

California Independent System Operator Corporation

March 28, 2008

The Honorable Kimberly D. Bose Secretary Federal Energy Regulatory Commission 888 First Street, NE Washington, DC 20426

REGULATORY CONTRACT 1003 28 U ÷ 29

#### Re: California Independent System Operator Corporation, Docket No. ER08-\_\_\_-000 Transitional Capacity Procurement Mechanism

Dear Secretary Bose:

Pursuant to Section 205 of the Federal Power Act, 16 U.S.C. § 824d, and Part 35 of the regulations of the Federal Energy Regulatory Commission (the "Commission"), 18 C.F.R. Part 35 (2007), the California Independent System Operator Corporation ("CAISO") hereby submits for filing an original and five copies of proposed amendments to the ISO Tariff to implement a Transitional Capacity Procurement Mechanism ("TCPM").<sup>1</sup>

The TCPM is meant to serve as a bridge between the currently effective Reliability Capacity Services Tariff ("RCST") and the Interim Capacity Procurement Mechanism ("ICPM") proposed in Docket Nos. ER08-556-000 and ER06-615-020 that will be implemented simultaneously with the CAISO's Market Redesign and Technology Upgrade ("MRTU"). As with the RCST and the ICPM, the TCPM will enable the CAISO to maintain reliable grid operations in the event Load Serving Entities ("LSEs") do not meet resource adequacy ("RA") requirements established by the California Public Utility Commission ("CPUC") and other Local Regulatory Authorities; procured Resource Adequacy Resources do not meet specific local reliability criteria; or unexpected conditions or events occur during the operating year that create a need for the CAISO to procure additional capacity in order to maintain and sustain reliable operations.

The CAISO proposes an effective date for the TCPM of June 1, 2008. The TCPM would expire upon the effective date of MRTU (and ICPM) implementation.

<sup>&</sup>lt;sup>1</sup> Capitalized terms not otherwise defined herein have the meanings set forth in the Master Definition Supplement, Appendix A to the ISO Tariff.

#### I. EXECUTIVE SUMMARY

The TCPM is designed to serve as a very short-term bridge between the currently effective RCST and the proposed ICPM. Although the TCPM incorporates certain of the improvements developed during the ICPM stakeholder process, the TCPM proposal is designed to work with the existing (pre-MRTU) market structure. Given that this structure includes the Must Offer Obligation ("MOO") and utilizes existing CAISO systems, the TCPM proposal is based on modifications to the RCST, not a new framework.

The TCPM continues the process introduced in the RCST under which the CAISO can engage in backstop procurement of capacity under two types of conditions. First, the CAISO can procure additional capacity if a Scheduling Coordinator for an LSE fails to meet its RA requirements, either the Reserve Margin established by the CPUC or other Local Regulatory Authority or the Local Capacity Requirement determined in accordance with the ISO Tariff. Second, the CAISO can designate resources in order to respond to Significant Events.

The TCPM proposal builds upon and improves upon the existing RCST in five primary ways:

- First, the TCPM escalates the compensation paid to designated resources.
  - The TCPM increases the current RCST Target Annual Capacity Price from \$73/kW-year, less peak energy rents ("PER"), to \$86/kW-year, minus PER. The updated rate is based upon an escalation of the RCST capacity price for two years using the Consumer Price Index ("CPI") and then adding 10 percent to that amount in recognition of the fact that the CPI is only a general inflation factor that may not capture all of the appropriate costs and considerations that should be taken into account in determining the appropriate TCPM capacity payment. For example, the 10 percent adder can account, inter alia, for an inflation escalator for 2008, costs not captured by the CPI, and consideration of the values of other inflation indices. The CAISO believes that the \$86/kW-year target capacity price appropriately balances the divergent positions of loads and suppliers regarding the price to be paid to existing generators for TCPM capacity, as expressed during the stakeholder process. The \$86/kW-year price is between the fixed costs of existing units and the cost on new entry ("CONE"). Consistent with the rationale enunciated by the Commission in its order approving the RCST Settlement, the Commission should find that the revised TCPM capacity payment is just and reasonable.
  - The TCPM also increases the current daily MOO capacity payment that is in the RCST from a factor of 1/17 to a factor of 1/8. The CAISO's proposal again attempts to balance the divergent positions of stakeholders, some of whom supported retention of the existing 1/17 payment and others who

wanted higher daily payments or multi-month designations following a single Must Offer Waiver Denial ("MOWD"). The additional compensation recognizes, *inter alia*, that the commitment of a FERC MOO unit to provide reliability services is essentially a daily designation of capacity as opposed to a monthly or longer designation.

- Second, the TCPM incorporates the improvements made in the ICPM to the process for designating resources to respond to TCPM Significant Events. This will provide the CAISO with increased flexibility to use the backstop mechanism to address unexpected, short-term reliability needs. The revised TCPM Significant Event designation process has been tailored to match the scope and expected duration of the TCPM Significant Event and ensure that designations are made in a transparent manner. In particular, the TCPM incorporates the following changes with respect to Significant Event designations:
  - Adopts the broader definition of Significant Event proposed for the ICPM;
  - Reduces to the minimum term of a Significant Event designation from three months in the RCST to the one month minimum term proposed in the ICPM;
  - Adds the "three-step" designation process developed in the ICPM, whereby the CAISO would make an initial designation for 30 days and then determine whether the Significant Event will last longer than 30 days. To the extent the CAISO expects it will, the CAISO can extend the designation for another 60 days. If the CAISO then determines that the event will last even longer, the CAISO will offer Market Participants the opportunity to offer alternative solutions to address the capacity shortfall before extending the TCPM designation beyond 90 days; and
  - Adds the reporting requirements proposed in the ICPM under which the CAISO would have to issue notification of any TCPM designation within two business days and post a designation report by the earlier of 30 days after procuring the resource or 10 days after the end of the month providing additional detail as to the basis of the designation and an explanation as to whether or not the designation will be extended beyond the initial 30 days.
- Third, the TCPM adds tariff language from the ICPM to address how the CAISO would backstop for RA deficiencies relative to local requirements, and how the CAISO would address a collective deficiency relative to the local RA requirement. These provisions and the associated cost allocation were again derived from the ICPM.
- Fourth, the TCPM adds tariff language from the ICPM to address allowing LSEs to "count" or "credit" certain TCPM procurement in RA showings. This was an additional element supported by many stakeholders during the ICPM and stakeholder processes. However, as with the ICPM proposal, the CAISO will not permit TCPM Significant Event designations to "count" toward RA showings.

> Fifth, the TCPM incorporates the ICPM cost allocation methodology for TCPM Significant Events, which is based on Market Participants' actual usage of the CAISO Controlled Grid during the period of the TCPM Significant Event. This is a change from the negotiated RCST Settlement which allocated Significant Event procurement costs on the basis of coincident peak load during the year preceding the Significant Event. The revised proposal better aligns cost incurrence with the parties that benefit from the designation of capacity. The actual load that is using the grid during a TCPM Significant Event is the load that benefits from the capacity designation. On the other hand, coincident peak load from a prior year is not necessarily the load that is benefiting from a TCPM Significant Event designation in the following year.

The CAISO notes that during the TCPM stakeholder process, stakeholders held widely divergent views regarding the appropriate level of compensation to be paid to TCPM resources. The CAISO has attempted to balance the benefits and the burdens under circumstances where there was no stakeholder consensus. The CAISO believes that its overall proposal is just and reasonable and provides fair compensation to generation resources without unduly burdening load serving entities, particularly considering it will only be in place for a period of several months.

#### II. BACKGROUND

#### A. RCST

As a result of the 2000-2001 California Energy Crisis, the Commission established a prospective mitigation and monitoring plan for the California wholesale electric markets.<sup>2</sup> A fundamental element of the plan was the implementation of the MOO. The CAISO implemented the MOO beginning in July 2001.

In an order issued on July 8, 2004,<sup>3</sup> the Commission advised that if a supplier believed the payments under the MOO to be unjust and unreasonable, they may seek to initiate a Section 206 proceeding to challenge the current method and seek an alternative proposal.<sup>4</sup> On August 26, 2005, the Independent Energy Producers Association ("IEP") filed a complaint in Docket No. EL05-146 seeking an order from the Commission directing the CAISO to replace the MOO with a tariff-based procurement mechanism entitled the "Reliability Capacity Services Tariff." Following extensive settlement discussions, on March 31, 2006, certain parties<sup>5</sup> filed an Offer of Settlement of the IEP complaint, which proposed the institution of a RCST. The RCST provided the CAISO with a backstop capacity procurement mechanism that included provisions establishing: (1) daily must-offer capacity payments; (2) capacity payments for resources receiving a RCST designation resulting from a Significant Event; (3) capacity payments for resources receiving RCST designations as a result of a deficiency in RA showings; and (4) payments to frequently mitigated units.<sup>6</sup> In addition, the RCST

<sup>3</sup> *Cal. Indep. Sys. Operator Corp.*, 108 FERC ¶ 61,022 (July 2004 Order), *order on reh'g*, 109 FERC ¶ 61,097 (2004).

<sup>4</sup> July 2004 Order, 108 FERC ¶ 61,022 at P 115.

<sup>5</sup> The settling parties were: IEP; the CAISO; the CPUC; Pacific Gas and Electric Company ("PG&E"); San Diego Gas & Electric Company ("SDG&E"); and Southern California Edison Company ("SCE").

<sup>&</sup>lt;sup>2</sup> San Diego Gas & Elec. Co., 95 FERC ¶ 61,115, at 61,355-57, order on reh'g, 95 FERC ¶ 61,418, order on reh'g, 97 FERC ¶ 61,275 (2001), order on reh'g, 99 FERC ¶ 61,160 (2002), pet. granted in part and denied in part sub nom. Pub. Utils. Comm'n of the State of Cal. v. FERC, 462 F.3d 1027 (9th Cir. 2006).

<sup>&</sup>lt;sup>6</sup> See Indep. Energy Producers Ass'n v. Cal. Indep. Sys. Operator Corp., 118 FERC ¶ 61,096 (2007). See generally Indep. Energy Producers Ass'n v. Cal. Indep. Sys. Operator Corp., 116 FERC ¶ 61,069 (2006) ("Settlement Procedural Order"); Indep. Energy Producers Ass'n v. Cal. Indep. Sys. Operator Corp., 116 FERC ¶ 61,297 (2006) ("Rehearing Order"); Indep. Energy Producers Ass'n v. Cal. Indep. Sys. Operator Corp., 119 FERC ¶ 61,266 (2007) ("First Rehearing Order"), pet. for review pending sub nom. Cities of Anaheim v. FERC, Case No. 07-1222, et al. (D.C. Cir., filed June 20, 2007); Cal. Indep. Sys. Operator Corp., 118 FERC ¶ 61,097 (2007) (Order on 2007 RCST), on reh'g, Indep. Energy Producers Ass'n v. Cal. Indep. Sys. Operator Corp., 121 FERC ¶ 61,276 (2007), in Docket No. EL05-146-004.

established cost allocation methodologies and governed the rules by which the CAISO can procure RCST capacity.

In the Settlement Procedural Order, the Commission found that the compensation provided to generators under the MOO was no longer just and reasonable.<sup>7</sup> Specifically, the Commission found that "under the current market design, the [MOO] does not adequately compensate generators for the reliability services they provide."<sup>8</sup> The Commission further held that it was "unduly discriminatory that units under the [MOO] would be required to operate for reliability purposes in a manner similar to units contracted for capacity under the RA program and not receive similar capacity payment."<sup>9</sup>

The Commission, however, was unable to find, without further factual support, that the rates and cost allocation mechanism under the Offer of Settlement were just and reasonable. The Settlement Procedural Order established paper hearing procedures to review evidence on whether the rates and cost allocation under the Offer of Settlement or some other rates and cost allocation would be just and reasonable with respect to the MOO.<sup>10</sup> On February 13, 2007, in the Order on Paper Hearing, the Commission approved, with modifications, the Offer of Settlement as a just and reasonable outcome.<sup>11</sup> The Commission issued its order on rehearing and clarification on December 20, 2007.<sup>12</sup> In its December 20, 2007 rehearing order, the Commission affirmed the findings in its February 13, 2007 Order.

Also on December 20, 2007, the Commission issued an Order Instituting a Section 206 Investigation and Denying Motion for Reconsideration and Clarification.<sup>13</sup> In its December 20 Order, the Commission preliminarily determined that the RCST (which under the tariff was set to expire on December 31, 2007) should be extended until the earlier of MRTU implementation or the effective date of a successor backstop capacity procurement mechanism to the RCST.<sup>14</sup> The Commission recognized the

<sup>7</sup> Settlement Procedural Order, 116 FERC ¶ 61,297 at P 38 (2007).

<sup>8</sup> *Id.* at P 35.

<sup>9</sup> *Id.* at P 36.

<sup>10</sup> *Id.* at PP 38-39 and Appendix to Order.

<sup>11</sup> Indep. Energy Producers Ass'n v. Cal. Indep. Sys. Operator Corp., 118 FERC ¶ 61,096 (2007) ("RCST Settlement Order").

<sup>12</sup> *Indep. Energy Producers Ass'n v. Cal. Indep. Sys. Operator Corp.*, 121 FERC ¶ 61,276 (2007) ("RCST Rehearing Order").

<sup>13</sup> *Cal. Indep. Sys. Operator Corp.*, 121 FERC ¶ 61,281 (2007).

<sup>14</sup> The Commission also instituted a Section 206 proceeding to determine whether it was just and reasonable to extend the RCST.

CAISO's commitment to engage in a stakeholder process to develop an updated MOO compensation mechanism to be in place by the summer of 2008 in the event MRTU implementation was delayed.<sup>15</sup> The Commission indicated that it "expect[ed] the CAISO to follow through with its commitment to initiate a new stakeholder process and modify the RCST accordingly."<sup>16</sup> The instant filing is a product of that process and the TCPM will serve as a bridge between the currently effective RCST and the proposed ICPM.

# B. Relevant MRTU Orders

On February 9, 2006, the CAISO filed its MRTU Tariff with the Commission. On September 21, 2006, the Commission issued an order conditionally accepting the filing, subject to modifications.<sup>17</sup> On June 25, 2007, the Commission accepted certain compliance filings made by the CAISO, subject to further modifications.<sup>18</sup> The Commission also directed the CAISO to explore with stakeholders opportunities for LSEs to avoid potential CAISO remedial procurement by curing a collective shortfall in Local Capacity Area Resource Requirements.<sup>19</sup>

The CAISO determined that the backstop capacity procurement issues identified in Paragraph 380 of the June 25 Order would best be resolved in the context of its development of the ICPM.<sup>20</sup> Accordingly, in its ICPM filing, the CAISO included procedures for LSEs to cure a "collective deficiency" and for the CAISO to procure capacity to the extent the "collective deficiency" is not cured. The CAISO is including these "collective deficiency" provisions in the instant TCPM tariff amendment filing.

# C. ICPM Proposal

On February 8, 2008 the CAISO filed its ICPM proposal with the Commission in Docket No. ER08-556. The ICPM filing proposes to replace the currently-effective RCST to, among other things, enable the CAISO to maintain reliable grid operations in the event: (1) LSEs do not meet RA requirements established by the CPUC and other Local Regulatory Authorities; (2) procured Resource Adequacy Resources do not meet specific local reliability criteria; or (3) conditions or "ICPM Significant Events" occur during the operating year that create a need for the CAISO to procure additional capacity in order to maintain and sustain reliable operations. Unlike the RCST (or the

- <sup>19</sup> *Id.* at P 380.
- <sup>20</sup> CAISO's Sept. 19, 2007 Motion for Extension of Time, Docket No. ER06-615-003, at 6.

