

February 4, 2008

The Honorable Kimberly D. Bose Secretary Federal Energy Regulatory Commission 888 First Street, N.E. Washington, DC 20426

Re: Monthly Status Report re MRTU, California Independent

**System Operator Corporation** 

Docket No. ER06-615

Dear Ms. Bose:

Enclosed for filing in the above-captioned docket, please find an electronic copy of the February 2008 Status Report of the California Independent System Operator Corporation.

Respectfully submitted,

#### /s/ Sidney Mannheim Davies

Sidney Mannheim Davies
The California Independent System
Operator Corporation
151 Blue Ravine Road
Folsom, CA 95630

Counsel for the California Independent System Operator Corporation

# UNITED STATES OF AMERICA BEFORE THE FEDERAL ENERGY REGULATORY COMMISSION

California Independent System	)	Docket No. ER06-615
Operator Corporation	)	
	)	

### FEBRUARY 2008 STATUS REPORT OF THE CALIFORNIA INDEPENDENT SYSTEM OPERATOR CORPORATION

The California Independent System Operator Corporation ("CAISO") respectfully submits this monthly progress report ("Report") here attached in compliance with Paragraph 1415 of the Commission's September 21, 2006 "Order Conditionally Accepting The California Independent System Operator's Electric Tariff Filing To Reflect Market Redesign and Technology Upgrade," 116 FERC ¶ 61,274 (2006) ("September 21 Order"), issued in the above-referenced docket. The September 21 Order requires the CAISO to file monthly reports concerning the progress in designing and implementing the CAISO's Market Redesign and Technology Upgrade ("MRTU") and, as required by P 1415 of the September 21 Order, on the status of the CAISO's MRTU readiness program. The CAISO will continue to file this monthly report on the first Monday of the month through the implementation of MRTU, which date is currently being reevaluated. The attached report provides a high level update concerning the status of the three components of the MRTU project: People, Process and Technology.

As reported in the January 2008 MRTU Status Report, the CAISO was required to delay the start of the Integrated Market Simulation – Update 2 (IMS-U2) due to system stability issues and indicated that the delay of IMS-U2 would

affect the previously proposed Go Live date of March 31, 2008. At the January

29, 2008 Board of Governors meeting, CAISO management indicated that the he

current target date for the start of IMS-U2 is February 19, 2008. CAISO

management further indicated that it would not announce a new MRTU Go Live

date until IMS-U2 was up and running successfully. Recognizing the challenges

that this uncertainty presents to market participants, CAISO management

expressed assurances at the meeting that the CAISO would not begin MRTU

until both the CAISO and its market participants were ready and that Go Live

date for MRTU would need to be acceptable to market participants and CAISO.

Respectfully submitted,

/s/ Sidney Mannheim Davies

Sidney Mannheim Davies

Counsel for the California Independent

**System Operator Corporation** 

Dated: February 4, 2008

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## ATTACHMENT Market Redesign and Technology Upgrade

**FERC Report** 

**February 4, 2008** 



# Market Redesign and Technology Upgrade FERC Report February 4, 2008



#### **Executive Summary:**

This report provides an update to the January 14, 2008 report of the accomplishments and status of the Market Redesign and Technology Upgrade ("MRTU") for January 2008. The status report will continue to provide the Commission with additional information supporting the California ISO's continued efforts to preparing itself and its Market Participants to commence MRTU operations. The highlights for the month include:

- Integrated Market Simulation Update 2 ("IMS Update 2") is targeted to commence on February 19, 2008.
- CAISO committed to not start IMS Update 2 until we achieve:
  - Stability All core applications have to consistently run within market timelines.
  - Performance All systems must demonstrate acceptable response times.
  - End-to-End Testing The systems must run end-to-end consistently and with required quality and result in accurate settlement statements.
  - Quality of Solution Pricing solutions need to be within simulation tolerances.
- The MRTU Go Live date is not April 1, 2008, however CAISO will not set a new date until:
  - Market Participants have had an opportunity to test the final MRTU functionality.
  - Market Participants have provided feedback to CAISO management.
- Readiness activities continued throughout the month.



