

January 28, 2000

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

**Re: California Independent System Operator Corporation,  
Docket No. ER00-\_\_\_\_-000  
Amendments to the ISO Tariff**

Dear Secretary Boergers:

Pursuant to Section 205 of the Federal Power Act ("FPA"), 16 U.S.C. § 824d, and Section 35.13 of the Commission's regulations, 18 C.F.R. § 35.13, the California Independent System Operator Corporation ("ISO")<sup>1</sup> respectfully submits for filing six copies of an amendment ("Amendment No. 26") to the ISO Tariff. The proposed amendment modifies procedures governing the notice provided by the ISO to Scheduling Coordinators that a specific Reliability Must-Run ("RMR") Unit will be required to provide Energy for reliability purposes during the next day. The purpose of the amendment is to eliminate market distortions and operational problems that are caused by the current timing of notices. Although these distortions and problems were identified last year by the ISO's Market Surveillance Committee ("MSC"), an independent advisor to the ISO, and by the ISO's Market Surveillance Unit ("MSU," now the Department of Market Analysis "DMA"),<sup>2</sup> the ISO agreed, in a partial settlement in Docket Nos. ER98-441, *et al.*, that it would defer seeking modification of these procedures until at least October 1, 1999. Pursuant to the terms of the partial settlement, the ISO now seeks to implement the recommended modifications.

---

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

<sup>2</sup> See "Preliminary Report on the Operations of the Ancillary Services Markets of the California Independent System Operator (ISO)," dated August 19, 1998, and filed with the Commission in *AES Redondo Beach, LLC, et al*, Docket Nos. ER98-2843-000, on September 4, 1998 ("MSC Recommendations"); "Reliability Must-Run Contracts for the California Electricity Market," prepared by Dr. Frank A. Wolak, the Chairman of the MSC, and Dr. James Bushnell, for the MSC (April 2, 1999), attached as Attachment C; "Report on Impacts of RMR Contracts on Market Performance," prepared by the MSU (March 1999), attached as Attachment D ("MSU Report").

## Summary

When the vertically integrated utilities in California built their bulk power generation and transmission systems, they did so relying on some Generation, which may initially have been built primarily to serve Load, to furnish services necessary to ensure the reliability of the expanding integrated system. The legacy of this practice is that today the security of the transmission system is ensured, in part, by dispatching certain Generating Units out of economic order. Now that the ISO controls the transmission system and, in most cases, the utility no longer owns the Generating Units, the ISO Tariff uses RMR designation as the mechanism for calling upon Generating Units out of economic order to satisfy local reliability needs.

Under current procedures, the ISO issues Dispatch Notices to RMR Units after the close of the PX Day-Ahead Market. As a result, the Energy supplied in response to RMR Dispatch Notices is not scheduled against Demand in that market. Frequently, that Energy does not appear in any forward market, but rather appears in real time, unscheduled against Demand. To maintain a balance between Generation and Demand, while ensuring that the RMR Units produce the Energy needed to maintain local reliability, the ISO must reduce the output of other Generation through the Real Time Market. The current practices lead to significant market distortions and inefficiencies, operational problems that require corrective action in order to avoid adverse effects on reliability, and increased costs to consumers.

As explained in the Declaration of Mr. Kellan Fluckiger, the ISO's Vice President of Operations, (Attachment E) and in the report of the DMA entitled *Pre-Dispatch and Scheduling RMR Energy in the Day-Ahead Market* (Attachment F), the ISO most efficiently and effectively operates the ISO Controlled Grid when decisions on scheduling and commitment of resources are made through Day-Ahead and Hour-Ahead Schedules. This was the original market design. It is premised on the balancing of Supply and Load in the forward markets. The current procedures for RMR Dispatch, however, preclude this advance coordination. The ISO is instead forced to rely upon Real Time Market directions to Generators and schedulers of Load, and their prompt and correct response to those directions, to balance Demand and Generation. This approach increases both the reliability risks and costs of operating the ISO Controlled Grid. More specifically, the adverse effects are the following:

- Increased flows of Energy into real time and imperfect shifting of Demand into real time in order to take advantage of that increased Energy increase the volatility of the Real Time Market.

