

May 19, 1998

**The Honorable David P. Boergers  
Acting Secretary  
Federal Energy Regulatory Commission  
888 First Street, N.E.  
Washington, D.C. 20426**

**Re: California Independent System Operator Corporation, Docket  
Nos. EC96-19-\_\_\_\_ and ER96-1663-\_\_\_\_**

**Amendment No. 8 to the ISO Operating Agreement and Tariff,  
including the ISO Protocols**

***Relating to the Issue of Inadequate Regulation Reserves Bids  
for Maintaining ISO Control Area Reliability***

Dear Secretary Boergers:

Pursuant to Section 205 of the Federal Power Act ("FPA"), 16 U.S.C. § 824d, the California Independent System Operator Corporation ("ISO")<sup>1</sup> respectfully submits for filing an amendment ("Amendment No. 8") to the ISO Operating Agreement and Tariff, including the ISO Protocols ("ISO Tariff").<sup>2</sup>

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<sup>1</sup> Capitalized terms not otherwise defined herein are defined in the Master Definitions Supplement, ISO Tariff Appendix A, as filed August 15, 1997.

<sup>2</sup> This numbering system refers to amendments made in 1998, **after** the Commission's December 17, 1997 order conditionally accepting the ISO Tariff, as amended, for filing. The Commission already has acted upon Amendment Nos. 1-6. See California Independent System Operator Corp., 82 FERC ¶ 61,312 (1998) (conditionally accepting Amendment No. 1 with modifications and rejecting Amendment Nos. 2 and 3); California Independent System Operator Corp., 82 FERC ¶ 61,327 (1998) (conditionally accepting Amendment Nos. 4 and 5 without modifications and No. 6 with modification). Amendment No. 7, filed March 31, 1998 in Docket Nos. EC96-19-023 and ER96-1663-024, remains pending before the Commission although the ISO has acted in accordance with that Amendment since the operations date. Amendment No. 7 proposes certain changes concerning Congestion Management, Adjustment Bids, the ISO's Balancing Energy software and Reliability Must-Run charges.

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Amendment No. 8 involves a proposed interim solution to the significant system reliability concerns and high economic costs resulting from the lack of adequate Regulation reserves bids in the ISO Ancillary Services market, which has occurred consistently since the ISO Operations Date. Amendment No. 8 also proposes certain clarifications regarding the ISO's procedures for dispatching Generating Units providing Regulation, the need for which became apparent during the stakeholder discussions that preceded the filing of Amendment No. 8.

The ISO respectfully requests that the Commission accept Amendment No. 8 for filing and make it effective as of May 19, 1998. Additionally, because of the persistent risks to system reliability for which Amendment No. 8 proposes an immediate interim solution, the ISO respectfully requests that the Commission take expedited action with respect to Amendment No. 8.

Included with this submittal are:

- Amendment No. 8 (providing only the revised excerpts from the ISO Tariff, including the ISO Protocols, blacklined to show changes from the ISO's April 1998 Tariff Posting (**Attachment A**); and
- a notice suitable for publication in the Federal Register (**Attachment B**).

## I. NOTICES

The following individuals should be placed on the Commission's official service list for this submittal:

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## **II. BACKGROUND**

In every hour of every day since the ISO Operations Date of March 31, 1998, the ISO has conducted four hour-ahead and four day-ahead auctions for Ancillary Services. These four services are: Regulation, Spinning Reserves, Non-Spinning Reserves and Replacement Reserves. Each is a capacity-only market. Bidders must also include an energy bid with each capacity bid. The Energy Bids in the Regulation template are used for validation only and the Energy Bids for Spinning, Non-Spinning and Replacement are added to the Balancing Energy and Ex-Post Price ("BEEP") stack for use as needed in the real-time balancing Energy market. The difference in treatment of these Energy Bids is one of the significant causes of the problem that is the subject of this Amendment.

For some time, the ISO has been concerned about the "thinness of Ancillary Services markets." While these markets had insufficient bids in a number of hours in early days of operation recently<sup>3</sup>, the bids have been adequate for most of the hours in each day for all but Regulation. In nearly all of the hours for each operating day, the results of the Ancillary Services auction have left the ISO with insufficient Regulation, in the range of 60 to 100% deficient. This results in a significant reliability concern for the ISO. As the

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<sup>3</sup> The bids for Spinning Reserve have usually been 0-20% deficient in the hours of a day, the bids for Non-Spinning Reserves 0-10% deficient, the bids for Replacement Reserves 0-5% deficient.