#### **Overall Dashboard**

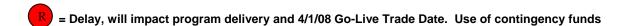
The following dashboard outlines the updated status for Business Units, Market Participants and the MRTU Program Management for the components People, Process, and Technology.

**Please Note:** When viewing the Dashboard below, please note that both the CAISO Business Units, as well as the Market Participants were assessed based off of a Go-Live Trade Date of April 1, 2008. The status provided for both the Business Units and Market Participants below is as of January 31, 2008, and in each case, the status provided is reflective of the lowest common denominator (score) for each category.

Category	Business Units		Market Participants
	Core	Non-Core	
People	Y	G	Y
Process	Y	G	Y
Technology	R	R	R







#### Technology/Testing Readiness:

The MRTU Integration Testing project has been focused on the start of Integrated Market Simulation Update 2 ("IMS Update 2"). IMS Update 2 is targeted to commence on Tuesday, February 19, 2008. Testing has included the evaluation of new market system components, an upgrade to the full network model, regression testing of previously introduced system functionality, and the integration of additional legacy applications. The overall program status is the same as the January 14, 2008 report to the Commission pending determination of a revised Go Live date.



MRTU Schedule		
Current Period	Trend	
R	<b>1</b>	

MRTU Budget		
Current Period	Trend	
G	1	

Tracking Delay: 0 weeks

Critical Path Items: Vendor Delivery, Integration Testing, Market Simulation Schedule \*Based on approved 4/1/08 Go-Live Trade date

- Integration Test execution for Update 2 is in progress integrating FERC changes plus remaining MRTU and Legacy systems.
- CAISO working to address stability and performance issues with the Update 2 environment and applications.

environment and applications.			

<b>Approved MRTU budget: \$189.223</b>	М*
*Based on approved budget on 12/06	

- PMO has been allocated \$4.5 million of the contingency to date.
- PMO is evaluating total program budget in light of a revised Go Live date.
- PMO continues to process change requests and evaluate against approved budgets.

	Complete
	No Delays
0	Delay, but will not impact 4/1/08 go-live Trade date.
	Delay, will impact program delivery and 4/1/08 Go-Live Trade Date. Use of contingency funds.

#### Key Accomplishments:

- Functional Integration Test ("FIT") Planning: Planning for IMS Update 2 is completed.
- **FIT Testing:** Execution of FIT for IMS Update 2 is 88% complete (58 of 65 test cases).
- End-to-End ("ETE") Planning: Test planning for IMS Update 2 is completed.
- ETE Testing: Execution of ETE testing is 76% complete (35 of 46 test cases).

#### Key Issues:

- Vendor deliveries and market system stability issues are still being addressed.
- Numerous functionality and performance enhancements have been received from the vendors which still need to be tested before IMS Update 2 is ready for start.
- Large number of outstanding system issues that will need to be resolved before exiting IMS Update 2



#### Readiness:

As of January 31, 2008, the CAISO Business Units and External Market Participants are continuing their readiness activities but the status has not substantially changed. The following dashboard outlines the status for Internal Readiness and External Readiness.

**Please Note:** When viewing the Dashboard below, please note that both the CAISO (Internal Readiness) as well as the Market Participants (External Readiness) were assessed based off of a Go-Live Trade Date of April 1, 2008. The status provided for both the Internal Readiness and External Readiness below is reflective of the lowest common denominator (score) for each category.

Internal Readiness		
<b>Current Period</b>	Trend	
Y		

- Created final go-live checklists of remaining activities by Business Units and tracking to checklists.
- Continued planning of complete End-to-End business process testing of critical MRTU processes.
- Continued developing Operator Role-based Training and Scenario-based testing and conducting refresher-training sessions with the Operators.

