



April 5, 2004

The Honorable Magalie Roman Salas  
Secretary  
Federal Energy Regulatory Commission  
888 First Street, N.E.  
Washington, DC 20426

**Re: California Independent System Operator Corporation,  
Docket No. ER02-1656-009, -010, and -011 and Investigation of  
Wholesale Rates of Public Utility Sellers of Energy and  
Ancillary Services in the Western Systems Coordinating  
Council, Docket No. EL01-68-017**

Dear Secretary Salas:

Enclosed for filing in the above-captioned dockets, please find the Status Report of California Independent System Operator Corporation ("ISO").

Respectfully submitted,

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**UNITED STATES OF AMERICA  
BEFORE THE  
FEDERAL ENERGY REGULATORY COMMISSION**

California Independent System Operator Corporation	)	Docket No. ER02-1656-000
	)	
	)	
Investigation of Wholesale Rates of Public Utility Sellers of Energy and Ancillary Services in the Western Systems Coordinating Council	)	Docket No. EL01-68-017
	)	
	)	

**STATUS REPORT OF THE  
CALIFORNIA INDEPENDENT SYSTEM OPERATOR CORPORATION**

The California Independent System Operator Corporation (“ISO”)<sup>1</sup> respectfully submits this monthly progress report (“Report”) in compliance with the Commission’s November 27, 2002 “Order Clarifying The California Market Redesign Implementation Schedule”, 101 FERC ¶ 61,266 (2002) (“November 27 Order”), issued in the above-referenced dockets.

The November 27 Order required the ISO to file reports on the first Monday of each month, beginning in January 2003, to update the Commission on the ISO’s progress in designing and implementing the market redesign effort. The Commission directed the ISO to file a full market redesign implementation plan, including a detailed timeline with the sequential and concurrent nature of the design elements, the software and vendors (once selected) to be used and the cost estimates for each element. The November 27 Order required that the first report include explanations of the following: (1) any alternative methods of

developing market redesign elements; (2) the ISO's progress in developing the market redesign elements; (3) the action required to establish such elements; and (4) a detailed breakdown of the total start-up costs.<sup>2</sup> The Commission directed the ISO to update the market redesign implementation plan on a monthly basis, indicating the progress made and the upcoming steps.

On January 10, 2003, the ISO filed its first Status Report in compliance with the November 27 Order. Subsequent to the first filing, the ISO continues to file monthly Status Reports with the Commission on the first Monday of each month. The instant Report is intended to satisfy the monthly reporting requirement in the November 27 Order, update the information included in prior Status Reports and generally advise the Commission of the current status of the market redesign implementation effort.

## **I. APRIL STATUS REPORT**

Sections A and B include a narrative of the significant changes to the "Program Plan – High Level" schedule activity that have occurred since the filing of the prior month's Status Report. Section C includes a narrative regarding the budget along with an updated Budget Tracking and Status Report<sup>3</sup>. Section D identifies the ISO's key market redesign implementation issues including the previous month's accomplishments, major milestones, upcoming activities, issue

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<sup>1</sup> Capitalized terms not otherwise defined herein are used in the sense given in the Master Definitions Supplement, Appendix A to the ISO Tariff.

<sup>2</sup> November 27, Order at P 9.

<sup>3</sup> The narrative includes only non-confidential information.

resolution with stakeholders and items requiring timely resolution by the Commission in order to meet the project schedule.

#### **A. Phase 1B Status**

**Overall:** There are a number of elements to Phase 1B: two key elements include providing the ISO operators better certainty that dispatch quantities will be delivered, and dispatch that seeks pricing efficiency rather than simple merit order. ISO operator uncertainty will be addressed through the assessment of penalties if generators do not respond within a defined tolerance band. Pricing efficiency will be achieved through the elimination of separate prices that currently exist by establishing a single price for each dispatch interval.

Since the March 1, 2004 Status Report, the ISO identified four main areas that require additional time to complete before the ISO can successfully implement Phase 1B. These areas include (1) hands-on ISO operator training, (2) a market simulation that meets the pre-established exit criteria, (3) load and performance testing and (4) the final integration of system applications. Although progress has been made in these individual areas, the problems being encountered in market simulation and in the preparation of ISO operator training make it clear that the ISO's attempt to develop, test, train and support market simulation in parallel has not been successful.