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Commission is aware Regulation is a significant Ancillary Service that is essential to the reliability of the grid in Energy hour of operation. Unlike Spinning Reserve, Non-Spinning Reserve and Replacement Reserve which are usually only called upon for loss of a generator or a significant under forecasting of control area load. Regulation is called an Energy hour of the day to allow the ISO to meet the NERC control performance (CPS1 and CPS2) for reliable control area operation.

The ISO experienced thin Ancillary Services bids during market demonstration testing that preceded the ISO Operations Date. Accordingly, the ISO developed, and has routinely implemented since the ISO Operations Date, a contingency plan in which shortfalls in Ancillary Services, including Regulation, are covered by calling on Reliability Must-Run ("RMR") Generating Units.

#### **A. Impact of Insufficient Regulation**

As noted above, Regulation service is required to balance loads and generation on a continuous basis in every hour of operation. Without adequate Regulation, the reliability of the Control Area cannot be assured and the ISO's ability to satisfy Western Systems Coordinating Council ("WSCC") Minimum Operating Reliability Criteria ("MORC") and North American Electric Reliability Council ("NERC") Control Performance Standard ("CPS") will continue to be threatened.

The WSCC's MORC requires that the ISO satisfy the NERC CPS. The NERC CPS is the measure against which all control areas are evaluated. A control area that does not comply with CPS is not adequately controlling its

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system and imposing burdens as its neighboring control areas. The NERC CPS is composed of two measures. The first measure (CPS1) is a statistical measure of Area Control Error (ACE) variability and its relationship to frequency error. The second measure (CPS2) is a statistical measure designed to limit unacceptably large net flows in or out of the Control Area.

The ISO triggers CPS2 violations typically during the morning and evening load ramps. The Control Area ramp in the heavy morning pull and in the evening drop-off has typically been between 40 and 70 MW per *minute*. In addition the market behavior creates large interchange ramps at least twice each day that only partially coincide with control area load increases regulating units need to be able to make sufficient room to allow these schedules to happen as scheduled by the market. For example: if at 6:00 AM the inbound ramp from neighboring control areas is 2000 MW and the load increase during the 20 minute ramp from 5:50 to 6:10 may only be 600 MW. The ISO must find 1400 MW of regulating units that can decrease output quickly (1400 MW in 20 minutes) to make room for the Energy coming in. During the additional time between 6:10 and 6:50 when the next ramp starts the control area loop will increase and absorb the remaining 1400 MW of the 6:00 increase. At 6:50, the process repeats itself as it will each hour until the morning pull is over. The process reverses itself at night as the load falls between 9:00 PM and 1:00 AM. To follow these ramps effectively, the ISO must use fast-moving units (typically hydro) to regulate during the ramps. The RMR Units are, however, mostly slower-moving fossil units with ramp rates of between 2.5 and 7 MW per minute. These RMR units therefore do not provide sufficient regulation speed (ramp rate)

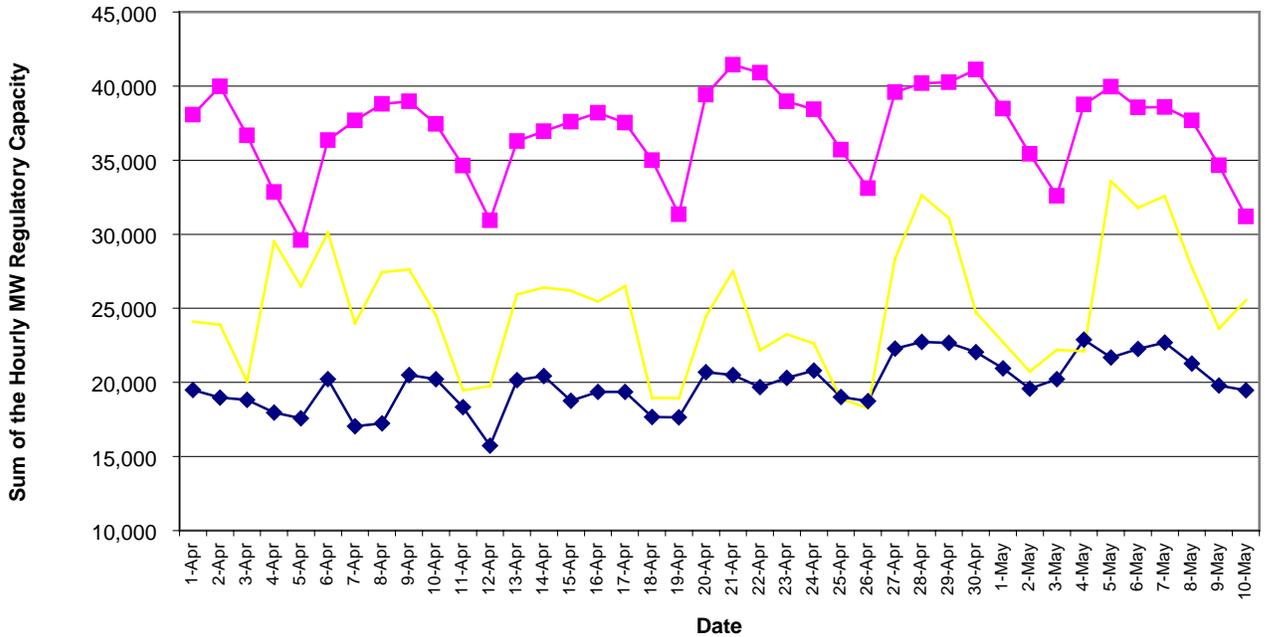
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to allow the ISO to follow the load without incurring violations of the CPS2 criteria.