- More frequent adjustments of schedules in real time reduce the ability of Scheduling Coordinators to schedule resources optimally.
- Higher volatility in real time Demand adds to the ISO's Ancillary Services requirements, increasing Ancillary Service costs.
- Higher volatility in real time Demand also raises reliability risks.
- The inclusion in the PX Day-Ahead Market of Demand that, due to system conditions, will have to be met by RMR Units that are not scheduled in that market leads to overstatement of Demand and increased prices in that market.
- The current procedures create incentives for some RMR Owners to forego the PX Day-Ahead Market under certain circumstances, producing a greater incidence of overstated Demand in that market.
- The current RMR dispatch protocols are estimated to distort market costs upward by up to \$110 million per year.

The ISO proposes three revisions to the Tariff to address these concerns. The three revisions work in tandem to ensure that Energy from RMR Units that are dispatched by the ISO appears scheduled against Demand in a forward Market. They do so while preserving the RMR Owner's ability, at its unilateral discretion, to fulfill its responsibility to provide RMR Energy through a market transaction.

- First, under the amendment, the ISO would dispatch RMR Units prior to the close of the PX Day-Ahead Market, so that the RMR Unit *can* be scheduled in that market. At that point, the RMR Owner can elect payment either by the market or under its RMR Contract.
- The second revision ensures that, if the RMR Owner wishes to take payment through the market and assume both market risk and the potential for market reward – an option under the RMR Contracts – and schedules a bilateral transaction or bids into the PX Markets, the dispatched Energy is scheduled against Demand.
  - The revision requires the RMR Owner to take steps to ensure that its bid is successful in the forward markets and to include any RMR Energy awarded in the forward markets in its Preferred Schedules.

- It also eliminates the ability of RMR Owners under the current RMR Contracts voluntarily to skip the forward markets and take payment through the Real Time Market.
- The third revision ensures that, if the RMR Owner elects to receive the payment specified in its RMR Contract, the RMR Energy will nonetheless be scheduled in a forward market. Under such circumstances, the ISO is, in effect, obligated to buy the Energy on behalf of a Participating Transmission Owner (“TO”),<sup>3</sup> to serve Demand that, because of system conditions, cannot be served by other Resources.<sup>4</sup> The Demand that must be met by RMR generation must therefore be “netted out” of the PX Day-Ahead Market in order to ensure a balance between scheduled Loads and Generation and avoid unnecessary distortions in the PX and ISO real time Energy markets. This is achieved by requiring the Owner to bid the Energy into the PX Day-Ahead Market at zero dollars, ensuring that the Energy is actually scheduled against the Demand in that or a later PX market. The same treatment is used for other must-take Energy, such as that provided by nuclear units or by qualifying facilities pursuant to contract.

There is one final, critical point. These changes are a package. As more fully explained by Mr. Fluckiger and in the DMA Report, implementation of the first of these proposed revisions — Dispatch of RMR Units prior to the close of the PX Day-Ahead Market and netting out — must go hand-in-hand with a requirement that RMR Energy be scheduled in the forward markets. Giving the dispatch notice *without* such a requirement would provide RMR Owners with perfect information about RMR requirements. Armed with the assurance that the RMR Unit *will* run during certain hours and that the RMR Owner can receive contract payment for its variable costs, the RMR Owner would not need to schedule any Generation from the RMR Unit in the PX Day-Ahead Market during those hours, even though currently there are many hours when, absent the information, the RMR owner would have an incentive to do so. Specifically, thermal units often choose to be “price takers” and sell at below variable cost in off-peak hours when that is more economical than shutting down and restarting. Thus, Dispatch of RMR Units prior to the close of the PX Day-Ahead Market, without *netting out* the Demand to be served by RMR Units that elect payment under the RMR Contract, would exacerbate rather than reduce the negative market and operational impacts of current Dispatch Procedures.

---

<sup>3</sup> The pro forma Must Run Agreement, accepted by the Commission on May 28, 1999, and the ISO Tariff, Section 5.2.8, denominate the Participating TO responsible for paying the costs of an RMR Unit as the “Responsible Utility.” The ISO, in fact, does not actually purchase such Energy.

<sup>4</sup> This Energy also includes minimum amounts of Energy that are necessarily produced when another product essential to system reliability (reactive power) is furnished from RMR Units.

Over the past year, the ISO has significantly revised its practices to reduce market volatility, increase efficiency, and prevent gaming opportunities. Revision of the RMR Contracts in June 1999 was a significant step toward those goals. These reforms cannot reach their full potential, however, as long as current dispatch procedures for RMR Units interfere with the rational operation of the markets. As the attached analysis by the DMA demonstrates, the proposed revisions are necessary to eliminate major distortions, volatility and inefficiencies identified as the markets were analyzed in actual operation. The ISO therefore respectfully requests that the Commission accept Amendment No. 26, as proposed.

