

# SWIDLER BERLIN SHEREFF FRIEDMAN, LLP

THE WASHINGTON HARBOUR  
3000 K STREET, NW, SUITE 300  
WASHINGTON, DC 20007-5116  
TELEPHONE (202) 424-7500  
FACSIMILE (202) 424-7647  
WWW.SWIDLAW.COM

MICHAEL N. KUNSELMAN  
DIRECT DIAL: (202) 295-8465  
FAX: (202) 424-7643  
MNKUNSELMAN@SWIDLAW.COM

NEW YORK OFFICE  
THE CHRYSLER BUILDING  
405 LEXINGTON AVENUE  
NEW YORK, NY 10174  
TEL. (212) 973-0111  
FAX (212) 891-9598

July 9, 2003

The Honorable Magalie R. Salas  
Secretary  
Federal Energy Regulatory Commission  
888 First Street, N.E.  
Washington, D.C. 20426

**Re: California Independent System Operator Corporation  
Addendum to Compliance Filing  
Docket No. ER03-746-001**

Dear Secretary Salas:

The California Independent System Operator Corporation ("ISO")<sup>1</sup> respectfully submits six copies of this addendum to its compliance filing of July 3, 2003, ("Amendment No. 51 Compliance Filing") made pursuant to the Commission's June 13, 2003, Order in the above-captioned docket concerning Amendment No. 51 to the ISO Tariff, 103 FERC ¶ 61,331 ("Amendment No. 51 Order"). Two additional copies of this filing are enclosed to be date-stamped and returned to our messenger.

In Amendment No. 51, the ISO explained that, in order to obtain a set of accurate baseline data for use in the Commission-ordered rerun of its settlement system in the California refund proceeding, the ISO would need to complete preparatory re-runs that encompass over 18 major issues. Because of certain complexities and incompatibilities, however, the ISO determined that it would be in the best interest of the ISO Market to have the invoicing process for the preparatory adjustments and re-runs and the FERC refund proceeding re-run completely separated (*i.e.*, "walled off") from the invoicing process that currently

---

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

The Honorable Magalie R. Salas  
July 9, 2003  
Page 2

is used to clear the ISO Market. Therefore, in Amendment No. 51, the ISO proposed a tariff amendment that would allow it to implement this “wall off” mechanism.

In the Amendment No. 51 Order, the Commission directed the ISO to “explain and justify each proposed adjustment for the 18 major revisions and address the concerns and provide details as described below [in the rest of the Amendment No. 51 Order].” Amendment No. 51 Order at P 15. In response to the Commission directive concerning the “major revisions,” the ISO provided, in the Amendment No. 51 Compliance Filing, a table providing details concerning each of the “major revisions.”

As to one of those items, Issue No. 13, entitled “Rescission of Unavailable Ancillary Service,” the ISO requested an extension of time until July 9, 2003 to file additional information concerning the justification for including this issue in the preparatory rerun. The ISO explained that it was requesting this extension due to the unavailability of certain ISO personnel needed to finalize the additional information required. Therefore, consistent with that request, enclosed is Appendix I to the Amendment No. 51 Compliance Filing, which explains in detail the methodology of the “Rescission of Unavailable Ancillary Service” issue and the justification for including it in the preparatory rerun.

The Honorable Magalie R. Salas  
July 9, 2003  
Page 3

Materials Included in the Present Filing

In addition to this transmittal letter, the present filing includes the following attachments:

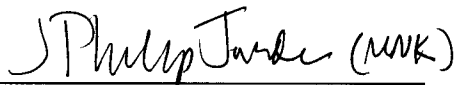
Appendix I	Explanation of Issue No. 13 – Elimination of Payments for Unavailable Ancillary Services
------------	--

If there are questions concerning this filing, please contact the undersigned.

Respectfully submitted,

---

Charles F. Robinson  
General Counsel  
Gene L. Waas  
Regulatory Counsel  
The California Independent System  
Operator Corporation  
151 Blue Ravine Road  
Folsom, CA 95630  
(916) 608-7049

 (MVK)  
\_\_\_\_\_  
J. Phillip Jordan  
Bradley R. Miliauskas  
Michael Kunselman  
Swidler Berlin Shereff Friedman, LLP  
3000 K Street, N.W., Suite 300  
Washington, D.C. 20007  
(202) 424-7500

