

**UNITED STATES OF AMERICA  
BEFORE THE  
FEDERAL ENERGY REGULATORY COMMISSION**

California Independent System            )  
Operator Corporation                        )           Docket No. ER11-3713-000

**MOTION TO FILE ANSWER ONE DAY OUT OF TIME,  
ANSWER TO MOTIONS TO INTERVENE AND COMMENTS,  
MOTION TO FILE ANSWER TO PROTEST, AND  
ANSWER TO PROTEST, OF THE  
CALIFORNIA INDEPENDENT SYSTEM OPERATOR CORPORATION**

The California Independent System Operator Corporation (ISO)<sup>1</sup> hereby submits its answer to the motions to intervene and comments submitted in this proceeding in response to the ISO's June 3, 2011, petition for limited waiver of certain requirements in Section 11.8 of the ISO tariff.<sup>2</sup> The ISO also submits motions to file this answer one day out of time and for leave to answer the protest submitted in this proceeding by Calpine.<sup>3</sup> For the reasons provided below and in the ISO's June 3 petition, the Commission should grant the petition as filed.

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<sup>1</sup> The ISO is also sometimes referred to as the CAISO. Except where otherwise specified, references to section numbers are references to sections of the ISO tariff.

<sup>2</sup> The following entities filed motions to intervene and/or comments in this proceeding: the California Department of Water Resources State Water Project; Calpine Corporation (Calpine); City of Santa Clara, California and the M-S-R Public Power Agency; J.P. Morgan Ventures Energy Corporation and BE CA LLC; Modesto Irrigation District; Northern California Power Agency; NRG Power Marketing LLC, Cabrillo Power I LLC, Cabrillo Power II LLC, El Segundo Power LLC, Long Beach Generation LLC, and NRG Solar Blythe LLC; Pacific Gas and Electric Company; and Southern California Edison Company (SCE).

<sup>3</sup> The ISO submits this answer pursuant to Rules 212 and 213 of the Commission's Rules of Practice and Procedure, 18 C.F.R. §§ 385.212, 385.213. The ISO respectfully requests waiver of Rule 213(d), 18 C.F.R. 385.213(d), to permit it to file this answer one day after the standard 15-day time period. Good cause for this waiver exists here because the one-day delay was due to administrative difficulties, and the Commission's acceptance of this answer will not prejudice the rights of any party or delay the proceeding. The ISO also requests waiver of Rule 213(a)(2), 18 C.F.R. § 385.213(a)(2), to permit it to make an answer to Calpine's protest. Good cause for this waiver exists here because the answer will aid the Commission in understanding the issues in the proceeding, provide additional information to assist the Commission in the decision-making process, and help to ensure a complete and accurate record in the case. See, e.g., *Xcel Energy*

## I. Overview

As the ISO explained in its June 3 petition, the ISO seeks waiver in order to permit it to refrain from correcting the calculation of bid cost recovery payments during the period from April 2009 to July 2010. The ISO is exercising its existing authority to recalculate bid cost recovery payments during the period from August 2010 to March 25, 2011. As described in a technical bulletin issued by the ISO on April 5, 2011, over the entire period from April 2009 to March 2011, a bidding practice exacerbated the impact of an error resulting from the ISO's use of the metered energy adjustment factor – which is not part of the ISO tariff – to calculate bid cost recovery payments required by Section 11.8 of the tariff.

Good cause exists for the ISO's requested waiver because it satisfies all four requirements of a waiver request under applicable Commission precedent. First, the underlying error – the erroneous calculation of bid cost recovery payments – was made in good faith and the ISO promptly took steps not only to remedy the error for the period when the error had the greatest impact but also to obtain Commission authority to refrain from correcting the error for the period from April 2009 to July 2010. Second, the waiver is of limited scope, because it only applies to the period from April 2009 to July 2010 and does not affect any subsequent period. Third, the waiver remedies a concrete problem – namely, the unnecessary burden of resettlement to market participants for the period from

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*Services, Inc.*, 124 FERC ¶ 61,011, at P 20 (2008); *California Independent System Operator Corp.*, 132 FERC ¶ 61,023, at P 16 (2010); *Equitrans, L.P.*, 134 FERC ¶ 61,250, at P 6 (2011).

April 2009 to July 2010. Fourth and finally, the waiver does not have undesirable consequences, such as harm to third parties.<sup>4</sup>

No party opposes the waiver requested by the ISO. SCE only suggests that the ISO should provide further detail on two of the elements the Commission considers in granting waivers. No further detail is required. The ISO has already provided sufficient detail to support its petition for waiver. Therefore, the petition satisfies the requirements of Commission precedent. Given SCE's request, however, the ISO has provided some further information that supports the conclusion that no harm is caused to third parties. The ISO also has updated its estimates of the bid cost recovery overpayments for the period from April 2009 through July 2010, and the updated estimates show that the financial impact of the requested waiver is even less than noted in the ISO's June 3 petition.

Calpine also does not oppose the ISO's request to refrain from correcting the calculation of bid cost recovery payments during the period from April 2009 to July 2010. Instead, Calpine argues that the ISO is not correctly applying the terms of its filed rate – specifically, existing ISO tariff provisions related to market revenues for delivered MWh – in recalculating bid cost recovery payments during the period from August 2010 to March 2011. Although numerous market participants will be affected by the ISO's resettlement of bid cost recovery

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<sup>4</sup> On June 3, 2011, the ISO also filed a motion for clarification or, in the alternative, request for rehearing of a statement in paragraph 27 of the Commission's May 4, 2011, order in a separate proceeding, Docket No. ER11-3149. See *California Independent System Operator Corp.*, 135 FERC ¶ 61,110, at P 27 (2011). The ISO explained in that filing that the Commission should clarify or, alternatively, should find on rehearing of the May 4 order that the ISO has the authority both under the filed rate doctrine and under the express provisions of the ISO tariff to correct settlements implementation errors where the resulting charges do not reflect the filed rate. One party – Calpine – filed an answer in opposition to the ISO's filing. The ISO filed a response to Calpine in the separate Docket No. ER11-3149 proceeding on July 6, 2011.

payments, Calpine is the only market participant that claims the ISO is not correctly interpreting this provision of its tariff. Although this tariff interpretation issue is arguably beyond the scope of the ISO's petition for waiver, the ISO nonetheless explains below why certain aspects of its prior methodology for calculating bid cost recovery payments for the period from August 2010 to March 2011 led to erroneous results contrary to the ISO tariff in some circumstances and why the ISO therefore can and should correct these payment calculations consistent with the filed rate doctrine.