<sup>&</sup>lt;sup>15</sup> *Id.* at P 38.

<sup>&</sup>lt;sup>16</sup> *Id*.

<sup>&</sup>lt;sup>17</sup> *Cal. Indep. Sys. Operator Corp.*, 116 FERC ¶ 61,274 (2007) ("September 21 Order").

<sup>&</sup>lt;sup>18</sup> *Cal. Indep. Sys. Operator Corp.*, 119 FERC ¶ 61,313 (2008) ("June 25 Order").

TCPM) the ICPM is designed to work under the new MRTU market paradigm, without the MOO. Thus, the ICPM incorporates a lower minimum annual capacity price of \$41/kW-year, but does not include a deduction for PER or Ancillary Service revenues. This will better reflect the value of any energy produced from the designated capacity and reflect the higher price caps, locational marginal pricing and scarcity pricing concepts incorporated into MRTU.

Moreover, a resource owner that believes that its going-forward costs, plus 10 percent, are greater than \$41/kW-year, would be able to file with the Commission a request and cost justification for a higher ICPM Capacity price. Other proposed changes from the RCST included: (1) participation in the ICPM by a resource would be voluntary; (2) the CAISO would have the ability to procure only a portion of a resource rather than its entire capacity (something that would require significant system changes if the CAISO were to try and implement prior to MRTU due to complications associated with the currently-effective MOO); (3) extensive reporting requirements that would increase transparency; (4) costs for designations resulting from collective procurement shortfalls or ICPM Significant Events would be allocated proportionately to SCs for LSEs in the affected areas after such LSEs are given an opportunity to cure the deficiency; and (5) when the CAISO designates resources, other than for ICPM Significant Events, it would provide "credit" to the affected SCs for LSEs for a corresponding quantity of their RA obligations. The ICPM would become effective simultaneously with implementation of MRTU.

# D. Development of the TCPM – Stakeholder Process

As explained above, the CAISO previously expressed its intent to work with stakeholders to implement a modified RCST backstop capacity procurement mechanism by summer of 2008 if implementation of MRTU was delayed. Given that MRTU was not expected to be implemented by June 1, 2008, the CAISO initiated a stakeholder process by posting an initial TCPM proposal on February 13, 2008. Rather than designing an entirely new backstop mechanism from scratch, the proposal modified the CAISO's currently-effective RCST. The CAISO indicated its belief that this approach was reasonable given that the TCPM had to function effectively and efficiently with the current market design (including the daily MOO) and systems rather than the MRTU market design and systems. Further, such an approach was necessitated given resource and time constraints and the primary focus of CAISO and Market Participant staff's on implementation of MRTU.

The CAISO posted its initial TCPM proposal on February 13, 2008 and conducted a conference call with stakeholders to discuss the proposal on February 21, 2008.<sup>21</sup> Stakeholders were encouraged to provide written comments on the draft

<sup>&</sup>lt;sup>21</sup> The complete TCPM stakeholder record, including CAISO TCPM draft proposals, written stakeholder comments, draft tariff language and conference call materials, can be found at http://www.caiso.com/1f65/1f65791614bd0.html

proposal no later than February 28, 2008. The CAISO received written comments from ten entities. On March 4, 2008, the CAISO posted a revised TCPM proposal reflecting the CAISO's consideration of stakeholder comments and further internal discussions. On March 7, 2008, the CAISO held another conference call with stakeholders to discuss the revised TCPM proposal. On March 10, 2008, the CAISO posted draft tariff language to reflect the latest TCPM draft proposal. Stakeholders were encouraged to provide written comments on the draft TCPM tariff language no later than March 18, 2008. The CAISO received written comments from four entities. On March 20, 2008, the CAISO held a conference call with stakeholders to discuss the draft tariff language. Finally, at the March Board meeting, CAISO management and staff sought the approval of the CAISO Board of Governors for the policy elements of the TCPM and authorization to make a tariff filing reflecting those policy elements.<sup>22</sup> The Board granted its approval on March 27, 2008.

## III. THE TCPM PROPOSAL

The proposed TCPM Tariff language builds off of the RCST Extension tariff language that was contained in the CAISO's March 5, 2008 compliance filing in Docket Nos. EL05-146, et al. In developing the TCPM proposal, the CAISO generally sought to retain the RCST structure, but to: (1) update the compensation paid to resources for both daily MOO and TCPM capacity; and (2) facilitate the CAISO's ability to designate resources to meet Reliability Criteria. With regard to the second goal, the CAISO has included several aspects of the ICPM. For example, the CAISO has included the ability to make TCPM designations for a "collective" shortfall situation in which LSEs in a Local Capacity Area have met their local procurement obligations, but the procurement still does not enable the CAISO to meet Reliability Criteria. The CAISO has also proposed to modify the RCST's definition of Significant Event, as well as the term of Significant Event designations and the Significant Event designation process. In their place, the CAISO has essentially substituted the corresponding ICPM Significant Event designation provisions for use under the TCPM. As part of the TCPM designation process, the CAISO has proposed that costs for designations resulting from collective procurement shortfalls or TCPM Significant Events be allocated in the same manner as proposed in the ICPM and with the same opportunity to LSEs to cure the deficiency. In addition, the CAISO has included extensive reporting requirements in order to ensure that any TCPM procurement is transparent to Market Participants and regulators. Finally, when the CAISO designates under TCPM, other than for TCPM Significant Events, it proposes to provide "credit" to the affected SCs for LSEs for a corresponding quantity of their RA obligations.

Attachment C hereto contains the following: (1) the CAISO's *Final Proposal to the Board* of *Governors for Transitional Capacity Procurement Mechanism Tariff Filing*; (2) the CAISO Memorandum to the Board of Governors regarding the *Decision on Transitional Capacity Procurement Mechanism Tariff Filing*, and (3) a chronology of the major stakeholder activities and a matrix of stakeholder comments and the CAISO's response thereto.

The CAISO considered potential modifications to other aspects of the RCST, such as the shaping and availability factors in Appendix F, Schedule 6 of the ISO Tariff. In the end, the CAISO did not believe that these factors needed to be changed during the expected short-term duration of the TCPM. The CAISO explored the possibility of partial unit designations under the TCPM but realized that such a change would require significant system modifications which were not justified given the extremely short-term duration of the TCPM.

## A. The Need for the TCPM

The Commission has issued several directives that support the need for the TCPM. The CAISO believes that the TCPM satisfies these Commission directives, but retains its narrow scope as a short-term, transitional mechanism that makes important but limited changes to the current RCST and, like the ICPM, fills the gaps between – rather than replaces – a number of existing requirements and programs. As such, the CAISO believes that it has developed a just and reasonable backstop capacity procurement program to be used infrequently in the few months prior to implementation of MRTU.

As described above, the Commission has recognized the need to modify the current RCST scheme -- and the CAISO's commitment to do it in time for the summer of 2008 -- in the event that MRTU was delayed, contemplating either a successor to the RCST under the current market design, or the use of the ICPM under MRTU.<sup>23</sup> As the Commission recognized in its December 20 Order:

[I]f MRTU implementation is postponed until after March 31, 2008, this would heighten concerns we may have regarding prolonged extension of the RCST. In its answer to IEP's motion, the CAISO commits to 'consider developing' a new MOO compensation mechanism should MRTU implementation be delayed. If MRTU is delayed beyond March 31, 2008, therefore, we expect the CAISO to follow through with its commitment to initiate a new stakeholder process and modify the RCST accordingly. While we recognize the CAISO is focused on achieving MRTU implementation, assuring sufficient resource adequacy, and adequately compensating those resources for their services, is important for maintaining reliability. We find that the approach we take today strikes an appropriate balance between the competing goals of preventing a short-term gap in the backstop capacity payment mechanism and providing a longer-term solution that has undergone a more complete stakeholder process in the event that MRTU implementation is delayed."<sup>24</sup>

<sup>&</sup>lt;sup>23</sup> *Cal. Indep. Sys. Operator Corp.*, 121 FERC ¶ 61,281 (2007) ("December 20 Order").

<sup>&</sup>lt;sup>24</sup> *Id.* at P 38.

The instant filing is meant to comply with these Commission directives and to serve as a bridge between the currently effective RCST and proposed ICPM.

The Commission has recognized on several occasions that the CAISO needs the authority to engage in backstop procurement to maintain reliable system operations. In approving the RCST, the Commission has already made the determination that it is appropriate for the CAISO to have authority to procure capacity from non-RA resources to address reliability needs. As the Commission stated in approving the RCST Settlement:

We disagree with Six Cities that the RCST adds an unnecessary mechanism for the CAISO to procure resources for reliability purposes. Under the RCST, the CAISO will compensate units that are needed for reliability reasons and that are not receiving adequate compensation from the CAISO's energy market. Consistent with the implementation of resource adequacy programs and market design elements incorporated in MRTU, the RCST will provide a capacity payment to units that are needed by the CAISO for reliability reasons and that are not already receiving a capacity payment. Additionally, the RCST payment structure better reflects the costs to these units for providing reliability services and reduces the likelihood that units needed for reliability purposes will be mothballed or shut down and unavailable when needed. Therefore, we find that the RCST is neither unnecessary nor duplicative; instead, we find that it augments both market design and reliability initiatives.<sup>25</sup>

More recently, the Commission confirmed that the CAISO needs the authority to engage in backstop capacity procurement activities to meet its responsibilities as the Balancing Authority Area Operator:

We find it reasonable to allow the CAISO the flexibility to engage in backstop procurement activities even though LSEs have adequately met their immediate local capacity obligation. We believe this flexibility is appropriate for those unforeseen circumstances where the CAISO must act in response to a system contingency (e.g. transmission outage) that prevents an LSE from meeting its local procurement obligation in its applicable TAC area location. We also emphasize the necessity of this approach because the CAISO is responsible for maintaining the efficiency and reliable operation of the transmission grid consistent with the NERC planning standards. In addition, we note that the CAISO is under an obligation to meet other applicable reliability criteria under its Transmission Control Agreement. While the CAISO has discretion to engage in backstop procurement, we continue to believe there are adequate safeguards to mitigate concerns regarding unnecessary

<sup>&</sup>lt;sup>25</sup> RCST Settlement Order at P 49.

backstop procurement of local capacity area resources...This report should provide transparency to the CAISO's backstop procurement process that is sufficient to ameliorate ...concerns....

For these reasons, we accept the proposed MRTU tariff language ..., allowing the CAISO to engage in backstop procurement activities: (1) when an LSE fails to meet its obligation; and (2) when the applicable reliability criteria cannot be met despite the fact that each LSE has sufficiently procured the minimum amount of local capacity area resources. We also note that our acceptance is without prejudice to the CAISO filing further modifications, if necessary, to coincide with the cost allocation provisions of its backstop procurement program.<sup>26</sup>

The same rationale enunciated by the Commission in these orders supports the need for the TCPM. Below the CAISO discusses the specific elements of the TCPM proposal that constitute modifications to the existing RCST.

The CAISO understands the potential concern of having a third temporary or interim backstop procurement mechanism but believes that such an approach is the best course given the delay in start-up of MRTU. The CAISO submits that these changes proposed in the RCST are just and reasonable, will provide fair compensation to generators for the reliability services they provide during the peak summer months, and will not place an undue cost burden on ratepayers. The CAISO cannot support simply going forward with the ICPM at this time. The ICPM, in particular the proposed cost structure and voluntary designation process, are designed to work after the MOO has ended and the new market design (with the MRTU bidding and pricing mechanisms) has been implemented.

# B. Compensation for TCPM Resources

TCPM retains the two main types of capacity payments in the RCST -- the monthly capacity payment for units that are designated to provide service on a forward basis (*e.g.*, as the result of Significant Event designations or designations to backstop a deficiency in LSE procurement) and the daily Must Offer capacity payment for units whose request for a MOWD is denied on a given day. The CAISO proposes to update the compensation paid to resources by (1) adopting a target capacity price of \$86/kW-year with a peak energy rent ("PER") deduction for the forward capacity designations and (2) increasing the MOO daily capacity payment from 1/17 of the monthly target capacity price to 1/8 of the monthly target capacity payment.

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Cal. Indep. Sys. Operator Corp., 122 FERC ¶ 61,017at PP 63-64 (2008).

## 1. The Proposed TCPM Monthly Target Capacity Payment

In its initial TCPM white paper issued on February 13, 2008, the CAISO offered two possible options for TCPM pricing: (1) escalating the current RCST capacity price from \$73/kW-year minus a peak energy rent (PER") for two years using the National Consumer Price Index ("CPI")<sup>27</sup> while retaining the peak energy rent ("PER") deduction; or (2) a price of \$41/kW-year with no deduction for PER, which was the minimum price proposed in the ICPM proposal. The CAISO also invited stakeholders to present alternatives to these to proposals. Two stakeholders, Reliant Energy, Inc. ("Reliant") and Dynegy Inc. ("Dynegy") submitted comments suggesting alternative pricing proposals. Reliant argued that TCPM pricing should be based on the CONE and that a single daily Must Offer Waiver Denial ("MOWD") should result in a TCPM capacity payment for a three-year term. Dynegy argued that the TCPM target capacity payment should be set at \$117/kW-year and that a single MOWD should result should result in a two-month designation of capacity. Alternatively, Dynegy argued that if the CAISO retained the daily capacity payment it should be set at 1/3 of the monthly payment. The CAISO discusses each of these options below, as well as the CAISO's ultimate proposal.

As with the ICPM proposal, stakeholders were polarized on the issue of the level of the price to be paid for TCPM Capacity. Positions ranged from retention of the \$73/kW-year RCST price (with a possible CPI adjustment) or use of the \$41/kW-year ICPM price (with no PER deduction) on one end of the spectrum, to use of CONE on the other end. There also was significant debate regarding the appropriate approach to be followed with respect to ICPM pricing with the majority of stakeholders supporting the ICPM approach, and a lesser number of stakeholders supporting continuation of the RCST approach.

After considering the pricing options, the CAISO concluded that it was more appropriate to retain the existing RCST pricing scheme with some modifications for the few months that the TCPM will be in effect, rather than utilize the ICPM pricing scheme. Specifically, the CAISO proposes a TCPM Monthly Target Capacity Payment of \$86/kW-year, which the CAISO calculated by (1) escalating the current RCST Target Annual Capacity Price of \$73/kW-year for two years using the National Consumer Price Index ("CPI") and (2) increasing that value by applying a 10 percent adder.

As with the RCST, the CAISO will subtract the PER from the target capacity price to get a net capacity price that will be paid to TCPM resources. For purposes of calculating the PER, the CAISO proposes to continue using the hypothetical proxy unit heat rate of 10,500 BTU/kWh reflected in the RCST. The CAISO also proposes to use the same seasonal shaping factors for the TCPM that are contained in the RCST.

<sup>&</sup>lt;sup>27</sup> This two year timeframe is based on the fact that the current RCST capacity price was initially proposed in the RCST Offer of Settlement which was filed at the Commission in March of 2006 in Docket No. EL05-146.

The CAISO submits that continuation of the RCST pricing approach rather than the ICPM pricing approach is appropriate for several reasons. First, given the time constraints facing the CAISO, the extremely short-term nature of the TCPM, and the need to focus efforts on MRTU implementation efforts, it is more efficient for the CAISO simply to continue the existing RCST approach until MRTU implementation. The CAISO's business systems are already configured to support the RCST processes, thereby allowing for an effective and efficient implementation of the TCPM without potential delays associated with new system requirements for a transitional product. Second, RCST was designed and approved by the Commission as a just and reasonable approach under a pre-MRTU market design that includes a mandatory daily MOO. In that regard, as recently as December 20, 2007 RCST Rehearing Order, the Commission found the RCST approach to be just and reasonable. On the other hand, ICPM was designed to function under the MRTU market design with different bidding and pricing rules and was intended as a voluntary service that a resource is not obligated to accept.