**APPENDIX 1**  
**EXPLANATION OF PREPARATORY RERUN ISSUE # 13**

---

**ELIMINATION OF PAYMENTS**  
**FOR UNAVAILABLE ANCILLARY SERVICES**  
**Docket No. ER03-746**

This correction concerns payments to Scheduling Coordinators<sup>1</sup> that scheduled Ancillary Services capacity into the ISO's markets, but did not actually make the Ancillary Services available. These payments should be returned to Scheduling Coordinators that purchased Ancillary Services in the ISO's markets. Suppliers are entitled to payment only for services provided and, because these services were not provided, no payment should have been made. To correct these over-payments, the ISO proposes to withhold from settlements the amounts by which the Scheduling Coordinators that did not provide the Ancillary Services were overpaid and to distribute the amounts recouped to the Scheduling Coordinators based on metered Demand.<sup>2</sup> The correction will cover the period from April 1, 1998 through September 9, 2000, inclusive.<sup>3</sup>

This practice is referred to as "Double Selling" in the Commission's order of June 25, 2003 (Docket Nos. EL03-137, *et al.*). More precisely, it involves uninstructed deviations using capacity that is obligated to be unloaded and available for Dispatch by the ISO. The Commission found that Double Selling violated the ISO Tariff and "unfairly took advantage of the market rules by using false representations and/or receiving payments for services that they did not provide." This was not the first time that the Commission found that such practices were inconsistent with supplier obligations. In its order of February 9, 1999 on Amendment 13, 86 FERC ¶ 61,122 (1999) the Commission confirmed that Ancillary Service providers are "paid a capacity charge for holding their generating resource in reserve" and indicated that using such capacity for uninstructed deviations dishonored those commitments.

In its June 25 order, the Commission indicated that it intends to seek disgorgement of unjust profits from four suppliers for Double Selling. As will be detailed further in the ISO's comments on the Commission's June 25, 2003 order, the ISO believes that Double Selling that occurred prior to January 1, 2000 must also be corrected, and that all suppliers, rather than just the four suppliers identified in the Commission's order, ought to be subject to the settlement corrections that the ISO proposes. The basis for these corrections is described more fully in the balance of this paper.

---

<sup>1</sup> Capitalized terms not otherwise defined are used with the meaning given them in Appendix A of the ISO Tariff.

<sup>2</sup> Concurrent with this filing, the ISO is providing all affected Scheduling Coordinators with complete documentation supporting these adjustments.

<sup>3</sup> With the Amendment 13 order, the Commission authorized the ISO not only to rescind payment for Ancillary Service capacity that was not supplied, but also to impose a penalty equal to the elimination of the associated payment for Uninstructed Imbalance Energy. The ISO implemented the "No Pay" software to automatically eliminate Energy and capacity payments on September 10, 2000.

There are fundamental distinctions between the behavior for which the ISO intends to make the adjustments described in the instant filing, and the so-called “Enron games” that have been the subject of debate and scrutiny over the last 2 years, including the Commission’s proceedings in PA02-2. The obligation to keep Ancillary Service capacity unloaded and available can be ascertained with certainty from the obligations specified in the ISO Tariff. Market Participants received notice emphasizing these obligations in a July 17, 1998 market notice that explained the ISO intended to impose consequences on suppliers that failed to keep such capacity unloaded and available (see Attachment 1).

The ISO acknowledges that it did not have authority to impose *penalties* under Section 2.5.26 of the ISO Tariff between April 1, 1998 and July 31, 1998. However, the adjustments proposed here are not penalties, but simply adjustments to recover payments that certain Scheduling Coordinators were not entitled to receive because such Scheduling Coordinators did not satisfy the essential conditions of payment.<sup>4</sup>

## I. BACKGROUND

### A. Ancillary Services

Since commencing operations on April 1, 1998, the ISO has operated auction markets to procure Ancillary Services on behalf of Scheduling Coordinators that schedule transactions on the ISO Controlled Grid. These Ancillary Services include Regulation, Spinning Reserve, Non-Spinning Reserve, and Replacement Reserve. The Ancillary Services procured by the ISO, together with those that are self-provided, fulfill the requirement of the Western Electricity Coordinating Council (“WECC”) (formerly Western Systems Coordinating Council) that the ISO, as Control Area operator, maintain Regulation and Operating Reserve<sup>5</sup> sufficient to meet applicable reliability criteria.

