UNITED STATES OF AMERICA
BEFORE THE
FEDERAL ENERGY REGULATORY COMMISSION

California Independent System) **Operator Corporation**)	**Docket No. ER02-1656-029**

REQUEST FOR REHEARING OF THE
CALIFORNIA INDEPENDENT SYSTEM OPERATOR CORPORATION

Pursuant to Section 313(a) of the Federal Power Act, 16 U.S.C. § 251 (a) (2001), and Rule 713 of the Rules of Practice and Procedure of the Federal Energy Regulatory Commission ("Commission"),18 C.F.R. § 385.713, the California Independent System Operator Corporation ("CAISO") hereby submits this Request for Rehearing of the Commission's order issued on September 19, 2005, 112 FERC ¶ 61,310 (2005) ("September 19 Order") in the above captioned docket.

In support hereof, the CAISO respectfully states as follows:

I.   STATEMENT OF ISSUES

   1. The CAISO respectfully submits that the September 19 Order erred in requiring the CAISO to determine which bids to mitigate in the pre-IFM runs based on bid-in load -- not on the CAISO's forecasted load -- in MRTU Release 1. Because of the complex and multiple issues involved, implementing this change will be difficult and will result in a delay in implementation of MRTU Release 1 until after the Summer of 2007. Although merely incorporating the software changes would result in a delay until sometime during summer 2007, it would not be prudent to require the CAISO to implement a complete market overhaul during the peak summer months. Contrary to the assumptions in the September 19 Order, applying mitigation in the pre-IFM runs based on the CAISO's forecasted load for the limited duration of MRTU Release 1 will not have a systemic bias against suppliers. Mitigation based on forecast demand can potentially result in either over-mitigation or under-mitigation, depending on the interplay between bid-in demand and supply. The impact on suppliers from using forecasted load, as opposed to bid-in load, is indeterminate and is likely to be as

favorable to them as unfavorable, depending on supply and demand conditions. Further, merely substituting bid-in demand for forecast demand into the process will not eliminate the potential for over-mitigation or under-mitigation. In any event, the concerns raised by LECG, Inc. regarding the CAISO's use of forecasted load rather than bid-in load in the pre-IFM process were with under-mitigation, not over-mitigation[1]. LECG concluded that it was not essential to change this aspect of the market design for MRTU Release 1.[2] Accordingly, the Commission should grant rehearing and rule that (1) in MRTU Release 1 the CAISO is not required to apply mitigation based on bid-in load in the pre-IFM runs, and (2) the CAISO should implement such change to its pre-IFM process as part of MRTU Release 2, along with other changes to avoid potential over- or under- mitigation when using bid-in load in pre-IFM.

II.   BACKGROUND

On May 13, 2005, the CAISO filed with the Commission a further

amendment to its Comprehensive Market Design Proposal ("MRTU") ("May 13

Filing"). Therein, the CAISO requested that the Commission grant conceptual

approval to allow the CAISO to implement as part of MRTU the following design

elements: (1) the clearing of demand bids at the LAP level; (2) a revised HASP;

and (3) a package of market power mitigation measures to be in place upon

implementation of MRTU in February 2007. In particular, the May 13 Filing set

forth the CAISO's proposed process for forward market (*i.e.,* Day-Ahead) local

market power mitigation.[3] The proposal contained several revisions to the

mitigation process proposed in the CAISO's Amended Comprehensive Market

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[1]   This concern for potentially systematic under-mitigation was to some extent addressed by subjecting the remaining capacity of the mitigated resource to bid mitigation, rather than just the incremental portion. As discussed below, this change helps reduce the gap between bid mitigation based on forecast and bid-in load in the pre-IFM.

[2]   The CAISO fully vetted this issue internally last Spring in response to the LECG Report and concluded that if changes in some other elements of the design were made, using bid-in demand in Passes 1-2 would be the preferred solution. However, the CAISO recognized that such change in design would require modifying several aspects of the pre-IFM, including a adoption of a different approach to RMR. As such, the CAISO could not accommodate the change in MRTU Release 1. The CAISO's intent has been to implement a change consistent with the September 19 Order in MRTU Release 2.

[3]   Because HASP and Real-Time processes are driven by the CAISO's load forecast, bid mitigation for local market power in HASP and Real-Time is based on CAISO's forecast load, *i.e.*, mitigation based on bid-in load is moot in HASP and Real-Time processes.