In addition, Calpine attempts to interject into this proceeding a separate issue concerning a settlement dispute that predates the recalculations described in the ISO's April 5 technical bulletin. The Commission should recognize that this issue is unrelated to the issues addressed in the ISO's waiver petition and should be addressed in the existing ISO process regarding that particular Calpine settlement dispute.

## **II. Answer**

### **A. The ISO's Petition for Waiver Satisfies the Requirements of Commission Precedent**

SCE states that it does not oppose the ISO's petition for waiver but claims that the ISO has not made a proper and complete showing on two elements the Commission considers when determining whether to grant a waiver, namely, the existence of a concrete problem to be remedied and the fact that granting waiver will have no undesirable consequences, such as adverse consequences to third

parties.<sup>5</sup> The Commission should find that no further showing by the ISO is required. SCE provides no explanation as to what it believes to be deficient in the ISO's filing or what additional detail it wishes the ISO to provide. Therefore, SCE's claim is simply a bald and conclusory statement. As such, SCE's claim is insufficient to satisfy the Commission's requirement that an intervenor make "not just bare allegations, but also an adequate proffer of evidence to support those allegations."<sup>6</sup>

The ISO's petition demonstrates that the ISO satisfies all elements the Commission normally considers in granting a waiver, including the existence of a concrete problem to be remedied and the fact that granting waiver will have no undesirable consequences.<sup>7</sup> With regard to the existence of a concrete problem, as the ISO explained, the Commission has granted a requested tariff waiver to independent system operators when the burden of recalculating amounts pursuant to the tariff would outweigh the benefits of the recalculation.<sup>8</sup> By definition, any resettlement creates some level of financial uncertainty for market participants. For those periods immediately after start-up of the new ISO markets, it is appropriate for the ISO to weigh the potential benefits of recalculations against the uncertainty created by resettlement. In this case, the

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<sup>5</sup> SCE at 1, 2-3.

<sup>6</sup> *Northeast Utilities Service Co.*, 52 FERC ¶ 61,336, at 62,317-18 (1990). See also *id.* at 62,318 n.44 (explaining that "Rule 214(b)(1) of the Commission's Rules of Practice and Procedures expressly provides that an intervenor 'must state . . . the basis in fact and law for [its] position.'").

<sup>7</sup> ISO June 3 Petition at 9-13.

<sup>8</sup> *Id.* at 12 (citing *New York Independent System Operator, Inc.*, 115 FERC ¶ 61,026, at P 55 (2006)).

erroneous calculation of bid cost recovery payments for the period from market start-up in April 2009 to July 2010 had substantially less financial impact on market participants than the same errors during the period after August 2010.<sup>9</sup> Avoiding the burden of resettlement for that earlier period is the concrete problem the ISO seeks to address in its petition.

For similar reasons, refraining from bid cost recovery recalculations for the period from April 2009 to July 2010 will have no undesirable consequences, such as adverse consequences to third parties. For that earlier period, any benefits of recalculation would be more than offset by the uncertainty and burden of resettlements. In its petition, the ISO estimated that for the *sixteen-month* period from April 1, 2009, to July 31, 2010, the overpayments totaled approximately \$23 million, or an average of approximately \$1.4 million per month,<sup>10</sup> in contrast to the *seven-month* period from August 1, 2010, to February 28, 2011, during which the overpayments totaled approximately \$32 million, or an average of approximately \$4.6 million per month.

The ISO wishes to note that these estimates do not include the offset from allocation of bid cost recovery overpayments to many of the same scheduling coordinators that received overpayments, and thus do not present the full picture of the financial impact of re-settling bid cost recovery payments. These consist of estimates of the amount of IFM bid cost recovery payments the ISO would recover from resources and return to load-serving entities were the ISO to

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<sup>9</sup> *Id.* at 11-12.

<sup>10</sup> As noted below, the ISO has updated these estimates, and the total overpayments for the period from April 1, 2009, to July 31, 2010 are even less than originally estimated by the ISO.

recalculate the settlement statements during those time periods. These amounts consist only of the change in settlements attributable to the changes in the IFM bid cost recovery calculation. They do not account for the resource's total bid cost recovery payments, which would include bid cost recovery for the residual unit commitment process and the real-time market. However, isolating the analysis of the estimated settlement differences to the IFM is appropriate as it provides relevant settlement amounts that would change with the settlement calculation error corrected.

The ISO concluded that in light of the interest of market participants in minimizing changes to financial settlements – particularly in the first year of the ISO's new market – as well as the less significant impact of the bid cost recovery calculation error in the first 16 months of the new ISO market, it was appropriate not to resettle bid cost recovery amounts for the period from new market start-up on April 1, 2009, through July 31, 2010.

The ISO notes that no market participant submitted comments in this proceeding suggesting that it will suffer adverse consequences if the ISO refrains from recalculating bid cost recovery payments for this period. Although the information submitted to date already is more than sufficient to support the ISO's waiver request, the ISO now supplements the information provided in the June 3 petition with a breakdown of these amounts by scheduling coordinator.<sup>11</sup> This breakdown reflects an updated estimate of the bid cost recovery overpayments during this period. The ISO now estimates that the total overpayments to

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<sup>11</sup> Due to confidentiality concerns, the ISO does not identify the affected scheduling coordinators.

scheduling coordinators are approximately \$17.5 million, or an average of approximately \$1.1 million per month for the sixteen-month period.

