



Market Redesign Update

ERCOT Board of Directors Meeting April 18, 2006

Ron Hinsley
Chief Information Officer
rhinsley@ERCOT.com

- ❑ Predicted program completion date of 7/1/2009
 - Much effort has gone into the time line
 - High confidence in this projection based on known factors
 - Based on critical path review of each work package
 - Assumption sets clearly defined and understood
 - Meets the needs of transition plan requirements

- ❑ Next forecast will review and solidify time line
 - Vendor discussions
 - RFPs will be returned and reviewed (starting Mid-May)
 - Vendor awards in June
 - Discuss with vendors how time line can be shortened
 - Work with Market Participants
 - What can be changed in assumption set?
 - Are there trade-offs?

- ❑ ERCOT recognizes the importance of a firm, achievable date
 - Market Participants need a firm date to plan business activity accordingly
 - Benefits of Nodal are well-documented and the new market is essential as soon as possible

We are all in this together and need to make it work

□ Scope

- Design and implement the nodal market system and transition from the current zonal market to the nodal market as defined by the Protocols approved by the PUCT on April 5, 2006.
- Specific exclusions are those items not yet embodied in the Protocols (e.g. Real Time Co-optimization) that have a material impact on the scope, time and cost of the program.

□ Objectives

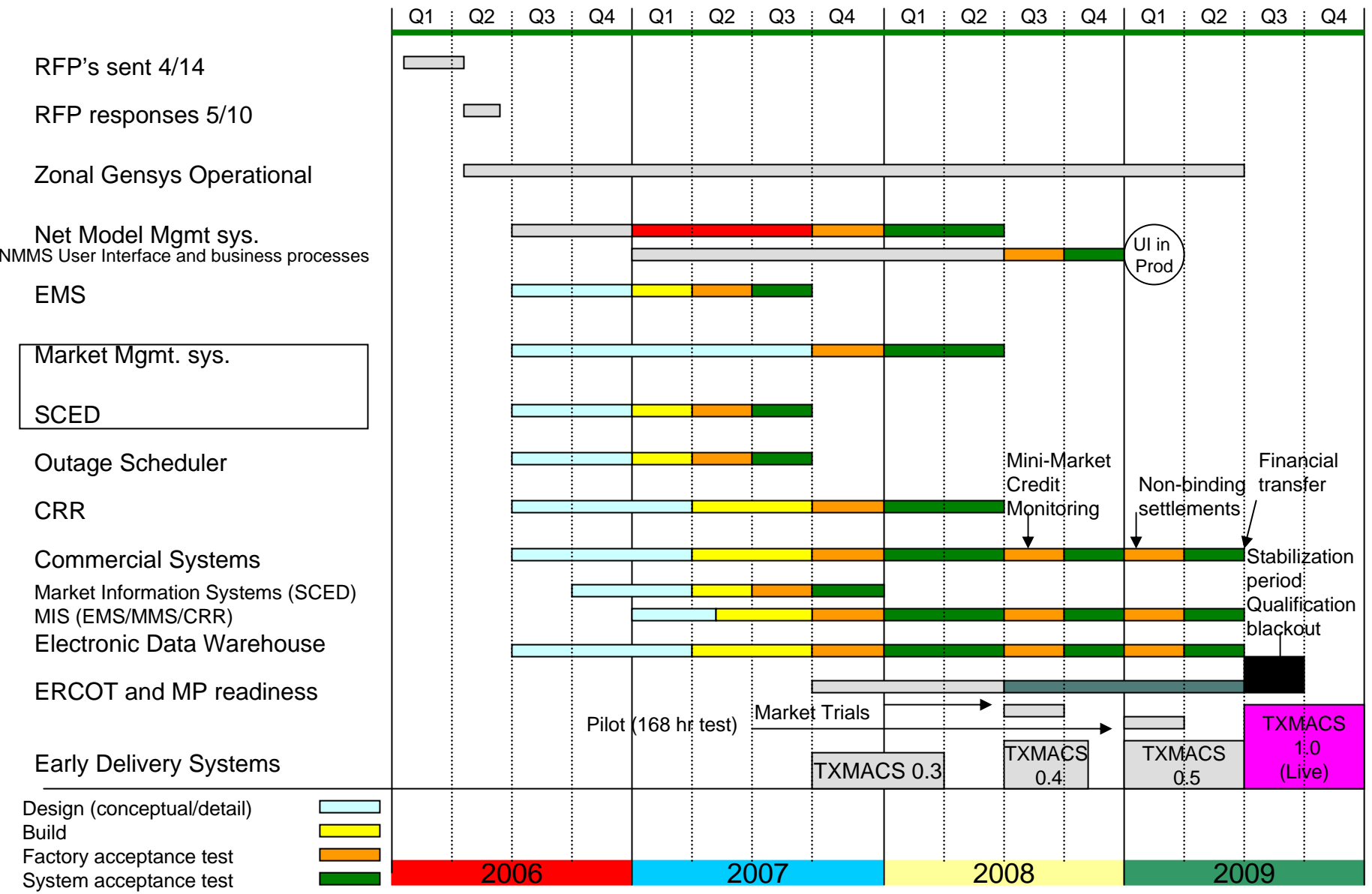
- ERCOT is charged with delivering the capability to:
 - Directly assign congestion costs
 - Increase transparency of energy prices
 - Increase reliability and market efficiency
- By:
 - Computing LMPs for 100% of settlement points, 100% of the time
 - Moving from portfolio-based dispatch to resource-specific dispatch
 - Running and settling the Nodal markets to comply with 100% of the protocol requirements as measured by the accuracy of the calculations and compliance with prescribed operational timeline
- While achieving agreed program targets of:
 - Zonal market continuity as measured by adherence to existing target levels
 - Timeliness as measured by achievement of key program milestones
 - Budget as measured by achievement of budget goals