Third, ICPM includes the opportunity for a resource to make a cost justification filing at FERC if the going forward costs of the resource exceed \$41/kW-year. The ICPM also includes a process for resources to notify the CAISO at the start of the program, and annually thereafter, whether they will accept the \$41/kW-year minimum ICPM capacity price, file with the Commission for a higher price that is specified to the CAISO during the notification period, or file with the Commission for a higher price but not specify such price to the CAISO during the notification process. The ICPM designation process then requires the CAISO to designate lower cost resources that have specified a capacity price before designating resources that have not specified a price, taking into account other factors specified in the tariff such as effectiveness. Adopting the ICPM designation approach in a pre-MRTU environment, where the CAISO must evaluate MOWD requests on a daily basis, would add an additional layer of complexity to the MOWD and unit commitment process, further burdening grid operators during the peak season. Moreover, the cost justification option is not an administratively efficient option given the daily MOWD process that exists today. In fact, allowing that option could potentially result in a "hollow promise" because it is uncertain whether generation owners would spend the necessary time and resources to make cost justification filings with the Commission for daily MOWDs, whereas generators would be more likely to do so under the ICPM where only longer-term designations are available. Even assuming arguendo that such cost-justification filings were made under the TCPM, it would likely be administratively burdensome for resources, interveners, and the Commission to be dealing with such filings every time there is a daily MOWD. These problems do not exist under the ICPM because there is no MOO under MRTU.

Fourth, the Commission's December 20, 2007 order establishing a Section 206 proceeding regarding extension of the RCST effective January 1, 2008 appears to contemplate that the CAISO would modify the RCST.<sup>28</sup>

28

Cal. Indep. Sys. Operator Corp., 121 FERC ¶ 61,281 at P 38 (2008).

Thus, the CAISO proposes to continue the RCST approach for determining the TCPM monthly capacity payment and the MOO daily capacity payment. The current Target Annual Capacity Price under RCST is \$73/kW-year. Given that the Target Annual Capacity Price that was agreed upon by the Settling Parties and was filed at the Commission during the first quarter of 2006, the CAISO believes that it is appropriate to escalate the \$73/kW-year value which the Commission has found to be just and reasonable. The CAISO first proposes to escalate the \$73/kW-year price for two years using an inflation adder based on the National Consumer Price Index for all Urban Consumers ("CPI-U) values for 2006 and 2007. The CPI-U for the twelve months ended in December 2006 is 2.5 percent and the CPI-U for the twelve months ended in December 2007 is 4.1 percent.<sup>29</sup> This would increase the target capacity price to \$77.89/kW-year. The CAISO notes that in previous orders, the Commission has approved price/rate escalations based on the CPI-U index.<sup>30</sup> Consistent with these decisions, the Commission should permit the RCST price to be escalated by the CPI-U, as proposed by the CAISO.

The CAISO recognizes that the CPI-U is only a general inflation factor that may not capture all of the appropriate costs and considerations that should be taken into account in determining the appropriate target TCPM Capacity payment. Accordingly, the CAISO proposes to increase the CPI-escalated Target Annual Capacity Price of \$77.89/kW-year by 10 percent. This can account for inflation in 2008, cost components not captured by the CPI, and consideration of the values of other inflation indices. Also, it can provide a "margin for error" in recognition of the fact that the CAISO does not have comprehensive cost information regarding the fixed costs of all existing units. Accordingly, the CAISO cannot quantify the fixed costs of existing units with any degree of certainty. For example, costs associated with plant maintenance may not readily be captured by a CPI adjustment. Although no stakeholder proposed an alternative inflation indicator during the stakeholder process, other indicators reviewed by the

<sup>&</sup>lt;sup>29</sup> The 2006 and 2007 CPI-U values are available at <u>ftp://ftp.bls.gov/pub/special.reguests/cpi/cpiai.txt</u>

<sup>&</sup>lt;sup>30</sup> For example, the Commission has often used the CIP-U index in hydroelectric project licenses to assess escalating payments licensees must make to various parties and organizations. *See, e.g., Moon Lake Elec. Ass'n, Inc.*, 116 FERC ¶ 62,069 (2006), *Wis. Power & Light Co., Wolf River Hydro Ltd. P'ship*, 96 FERC ¶ 64,134 (2001). The Commission also approves the use of the CIP-U index in other contexts. *See, e.g., Enbridge Energy, Ltd. P'ship,* 117 FERC ¶ 61,279 (2006) (order approving settlement that permits return on equity to be escalated for inflation using the CPI-U); *United Illuminating Co.,* 108 FERC ¶ 63,005 (2004) (order approving a settlement that requires one party to an interconnection agreement to pay, among other things, an annual facilities charge that will be based on the first year's AFC and adjusted annually to the CPI-U); *Accounting and Ratemaking Treatment of Special Assessments Levied Under the Atomic Energy Act of 1954,* 64 FERC ¶ 61,350 (1993) (deposits to fund adjusted annually for inflation using CPI-U index). The CAISO also notes that, in setting the appropriate range of prices for the RCST, one of the bookends adopted by the Commission was a price based on a 2003 study by the California Energy Commission adjusted annually for inflation. *See Indep. Energy Producers Ass'n v. Cal. Indep. Sys. Operator Corp.,* 118 FERC ¶ 61,096 at n.35 (2007).

CAISO reflect a higher inflation rate than the CPI-U (All Items). For example, the Producer Price Index values for Finished Good ("PPI-FG") are 1.1 percent for the twelve months ended in December 2006 and 6.3 percent for the twelve months ended in December 2007, which would result in a two-year escalation of 7.4 percent, as opposed to the 6.6 percent using CPI-U.<sup>31</sup> The CAISO notes that, for oil pipelines, the Commission currently permits an annual escalator for rates based on PPI-FG plus 1.3 percent.<sup>32</sup> The Commission approved an annual escalator based on PPI-FG plus 1.3 percent based, in part, on the increased costs oil pipelines face due to new safety, security, and environmental obligations.<sup>33</sup> Generators in California can face similar types of costs. A 10 percent adder to the CPI-adjusted price is reasonable given the aforementioned considerations and uncertainties.

In addition, a 10 percent adder is in line with adders that the Commission has approved in the past.<sup>34</sup> As the Commission has recognized, a 10 percent adder can, *inter alia,* account for costs that are difficult to quantify and promote appropriate behavior.

The CAISO recognizes that further escalation of the target capacity price from \$77.89/kW-year to \$86/kW-year is not without dispute as to being either too high or too low. The adder recognizes that rate setting is not a perfect science and that there may be a number of just and reasonable prices within a zone of reasonable prices.

The proposed \$86/kW-year capacity price also reflects an attempt to balance the disparate positions of LSEs and generation owners on the pricing issue, while maintaining the CAISO's belief that CONE pricing is not appropriate for an interim capacity backstop mechanism. Importantly, though, an \$86/kW-year (minus a PER) target capacity price is within the range of the fixed costs of existing units and the cost of new entry -- which the Commission found was the appropriate range for determining reasonable capacity prices in the RCST Settlement Order.<sup>35</sup> The CAISO acknowledges that it does not have comprehensive information regarding the annual fixed costs of existing generators (for purposes of establishing the appropriate capacity price floor)

<sup>32</sup> See, e.g., Oil Pipeline Rate Methodologies and Procedures, 18 C.F.R. Part 342 (2007); Five-Year Review of Oil Pipeline Pricing Index, 114 FERC ¶ 61,293 (2006).

<sup>33</sup> *Id.* at PP 4, 62-63.

<sup>34</sup> San Diego Gas & Elec. Co. v. Sellers of Energy and Ancillary Servs., into Markets Operated by the Cal. Indep. Sys. Operator Corp. & the Cal. Power Exch., 96 FERC ¶ 61,120 at 61,519 (2001) (involving a 10 percent creditworthiness adder); *Pub. Serv. Co. of N.M.*, 95 FERC ¶ 61,481 at 62,714 (2001) (involving a 10 percent energy imbalance adder); *Niagara Mohawk Power Corp.*, 86 FERC ¶ 61,009 at 61,028 (1999); *Terra Comfort Corp.*, 52 FERC ¶ 61,241 at 61,841 (1990).

<sup>35</sup> RCST Settlement Order at P 70.

<sup>&</sup>lt;sup>31</sup> See <u>http://www.bls.gov/ppi/ppidr200712.pdf</u> at page 2.

other than data concerning the costs of RMR units which are provided in Attachments D and E hereto.<sup>36</sup> As the Commission recognized in approving the RCST Settlement, the average annual cost of non-hydroelectric RMR units for 2006 was \$64/kW-year.<sup>37</sup> The Commission used this price as a proxy for the costs of existing units for purposes of establishing the floor of the range of reasonableness. As reflected in Attachment E, the average \$/kW-year of non-hydroelectric RMR units in 2008 is \$32.44/kW-year. However, the CAISO notes that there are significantly fewer RMR units in 2008 than there were in 2006 when the RCST Settlement was approved. In any event, based on the cost information available to the CAISO, an \$86/kW-year target capacity price is above the fixed costs of existing generation.

The ceiling price for the zone of reasonable capacity prices can be established based on data contained in the California Energy Commission's ("CEC") comprehensive generation cost study which was completed in December 2007.<sup>38</sup> The CEC studied 34 Combustion Turbine and Combined Cycle units constructed in California to arrive at its cost numbers. The CEC Cost Study shows that the average CONE of a Conventional Simple Cycle CT (100 MW) is \$145.54/kW-year. This cost is derived by averaging the costs to construct such a unit by a merchant generator, investor owned utility and publicly owned utility construction.<sup>39</sup> The CEC Cost Study shows that the average CONE of a Small Simple Cycle CT (50 MW) is \$162.10/kW-year, and the average CONE of an Advanced Simple Cycle CT (200 MW) is \$116.23/kW-year.<sup>40</sup> The CEC Cost Study shows the total fixed costs of new Combined Cycle units to be lower on average than the total fixed costs of new Simple Cycle units.

Based on the aforementioned data, the proposed target capacity price of \$86/kW-year is within the range of the fixed costs of existing units and the cost of new entry. An \$86/kW-year target capacity price (minus a PER) is an appropriate price for existing units providing reliability service under a mandatory MOO. Consistent with its rationale for accepting the target capacity price in the RCST Settlement, the Commission should find the proposed capacity price to be just and reasonable.

- <sup>40</sup> *Id.*
- <sup>41</sup> See CEC Cost Study at 10, 12, 14.

<sup>&</sup>lt;sup>36</sup> Attachments D and E show the Annual Fixed Revenue Requirements ("AFRR") of RMR Resources for 2006 and 2008, respectively.

<sup>&</sup>lt;sup>37</sup> See RCST Settlement Order at P 73.

<sup>&</sup>lt;sup>38</sup> The CEC's December 2007 study, entitled *Comparative Costs of California Central Station Electricity Generation Technologies* ("CEC Cost Study"), is available at <u>http://www.energy.ca.gov/2007publications/CEC-200-2007-011/CEC-200-2007-011-SF.PDF</u>. The CAISO included the CEC Cost Study as Attachment F to its ICPM Filing in Docket No. ER08-556.

<sup>&</sup>lt;sup>39</sup> See CEC Cost Study at Appendix E.

Under TCPM, a PER would be deducted from the capacity payment as is currently done under the RCST.<sup>42</sup> Further, the CAISO is not proposing to change how the PER is currently calculated under RCST. Rather, the CAISO proposes to continue using the hypothetical proxy unit that is used to determine the PER in the current RCST (with a heat rate of 10,500 BTU/kWh).<sup>43</sup> Also, the CAISO is also not proposing to change the availability factor and monthly shaping factors that are contained in the RCST.<sup>44</sup>

The only revisions are to recognize the possibility of a mid-month designation for a TCPM Significant Event, and the approach the CAISO is proposing is consistent with that proposed in the ICPM.

## 2. Uniform Cost of New Entry Pricing Is Inappropriate

In comments filed in response to the CAISO's initial TCPM whitepaper, Reliant Energy, Inc. ("Reliant") argued for continuation of the RCST pricing method, but contended that the RCST price should be changed to a price equal to recent estimates of the cost of new entry. Specifically, Reliant stated that the CEC Cost Study supports a CONE price of \$145.54/kW-year. As indicated above, that price was derived by averaging the costs to construct a new Conventional Simple Cycle CT (100 MW) by a merchant generator, investor owned utility and publicly owned utility.

The CAISO does not concur with the suggestion that there should be a uniform TCPM capacity price based on CONE. The TCPM is only expected to be in place until the fall of 2008. Given its extremely short-term existence, it is not the intent of the TCPM to provide an incentive for construction of new generation. In approving the RCST, the Commission found that "it was reasonable to expect that the target capacity price would be less than the cost of new entry, because the shorter term nature of RCST does not provide the long-term incentive required to attract new investment.<sup>45</sup> Given that the expected duration of the TCPM -- a few months -- is significantly less than the duration of the RCST, there is even less reason to use CONE pricing as the basis for the TCPM.

Further, new entry cannot provide TCPM service, only existing units can. The TCPM is simply a tool for the CAISO to be able to procure backstop capacity from *existing* resources to meet short-term reliability needs and backstop any RA procurement deficiencies. It is uncertain whether, when, and to what extent TCPM capacity will even need to be procured. The past couple of years there have not been

<sup>&</sup>lt;sup>42</sup> See section 40.14 and Appendix F, Schedule 6.

<sup>&</sup>lt;sup>43</sup> RCST Settlement Order at PP 86-89, *order on reh'g*, RCST Rehearing Order at P 30.

<sup>&</sup>lt;sup>44</sup> RCST Settlement Order at PP 97-99, *order on reh'g*, RCST Rehearing Order at P 34-36.

<sup>&</sup>lt;sup>45</sup> RCST Rehearing Order at P 23.

any deficiencies in RA procurement for which the CAISO has had to backstop, and the CAISO does not expect that there will be any in the future.<sup>46</sup> Further, TCPM Significant Event procurement is for unforeseen, unexpected and transitory events. Given the uncertainty about the location, frequency and duration of TCPM backstop procurement, it is highly unlikely that any resource developer or financer would be "counting on" TCPM designations for purposes of determining whether to build new generation. Thus, CONE pricing as an incentive for new generation is not needed for the TCPM.<sup>47</sup>

Some form of CONE pricing might be appropriate as a backstop price under a multi-year forward capacity market design as an incentive for new generation in areas where it is needed. Under such circumstances, new entry can compete to provide the "future" service, and CONE pricing can incent new generation in locations where new infrastructure is needed. Unlike a multi-year capacity market, however, the TCPM is a short-term, administrative backstop procurement mechanism that permits the CAISO to procure capacity from existing units. New entry cannot compete with existing capacity to provide the service. The TCPM is designed to provide capacity payments to resources already under a MOO imposed by the Commission. Hence, TCPM is not a proper mechanism to support new investment, nor is it appropriate to make the TCPM the mechanism to guarantee a particular level of fixed cost recovery to recent entrants that made the investment decisions prior to the establishment of the TCPM or to resources that have decided to remain available absent an RA contract. The purpose of the TCPM is to provide the CAISO with the ability to call on *existing* units not under RA or RMR contracts if the CAISO need them on a particular day.