## **Background**

Under Section 5.2 of the ISO Tariff, the ISO designates certain Generating Units as RMR Units because operation of those units is required under some conditions to provide local grid reliability. The ISO is entitled to call upon those RMR Units for Energy and Ancillary Services when required to ensure that the reliability of the ISO Controlled Grid is maintained. Because RMR Units are designated and dispatched to address local reliability concerns associated with specific local portions of the ISO Controlled Grid, the costs incurred under the RMR Contracts are paid by the appropriate Participating TO.

RMR Contracts are contracts under which California consumers (through the ISO and the Participating TOs) pay a fixed payment to certain units in consideration for the ability to require these units to generate when needed to ensure local reliability. Unlike traditional power supply contracts for firm capacity, however, RMR Contracts explicitly grant RMR Owners the ability to retain the financial benefits that accrue when RMR Units are economic to operate (i.e. when market Energy prices exceed the units variable operating costs). RMR Contracts merely provide California consumers (through the ISO and the Participating TOs) the ability to ensure that RMR Units are in operation when needed for local reliability.

In addition to a fixed payment provided in consideration for this ability, RMR Contracts ensure that generators receive payment for the variable costs of any Energy the units are required to generate to ensure local reliability when it would otherwise be uneconomic for the units to be in operation (i.e. when variable operating costs would exceed market revenues for Energy). The ISO

has, in effect, purchased the Energy, *on behalf of the Participating TO*, through the RMR Contract.<sup>5</sup>

The terms and conditions of the RMR Contracts were the subject of a partial settlement filed with the Commission on April 2, 1999, and accepted by the Commission on May 28, 1999. *Pacific Gas & Electric Company, et al.*, 87 FERC 61,250 (1999). The partial settlement resolved all but a few of the issues concerning the RMR Contracts, and included both amendments to the ISO Tariff and to the *pro forma* Reliability Must-Run Service Agreement (“Must-Run Agreement”).

Among the issues addressed in the partial settlement was the timing of Dispatch Notices for Ancillary Services or Energy under the RMR Contracts. Although Section 2.2.12.6 of the ISO Tariff<sup>6</sup> currently provides that such Dispatch Notices for both Energy and Ancillary Services are issued subsequent to the close of the Day-Ahead Markets, the reports prepared last year by the MSC and the MSU independently concluded that the issuance of Dispatch Notices at such time produced market distortions and inefficiencies. The reports recommended that Dispatch Notices for Energy be issued prior to the close of the PX's Day-Ahead Market and that tariff or contract provisions be added to require that Energy provided under RMR Contracts be balanced against Demand in Final Day-Ahead Schedules submitted to the ISO by Scheduling Coordinators for RMR Owners.

Currently, Section 4.2 of the Must-Run Agreement provides that the ISO shall issue Dispatch Notices for Energy no earlier than the establishment of Final Day-Ahead Schedules for the Day-Ahead Market, unless the ISO Tariff is amended to permit otherwise. Under Article VI of the Stipulation and Agreement, also filed on April 2, 1999, the ISO agreed to defer any amendment regarding the timing of Dispatch Notices until at least October 1, 1999. Thereafter, the ISO is permitted to seek an amendment to the ISO Tariff that specifies earlier dispatch of RMR Units for reliability purposes with an option by the seller (1) to accept payment from the market or (2) to take payment in accordance with the Must-Run Contract, under which circumstance the Energy must be treated as “must-take” in the PX Day-Ahead Market. The Stipulation and Agreement, attached to this filing as Attachment G, established three conditions for such a filing:

- the ISO must first conduct a stakeholder process;

---

<sup>5</sup> As noted above, this is the effect of requesting the RMR Units to operate under certain conditions to ensure reliability. The ISO does not actually purchase such reliability Energy.

<sup>6</sup> Timing for RMR Dispatch Notices is also included in Appendix C of the ISO Tariff and various protocols.

- the ISO must serve all RMR Owners with the filing ten business days in advance of filing with the Commission; and
- the ISO must include in the filing an express recognition, which it hereby does, that the proposed change alters the basis on which certain RMR Owners accepted fixed option payment levels; that such owners may file under Section 205 for revised payment levels (solely to reflect the effect of this filing); and that such filings under Section 205 should, to the extent practicable, be consolidated or resolved concurrently with the proposed tariff change.