The two graphs shown below clearly indicate the problems experienced by the ISO with respect to the Regulation market. The bottom line on Graph No. 1 indicates the absolute minimum Regulation requirements for the ISO during fairly smooth hours without heavy load ramps. The top line indicates the preferred level of Regulation capacity to allow the ISO to fully meet the CPS2 performance criteria including during heavy ramp hours. The middle line indicates the level of market bids for Regulation service plus the amount of capacity relied upon from RMR Generating Units for Regulation.

## **GRAPH 1**

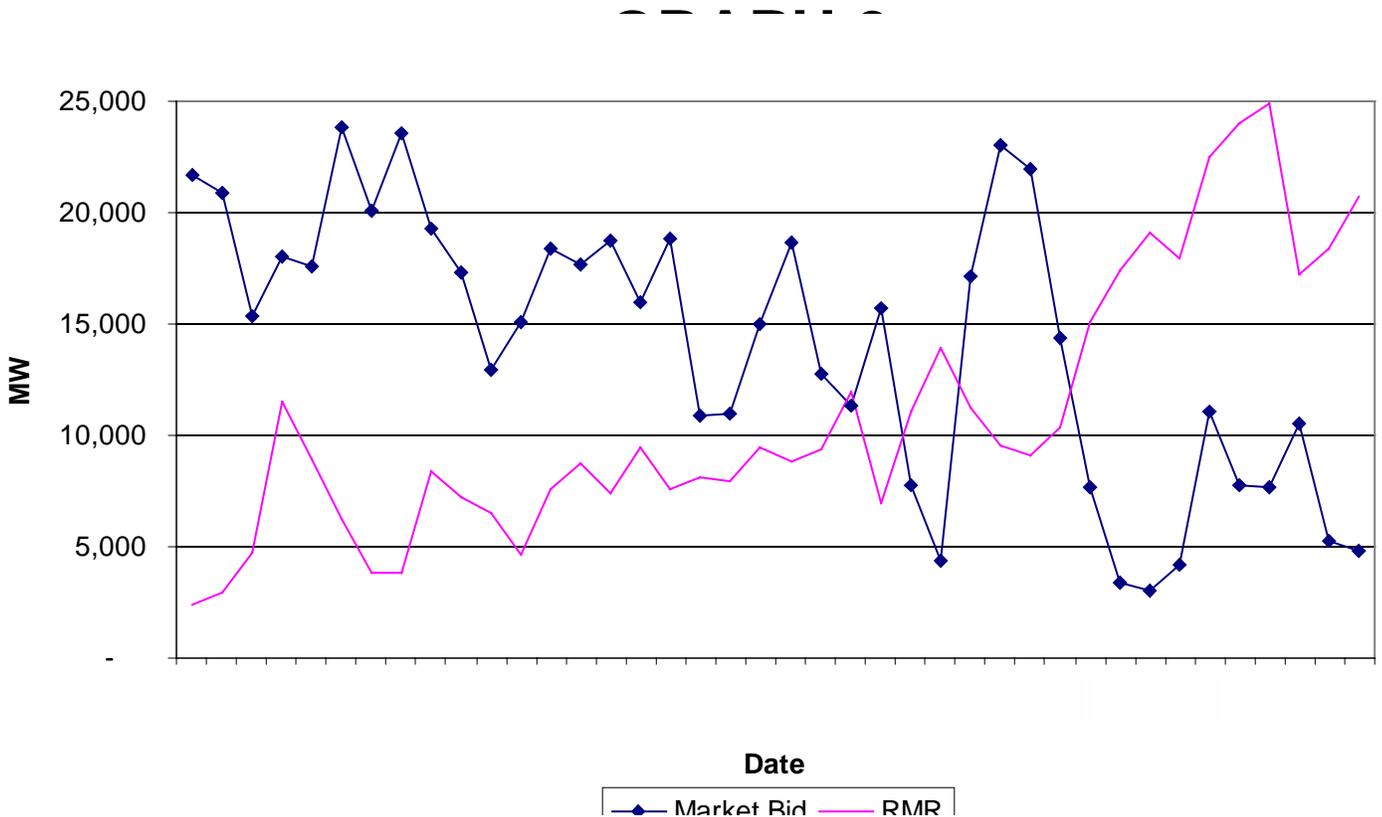
**The sum of capacity bid by the market and RMR purchased by the ISO consistently falls short of the preferred regulation requirements (5-10% forecasted load).**