The purpose of Operating Reserve is to ensure that the ISO has unloaded capacity available to call upon for Energy necessary to balance the system if there is an unanticipated equipment failure or other contingency that threatens reliability. To fulfill this purpose, Generating Units committed to provide Spinning Reserve and Non-Spinning Reserve must be available for Dispatch during the period for which the Ancillary Services are scheduled, *i.e.*, they must have unloaded capacity equivalent to the amount of Ancillary Services scheduled. This is a specific requirement of Sections 5.3.2 and 5.4.2 of the Ancillary Services Requirements Protocol (ASRP). Similarly, Section 6.4 of the ASRP requires that Generating Units providing Replacement Reserve

---

<sup>4</sup> “Double selling” was also the subject of an investigation by the California Attorney General beginning in mid-2001 into the use of Ancillary Services for uninstructed deviations. In the course of responding to the Attorney General’s requests, the ISO identified payments that had been made improperly and concluded that such amounts should be recouped, as proposed herein.

<sup>5</sup> The ISO Tariff defines Operating Reserve as Spinning Reserve and Non-Spinning Reserve. Under the WECC criteria, these two Ancillary Services are called “contingency reserve” and “operating reserve” refers to a broader classification, which includes both contingency reserve and regulating reserve.

be capable of achieving a dispatched operating level within 60 minutes of receiving a Dispatch Instruction from the ISO.

Under the ISO Tariff, Ancillary Service Schedules “represent binding commitments made in the markets between the ISO and the Scheduling Coordinators concerned.”<sup>6</sup> Importantly, the ISO Tariff permits payment only for capacity that is “made available.”<sup>7</sup>

For Scheduling Coordinators that are awarded Ancillary Service Schedules through one of the ISO’s auctions, the ISO pays the Market Clearing Price for the Ancillary Services provided. A Scheduling Coordinator that scheduled capacity as self-provided Ancillary Services reduces its net obligation on which Ancillary Services charges are assessed, and, since August 1999, the ISO has paid for self-provided capacity in excess of that obligation.<sup>8</sup>

### **B. Scheduling Coordinators’ Failure to Provide Ancillary Services**

Since early in ISO operations, some Scheduling Coordinators that had voluntarily scheduled Ancillary Services in fact failed to maintain unloaded capacity sufficient to provide such services. Rather, they elected to produce Energy from the capacity that the ISO was paying them to hold in reserve, even though the ISO did not request the production of Energy from that capacity. Under the ISO Tariff, this was called “Uninstructed Imbalance Energy,” *i.e.*, unscheduled Energy produced other than in response to a Dispatch Instruction from the ISO, for which the ISO paid the Hourly Ex Post Price. When the Hourly Ex-Post Price was expected to be high, some Generators elected to ignore their obligation to hold their Ancillary Services capacity unloaded and instead generate Energy from the capacity already committed to the ISO.

These deviations into committed capacity reduce the Operating Reserve available for Dispatch by the ISO in case of an emergency or disturbance. Such deviations can cause considerable operating difficulties and, potentially, violations of WECC reliability criteria and North American Electric Reliability Council policies. The Generating Units from which the Ancillary Services were to be provided were not capable of delivering additional Energy in the event the ISO needed to call upon the Ancillary Services represented by that capacity. Under these circumstances, the Ancillary Services capacity cannot serve its intended purpose as a reserve to maintain the reliability of the ISO Controlled Grid. Such uninstructed deviations may exacerbate the ISO’s challenges in maintaining Area Control Error, increase the deviations from “preferred operating points” by Generating Units supplying Regulation, and increase the cost of Ancillary Services to the ISO.

---

<sup>6</sup> See Section 2.5.21 of the ISO Tariff.

<sup>7</sup> See Scheduling Protocol (SP) Section 9.6.2, 9.7.2 and 9.8.2.

<sup>8</sup> Proposed adjustments to eliminate credits for unavailable, self-provided Ancillary Services exclude consideration of excess self-provision for Schedules prior to August 18, 1999, since no credits were provided on such excess self-provision. Only self-provided Ancillary Service Schedules on which credit was received are subject to the proposed adjustment.

To accommodate the additional uninstructed Energy, the ISO may be required to decrement output from other resources, which may or may not be available for re-Dispatch. If the incremental Energy from the Ancillary Services capacity on which the ISO is relying for reserves is not available, the ISO must find alternate sources of reserve Energy in real time, which may contribute to Operating Reserve deficiencies and cause negative impacts on system reliability.<sup>9</sup>

### **C. The Mechanism for this Adjustment**

During the period in question, the ISO did not have mechanisms in place to detect such unauthorized deviations automatically. Manually comparing meter readings with maximum Generating Unit operating capacity (in order to ensure that the uninstructed production of Energy did not cause a Generating Unit to fail to fulfill an Ancillary Service commitment) was impossible to complete on the settlements timeline specified in the ISO Tariff. Absent the timely availability of such analysis to indicate that a Scheduling Coordinator was producing uninstructed Energy from capacity that it had committed to the ISO for Ancillary Services, the ISO had no means within the normal settlement process to withhold payment for the Ancillary Services that a Scheduling Coordinator had failed to provide.