Consistent with the requirements in the Stipulation and Agreement, the ISO presented the proposed changes for dispatching RMR Units to the stakeholders at the Market Issues Forum held on August 11, 1999. The materials used for the Market Issues Forum are included as Attachment H.

On August 26, 1999, the ISO Governing Board authorized the ISO to prepare and file with the Commission the necessary tariff amendments to provide for the issuance of Dispatch Notices prior to close of the PX Day-Ahead Market. The memorandum on this subject prepared for the Governing Board is included as Attachment I.

### **Need for Amendment**

***Current Practice and Proposed Modifications*** -- By this Section 205 filing, the ISO proposes to revise the time at which it notifies RMR Units (1) that they are to be called to provide Energy for reliability purposes and, (2) of the amount of Energy needed for such reliability services. To the extent that it is aware of reliability requirements at that time, the ISO would provide notice by 5:00 a.m. of the day prior to the Trading Day, at least two hours before close of the PX Day-Ahead Market.

Under the existing provisions of the Must-Run Agreement, the RMR Owner has the option of accepting payment through the Must-Run Agreement (at rates covering the unit's variable operating costs) or through a Market Transaction. The proposed revision adds the requirement that, if the RMR Owner selects payment through the Must-Run Agreement, it must bid the Energy specified in the Dispatch Notice into the PX Day-Ahead Market at zero dollars, *i.e.*, as "must take" Energy. Consistent with the Must-Run Agreement, if the RMR Owner elects to provide the Energy specified in the Dispatch Notice through a Market Transaction, its Scheduling Coordinator may bid the Energy specified in the Dispatch Notice into the PX Day-Ahead Market at any price or arrange a bilateral transaction. If the Energy is not in the Preferred Day-Ahead

Schedule, however, the Scheduling Coordinator must bid that amount of Energy into the final PX Market at zero dollars, *i.e.*, as “must take.”

These changes ensure that all RMR Energy is scheduled against Demand in the PX markets or in a bilateral transaction. The changes thus eliminate negative market impacts and reliability effects attributable to current RMR dispatch procedures, under which RMR Energy frequently appears in real time unscheduled against Demand.

***Basis for Change*** -- Currently, the ISO issues Dispatch Notices for RMR Energy after the PX Day-Ahead and ISO Ancillary Services Day-Ahead Markets close for the next Trading Day.<sup>7</sup> This procedure is known as “market first.” Although this procedure may appear consistent with primary reliance on markets to resolve reliability issues, it is actually in conflict with the fundamental design of California’s Energy markets – that balanced schedules of Generation and Load covering all but small amounts of balancing Energy clear the forward markets and be presented to the ISO. As Mr. Fluckiger notes, the original market design contemplated that the ISO would notify RMR Units *before* the PX Day-Ahead Market was run. The ISO ultimately proposed to the Commission that RMR Units be dispatched after the submission of Initial Preferred Schedules (to allow the markets to clear RMR Energy if possible) but before submission of Revised Preferred Schedules. Under this approach, RMR Energy would still have had to be in the balanced schedules presented to the ISO before the final run of congestion management. This procedure, however, proved operationally impossible in the time allotted. As a result, the ISO has issued Dispatch Notices to RMR Units after the Day-Ahead Schedule is final.

Experience has shown that this change has had significant negative effects on market price signals, efficiency, and reliability. The need for RMR Generation arises when, because of local transmission constraints, only one Generating Unit (or a very few) can meet the Demand in a specific location. If the Generating Unit that can meet the Demand in the constrained location is scheduled in the PX Day-Ahead Market, then the market has successfully met the Reliability need. If the RMR Unit is not scheduled in the PX Day-Ahead Market (*e.g.*, does not bid, or bids but does not clear) or is scheduled to operate at a lower level than is required to meet system reliability requirements, then the market selects a different supply resource (or resources) to meet the Demand even though, as noted above, transmission constraints preclude the selected resource from meeting the Demand in that specific location. The resulting schedules thus include Generating Units that are committed to operate but are

---

<sup>7</sup> See Section 2.2.12.6 and Appendix C of the ISO Tariff; Scheduling Protocol 3.2.6.1, 5.3. The ISO also issues hour-ahead and real-time dispatch notices to manage the reliability requirements of the system.



not capable of providing the needed local reliability services. In other words, the resulting schedules – although balanced in terms of Supply and Demand – do not include the Generation mix that local reliability requires. The ISO must then call upon the RMR Unit as unscheduled Generation to meet Demand for which other Supply was scheduled in the PX Day-Ahead auction and must often decrement other units to accommodate the needed RMR Energy.