	Complete
	No Delays
0	Delay, but will not impact 3/31/08 go-live date. Contingency maintained, but at risk
	Delay, will impact program delivery and 3/31/08 Go-Live Date. Use of contingency funds

External Readiness		
Current Period	Trend	
Y	<b></b>	

- Completed Update 1 Market Simulation with noted concerns expressed by the Market Participants.
- Continued planning and set up for Update 2 Market Simulation.
- Continued Market Simulation support initiative to help prepare Participants.
- Participant Check Points/Follow Ups planned throughout Market Simulation Update 2.
- Continued work with Market Participants on validating IMS Update 1 in scope charge codes. Noted participant concerns with timeline of remaining charge codes in scope for IMS Update 2.



#### Key Accomplishments:

#### CAISO Business Unit Readiness

- **Training:** CAISO Employees completed 96% of the mandatory training (Level 100, 200, and 300). Continued with knowledge transfer and refresher training for the Operators.
- **To-Be Processes:** 17 critical End-to-End MRTU Business Process have been developed and completed through high level walk through (phase 1) to issue resolution (phase 3) of the Business Process Walkthrough effort. Planning and prep work for the fourth and final phase is started and will test processes during market simulation.
- Assessment of Readiness: For all Business Units, checklists of all remaining activities were created and are tracked weekly.

#### Market Participant Readiness

- **Issue Resolution:** Continued focus effort to resolve SC issues submitted during Market Simulation.
- **Training:** Reviewed 'Scheduling of Wheeling' during Implementation Workshop and assessing need for additional training. Continued registration for Level 200 (February) and Bid to Bill Training (March).
- Assessment of Readiness: Planned regular checkpoints during Update 2 Market Simulation to gauge Market Participant experience and concerns. Final Assessment will be completed 60 days prior to Go Live.

**Risks and Mitigations**: Have not changed since the previous report.

Risks and Mitigations			
Technology/Testing	•	<b>Vendor Deliveries -</b> Key variances required to start Update 2 market simulation were not meeting the delivery schedule. Vendor has had a large team on site in Folsom focused solely on resolving CAISO's issues and Market Participant variances from Update 1.	
	•	System Stability and Performance – While Day-Ahead and Real-time markets have been running, there are still intermittent problems that arise daily that hamper meeting the scheduled timeline for running of markets. The vendor has made strides in the application performance, but additional patches need to be received to meet the CAISO's performance requirements.  Participant Expectations for Update 2 – The Market Participants are expecting everything to be functional at the start of Update 2. Most of the functionality will be available at the start of the market simulation, but some of it will need to be phased in over the first month of the simulation.	



#### **Risks and Mitigations (continued)**

#### **Business Units**

Core Business Units – During the recent Implement Phase Readiness Assessment (11/30/07), it became apparent that not all Core Business Units are on track. Common risk/problem areas identified include: Understanding and completion of the Transition and Support Plans of Application to Business Unit/IT, Testing Schedule and Application delays impacting readiness activities, Business Reporting Tools and Applications development delays, and approach and completion of Business Process End-to-End Testing.

In each of the risks/problem areas highlighted above, a Go-Live checklist of all remaining activities was created and will be tracked on a weekly basis.

• Non-Core Business Units - The Implement Phase Readiness Assessment revealed that all Non-Core Business Units are on track.

The Readiness Team will continue to work closely with the applicable Business Units to complete the remaining Go-Live activities and deliverables. These activities includes working with Business Units, Program Management, and Testing Team to ensure application testing is executed, end to end business process are proved out, transition is finalized and all deliverables are completed and signed-off.

#### **Market Participants**

The Market Participants' Readiness in the People, Process and Technology areas is highly dependent upon a stable and effective Market Simulation environment to practice their internal processes and the ability to fully validate Settlement Charge Codes. The Market Participants, and their Vendors, have been unable to successfully test their systems in order to validate their processes and technology. Additionally, during IMS Release 3 and Update 1, Market Participants have expressed issues with validating the charge codes that were in scope. The CAISO continues to do the following to achieve an effective Market Simulation:

- Conduct Settlement Workshops to explain the details and steps for validation of each Settlement Charge Code that is in scope for Market Simulation. Two Settlement Workshops have been provided on 9/21/07 and 11/15/07. An additional Settlement Workshop will be provided for Charge Codes in Update 2 Market Simulation.
- The ability for Market Participants to provide their own bids during Market Simulation.
- The Quick Response Team will continue with their objectives until Go-Live.
- Market Participant Scenarios will be tested during unstructured Market Simulation.
- Provide Market Simulation status reports showing which Charge Codes have valid results for each day of Market Simulation as well as a report that provides useful information on system status.
- Continue with the scheduled meetings and workshops (ie: monthly MRTU Implementation Workshops, bi-weekly SIUG and SaMC meetings.