Of the 83 scheduling coordinators that participated in the IFM during the period from April 1, 2009 to July 31, 2010, only 32 would see a change in their IFM bid cost recovery settlement amounts. The settlement deltas for those 32 are provided anonymously below in Table 1.

**Table 1: Estimated Change in IFM Bid Cost Recovery Payments to Scheduling Coordinators for April 1, 2009 to July 31, 2010**

| SC Number | IFM BCR         | IFM BCR_new     | IFM BCR_Difference |
|-----------|-----------------|-----------------|--------------------|
| 1         | \$15,167,832.72 | \$10,853,938.74 | \$4,313,893.97     |
| 2         | \$8,995,369.50  | \$6,216,167.78  | \$2,779,201.72     |
| 3         | \$3,634,773.39  | \$1,235,941.47  | \$2,398,831.91     |
| 4         | \$16,073,120.86 | \$13,771,552.63 | \$2,301,568.23     |
| 5         | \$6,024,025.20  | \$4,087,973.69  | \$1,936,051.51     |
| 6         | \$9,355,968.78  | \$8,508,882.27  | \$847,086.50       |
| 7         | \$2,109,049.98  | \$1,638,339.09  | \$470,710.89       |
| 8         | \$619,244.04    | \$265,120.93    | \$354,123.10       |
| 9         | \$2,810,372.61  | \$2,521,109.12  | \$289,263.49       |
| 10        | \$338,444.91    | \$65,312.00     | \$273,132.91       |
| 11        | \$829,888.22    | \$570,217.61    | \$259,670.61       |
| 12        | \$882,086.05    | \$649,424.61    | \$232,661.44       |
| 13        | \$9,570,510.43  | \$9,376,635.15  | \$193,875.28       |
| 14        | \$205,976.05    | \$28,370.27     | \$177,605.77       |
| 15        | \$2,549,659.76  | \$2,410,576.73  | \$139,083.03       |
| 16        | \$7,122,984.80  | \$6,999,050.51  | \$123,934.29       |
| 17        | \$559,228.61    | \$440,233.15    | \$118,995.46       |
| 18        | \$444,437.80    | \$409,557.89    | \$34,879.92        |
| 19        | \$25,104.12     | \$8.32          | \$25,095.80        |
| 20        | \$551,701.20    | \$531,693.77    | \$20,007.42        |
| 21        | \$140,764.68    | \$125,859.04    | \$14,905.64        |
| 22        | \$22,123.02     | \$8,916.68      | \$13,206.34        |
| 23        | \$150,301.78    | \$145,859.97    | \$4,441.81         |
| 24        | \$135,072.65    | \$133,093.43    | \$1,979.23         |
| 25        | \$104,135.36    | \$102,811.04    | \$1,324.32         |
| 26        | \$149,129.89    | \$148,268.19    | \$861.70           |
| 27        | \$10,639,727.03 | \$10,639,101.44 | \$625.59           |
| 28        | \$292,764.69    | \$292,293.78    | \$470.92           |
| 29        | \$127,860.98    | \$127,581.94    | \$279.04           |



|    |                |                |            |
|----|----------------|----------------|------------|
| 30 | \$33,019.74    | \$32,964.15    | \$55.59    |
| 31 | \$90,390.64    | \$90,394.58    | (\$3.94)   |
| 32 | \$4,717,147.90 | \$4,717,340.61 | (\$192.71) |

It is important to recognize that these estimates do not include the offset from allocation of these amounts to the same scheduling coordinators, and thus do not present the full picture of the financial impact to any particular scheduling coordinator, as it will often be less than the bid cost recovery overpayment. The bid cost recovery payment differences for the period from April 1, 2009 to July 31, 2010 provided in Table 1 are proportionately reflective of the amount of generation each scheduling coordinator scheduled in the ISO market. As indicated above, these settlement recalculation estimates only represent the change in settlements for IFM bid cost recovery payments. Therefore, these do not reflect the total change in the settlement outcome of these entities as they do not reflect how the scheduling coordinators would be affected by the further recalculation of the allocation amounts that would result from these recalculations.

Under Section 11.8.6.4 of the ISO tariff, after the ISO has conducted the sequential netting of bid costs across the three markets (*i.e.*, IFM, RUC and RTM), the ISO will allocate any positive IFM bid cost recovery uplift to scheduling coordinators in two tiers. First the uplift is allocated to scheduling coordinators based on their IFM uplift obligation driven by the scheduling coordinator's virtual bids. In the second tier, the remaining IFM uplift amounts are allocated to the scheduling coordinator based on their measured demand, which consists of their metered load and exports. The recalculation of the IFM uplift payments would

result in a reduction of the total IFM uplift amounts that the ISO would be allocating to the scheduling coordinators for these time periods. Because the scheduling coordinator's ultimate exposure to this uplift depends on a number of factors, it is not possible to determine the precise impact on the settlement outcomes to individual scheduling coordinators without actually conducting the recalculation of settlements statements. However, a notable fact is that, of the 32 affected scheduling coordinators, 21 have either metered load or exports. This means that each of these scheduling coordinators that have their IFM uplift payments reduced, would also have a reduction in their uplift allocation amounts (*i.e.*, a reduction in the amount these scheduling coordinators are obligated to pay for bid cost recovery payments). Thus, the total financial impact of resettling bid cost recovery payments to these 21 scheduling coordinators will be even less than suggested by Table 1.

