



March 4, 2005

**VIA FEDERAL EXPRESS**

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 an original and 14 copies of the Status Report of the California Independent System Operator Corporation ("ISO"). These copies contain a redacted version of Attachment A. The ISO is also submitting one copy marked **CONFIDENTIAL**, which has a nonredacted version of Attachment A. The ISO requests privileged treatment for the instant filing pursuant to 18 C.F.R. § 388.112 because public disclosure of the entire contents of Attachment A would disclose confidential business information and jeopardize the ISO's future negotiation with vendors regarding implementation of the market redesign.

Two additional copies of the public version of this filing are enclosed. Please date-stamp them and return them in the self-addressed prepaid Federal Express envelope.

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**  
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**Investigation of Wholesale Rates of Public Utility Sellers of Energy and Ancillary Services in the Western Systems Coordinating Council** ) **Docket No. EL01-68-017**  
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**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.<sup>2</sup> 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

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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.

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>3</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. MARCH STATUS REPORT**

Sections A and B include narratives 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>4</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>2</sup> This market redesign effort, previously known as "MD02", has been renamed Market Redesign & Technology Upgrade ("MRTU")

<sup>3</sup> November 27, Order at P 9.

<sup>4</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. Market Redesign and Technology Upgrade (“MRTU”) Program**

The Market Redesign and Technology Upgrade (“MRTU”) Program is comprised of seven major system projects – (1) Integrated Forward Markets/Real-Time Market/Full Network Model (“IFM/RTM/FNM”), (2) Scheduling Infrastructure Business Rules (“SIBR”), (3) Congestion Revenue Rights (“CRR”), (4) Settlements and Market Clearing (“SaMC”), (5) Master File Redesign (“MFRD”), (6) Post Transaction Repository (“PTR”) and (7) Legacy Systems. Currently, each project is at different stages of implementation, but are projected to converge by January 2006 for system integration and integration testing.

- IFM/RTM/FNM: completed the initial development stage in February 2005 and started pre-Factory Acceptance Testing (“pre-FAT”)
- SIBR: design phase is nearing completion and development activities have begun
- CRR: contract signed and started project planning phase with vendor
- SaMC:
  - Stage 1 (current ISO markets) – started system testing phase
  - Stage 2 (MRTU design) – on schedule to complete the technical design stage in June 2005

- Market Clearing – development phase is progressing on schedule
- MFRD: completed application design in February 2005
- PTR: on schedule to complete the design stage in August 2005
- Legacy Systems: on schedule to complete the design stage in July 2005

## **B. Market Redesign Budget Update**

Attachment A -- the Budget Status and Tracking Report (which remains confidential) – summarizes expected cost at completion compared to the May 2004 budget. Specifically, Attachment A shows the program budget amount, actual costs to date, estimated costs to complete and the project cost at completion.

## **C. Key Issues**

### **1. Resolution of Open Design and Policy Issues**

The ISO held a MRTU Policy Issues Stakeholder meeting on March 1-2, 2005, to discuss the following documents:

1. “Comprehensive Market Redesign Update”<sup>5</sup>
2. “Proposed MRTU Market Power Mitigation Provisions”<sup>6</sup>
3. Law and Economic Consulting Group’s (“LECG”) “Comments on the California ISO MRTU LMP Market Design”<sup>7</sup>

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<sup>5</sup> The “Comprehensive Market Redesign Update” can be found on the ISO website at: <http://www.caiso.com/docs/2005/02/23/200502231645317880.pdf>

Scott Harvey and William Hogan from LECG discussed their findings on the ISO's market design and responded to stakeholders' questions. The ISO has requested that stakeholders submit comments on the three documents by March 11, 2005. The ISO will seek final approval on its market design at the March 31 ISO Board meeting. Based on the outcome of the Board meeting, the ISO proposes to file a refined conceptual design proposal with the Commission in April 2005.

## **2. Resource Adequacy Proceedings**

Since the beginning of January 2005, the California Public Utilities Commission ("CPUC") has held a number of scheduled resource adequacy workshops. During the March 1-2 MRTU stakeholder meeting, the ISO discussed many elements of the CPUC resource adequacy requirements as they interplay with the market design. These elements were outlined in a document prepared by the ISO, "Appendix A – Summary of the CPUC's October 28, 2004 Order."<sup>8</sup> The document provides two key sections, (1) a short summary of the CPUC October 28th, 2004 Order on resource adequacy and (2) an update on the workshop progress for some of the more central elements such as local capacity obligations, compliance and reporting. The ISO has included "Appendix A – Summary of the CPUC's October 28, 2004 Order" as Attachment B of this Status Report.