Also, CONE is significantly higher than the fixed costs of existing generation. Indeed, using the annual fixed costs of RMR units as reflected in Attachments D and E as a proxy for the fixed costs of existing resources, the CONE price exceeds the fixed costs of the vast majority of these existing resources by many multiples. Thus, the sole result of CONE pricing would be a revenue windfall for existing resources without incenting new generation – an unjust and unreasonable outcome.

Even assuming *arguendo* that CONE pricing is appropriate under an interim program, it would not be appropriate to apply such pricing in a uniform manner. In particular, CONE should be considered as a possible backstop price only when there is a capacity deficiency in a local area or system zone and the intent of the mechanism is

<sup>&</sup>lt;sup>46</sup> The CAISO also notes that LSE procurement of annual resources to meet local RA requirements has already occurred for 2008, as has year-ahead procurement for 90 percent of LSEs' summer-month requirements. Thus, the only RA procurement that the CAISO might need to backstop during the expected duration of the TCPM is the month-ahead obligation for LSEs to satisfy 100 percent of their Demand and Planning Reserve obligations.

<sup>&</sup>lt;sup>47</sup> Backstop procurement that includes new investment typically requires a multi-year forward time frame and the identification of specific projects to fulfill an RA need, *e.g.*, in the four-year RPM process in PJM. That does not exist here. Also, the TCPM is not a capacity market like the RPM or the forward capacity market in New England.

to incent new generation.<sup>48</sup> RA requirements in California are currently set on both a local area and system basis. The Table below shows the 2008 evaluation of the deficiency or surplus in the 10 local capacity areas that the CAISO has defined for the CAISO grid. Based on the reliability needs identified in the CAISO's 2008 Local Capacity Technical Study, only three of these local areas are deficient in terms of meeting the reliability criteria set forth in the 2008 Local Capacity Technical Study.<sup>49</sup> Further, the deficient areas constitute a relatively small percentage of the total capacity. This assessment suggests that only few locations on the CAISO Controlled Grid would even warrant high backstop prices if a CONE approach were to be applied in the context of a multi-year forward capacity market --- which the TCPM is not. However. most of the capacity in those tight areas is either owned by investor owned utilities or is under a multi-year RA contract, thereby indicating that even if a CONE approach were to be applied, it would provide no near-term benefits to Reliant or other FERC MOO generators that do not already have RA contracts. In the remaining load pockets, where there is a surplus of capacity, additional investment does not seem to be needed in the near term. As a result, using CONE pricing to spur additional investment in these areas is neither needed nor justifiable for the several month period in which the TCPM will be in effect. Also, there is a concentration of ownership in many of the local areas. Using CONE as the backstop price in these circumstances could only serve to increase the month-ahead RA prices in these areas to the extent generation owners have market power.<sup>50</sup>

<sup>&</sup>lt;sup>48</sup> The CAISO also stresses that any application of CONE without appropriate market power mitigation rules would create competitiveness issues. Reliant has not proposed any market power mitigation measures, and a further process would be required to determine such appropriate measures.

<sup>&</sup>lt;sup>49</sup> The CAISO notes that in the San Diego load pocket the new 590 MW Otay-Mesa plant is expected to come on-line in 2009.

<sup>&</sup>lt;sup>50</sup> For example, consider a hypothetical scenario in which there is a load pocket with 50 percent additional capacity (MW) than is needed to fulfill the local RA requirement. There is also substantial concentration of ownership of that capacity because only one or two sellers exist. In that situation, the cost of new entry backstop price would be used not to incent new generation but to provide sellers with a bargaining tool in bilateral RA negotiations with buyers. This occurs because sellers would know that if buyers did not accept the offered forward RA prices, they could rely on the CAISO to procure that capacity through the backstop and at a price at cost of new entry. To mitigate this market power, there would need to be additional rules for backstop capacity pricing, such as an administrative demand curve for capacity that lowers the backstop price in relation to the surplus market supply condition. No such rules have been proposed or vetted with stakeholders. This would require significant effort – more than is justified given current market conditions and the transitional nature of the TCPM. The CAISO believes that time is better spent designing a long-term RA framework and long-term capacity pricing scheme, not developing demand curves and mitigation for a several month product.

#### Table -- Comparison of 2008 Locational Capacity Requirement Need and Qualifying Capacity

Local Area <sup>1/</sup> Name	Total '2008 LCR Need based on Category C with Operating Procedure (MW)	Total Qualifying Capacity (MW)	Surplus or (Deficit) (MW)	Surplus or (Deficit) (%)
Humbolt	175	180	5	3%
North Coast/North Bay	676	883	207	
Sierra	2092	1780	(312.00) 2/	<b>( 15%)</b> <sup>2/</sup>
Stockton	786	536	(250.00) 2/	(32%) <sup>2/</sup>
Greater Bay	4688	6214	1526	33%
Greater Fresno	2382	2991	609	26%
Kern	486	646	160	33%
LA Basin	10130	12093	1963	19%
Big Crook/Vontura	3658	5396	1738	48%
Creek/Ventura <b>San Diego</b>	3033	2919	(114.00) 2/	<b>(4%)</b> <sup>2/</sup>
Total	28106	33638	()	()

Source: CAISO "2008 Local Capacity Technical Analysis Report and Study Results," Updated April 3, 2007, table on page 4 of 85 pages. This study is available at: <u>http://www.caiso.com/1bb5/1bb5ed3d46430.pdf</u>. Data for San Diego local area is from "Report and Study Results Update for San Diego, Updated June 19, 2007, which was filed with the CPUC. The update is available at: <u>http://www.caiso.com/1f81/1f81bf3f68a20.pdf</u>.

Generation deficient Local Capacity Area (or with sub-area that are deficient) – deficiency included in LCR. Generator deficient area implies that in order to comply with the criteria, at summer peak, load must be shed immediately after the first contingency.

In a recent order on the New York ISO's capacity market design, the Commission recognized,

While a capacity market may produce market clearing prices equal to or in excess of net CONE in certain market conditions, the NYC capacity market is currently enjoying a surplus of capacity.<sup>51</sup> This surplus should translate into market clearing prices that are below net CONE, and therefore we would expect that any just and reasonable proposal would produce market clearing prices that are below net CONE, as NYISO's proposal does. Market-clearing prices under the proposed mitigation will likely fall significantly below new entry costs in the short-run, but this is to be expected given the significant excess supply that currently exists.<sup>52</sup>

Thus, the Commission found that prices should be significantly below CONE in situations where there is excess supply. That is the situation in the CAISO Balancing Authority Area, and the CAISO's pricing proposal is more reasonable under these conditions than is Reliant's proposal for uniform CONE pricing.

Also, the CAISO does not believe that CONE is the appropriate price benchmark for TCPM Significant Event procurement which will result from unexpected, unforeseen and transitory events which create a need for short-term procurement. It is not appropriate to base payments for such procurement on CONE because the purpose of this type of procurement is to employ existing resources that are available to address short-term contingencies or reliability needs, not to provide incentives for construction of new generation. Indeed, new generation cannot compete to provide this service. There is no legitimate basis to pay a price based on CONE to existing resources under these types of transitory circumstances. Even ignoring the fact that new entry could not enter the market in the necessary timeframe to provide the service, there is no indication that new resources should even enter the market at that particular location of the TCPM Significant Event in the long-term due to the transient nature of such events.<sup>53</sup> As the CAISO's Market Surveillance Committee ("MSC") recognized in its opinion on the ICPM proposal, units providing service in response to Significant Events have already made the decision to remain available in the CAISO markets without an RA contract (and without any expectation of a forward designation of capacity), and the price and duration of Significant Event procurement does not provide a signal for new investment.<sup>54</sup>

Accordingly, the MSC opined that resources designated in response to Significant Events should be paid significantly less than CONE.<sup>55</sup>

# 3. Dynegy's Proposed Price of \$117/kW-Year Should be Rejected

In its comments submitted during the stakeholder process, Dynegy proposed a \$117/kW-year price for capacity procured under the TCPM. Dynegy obtained this proposed price by first extending the range of reasonable capacity prices the Commission relied on in setting the RCST capacity price, *i.e.,* \$64/kW-year to \$89/kW-year, to a new range of \$64/kW-year to \$205/kW-year. Dynegy then selects the same point along the \$64/kW-year to \$89/kW-year scale used to determine the \$73/kW-year RCST capacity price to reach a proposed new capacity price of \$117/kW-year.

Dynegy's proposal is not just and reasonable. The arguments above with respect to the inappropriateness of CONE pricing for TCPM apply with similar force to Dynegy's proposal. Moreover, it is not justifiable to increase the existing RCST price by 60 percent simply because the alleged CONE has dramatically increased in the past few years. For the most part, the same existing units that have been eligible to receive the just and reasonable \$73/kW-year RCST payment are the same units that would be eligible to receive the \$117/kW-year payment proposed by under Dynegy. However, the increased cost of constructing new units (which Dynegy states has increased during the last few years, and in particular spiked during the last year)<sup>56</sup> does not materially affect the costs of existing units, many of which were constructed 10, 20, or 30 years ago (or even longer). Even assuming *arguendo* that there happens to be a residual impact on existing units from the recent increase in new unit construction prices, that impact can be accounted for by the 10 percent adder (above a two-year CPI-U escalation) that the CAISO has utilized in developing the \$86/kW-year target capacity price. The sole result of Dynegy's proposal would be a revenue windfall for existing units, without incenting new generation. Using the costs of 2006 and 2008 non-

<sup>51</sup> Potomac Economics, Ltd., *NYISO State of the Market Report* (2006).

Order")

<sup>52</sup> *N.Y. Indep. Sys. Operator, Inc.*, 122 FERC ¶ 61,211 at P 35.(2008) ("March 7 NYISO ")

<sup>53</sup> In the event TCPM Significant Events were to take place repeatedly in a particular location, or due to failure of RA resources, then that information will be provided to the CPUC and Local Regulatory Authorities to suggest potential modifications to the RA programs and thereby influencing forward procurement.

<sup>54</sup> *MSC Opinion on "Interim Capacity Pricing Mechanism" under MRTU, p. 3,* November 21, 2007. The MSC Opinion is included herewith as Attachment F.

<sup>55</sup> *Id.* at 4.

<sup>56</sup> See Motion to Intervene and Protest of Dynegy Moss Landing, *et al.*, n. 27, Docket No. ER08-556, February 29, 2007.

hydroelectric RMR units -- an average of \$64/kW-year and \$32.44/kW-year, respectively -- as a proxy for the fixed costs of existing units, Dynegy's proposed capacity price of \$117/kW-year is substantially in excess of that amount. Indeed, in the overwhelming majority of instances, the \$117/kW-year price is a multiple of these units' fixed costs (in some instances 4, 5 or even more than 10 times higher). Also, a \$117/k/W-year backstop price would unduly put upward pressure on forward RA prices especially in areas where there is a concentration of ownership. Such an outcome would not be justifiable given that there are surplus conditions in most local areas, and new generation is not needed.

There are other reasons why use of a \$117/kW-year capacity price is not justified. First, Dynegy has not adequately supported the level of the floor or ceiling prices it uses to reach the \$117 price. Dynegy simply retains the \$64/kW-year price from RCST (which was based on the average Annual Fixed Revenue Requirements of 2006 RMR units) without providing any current information regarding the fixed costs of existing units. As the CAISO acknowledged *supra*, it does not have comprehensive information regarding the actual fixed costs of the existing units in the generation fleet. The only relevant data the CAISO has is RMR data. The CAISO notes that for 2008, the average Annual Fixed Revenue Requirement (average \$/kW-year) is \$32.44/KW-year. The CAISO recognizes that there are significantly fewer RMR units in 2008 that there were in 2006; so, any comparison of the average costs of RMR units in 2006 and 2008 is not necessarily comprehensive. The numbers do demonstrate, however, that it is not appropriate to accept, without any analysis, \$64/kW-year as the appropriate floor price.

Second, Dynegy does not rely on the comprehensive CEC cost study as the basis for determining the CONE ceiling price. Instead, Dynegy sets the ceiling price (\$205.61/kW-year) based on the cost of peakers installed by Southern California Edison Company ("SCE"). As explained by SCE in its answer to protests filed on March 17, 2008 in Docket No. ER08-556, these units were constructed on an expedited basis under special circumstances. It is inappropriate to base the CONE price on a single data point without knowing all of the circumstances that led to the cost of the particular unit installation. It is more appropriate that any CONE bookend price be based on a representative sample of units such as that reflected in the comprehensive generation cost study conducted by the CEC. As indicated above, the CEC studied 34 gas-fired CT and CC units in developing its CONE estimates. Based on the CEC cost study, the average CONE of a Conventional Simple Cycle CT (100 MW) unit -- averaging the costs of merchant generator, investor owned utility and publicly owned utility construction -- is \$145.54/kW-year. See CEC Cost Study at Appendix E.

## 4. Increase in MOO Daily Capacity Payment

As a result of approval of the RCST Settlement, the CAISO currently pays non-RA and non-RMR units that are denied a Must Offer Waiver on a given day a daily capacity payment equal to 1/17 of the monthly RCST target capacity price. Under the

TCPM, the CAISO proposes to increase this daily payment to 1/8 of the monthly target capacity price.

The CAISO recognizes that there is no "magic formula" to determine what the appropriate level of the daily payment should be. The 1/17 payment was a negotiated level as part of the RCST Settlement. The CAISO believes that a 1/8 payment better reflects the fact that non-RA, non-RMR resources are providing reliability services pursuant to a mandatory MOO. A 1/8 payment also strikes a reasonable balance between the divergent positions of the various stakeholder groups, some who argued for retention of the 1/17 payment and others who argued for multi-month designations for a single MOWD.<sup>57</sup>

Further, a 1/8 payment recognizes that a MOWD commitment of a resource is essentially a daily designation of capacity as opposed to a monthly or longer designation of capacity.<sup>58</sup> Although LSEs and the CPUC supported retention of the existing 1/17 daily capacity payment and argued that there was no basis for increasing it to 1/8, the CAISO believes that, for the peak and shoulder months when the TCPM will be in effect -- the times of the year when the CAISO most needs capacity to be available -- it is not unreasonable to pay a non-RA unit that is committed for reliability reasons eight times in a month the equivalent of a monthly TCPM capacity payment.<sup>59</sup> This will enable FERC Must Offer Generators to achieve the equivalent of a monthly capacity payment more than 50 percent guicker than under the RCST with a 1/17 daily payment. The CAISO also notes that the proposed 1/8 payment -- which more than doubles the daily capacity payment agreed to in the RCST Settlement and approved by the Commission -- strikes a reasonable balance between the stakeholders that argued for retention of the 1/17 payment and stakeholders that sought a higher payment (*i.e.*,  $1/3^{ra}$ ). Further, in conjunction with increasing the daily capacity payment from 1/17 to 1/8, as discussed in Section III.C.1.b, the CAISO is proposing to modify the existing RCST Significant Event designation provisions and process in a manner consistent with the ICPM proposal. This will give the CAISO broader authority and flexibility than existed under RCST to utilize the backstop mechanism to make monthly designations of capacity when necessary to meet short-term reliability needs.

As with the increase in the Target Annual Capacity Price described above, increasing the level of the daily capacity payment will also encourage generators to maximize their availability during the upcoming peak and shoulder seasons. Although

<sup>&</sup>lt;sup>57</sup> Dynegy stated in its written stakeholder comments that to the extent the CAISO retains a daily MOWD payment and does not propose that a single MOWD will trigger a two-month designation of capacity, then the CAISO should set the daily capacity payment at 1/3rd of the monthly capacity payment.

<sup>&</sup>lt;sup>58</sup> See RCST Settlement Order at P 73.