As Graph 1 indicates, on numerous occasions the ISO has come dangerously close to falling below the absolute minimum capacity requirements for Regulation. Not surprisingly, without adequate Regulation in fast-moving units, the ISO has had considerable difficulty meeting CPS2 requirements. For example, on May 1 the ISO recorded 24 CPS2 violations due primarily to a lack of regulating capacity. Similarly, on May 4, the ISO recorded 34 CPS2 violations due predominantly to a lack of Regulation capacity. Of greater concern, however, is the potential effect on reliability if the ISO continues to incur CPS2 violations during the summer peak. During those periods, CPS2 violations are of greater concern because the “margin for error” is reduced as load increases and

line loadings put greater stress on the system. It is for that reason that an immediate, *albeit* temporary measure must be implemented prior to the summer months.

Unfortunately, as suggested by Graph No. 2 below, the problems associated with a lack of regulating capacity are likely to increase in the future. Graph No. 2 shows that from April 1 through May 14 – *i.e.*, over virtually the entire period of ISO operations -- the amount of market-bid regulating capacity has steadily declined. As a result, the ISO has been forced to rely on a steadily increasing amount of RMR capacity to satisfy its Regulation requirements. Indeed, because of the consistent shortfall in bids for Regulation reserves, approximately 75% of all ISO requirements for Regulation since March 31 have come from RMR Generating Units. In many hours, the ISO has had to procure 100% of Regulation from RMR Generating Units.



## **B. Relationship between the Imbalance Energy in Market and Regulation**

Graph No. 1 clearly indicates that there is a significant difference between the amount of Regulation capacity bid into the market (plus the RMR capacity) and the preferred level of regulating capacity. The ISO Imbalance Energy market is designed to provide a resource to provide or absorb energy to allow the ISO to follow load between Hourly Schedule changes, make up for load forecasting errors and make up for loss of generation. The Imbalance Energy market also is the resource for the ISO to use to attempt to return regulating units back to their preferred operating point to restore the full upward and downward regulating range of one unit. There are, however some communication and timing issues which impede full and timely utilization of the Imbalance Energy market to perform these functions. The sequence in real time occurs as follows. In order to instruct (increment or decrement) Generators that submit Supplemental Energy bids, the ISO will manually instruct by phone each Generator through its Scheduling Coordinator<sup>4</sup> unless the generator is on AGC. For example, in order to instruct IOU-owned Generating Units, the ISO must first

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<sup>4</sup> For a detailed operational timeline that may assist in understanding the examples set forth herein refer to ISO Scheduling Protocol sections 3, 9 and 11.

call the PX (the Scheduling Coordinator for the IOUs), which then contacts the respective IOU's control center, which then contacts the Generator. Completing this chain of communication can take as long as ten to fifteen minutes. During that time the ISO may see load swings of up to 600 MW. Thus the ISO cannot rely on the manual instruction of Generating Units in order to reliably match Generation and Load.

Another feature of the RMR units is that they are scheduled "outside" the market. The Balanced Day-Ahead Schedules submitted by Scheduling Coordinators do not include the RMR schedules. Each RMR unit placed on line for any reason creates the need for the ISO to turn to the Imbalance Energy market to exercise decremental bids ("decs") to make room for the Energy output of the RMR unit constrained on line. Thus, the more RMR units constrained on line, the more the need for decremental Supplemental Energy. This condition of being "outside" the market will continue until the PX is able to participate in the Hour-Ahead Market. When this happens, the ISO will require all SCs will be required to include RMR dispatch in their Hour-Ahead Schedules.

The balanced schedules submitted by Scheduling Coordinators include Adjustment Bids that the ISO may call to resolve congestion; but the ISO must exercise those bids in pairs, leaving a Scheduling Coordinator in "balance." Awarding Ancillary Services bids has no effect on the balance because they are capacity-only. The only opportunity for the ISO to call on generation without having to call on a Scheduling Coordinator for an offsetting amount of load is in real-time for Supplemental Energy.

