**Texas Nodal Market Implementation**

ERCOT Board of Directors Meeting

Nodal Status Review

January 16, 2007

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- **Surcharge filing by January 30**
  - Testimony prepared by Nodal leadership team
- **Initial ERCOT/Market Participant Interface deliverable issued on schedule**
  - Included Machine to Machine Interface strategy, draft list of Web Services, and initial sub-set of Specifications
- **Conceptual Systems Designs (CSDs) issued on schedule**
  - MMS (2 documents)
    - Outage Scheduling and MMS
  - Commercial Systems (10 documents)
    - AIEC, CRR settlements, Data Aggregation, Day-Ahead Market Settlements, Eligibility, Financial Transfer, Real-Time Settlements, Registration System, RUC Settlements, and Statements and Invoices
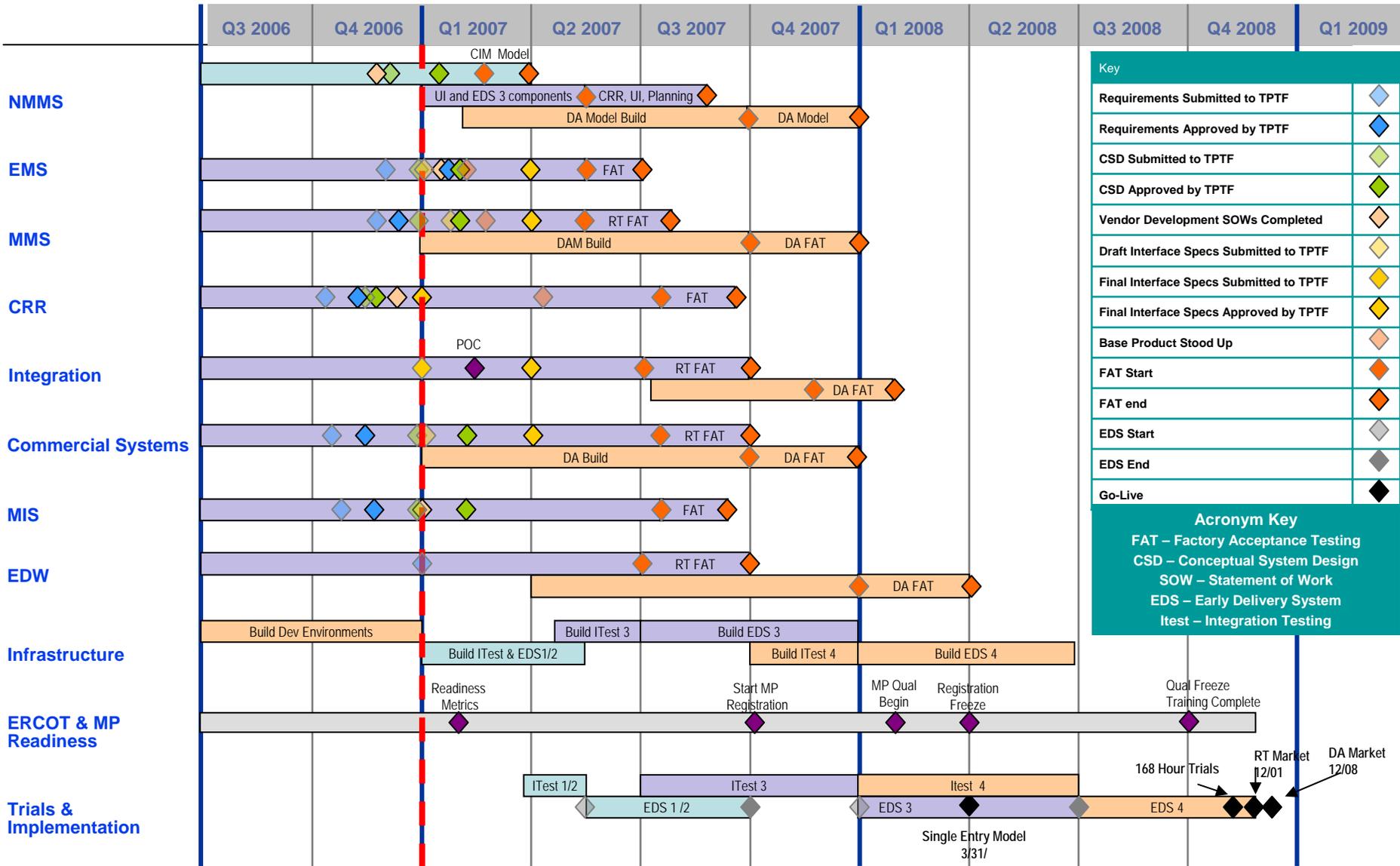
- **Program Management**
  - 2nd IBM review report issued in draft – practical application of the control system examined in the first review
  - Nodal PM testimony prepared for January 30 filing