The ISO Tariff provides mechanisms for the ISO to verify the availability of Ancillary Services, including unannounced testing, auditing response to ISO Dispatch instructions, and analysis of meter data (see Section 2.5.24). The ISO has now completed an audit of meter data and Dispatch instructions to verify the availability of Ancillary Service capacity as contemplated in Section 2.5.24, and the results of this audit provide the basis for the adjustments described in this appendix.

The ISO believes that payments made for unavailable Ancillary Services capacity should be recovered through offsets against payments owed to the Scheduling Coordinators that received the payments. The compensation these suppliers received for Uninstructed Imbalance Energy will remain intact. This result leaves the suppliers who failed to fulfill their Ancillary Service capacity obligations on the same footing as other Generating Units that delivered uninstructed Energy from capacity that was not encumbered with an Ancillary Service obligation. These adjustments also deny parties that failed to honor their Ancillary Services obligations the opportunity to be unjustly enriched as compared to suppliers that honored their Ancillary Service obligations and elected not to engage in uninstructed deviations using such capacity.

The ISO's proposed adjustments are conservative in two important respects. First, the ISO is proposing pro rata adjustments to payments for services (or to credits for self-

---

<sup>9</sup> Although the ISO may issue Dispatch instructions to reduce output by other resources when a Generating Unit obligated to provide an Ancillary Service is unavailable due to an uninstructed incremental deviation, such resources do not carry the same obligation to perform when dispatched to supply Energy that the original supplier of the Ancillary Service carried, and even if the Generating Unit from which the Ancillary Service was originally scheduled had notified the ISO of its intent to assign such responsibility, no supplier of an Ancillary Service has the right to reassign its obligation to be available and capable of performing.

provided services) only during those hours that such services were unavailable. The ISO's planned adjustments do not represent a penalty. Nor is the ISO proposing to eliminate payments these suppliers realized for Uninstructed Imbalance Energy.

Second, with respect to the particular hours in which services were not provided, this adjustment gives the full benefit of the doubt regarding the capability of the Generating Units involved. In recognition that it is impossible to determine the precise maximum capability of Generating Units during all of these hours, the ISO is uniformly assuming that the maximum capability each supplier was eligible to bid in each hour was available in all hours, and that the Generating Unit was always able to respond to Dispatch instructions at a ramp rate consistent with its Ancillary Service Schedule. Since the ISO has not always had a validation step to assure that total Energy and Ancillary Service Schedules submitted on a Generating Unit did not exceed the recorded maximum capability or "P-Max", there were some hours in which the sum of schedules exceeded the P-Max. In those circumstances, the ISO has given the supplier the benefit of the doubt by assuming that the Generating Unit is capable of output equal to the sum of the Energy and Ancillary Service Schedules.

The ISO proposes that these adjustments take account of prior manual adjustments. In June 1999, in the face of delays in the availability of software required to automatically eliminate both capacity and energy payments, the ISO began a manual review of Ancillary Service performance to eliminate capacity payments for Ancillary Services that were unavailable. Through this time-intensive process, the ISO was able to make adjustments for a small subset of the total number of Ancillary Service Schedules that could not be fulfilled due to uninstructed deviations. The ISO proposes to leave intact the manual adjustments made between June 14, 1999 and September 9, 2000, and apply the reduction in capacity payments described in the instant filing to only those schedules of unavailable Ancillary Services that were not subjected to manual adjustment.

The implementation of the manual program in June 1999 was a laborious and imperfect replacement for an automated tool. Numerous Scheduling Coordinators were paid for services they did not provide, and other Scheduling Coordinators were charged for services the ISO did not receive. The ISO has completed a comprehensive review of data regarding Ancillary Services purchases from the commencement of operations through September 9, 2000 to evaluate those instances in which Energy was delivered from capacity committed to Ancillary Services without a Dispatch Instruction from the ISO. Through this audit, the ISO has identified almost \$47 million in payments for Ancillary Services to Scheduling Coordinators where the associated capacity was not held in reserve, and for which no payment should have been made.