<sup>&</sup>lt;sup>59</sup> As with the current RCST, the total payment that a generator can receive in any month will remain capped at the level of the monthly payment.

generators are subject to a MOO, the MOO only applies to the extent a unit is actually available (and then only to the extent of the unit's actual available capacity). CAISO grid operators want resources to maximize their availability and minimize outages or derates during these periods when system stress is generally at its greatest. The revised compensation scheme will further incent resources to maximize their availability during this period when they are most needed.

# C. Designation of Resources

Although the TCPM retains the two main types of backstop procurement in the RCST, it proposes to change the designation process by including the authority to procure resources where there are insufficient collective local capacity area resources and revising the resource designation where a TCPM Significant Event occurs.

# 1. Types of Designations

The TCPM proposes two significant changes from the designation process under the RCST. Both of these changes were incorporated into the ICPM. First, the CAISO proposes to include the authority to make a "collective deficiency" designation if the portfolio of resources procured by all Scheduling Coordinators for LSEs in a local area is not sufficient to fully meet the Reliability Criteria for the local area. Second, the CAISO has proposed a number of changes to the process and criteria for designating units for Significant Events.

#### a. TCPM Procurement in Response to Insufficient Collective Local Capacity Area Resources

In the first instance, Scheduling Coordinators for LSEs are given the opportunity to procure the necessary resources to meet their Reserve Margin and Local Capacity Area Resource obligations and reflect those purchases in their annual and monthly Resource Adequacy Plans. However, it is possible that the procurement of all Scheduling Coordinators for LSEs in a particular local area will not collectively be sufficient for the CAISO to meet Reliability Criteria in that local area, even if all such Scheduling Coordinators meet their RA procurement obligation for Local Capacity Area Resources. In such a circumstance, the CAISO will *first* give the respective Scheduling Coordinators a chance to purchase additional capacity to resolve the need, *i.e.,* "cure the collective deficiency." In that regard, if there is a collective shortfall for procurement in a Local Capacity Area, Section 43.2.1.4.1 provides that any Scheduling Coordinator for an LSE in the affected Local Capacity Area can procure its proportionate share of the additional resources needed to meet the Reliability Criteria and avoid any further cost allocation under TCPM. Under this provision:

Where the ISO determines that a need for Eligible Capacity exists under Section 43.2.1.4, but prior to any designation of Eligible Capacity, the ISO shall issue a market notice, no later than fifteen (15) days after the Scheduling Coordinator for an LSE is required to submit local Resource Adequacy filings, identifying the deficient Local Capacity Area and the quantity of capacity that would permit the deficient Local Capacity Area to comply with the Local Capacity Technical Study criteria provided in Section 40.3.1.1 of Appendix CC and, where only specific resources are effective to resolve the Reliability Criteria deficiency, the ISO shall provide the identity of such resources. Any Scheduling Coordinator for an LSE may submit a revised annual Resource Adequacy Plan within thirty (30) days after the ISO issues the market notice herein, demonstrating procurement of additional Local Capacity Area Resources consistent with the market notice issued under this Section. Any Scheduling Coordinator for an LSE that provides such additional Local Capacity Area Resources consistent with the market notice under this Section shall have its share of any TCPM procurement costs under Section 43.8 reduced on a proportionate basis. If the full quantity of capacity is not reported to the ISO under revised annual Resource Adequacy Plans in accordance with this Section, the ISO may designate Eligible Capacity sufficient to alleviate the deficiency.

Thus, if a Scheduling Coordinator for an LSE procures its additional share of this capacity, it will not be assigned TCPM procurement costs if others do not cure the shortfall.

If Scheduling Coordinators do not procure the additional capacity necessary to ensure the Reliability Criteria can be met, Section 43.2.1.4 authorizes the CAISO to designate additional capacity to address the shortfall. Under that section, the CAISO would designate resources to respond to the collective shortfall situation for a minimum term of one month and a maximum term of one year, provided that the term does not extend into a subsequent Resource Adequacy Compliance Year or extend beyond midnight on the day before the MRTU Tariff goes into effect. The CAISO would base the term of the designation on its evaluation of what the period(s) of the shortfall will be after examining all of the Resource Adequacy Plans for that area. In other words, the CAISO will only procure capacity for the period of time that it is needed to meet the collective deficiency. This will prevent over-procurement or duplicative procurement.

The Commission has previously recognized the appropriateness of the CAISO procuring local capacity to ensure compliance with applicable Reliability Criteria.<sup>60</sup> However, in connection with such backstop procurement, the Commission directed the CAISO to explore with stakeholders potential opportunities to cure any collective deficiencies.<sup>61</sup> The CAISO complied with that directive in the ICPM stakeholder process and developed tariff provisions under the ICPM to provide opportunities for LSEs to cure collective deficiencies. The proposed TCPM tariff provisions regarding "collective

<sup>&</sup>lt;sup>60</sup> September 21 Order at PP 1171-1199.

<sup>&</sup>lt;sup>61</sup> June 25 Order at P 380.

deficiencies" are consistent with the "collective deficiency" tariff provisions proposed in the ICPM filing, and should be approved by the Commission.

#### b. Procurement for TCPM Significant Events

The CAISO proposes a number of important changes to the existing RCST process and criteria for designating units for RCST Significant Events. The CAISO recognizes that the RA program is the primary means by which resources are to be made available to meet the CAISO Balancing Authority Area operational requirements. The CAISO also understands that the Reserve Margins established by Local Regulatory Authorities should be set at a level that provides sufficient capacity by anticipating that Outages can and will occur. Nevertheless, the CAISO needs the ability to procure additional capacity under certain circumstances. Specifically, the CAISO must be able to address a single event, or a combination of events, that the CAISO determines (1) results in either (a) a material difference from what was assumed in the RA program for purposes of determining the RA capacity requirements, or (b) a material change in system conditions or CAISO-Controlled Grid operations, and (2) causes, or threatens to cause, a failure to meet Reliability Criteria absent the recurring use of a non-Resource Adequacy Resource(s) on a prospective basis. Under the RCST, these types of events are referred to as Significant Events. Under the ICPM they are referred to as ICPM Significant Events. Under the TCPM, they are referred to as TCPM Significant Events.

In the ICPM tariff amendment filing, the CAISO explained certain shortcomings in the RCST approach to Significant Event designations and how the ICPM Significant Event designation process remedied these deficiencies. The primary focus of the ICPM proposal was to provide the CAISO with greater authority and increased flexibility to designate capacity to respond to unexpected events that create short-term reliability problems. This was accomplished, *inter alia*, by adopting a broader definition of Significant Event and decreasing the initial Significant Event designation period from three months to one month. The additional flexibility afforded the CAISO was balanced by the CAISO's heightened reporting obligations to provide increased transparency regarding its designations and by giving Market Participants the opportunity to avoid lengthy ICPM Significant Event designations by proposing alternative operating procedures or procurement to address the CAISO's capacity need.

The CAISO proposes to incorporate the improvements proposed in the ICPM into the TCPM. Thus, consistent with the ICPM definition of Significant Event, a "TCPM Significant Event" is defined as:

A substantial event, or a combination of events, that is determined by the ISO to either result in a material difference from what was assumed in the RA program for purposes of determining the RA capacity requirements, or produce a material change in system conditions or in ISO-Controlled Grid operations, that causes, or threatens to cause, a failure to meet Reliability

Criteria absent the recurring use of a non-RA resource(s) on a prospective basis.<sup>62</sup>

Examples of such "TCPM Significant Events" could include the following:

- Loss of a facility, for any cause, that affects its capability, including but not limited to:
  - Loss of a local RA resource after annual LSE RA showing,
  - Lack of RA resources causing a shortage of capacity to meet required operating reserves (accumulated total, including ongoing scheduled and forced outages) after monthly LSE RA showing, or
  - Loss of a facility, CAISO Controlled or not, that affects the deliverability of RA, Reliability Must-Run Contract ("RMR") or other resource available to the CAISO, or affects the operation of the grid;
- Grid study error, forecast changes, incorrect assumptions, bad data, or modeling inaccuracies, including, but not limited to:
  - An official change in the adopted Load forecast by the CEC after it has been used in RA showings by LSEs,
  - Errors relative to deliverability of RA resources to load, or
  - Changes in non-CAISO Controlled Grid affecting previous assumptions;
- Changes in applicable NERC or WECC reliability criteria or operating policies affecting the CAISO; and
- Changes in federal or state law or regulation; court action; or imposition of environmental restrictions that affect the operation of resources.

Although some stakeholders sought a more narrow definition of TCPM Significant Event (in order to limit the CAISO's ability to make capacity designations), the CAISO believes that greater flexibility is necessary to avoid the unintended consequences of an overly prescriptive approach. A more flexible "tool" will better enable the CAISO to address unforeseen or changed circumstances or deficiencies in resource adequacy programs where lack of action by the CAISO to address a known problem could place the CAISO in the position of failing to meet Reliability Criteria. The CAISO believes that it has proposed a reasonable definition of a TCPM Significant Event, which will allow the CAISO to use the TCPM to address contingencies and

<sup>&</sup>lt;sup>62</sup> On the other hand, under the RCST Settlement a Significant Event was defined as follows:

For 2006, a "Significant Event" is an event that results in a material difference in ISO Controlled Grid operations relative to what was assumed in developing the LARN Report for 2006 that causes, or threatens to cause, a failure to meet Applicable Reliability Criteria, For 2007, a "Significant Event" is an event that results in a material difference in ISO Controlled Grid operations relative to what was assumed by the CPUC and Local Regulatory Authorities in developing Local Resource Adequacy Requirements for 2007 that causes, or threatens to cause, a failure to meet Applicable Reliability Criteria.

unexpected system conditions and ensure its ability to satisfy reliability requirements. Based on its experience under the RCST, the CAISO found the RCST definition of Significant Event to be overly prescriptive and, as such, it unduly limited the CAISO's ability to use that tool to make designations to address reliability concerns. In that regard, a Significant Event under RCST was limited to events that resulted in material differences from the assumptions that were used for purposes of setting local RA capacity requirements. Further, as the Commission has previously recognized, the RCST Settlement did not permit the CAISO to make RCST designations for zonal reasons.<sup>63</sup> On the other hand, the TCPM uses a broader definition of Significant Event which permits the CAISO to make TCPM Significant Event designation of capacity for any event that produces a material change in system conditions or in ISO-Controlled Grid operations, as well as events that result in a material difference from what was assumed in the RA program for purposes of determining the RA capacity requirements. Thus, the proposed definition of TCPM Significant Event provides the CAISO with the increased flexibility that it requires to designate capacity to meet short-term reliability needs.

## 1. Three-Step Designation Process

For the TCPM, the CAISO proposes to utilize the same three-step designation process developed for the ICPM. This process reflected a "compromise" of the various positions raised during the ICPM stakeholder process and provides the CAISO with the flexibility it needs to make designations, while providing increased transparency as well as certain protections to address concerns about unnecessary procurement. Consistent with its ICPM proposal, the CAISO proposes to designate capacity for TCPM Significant Events in the following manner:

<sup>63</sup> 

RCST Rehearing Order at P 44.

#### <u>Step 1:</u>

The CAISO would identify an event or events that may violate an assumption in the RA program or result in a material change in system conditions or in CAISO-Controlled Grid operations. If the event causes, or threatens to cause, the CAISO to fail to meet Reliability Criteria, the CAISO would determine if the event is of a continuing nature that indicates the need to procure backstop capacity on a forward basis. If the answer to the first step is "yes," the CAISO would procure needed backstop resources on a forward basis for a period of 30 days,<sup>64</sup> and post an explanation of the TCPM Significant Event and inform the market participants of the need to procure the backstop capacity as well as the expected duration of the TCPM Significant Event.

## <u>Step 2:</u>

If the CAISO determines that the TCPM Significant Event has an expected duration greater than 30 days, then the CAISO would extend that designation for another 60 days (for a total of 90 days from beginning of the event). During this extended time, Market Participants would have the opportunity to review the CAISO explanation for the TCPM Significant Event and provide alternative solutions that meet the CAISO's operational needs.<sup>65</sup>

## <u> Step 3:</u>

Before the end of the 90-day period, the CAISO would conduct an assessment of any proposed solutions to determine whether they totally or partially mitigate the ongoing need for the TCPM Capacity. The CAISO would only extend the designation to the extent the alternatives do not meet the need for capacity.

This approach recognizes that, given the nature of TCPM Significant Events, the CAISO is not in a position to delay the designations. However, the CAISO's approach is reasonable because it limits initial designations to 30 days, thereby: (1) providing the CAISO with sufficient time to assess the scope and impact of the TCPM Significant Event; and (2) limiting undue cost impacts on LSEs by limiting the initial procurement term. To the extent the CAISO expects a TCPM Significant Event to last longer than 30 days, the CAISO can extend the designation for another 60 days. This provides the CAISO with time to evaluate other alternatives to a TCPM capacity designation, and it

<sup>&</sup>lt;sup>64</sup> The minimum term for a Significant Event designation is currently three months in the RCST. The CAISO proposes to change the minimum term from three months to one month consistent with the ICPM proposal. Based on operating experience under the RCST, the CAISO realizes that it is more appropriate to move to one month to better align designations with operating needs.

<sup>&</sup>lt;sup>65</sup> These would include options such as procurement of capacity by LSEs, operational fixes by Participating Transmission Owners, or additional Demand Response.

places a reasonable limit on the procurement costs that will be incurred. If, the CAISO determines that the TCPM Significant Event will last longer than 90 days, the CAISO will offer Scheduling Coordinators for LSEs the possibility of bringing forth alternatives that would alleviate the need for any further TCPM designation.

Unlike the situation under the RCST, the CAISO will be able to make a shortterm designation initially. The RCST was problematic, in part, because it required the CAISO to take into account the expected duration of the Significant Event in determining whether or not to make a designation of capacity. Thus, the CAISO had to compare the expected duration of the Significant Event with the three-month minimum term for a RCST Significant Event designation. This made it very difficult to justify an RCST designation of capacity to address for shorter-term events that create reliability problems. The TCPM remedies that situation. As proposed, the TCPM provides the CAISO with more flexibility to make designations to meet shorter-term reliability needs without being required to take into consideration the potentially burdensome cost impacts of a minimum three-month designation. However, to the extent the TCPM Significant Event is expected to last more that 30 days, the CAISO will then be able to extend the designation another 60 days. The CAISO's proposal provides for transparency regarding its decisions and an opportunity for stakeholders to be involved in identifying alternatives to a TCPM designation.

In its comments submitted during the TCPM stakeholder process, Dynegy stated that "[t]here is no reason to believe that the supposedly improved discretion in the TCPM will be exercised any differently than the discretion which resulted in only one designation under the RCST..."66 Dynegy's reliance on what occurred under the RCST is wholly irrelevant to TCPM because the CAISO is proposing a new definition of Significant Event under the TCPM which is more expansive than the definition of Significant Event under RCST. As indicated above, RCST precluded designations for zonal reasons, and Significant Event designations were limited to events causing a material difference in the assumptions in the local capacity studies underlying local RA requirements. That is a very narrow definition. On the other hand, the TCPM definition of TCPM Significant Event gives the CAISO broader authority to make capacity designations. Further, the CAISO's ability to make designations to address short-term reliability needs will be enhanced by the fact that TCPM designations have a minimum term of one month as opposed to the three-month minimum term under RCST. This provides the CAISO with greater flexibility to make designations to meet shorter-term designations without having to balance the cost impacts of a minimum three-month designation. In any event, as the Commission has indicated previously, the CAISO is required to exercise this discretion in a reasonable manner.<sup>67</sup> To the extent the CAISO does not, parties are able to file a complaint at FERC.