❑ O&M(1)	
▪ Internal labor	\$698K
▪ Equipment, tools, supplies	\$ 2K
▪ Outside services	\$121K
▪ Facilities and Utilities	\$ 36K
▪ Employee expenses	\$ 9K
▪ <u>Interest and fees</u>	<u>\$ 5K</u>
▪ Total O&M:	\$871K
❑ Capital	
▪ <u>Total Capital</u>	<u>\$149K</u>
❑ Total spending through March	\$1,020K

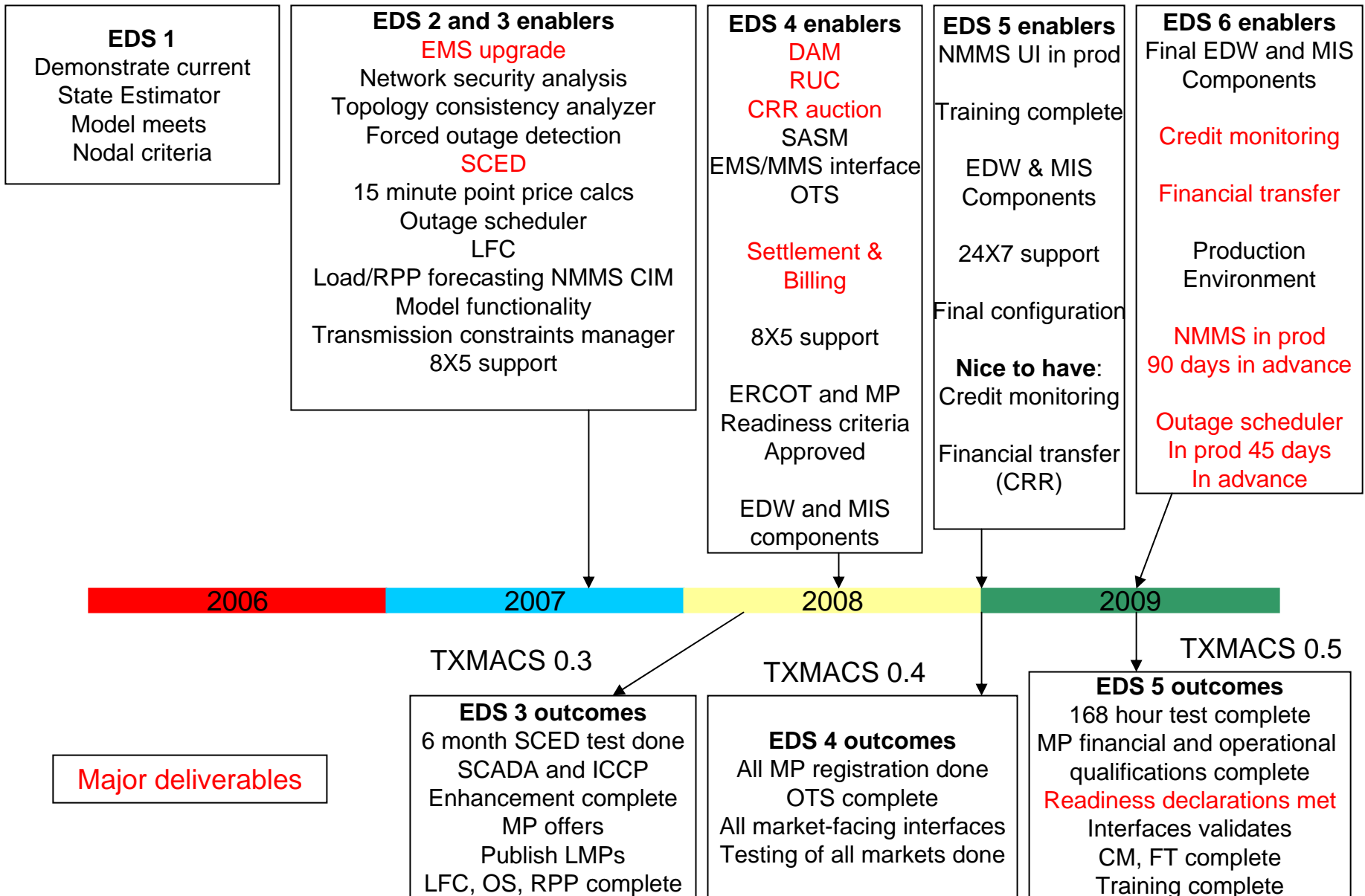
(1) – Final values. Status report shows preliminary figures