#### **Key Activities and Next Steps:**

- The Quick Response Team will continue to address Participant issues in Integrated Market Simulation.
- Additional MRTU Training has been scheduled for 2008.
- IMS Update 2 targeted to start February 19, 2008.
- A Touch point call will be made with each of the certified SCs one week prior to the start of IMS Update 2 to engage the SCs to actively participate in market simulation.
- Continue analyzing and taking appropriate corrective actions to resolve SC submitted market simulation issues. Communicate status of issues, especially when retesting of the condition is appropriate to ensure resolution has been achieved.
- The MRTU Final Assessments will be scheduled during IMS Update 2 and completed 60 days prior to Go Live.
- Completion of SAIC System Certification, LECG Report and PwC Audit Opinion is contingent on Go Live date.
- FERC Informational Filing 60-Days in advance of Go Live (report will include status of remaining activities & milestones).



#### Readiness Criteria High Level Overview: January Status Report

The following provides the overall status of the MRTU Readiness Criteria as of January 31, 2008.

#### **Total Number of MRTU Readiness Criterions: 33**

- # of Completed Readiness Criterions: 6
- # of "On Track" Readiness Criterions: 17
- # of "Not On Track" Readiness Criterions: 10

#### **January Status Changes:**

- # of Readiness Criterions that have changed status from Orange to Purple: 0
- # of Readiness Criterions that have changed status from Purple to Orange: 1
  - The following Readiness Criteria changed status from Purple to Orange:
    - SIM -1
- # of Readiness Criterions that have changed status from Purple to Blue: 0

#### Readiness Criteria status is indicated by the following color codes:

- Clear: A Readiness Criterion is clear (C) if:
  - The Readiness Criterion has not begun.
- Purple: A Readiness Criterion is purple (P) if:
  - The completion or status updates are on schedule based on the specified target due date or milestone. OR
  - A mitigating action has been implemented successfully and the Readiness
     Criterion is back on schedule to be completed on the specified target due date.
- Orange: A Readiness Criterion is orange (O) if:
  - One or more Readiness Components in that Readiness Criterion are not complete on the specified target due date or milestone, OR
  - A Readiness Criteria has reported risks or issues that have a potential for not allowing it to be completed on the specified target due dates or milestones.
- Blue: A Readiness Criterion is blue (B) if:
  - All Readiness Components in that category are complete.

<sup>\*</sup>Only status change on parent criterions are counted in these statistics. Any status change on sub-criterions are not counted



Readiness Criterion	Status	Comments	
	Completed Readiness Criteria		
BPM – 1	B	As of November 2007, all BPMs have met FERC directives and have been posted on the CAISO website.	
CRR – 1	B	As of April 2007, the CAISO has completed the CRR Dry Run in Market Simulation.	
CRR-4	B	The CAISO made its compliance filing with the FERC's Long-Term Transmission Rights Final Rule on January 29, 2007.	
ECA-1	B	The Control Area Scheduler went live on 2/13/07 at 10:00 PM and all tags applicable to CAISO from Partisans have been linked to CAS.	
MM-Study 2	<b>B</b>	Analysis of the potential LMPM deficiency showed that it was not a valid concern. Report on the LMPM deficiency can be found on the CAISO website.	
SE-1	<b>B</b>	As of 6/30/07, the State Estimator has meet all stipulations of this Readiness Criterion.	
		"On Track" Readiness Criteria	
CRR-2	•	Testing and Validation of all CRR Broadcast Services for Settlements is planned to occur with SaMC during IMS Update 2.	
CRR-3	<b>©</b>	As of 12/20/07, the annual Auction Process was completed. The timeline for the monthly allocation process is being reevaluated due to the changes in the MRTU schedule.	
ENT-1	<b>(</b>	All enterprise systems are in the verification process to ensure that they will meet availability requirements.	
INF-1	<b>(</b>	Monitoring tools and production environment are available to support Market Simulation.	
MKS-1	(P)	Continuous runs of this scenario will occur in Update 2 and the CAISO will post the results once a successful run has been achieved.	
MKS-2	•	The CAISO has developed a set of monitoring metrics to be used in the Post-Implementation evaluation.	
MM-Study 1	•	As of 12/19/07, the third set of CPA reports were posted on the CAISO website. The final set will be published one month prior to Go-Live.	
MS-1	P	Application Monitoring of the applicable systems are in progress. All Hardware and monitoring tools have been deployed to measure availability of the systems during PPS.	