The ISO has revised the project plan and is re-directing efforts to successfully implement Phase 1B market design changes. The focus of the work effort will be in testing and integration, and then sequentially moving to training and market simulation after the ISO has uncovered and corrected the critical

variances and issues in the testing phase. The Phase 1B Implementation team has developed a revised detailed implementation plan for completing these remaining critical items. The revised plan includes a list of tasks, durations to complete those tasks and resource requirements. The ISO management provided an overview of the revised Phase 1B implementation plan at the March Board meeting. Based on the revised implementation plan, Phase 1B is scheduled to be implemented Fall 2004. The ISO will apprise the Commission of the final “go-Live” date once the testing phase is complete which should identify any remaining variances in the software, and the ISO moves into ISO hands-on operator training and the final round of market simulation.

**Hands-On ISO Operator Training:** A stable training environment that will be used to train the ISO operators prior to implementing Phase 1B has been impacted by (1) system stability, (2) functional issues that have not yet been exposed in testing, and (3) the need to train ISO operators once Summer Session training is completed on May 20, 2004. Of these, the most critical is the discovery of functional problems while preparing for the operational training. The fact that we are still discovering functional issues while preparing for training is an indicator that more testing is necessary. Based on the revised implementation plan, training will not begin until after testing and integration are completed and all critical variances and issues have been identified and fixed.

**Market Simulation:** The ISO and market participants concluded the fourth round of market simulation on March 19, 2004. The ISO and participants continued to expose variances and issues in market simulation. A recurring

issue was identified that involved the availability of the automated dispatch system. However, functional issues extend beyond the automated dispatch system issue exposed in market simulation in which the system was unavailable for a period of one hour. Although, market simulation has been valuable in exposing these issues, the mere fact that they are being found in market simulation is an indicator that the systems are not sufficiently ready to “go live.”

It should be noted that the primary goal of the third round of full market simulation completed on March 19 was for participants to review settlement statements that include all the imbalance energy charge types and month-end charge types such as grid management charge and the minimum load cost compensation. Participants will be reviewing this information over the coming weeks to determine if this information is being processed satisfactorily.

The ISO conducted the third round of one-on-one conference calls with the 23 participants from March 1-3, 2004. In response to requests from some of the participants, the ISO traveled to their sites to respond to specific issues and conduct the monthly readiness assessment. The purpose of both the visits and conference calls was to (1) review each participants overall readiness assessment for implementing Phase 1B and (2) review of the Exit Criteria.

**Load and Performance Testing:** Load and performance testing is performed to simulate or exceed expected system conditions to stress the system in a controlled environment prior to moving the systems into production. The goal of load and performance testing is for the system to be available and not fail under the load conditions expected to be encountered once the system is

running in production. It is also designed to ensure that there is sufficient operating margin from computing systems to accommodate any computing system load increases over time. The ISO identified and recently purchased a software package that is designed to replicate “live” database loading and can emulate the activity of 100 users at a time. Although the software has been delivered, it will take time to implement the software, build the test scripts and execute the test on the production environment or an environment that closely resembles the production environment. These elements of load and performance testing are being incorporated into the revised implementation plan.

**Testing and Integration of System Applications:** Due to the delivery of recent system changes, the ISO has not been able to complete functional and integration testing prior to market simulation. The ISO has been taking advantage of the various rounds of market simulation to effectively perform the integration testing and remediation cycles that one would normally perform in separate integration testing prior to market simulation. However, the ISO needs additional time to perform testing and remediation. Once the systems have been successfully tested, hands-on ISO operator training and the last round of market simulation can be started.

**Phase 1B Weekly Conference Calls:** After Friday, April 2, 2004, the ISO will transition to bi-weekly conference calls, as discussed with market participants on the March 19<sup>th</sup> conference call. The ISO will re-start weekly conference calls as Phase 1B moves closer to being put into production. The conference calls are

open to all market participants and are structured to keep stakeholders informed about the progress of Phase 1B implementation and respond to questions.