A dec bid, if called, obligates the bidder to back down a unit (or increase a load). Without adequate dec bids in the BEEP stack, the ISO is even more dependent on Regulation when generation exceeds load, as it will when RMR units are injected after the Day-Ahead Schedules are final, since other than dec bids, Regulation is the only market tool available to the ISO to solve Overgeneration in real time.<sup>5</sup>

To illustrate the pressure on the Imbalance Energy market consider the following example. A 300 MW unit may have the following constraints. Absolute minimum load may be 40 MW, AGC minimum load may be 70 MW. In order for the unit to be able to regulate in both the upward and downward directions, the unit maybe loaded at 150 MW. If such a unit can move under regulation @ 3 MW/min and the ISO needs 60 MW/min regulation speed then 20 such units would be needed if each unit were loaded at 150 MW to provide this service then 3000 MW of decremental bids would be needed to accommodate the Energy output of these units. This example further illustrates the need to get fast moving hydro units in the regulation market since they satisfy the need best since they have ramp rates of up to 50 MW/min.

### **C. Cost Implications of RMR vs. Regulation Bids**

The costs associated with calling on RMR Generating Units for purposes of addressing Ancillary Services shortfalls are significant. These costs exceed

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<sup>5</sup> This issue will be mitigated when the California Power Exchange ("PX") is able to accept hour-ahead market bids, because the ISO will then require the PX to include RMR units that are called in its hour-ahead schedule. The problem will be further reduced when the PX is able to submit revised bids after the ISO runs Congestion Management for the day-ahead market. That will allow the ISO to designate RMR units after the initial day-ahead schedules are set, but have the units included in the final day-ahead schedule of the PX – avoiding the need to

any capacity bid cap required by the Commission and include such other costs as reliability payments under the RMR contracts. For example, the average RMR reliability payment is \$60.03/MWh. Ancillary Service Regulation capacity bids (and payments), by contrast, are capped at \$9.55/MW.

Additionally, the ISO can incur additional cost due to the primary purpose for RMR Generating Units being to solve local area reliability problems associated with maintaining acceptable voltages and line loadings under single-contingency outage conditions. The ISO's use of RMR Generating Units to address Ancillary Service shortfalls involves a Control Area reliability requirement as opposed to a local area requirement and uses valuable starts and Energy of RMR Generating Units that could be needed for actual local area reliability needs at a later time. If the ISO has no choice but to call on the RMR unit later as well, it must pay a substantial penalty for exceeding the limits.

#### **D. Causes of Lack of Regulation Bids**

The ISO believes that a significant cause of the dearth of Regulation bids relates to the design of the Regulation market and its interplay with the other markets – all of which provide opportunities for units – in particular low energy cost units such as hydro – to make more money selling in anything but Regulation. Specifically, all of the Ancillary Services bids into the ISO's auctions, including Regulation, must be capable of providing Energy in real time, but as noted above, the ISO calls on real time balancing Energy, except energy associated with regulation, in economic order, whether or not it is Energy associated with an Ancillary Services capacity award. However, all of the bid

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displace other energy through bids in real-time.

Ancillary Services, except for Regulation, are paid for Energy based on Dispatch instructions at marginal interval prices (*i.e.*, at the highest 10-minute price for incremental Energy and at the lowest 10-minute price for decremental Energy). This means that an Ancillary Services bidder will always get paid at or above their bid price for Energy delivered from all other Ancillary Services. By contrast, Regulation Energy deviations are treated as uninstructed deviations and settled at the Hourly Ex Post Price.

This approach results from the market design -- Regulation is considered a "zero-Energy" service. Regulating units are intended to be returned to their "preferred operating point" by calls on the real time balancing Energy incremental and decremental bids. This means that while the unit may be moved up and down, its resulting Energy output over the hour for Regulation is expected to be a net zero.

In practice, units providing Regulation service produce substantial amounts of Energy in both upward and downward directions depending on the ramp and system needs. Therefore, in a particular hour, the Generating Unit's actual output can differ significantly from its scheduled output (either higher or lower). These deviations are settled at the Hourly Ex Post Price, representing a risk to bidders of Regulation reserves.

For example, the 300 MW Generating Unit referred to earlier may have a 150 MW Energy schedule and be selected to provide Regulation of 50 MW up and 50 MW down (at a price of \$7/MW, for instance, taking into account cost caps) and, based on ramps and other system needs, could end up generating only 100 MWh for the hour. This is not at all an unlikely outcome given the

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significant needs for decremental Energy as explained earlier. The Scheduling Coordinator would be paid \$700 for the Regulation capacity. If the Hourly Ex Post Price is \$20/MWh, the Scheduling Coordinator would incur an Imbalance Energy charge of \$1100. As a result, it costs the Scheduling Coordinator money to bid the resource into the ISO's Regulation auction. The potential for such outcomes creates disincentives for Scheduling Coordinators to bid their Generating Units into the ISO's Regulation reserve auction.