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<sup>6</sup> The "Proposed MRTU Market Power Mitigation Provisions" can be found on the ISO website at: <http://www.caiso.com/docs/2005/02/23/200502231639176611.pdf>

<sup>7</sup> LECG's "Comments on the California ISO MRTU LMP Market Design" can be found on the ISO website at: <http://www.caiso.com/docs/2005/02/23/200502231634265701.pdf>

<sup>8</sup> The "Appendix A – Summary of the CPUC's October 28, 2004 Order" can be found on the ISO website at: <http://www.caiso.com/docs/2005/02/23/200502231643487656.pdf>

## 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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Sidney Mannheim Davies

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System Operator Corporation

Dated: March 4, 2005

ATTACHMENT A

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ATTACHMENT B

## Appendix A

### Summary of the CPUC's October 28, 2004 Order

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The salient elements of the CPUC's order are summarized below. In addition, the CAISO also provides comments on the CPUC workshop discussions.

#### **i. Phase-In and Nature of the Obligation**

The CPUC's October 28<sup>th</sup> Order establishes a year-round obligation on load-serving entities to procure sufficient capacity to serve their load plus a planning reserve margin. Specifically, the CPUC adopted the CAISO's position that load-serving entities have the obligation to satisfy 90% of their capacity requirements (load plus a 15-17% planning reserve margin) one year in advance for the summer peak season of May through September and 100% of their capacity requirements one month in advance throughout the year. In addition, the CPUC's order notes that a forward commitment is consistent with its decision to relax the 5% limit on spot market purchases because so long as load-serving entities have assured sufficient capacity resources in the forward time frame, they can maximize their opportunities to procure energy in the spot market while minimizing exposure to high energy prices and volatility. The CPUC order also provides that the details of the monthly reporting requirement - monthly due date, nature of filing, review process and penalties – will be developed in Phase 2 (i.e., the decision scheduled to be released in mid-2005).

In light of some uncertainty whether the CPUC's requirements applied only to the five peak summer months, the CPUC clarified, as noted above, that the 15-17% planning reserve margin applies to the entire year, finding anything short of a year round reserve requirement to constitute an inadequate and suboptimal assurance of grid reliability.

In addition, the CPUC required that LSEs acquire a mix of resources capable of satisfying the number of hours for each month that their loads are within 10% of their maximum contribution to monthly system peak<sup>1</sup>. The CPUC directed that the CAISO utilize historical data to provide guidance about the general number of hours to be expected in each month. Consistent with the above-stated obligations, the CPUC order also directed that year-in-advance compliance filings be submitted on September 30<sup>th</sup> of each year.<sup>2</sup>

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<sup>1</sup> This aspect of the obligation was discussed in the CPUC Phase 1 workshops; however, it misrepresents the understanding of the participants. Those discussions were central to defining a means for counting energy limited resources. The misunderstanding may have its origins in earlier proposals of the CAISO. Nevertheless, one thing was quite clear, namely that the strip of hours would apply uniformly to all LSEs based on system, not LSE-specific data. Another important issue that was not emphasized (but we had assumed) was that since the hours comprising this "system peak strip" were not known in advance, there would be a must offer obligation, for all hours.

<sup>2</sup> For the first round of filings for the May-September 2006 period, the CPUC order stated that the deadline for compliance will be the later of September 30, 2005 or 90 days after the date of the Phase 2

Of critical importance, and in contrast to the CPUC's January 22, 2004 initial ruling on these issues, the CPUC's October 28<sup>th</sup> Order establishes June 1, 2006 as the date for load-serving entities to achieve full implementation of the resource adequacy requirements. This represents a full year and a half acceleration from the original start date of January 1, 2008, set forth in the CPUC's January 22, 2004, initial ruling. As a consequence, the CPUC's resource adequacy program will be in place prior to full implementation of the CAISO's new market design in February 2007.