**B. Integrated Forward Market/Locational Marginal Pricing Status**

In the March 1, 2004 Status report, the ISO reported that, in a joint effort, Siemens Power Transmission and Distribution Inc. (“Siemens”) and the CAISO continued to work on detailed project planning, requirements clarifications and detailed design specifications. Final detailed design was targeted for the end of March 2004. Further refinements of the project plan and its associated project schedule have resulted in a revised target date for final detailed design in early May 2004. In addition, the ISO is reviewing the outcomes of the Commission’s technical conference for details related to outstanding design issues. The ISO has released discussion papers on Residual Unit Commitment (“RUC”), a simplified Hour Ahead market, and a revised Market Power Mitigation proposal. In addition, the ISO and Siemens continue to develop the project plan with particular emphasis on incorporating appropriate durations for testing and development.

**C. Market Redesign Budget Update**

Attachment A -- the Budget Status and Tracking Report is not being provided this month as the overall program budget is currently under review by an independent consultant who was hired at the request of the ISO Board of Governors. Although the independent consultant gave a status report to the Board at their January 22<sup>nd</sup> meeting, it is anticipated that the consultant will make his complete assessment, including recommendations of the format of the budget

reporting going forward, at the April ISO Board of Governors meeting. Due to the timing of acceptance of that report by the Board, the ISO does not have complete information to continue reporting in the format we have used in the Status Reports to date. The Budget Status and Tracking Report will be re-formatted to incorporate this information and provided in future monthly Status Reports. The Budget Status and Tracking Report will remain confidential until such time that the information contained in the report does not disclose confidential business information or jeopardize the ISO's negotiations with vendors regarding implementation of the market redesign.

**D. Key Issues**

**1. Settlements and Market Clearing Request for Proposals**

ISO management presented the Settlements and Market Clearing project to the Board of Governors for approval at the March 25, 2004 meeting. In light of the fact that the overall MD02 budget will not be presented to the Board until the April meeting, the Board deferred action. However the Settlements and Market Clearing Implementation Team continues to work at finalizing the Detailed Statement of Work ("DSOW") deliverables for both elements of the Settlements and Market Clearing project prior to signing contracts with the preferred vendors. To facilitate market participant involvement throughout the Settlements and Market Clearing Project, the ISO established a forum to receive input on the settlement interface design and participant implementation requirements.

**2. Congestion Revenue Rights ("CRR") Study**

The ISO received comments on the first draft of the “CRR Study 2 - Proposed Processes, Input Data and Modeling Assumptions” from market participants on March 1, 2004.<sup>4</sup> In addition, the ISO presented the second series of CRR Educational classes over a three-day period from March 16-18, 2004<sup>5</sup>. The classes are designed to provide market participants the opportunity to learn the basics associated with CRRs. The ISO will offer a third and final series of educational classes via the internet (Placeware) during the month of April. The ISO will send out a Market Notice once the dates are finalized.

The ISO held a CRR Study 2 meeting on March 22, 2004 to discuss comments and questions submitted by market participants regarding the first draft of the “CRR Study 2 - Proposed Processes, Input Data and Modeling Assumptions”. In addition, the ISO continues to hold bi-weekly teleconferences with Market Participants to discuss CRR study 2 as well as a holding a stakeholder meeting on March 22, 2004 to review the methodology and assumptions to be used in CRR study 2.

#### **4. CPUC Procurement Proceedings**

The Commission’s October 28, 2003 order regarding the ISO’s MD02 proposal directed the ISO to make a compliance filing at the Commission no later than sixty days after the California Public utilities Commission (“CPUC”) issues a final decision in its ongoing procurement proceeding. The purpose of the

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<sup>4</sup> Market participants’ comments on the Draft CRR Study 2 – Proposed Processes, Input Data and Modeling Assumptions were posted to the ISO website under the Heading: Congestion Revenue Rights (CRR) Study 2 Stakeholder Comments at:

<http://www.caiso.com/docs/2004/01/29/2004012910343827511.html>

<sup>5</sup> Descriptions of the ten presentations along with the dates and location were posted to the ISO website at: <http://www.caiso.com/docs/2004/02/05/200402051241327029.pdf>.