Design Proposal that was filed on July 22, 2003. Under the revised process, the CAISO would identify the supply bids that require Day-Ahead local market power mitigation based on the pre-IFM runs using the CAISO's forecast load.[4] In the IFM, the CAISO would then apply mitigation based only on scheduled and bid-in demand, *i.e.,* only to the extent that a supply bid that had been identified as requiring mitigation was required to meet that demand.

On July 1, 2005, the Commission issued an order addressing the May 13 Filing. *California Independent System Operator Corporation,* 112 FERC ¶ 61,013 (2005). Therein, the Commission granted conceptual approval to the majority of the market design elements proposed in the May 13 Filing, required modifications of some aspects of the May 13 Filing, and solicited additional information and explanation of other portions of the CAISO's proposal. In the July 1 Order, the Commission approved the CAISO's revised market optimization process. July 1 Order at P 162.

However, in the September 19 Order, in response to IEP's and Williams's request for rehearing, the Commission reversed course and ruled that market power mitigation should only be applied based on bid-in load, not on the CAISO's forecasted load.[5] September 19 Order at P 69. The Commission stated that there was little justification for the additional mitigation of supply bids for energy

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[4] There was a good reason for this approach, namely, it would closely resemble the load conditions expected in Real-Time and thereby provide the best estimate, at the time of the Day-Ahead market, of how much supply from RMR resources and how much supply from non-RMR resources in constrained areas would be needed in Real-Time

[5] The pre-IFM process performs two functions: (a) RMR pre-dispatch determination; and (b) determination of bid mitigation (for supply, whether or not RMR, that is indispensable to meet non-competitive local requirements). Determination of RMR pre-dispatch based on forecast rather than bid-in load is consistent with the intent and usage of RMR. The issue addressed by the Commission in the September 19 Order pertains only to the latter function of the pre-IFM, *i.e.,* the determination of bid mitigation.

based on CAISO demand forecasts rather than the demand by market

participants in the Day-Ahead market. *Id.*

III. THE COMMISSION ERRED IN REQUIRING THE CAISO TO APPLY MITIGATION BASED ON BID-IN LOAD IN THE PRE-IFM RUNS AS PART OF MRTU RELEASE 1

The Commission should not require the CAISO to apply mitigation based

on bid-in load in the pre-IFM runs as part of MRTU Release 1. Rather, the

Commission should direct the CAISO to make this change as part of MRTU

Release 2, as the CAISO has intended to do anyway. The CAISO cannot

incorporate the necessary changes into MRTU Release 1 without delaying

MRTU implementation. The CAISO's evaluation of this issue shows that MRTU

Release 1 would likely be delayed until sometime during the summer of 2007 if

the CAISO is required to base the pre-IFM runs on bid-in load. For obvious

reasons, the CAISO does not want to implement an entirely new market design

during the summer peak-period months and thus would have to delay actual

MRTU implementation until after Summer 2007.

Basing the pre-IFM runs on bid-in load is not a trivial change; indeed, it is

a significant one. The change raises multiple, complex and technical issues that

are not easily resolved. Further, implementing the change will have significant

software implications. The CAISO cannot simply substitute bid-in demand for

forecasted demand in the pre-IFM runs because the pre-IFM runs have multiple

purposes, only one of which is to determine the need for local market power

mitigation. As indicated above, the pre-IFM runs also determine appropriate

levels of RMR pre-dispatch. The CAISO cannot use bid-in load for RMR pre-

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dispatch in the pre-IFM run; it must use forecasted load. If the CAISO were

required to use bid-in load, it would have to develop an alternative process for

determining the correct level of RMR pre-dispatch consistent with the terms of

RMR contracts. Also, if the CAISO were to run the pre-IFM based on bid-in load,

the CAISO would have to replace the use of highly negative DEC bids in pre-IFM

Pass 2 for Pass 1 supply schedules with another process. This existing feature

(*i.e.,* negative DEC bids) works only if the load in Pass 1 and Pass 2 are the

same, which is true when load forecast is used, but not true with bid-in demand

(the total load that clears Pass 2 may be different from Pass 1 if bid-in load is

used).