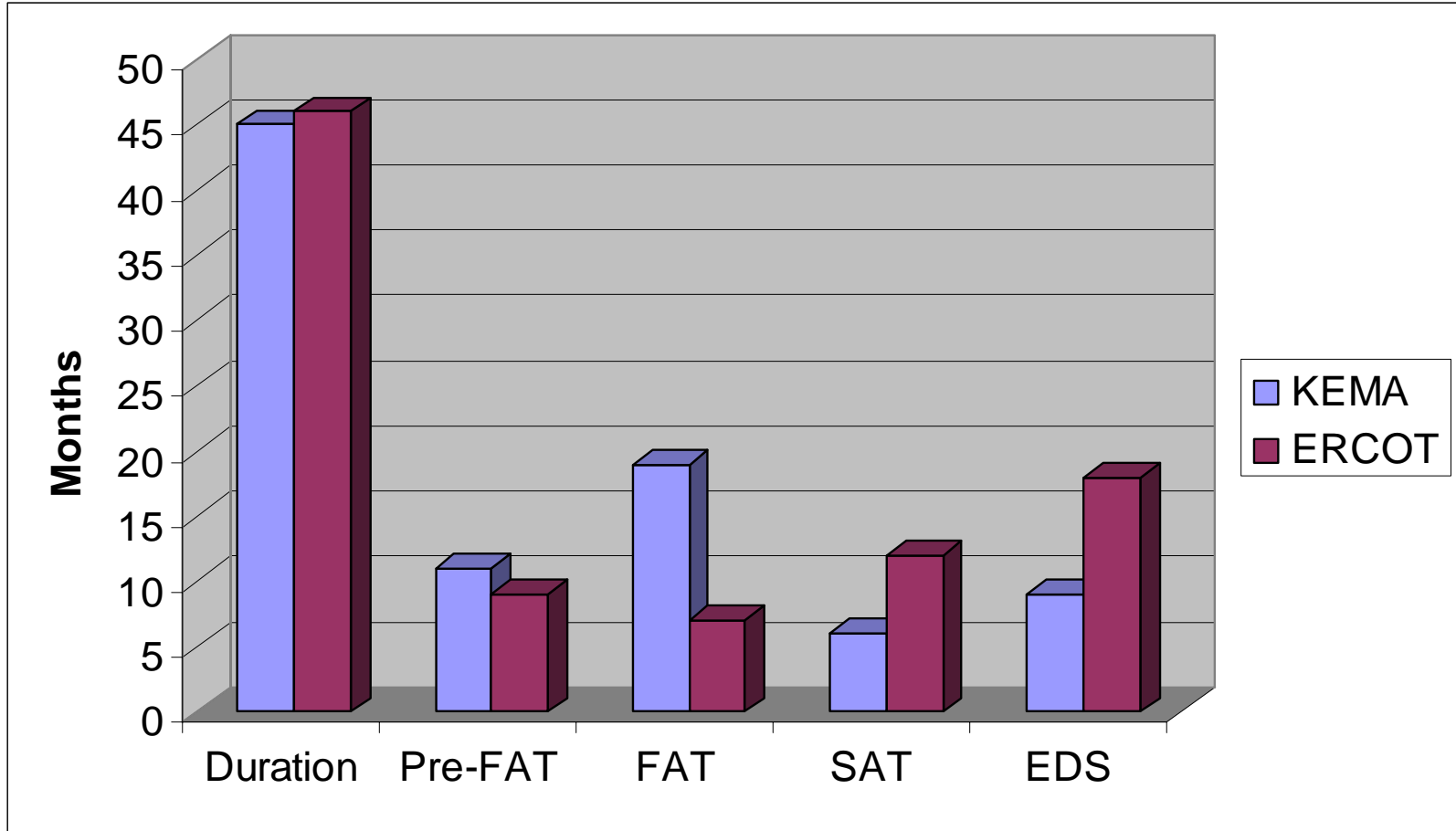
- ❑ Program charter complete – April 14
- ❑ Critical RFPs issued – April 14
- ❑ RFP responses received – May 10
- ❑ Overall business and IT architecture plan approved – May 15
- ❑ Update budget forecast – May 15
- ❑ Vendors selected – June 7
- ❑ Vendors on board and begin work – June 30
- ❑ Project-based RUP phase gates – July 1

Program time line



Early Delivery System Sequence





KEMA time line covers October 2005 to April 2009 Go-live

ERCOT Time line covers December 2005 to July 2009 Go-live

- ❑ Eleven work packages have been identified
 - External bid
 - Market operations
 - Day Ahead Market
 - Supplemental ancillary service market
 - Reliability unit commitment
 - Real time market
 - Emergency operations enhancements
 - Price correction
 - Administration and mitigation
 - Asset registration interfaces
 - EMS/MMS interfaces
 - Congestion Revenue Rights
 - Financial Transfer
 - Credit Monitoring
 - Outage Scheduling
 - Load forecasting
 - Network Model and Telemetry
 - Internal deliverables
 - Registration
 - Settlements and billing
 - Infrastructure
 - Request for Information
 - Network Model Management System

- ❑ State Estimator meets necessary criteria
- ❑ Zonal PRRs – discussion on appropriate limitations needs to start – Date TBD
- ❑ SCED work can start as soon as possible
- ❑ Vendor selection to be completed by Mid-June
- ❑ Vendors will share detail designs with other vendors
- ❑ TDSP's will enter data in new NMMS and GENSYS
 - ERCOT will have enough staff to handle this work
- ❑ ERCOT will deploy COGNOS and SAS to PUCT
- ❑ Six months integration testing will be required
- ❑ TPTF will review requirements and conceptual design documents when produced

- ❑ Monthly Board reports
 - Program progress
 - Deliverables
 - Near-term deliverables
 - Monthly spending reviews
 - Monthly staffing forecasts
- ❑ Quarterly spending forecasts
- ❑ Periodic external program reviews
 - Program assessment
 - Time-line review
 - Spending review
 - Staffing effectiveness
 - Vendor reviews