One of the concerns raised against adoption of an accelerated implementation date for resource adequacy was the fear that compressing the procurement period would exacerbate the ability of suppliers to exercise market power. The CPUC's October 28<sup>th</sup> Order addresses this fear by recognizing the CPUC's obligation to ensure that the prices reflected in capacity contracts are not the product of market power:

"At the same time, we cannot neglect our other primary public duty: protection of ratepayers from excessive charges. Increasing supply will cost money, and ensuring reliability does not come cheap. However, we will not "pay any price" or require utilities to sign contracts that meet these requirements at any cost. The memories of the 2000-2001 energy crisis are still fresh in our minds, and the fallout and tremendous costs of that time continue on. We recognize that there is a difference between competitive market costs and prices that arise from the exercise of market power. We will develop reporting requirements in Phase 2 that enable us to monitor the terms and prices of contracts signed under the provisions of this decision to ensure that they are reasonable and that the extra capacity and reliability provided by our reserve requirement is available at reasonable cost to ratepayers."

## **ii. Load Forecasting Protocols**

Throughout the CPUC's procurement proceeding, the CPUC and parties to the proceeding acknowledged the importance of accurate load forecasting for the purpose of determining each load-serving entity's obligation. Recognizing the critical expertise the California Energy Commission ("CEC") has on such matters, the CPUC's October 28<sup>th</sup> Order requests that the CEC perform "coincidence analysis" for load-serving entities based on each load-serving entities best estimate of future customer loads. The order also states that the CPUC will develop a tracking system that compares forecasts to actual loads and create penalties for excessive deviations and that load-serving entity forecasts with significant load reductions will be subject to justification.

The CPUC order also states that load-serving entities must include all losses in load forecasts, including distribution losses, transmission losses, and estimates of unaccounted for energy. The CPUC directed South California Edison Company (Edison) to prepare a methodology for consideration in Phase 2. SCE

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decision. The CPUC also provided that, in the future, it may adopt a rolling 12-month ahead definition of year-ahead.

worked with CAISO to propose a methodology that was widely accepted by the Phase 2 participants, where the CAISO would analyze the historic quantity of transmission losses and UFE on a system-wide basis. The resulting amount of MWs would be converted to a percentage of load that all LSEs would be required to meet in their resource adequacy obligations.

Further, consistent with the CAISO's position on this matter, the CPUC's October 28<sup>th</sup> Order provides that energy efficiency impacts be included in each load-serving entity's load forecast. The CPUC states that the detailed methodology for doing so will be determined in Phase 2 through coordination with the CPUC's pending energy efficiency rulemaking. In addition, the CPUC order provides that non-dispatchable demand response programs be subtracted from load forecasts, while dispatchable demand response be treated as a resource (i.e., not subtracted from load-forecasts but included in the resources qualified to satisfy the resource adequacy obligation).

### **iii. Resource Counting Conventions**

The CPUC adopted a "net dependable capacity" basis for determining how much each specific resource will count towards satisfying a load-serving entity's obligation. Such an approach is consistent with the CAISO's position on this matter. However, since forced outages are already accounted for/reflected in the reserve margin calculation (i.e., the 15-17% requirement), the CPUC's October 28<sup>th</sup> Order states that, at this time, the availability of resources will not be derated based on actual forced outage rates. In other words, the general formulas for qualifying capacity will not be further adjusted for forced outages. The CPUC's order states that they will evaluate, during the second-generation resource adequacy efforts, whether the use of unit-specific differential adjustments from the average forced-outage rate provides cost-effective incentives for generators to make investments to improve performance. Notwithstanding the CAISO's support for developing and applying unit-specific forced outage factors, the CAISO supports the CPUC's measured approach and will actively participate in the future proceedings regarding this matter.