For all these reasons, it is reasonable to conclude that avoiding the recalculation of the settlement statements from April 1, 2009 to July 31, 2010 to correct for the calculation error will not have an adverse impact to third parties.

**B. The ISO Has the Authority to Correct Bid Cost Recovery Payments to Ensure That the Calculations Account for Delivered MWh in Accordance with the Filed Rate**

Calpine concedes that the ISO has the authority to correct settlement calculation errors to be consistent with the filed rate, *i.e.*, the filed ISO tariff. Calpine asserts that the May 4 order "did not cast any doubt on the CAISO's authority to resettle past-period bid cost recovery amounts to correct

computational errors,”<sup>12</sup> and states that the ISO has the authority to perform retroactive resettlements to address “computational errors and outright conflicts with express provisions in the filed tariff.”<sup>13</sup> Calpine’s only dispute is about whether the ISO is correct in interpreting its filed tariff – specifically, existing provisions in Section 11.8 of the tariff related to market revenues for delivered MWh – in recalculating bid cost recovery payments during the period from August 2010 to March 2011.<sup>14</sup>

In the normal course of business, a market participant raising objections to settlements resulting from an ISO’s interpretation of its tariff would raise those objections in a settlement dispute – which Calpine apparently also has done in an ongoing dispute unrelated to this proceeding<sup>15</sup> – and ultimately (if the dispute is not resolved) through a complaint under Section 206 of the Federal Power Act. Therefore, Calpine arguably is raising issues beyond the scope of the ISO’s petition for waiver. Because there is some relationship between Calpine’s issue

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<sup>12</sup> Calpine at 13 (internal citation omitted).

<sup>13</sup> *Id.* at 17. Similarly, in Calpine’s answer to the ISO’s motion for clarification or, in the alternative, request for rehearing in Docket No. ER11-3149, Calpine asserts that the ISO “totally misreads paragraph 27 of the May 4 Order as suggesting or implying that the CAISO and other independent system operators and regional transmission organizations must seek prior Commission approval to correct computational errors in their settlement calculations that result in charges contrary to the filed tariff.” Calpine answer in Docket No. ER11-3149 at 5. Calpine also states that “the CAISO’s generic request for clarification of its authority to correct retroactively erroneous settlement calculations under the filed rate doctrine is not called into question in any way by paragraph 27 of the May 4 Order.” *Id.*

<sup>14</sup> See Calpine at 13 (“The issue of the CAISO’s retroactive resettlement authority with respect to Filed Tariff section 11.8 is ripe for decision in this proceeding.”).

<sup>15</sup> See *id.* at 10 n.28. This separate and unrelated Calpine settlement dispute is discussed further in Section I.C, below.

regarding the interpretation of the ISO tariff and the matters discussed in the petition for waiver, however, the ISO will provide a response in this proceeding.

There is no merit in Calpine's criticism of the ISO's interpretation of the ISO tariff. The Commission has recognized that ISOs and RTOs should be granted certain deference in interpreting their own tariffs,<sup>16</sup> and the ISO has fully explained and supported its interpretation of Section 11.8 of the ISO tariff. Moreover, as the ISO explained in its petition for waiver, while the ISO does not believe there is any ambiguity in the relevant tariff provisions, even if there were any ambiguity, it should be resolved consistent with the ISO's reading of the tariff provisions.<sup>17</sup>

Calpine clouds the threshold issue of which ISO tariff provisions require interpretation. Calpine states that the ISO's petition for waiver and April 5 technical bulletin "inexplicably" fail to explain that Section 11.8.2.2 of the ISO tariff prescribed different calculation rules for determining delivered energy for resources with self-schedules in particular settlement intervals (called "self-commitment periods") and for resources with no self-schedules in particular settlement intervals (called "commitment periods").<sup>18</sup> Contrary to Calpine's claims, there is a readily explicable reason why the petition for waiver and April 5

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<sup>16</sup> See *Midwest Independent Transmission System Operator, Inc.*, 117 FERC ¶ 61,113, at P 58 (2006) ("[A]s a general matter, an RTO should be considered a credible source when it comes to an accurate interpretation of its own tariff"); *PPL EnergyPlus, LLC v. New York Independent System Operator, Inc.*, 115 FERC ¶ 61,383, at P 29 (2006) ("It is unfair to market participants to assume that interpretations made by NYISO in its own publications . . . cannot be regarded as coming from a credible source.").

<sup>17</sup> ISO June 3 Petition at 15-16.

<sup>18</sup> Calpine at 6, 8-9. Section 11.8.2.2 of the tariff included different calculation rules for self-commitment periods and commitment periods prior to approval in the May 4 order of tariff revisions proposed by the ISO in Docket No. ER11-3149.

technical bulletin address the calculation rules for determining delivered energy for commitment periods only: the ISO requests waiver solely with regard to resettlements of commitment periods (but not self-commitment periods) for March 2009 through July 2010 and will conduct resettlements solely for commitment periods (but not self-commitment periods) for August 2010 through March 2011.

The provisions in Section 11.8.2.2 regarding the calculation of delivered energy for commitment periods – which are the only provisions relevant to the ISO’s petition for waiver – clearly state that bid cost recovery payments must be adjusted to reflect market revenues for “delivered MWh, in the relevant Day-Ahead Schedule.” The ISO explained in its June 3 petition and the April 5 technical bulletin that, in minimum load energy portions of the scheduled energy curve, the ISO’s prior use of the metered energy adjustment factor resulted in a miscalculation of the delivered MWh that was inconsistent with the requirements of Section 11.8.2.2. In particular, the ISO stated that “[a]pplying the day-ahead metered energy adjustment factor ratio to market revenue for energy delivered below a resource’s minimum load cannot fully account for market revenue from delivered energy.”<sup>19</sup> The ISO also explained that, in certain instances, the use of the metered energy adjustment factor to determine delivered portions of the day-ahead schedule resulted in an accounting deficiency, rendering the bid cost recovery payments since the start of the new ISO market on April 1, 2009, inconsistent with the tariff requirement that the accounting of integrated forward

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<sup>19</sup> ISO June 3 Petition at 4-5.

market revenues be based on delivered portions of the scheduled energy curve.<sup>20</sup> The sole purpose of the ISO's resettlement for the period from August 2010 to March 2011 is to correct that miscalculation of the delivered MWh in order to satisfy the tariff requirement of Section 11.8.2.2.