## II. LEGAL AUTHORITY FOR THE ADJUSTMENT

### A. The ISO Is Authorized to Recover Ancillary Services Payments Made to Scheduling Coordinators that Did Not Provide the Ancillary Services

It is elementary that a seller of products should not be paid for products it has not provided. Scheduled Operating Reserve and Replacement Reserve represents an option on Energy from unloaded capacity. The WECC Minimum Operating Reliability Criteria make clear that only unloaded generating capacity can be “considered as reserve.”<sup>10</sup> For a seller to bid a product successfully into a market, to sell such an option, and then to be incapable of delivering on that option, while nonetheless retaining payment for the service is clearly unjust enrichment. When the harmed parties (or, in this case, the ISO acting on their behalf) have the ability to recover amounts incorrectly paid by withholding amounts due, no recourse to additional administrative or judicial process should be necessary.

This principle is reflected in both the common law and the Uniform Commercial Code.<sup>11</sup> By executing the Scheduling Coordinator Agreement, Scheduling Coordinators have entered into a sales contract, *i.e.*, they have agreed to make available to the ISO Ancillary Services that are selected in the ISO’s auctions, and to receive payment under the terms of the ISO Tariff. Where a seller fails to deliver under a sales agreement, the buyer at a minimum may recover any of the cost paid. *See generally* 67A Am. Jur. 2d, *Sales* § 1268 (2002), citing U.C.C. § 2-711(1) and case law; *see also* Cal. Com. Code § 2711 (West 2002). This includes overpayments made by mistake. 67A Am. Jur. 2d., *Sales* § 1268 (2002), citing U.C.C. §§ 1-103 and 2-718(2); *see also* *Firpo v. Pacific Mut. Life Ins. Co.*, 80 Cal. App. 122 (Cal. Dist. Ct. App. 1926) (action exists where defendant receives money that in equity and good conscience ought to be paid to plaintiff, including by fraud or mistake of fact). Moreover, the buyer may deduct amounts due from the seller from payments owing to the seller under the same contract – here, the Scheduling Coordinator Agreement. 67A Am. Jur. 2d., *Sales* § 1270 (2002); *see also* Cal. Com. Code § 2717 (West 2002).

The ISO Tariff is consistent with this understanding. The Scheduling Coordinators’ entitlement for payment for Ancillary Services is set forth in Section 2.5.27 of the ISO Tariff. With regard to each Ancillary Service, the relevant subsection states that the ISO will make payment to Scheduling Coordinators *providing* the Ancillary Service. There is no basis in the ISO Tariff for Scheduling Coordinators to lay a claim to payment where

---

<sup>10</sup> [http://www.wecc.biz/documents/policy/WECC\\_Reliability\\_Criteria\\_802.pdf](http://www.wecc.biz/documents/policy/WECC_Reliability_Criteria_802.pdf)  
(Page 110)

<sup>11</sup> Although at least one court has determined that electric energy is “goods,” the sale of which is governed by the Uniform Commercial Code as adopted in California, *In re Pacific Gas and Electric Co.*, 271 B.R. 626 (N.D. Cal. 2002), the question of whether capacity constitutes goods has not been addressed. Nonetheless, the provisions of the Uniform Commercial Code are at least applicable by analogy.

such Scheduling Coordinators did not satisfy this requirement to provide the Ancillary Services for which they were being paid.

The ISO's markets operate on a transactional basis. Nothing entitles a Scheduling Coordinator to a payment (or a credit) solely by virtue of having submitted an Ancillary Service bid or self-provision Schedule without also delivering the service for which its bid or Schedule was accepted. The only instances in which the ISO Tariff authorizes payments to Market Participants on a basis other than for Energy or Ancillary Services delivered, such as Reliability Must Run contracts, are specifically set forth in the ISO Tariff. The provisions concerning the ISO markets do not provide for payments on any basis other than for products delivered. No party that is dispatched through the Imbalance Energy market and fails to provide the Energy would expect payment for Energy. Consequently, parties that fail to abide by the obligation to hold reserve capacity unloaded and provide Ancillary Services should not expect payment if they decide to exercise for their own account the option sold to the ISO to call on that same capacity.

**B. Equity Supports the ISO Authority to Recover Ancillary Services Payments Made to Scheduling Coordinators that Did Not Provide the Ancillary Services**

Payments for Ancillary Services made to Scheduling Coordinators that reneged on their commitment to provide the Ancillary Services should be rescinded to allow Scheduling Coordinators that were charged for such unavailable Ancillary Services an opportunity to recover costs they should not have incurred from the Scheduling Coordinators that failed to honor their commitments. There is no countervailing argument that would justify allowing Scheduling Coordinators to retain the payments they received for Ancillary Services they did not provide. Recovery of operating costs should not be an issue, because Scheduling Coordinators received payment for the Energy that the Generating Units generated from the Ancillary Services capacity. Neither should detrimental reliance be a concern. Generators cannot reasonably have expected that they would be paid for capacity that they did not have available.

