

MRTU Program Update



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California ISO
Your Link to Power

Board of Governors Meeting
January 28-29, 2008

Why Update 2 Delayed

- 🌐 Start of Update 2 delayed from January 2nd to February 4th
- 🌐 Mid-December
 - Regression testing of previous functionality 50% complete projected 12/31 completion
 - Functional Integration Testing (FIT) for new functionality and applications was 20% complete with 50% complete projected for 12/31
 - FIT status was reason for phased start of functionality
- 🌐 Over Holidays
 - Complexity of issues at this point resulted in the delay of vendor patches to fix outstanding issues
 - Integration instability – all applications moved to new a new platform
 - Issues found in testing and resolved, others have seen in Go Live
 - Performance issues not resolved

Current Status of Update 2 Testing

- 🌐 Testing process is working, we are finding issues and resolving them
- 🌐 Made significant progress on a new integration platform which required revisions to all 24 MRTU applications
- 🌐 Almost complete regression testing the functionality that existed from the previous market simulation
- 🌐 New functionality is being tested in a phased approach
 - Day-Ahead Market is consistent and stable
 - Real-time Market issues with consistently running
 - Pricing of solutions is good with infrequent anomalies that are being resolved.
- 🌐 Start of Update 2 – February 4th

CAISO Update 2 Start Criteria

Want a stable start with quality results for the base applications and additional functionality will be added in during the simulation as we build on successful results.

- 🌐 CAISO Update 2 start criteria is:
 - Day-Ahead and Real-time consistently run within production timeline with quality results
 - Critical applications broadcast payloads and downstream applications receive payloads
 - SIBR is swift and stable as compared to the last simulation
- 🌐 Vendors, staff and Market Participants are committed to the MRTU Program

Go Live Date

CAISO ***will not*** determine a new Go Live date until:

- CAISO has received vendor patches to meet Update 2 Exit Criteria and Go Live
- Market Participants have had an opportunity to test the final MRTU functionality
- Market Participants have provided feedback to CAISO management

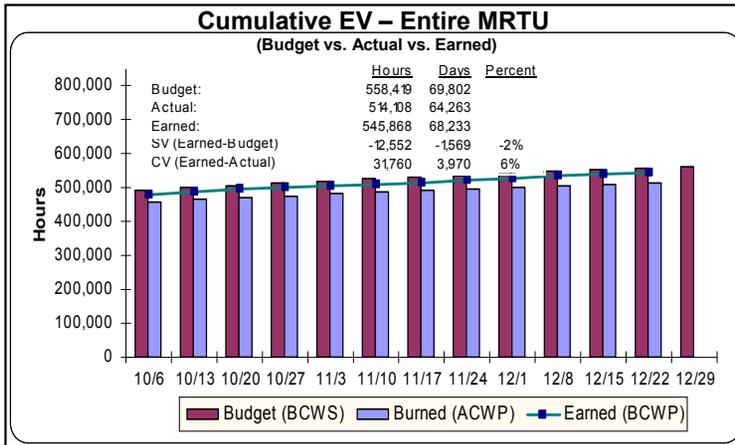
➤ ***Go Live is not April 1, 2008***

- CAISO continues to strive for implementation prior to summer

Other Activities

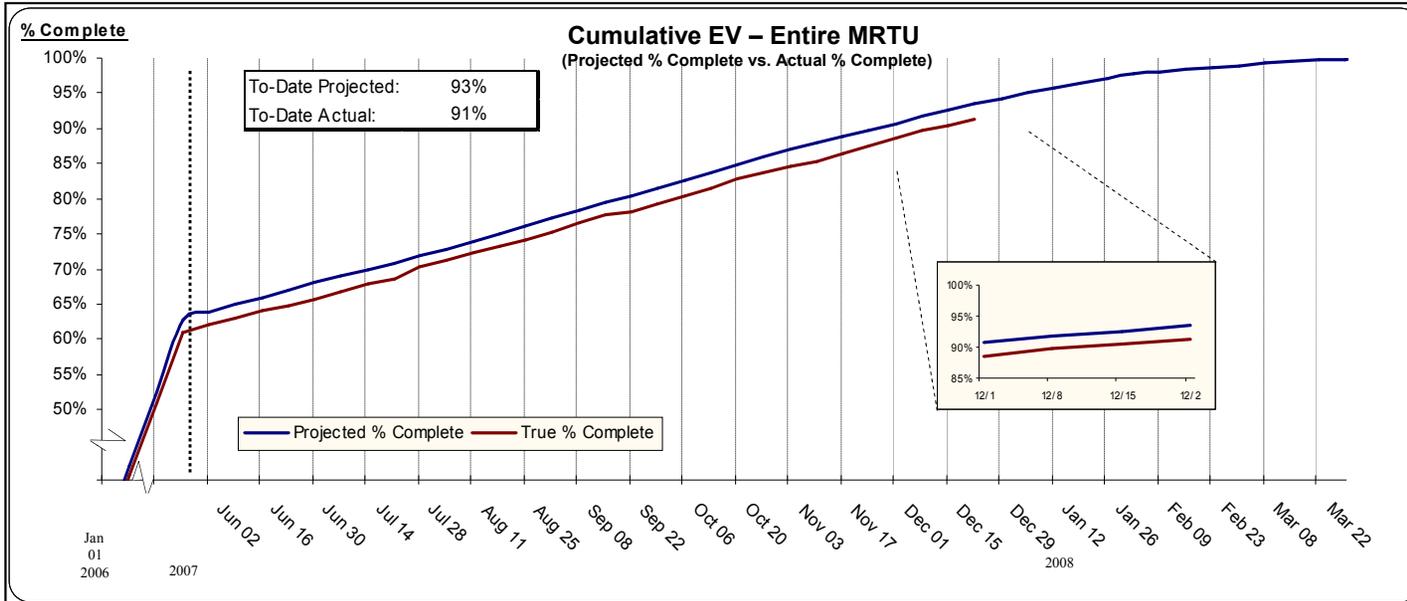
- CRR and FTRs – separate presentation
- LECG Report
 - Testing and analysis behind due to delay in vendor patches
 - Target draft report to Market Participants on 2/15
- SAIC Certification
 - MQS and SIBR certification completed through November 15th FERC Order
 - IFM/RTN and CRR certification in progress