In contrast to the presiding ALJ's Draft Decision, the CPUC's October 28<sup>th</sup> Order establishes no limitations on the use of Firm Liquidated Damages ("Firm LD") contracts to satisfy the resource adequacy requirements. The CPUC states that in Phase 2, the CPUC will review proposals for contract language or other contract methods that can substitute for liquidated damages contracts, and will explore whether audit methods can be developed that would allow the CPUC to place greater confidence in relying upon liquidated damage contracts. Consistent with its long-held position that load-serving entities identify the actual physical resource(s) used to satisfy their resource adequacy obligations, the CAISO supports the long-term exclusion of Firm LD contracts as compliant with resource adequacy requirements. Nevertheless, the CAISO reiterates that if the CPUC adopts a transition period during which Firm LD contracts remain eligible towards satisfying the obligation, it is appropriate to include a requirement that the physical resources supporting the Firm LD contracts be identified. For example, for each day/hour the designated SC (representing the LSE or the seller) will

identify the physical resource no later than the close of the CAISO's Day Ahead market. While the CAISO will continue to monitor developments in this area closely, the CAISO appreciates the fact that the CPUC must balance between reliability concerns and limiting the tools available to load-serving entities to satisfy their obligations.

Consistent with the CAISO's recommendations on the issue, the CPUC order adopts a historic performance approach for valuing/counting the amount of capacity available from solar and wind-based resources that do not have backup arrangement in place with utilities. In addition, the CPUC directs that such historical availability be determined in such a way as to reveal monthly differences in performance. Further, the CPUC requires that historic performance be computed over the Qualifying Facility ("QF") Standard Offer 1 ("SO 1") on-peak period only and that the differential treatment of wind resources by location and technology be considered during the second generation proceedings.

The CPUC order also states that QFs qualify at historic performance at peak and that for energy-limited resources - a unit must be able to (1) operate for 4 hours per day for 3 consecutive days the and (2) run a minimum aggregate number of hours per month based on the number of hours that loads in the control area exceed 90% of peak demand in that month. The order states that this rule is limited to the summer months and an appropriate rule for energy-limited resources for non-summer months will be developed in Phase 2.

With respect to demand response resources, the CPUC order provides that:

- Reserve requirements will not be imposed for demand response counted as resources (i.e. dispatchable demand response);
- To qualify as a demand response resource, a resource must have a minimal summer seasonal performance level of 48 hours;
- Demand response products with 2-hour availability can only constitute 0.89% of monthly system peak of an load-serving entity's portfolio; and
- Quantification of such resources will be performed by an inter-agency staff team.

With respect to all resources, the CPUC's October 28<sup>th</sup> Order provides that for purposes of counting resources under construction, parties should use the commercial operation date data published by the CEC and CAISO. Details of this requirement were to be determined in Phase 2 workshops. The CAISO and CEC developed a proposal that was widely accepted by the Phase 2 participants where a new resource would be required to meet specific operational criteria prior to the month ahead reporting deadline before it would be considered for resource adequacy.

Finally, with respect to the existing California Department of Water Resources long-term power contracts ("CDWR Long-term Contracts"), the amount of qualifying capacity from these contracts will be determined through application of

the deliverability screens that are ultimately adopted by the CPUC, as discussed below.

The CAISO generally supports the CPUC's decision regarding resource counting conventions. However, the CAISO has consistently observed that the deliverability screens cannot be applied to those contracts, such as current-form Firm LD contracts, which do not identify specific resources.

#### **iv. Deliverability**

The CAISO has long-held the position that all resources procured by load-serving entities to satisfy their resource adequacy obligations must be deliverable, both on a system-wide as well as local level. The CAISO proposed three deliverability screens: (1) aggregate to load for evaluating control area resources, (2) imports, and (3) and load pocket.

The CPUC's October 28<sup>th</sup> Order supports the CAISO's baseline analyses proposals to implement the first two screens described above. With respect to allocation of limited export capacity for the aggregate to load analysis, the CPUC agrees that such allocation should occur on the basis of the CAISO transmission access charges. The order also provides that the issue of import capacity allocation will be addressed in Phase 2 workshops. The CPUC's order directs the CAISO to perform the baseline analyses as part of Phase 2. In addition, the CPUC requests that the CAISO serve an updated description of the proposed baseline analysis, its data requirements, and a schedule for the analysis on the parties within 10 days of the date of the CPUC's decision.

With respect to the all-important issue of Local Deliverability, the CPUC's decision states that creating local reliability requirements is consistent with the CPUC's prior decisions and directs the parties to address implementation of such requirements in Phase 2 ["Local resource adequacy requirements, including identification of load pockets, generator performance in load pockets, transmission import capabilities, and various adjustments to the current LARS process that results in RMR contracts."]. The CPUC's order also states that Reliability Must-Run contracts should remain available in the future to address local market power concerns.