Moreover, although the ISO's recovery of payments made under such circumstances is not a penalty, it is at least an appropriate response to what can best be described as an early instance of Generators exploiting the system. Generators took unfair advantage of the early stages in the development of the ISO's monitoring and compliance efforts to collect unearned payments. They should not be rewarded for selling options that they then consciously decided to exercise for their own account, thereby putting themselves at an undeserved advantage as compared to both the Generating Unit that had, and respected, an Ancillary Service obligation to keep capacity unloaded, as well as the supplier that generated uninstructed Energy from unencumbered capacity that carried no obligation to remain unloaded, and which received no compensation for providing an Ancillary Service.

### **III. DETAILS OF SETTLEMENT ADJUSTMENT**

#### **A. Process**

Over the last 30 months, the ISO has developed systems, processes and procedures to assure that data can be compiled and analyzed on a timely basis in support of future investigations and compliance adjustments. These disciplined processes result in business-driven solutions that are documented, versioned and auditable. To perform the proposed adjustments, the ISO developed the Ancillary Service Monitoring (“ASM”) program based on a business rules approach to review the approximately 1.3 million schedules and millions of other records that were analyzed in this audit.

#### **B. Data**

The data used in this calculation include Energy and Ancillary Service Schedules, expected Energy dispatched from BEEP,<sup>12</sup> instructions related to Reliability Must Run (“RMR”), and meter data from Generating Units. These data have been processed through Preliminary and Final Settlements and thus represent data that have been used for financial payment. The ISO has imported into a single repository and validated all of the data necessary for the ASM calculations.

The ISO’s Master File does not keep a historical record of P-Max, or unit maximum capacity, so there is no official record of a unit’s P-Max from 1998 to 2000. The ISO researched all available data in the Scheduling Infrastructure, Ancillary Service certification e-mails, the Participating Generator Agreement, Resource Registry, SLIC, and the current Master File to recreate each Ancillary Services unit’s P-Max during this time period. Documentation supporting each unit’s recreated P-Max has been developed. This documentation includes e-mails between ISO representatives and Scheduling Coordinators during the Ancillary Services certification process in 1998, snapshots of the Ancillary Services Certification File, and bidding data in the ISO’s Scheduling Infrastructure.

As explained earlier, the ISO systems in 1998 and 1999 did not have a validation to prevent Generating Units from being awarded Energy and Ancillary Services that exceeded the applicable P-Max. The ISO does not propose to apply such a validation now, and instead proposes to give the benefit of the doubt to the suppliers by assuming that the Generating Unit was capable of delivering the maximum of the P-Max or the sum of Energy and Ancillary Services schedules in each hour.

All of these data are available to suppliers through their systems and their previous Settlement Statements. However, the CAISO will provide all data used in the calculation for each unit-hour to Scheduling Coordinators so that they can further validate the calculations.

---

<sup>12</sup> BEEP is the Balancing Energy Ex-Post Pricing software used by CAISO to dispatch Energy in real-time and set Market Clearing Prices.

### **C. Exceptions**

Several exception rules ensure that Ancillary Service capacity payments are not rescinded when it is not appropriate. These exceptions are the result of thorough research on a variety of issues that may have impacted these adjustments.