Calpine claims that the filed rate doctrine does not allow an ISO to resettle charges to comply with the filed rate if the resettlement is "contrary to the CAISO's consistent and settled practice."<sup>21</sup> By Calpine's flawed logic, an ISO could not correct charges to comply with the filed rate if the ISO had a practice of using a formula not documented in its tariff which included a mathematical flaw (e.g., a minus sign where the tariff would suggest there should be a plus sign). The filed rate doctrine does not require that a "consistent practice" which conflicts with the filed tariff must remain uncorrected. To the contrary, an ISO or RTO acts in accordance with the filed rate doctrine when it discovers and corrects a flaw in a practice that has resulted in charges contrary to the provisions of the filed tariff.

That is exactly what has occurred here. As explained by Mark Rothleder, the ISO's Director of Market Analysis and Development, in his testimony supporting the ISO's March 25, 2011, tariff amendment in Docket No. ER11-3149, the use of the metered energy adjustment factor to determine delivered quantities resulted in computational errors in certain circumstances. Specifically, the ISO discovered that, in cases where a resource is instructed below the

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<sup>20</sup> *Id.* at 7. The April 5 technical bulletin was attached to the petition for waiver.

<sup>21</sup> Calpine at 20.

resource's day-ahead schedule in real-time and the resource's metered delivery is less than the resource's day-ahead schedule, the application of the day-ahead metered energy adjustment factor results in the failure to account for delivered portions of the day-ahead schedule below the minimum load, as required by the filed tariff.<sup>22</sup> Mr. Rothleder's explanation is the same as the explanation on this issue provided in the petition for review and the April 5 technical bulletin, as discussed above.

Mr. Rothleder provided the following numerical example to illustrate why the use of the metered energy adjustment factor results in computational errors in the circumstances he described. Assume a resource with a maximum capacity of 400 MW and a minimum load at 100 MW. Also assume that the resource is scheduled in the day-ahead market at its maximum capacity (*i.e.*, the resource receives a day-ahead schedule for 400 MW based on its submitted bid above minimum load and is paid for those 400 MW at the locational marginal price for the integrated forward market, which for the purpose of Mr. Rothleder's example is assumed to be \$35/MWh). Further assume that there are no self-schedules, which simplifies the definition of the day-ahead metered energy adjustment factor as follows: (metered energy *minus* minimum load energy) *divided by* (day-ahead schedule energy *minus* minimum load energy).<sup>23</sup>

To continue with this example, as a resource is scheduled in the day-ahead at or above its minimum load, the resource is scheduling energy and

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<sup>22</sup> March 25, 2011, tariff amendment, Attachment C, Rothleder testimony at 12-17. This portion of Mr. Rothleder's testimony is also attached to this answer.

<sup>23</sup> Rothleder testimony at 12-13.

under Section 11.2 of the ISO tariff it is paid the locational marginal price for all of its energy scheduled in the day-ahead schedule, including the energy scheduled for portions below the resource's minimum load regardless of delivery. If, in the real-time, the resource operates at its scheduled 400 MW, the day-ahead metered energy adjustment factor will be equal to 1 (*i.e.*,  $(400 \text{ MW} - 100 \text{ MW} / (400 \text{ MW} - 100 \text{ MW}))$ ). If the day-ahead metered energy adjustment factor is equal to 1, the use of the metered energy adjustment factor performs well when applied to the lower portions of the minimum load energy in the day-ahead schedule. The resource's market schedule for the integrated forward market for the purpose of offsetting the resource's costs in the bid cost recovery mechanism for portions at or below minimum load will be equal to \$3,500 (*i.e.*,  $100 \text{ MWh} * \$35/\text{MWh} * 1$ ), for a total sum of \$14,000. In this case the day-ahead metered energy adjustment factor of 1 allowed the ISO to calculate the market revenues for the integrated forward market for the entire day-ahead schedule.<sup>24</sup>

However, now assume that instead of performing for its entire day-ahead schedule, the resource's meter is at 300 MW in the real-time. In that case, the resource's day-ahead metered energy adjustment factor will be equal to 0.67 (*i.e.*,  $(300 \text{ MW} - 100 \text{ MW} / 400 \text{ MW} - 100 \text{ MW})$ ). In using the day-ahead metered energy adjustment factor to calculate the resource's market revenues contribution to bid cost recovery calculations for the integrated forward market, the ISO will determine the following market revenues: the market revenues for the integrated forward market at or below the minimum load will be equal to

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<sup>24</sup> *Id.* at 13.



\$2,345 (*i.e.*,  $100 \text{ MWh} * \$35/\text{MWh} * 0.67$ ). For portions above the minimum load, the market revenues for the integrated forward market will be equal to \$7,035 (*i.e.*,  $300 \text{ MWh} * \$35/\text{MWh} * 0.67$ ), for a total sum of \$9,380. As described above, the total day-head market revenues earned were equal to \$14,000 and will remain so regardless of metered delivery. Therefore, while the resource is receiving full payment for its scheduled energy, the ISO is only accounting for a portion of its energy revenue in the bid cost recovery calculation.<sup>25</sup>

Now assume that the resource operates at its minimum load (100 MW) in the real-time instead of delivering its full day-ahead schedule. The day-ahead metered energy adjustment factor will be 0 (*i.e.*,  $(100 \text{ MW} - 100 \text{ MW} / 400 \text{ MW} - 100 \text{ MW})$ ). The market revenues for the integrated forward market calculated for purposes of offsetting the resource's bids will also be 0. This last case poses a particular problem because even if the resource delivered only up to its minimum load, the ISO's use of the day-ahead metered energy adjustment factor to determine the "delivered MWh" essentially nullifies these values in the calculation of market revenue for the portion of the day-ahead schedule that was actually delivered (*i.e.*, in this case only minimum load energy was delivered).<sup>26</sup>

The ISO does not dispute that it originally intended to use the metered energy adjustment factor to calculate the delivered quantity of energy in circumstances such as those described in Mr. Rothleder's example. That fact does not change the ISO's obligation to correct its error when it discovered that

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<sup>25</sup> *Id.* at 13-14.