Program Key Metrics



Notes/Comments:

Graph represents the new baseline as of June 2006.



Included in Graphs: BPM, Business Process, SIBR, Training, FNM/SE, IFM, MQS, CRR, Mkt Cert, MDS, MFRD, SaMC, Portal, Testing, Integration, PTR, PMO, Legacy, STING, Readiness, and Technical Architecture, Infrastructure/Environment. **Not Included in Graphs:** n/a



MRTU Financials

California Independent System Operator
 Summary of Expected Completion Costs vs. December, 2006 Budget
 November 30, 2007
 (In Thousands) *

Project	Re-baselined Project Costs Dec. 2006 (a)**	Actual Costs Through 2006 (b)	Paid Invoices To Date 11/30/07 (c)	Estimated Costs to Complete (d)	Cost of Project at Completion (e)=(c+d)	Increase (Decrease) from Baseline (f)=(e-a)
Market Redesign	\$ 64,807	\$ 49,990	\$ 59,189	\$ 3,100	\$ 62,289	\$ (2,518)
1 Automatic Mitigation Procedures/Phase 1A	773	773	773	0	773	0
2 Real Time Markets/Phase 1B	16,297	16,297	16,297	0	16,297	0
3 Integrated Forward Markets/Real -Time Market (IFM/RTM)	33,372	23,673	29,699	1,839	31,539	(1,833)
4 Congestion Revenue Rights (CRR)	4,516	3,986	4,608	43	4,651	135
4A Market Quality System (MQS)	6,261	2,315	4,607	1,007	5,614	(647)
11A Hardware & Software Purchases	3,588	2,947	3,205	210	3,415	(173)
Technology Upgrade	\$ 74,179	\$ 61,020	\$ 70,554	\$ 3,271	\$ 73,825	\$ (354)
5 Scheduling Infrastructure Business Rules (SIBR)	13,323	9,727	11,127	882	12,009	(1,314)
6 Settlements and Market Clearing (SaMC)	18,030	16,170	18,573	919	19,492	1,462
6 Master File (MFRD)	2,300	2,291	2,388	3	2,391	91
9 Post Transactional Repository (PTR)	2,461	2,236	2,710	236	2,946	484
10 Legacy Systems	7,785	6,379	7,077	330	7,407	(377)
10A State Estimator/Full Network Model	1,345	1,040	1,170	0	1,170	(175)
11 Technology Infrastructure/ Portal	2,065	2,050	2,051	0	2,051	(14)
11B Hardware & Software Purchases	6,923	5,197	6,415	677	7,092	169
12A System Integration/Enterprise Architecture	17,989	15,540	17,740	0	17,740	(249)
12B Technology Architecture	1,957	389	1,302	224	1,526	(431)
Common Projects ***	\$ 41,214	\$ 25,738	\$ 41,600	\$ 6,991	\$ 48,591	\$ 7,377
13 Training/Readiness Projects	9,709	6,975	10,346	611	10,957	1,248
14A Project Management	17,666	11,907	14,641	2,707	17,348	(318)
14B Testing	13,840	6,856	16,612	3,673	20,286	6,446
Ongoing Scope Adjustments	\$ 1,523	\$ -	\$ -	\$ 0	\$ 0	\$ (1,523)
Pending MRTU Scope Changes	1,523	0	0	0	0	(1,523)
Contingency	\$ 7,500	\$ -	\$ -	\$ 6,441	\$ 6,441	\$ (1,059)
15 Program Contingency	7,500	0	0	6,441	6,441	(1,059)
Total MRTU Project	\$ 189,223	\$ 136,748	\$ 171,343	\$ 19,803	\$ 191,145	\$ 1,922

* Columns and rows may not total due to rounding.

** Budgets include: Consultant Labor, Vendor Costs, Travel & Meals Expenses, Training, Hardware, Software, Maintenance, Employee Backfill costs

*** Common Projects Allocation: 47.9% to Market Redesign; 52.1% to Technology Upgrade