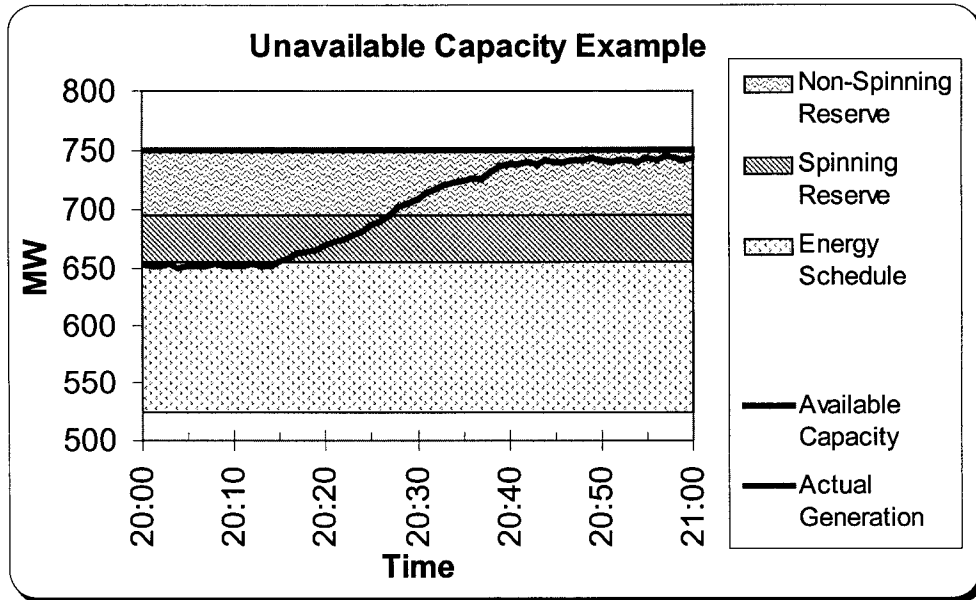
Exceptions include:

- 1) Units with Regulation Schedules are excluded from consideration since those units are controlled by the ISO when on Automatic Generation Control.
- 2) Adjustments affecting “pseudo” units that are established to honor existing contracts, and which have a “logical” meter instead of a physically installed ISO meter, are eliminated.
- 3) Beginning in June 1999, the ISO manually rescinded Ancillary Service capacity payments based on information in the CAISO operations logs. Those original adjustments will remain intact since they have been through Preliminary and Final Settlements Statements and the dispute process provided under the ISO Tariff.
- 4) The CAISO did not begin paying for excess self-provision of Ancillary Services until August 1999. The ISO has identified those hours in which a Scheduling Coordinator may have over-scheduled Ancillary Services without compensation. If an adjustment was calculated for a unit in that Scheduling Coordinator’s portfolio in those hours when the Ancillary Services were self-provided on that unit, no adjustment is proposed to the extent of the excess self-provision. This exception eliminates only those adjustments that would apply to excess self-provided Ancillary Services for which no credit or compensation was received, affecting the period from April 1, 1998 to August 17, 1999.

### **D. Determination of Payments to be Rescinded**

When a generating unit is scheduled to provide Spinning Reserve, Non-Spinning Reserve, or Replacement Reserve, it is obligated to keep an amount of capacity unloaded and available for Dispatch by the ISO at least equal to the scheduled Ancillary Service that the ISO has not called upon. This requires that the Generating Unit not generate Energy using that capacity. Figure 1 provides an illustration of unavailable Ancillary Service reserve capacity when a unit undertakes an uninstructed deviation and uses that obligated capacity to generate Energy.

Figure 1



In Figure 1, the unit's output is consistent with its Energy Schedule for the first 15 minutes of the hour, but as it ramps up without an instruction, it uses Ancillary Service capacity that was reserved for Dispatch by the ISO. For the last 20 minutes of the hour, the unit has used virtually all its available capacity.

The ASM model calculates how much Ancillary Service reserve capacity was not available across the entire hour based on the unit's Schedules and meter read. Data for Figure 1 follow:

Unit Schedules	
Final HA Energy	655
Spin Capacity	40
Non-Spin Capacity	55
Total Schedule	750 MW

P-Max	750 MW
Hour Meter	701 MWh
GMMa	1
GMMf	1
RMR Obligation	0

**1. Step 1 – Calculate Total Unavailable Capacity (UC)**

The following equation is used to determine the unavailable capacity:

MAX (0, MIN (UD, P-Max – RMR Obligation, MAX (P-Max, (Final HA Energy Schedule +  $\sum$ A/S capacity)) – (Final HA Energy Schedule +  $\sum$  Dispatched Energy), Hour Meter\*GMMa – (MAX (P-Max, (Final HA Energy Schedule +  $\sum$ A/S capacity))\*GMMa – ( $\sum$ A/S capacity -  $\sum$ A/S Expected Energy)))

Where:

UD = IF (RMR Obligation > (Final HA Energy Schedule +  $\sum$  Dispatched Energy), Hour Meter – RMR Obligation, Hour Meter \* GMMa – (Final HA Energy Schedule \* GMMf + Ramp Energy +  $\sum$  Dispatched Energy))

UD = If (0 > 655, 701– 0, 701\*1 – (655+0)) = 46

Total Unavailable Capacity =

MAX (0, MIN (46, 750 – 0, MAX (750, (655+40+55)) - (655 +0), 701\*1 – (MAX (750, (655+40+55))\*1 – (40+55) – (0)))

MAX (0, MIN (46, 750, 95, 46))

Total UC = 46

## 2. Step 2 – Allocate to Ancillary Services

The unavailable capacity is assigned to each Ancillary Service for which there is scheduled capacity that has not been Dispatched by the ISO, beginning first with Spinning Reserve, then Non-Spinning Reserve, and finally Replacement Reserve.