The capacity bid caps approved by the Commission also diminish incentives for Market Participants to bid. For example, when the PX Energy market price is expected to be higher than the approved bid cap, the Scheduling Coordinator will choose the PX Energy market since the ISO offers no incentives to bid the resource as Regulation but, instead, creates the possibility of the Scheduling Coordinator losing money based on the Hourly Ex Post Price. This is particularly true for Hydro units which have very low fuel cost. These are exactly the units most needed for regulation yet they are the units most likely to lose money in the "Decremental" situation in which the ISO now operates. If Market Participants were allowed to bid Ancillary Services at market prices, this problem could be mitigated in significant degree. However, this is not expected to occur within the next several weeks or months. In the meantime, as evidenced by the preceding explanations, the ISO requires an immediate solution to the problem of not having a sufficient supply of bid Regulation reserves.

### **III. THE NATURE OF AMENDMENT NO. 8**

#### **A. Interim Regulation Energy Payment Adjustment**

Clearly, thought needs to be given to whether there are fundamental design flaws in the Regulation market. The stakeholders want to be actively involved in those considerations. Reliability will not, however, wait for that process to be concluded. The key considerations were (1) the solution involve no software changes and reasonable manual work-arounds; (2) the solution be roughly fair; and (3) the solution not create significant gaming opportunities.

Consistent with these principles, the ISO Board approved the proposed change to the Tariff to provide for an additional Energy payment in connection with Regulation service. In developing this approach, the ISO undertook extensive consultation with stakeholders, including the evaluation of three separate options, each with a number of possible variants, which were discussed at numerous meeting between ISO staff and stakeholders.

At its meeting on May 11, 1998, the ISO Governing Board, after consideration of all of the options previously discussed with stakeholders, chose to institute, on an interim basis, a Regulation Energy Payment Adjustment ("REPA"). The REPA is an equation intended to represent the additional value of Regulation Energy. It is equal to the energy potentially available in the Regulation bid ( $R_{UP}$  plus  $R_{DOWN}$ ) times the greater of \$20/MWh or the Hourly Ex Post Price. The total Energy available ( $R_{UP} + R_{DOWN}$ ) may be adjusted to be only  $R_{UP}$  or only  $R_{DOWN}$ , a percentage of  $R_{UP}$  or  $R_{DOWN}$  or the sum of  $R_{UP} + R_{DOWN}$  depending on the needs, for each direction of Regulation Service, of the ISO. The product will be adjusted by a factor, "C," of between 0 and 1. The figure of

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\$20/MWh approximates the ISO's average price for Imbalance Energy<sup>6</sup> and represents a floor on the price of Imbalance Energy provided from Regulation resources. This is particularly important to assuring the ISO's ability to maintain system reliability in Overgeneration conditions, when the Imbalance Energy price (the Hourly Ex Post Price), can approach or be zero in some hours.

The factor "C" in the REPA formula is based on the ISO's assessment of the relative amounts of incremental and decremental activity occurring over the hour and is intended to be set at the level necessary to attract sufficient resources into the market. This factor will initially be set at 1 for all hours, but the ISO proposes that it have the ability to modify the factors relating to upward and/or downward Regulation both in amount (between 0 and 1) and in its application to particular times of the day, subject to prior approval of any such modification by the ISO Governing Board. This will enable the ISO to provide the necessary incentives to ensure that it has the means available to it to secure system reliability in differing system conditions. Market Participants will be advised of any such modification by a notice issued by the ISO's Chief Executive Officer and posted on the ISO's "Home Page."

The REPA is designed to provide an economic incentive for Generators to bid into the ISO's Regulation market. The REPA accomplishes this by

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<sup>6</sup> This \$20/MWh component of the REPA should be contrasted with the \$60.03/MWh average RMR reliability payment. As the ISO's earlier explanations make clear, if the Commission does not accept the REPA, the ISO will have no choice but to continue resorting primarily to RMR Generating Units to assure system reliability.

compensating Generators for the full range of energy adjustments that they produce when providing Regulation.<sup>7</sup>

An illustration of how the REPA provides an economic incentive can be seen by using a simple example. In this example, a Generator bidding at its Commission-imposed capacity reservation cap of \$7.00 per MW is chosen to provide a 100 MW upward adjustment and a 50 MW downward adjustment to its scheduled operating level during an hour. For the first 30 minutes of the hour, the Generator is instructed to move upward by 100 MW. For the second 30 minutes, the Generator is instructed to move to 50 MW below its scheduled operating level.