Readiness Criterion	Status	Comments	
"On Track" Readiness Criteria			
MOD-1	P	Planning for the simultaneous update of the FMN is in progress.	
ORG-2	P	Go-Live Checklist of all remaining activities and deliverables were created for all Business Units. Business Units are developing testing scenarios to prove out end to end processes and final application acceptance testing.	
PRT-1	P	The CAISO is realigning the MRTU Final Assessments with the overall MRTU schedule. Once a Go-Live date has been determined, the CAISO will begin scheduling Final Assessments with Market Participants.	
PRT-2	P	As of 1/4/08, all Very High and Critical issues reported during IMS Update 1 have been resolved.	
REG-1	P	Extensions from the August 3 <sup>rd</sup> filing and additional substantive and non-substantive compliance and 205 filing are on track to be completed 90-60 days prior to MRTU Go-Live.	
STL-1	P	Revised Settlements BPM have been posted on the CAISO website. Audit of the SaMC software has begun and scheduled to complete by end of IMS Update 2.	
TECH-1	<b>P</b>	Operational Readiness Testing is in progress.	
BUS-BA-1	P	All systems are in review by the Business Units.	
BUS-BA -2	•	Due to the changes in the MRTU schedule, the CAISO did not file a 60 Day Readiness Certification in January. The CAISO will realign the 60 Day Certification filing with the new Go-Live date once it has been established.	



Readiness Criterion	Status	Comments	
"Not On Track" Readiness Criteria			
GO-1	0	The 4 major Operating Procedures are still in review and feedback is needed from various sources (Legal, Market Operations).	
LMP Testing	0	Analysis Track Testing is delayed due to issues stemming from overall variance resolution and software patching.	
LMP PRD	0	A series of Dry Runs were conducted in December 2007. This criterion will be marked "On Track" pending operational success of the tool in IMS Update 2.	
ORG-1	0	Go-Live Checklist of all remaining activities and deliverables were created for all Business Units however, due to the Market Simulation schedule, certain activities are delayed.	
ORG-3	0	The EDR is not available to DMM. Testing and refining of monitoring metrics and processes are behind schedule due to delays in EDR development.	
SIM-1	0	IMS Update 2 has been delayed due to systems stability. Performance and integration testing is ongoing.	
STL-2	0	Charge types have been rolled out during Update 1 and will continue to be rolled out into Update 2 of IMS.	
STL-3	0	At the conclusion of IMS Update 1, 29 Charge Types have been validated from Bid to Bill.	
TST – 1	0	Additional Performance Testing is required prior to the start of Update 2 to further tune the MRTU systems and address unresolved issues.	
TST-2	0	Initial phase of Integration Test for Update 2 has been completed. The CAISO will continue Integration Testing prior to the start of IMS Update 2.	

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#### **CERTIFICATE OF SERVICE**

I hereby certify that I have caused the public version of the foregoing document to be served upon the Public Utilities Commission of the State of California and upon all parties of the official service lists maintained by the Secretary for Docket No. ER06-615.

Dated at Folsom, California, this 4<sup>th</sup> day of February 2008.

/s/ Susan Montana Susan Montana