Allocation to Spinning Reserve:

Unavailable Spin Capacity =

MIN (Total UC, MAX (0, Final HA Spin Schedule – Spin Energy))

= MIN (46, MAX (0, 40-0))

= 40 MW of Unavailable Spin Capacity

Allocation to Non-Spinning Reserve:

Unavailable Non-Spin Capacity =

MIN (Total UC – Unavailable Spin Capacity, MAX (0, Final HA Non-Spin Schedule – Non-Spin Energy))

= MIN (46-40, MAX (0, 55-0))

= MIN (6, 55)

= 6 MW of Unavailable Non-Spin Capacity

The unit's uninstructed deviation for the hour was 46 MWh above its Energy Schedule. This 46 MW of unavailable capacity caused by this 46 MWh of uninstructed deviation was assigned to Spinning Reserve (40 MW) and Non-Spinning Reserve (6 MW). The

40 MW of Spinning Reserve will be charged to the Scheduling Coordinator of the unit at the unit's weighted-average price for Spinning Reserve where the weights are the quantities of Spinning Reserve scheduled in the Day-Ahead and Hour-Ahead Markets. The Non-Spinning Reserve adjustment is determined in a similar way.

**E. Distribution of Rescinded Payments**

The ISO proposes to distribute the rescinded Ancillary Service payments in each hour in proportion to each Scheduling Coordinator's metered Demand (load plus exports) in that hour.

**F. Timing of Settlement Adjustments**

Concurrent with the filing of this appendix with the Commission, the Scheduling Coordinators with Generating Units affected by these adjustments are being given all the data used by the ISO to allow them to validate every adjustment. These adjustments will be processed through the ISO Settlement system and will be applied to settlement statements generated through the preparatory re-runs. The ISO proposes that the 15 business-day dispute period described in its answer to comments on Amendment 51 apply, and that these adjustments be invoiced and cleared on the same schedule as the other adjustments completed in the preparatory reruns.

**IV. CONCLUSION**

For the reasons discussed above, the ISO intends to recoup, on behalf of Scheduling Coordinators purchasing Ancillary Services in the ISO's markets, payments made to Scheduling Coordinators that successfully bid Ancillary Services capacity for particular hours into the ISO's markets but actually did not make the Ancillary Services available during those hours, during the period April 1, 1998, through September 9, 2000, inclusive.

## Attachment 1

Market Notice Posted on July 17, 1998:

### **Notice to All Market Participants Regarding Operating Reserve and Other Ancillary Services**

As we move into high load days, there are two items that need to be mentioned as a reminder to all market participants.

- 1) Operating reserve is increasingly important. In order to maintain the reliability of the ISO Control Area, we must maintain proper operating reserve. Reliability of the grid is our most important function.
- 2) Ex-post energy prices are getting higher. This tends to incent market participants to generate above their schedules in order to capture the benefits of a high ex-post price for a particular hour.

Spinning and Non-Spinning Reserve are, by definition, unloaded capacity available in ten minutes. When the ISO purchases these services, it requires that the unit from which they are purchased retain *unloaded* capacity, in the amounts selected in the auctions, to provide these services if and when called. The only exception would be units subject to the physically interdependent unit procedure, such as watershed bids, *etc.*

The ISO Tariff specifies certain penalties for failure to provide Ancillary Services sold at auction to the ISO. The ISO intends to pursue these sanctions as required to ensure adequate Operating Reserve is maintained. We understand that some market participants may be interpreting the temporary suspension language of Tariff Section 26 as having eliminated penalties in all cases. As the ISO transmittal letter to FERC and the Board action authorizing the Tariff amendment made clear, this temporary suspension of sanctions applies only to units whose output was adjusted by Congestion Management to a level that conflicts with their Ancillary Service capacities.

Jeffrey D. Tranen  
President and CEO, California ISO



## CERTIFICATE OF SERVICE

I hereby certify that I have caused the foregoing document to be served by first class mail, postage prepaid, upon each person designated on the official service list compiled by the Secretary in this proceeding.

Dated at Washington, D.C. this 9<sup>th</sup> day of July, 2003.



Michael Kunselman