Thus, using bid-in demand to determine the need for local market power

mitigation is not as simple as substituting one set of demand quantities for

another in the pre-IFM runs. To implement this change the CAISO will have to

carefully consider the linkages between this feature and other aspects of Day-

Ahead determination of local needs, and fully vet potential solutions with

stakeholders. The CAISO has begun identifying possible solutions and has

discussed the matter with its software vendor.[6] One potential solution would be

to move RMR pre-dispatch identification partially out of the pre-IFM and into the

RUC process, thereby allowing the pre-IFM to be based on bid in load. This

option would require multiple changes to the existing market software as well as

development of an additional pass in RUC whereby competitive transmission

constraints would first be applied in the RUC, followed by all transmission

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[6]   The CAISO has not explored in detail all of the possible alternatives, nor has it discussed
the issue with stakeholders.

constraints, in order to identify which RUC "dispatches" were required for local reliability and RMR. Implementation of this change would require changes in all parts of the software development cycle, including user interface displays, system set up input requirements, database schema, software optimization engine, and post-processing of "Final Pass" bids to the IFM/RTM market processes, and an additional pass in the RUC market. Further, this change would require additional time and resources to be allocated for integration, testing and documentation, thereby delaying MRTU Release 1 until sometime during the Summer of 2007. As indicated above, because it simply is not prudent to "drop" a completely new market design during the peak summer months, the CAISO would have to delay MRTU implementation until after Summer 2007. In any event, the CAISO recognizes that a change in the pre-IFM process is appropriate for the long-term, and the CAISO has intended to implement such change as part of MRTU Release 2.

The CAISO also submits that it is not critical that the change to the use of bid-in load in the pre-IFM process be incorporated into MRTU Release 1. The Commission's decision appears to be based on the erroneous premise raised by IEP and Williams that the CAISO's proposed approach for MRTU Release 1 contains a systemic bias toward over-mitigation and that significant over-mitigation will occur if the CAISO identifies the supply bids subject to mitigation during the pre-IFM runs based on CAISO forecasted load rather that bid-in load.[7]

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[7] The September 19 Order restates IEP's and Williams' claim that, under the CAISO's proposed market power mitigation measures, all bids dispatched from a given unit in Pass 2 of the IFM are deemed to be non-competitive if any bid dispatched from that unit is mitigated. September 19 Order at P 64. That is incorrect. The portion of the bid curve below the accepted

That is not the case. Although the pre-IFM identifies supply bids subject to mitigation based on forecasted load, the CAISO's IFM run applies mitigation based on scheduled and bid-in demand. Further, suppliers can re-bid the uncleared portion of their bid curves in the Hour-Ahead Scheduling Process.[8] Whether or not the mitigated bids are used in IFM, depends on the interplay between supply and demand bids in IFM. Depending on this interplay, IFM may not use some of the bids that are mitigated in load forecast based pre-IFM, or it may use some unmitigated bids that would have been mitigated if forward market power mitigation were based on bid-in load. The bottom line is that the approach proposed in the May 15 Filing does not systemically over-mitigate, or under-mitigate, resources. Thus, the premise underlying IEP's and Williams' claims, and the Commission's decision is incorrect. Moreover, simply changing the load used in pre-IFM (*i.e.,* using bid-in load rather than forecast load) without changing other elements of the pre-IFM, IFM, and RUC design would still result in unpredictable over- or under- mitigation.

Pass 1 level is not mitigated under such circumstances. *See* May 13, 2005 Filing, Transmittal Letter at 54. The September 19 Order also notes IEP's and Williams' claim that, as a result of the CAISO's pre-IFM runs, "LSE's will not only be afforded local market power mitigation for load that they may not even have bid into the day-ahead market, but for every remaining MW of the unit's operating range, regardless of the reason for which the unit might be subsequently dispatched." September 19 Order at P 65. This claim, too, is incorrect because all energy bids that are not accepted can be revised by the supplier for re-submission in subsequent markets.

[8]   As proposed by the CAISO, IFM (pass 3) commits supply resources with local market power and schedules energy from them based on mitigated energy bids only to the extent such resources are determined by the IFM optimization to be needed to clear scheduled and bid-in demand. After the IFM optimization is completed (pass 3) based on scheduled and bid-in demand, any mitigated bids not accepted in the IFM are no longer used. For the RUC process (pass 4), energy bids are not used at all. For the Real-Time market, SCs may submit entirely new energy bids for (1) any resources not committed in the IFM, (2) the capacity associated with Ancillary Services procured in the IFM, (3) the capacity associated with any capacity procured in RUC (pass 4), and (4) any capacity associated with resources committed in the IFM that was not scheduled for energy in the IFM.