<sup>26</sup> *Id.* at 14.

the use of the metered energy adjustment factor does not account for “delivered MWh, in the relevant Day-Ahead Schedule” in all circumstances, as required by the filed provisions set forth in Section 11.8.2.2 of the ISO tariff.

Calpine suggests that the metered energy adjustment factor was used for all purposes in calculating bid cost recovery payments.<sup>27</sup> Calpine is incorrect in suggesting that was the case. Even under the ISO’s original calculation methodology, a tolerance band was used for calculating certain minimum load costs. As the ISO explained in the April 5 technical bulletin:

Section 11.8.2.2 of the tariff does not specify the use of the day-ahead MEAF and only specifies that the ISO calculate IFM [integrated forward market] market revenues based on the delivered portions. Section 11.8.2.1.2 of the ISO tariff specifies that the ISO provides IFM Minimum Load Cost payment in a given interval if the resource is determined to be “On.” To determine whether the resource is “On,” the ISO applies the tolerance band to the resource’s metered energy and if the resource is at or near their minimum load at any time during the applicable time interval, the resource is determined to be “On” and the ISO qualifies the resource for payment of its IFM Minimum Load cost. The tolerance band is defined as: the higher of 5 MW or the product of 3% and the resources PMax.<sup>28</sup>

Although the ISO originally used the tolerance band solely for this purpose, the ISO subsequently determined that use of the tolerance band in certain other circumstances will allow the ISO to calculate bid cost recovery payments consistent with the filed rate. It is appropriate for the ISO to use the tolerance band rather than the metered energy adjustment factor in those circumstances.

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<sup>27</sup> Calpine at 6 (“the CAISO made a deliberate . . . determination that the use of MEAF [metered energy adjustment factor] was an appropriate computational tool for calculating ‘delivered energy’ whenever that term was used in section 11.8 of the Filed Tariff”); *id.* at 8 (describing “the use of MEAF to determine delivered energy in all facets of the bid cost recovery payment mechanism in section 11.8 of the Filed Tariff”).

<sup>28</sup> April 5 technical bulletin at 7.

Nothing in Section 11.8.2.2 (or any other tariff provision) requires the ISO to use the metered energy adjustment factor to determine delivered MWh.

**C. The Commission Should Reject Calpine's Attempt to Interject Issues About a Separate, Ongoing, and Unrelated Settlement Dispute into This Proceeding**

Calpine suggests that the ISO's resettlements of certain of Calpine's invoices do not comply with the requirement in Section 11.8.2.2 of the tariff that, for self-commitment periods, market revenue offsets will be calculated by multiplying the locational marginal price by the quantity of "the delivered MWh above the greater of Minimum Load and Self-Scheduled Energy, in the relevant Day-Ahead Schedule in that Trading Hour." Calpine merely states that this claim is based on "information and belief," without providing any supporting evidence.<sup>29</sup> This claim is incorrect. As explained above, the ISO has not resettled and does not plan to resettle any bid cost recovery payments for self-commitment periods, regarding Calpine or any other party, for any period prior to March 2011.

Calpine states that it has "disputed these resettlements under the CAISO Tariff's dispute resolution provisions and reserves the right to advance any legal position and argument in the dispute resolution process."<sup>30</sup> Although Calpine does not specify which existing settlement dispute it means, the ISO can confirm that the dispute Calpine refers to relates to a recalculation of settlements statements entirely unrelated to the use of the metered energy adjustment factor described in the ISO's April 5 technical bulletin.

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<sup>29</sup> Calpine at 9-10.

<sup>30</sup> *Id.* at 10 n.28.

This issue is currently the subject of good faith negotiations, consistent with the dispute resolution provisions contained in Section 13 of the ISO tariff. The ISO will work with Calpine through the existing settlement dispute process to address any questions about specific recalculations. If Calpine continues to dispute this issue, it will then have the opportunity to raise this issue with the Commission in a complaint under Section 206 of the Federal Power Act if it so wishes. However, the issue should be addressed solely in that existing settlement dispute proceeding, not in this separate and unrelated proceeding on the ISO's petition for waiver.

### III. Conclusion

For the reasons explained above and in the ISO's June 3, 2011, petition for limited waiver of tariff provisions, the Commission should grant the petition as filed.

Respectfully submitted,

Nancy Saracino  
General Counsel  
Roger E. Collanton  
Assistant General Counsel  
Anna A. McKenna  
Senior Counsel  
The California Independent  
System Operator Corporation  
250 Outcropping Way  
Folsom, CA 95630  
Tel: (916) 351-4400  
Fax: (916) 608-7296  
E-mail: [rcollanton@caiso.com](mailto:rcollanton@caiso.com)  
[amckenna@caiso.com](mailto:amckenna@caiso.com)

/s/ Sean A. Atkins  
Sean A. Atkins  
Bradley R. Miliauskas  
Alston & Bird LLP  
The Atlantic Building  
950 F Street, NW  
Washington, DC 20004  
Tel: (202) 239-3300  
Fax: (202) 654-4875  
E-mail: [sean.atkins@alston.com](mailto:sean.atkins@alston.com)  
[bradley.miliauskas@alston.com](mailto:bradley.miliauskas@alston.com)

Attorneys for the California Independent System Operator Corporation

Dated: July 12, 2011

**Attachment**

1 to account for costs that are directly incorporated into the proxy based  
2 cost calculation. In addition the principle of the bid cost recovery  
3 mechanism is that only unrecovered portions of such registered costs will  
4 be recovered.