Finally, the CPUC acknowledges that the deliverability baseline analysis to be conducted in Phase 2 will shed light on the conditions that define "load pockets," the geographic scope of these load pockets, and methods for periodically updating the number and extent of load pockets as system configurations and loading patterns change.

The CAISO supports the CPUC's rulings regarding deliverability. In addition, recognizing the importance of establishing viable local capacity requirements and that the CAISO is uniquely situated to lead the development of such requirements, the CAISO is committed to defining such requirements through the Phase 2 process.

**v. Availability of Resources to the CAISO**

The CPUC's October 28<sup>th</sup> Order approved a sequence of requirements that qualified capacity first be scheduled by the load-serving entity pursuant to the CAISO's Day-Ahead Scheduling process, then bid into CAISO's Day-Ahead market if not scheduled, and then subject to the CAISO's Residual Unit Commitment ("RUC") procedure if its bid is not accepted in the Day-Ahead Integrated Forward Market. The CAISO fully supports the CPUC's established requirements<sup>3</sup>. Moreover, such requirements are fully consistent with the intent and function of the CAISO's proposed Day-Ahead Must Offer Obligation, as originally outlined in the CAISO's May 2002 and July 2003 conceptual design filings.

The CPUC order also provided that contracts executed after completion of the Phase 2 proceedings should include such provisions in order to be eligible to count as qualified capacity in satisfaction of forward commitment obligations. The CPUC order identified the following issues to be addressed in the Phase 2 workshops:

1. What specific standard language, if any, should be included in future contracts between load-serving entities and generators that will sufficiently obligate generators to bid into Day-Ahead markets and be subject to RUC and other appropriate processes?
2. How to accommodate intra-day scheduling flexibility in existing contracts, and whether and how to accommodate intra-day scheduling flexibility in new contracts, e.g. through "self-provided RUC"?
3. How unscheduled resources are made available to the CAISO?
4. What CAISO tariff provisions must be established in order to complement the contractual language that the CPUC will impose?
5. What provisions are appropriate to protect energy-limited resources?
6. Should demand response and other non-generation resources be subject to such requirements? If so, to what degree and under what provisions?

**vi. Reporting, Reviewing and Sanctions**

The CPUC's October 28<sup>th</sup> Order also contemplates a review process intended to become a simple checklist or verification process. The CPUC was explicit that it did not intend to conduct a prudency review as part of the annual compliance filing. The CPUC order stated that the resource tabulation templates and system of penalties would be addressed in Phase 2.

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<sup>3</sup> The CAISO's concurrent White Paper on Comprehensive Market Design Update describes the offer obligations that it desires for RA units in greater detail, including how a RA unit's start-up and minimum run time relate to its obligations to offer in the Day Ahead, Hour Ahead Scheduling Process, and Real Time Market.

## **vii. Summary of Second Generation Issues**

While the Phase 2 workshops focus on those elements of the Resource Adequacy Requirements the CPUC believes vital for an accelerated implementation date, the deferred Second Generation workshops will address more long-term structural modifications. Among others, these include:

1. Consideration and development of unit-specific differential adjustments to average forced outage rates;
2. Consideration of a multi-year forward commitment concept; and
3. Consideration of a resource tagging and trading concept.

The CAISO supports the direction expressed in the Second Generation items. Such matters are either complimentary to or expansions on the core resource adequacy requirements established in the CPUC's October 28<sup>th</sup> Order.

## **b. Update on the CPUC Resource Adequacy (Phase 2) Workshops**

Beginning in December 2004, the CPUC initiated a series of workshops in order to further define the Resource Adequacy Requirements adopted by the CPUC in the CPUC October 28 Order. The CPUC's intent is conduct workshops through February 2005, issue a workshop report, and then issue a further order on Resource Adequacy Requirements by June 2005.

The CPUC has held workshop discussions on, among others, the following matters of particular importance to the CAISO:

- Deliverability (including Local Capacity obligations);
- Compliance and reporting;
- The nature of the yearly and monthly obligations (including the load forecasting process necessary to define each load-serving entities obligation);
- The nature of must-offer (availability) obligations; and
- The use of firm liquidated damages contracts ("Firm LD") to satisfy the established resource adequacy requirements.

The CAISO offers its brief assessment of the workshop discussions on these matters below.