**Specific Direct and Indirect Adverse Effects** -- The current dispatch practice for reliability Energy from RMR Units has both direct and indirect effects that create a variety of market distortions and inefficiencies, and ultimately reduce system reliability and increase costs to consumers. Either the direct or indirect effects of the current arrangement would independently justify the proposed amendment. These effects are described in detail in the Affidavit of Eric Hildebrandt and the report he sponsors, *Pre-Dispatch and Scheduling RMR Energy in the Day-Ahead Market* (September 1999), attached as Attachment F, and in the Declaration of Mr. Fluckiger.

The direct effects arise because the practice of dispatching RMR Units after the market closes frequently causes the Energy from such units to appear unscheduled against Demand in real time, adding to any excess Generation (i.e. Overgeneration) from other causes. Unless the excess RMR Generation can be used to offset an unforeseen increase in Demand (i.e., real time Demand that exceeds Scheduled Demand), the ISO Dispatchers must decrease the output of *other* resources to accommodate this unscheduled Generation. This forces reliance on the often thin supply of decremental Energy bids and strains the Real Time Market.

The “spillover” of RMR Energy into the Real Time Market does create an incentive for Demand to take advantage of the availability of excess Generation by shifting a portion of its requirements to the Real Time Markets. However, because Scheduling Coordinators cannot perfectly forecast this “supply” of RMR Energy and co-ordinate any shift in Demand to Real Time Markets, any such shift is not likely to match the availability of excess RMR Generation. This leads to unnecessary volatility in real time Demand and to increased reliance on the Real Time Market to resolve Imbalances, further straining operations in the Imbalance Energy market.<sup>8</sup>

---

<sup>8</sup> As an interim measure, the Commission directed the ISO to provide information to Market Participants on the amount of RMR Energy requirements that the ISO estimates will not be scheduled in the Day-Ahead Market. *AES Redondo Beach, L.L.C., et al.*, Docket Nos. ER98-2843-005 *et al.*, 87 FERC ¶ 61,208 (May 26, 1999). However, since buyers cannot co-ordinate the quantity that others purchase in the Day-Ahead Market, the total aggregate shift of Demand from the Day-Ahead to the Real Time Market in response to this information can only be imperfect at best.

Decrementing and incrementing Generation in real time to address the unscheduled RMR Energy and increased volatility of real time Demand caused by current RMR dispatch procedures also directly affects the ability of Scheduling Coordinators to make efficient unit commitments and scheduling decisions. The ISO market design is intended to foster scheduling of Generation to meet Demand by the close of the Day-Ahead Markets. Increased volatility of Demand in the Real Time Market reduces the ability of owners of Generating Units optimally to commit and schedule resources to meet expected Loads and price signals in the Day-Ahead Market.

The real time volatility that results from the unscheduled Energy from RMR Units also increases the amount of Regulation that the ISO must procure in order to manage such fluctuations. Because Regulation represents 80% of the ISO's Ancillary Services expenditures, any increase in the amount of Regulation purchased by the ISO significantly increases the overall costs of Ancillary Services that must be passed on to Scheduling Coordinators. The procurement of additional Ancillary Services, moreover, can only partially offset the risk to system reliability caused by the "spill over" of RMR Energy to real time unscheduled against Demand.

The current practice indirectly distorts the Day-Ahead Market in at least two ways. First, total Demand in the PX Day-Ahead Market is overstated because it includes Demand that must (because of locational reliability requirements) be met by RMR Generation. The Generation purchased in the PX Day-Ahead Market to meet this Demand (unless from specific units) is thus Generation that is not capable of meeting the actual Demand. The purchase of such excess Generation causes the PX Market Clearing Price to be higher than would have been set by the marginal Supply bid needed to meet actual Demand. In practice, Demand met by the Energy the ISO requires for reliability from the RMR Unit (and paid for at the RMR Contract price), is really not part of the Demand in the competitive market, but yet it is not "netted out" of that market for purposes of determining the Market Clearing Price. This artificial increase in Demand distorts price signals in the PX Day-Ahead Market and raises the costs for PX Market Participants. See "Reliability Must-Run Contracts for the California Electricity Market," *supra* n. 2, at 8-9. As noted in the attached DMA Report, the increased Market Clearing Price costs California's consumers at least \$110 million annually.