5 **II. Issues Observed with the Use of Delivered Portions in Calculating**  
6 **IFM Market Revenue**

7  
8 **Q. How does the day-ahead MEAF perform in determining the delivered**  
9 **portions of a resource's day-ahead schedule?**

10 **A.** Generally, the day-ahead MEAF is effective in determining the portions of  
11 the day-ahead schedule that is actually delivered in real-time. However,  
12 the ISO has found that in cases where the resource is instructed below the  
13 resource's day-ahead schedule in real-time and the resource's metered  
14 delivery is less than the resource's day-ahead schedule, the application of  
15 the day-ahead MEAF results in the failure to account for delivered portions  
16 of the day-ahead schedule below the minimum load.

17 **Q. Can you please provide an example?**

18 **A.** Yes. At this point, it is helpful for me to set up an example of a specific  
19 resource, which I will use throughout my discussion of the issues  
20 identified. Assume a resource with a maximum capacity (*i.e.*, P<sub>Max</sub>) of  
21 400 megawatts. The resource has registered its minimum load at 100  
22 megawatts. Assume also that the resource is scheduled in the day-ahead  
23 at its full capacity at 400 MWs (*i.e.*, the resource receives a day-ahead  
24 schedule for 400 MWs based on its submitted bid above minimum load  
25 and is paid for those 400 megawatts at the IFM LMP, which for the

1 purpose of my example is assumed to be \$35/MWh. As I described the  
2 day-ahead MEAF above, I included in the definition of the day-ahead  
3 MEAF the treatment of self-schedule energy. For the purposes of the  
4 examples I provide herein, I am going to assume there are no self-  
5 schedules, which further simplifies the definition of the day-ahead MEAF  
6 as follows: (metered energy *minus* minimum load energy) *divided by*  
7 (day-ahead schedule energy *minus* minimum load energy). As a resource  
8 is scheduled in the day-ahead at or above its minimum load, the resource  
9 is scheduling energy and under ~~the~~ ISO tariff Section 11.2 is paid the LMP  
10 for all their energy scheduled in the day-ahead schedule, including the  
11 energy scheduled for portions below their minimum load regardless of  
12 delivery. Going back to the example, if in the real-time, the resource  
13 operates at its scheduled 400 megawatts, the day-ahead MEAF will be  
14 equal to 1 (*i.e.*,  $(400-100)/(400-100)$ ). If the day-ahead MEAF is equal to  
15 1, the use of the MEAF performs well when applied to the lower portions  
16 of the minimum load energy in the day-ahead schedule. The resource's  
17 IFM market revenue for the purpose of offsetting the resource's costs in  
18 the bid cost recovery Mechanism for portions at or below the minimum  
19 load will be equal to \$3,500 (*i.e.*,  $100 \text{ MWh} * \$35 * 1$ ). For portions above  
20 the minimum load, the IFM market revenues will be equal to \$10,500 (*i.e.*,  
21  $300 \text{ MWh} * \$35 * 1$ ), for a total sum of \$14,000. In this case, the day-  
22 ahead MEAF of 1 allowed the ISO to calculate the IFM market revenues  
23 for the entire day-ahead schedule. However, let us now assume that



1           instead of performing for their entire day-ahead schedule, the resource's  
2           meter is instead at ~~300~~200 megawatts in the real-time. In this case, the  
3           resource's day-ahead MEAF will be equal to 0.67 (*i.e.*,  $(300 - 100)/(400 -$   
4            $100)$ ). In using the day-ahead MEAF to calculate the resource's IFM  
5           market revenues contribution to bid cost recovery calculations, the ISO will  
6           determine the following IFM market revenues: The resource's IFM market  
7           revenue at or below the minimum load will be equal to \$2,345 (*i.e.*,  $100$   
8            $MWh * \$35 * 0.67$ ). For portions above the minimum load, the IFM market  
9           revenues will be equal to \$7,035 (*i.e.*, ~~400~~  $300 MWh * \$35 * 0.67$ ), for a  
10          total sum of \$9,380. Recall that the total day-ahead market revenues  
11          earned were equal to \$14,000 and will remain so regardless of metered  
12          delivery. Therefore, while the resource is receiving full payment for its  
13          scheduled energy we are only accounting for a portion of its energy  
14          revenue in the Bid Cost Recovery calculation. Now suppose the resource  
15          operates to its minimum load (100 MWs) in the real-time instead of  
16          delivering its full day-ahead schedule. The day-ahead MEAF will be 0  
17          (*i.e.*,  $(100 - 100)/(400 - 100)$ ). The IFM market revenues calculated for  
18          purposes of offsetting the resource's bid costs will be zero. This last case  
19          poses a particular problem because even if the resource delivered only up  
20          to its minimum load, the day-ahead MEAF essentially nullifies these  
21          values in the calculation of market revenue for the portions of the day-  
22          ahead schedule that was actually delivered (*i.e.*, in this case only  
23          minimum load energy was delivered).

1 **Q. Please explain why you say that this last scenario poses a particular**  
2 **problem?**

3 **A.** The ISO intended to use the day-ahead MEAF for the purposes of  
4 calculating the delivered portions of the day-ahead schedule above  
5 minimum load. When a resource delivers at least its minimum load  
6 energy, the ISO pays the LMP for that scheduled minimum load energy  
7 through the settlement of the day-ahead schedule. So in the last scenario,  
8 the resource delivered a portion of the day-ahead schedule. But applying  
9 the day-ahead MEAF which was determined from the energy delivered  
10 and scheduled above minimum load to the delivered minimum load energy  
11 (day-ahead MEAF<1) results in the under accounting of those revenues  
12 associated with the delivered portions of the day-ahead schedule.