<sup>&</sup>lt;sup>66</sup> Comments of Dynegy Morro Bay, LLC, Dynegy Moss Landing, LLC, Dynegy South Bay LLC, Dynegy Oakland, LLC (together, "Dynegy"), Inc. on the proposed TCPM Tariff Language (Mar. 18, 2008).

<sup>&</sup>lt;sup>67</sup> Indep. Energy Producers Ass'n v. Cal. Indep. Sys. Operator Corp., 121 FERC ¶ 61,276 at P 41 (2007).

Dynegy and Reliant argued in their stakeholder comments that there should be a "hard trigger" for TCPM Significant Event designations such that, for a single MOWD on a given day, the CAISO would automatically be required to procure the unit whose MOO Waiver request is denied for a period of two or three months (and a monthly capacity payment based on CONE). The CAISO submits that it is inappropriate to have a prescriptive "hard trigger" for a TCPM Significant Event that does not allow the CAISO to exercise prudent judgment based on Good Utility Practice to avoid designations that are not required. Hard triggers could result in prospective, multi-month designations of capacity even though the capacity is not needed for that amount of time or at all. For example, there could be situations where the event that triggered the MOWD will only last for a single day or a very short period of time (e.g., a one or two day maintenance outage) that does not justify a month or longer designation of capacity. Also, an event that results in a MOWD on a particular day may not constitute a TCPM Significant Event that requires the procurement of capacity on a forward basis. A "hard" trigger could also result in a unit being designated as the result of it receiving a MOWD on a given day, even though other RA, RMR or cheaper non-RA units are available to meet the reliability need prospectively but for some reason were not available on the day of the MOWD. Under these circumstances, automatic multi-month designations of capacity are not justifiable on either a need or cost-incurrence basis.

The CAISO notes that MOWDs are based on needs and circumstances that exist on a given day. Such MOWDs might not support a month or longer TCPM Significant Event designation unless they result from an event that will continue into the future and require the use of non-RA units to meet such future need. A TCPM Significant Event designation is not a reward for service provided in the past, it is essentially a call-option for the future because the CAISO expects that the unit will be needed on a recurring basis in the future to respond to a continuing Significant Event(s) that creates reliability problems or otherwise threatens the CAISO's ability to meet Reliability Criteria. Stated differently, the purpose of TCPM is to designate units that are needed to meet prospective reliability requirements based on an event(s) that has occurred and will continue to occur in the future. "Hard" triggers could result in unnecessary procurement or over-procurement, thereby imposing an unjust and unreasonable burden on ratepayers. As such, any "hardwiring" of designations is inappropriate.

Under the TCPM, the CAISO is establishing an administrative mechanism that will essentially enable it to contract for capacity in an efficient manner on a short-term forward basis if it determines that such capacity is needed on a prospective and recurring basis to meet Reliability Criteria. However, contracting is a two-way street; the CAISO must determine that it needs to procure capacity on a forward basis, and a resource must determine that it wants to accept the designation. Hard triggers – particularly for extended periods of time would essentially amount to forced contracting for units that do not have RA or RMR contracts, without the CAISO having any say in the matter. That is unjustifiable and is contrary to any reasonable construct of bilateral capacity procurement. In addition, "hard trigger" and accompanying automatic multimonth designation would also create improper incentives in the marketplace. In that regard, non-RA units that anticipate they might be needed on a given day (*e.g.*, due to a

noticed transmission or generation outage or extraordinary heat wave), might be inclined to seek a MOO Waiver knowing that it will likely be denied by the CAISO, and then the unit will then automatically receive a multi-month capacity designation. Another possible scenario is that suppliers would decline to enter into a month-ahead RA contract knowing that all it would take is a single MOWD to get them a two or three month TCPM capacity payment. A properly designed proposal should not encourage this type of behavior. The TCPM proposal does not create these perverse incentives.

Likewise, there is no reasonable basis for a minimum TCPM Significant Event designation term of two or three-months. That would essentially require the CAISO to contract for two/three months of capacity even if there is no need for the capacity beyond the day on which a unit was denied a MOO Waiver or if the unit is only needed on a prospective basis for a very short period of time (*e.g.*, for a period of time that might justify a one-month designation of capacity but not a two/three-month designation). Any requirement for an automatic two/three-month designation of capacity would be wholly unrelated to, and would completely disregard, the nature or the expected duration of the Significant Event. In other words, the CAISO would be paying for capacity for every day during a two or three-month period whether it needs the capacity or not. This could result in unnecessary procurement and over-procurement, thereby imposing an unjust and unreasonable financial burden on ratepayers.

The CAISO's TCPM proposal, which permits the CAISO to make an initial onemonth designation of capacity reasonably provides the CAISO with flexibility to make designations to meet shorter-term reliability needs without being required to take into consideration the potentially burdensome cost impacts of a three-month or longer designation. Moreover, to the extent the CAISO expects a TCPM Significant Event to last longer than a month, the CAISO has the ability to extend the designation for an additional 60 days. Certainly this is more rational -- and more tailored to the scope and expected duration of the TCPM Significant Event -- than an automatic two or threemonth designation term. It is inherently reasonable that TCPM designations be limited, as proposed by the CAISO, to situations where the CAISO determines a TCPM designation is necessary on a prospective basis following a TCPM Significant Event to maintain compliance with reliability criteria and taking into account the duration of the TCPM Significant Event. Some limitations on the extent of CAISO forward procurement are not unreasonable. Capacity should be procured on a forward basis only to meet a specific future need or requirement; forward capacity procurement should not be a "reward" for having been available on a given day or days in the past. In contrast to TCPM Significant Event designations, MOWDs are for a single day and are based on whether the CAISO needs a unit to be available on that day. On the other hand, TCPM involves the forward procurement of capacity that the CAISO expects it will need in order to maintain reliability for a longer period of time.

# 2. Designation Selection Criteria

The CAISO recognizes that in certain instances two or more resources may be able to resolve the need for additional capacity. Sections 43.2.2 and 43.3.3 specify the CAISO's selection criteria to be used where Eligible Capacity is designated for local reliability and for system reliability, respectively.<sup>68</sup> These criteria are part of the currently-effective RCST and remain unchanged by this TCPM proposal.

For clarity purposes, the CAISO has proposed to include identical criteria in a new Section 43.4.1 applicable to designations of Eligible Capacity for TCPM Significant Events. Under the RCST, the Significant Event designation criteria consisted of a cross-reference to 43.3.3. The CAISO provided a separate section not to alter the standard as to what criteria were being considered, but for consistency and clarity.

## D. Cost Allocation

The CAISO proposes to retain the RCST cost allocation methodologies for annual system, monthly system and local capacity designations. The CAISO proposes to follow the ICPM methodology for allocating costs in connection with two types of capacity designations: (1) for collective local capacity shortfall designations (as set forth in proposed new Section 43.8(4)); and (2) for TCPM Significant Event designations, as set forth in Section 43.8 (5)). Both of these allocation methodologies resulted from the lengthy ICPM stakeholder process and were generally supported by stakeholders. The CAISO believes that it is also appropriate to utilize these ICPM allocation methodologies in the TCPM.

The CAISO proposes to allocate the costs of capacity designations to remedy a "collective deficiency" in local area resources to all Scheduling Coordinators for LSEs in the TAC Area(s) in which the deficient Local Capacity Area was located. The allocation will be based on the Scheduling Coordinators' proportionate share of Load in such TAC Area(s), as calculated pursuant to Section 40.3.2 of Appendix CC. A Scheduling Coordinator's "proportionate share of Load" will be determined based on coincident peak load. The CAISO notes that this is the same basis upon which the original Local Capacity Area Resource requirements were developed as approved by the Commission under Section 40 of Appendix CC of the ISO Tariff. The proposed allocation

<sup>&</sup>lt;sup>68</sup> Specifically, Section 43.2.2 specifies that, with regard to Eligible Capacity designated for local reliability, the CAISO will consider the following factors: the effectiveness of the Eligible Capacity, the quantity of Eligible Capacity of the resource relative to the remaining amount of capacity that is needed, and the Start-Up and Minimum Load Costs associated with the Eligible Capacity. Section 43.3.3 specifies that, with regard to Eligible Capacity designated for system reliability, the CAISO will consider the following factors: the effectiveness of the Eligible Capacity in addressing local and/or zonal constraints in addition to meeting system needs, the quantity of Eligible Capacity of the resource, the Start-Up and Minimum Load Costs associated with the Eligible Capacity, and the effectiveness of the Eligible Capacity at reducing the Minimum Load Costs that might otherwise be incurred as a result of must-offer waiver denials.

methodology recognizes that, for "collective deficiency" or "effectiveness" procurement, no LSE was deficient in meeting their RA obligations, only that the resources that were procured were not sufficiently effective in meeting the CAISO's reliability needs. The CAISO would exclude Scheduling Coordinators for LSEs that procured additional capacity in accordance with Section 43.2.1.4.1 on a proportionate basis, to the extent of their additional procurement. This approach recognizes that LSEs who cure their allocable portion of a collective deficiency should not be charged for the additional ICPM procurement associated with any remaining deficiency.

Under Section 43.8 (5), if the CAISO makes any TCPM Significant Event designations under Section 43.4, the CAISO will allocate the costs of such designations to all Scheduling Coordinators for LSEs in the TAC Area(s) in which the TCPM Significant Event caused or threatened to cause a failure to meet Reliability Criteria based on Scheduling Coordinators' for LSEs percentage of actual MWh load in the TAC Area(s) to total MWh load in the TAC Area(s) as recorded in the CAISO Settlements system for the actual days during any Settlement month over which the designation occurred. This proposed allocation methodology is different than the cost allocation methodology for Significant Event designations contained in the RCST. Under the RCST, the CAISO allocates Significant Event designation costs based on Scheduling Coordinators' RA Entity Load Share Percentages in the TAC Area(s) affected by the Significant Event. The RA Entity Load Share Percentage is based on a Scheduling Coordinator's share of actual coincident peak load in such TAC Area(s) during the prior year.

The CAISO understands that the RCST methodology for allocating Significant Event designation costs was accepted by the Commission as being just and reasonable.<sup>69</sup> However, the Commission's order recognized that this allocation methodology was a negotiated term of the RCST Settlement.<sup>70</sup> The fact that the existing methodology was found to be just and reasonable under the RCST does not preclude the CAISO from proposing an alternative methodology that it believes better aligns cost incurrence with those who benefit from the capacity procurement in several respects. First, coincident peak load in the year prior to a TCPM Significant Event should not serve as the basis for allocating TCPM Significant Event designation costs because it constitutes stale data. In contrast, the CAISO proposes to base the TCPM Significant Event cost allocation on actual usage *during the actual period of the Significant Event*. The CAISO submits that the revised proposal better tracks cost causation principles in matching the costs of the backstop procurement to the entities that benefit from the usage of the transmission grid during the TCPM Significant Event period.<sup>71</sup> Second, the proposed TCPM allocation methodology recognizes that the

<sup>&</sup>lt;sup>69</sup> *Indep. Energy Producers Ass'n v. Cal. Sys. Operator Corp.*, 121 FERC ¶61,276 at P 70.

<sup>&</sup>lt;sup>70</sup> *Id.* at 73.

<sup>&</sup>lt;sup>71</sup> The Commission has stated its goal is to "allocate to each class of [customer] and to each time period and each company its fair share of costs." *Pennsylvania Power & Light Co.*, Opinion No. 176, 23 FERC ¶ 61,395 at 61,850 (1983).
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actual load that is using the grid during a TCPM Significant Event is the load that benefits from the capacity that is procured to address the TCPM Significant Event. In other words, the TCPM Capacity has a 24-hour a day availability obligation and helps to support reliability throughout the period of the TCPM Significant Event. Coincident peak load from a prior year is not necessarily the load that is benefiting from the TCPM Significant Event designation. Because a TCPM Significant Event is unexpected, no LSE is deficient in meeting RA requirements, no party could have planned for the TCPM Significant Event, and the nature of such events can vary significantly, it is difficult to fashion an allocation that ensures that the costs are allocated based on the proximate cause of the event. However, an allocation based on coincident peak load from the year prior to the TCPM Significant Event bears no necessary causal relationship to the event or the reason for the designation of capacity.

Third, it is important to recognize that the CAISO has proposed to reduce the minimum duration for a TCPM Significant Event designation from three months under the RCST to the one month period proposed in the ICPM. Allocation based on actual usage during the month is consistent with the potentially shortened timeframe for Significant Event designations.

The CAISO believes that the proposed cost allocation methodologies are consistent with cost causation principles. Section 43.8 properly aligns the payment obligations with the entities that are either responsible for, or benefit the most from, the TCPM procurement.

# E. Reporting

The CAISO recognizes the need for transparency in any backstop procurement, and stakeholders demanded such transparency. In particular, in the context of reviewing both the ICPM and the TCPM proposals, stakeholders requested that robust reporting obligations be implemented to ensure that all capacity procurement is transparent to market participants and regulators. Such transparency is important so that, to the extent that resources are being designated under the TCPM, it should serve as notice to the CPUC and Local Regulatory Authorities to review and evaluate the performance of their RA programs, including any local capacity procurement requirements.

The CAISO recognized the important relationship between its revised ICPM Significant Event designation process and enhanced reporting obligations. Because the CAISO has sought to adopt the ICPM's approach to Significant Events in the TCPM, the CAISO has proposed a consistent set of reporting obligations. Importantly, the CAISO has proposed to adopt the additional ICPM reporting obligations, without eliminating the existing reporting requirements that existed under the RCST. In that regard, the CAISO has retained the obligation under Section 40.15.1 to issue a Must-Offer Waiver Denial Report and under Section 40.15.2 to publish a monthly minimum load cost report. The CAISO also retained the responsibility under Section 40.15.4 to produce a TCPM Significant Event / Waiver Denial Report.

In addition, the TCPM proposal includes two additional types of reports to promote transparency and support the objectives identified above. As set forth in Section 43.6, the TCPM reports would appropriately maintain the confidentiality of market sensitive information, while providing sufficient data so that the CAISO, stakeholders, the CPUC and LRAs can be informed of TCPM and other non resource adequacy procurement by the CAISO. The CAISO proposes to publish the following information:

- Report 1: Market Notice within Two Business Days of Each Designation (Section 43.6.1). The CAISO would issue a Market Notice within two Business Days of designating a resource under the TCPM. For TCPM Significant Event designation, the Market Notice would contain a preliminary description of what caused the TCPM Significant Event, the name of the resource(s) procured, the preliminary expected duration of the TCPM Significant Event, the initial designation period, and an indication that a designation report is being prepared.
- Report 2: Designation of a Resource under the TCPM Tariff (Section 43.6.2).
   A "designation report" would be posted to the CAISO Website within 30 days after the CAISO procures a resource through the TCPM tariff authority, and the CAISO would issue a Market Notice of its availability. The report would include:
   (1) a description of the reason for the designation;
   (2) basic information such as the resource name, the amount of capacity designated, an explanation of why that amount was designated, the date capacity was designated, the duration of the designation, and the price; and (3) if the reason for the designation is for a TCPM Significant Event, a discussion of the event or events that have occurred, an initial assessment of the expected duration of the TCPM Significant Event, the duration of the initial designation, and whether the initial designation has been extended (such that the backstop procurement is now for more than 30 days), and, if it has been extended, the length of the extension (days).

The CAISO believes that these reports will allow Market Participants and regulators to effectively monitor the TCPM. The reports will provide timely information to market participants and regulators to enable any necessary adjustments to be made to the resource adequacy program to reduce the need for potential TCPM designations in the future.