Second, current RMR Dispatch protocols also indirectly affect the Day-Ahead Market by creating an incentive for certain RMR Owners, under certain market conditions, to refrain from scheduling these units in the PX Day-Ahead Market. Due to operational constraints, many thermal units must stay on-line and operate at minimum operating levels during hours when the PX Market Clearing Price is lower than the unit's variable operating cost. Non-RMR Generating Units

must incur any such losses as unavoidable costs of being ready to be in the market during peak hours when prices significantly exceed operating costs, although they may bid into the markets to mitigate those losses. They must factor these costs into portfolio bidding, unit commitment, and scheduling decisions. RMR Units, however, have the option of accepting the variable cost payment under the Must-Run Agreement whenever needed for local reliability. This creates an incentive for RMR Owners with such operational constraints to refrain from scheduling RMR Units in the Day-Ahead Market for any hour for which they anticipate that they will be called under their RMR Contracts and that market prices will be lower than the variable cost payment. This incentive increases the likelihood that Demand in the PX Day-Ahead Market will be overstated because of the presence of Demand that can only be met by unscheduled RMR Units.

### **The Proposed Amendment**

The proposed amendment addresses these issues through three modifications in the provisions for dispatching RMR Units. First, it provides for such Units to receive Dispatch Notices of RMR requirements *prior* to the close of the PX Day-Ahead Market. As described above, market distortions, operational problems, and inefficiency result when RMR Generation is not scheduled against Demand in the PX Day-Ahead Market. Thus, this modification is necessary in order to enable Scheduling Coordinators to schedule the RMR Units in that market.

The second modification increases the likelihood that, if the RMR Owner elects to take payment for the RMR Energy under a Market Transaction, as is permitted under the Must-Run Agreements, the Energy will in fact be scheduled against Demand either in a bilateral transaction or in a PX forward market. Under such circumstances, the RMR Energy will not appear unscheduled in real time, and will therefore not present the market distortions, inefficiencies and reliability risks inherent in current practices. If, however, the RMR Energy being provided through a Market Transaction were not so scheduled, and instead were to appear unscheduled in real time, it would create the same volatility as does current practice.<sup>9</sup> The proposed amendment addresses this concern by requiring that if an RMR Owner elects to fulfill its RMR obligation through a Market Transaction, but does not include the Energy necessary to fulfill the obligation in the Preferred Schedule submitted to the ISO after the Day-Ahead Market, the RMR Owner must direct its Scheduling Coordinator to bid the amount of Energy from the RMR Unit specified in the Dispatch Notice into the PX market for the applicable hour as "must-take" (*i.e.*, zero bid). This is consistent with the

---

<sup>9</sup> Because, under the market option, the RMR Owner will be paid through the market, and not under the Must-Run Agreement, the Demand cannot be said to artificially raise market prices as under current practice.

requirement under the Must-Run Agreement that, if the RMR Owner intends to substitute a Market Transaction in the Hour-Ahead Market, it must bid at zero dollars. If the RMR Owner follows these procedures, but is nonetheless unable to schedule the RMR Energy through a forward transaction, it will be paid for the Energy at the price for Uninstructed Imbalance Energy, as provided in the Must-Run Agreement. If, instead, the RMR Owner fails to follow these procedures, it must deliver the Energy and will forfeit its right to payment for the Energy.

Under Section 5.2 of the Must-Run Agreement, an RMR Owner can also provide all or a portion of the Energy required by the ISO to maintain system reliability as a transaction in the Real Time Market. Although this option has rarely been exercised, it creates the same excess pressure on real time prices and operations as does current practice for RMR dispatch. The second modification, therefore, also eliminates the ability of an RMR Owner whose RMR Unit has been dispatched for reliability to generate this Energy in real time unscheduled against Demand. Although this prohibition is contrary to the authority in the Must-Run Agreement, Article VI of the Stipulation and Agreement provides that revised Tariff provisions allowing the dispatch of RMR Units prior to the close of the PX Day-Ahead Market are an exception to the general precedence that the Stipulation and Agreement provides to the Must-Run Agreement over the ISO Tariff.