### ***Deliverability***

***System-wide and Import Assessment*** – There is general consensus among workshop participants on the need for, and mechanics of, conducting a system-wide deliverability assessment. This system-wide assessment encompasses both the aggregate to load and import screens. Consequently, the participants generally agree on the quantity of imports that can be relied upon to satisfy the Resource Adequacy Requirements, i.e., the "size of the pipe." However, no clear consensus was reached regarding the allocation of import capability to each load-serving entity.



***Local Capacity Obligations*** – There is general consensus among workshop participants on the need for, and the method for determining the, local capacity obligations. In addition, there now appears to be general consensus that such local capacity obligations – which are likely to comprise half of a load-serving entity’s full obligation within the load pocket – must be satisfied 100% a year in advance.

With respect to the methodology for determining local capacity obligations, the CAISO developed a straw proposal that proposed that the local capacity requirements be based on the MW of capacity needed in an area to respond to a specific, identified operating contingencies. In addition, the CAISO proposed that such identified capacity requirements be generally stable (static or predictable) over time, such that load-serving entities can address local capacity requirements through a number of means – local generation (build and/or contract), transmission, demand response – over a planning timeframe. In addition, as part of its proposal, the CAISO acknowledged, and the participants conceded, that the CAISO will have a backstop role in procuring local capacity. This issue is discussed in the main body of this White Paper.

Key next steps will be for the CPUC to determine the allocation of cost and procurement responsibility for local capacity requirements among load-serving entities within local areas. Procurement of local capacity implicates the role of the CAISO as system operator and bears on how best to address local market power, while providing incentives for investment in each established local area.

#### **Compliance and Reporting** –

All workshop participants appear to agree on the need for regular and standardized reporting regarding each load-serving entity’s compliance with the established resource adequacy requirements. In addition, workshop participants appear to agree that such reporting should be based on a “checklist”-type of approach, as opposed to elaborate and details reports that have to be extensively reviewed and analyzed. Of course, most participants also acknowledge that in order to support a “checklist”-based reporting mechanism, the obligations and resource adequacy requirements must be clearly defined and objective. The CAISO developed and proposed a reporting template for use by the CPUC. Workshop participants are generally supportive of the CAISO’s proposed template.

Workshop participants appear to agree that the CPUC should establish clear, explicit, and pre-defined penalties for those load-serving entities that fail to satisfy their year-ahead and month-ahead obligations. Participants generally agree that such penalties should be two or three times the cost of a new CT.

As discussed below, the participants also recognize the need to define supplier compliance and the oversight of non-CPUC jurisdictional load-serving entities.

***Nature of the Obligations –***

The CPUC's previous orders and workshop participants support annual and monthly load-serving entity obligations based on resource adequacy requirements derived from system peak load. At present, the CPUC's orders contemplate that each load-serving entity will, on an annual basis, forecast its load for the coming year. After a review and validation of each load-serving entity's load forecast by the California Energy Commission, that load forecast will then be used to determine each load-serving entity's obligation, i.e., proportionate share of the system's total resource adequacy requirement. Currently, there are several contemplated approaches to establishing each load-serving entity's obligation: (1) the obligation would be set at the load serving entity's proportionate share of the CAISO's coincident system peak, (2) the obligation would vary by month, but each month's quantity would be set at the time of the year-ahead forecast and would only be updated based on significant known and measurable events or changed circumstances, or (3) the obligation would vary by month and the monthly quantity would be updated on a monthly or regular basis.

Over the past several months the CPUC and the workshop participants have extensively discussed that nature of the annual and monthly obligations. In those discussions, the CPUC and workshop participants have identified a number of problematic aspects of both establishing a year-round obligation with little variability and defining and implementing a meaningful month-ahead obligation.

Based on these discussions, the CAISO believes that: 1) the year-ahead obligation should be based on each load-serving entity's *historical* contribution to the system peak, thus avoiding reliance on load-serving entity forecasts and the need for an iterative review process; and 2) it may be appropriate to establish *seasonal* requirements in the long-run design e.g., summer and winter.