# F. Counting TCPM Capacity for Resource Adequacy Purposes

During the TCPM stakeholder process, a number of commenters raised the issue of whether Scheduling Coordinators for LSEs would be given "credit" for resource adequacy purposes for capacity designated by the CAISO the costs of which are assigned to them. The CAISO agreed that, consistent with the approach taken under the ICPM and to prevent potential over-procurement, Scheduling Coordinators for LSEs should be given credit toward certain of their RA obligations as a result of certain TCPM The Honorable Kimberly D. Bose March 28, 2008 Page 39

procurement. The CAISO has proposed a new Section 43.9 based on the ICPM tariff language which provides as follows:

- To the extent the cost of a CAISO designation is the result of a failure of a Scheduling Coordinator on behalf of an LSE to demonstrate sufficient Local Capacity Area Resources and is allocated to such Scheduling Coordinator, the CAISO proposes to provide the Scheduling Coordinator on behalf of the LSE, credit towards the LSE's Local Capacity Area Resource obligation.
- To the extent the cost of CAISO designation is a result of a collective deficiency in local capacity area resources and is allocated to a Scheduling Coordinator on behalf of an LSE, the CAISO will provide the Scheduling Coordinator on behalf of the LSE credit towards the LSE's Demand and Reserve Margin requirements determined under.
- To the extent the cost of a CAISO designation is the result of the failure of a Scheduling Coordinator on behalf of an LSE to demonstrate sufficient RA resources to meet annual and monthly Demand and Reserve Margin requirements and is allocated to such Scheduling Coordinator, and the designation is for greater than one month, the CAISO will provide the Scheduling Coordinator on behalf of the LSE credit towards the LSE's Demand and Reserve Margin requirements determined under Section 40.

These mechanisms will allow Scheduling Coordinators for LSEs to receive credit for TCPM Capacity for which they have paid. As was the case with the ICPM proposal, the CAISO does not support allowing TCPM Significant Event designations to count toward RA showings. The reason for TCPM Significant Event procurement is that the CAISO will have determined that the RA resources already procured by LSEs were insufficient to meet Reliability Criteria as a result of the Significant Event. Thus, allowing LSEs to include TCPM Significant Event procurement in subsequent RA showings would only result in a decrease of the available RA capacity, which was already insufficient. This would only exacerbate the conditions that led to the TCPM Significant Event, and potentially create a need for additional TCPM capacity procurement.

The credit provided under Section 43.9 is to be used solely for determining the need for the additional designation of TCPM Capacity by the CAISO under Section 43.1 and for allocation of TCPM costs under Section 43.8. For each Scheduling Coordinator that is given credit under Section 43.9, the CAISO will provide information, including the quantity of capacity procured, necessary to allow the CPUC, Local Regulatory Authority, or federal agency with jurisdiction over the LSE on whose behalf the credit was provided, to determine whether the LSE should receive credit toward its resource adequacy requirements as established by the applicable agency.

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# G. Other Considerations

# 1. Partial Unit Procurement

Under the RCST, the CAISO must designate all of the Eligible Capacity of a unit; the CAISO cannot designate a partial unit. The RCST further limits the CAISO's ability to make designations because the CAISO can only designate an amount of Eligible Capacity of a unit that is slightly more or slightly less than the amount of deficiency. As the CAISO indicated in its March 17, 2008 Answer to Protests in Docket No. ER08-556 (pp. 48-49), *i.e.*, the ICPM Docket, this has limited the CAISO's ability to use the RCST to meet reliability needs. Accordingly, in the ICPM filing, the CAISO proposed to remedy this limitation by enabling the CAISO to procure partial units. In its TCPM whitepapers, the CAISO initially considered requesting the authority to procure a portion of a resource under the TCPM. However, during the February 21, 2008 stakeholder conference call, one of the stakeholders noted the potential difficulty in implementing a partial unit designation under the current MOO process. The CAISO went back and investigated further the feasibility of making partial unit TCPM designations under the pre-MRTU systems. The CAISO ultimately determined that partial unit designations could not be accommodated under the current pre-MRTU design and that CAISO would have to make significant changes to its market and settlement systems in order to accommodate partial unit designations pre-MRTU. The CAISO concluded that this was not justified given the short-term nature of the TCPM and the need to focus on MRTU implementation. Accordingly, the CAISO proposes to retain the existing RCST tariff language (currently found in Section 43.3.3), which only permits the CAISO to designate a whole unit that is available to remedy the deficiency or reliability problem and whose available capacity is either "slightly more or slightly less" than the amount of additional capacity needed by the CAISO. This existing restriction is intended to prevent overprocurement by the CAISO and the imposition of excessive costs on ratepayers.

# 2. Real-Time Dispatch Process

Of the 525 MOWDs that the CAISO issued between June 1, 2006 and December 22, 2007, 264 were MOWDs in Real Time under the CAISO's Real Time Commitment ("RTC") software which commits units in economic order. Thus, with respect to RTC commitments, other RA, RMR or non-RA units are generally available for commitment, but the RTC methodology requires that the most economic unit be committed even if that means committing a FERC Must Offer unit before and RA or RMR unit.<sup>72</sup> Specifically, Section 34.3 of the CAISO Tariff, which the Commission approved as part of CAISO Tariff Amendment No. 54 in Docket No. ER03-1046, provides:

<sup>&</sup>lt;sup>72</sup> In only four of the 264 instances of RTC commitments were RA or RMR units not available for commitment in addition to the FERC Must Offer Unit that was committed.

[t]he ISO shall employ a multi-interval constrained optimization methodology (RTD Software) to calculate an optimal dispatch for each Dispatch Interval within a time horizon that shall extend to the end of the next hour.... The ISO also shall instruct resources to start up or shut down over the time horizon based on their submitted and validated Start-Up Fuel Costs, Minimum Load Costs and Energy Bids... The ISO shall only start resources that can start within the time horizon"<sup>73</sup>

The RTC software provides the functionality required by the CAISO Tariff by committing resources for a capacity deficiency expected in a two hour horizon, based on short term load forecasts and committed capacity, using economic considerations. When operating under this Real Time Dispatch procedure, the CAISO cannot deny a real-time MOWD to a less expensive effective non-RA unit prior to a more expensive effective RA unit without violating the requirement for economic dispatch.

Concerns have been raised that application of the Commission-approved RTC process results in FERC MOO units being committed (and being paid a daily capacity payment as well as Minimum Load Cost Compensation and an Imbalance Energy payment for their minimum load Energy) before RA and RMR units that are already under capacity contracts. Some stakeholders pointed to Section 40.7.6 of the CAISO Tariff which provides, "*To the extent conditions permit*, the ISO will revoke the waivers of Resource Adequacy Resources and RCST resources prior to revoking the waivers of other FERC Must-Offer Generators." (Emphasis added.) Although conditions rarely interfere with the CAISO's ability to follow this sequence day-ahead, the CAISO's RTC procedures and software are a condition that does not always allow the CAISO to do so in real-time.<sup>74</sup>

During the TCPM stakeholder process, the CAISO indicated that it would investigate the feasibility of implementing potential changes to its Real-Time Commitment ("RTC") application that would reduce the number of commitments of FERC MOO units pursuant to the RTC. The CAISO has determined that it would be feasible to incorporate into the RTC optimization, in time for June 1, 2008 TCPM implementation, proxy values to represent the additional costs paid to the non-RA, non-RMR units which currently are not taken into account in the RTC optimization.

<sup>&</sup>lt;sup>73</sup> Section 34.3.0.2(e) provides that the CAISO "shall not discriminate between Generating Units, System Units, Loads, Curtailable Demands, Dispatchable Interconnection schedules and System Resources other than based on price, and the effectiveness (*e.g.*, location and ramp rate) of the resource concerned to respond to the fluctuation in Demand or Generation or to resolve Inter-zonal Congestion."

<sup>&</sup>lt;sup>74</sup> The CAISO notes that its RTC software and tariff provisions and practices predate RCST and RA were not eliminated by the RCST Settlement or the RA tariff amendments.

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Accordingly, the CAISO proposes to revise Section 34.3 to include the following costs in the RTC optimization:

- Adding in the unit's first bid price segment to the Minimum Load Cost. This bid price would be a proxy for the Imbalance Energy price that is paid to a FERC MOO unit for its minimum Load Energy. This reflects the fact that FERC MOO units receive a so-called "double payment" for their minimum load Energy, Minimum Load Cost Compensation plus an Imbalance Energy payment.
- Adding in a value representing an estimate of the daily Must Offer capacity payment. Specifically, the CAISO would use a price equal to 1/8 of the applicable Monthly TCPM Charge.

Adding these two cost components into the RTC optimization is appropriate because these are incremental costs that will be incurred if the CAISO were to commit a non-RA unit instead of an RA on RMR unit. This should result in a significant reduction in MOO commitments in RTC. Such a result would be consistent with the general intent of Section 40.7 that RA and RMR units be committed before FERC MOO units. The CAISO recognizes that the values it will include in the optimization are proxies for the actual daily capacity payment and the Minimum Load Imbalance Energy Payment that a FERC MOO unit will actually receive. However, those actual costs are *ex post* costs, so they are unknown at the time of the optimization. As such, proxy values are needed. The CAISO submits that the proxy values it is using are reasonable and administratively straightforward and will not put any additional, unreasonable burdens on the CAISO staff at a time when the CAISO is focusing its efforts on MRTU implementation.

# 3. Split Month Significant Event Designations

The possibility exists that the term of a TCPM Significant Event Designation can commence and terminate mid-month. This requires tariff language for purposes of calculating a unit's availability during the "split month" in order to determine the level of the monthly capacity payment. The RCST neglected to include such language; however, the CAISO corrected this omission in the ICPM (Section 43.6.1). The CAISO has included the ICPM tariff language addressing this issue in Section 43.7.1 of the TCPM.

The RCST included tariff language to cap the cumulative capacity payments that a unit could receive in any month at the level of the actual monthly RCST capacity payment. However, the RCST failed to account for the possibility that a unit might receive daily capacity payments in a given month and then be designated as an RCST resource mid-month. This creates the possibility that a unit could receive capacity payments under the RCST in excess of the monthly RCST capacity payment. That was not the intent at the RCST Settlement. The CAISO has included tariff language in Section 40.14 to ensure that the total payment to a resource that receives both daily capacity payments and a TCPM Significant Event Designation in the same month is capped at the applicable monthly TCPM Monthly Capacity Payment.

# H. Definitions

The CAISO has proposed modifications to the Master Definition Supplement, Appendix A of the tariff to facilitate the TCPM program. These changes include conforming changes to the existing definitions of Eligible Capacity and Monthly RCST Charge to reflect the change from RCST to TCPM. The CAISO has also proposed new definitions for TCPM, TCPM Capacity, and TCPM Significant Event. The new definition for TCPM Significant Event reflects the proposed definition for ICPM Significant Event contained in Docket No. ER08-556.

In addition, the CAISO has proposed to remove the existing definitions for: RCST Significant Event, 2007 Local Reliability Area, and 2007 RA Entity Load Share Percentage. These definitions do not apply under the TCPM.

# I. Summary of Changes

Table 1 provides a summary of the tariff changes reflected in this filing.

# Table 1

Section	Reason for Change	
34.1.2.1.1	Changes RCST references to TCPM references and specifies TCPM sunset date	
34.3	Specifies that the RTC optimization will also include TCPM costs	
40.6A.6	Adds reference to resources designated under TCPM and changes RCST references to	
	TCPM references	
40.7.1	Changes RCST capacity references to TCPM capacity references	
40.7.6	Adds reference to resources designated under TCPM and changes RCST references to	
	TCPM references	
40.14	Changes RCST references to TCPM references and specifies total payment cap for	
	resource that receives a daily capacity payment and TCPM Significant Event Designation	
	in the same month	
40.15	Specifies TCPM sunset date	
40.15.1	Changes RCST reference to TCPM reference	
40.15.2	Changes RCST reference to TCPM reference	
40.15.3	Changes RCST reference to TCPM reference and adds a TCPM reference	
40.15.4	Changes RCST references to TCPM references and adds TCPM references	
43	Updates section title, changes RCST references to TCPM references, specifies that	
	TCPM supersedes the RCST with certain exceptions, and identifies TCPM sunset date	
43.1	Changes RCST reference to TCPM reference	
43.2	Changes RCST references to TCPM references	
43.2.1.3	Changes RCST references to TCPM references, updates a section cross reference, and	
	specifies term of TCPM designation	
43.2.1.4	Adds new section describing the designation of capacity in the event of a collective	
	deficiency in Local Capacity Area Resources	
43.2.1.4.1	Adds new section describing an LSE's opportunity to resolve a collective deficiency in	
	Local Capacity Area Resources prior to designation	
<b>43.2.2</b> Changes RCST reference to TCPM reference and deletes 2008 reference		
43.3	Changes RCST reference to TCPM reference and deletes RCST time limit on	
43.3.1	designations	
43.3.1	Changes RCST references to TCPM references, deletes 2008 reference, and updates	
43.3.2	term of Annual System TCPM Designations Changes RCST references to TCPM references, updates term of Monthly System TCPM	
43.3.2	Designations	
43.3.3	Changes RCST reference to TCPM reference	
43.3.3	Changes RCST references to TCPM references, specifies term of TCPM Significant	
73.7	Event Designations, describes opportunity to provide alternative solutions	
43.4.1	Adds new section describing selection of Eligible Capacity for TCPM Significant Events	
43.5	Changes RCST reference to TCPM reference	
43.5.1	Changes RCST references to TCPM references	
43.5.2	Changes RCST reference to TCPM reference	
43.5.3	Changes RCST references to TCPM references	
43.6	Changes RCST reference to TCPM reference	
43.6.1	Adds new section describing TCPM designation market notice	
43.6.2	Adds new section describing TCPM designation market holice	
43.7	Changes RCST reference to TCPM reference	
43.7.1	Changes RCST references to TCPM references and specifies calculation of the TCPM	
	Capacity Payments for TCPM Significant Event designations	
43.8	Changes RCST references to TCPM references and specifies allocation of TCPM	
	Capacity Payment Costs	
43.9	Adds new section describing crediting of TCPM capacity	
Appendix A	Adds new defined terms to facilitate understanding of TCPM provisions	
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Appendix F,	Changes RCST reference to TCPM reference
Schedule 4	
Appendix F,	Changes RCST references to TCPM references, identifies the price of TCPM capacity,
Schedule 6	the monthly shaping factor, the TCPM Availability Factor, and the calculation of the
	Monthly PER

# IV. EFFECTIVE DATE AND REQUEST FOR WAIVER

The CAISO proposes to implement the TCPM on June 1, 2008 and to terminate the TCPM at midnight on the day before the effective date of MRTU implementation.

# V. EXPENSES

No expense or cost associated with this filing has been alleged or judged in any judicial proceeding to be illegal, duplicative, unnecessary, or demonstratively the product of discriminatory employment practices.

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## VI. COMMUNICATIONS

Correspondence and other communications regarding this filing should be directed to:

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## VII. SERVICE

The CAISO has served copies of this filing on the Public Utilities Commission of the State of California, the California Energy Commission, the California Electricity Oversight Board, and all parties with Scheduling Coordinator Agreements under the CAISO Tariff. In addition, the CAISO has posted a copy of the filing on the CAISO Website.

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# VIII. CONTENTS OF THIS FILING

This filing comprises:

This Transmittal Letter

Attachment A: Attachment B:	Clean Tariff Sheets for the ISO Tariff Blacklined Tariff Sheets showing changes from the ISO Tariff
Attachment C:	CAISO's Final Proposal to Board of Governors for a Transitional Capacity Procurement Mechanism Tariff Filing, Memorandum to the Board of Governors re <i>Decision on</i> <i>Transitional Capacity Procurement Mechanism Tariff Filing</i> , a chronology of the major stakeholder activities, and matrix of stakeholder comments and the CAISO's response
Attachment D:	Costs of 2006 RMR Units
Attachment E:	Costs of 2008 RMR Units
Attachment F:	CAISO Market Surveillance Committee, Opinion on "Interim Capacity Pricing Mechanism under MRTU," November 21, 2007.