The CAISO's LMPM proposal, including the use of forecasted load in determining mitigation in the Pre-IFM, results in a very targeted application of market power mitigation and respects prices and quantities that have cleared under competitive conditions. While some anomalies may result with either a forecast-based or a bid-in-based approach, the use of forecast load in the Pre-IFM does not itself impose systematic over-mitigation or under-mitigation of resources in the Day-Ahead market. However, such approach is critical to determining RMR pre-dispatch levels in the Day-Ahead market within the existing market design.

The CAISO's conclusion that it is not imperative that MRTU Release 1 use bid-in load in the pre-IFM passes. This is supported by the *Comments on the California ISO MRTU LMP Market Design* prepared by LECG, Inc. ("LECG Report").[9] In that regard, the LECG Report identified 12 potential problems with the proposed MRTU design "in rough order of priority". LECG Report at 1-4. Problem No. 10 identified by LECG was

> [t]he use of extreme decremental (DEC) bids for Pass 1 schedules in Pass 2 of the DAM, with the intent of "minimizing" incremental (INC) adjustments and the use of forecast load in the market power passes of the DAM (Passes 1 and 2) and bid load in the scheduling and pricing pass (Pass 3) of the DAM.

Id. at 3.[10] LECG did not identify this issue as one that "ought to be addressed prior to the implementation date." *Id* at 2. Rather, LECG concluded that "[w]hile it

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9   The LECG Report was previously filed with the Commission as Attachment C to the CAISO's May 13, 2005 Filing.

10   LECG thought that this approach "could render the RMR dispatch and local market power mitigation process ineffective in some circumstances." LECG Report at 4. LECG also indicated that it might not fully promote least-cost procurement. *Id.* at 86.

would be desirable in principle to address these features of the market design, it is uncertain whether these latter six features of the market [including the use of forecast load instead of bid in load in the pre-IFM runs] will, in practice, have much adverse impact in the near term." *Id* at 4.

Following issuance of the LECG Report, the CAISO re-visited the issue of using forecasted load in the pre-IFM runs rather than bid-in load. The CAISO acknowledged LECG's concern that this approach might not result in an optimal commitment of resources and that it might be possible that unmitigated bids would be used to relieve local constraints in the IFM. *See* CAISO White Paper entitled *Comprehensive Market Redesign Update,* at 16-17, Attachment A to the CAISO's May 13, 2005 Filing. However, the CAISO concluded that the impact would not be significant because, to the extent that bid-in load cleared the IFM at a level below the forecast, there would likely be fewer constraints than with the load forecast, and therefore less need for dispatching unmitigated bids to relieve local constraints. White Paper at 17. Accordingly, the CAISO concluded that revising the pre-IFM process to use bid-in load did not warrant the additional risk to the MRTU Release 1 implementation schedule.[11] *Id.* For the reasons set forth above, that conclusion is still the appropriate one. Accordingly, the Commission should not require the CAISO to use bid-in load in the pre-IFM runs in MRTU Release 1, but should direct the CAISO to implement such change as part of MRTU Release 2, as the CAISO has intended to do.

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[11] The CAISO stated that it would address and remedy the issue in MRTU Release 2. White Paper at 31.

IV. CONCLUSION

For the foregoing reasons, the Commission should grant rehearing of its September 19 Order and not require the CAISO to apply market power mitigation in the pre-IFM runs based on bid-in load in MRTU Release 1.

Respectfully submitted,

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Date: October 18, 2005

CALIFORNIA ISO

October 18, 2005

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 Nos. ER02-1656-029**

Dear Secretary Salas:

Enclosed please find an electronic filing of a Request for Rehearing of The California Independent System Operator Corporation.

Thank you for your attention to this filing.

Respectfully submitted,

/s/ Anthony J. Ivancovich
Anthony J. Ivancovich

Counsel for the California Independent
    System Operator Corporation

CERTIFICATE OF SERVICE

I hereby certify that I have this day served the foregoing document upon each person designated on the official service list for the captioned proceeding, in accordance with Rule 2010 of the Commission's Rules of Practice and Procedure (18 C.F.R. § 385.2010).

Dated at Folsom, California, on this 18th day of October, 2005.

/s/ Anthony J. Ivancovich
Anthony J. Ivancovich