During the workshops, participants discussed two other alternatives; rely upon annual and monthly obligations with only a limited ability to update on a monthly basis or annual and monthly requirements that are updated each month. The CAISO believes the first approach is too inflexible and may be costly to load-serving entities, i.e., if they have to carry summer-level reserves year round. Further, the second approach may be impossible to administer because it would seem to require a new load forecast each month and an LSE procurement cycle to meet the monthly changes in resource adequacy obligations. The CAISO intends to continue to engage in the discussions regarding these matters.

***Must-Offer Obligations*** – The CPUC's October 28 Order specifies that the resources procured by load-serving entities to satisfy their resource adequacy obligations should be made available to the CAISO in the Day Ahead market (scheduled or bid) or in the CAISO's proposed Residual Unit Commitment process. However, as further described in a recent Assigned Commissioner's

Ruling (“ACR”) issued by President Peevey of the CPUC, the CPUC’s October 28 Order has contradictory statements regarding the nature of the must-offer obligation.<sup>4</sup> One interpretation supported by certain workshop participants is that resource must only be offered during the peak-load periods of each month. Another interpretation, supported by President Peevey in the ACR, is that resources must be offered during all hours of the month. The CAISO clearly supports President Peevey’s interpretation of the must-offer obligation.

Another issue that has arisen with respect to the must-offer obligation is the manner by which such an obligation is imposed and administered. The CPUC’s October 28 Order clearly imposes the requirement on load-serving entities, with the expectation that the load-serving entities will ensure resource-owner compliance with the obligation via the contract between the load-serving entity and the resource owner. One of the objectives of the workshop process was to develop and finalize the standard contract language necessary to establish and enforce the must-offer obligation on resource owners.

The workshop discussions to date have highlighted the difficulty (from an administrative standpoint) and possible inequities from requiring load-serving entities to establish and enforce must-offer obligations on third-party resource owners through their resource adequacy contracts. The CPUC staff, working with the CAISO, has recently raised the issues as to whether it would be more manageable to have the CAISO establish (through its tariff) and administer must-offer obligations. Workshop participants were generally supportive of such an approach.

**Firm LD Contracts** – As noted above, a central issues that has arisen in the workshop discussions is the use of Firm LD contracts to satisfy the resource adequacy requirements. The CAISO has taken the position that Firm Liquidated Damages contracts should not “count” towards satisfying the CPUC’s established *capacity* requirement. The essence of the CAISO’s position is that there is no physical capacity (actual resources) identified in such contracts - they are basically an agreement to provide energy, up to a point. At that point, the seller has the option to not provide the energy and compensate the buyer for the cost to replace the energy (liquidated damages). In other words, the seller will provide energy up to a point where they believe it is more economic for them to not provide and just pay the replacement cost, i.e., the cost of the buyer going out and getting replacement energy. The problematic aspect of that approach, at least from the CAISO’s vantage point, is that it presumes capacity (and the related energy) will be available through the market during those circumstances where the seller opts not to deliver. If the purpose of resource adequacy is to

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<sup>4</sup> See, *Assigned Commissioner’s Ruling Providing for Comments and Replies on Modification to the Interim Resource Adequacy Requirements (RAR) Decision (D.) 04-10-035, R.04-04-003* (Feb. 8, 2005).

ensure that sufficient capacity is built/contracted and committed to serve California load, then it is the CAISO's position that reliance on Firm LD contracts is inconsistent with that objective. Certain participants have and continue to argue that Firm LD contracts should count and that Firm LD contracts have "worked" (i.e., they have always delivered) in the past and that there is "implicit" capacity behind them. These parties contend that requiring load-serving entities to lock up explicit capacity will increase costs, if they are required to ask the suppliers of LD contracts to identify specific physical resources. They argue that the explicit designation of resources will drive up the costs of the energy under those contracts. The CAISO acknowledges that that may be true, but has emphasized that any increase in cost is the result of buying a better more reliable product; i.e., one of the reasons their LD contracts appears to be cheaper is because there is only an implied capacity commitment as well as uncertainty whether they are deliverable.

Clearly, this is a key issue that the CPUC must resolve. Should the CPUC move to permit the use of Firm LD contracts in its anticipated June decision, the CAISO will have to consider what actions it may have to take in order to ensure reliable operation of the grid in the presence of extensive reliance on Firm LD contracts.

## 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 Nos. ER02-1656-000 and EL01-68-017.

Dated at Folsom, California, this 4<sup>th</sup> day of March 2005.

  
Sidney Mannheim Davies