RARFs (MP11) and limited transaction submissions testing (MP22)

Note: Health Indicator measures located in appendix

Highlights

- **All tasks on the critical path completed on schedule**
- **NMMS conducted multi-vendor meeting and agreed to "frozen" schema changes**
- **Integrated Testing project (INT) has begun testing Integrated Release 2.0 (IR 2.0) in the integrated testing (i-Test) environment**
  - IR 2.0 includes components from the Market Management System (MMS) and key upstream systems, as well as some of the required interfaces
  - INT's testing strategy is to begin with MMS as the core system, and build out the interfaces from there
- **EMS scheduled to complete CIM Importer week of Oct. 13**
- **Continue to improve processes – as an example we were able to reduce the time to build and smoke test MMS4 Patch 4 from 10 days to 4 days**
- **Nodal budget – progressing as planned; presentation to Board is TBD**

Staffing Update

The program continues to increase participation of ERCOT staff while trending down with contractors.

Full Time Equivalent of Hours Worked

4-Month Critical Path

NMMS activities to deliver a validated CIM XML file are the critical path activities from now through early January 2009.

Project	Task Name	Finish	Timeline
Nodal IPS	Nodal Program Start	Mon 6/2/08	6/2
NMMS	NMMS Replan Start	Tue 6/10/08	6/10
NMMS	Gather requirements from upstream & downstream systems (EMS, MMS, Planning	Tue 7/22/08	7/22
NMMS	Analyze data and identify candidates for "existing data" and NOMCR/SAMR Valida	Mon 7/28/08	7/28
NMMS	Identify manual and bulk load data validation candidates	Fri 8/1/08	8/1
NMMS	Design validation rule generation capability	Thu 8/7/08	8/7
NMMS	Construct & Run Validation Set 1 in Dev Environment	Thu 8/21/08	8/21
NMMS	Categorize Errors & Identify Changes to Data Dictionary	Thu 8/28/08	8/28
NMMS	Move Validation Set 1 to Environment with Common Model	Fri 9/5/08	9/5
NMMS	Construct Validation Set 2	Wed 9/24/08	9/24
NMMS	Construct Validation Set 3	Thu 10/9/08	10/9
NMMS	Run Validation Set 3 in Dev Environment	Thu 10/16/08	10/16
NMMS	Categorize Errors & Identify Changes to Data Dictionary	Fri 10/24/08	10/24
NMMS	Move Validation Set 3 to Environment with Common Model	Mon 10/27/08	10/27
NMMS	Resolve Internal Errors	Mon 11/3/08	11/3
NMMS	Create SPRs and Work with Source System to Resolve	Fri 1/9/09	1/9
NMMS	Validation Set 3 Implemented & Errors "Resolved"	Fri 1/9/09	1/9
NMMS	CIM XML Validation Rules Implemented	Fri 1/9/09	1/9
MMS	Validated and Syncronized CIM XML Dataset Available	Fri 1/9/09	1/9

Additional report link: Milestones Planned for Next 30 Days

Top Risks / Issues

Description	Status
NMMS data collection and validation efforts within the timeframes	Assigned a RARF lead and added a QA lead to the team; adding more data validation and business rules; included additional time in schedule to allow for delays
Traceability between protocols and requirements is largely manual; not all requirements documentation has been updated to reflect NPRR changes and re-approved by TPTF	Requirements audit in process to review all project requirements documentation, approvals, and incorporation of NPRRs
Current schedule does not include time for additional changes beyond the ones incorporated; there is a high probability that we will have additional change items	Executives will need to determine the amount of additional time and budget to include new change items
As functionality is delivered and business owners review and test, there are changes needed. The extent of this is not fully known and is causing more rework than expected	Reviewing requirements documentation as well as reviewing business processes with project teams and business owners to identify problem areas; schedule includes time for these activities

Cost: Element Summary

When the integrated schedule has been finalized and the financial impact determined we will incorporate this into an updated forecast

Nodal Program
Cost Element Summary
($ Millions)

Cost Element	Through September 2008		Variance (over)/under Budget
	Budget	Actual	
Internal Labor	$ 42.4	$ 42.8	$ (0.4)
External Labor	167.1	177.1	(10.0)
Hardware / Software	60.5	61.6	(1.1)
Travel and Other	11.2	7.2	4.0
Subtotal	$ 281.2	$ 288.7	$ (7.5)
Finance Charge	9.6	10.6	(1.0)
Total	$ 290.8	$ 299.3	$ (8.5)

Appendix

Health Indicator Measures

Metric	Green	Amber	Red
Overall	Both core indicators are green	At least one core indicator is amber, but none are red	At least one core indicator is red
Schedule	All activities on the critical path are complete, or are expected to be complete, on or ahead of the planned dates	No dates have been missed, but one or more critical path activities is forecasted to complete late	At least one critical path deliverable has missed its due date. Project implementation date is in jeopardy
Budget (hrs)	Project forecasted to complete within the baselined hours	Project forecasted to complete up to 5% over the baselined hours	Project forecasted to complete more than 5% over the baselined hours
Scope	All Requirements approved; no unplanned scope changes	Pending approvals for Requirements; no unplanned scope changes	Unapproved Requirements and/or unplanned scope changes
Resources	All key resource positions are filled and no schedule delays are expected.	One or two key positions are not staffed and the schedule may be adversely impacted.	More than two key positions are not staffed and the schedule will be impacted.
Risk	All project risks have a Risk Score =< 4	At least one project risk has a Risk Score => 5 and =< 8	At least one project risk has an Risk Score => 9
Issues	All issues are being resolved by the required due dates	Some issues are remaining open past the required due dates but none are of "critical" priority (Impact = 3 or 4)	At least one "critical" priority issue (Impact = 3 or 4) is open past the due date
Quality Control	Defect metrics meet all of the following: • # of Severity 1 = 0 • # of Severity 2 = 0 • Avg. #. Days to Close Sev 1 and Sev 2 Defects < 45 • % Reopen Defects < 15	Defect metrics meet at least one of the following: • #. Severity 1 = 1 to 5 • #. Severity 2 = 1 to 5 • Avg. # Days to Close Sev 1 and Sev 2 Defects => 45 and =< 90 • % Reopen => 15 and =< 24	Defect metrics meet at least one of the following: • #. Severity 1 > 5 • #. Severity 2 > 5 • Avg. # Days to Close Sev 1 and Sev 2 Defects >90 • % Reopen >24

Questions ?