



California Independent
System Operator Corporation

April 1, 2010

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

**Re: California Independent System Operator Corporation
Docket Nos. ER10-300-____, and ER06-615-____
April 2010 Convergence Bidding Report**

Dear Secretary Bose:

Pursuant to the Commission's February 18, 2010 order in the above-identified docket, *Cal. Indep. System Operator Corp*, 130 FERC ¶ 61,122 (2010), the California Independent System Operator Corporation submits the attached monthly report describing its progress toward convergence bidding implementation.

Respectfully submitted,

/s/ Sidney M. Davies

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California ISO
Your Link to Power

Convergence Bidding Report

Federal Energy Regulatory Commission

April 2010

Introduction

This report addresses the status of the California Independent System Operator Corporation (ISO) implementation of Convergence Bidding. The target date for Convergence Bidding implementation is February 1, 2011 and the initiative is currently on track to meet this target.

The project milestones below are presented to the ISO Market Participants and Board of Governors on a regular basis.

Milestone	Planned Date	Status
Publish Final Draft Proposal	Oct 2, 2009	Complete
ISO BOG Approval	Oct 29-30, 2009	Complete
Submit FERC Filing	Q1 2010	Revised to May 2010
Publish Business Requirements	Dec 2, 2009	Complete; to be updated
Publish Technical Specifications	March 31, 2010	Complete
Implementation Guide Draft	April 20,2010	On track
Publish BPM Drafts	Q3 2010	On track
Begin Market Simulations	Oct 4, 2010	On track
Go-Live	Feb 1, 2011	On track

Overview

The ISO has prepared a dashboard to provide a high-level overview of the status of the core Convergence Bidding functionality. This dashboard is presented in Figure 1.

Figure 1 – Convergence Bidding Dashboard

	Design	Development	Testing	Simulation
IFM				
SIBR				
CRR Settlement Rule				
Credit Checking				
External Interfaces				
Internal Interfaces				
Server Infrastructure				
Market Monitoring				
Settlements				

Legend

	On Track
	Behind schedule; mitigation in place to maintain go-live target
	Behind schedule; go-live target threatened
	Complete

Significant Implementation Phases

The ISO implementation process consists of six partially overlapping phases which provide the structure of this document: Requirements, Design, Development, Testing, Simulation, and Implementation. Significant achievements and key challenges are described in this section.

Requirements Phase

Two key sets of requirements documents are created to guide the implementation activities: Business Requirements and System Requirements.

Accomplishments

- In November, the ISO completed an initial version of the Business Requirements addressing all needed market elements to implement the Convergence Bidding policy approved by the ISO Board. This document was the basis for the development of initial System Requirements, a public version of which was published on December 2.
- The Business Requirements have been updated to reflect additional functionality approved by the ISO Board in February.
- An initial version of the System Requirements has been prepared and reviewed by the teams responsible for all ISO software. This set of documents is the basis for detailed design efforts which are described in Section 2.2.

Challenges

- The updating of the Business Requirements documents to include the recently approved functionality to address the HASP Payment Reversal rule for untagged Day-Ahead Awards, data release and make whole payments for convergence bidding has expanded the scope of system changes which need to be implemented. These additional features are anticipated to be implemented within the proposed timeline.
- The development of the System Requirements documents has taken longer than initially anticipated. The ISO has mitigated this issue by sequencing the development of System Requirements to complete the requirements for the longest duration development efforts first.

Design Phase

The Design phase translates the System Requirements into detailed software designs for all impacted applications. The ISO Design effort is well underway and is anticipated to conclude in July.

Accomplishments

- Detailed design document for the core market applications has been developed in conjunction with the ISO's vendor. This document provides the details required to perform the aggregation of bids, determination of awards, application of nodal constraints, if necessary to maintain an AC power flow solution, and disaggregation of awards. Additionally, the design of SIBR has been completed.
- The ISO has prepared and posted externally the designs for Market Participants to interface with the ISO by submitting and retrieving bids, retrieving awards and viewing other relevant market results. This significant milestone allows market participants to begin their own design efforts.
- The design of a new Credit Tracking System which will allow the ISO to evaluate potential credit risk of submitted Convergence Bids has been completed.
- Design documents are underway for additional internal system changes.

Challenges

- The design of the mechanism to implement the nodal constraint has been challenging and has taken longer than anticipated. However, the ability to achieve an AC power flow solution is crucial to the success of the ISO's implementation of Convergence Bidding and the ISO is confident that the design will meet this requirement. A technical update was provided to Market Participants at the Market Performance and Planning meeting on March 16, 2010.¹
- The design documents necessary to implement the additional requirements related to the policy items approved by the ISO's Board in February have not been completed. Current evaluations suggest that some elements may be complex to implement. The ISO is working to address this challenge and will provide an update in April.

¹ The draft market simulation plan is posted at: <http://www.caiso.com/2756/27569a7a3c6b0.pdf>

Development Phase

The development phase relates to the coding and delivery of the software solutions. The development of some systems may overlap with the creation of requirements for other systems. The ISO is planning a Development effort which has already begun and will stretch through August.

Accomplishments

- The development of the new Credit Tracking System which will allow the ISO to evaluate potential credit risk of submitted Convergence Bids is underway.

Challenges

- As noted in previous sections, the completion of requirements and design documents for some functionality has taken longer than initially anticipated. However, development timelines remain realistic to deliver the required functionality for testing.

Testing Phase

The testing phase will evaluate the completeness, relative to business, system and Tariff requirements and quality of the delivered software solution. The ISO is planning a Testing effort which will begin in July and stretch through December.

Accomplishments

- The ISO has no significant testing accomplishments to report this month.

Challenges

- The ISO has no significant testing challenges to report this month.

Simulation Phase

The Simulation phase allows the ISO to demonstrate to market participants the functionality which has been developed as well as allow market participants to test their own software. The ISO is planning a Simulation which will begin in October and stretch through January.

Accomplishments

- The ISO has published an initial draft market simulation plan and presented it to participants. This plan lays out the framework for the ISO simulation activities and provides additional detail for market participants' test planning.²

Challenges

- The ISO has no significant simulation challenges to report this month.

Implementation Phase

The Implementation phase consists of cutover planning and execution.

Accomplishments

- The ISO has no significant implementation accomplishments to report this month.

Challenges

- The ISO has no significant implementation challenges to report this month.

² The draft market simulation plan is posted at: <http://www.caiso.com/2756/27569a7a3c6b0.pdf>

Implementation Plan

The Implementation Plan is a document which the ISO creates and maintains to provide additional details to market participants about various aspects of the project. It serves as a key reference document containing timelines and instructions for market participants as well as providing a repository for references to business and technical documentation.

The Implementation Plan is a living document which the ISO will update throughout the Convergence Bidding project. An initial version is anticipated to be published in late April and will contain initial information for Registration and Training activities. The ISO will discuss the Implementation Plan with Market Participants at the Market Performance and Planning meeting on April 27, 2010.

Readiness

As simulation and implementation target dates approach, the ISO will provide updates on both ISO readiness and assessments of market participant readiness.

CERTIFICATE OF SERVICE

I hereby certify that I have served the foregoing document upon the parties listed on the official service lists in the above-referenced proceedings, in accordance with the requirements of Rule 2010 of the Commission's Rules of Practice and Procedure (18 C.F.R. § 385.2010).

Dated at Folsom, California this 1st day of April, 2010.

Is/ Anna Pascuzzo

Anna Pascuzzo