Current ISO procedures call for the Generator providing Regulation to receive payment for the net energy deviation at the average Hourly Ex Post Price. For example, if the average hourly price were \$17/MWh, the generator would receive \$425 for the net energy of 25 MWh. (The upward adjustment of 100 MW for 30 minutes minus the 30 minute 50 MW downward adjustment.) The Generator would also receive a capacity reservation payment of \$1,050, for a total of \$1,475.

If the Generator were providing Spinning Reserve instead, the energy payments would be based upon the 10-minute incremental and decremental energy prices. If the prices during the hour were \$30/MWh for incremental energy and \$5/MWh for decremental energy, the Generator would receive

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<sup>7</sup> The ISO notes that REPA will not be paid to a Generating Unit unless it is available and capable of being controlled and monitored by the ISO Energy Management System over the full range of its Scheduled Regulation capacity for the entire Settlement Period at at least the ramp rates stated in its bid.

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\$1,375: \$1,500 for the incremental energy produced (50 MWh at \$30/MWh) less \$125 paid for the decremental energy (25 MWh at \$5/MWh). The Generator would also receive its capacity reservation payment of \$1,050, for a total of 2,425. By choosing to provide Spinning Reserve rather than Regulation, the Generator would receive an additional \$950 for the hour under current ISO procedures.

With the REPA, the Generator would receive the capacity payment of \$1,050 and be paid the same \$425 for the net energy produced. The ISO would use the REPA formula to calculate an additional payment of \$3,000 for providing a 150 MW range of Regulation, for a total of \$4,475. (The amount in this example is based upon a 100 MW upward increment and a 50 MW decrement, each priced at \$20/MWh. In the REPA formula, the Hourly Ex Post Price would apply if it were greater than \$20/MWh.)

If the unit provided the full decremental capability as may happen in the present operational circumstances the payments would be  $150 \times \$7$  or 1050 for Regulation capacity,  $150 \times \$20$  or \$3000 for the Energy payment and pay the ISO back  $\$50 \times 17$  for the deviation from Schedule. The net payment to the generator is still \$3200 which should incent sufficient participation in the regulation market.

Even under the higher REPA approach, this is still a substantially less expensive means to provide Regulation than calling on RMR units, for which the ISO must make reliability payments of perhaps \$60/MWh. Moreover, given the relatively small amount of Regulation required (5% of load) the ISO does not see a substantial risk of significant market dislocations even if the ISO determines

based on the market response that the REPA would have been effective with the constant set initially at a more conservative number. Again, the ISO must err on the side of reliability to get matters under control, then it will look for ways to improve cost efficiency further.

The market will be closely monitored to determine the impact of the REPA payments on the number and price of Regulation bids received. The ISO believes, however, that the combination of the existing capacity reservation payment and the proposed REPA should provide sufficient economic incentives to attract more bids into the ISO Regulation market. Given the consistent and severe shortfall in Regulation reserves bids that the ISO has experienced since it commenced operations, the C factor is being set initially at 1, thus providing the most generous payment possible under the REPA formula. Any future adjustments to the C factor would perforce be downward, resulting in a lower payment under the REPA formula.<sup>8</sup>

Since the ISO Governing Board will consider and approve any change to the factor C, there is no risk that the REPA will be applied in an arbitrary or discriminatory manner. (Indeed, the requirement of Board approval for any modifications to C was adopted by the Board in response to stakeholder concerns about allowing changes to be completely at the discretion of the ISO management.) Moreover, the ability to change C, as it applies to upward and/or downward Regulation, after due consideration and announcement is an important tool that provides the ISO with the flexibility both to avoid

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<sup>8</sup> It bears emphasis that the REPA is an Energy adder payment, not an addition to the existing capacity payment. Thus, accepting the REPA will not raise the possibility of exceeding the capacity bid caps previously approved by the Commission.

overcompensation if a robust Regulation market develops and to ensure in the meantime that sufficient Regulation resources are available to assure system reliability.<sup>9</sup>

### **B. Clarification Amendments**

During the ISO's discussions with stakeholders regarding the Regulation reserves bids shortfalls, it became evident that the ISO Tariff needs to be clarified to make it clearer to all market participants that the ISO does not use Energy bids to determine the dispatch of Generating Units providing Regulation, and that Energy from Regulation is paid at the Hour Ex Post Price as uninstructed Imbalance Energy.