- **Integration Design Authority (IDA) Package**
  - Market Participant Identity Management Solution paper issued for review
  - Combined Cycle white paper published
  - ERCOT RUP site published and IBM RUP team handed over to ERCOT RUP team

- **Commercial Systems Package**
  - Scheduled CSDs (10) issued for TPTF review on time
  - TA document submitted to build out CMM test environments
  - Conversion to AIX for LODESTAR completed. QA Testing underway

- **Network Model Management System/Network Model Package**
  - Siemens implementation SOWs concluded
  - NMT - Closed 744 issues for the week. The NMT team is concentrating on internally assigning or closing all issues related to an MP prior to sending out their complete list. Now 72% complete of the 4,254 identified data issues.
  - Completed CIM Extension meeting with all vendors (AREVA, ABB, Siemens, Nexant). Successful collaboration and near to convergence on extensions for ERCOT model. Most extensions defined and final few are planned to close by 1/15
  - Delivery of HW for Siemens development environment in Minn. completed

- **Energy Management System Package**
  - EMS Phased Delivery Agreement with Vendor & IRT
  - EMS Vendor Presented ICCP Recommendations
  - Pre-FAT on "Vanilla" EMS started

- **Market Management System/SCED Package**
  - MMS CSD issued for TPTF review

- **Congestion Revenue Rights Package**
  - Drafted 25 System Level Use Cases.
  - Developed CRR job activities list.
  - Engaged IT and Production Support teams to clarify roles & responsibilities

- **Electronic Data Warehouse Package**
  - New PM assigned to EDW project
  - Change in EDW approach has been completed
  - Work continues on documentation of project delivery process and engagement strategy

- **Integration Package**
  - Requirements and Design for External Interfaces Integration Track delivered
  - Requirements and Design for MMS Web Services Integration Track delivered
  - Requirements for NMMS-Settlement Integration Track delivered
  - Machine to Machine Interface strategy, draft list of Web Services, and Minimum Set of Specifications issued for TPTF review
  - Sandbox Requirements defined and work on build has begun

- **Market Participant Engagement & Readiness Package**
  - Training – Completion of capability to provide remote test-out of ERCOT Nodal 101
  - MIS - First conceptual wireframe has been distributed for comment
  - MIS - Vendor SOW for Phase2 has been submitted

- **ERCOT Readiness & Transition Package**
  - Transition Plan - Completed draft of Nodal System Operations Impact Assessment
  - Market Trials - Addressed TPTF questions for Market Trials Approach; Drafted version 1 of Detailed Market Trials Plan
  - Readiness Advisor - Reviewed Draft Metrics with 5 ERCOT Directors (Business and IT), Updated Metric Inventory (v2)
  - Registration & Qualification - Addressed TPTF questions for QSE Qualification Approach

- **Infrastructure Package**
  - 91 servers migrated to new OM environment
  - Migration factory has started production compression project. Inventory analysis underway
  - Storage swing completed in Austin
  - 40KVA power available in Austin
  - Taylor PJ frames installed
  - P595 #4 procurement issued

- **Integrated Testing Package**
  - Proof of concept for testing TIBCO portion of the sandbox underway.
  - Completed connectivity between Requisite Pro and Quality Center to enforce traceability

Lead from the front
Texas Nodal

Overall program status remains red – schedule is the key challenge

Dimension	This month	Trend	Commentary
Scope/baseline		=	Assessing impact of NPRRs on May protocol baseline. TPTF to review resulting Change Requests to endorse recommendations
Resources		↓	Systems Operations making additional internal EMS & MMS staff available for Nodal Finalizing appointment of Integration Project Manager
Costs		=	First cost update currently underway. Will be issued at end of January
Timescales		↓	CSDs and initial Interface deliverables issued 12/31 as scheduled. Delay in EMS CSDs still effecting schedule
Critical dependencies		↓	Currently working on critical path to define critical build dependencies. First draft scheduled to be complete by end of january
Vendors		↓	Vendor Solvency being tracked Working with Nexant and ERCOT legal on Non-disclosure agreement
Stakeholders		↓	Completed ERCOT IT engagement and transition responsibilities. Business responsibilities in process

↑ - Worse / ↓ - Better / = - Same

EXPENDITURE CATEGORY	DEC	YTD
❑ O&M Expenses (,000):		
▪ Internal Labor	(42)	1,616
▪ Equipment, Tools, Materials & Supplies	5	31
▪ Outside Services/Consulting	376	4,026
▪ Facilities & Utilities	0	1
▪ Employee Expenses	1	33
▪ Interest & Fees	35	205
▪ Other	4	17
▪ Adjustments	(1,644)	264
▪ Sub-Total	(1,266)	6,213
❑ Capital Expenditures (,000):		
▪ Sub-Total	12,837	43,607
❑ Total Expenditures (,000)	11,571	49,820

❑ Commitments $36,293

Notes:

Total spending through November $38,250K, as noted in project summaries