13 **Q. What is the implication of this under accounting of revenues?**

14 **A.** This results in less market revenue to offset a resource's bid costs, which,  
15 everything else held equal, would result in over-payment of bid cost  
16 recovery to the resource.

17 **Q. How does the day-ahead MEAF perform in accounting for the**  
18 **delivered portions of the day-ahead schedule above minimum load?**

19 **A.** As illustrated by my example above, the day-ahead MEAF will not capture  
20 the full day-ahead revenue when the resource is dispatched by the ISO in  
21 real-time below its day-ahead schedule level. This is inappropriate  
22 because it under-accounts for the fact that resource will receive energy  
23 settlement for its full day-ahead schedule, including the portions of the

1 day-ahead schedule that were not actually delivered. In this scenario,  
2 being that the resource was explicitly dispatched down by the ISO in real-  
3 time, the resource's real-time revenues and costs for the resource are also  
4 accounted for in the bid cost recovery calculation.

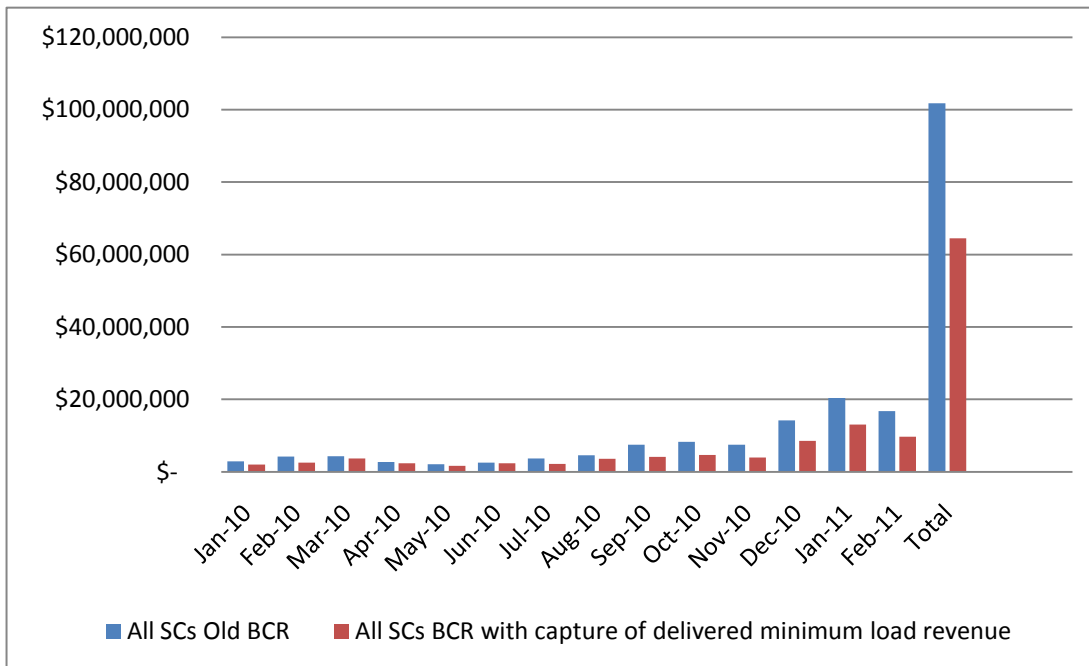
5 **Q. Please explain the implication of using the day-ahead MEAF in**  
6 **determining the delivered portions of the day-ahead schedule above**  
7 **the minimum load.**

8 **A.** As described above, the day-ahead MEAF appropriately accounts for IFM  
9 market revenues associated with the delivered portions of the day-ahead  
10 schedule but does not account for the revenue associated with the  
11 undelivered portions. In the last scenario where the resource goes to its  
12 minimum load and the day-ahead MEAF is zero, the application of the  
13 MEAF to the upper portions of the day-ahead scheduled energy curve  
14 does not capture the market revenues associated with undelivered energy  
15 scheduled above the resource's minimum load in the day-ahead schedule  
16 since none was actually delivered above those portions. For these upper  
17 portions of the resource's energy curve, this is performing as designed.  
18 But as I explain below, the use of delivered portions for IFM market  
19 revenue accounting, poses a different problem that causes exaggerated  
20 bid cost recovery payments to resources engaging in a specific bidding  
21 practice.

22 **Q. Do you have anecdotal evidence of these two deficiencies?**

1 **A.** Yes, below in figure 1 I demonstrate the total bid cost recovery amounts  
 2 over the past 14 months. As illustrated by the red portions of the bar  
 3 charts, if the day-ahead MEAF had not been used to account for delivered  
 4 minimum load energy, the total bid cost recovery paid out would be  
 5 approximately 36% percent less than what was actually paid. Note that  
 6 this the both sets of data used in this comparison includes does account  
 7 for the impact of the second deficiency that under accounts for revenues  
 8 the day-ahead scheduled energy above minimum load that is not  
 9 delivered. Therefore, the net amounts does not account for the second  
 10 deficiency.

11 **Figure 1: Impact of Under Accounting for Delivered Minimum Load**  
 12 **Revenue**  
 13



14  
 15 **III. Bidding Practice Exaggerating Bid Cost Recovery Payments**

## CERTIFICATE OF SERVICE

I hereby certify that I have served the foregoing document upon all of the parties listed on the official service list for the above-referenced proceeding, 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 12<sup>th</sup> day of July, 2011.

/s/ Bradley R. Miliauskas  
Bradley R. Miliauskas