Section 2.5.22.5 of the ISO Tariff and section SP 11.1 of the Scheduling Protocol state that the ISO's real time merit order stack (as implemented by the BEEP software) does not include the Energy bids for Generating Units providing Regulation. Section 2.5.23.2.1 (as amended by section 23) of the ISO Tariff states that only Energy bids included in BEEP are used to calculate BEEP Interval Ex Post Prices. However, other provisions -- for example, Section 2.5.22.3.1 of the ISO Tariff, section SBP 5.1.1(j) of the Schedules and Bids Protocol, section DP 8.7.1(b) of the Dispatch Protocol and the definition of Instructed Imbalance Energy -- may be read to imply that Generating Units providing Regulation are dispatched based on the Energy bid prices. In fact, such units are selected to provide incremental or decremental Energy by the

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<sup>9</sup> The ISO notes that the bid evaluation and pricing method currently applied by the ISO in its Regulation reserves auction, and the settlement at the Hourly Ex Post Price of real time Energy deviations in response to the ISO's control of units providing Regulation service, would remain unaltered by the REPA amendments.

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ISO's Energy Management System and not on the basis of Energy bids. Notwithstanding this, Energy prices are required to be included in Scheduling Coordinators' bids into the ISO's Regulation market in order that they can meet the requirements of the ISO's software for the validation of Ancillary Services bids.

The necessary clarifying amendments, which unlike the REPA provisions are not intended to be temporary (except to the extent that Section 23 of the ISO Tariff is a temporary provision), are included in Amendment No. 8 because the need for them became known to the ISO during its stakeholder discussions about the reliability issue that this Amendment principally concerns. The ISO believes that making the clarifications now will assist generally in encouraging participation in the ISO's Regulation market.

#### **IV. REQUESTED EFFECTIVE DATE FOR AMENDMENT NO. 8**

The ISO respectfully requests that the Commission accept for filing Tariff Amendment No. 8 and allow it to become effective as of May 19, 1998.

#### **V. REQUEST FOR WAIVER OF THE 60-DAY FILING REQUIREMENT AND EXPEDITED CONSIDERATION**

Pursuant to Section 35.11 of the Commission's regulations,<sup>10</sup> the ISO respectfully moves for waiver of the 60-day prior notice requirement with respect

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<sup>10</sup> 18 C.F.R. § 35.11 (1997).

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to proposed ISO Tariff Amendment No. 8. Additionally, the ISO respectfully requests that the Commission take expedited action on Amendment No. 8.<sup>11</sup>

Good cause exists for the Commission to grant the ISO a waiver of the 60-day notice requirement. Proposed ISO Tariff Amendment No. 8 is intended to ensure an adequate supply of Regulation reserves for the ISO's necessary purposes of maintaining ISO Control Area reliability and to adhere to WSCC Minimum Operating Reliability Criteria and NERC Control Performance Standards. The ISO is mindful of the Director of the Office of Electric Power Regulation's admonishment regarding waiver of the 60-day notice period. However, given the critical reliability issues involved, the ISO must respectfully ask for the Commission to take expedited action on Amendment No. 8.

The ISO has consulted extensively with stakeholders in regard to Amendment No. 8, and the ISO Governing Board considered various options before approving the interim REPA. In addition, the ISO will, concurrently with this filing, take steps to ensure that all parties are quickly informed of Amendment No. 8 by posting it on the ISO's "Home Page" and faxing to all parties on the existing service list a notice that the filing may be obtained from the ISO's "Home Page" if a party wishes to review it in advance of receiving its service copy.<sup>12</sup>

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<sup>11</sup> The ISO also respectfully moves for waiver of any other applicable provision of part 35 of the Commission's regulations pursuant to 18 C.F.R. § 385.101(e) of the Commission's regulations.

<sup>12</sup> As with the pre-operation amendments, the ISO is filing this amendment in the existing "WEPEX" dockets, ensuring the broadest possible notice through the service list in that long-standing docket.

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Wherefore, for the foregoing reasons, the ISO respectfully requests waiver of the 60-day prior notice requirement for ISO Tariff Amendment No. 8 to allow it to become effective as of May 19, 1998.

## **VI. CONCLUSION**

Wherefore, for the foregoing reasons, the California Independent System Operator Corporation respectfully requests that (1) the Commission accept for filing proposed ISO Tariff Amendment No. 8 and allow it to become effective as of May 19, 1998; and (2) grant such other relief as is requested herein.

Respectfully submitted,

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Fiona Woolf  
Linda C. Ray  
Bridget E.R. Shahan  
**Counsel for**  
**The California Independent System**  
**Operator Corporation**

## **CERTIFICATE OF SERVICE**

I hereby certify I have this day served the foregoing submittal upon each person designated on the Official Service List compiled by the Secretary in Docket Nos. EC96-19-003 and ER96-1663-003, 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 Washington, D.C., this 19th day of May, 1998.

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Harry Dupre