Despite these provisions, an RMR Owner might still be able to shift the RMR Energy into the Real Time Market by submitting Adjustment Bids at a level such that the ISO's Congestion Management procedures would curtail the scheduled Market Transaction that includes the RMR Energy, even though the RMR Owner would still be required to deliver the RMR Energy. In order to avoid such gaming, the second modification requires that Adjustment Bids for RMR Units specify the amount of RMR Energy as the minimum output to which the RMR Unit may be adjusted.

The third modification ensures that, if the RMR Owner elects to take the price specified by the Must-Run Agreement (the "Contract Path"), the Energy will in fact be scheduled against Demand in a forward market. As explained above, if an RMR Owner chooses to accept the price under the Must-Run Agreement, the Demand served by the RMR Energy should not also appear as Demand to be satisfied in the PX Day-Ahead Market. The ISO, in calling upon an RMR Unit, is in effect acting as a buying agent of the Participating TO that will pay the RMR Owner for the incremental cost of any Energy provided under the Must-Run Agreement. Had the TO actually purchased the Energy, the RMR Owner could not have bid the Energy into the PX, and the Demand to be met by RMR Energy would not appear unsatisfied in the PX Day-Ahead Market. To avoid this supply-demand distortion, the RMR Energy could be "netted out" of the PX Day-Ahead Market by treating the Dispatch Notice as effecting a bilateral sale between the

RMR Owner and the Participating TO. Instead, the amendment requires that the Scheduling Coordinator for the RMR Unit bid the quantity of Energy being supplied by the unit under the Must-Run Agreement into the PX Day-Ahead Market as "must take" (*i.e.*, at zero dollars). As shown in the attached report by the ISO's DMA, this requirement achieves the same result as "netting out." Because the second approach is more efficient to administer, the proposed amendment requires the Scheduling Coordinators for RMR Owners who elect to accept payment under the Must-Run Agreement to bid the Energy into the PX Day-Ahead Market at zero dollars. If there is insufficient Demand in the PX Day-Ahead Market to match the RMR requirement, the RMR Owner must bid the remaining Energy into the PX market for the applicable hour, also at zero dollars. The ISO has identified no reasonable alternative to this approach. Allowing the Energy to be bid at any amount other than zero dollars (e.g., at the RMR Units' variable cost) would not ensure that the Energy is scheduled against demand. Under the proposal, an RMR Owner that elects payment under the Contract, but fails to bid into the PX markets as required, must nonetheless deliver the Energy, but forfeits payment.

To prevent double payment when an RMR Owner elects to take payment at variable Generation costs, the amendment provides that in such circumstances the transaction is considered a nonmarket transaction under the Must-Run Agreement. Thus, under Section 9.1(f) of that agreement, the RMR Owners must credit payments received by their Scheduling Coordinators against the RMR invoices.

In addition, the ISO believes that netting the Demand served by the RMR Unit out of the PX Day-Ahead Market is consistent with the market basis underlying California's restructuring of the electric industry. When the ISO calls upon an RMR Unit for local reliability purposes, that unit is the only unit (or one of only a few units) that can, because of system constraints, serve the Demand in question. The RMR Unit is capable of exercising locational market power and a competitive market cannot be relied upon to meet the Demand. Otherwise, there would be no need for RMR Contracts. Such Demand is not in the competitive market and should not be allowed to affect prices in those markets.

As described above, under current procedures, the RMR Owner may elect to use the contract variable cost payment as a "backstop," allowing it to refrain from bidding in the PX Day-Ahead Market, and thereby to ensure recovery of its variable costs, when it anticipates a lower PX Market Clearing Price. The proposed amendment does not eliminate the ability of an RMR owner to use the payment under the Must-Run Agreement, rather than accepting a Market Clearing Price, in order to ensure recovery of variable costs. The amendment would, however, eliminate the overstatement of Demand and the market distortions inherent in current practice.

Each modification included as part of the proposed tariff amendment is critical in order to avoid the market distortions, inefficiencies and reliability risks that arise from current practices. If the ISO were merely to propose a change in the timing of Dispatch Notices, it would provide RMR Owners with better information upon which to decide resource portfolio bidding and scheduling strategies that maximize net operating revenues, taking into consideration that the RMR variable cost payment serves as a “backstop” payment for any RMR requirements not scheduled in the PX Day-Ahead Market. Such a proposal would *not*, however, prevent the RMR Energy from appearing in real time unscheduled against Demand, and may exacerbate rather than reduce the negative impacts of current dispatch procedures. It would provide RMR Owners with “perfect” knowledge, allowing them to use it to the disadvantage of a properly functioning competitive market.