required compliance filing is to make any necessary changes to the ISO's MD02 proposal resulting from the CPUC order. As the Commission is aware, on January 22, 2004, the CPUC issued an Interim Order in the procurement proceeding. That Interim Order addressed a number of important threshold issues, but deferred resolution of a number of other important issues (e.g., deliverability, counting of resources, load forecasting, phase-in of the reserve requirement) to a proposed "workshop" process, to be conducted over the next several months. By its title, and based on representations made by the CPUC, the January 22, 2004 order is an "interim" order and is not likely to be the final order in the procurement proceeding. In a February 25, 2004 letter to the ISO Board, CPUC President Peevey indicated that he anticipated the CPUC would issue a subsequent order on resource adequacy during the summer of 2004.

Out of an abundance of caution, and to manage expectations that the ISO would file a compliance filing with the Commission based on the CPUC's January 22, 2004, ruling, on March 22, 2004, the ISO filed a motion for extension of time to make the compliance filing required by the Commission's October 28, 2003 Order. In that request, the ISO specifically requested that it be permitted to make the above-noted compliance filing sixty days after the CPUC issues its order on the issues being address in the CPUC sponsored workshops. In addition, the ISO noted that it intends to work closely with the CPUC and other parties in the Procurement Proceeding over the next several months to resolve the important remaining issues. Finally, the ISO committed to keep the

Commission informed of the developments in the Procurement Proceeding and any other state activities regarding resource adequacy.

With regard to the workshops, the CPUC held its first workshop on March 16<sup>th</sup> in which the parties generally discussed the topics of load forecasting, resource counting conventions, and deliverability. This discussion resulted in specific activities or “homework” assignments to be completed prior to the next set of workshops, currently scheduled for April 6-7 and April 12-14. In particular, the ISO was assigned to develop a “deliverability” proposal and to identify and submit the North American Electric Reliability Council’s accepted definition of “net dependable capacity”.

## **5. FERC Technical Conferences**

The ISO participated in the Commission’s second technical conference on the Conceptual Design on March 3-5, 2004, in San Francisco to receive input to the following design issues: (1) Flexible Offer Obligation; (2) Residual Unit Commitment; (3) deferment by the ISO of a portion of its required Ancillary Services procurement from the Day Ahead to the Hour Ahead market; (4) allowing Constrained Output Generating resources to set market-clearing prices in forward markets; and (5) re-allocation of excess revenues collected by the ISO due to incorporation of marginal transmission losses in Locational Marginal Prices.

On March 19, 2004, the ISO posted the following documents to its website in response to the March Technical Conference. The first document, entitled “CAISO Answers to Questions Regarding the CAISO’s Residual Unit

Commitment (“RUC”) Proposal and Other Related Questions”, contains ISO responses to questions raised about the residual unit commitment proposal<sup>6</sup>. The second document is the proposal for a simplified Hour Ahead scheduling procedure titled, “Potential Design of a Simplified Hour Ahead Scheduling Procedure”<sup>7</sup>.

## II. CONCLUSION

In Section I of this Report, the ISO has responded to the Commission’s request for specific information on progress, critical issues, budget and alternative methods for the market redesign implementation effort. The ISO appreciates having the opportunity to comment and report on the progress being made on its market redesign.

Respectfully submitted,

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Dated: April 5, 2004

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<sup>6</sup> “CAISO Answers to Questions Regarding the CAISO’s Residual Unit Commitment (“RUC”) Proposal and Other Related Questions” was posted to the ISO website at:

<http://www.aiso.com/docs/2004/03/19/200403191448519257.pdf>

<sup>7</sup> Potential Design of a Simplified Hour Ahead Scheduling Procedure” was posted to the ISO website at: <http://www.aiso.com/docs/2004/03/19/200403191449369288.pdf>

## **CERTIFICATE OF SERVICE**

I hereby certify that I have this day served the foregoing document upon the Public Utilities Commission of the State of California, upon all parties of the official service lists maintained by the Secretary for Docket Nos. ER02-1656-000 and EL01-68-017.

Dated at Folsom, California, this 5<sup>th</sup> day of April 2004.

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