Honorable David P. Boergers

January 28, 2000

Page 15

### **Effective Date**

Because the software necessary to implement these procedures is not ready, the ISO requests that the ISO Tariff and Protocol amendments proposed herein become effective on the later of sixty days after filing or ten days after notice to the Commission and Market Participants that the necessary software is in place. We urge the Commission not to suspend for a longer period. The Amendment is not intended to raise costs to consumers. To the contrary, it is necessary to prevent the continuation of excessive consumer costs attributable entirely to a market design inefficiency. Because unnecessary costs to consumers from the current distortion are most pronounced during the spring and summer months, it is important that these changes be in place prior to the periods of peak demand.

## Notice and Service of Documents

Communications regarding this filing should be addressed to the following individuals, whose names should be placed on the official service list established by the Secretary with respect to this submittal:

Roger E. Smith  
Senior Regulatory Counsel  
Beth Ann Burns\*  
Regulatory Counsel  
The California Independent System  
Operator Corporation  
151 Blue Ravine Road  
Folsom, California 95630  
Tel: (916) 351-2207  
Fax: (916) 351-4436

Edward Berlin  
J. Phillip Jordan  
Michael E. Ward\*  
Swidler Berlin Shereff Friedman  
3000 K Street, N.W.  
Washington, D.C. 20007  
Tel: (202) 424-7500  
Fax: (202) 424-7643

\* Individuals designated for service pursuant to Rule 203(b)(3), 18 C.F.R. § 385.213(b)(3).

The ISO has served copies of this letter, and all attachments, on the Public Utilities Commission of the State of California, the California Energy Commission, the California Electricity Oversight Board, the RMR Owners, and all parties with effective Scheduling Coordinator Service Agreements under the ISO Tariff. In addition, the ISO is posting this transmittal letter and all attachments on the ISO's Home Page. Further, in compliance with Article VI of the Settlement Agreement approved in Docket Nos. ER98-441, *et al.*, the ISO distributed copies of the tariff language to RMR Owners more than 10 business days prior to the date of this filing. A previous version of the tariff language, which was similar in all significant areas to the current proposal, was provided to RMR Owners in October.



## Supporting Documents

- New ISO Tariff sheets incorporating the amendment (Attachment A)<sup>10</sup>.
- Black-lined text showing the additions and deletions to existing Tariff language (Attachment B).
- “Reliability Must-Run Contracts for the California Electricity Market,” prepared by Dr. Frank A. Wolak, the Chairman of the MSC, and Dr. James Bushnell, for the MSC. (April 2, 1999) (Attachment C).
- “Report on Impacts of RMR Contracts on Market Performance,” prepared by the Market Surveillance Unit (now the Department of Market Analysis), California Independent System Operator Corporation (March 1999) (Attachment D).
- Declaration of Kellan Fluckiger, Vice President of Operations. (Attachment E).
- Affidavit of Eric Hildebrandt, Manager of Market Monitoring Systems, Department of Market Analysis, sponsoring “Pre-Dispatch and Scheduling of RMR Energy in the Day-Ahead Market,” prepared by the Department of Market Analysis, California Independent System Operator Corporation (September 1999) (Attachment F).
- The Stipulation and Agreement (April 2, 1999) (Attachment G).
- The MIF materials (Attachment H).
- Memorandum for the ISO Board of Governors (Attachment I).
- A Notice of this filing, suitable for publication in the Federal Register (Attachment J), together with a diskette containing that notice in electronic form.

---

<sup>10</sup> The ISO notes that, on December 1, 1999, it filed with the Commission a comprehensive settlement concerning numerous “unresolved issues” in Docket Nos. ER98-3760-000, *et al.* Numerous revisions to the ISO Tariff were proposed as part of this Offer of Settlement. To date, the Commission has not acted on the Offer of Settlement. The revisions proposed in that offer are therefore not reflected in the Tariff Sheets and black-lined Tariff provisions contained herein.

Honorable David P. Boergers  
January 28, 2000  
Page 18

An additional copy of this filing is enclosed. Please stamp this copy with the date and time of filing and return it to our messenger.

Respectfully submitted,

---

Roger E. Smith, Senior Regulatory  
Counsel  
Beth Ann Burns, Regulatory Counsel  
The California Independent  
System Operator Corporation

Edward Berlin  
J. Phillip Jordan  
Michael E. Ward  
Swidler Berlin Shereff Friedman, LLP

Counsel for the California Independent  
System Operator Corporation