# IX. CONCLUSION

The CAISO respectfully requests that the proposed TCPM as reflected in the tariff sheets attached to this filing be approved, without modification, suspension, or hearing to go into effect on June 1, 2008 and to terminate upon the commencement of MRTU.

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Counsel for the California Independent System Operator Corporation

March 28, 2008

Attachment A

# Transitional Capacity Procurement Mechanism (TCPM) Amendment Filing – Clean Sheets Currently Effective Tariff

March 28, 2008

1) all of their Available Generation and 2) any Ancillary Services capacity awarded or self-provided in the Day-Ahead or Hour-Ahead Ancillary Services markets. In the absence of submitted bids, default bids will be used for resources required to offer their Available Generation in accordance with Section 40.7.4. Resources not required to offer their Available Generation in accordance with Section 40.7.4 that were awarded or self-provided Ancillary Services capacity must submit an Energy Bid for no less than the amount of awarded or self-provided Ancillary Services capacity. Resources not required to offer their Available Generation 40.7.4 may voluntarily submit Energy Bids. Submitted Energy Bids shall be subject to the Damage Control Bid Cap as set forth in Section 39.1 and to the Mitigation Measures set forth in Attachment A to Appendix P.

#### 34.1.2.1.1 Frequently Mitigated Adders

Generating Units of Participating Generators for which the ISO denies a must-offer waiver request and for which only a portion of their capacity is Eligible Capacity, as well as self-scheduled Generating Units of Participating Generators that have Eligible Capacity, that submit Supplemental Energy bids that are mitigated under Section 3.2.2.2 of Appendix P five times in a single Trading Day, based on five-minute dispatch periods, shall receive a supplemental payment adder ("Frequently Mitigated Adder") for the Dispatched Energy that is mitigated for each mitigated interval in that Trading Day beginning with the 10-minute settlement interval of the fifth mitigation and continuing for each following 10-minute settlement interval of the Trading Day, provided that the Frequently Mitigated Adder plus the Mitigated Price does not exceed the resources' original Supplemental Bid. The Frequently Mitigated Adder plus the S40 per megawatt hour multiplied by the ratio of the Eligible Capacity (excluding any portion of minimum load capacity that is not also Resource Adequacy, RMR or designated under TCPM) to the total Qualifying Capacity (excluding minimum load level) of the Generating Unit. Generating Units shall not receive Frequently Mitigated Adders in connection with decremental dispatches.

The total amount of Frequently Mitigated Adders that any Generating Unit can receive in a Trading Day shall not exceed the Must-Offer Capacity Payment that the Generating Unit would have received pursuant to Section 40.14 if the ISO had denied a must-offer waiver denial request. Further, Frequently Mitigated

Adders will stop accruing in any calendar month once the combined value for that month of Frequently Mitigated Adders, Must-Offer Capacity Payments and minimum load imbalance energy payments under Section 40.8.3 reaches the level of the Monthly TCPM Charge (established in Schedule 6 of Appendix F) reduced by the PER (established in Schedule 6 of Appendix F) for that month multiplied by the megawatts of Eligible Capacity of that Generating Unit. This Section 34.1.2.1.1 shall expire at midnight on the day before the MRTU Tariff goes into effect.

## 34.1.2.1.2 Allocation of Frequently Mitigated Adder Costs

Costs incurred under Section 34.1.2.1.1 will be allocated in accordance with Section 27.1.3.

#### 34.1.2.2 Real-Time Energy Bid Partition.

The portion of the single Energy Bid that corresponds to the high end of the resource's operating range, shall be allocated to any awarded or self-provided Ancillary Services in the following order from higher to lower capacity: (a) Regulation Up; (b) Spinning Reserve; (c) Non-Spinning Reserve; and (d) Replacement Reserve. For resources providing Regulation Up, the upper regulating limit shall be used if it is lower than the highest operating limit. The remaining portion of the Energy Bid (i.e. that portion not associated with capacity committed to provide Ancillary Services) shall constitute a Bid to provide Supplemental Energy.

#### 34.1.2.3 Creation of the Real-Time Merit Order Stack.

#### 34.1.2.3.1 Sources of Imbalance Energy.

The following Energy Bids will be considered in the creation of the real-time merit order stack for Imbalance Energy:

(a) Supplemental Energy Bids;

(b) Ancillary Services Energy Bids (except for Regulation) submitted for specific Ancillary Services for those resources which have been selected in the ISO's Ancillary Services auction to supply such specific Ancillary Services; and

(c) Ancillary Services Energy Bids (except for Regulation) submitted for specific Ancillary Services

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necessary, to ensure System Reliability and to maintain Reliability Criteria. The ISO shall determine that additional output is needed if the current output levels of the Regulation Generating Units, System Units, and System Resources deviate from their preferred operating points by more than a specified threshold (to be determined by the ISO), or to meet the projected Imbalance Energy requirements for the next Dispatch Interval. The ISO shall employ a multi-interval constrained optimization methodology (RTD Software) to calculate an optimal dispatch for each Dispatch Interval within a time horizon that shall extend to the end of the next hour. The ISO shall Dispatch resources that have submitted Energy Bids over the time horizon to meet forecasted Imbalance Energy requirements minimizing the Imbalance Energy procurement cost over the entire time horizon, subject to resource and transmission system constraints. However, Dispatch Instructions shall be issued for the next Dispatch Interval only. The ISO also shall instruct resources to start up or shut down over the time horizon based on their submitted and validated Start-Up Fuel Costs, Minimum Load Costs and Energy Bids and, in addition to these costs, the optimization shall also include for FERC Must-Offer Generators, 1/8<sup>th</sup> of the applicable Monthly TCPM Charge and the Generating Unit's first bid price segment to represent its minimum load Energy payment. These resources shall receive binding start-up or shut-down pre-dispatch instructions as required by their startup time. The ISO shall only start resources that can start within the time horizon. The ISO may shut down resources that do not need to be on-line if constraints within the time horizon permit. However, resources providing Regulation or Spinning Reserve shall not be shut down. On-line resources providing Non-Spinning or Replacement Reserve shall also not be eligible for shutdown, unless their minimum down time does not exceed 10 minutes.

## 34.3.0 Rules For Real-Time Dispatch of Imbalance Energy Resources.

#### 34.3.0.1.1 Overview.

During real time, the ISO shall dispatch Generating Units, Loads and System Resources to procure Imbalance Energy. In addition, the ISO may also need to purchase additional Ancillary Services if the services arranged in advance are used to provide Imbalance Energy, and such depletion needs to be recovered to meet reliability contingency requirements.

## 34.3.0.1.2 Utilization of the Energy Bids.

The ISO will use the Energy Bids to Dispatch Supplemental Energy and Ancillary Services to procure balancing Energy for:

#### 40.6A.6 Resource Adequacy Resource Obligation Process.

Resource Adequacy Resources may seek a waiver of the obligation to offer all Available Generation, as set forth in Section 40.6A.4 of this ISO Tariff, for one or more of their units. All Resource Adequacy Resources obligated under their respective Resource Adequacy Plans that have not submitted Day-Ahead Energy Schedules will be deemed to have requested a waiver, either implicitly or explicitly, of the obligation to offer all Available Generation. If conditions permit, the ISO may, at its sole discretion, grant waivers and allow a Resource Adequacy Resource to remove one or more Generating Units from service and, in doing so, the ISO will first grant waivers to FERC Must-Offer Generators, on a non-discriminatory basis, that are not also Resource Adequacy Resources or resources designated under the TCPM, and then, if permissible, the ISO may grant waivers to Resource Adequacy Resources or resources or resources designated as TCPM on a non-discriminatory basis.

The hours for which waivers are not granted shall constitute Waiver Denial Periods. A Waiver Denial Period shall be extended as necessary to accommodate the unit minimum up and down times. Units shall be on-line in real time during Waiver Denial Periods, or they will be in violation of the availability. Exceptions shall be allowed for verified forced outages or as otherwise set forth in Section 40.6A.5. The ISO may revoke waivers as necessary due to outages, changes in Load forecasts, or changes in system conditions. The ISO shall determine which waiver(s) will be revoked, and shall notify the relevant Scheduling Coordinator(s). To the extent conditions permit, the ISO will revoke the waivers of Resource Adequacy Resources and TCPM resources prior to revoking the waivers of FERC Must-Offer Generators. The ISO shall inform a Resource Adequacy Resource that its Waiver request has been approved, disapproved or revoked, and shall provide the Resource Adequacy Resource with the reason(s) for the decision, which reasons shall be non-discriminatory apart from the status of whether the unit is a Resource Adequacy Resource. The ISO will: (1) notify Resource Adequacy Resources of the ISO decisions on pending Waiver requests received no later than 10:00 a.m. (beginning of Hour Ending 11) no later than 11:30 a.m. (middle of Hour Ending 12) on the day before the operating day for which the Waivers are requested; (2) at any time but no later than 11:30 a.m. on the following day, notify Resource

regardless of whether the person is a "public utility" as defined in Section 201 of the Federal Power Act, that own or control one or more non-hydroelectric Generating Units or System Units or System Resources located in California from which energy or capacity is either: (i) sold through any market operated by the ISO, or (ii) transmitted over the ISO Controlled Grid. Each person described in this Section 40.7.1 is referred to in the ISO Tariff as a "FERC Must-Offer Generator", provided that such person with Eligible Capacity designated as TCPM Capacity shall not be considered a FERC Must-Offer Generator to the extent, and for the term, of the TCPM Capacity designation. The requirements of this Section 40.7 shall apply to all non-hydroelectric Generating Units located in California that are owned or controlled by a FERC Must-Offer Generator.

#### 40.7.2 Available Generation.

For the purposes of Section 40.7, a FERC Must-Offer Generator's "Available Generation" from a nonhydroelectric Generating Unit shall be: (a) the Generating Unit's maximum operating level adjusted for any outages or reductions in capacity reported to the ISO in accordance with Section 9.3.9 or 40.7.3 and for any limitations on the Generating Unit's operation under applicable law, including contractual obligations, which shall be reported to the ISO, (b) minus the Generating Unit's scheduled operating level as identified in the ISO's Final Hour-Ahead Schedule, (c) minus the Generating Unit's or System Unit's capacity committed to provide Ancillary Services to the ISO either through the ISO's Ancillary Services market or through self-provision by a Scheduling Coordinator, and (d) minus the capacity of the Generating Unit committed to deliver Energy or provide Operating Reserve to the FERC Must-Offer Generator's Native Load.

#### 40.7.3 Reporting Requirements for Non-Participating Generators.

So that the ISO may determine the Available Generation of all FERC Must-Offer Generators, FERC Must-Offer Generators that are not Participating Generators shall be required to file with the ISO, for each nonhydroelectric Generating Unit located in California they own or control: (i) the Generating Unit's minimum operating level; (ii) the Generating Unit's maximum operating level; and (iii) the Generating Unit's ramp rates at all operating levels; and (iv) such other information the ISO determines is necessary to determine discretion, grant waivers and allow a FERC Must-Offer Generator to remove one or more Generating Units or System Units from service. In doing so, the ISO will first grant waivers to FERC Must-Offer Generators, on a non-discriminatory basis, that are not also Resource Adequacy Resources or resources designated under the TCPM and then, if permissible, the ISO may grant waivers to Resource Adequacy Resources or resources designated as TCPM on a non-discriminatory basis.

The hours for which waivers are not granted shall constitute Waiver Denial Periods. A Waiver Denial Period shall be extended as necessary to accommodate Generating Unit minimum up and down times. Generating Units shall be on-line in real time during Waiver Denial Periods, or they will be in violation of the must-offer obligation. Exceptions shall be allowed for verified forced outages. The ISO may revoke waivers as necessary due to outages, changes in Load forecasts, or changes in system conditions. The ISO shall determine which waiver(s) will be revoked, and shall notify the relevant Scheduling Coordinator(s). To the extent conditions permit, the ISO will revoke the waivers of Resource Adequacy Resources and TCPM resources prior to revoking the waivers of other FERC Must-Offer Generators. The ISO shall inform a FERC Must-Offer Generator that its Waiver request has been approved, disapproved or revoked, and shall provide the FERC Must-Offer Generator with the reason(s) for the decision, which reasons shall be non-discriminatory. The ISO will: (1) notify FERC Must-Offer Generators of the ISO decisions on pending Waiver requests received no later than 10:00 a.m. (beginning of Hour Ending 11) no later than 11:30 a.m. (middle of Hour Ending 12) on the day before the operating day for which the Waivers are requested; (2) at any time but no later than 11:30 a.m. on the following day, notify FERC Must-Offer Generators of the ISO decisions on Waiver requests that were submitted to the ISO after 10:00 a.m. (beginning of Hour Ending 11) on the day before; (3) end Waiver Denial Periods at any time; and (4) revoke Waivers at any time, while making best attempts to revoke a Waiver at least 90 minutes prior to the time a unit would be required to be on-line generating at its Pmin.

#### 40.8 Recovery of Minimum Load Costs By FERC Must-Offer Generators.

#### 40.8.1 Eligibility.

Except as set forth below, Generating Units shall be eligible to recover Minimum Load Costs during

constraints may be imposed beyond those explicitly stated in the plan.

#### 40.14 Capacity Payments Under the FERC Must-Offer Obligation.

As set forth in this Section, Generating Units of FERC Must-Offer Generators that are eligible to recover Minimum Load Costs pursuant to Section 40.8 shall also be eligible to recover a Must-Offer Capacity Payment during Waiver Denial Periods, in addition to such Minimum Load Costs, provided the Generating Unit does not have an RMR contract, is not a Resource Adequacy Resource and is not designated as TCPM. The Must-Offer Capacity Payment shall equal 1/8<sup>th</sup> of the Monthly TCPM Charge as specified in Schedule 6 of Appendix F per megawatt for each day of the Waiver Denial Period, adjusted pro rata for any hours of that day in which the Generating Unit was ineligible for the recovery of Minimum Load Costs. For any Trading Day of a calendar month, if the sum of (i) total Must-Offer Capacity Payments that a FERC Must-Offer Generator has received for a Generating Unit under this Section 43.14 during that month, (ii) the total Imbalance Energy payments received when that Generating Unit is running at minimum load, and (iii) the Frequently Mitigated Adder under Section 34.1.2.1.1 during the calendar month, exceeds the Qualifying Capacity times the maximum Monthly TCPM Charge (established in Schedule 6 of Appendix F) reduced by the Monthly PER (established in Schedule 6 of Appendix F), the FERC Must-Offer Generator shall not be eligible to receive Must-Offer Capacity Payments or the Frequently Mitigated Adder under Section 34.1.2.1.1 for that Generating Unit for that Trading Day, nor for any other Trading Day in the remainder of the calendar month (but shall continue to recover Minimum Load Costs and imbalance Energy payments). If a FERC Must-Offer Generator (i) has been denied one or more must-offer waiver(s) for any Trading Day(s) of a calendar month for a Generating Unit, (ii) is eligible for a Must-Offer Capacity Payment for such Trading Day(s), and (iii) the Generating Unit is either subsequently or previously designated as TCPM Capacity within that calendar month pursuant to Section 43.4, the total compensation that the FERC Must-Offer Generator shall receive for that calendar month

from the combination of Must-Offer Capacity Payments, a TCPM Capacity Payment, the Frequently Mitigated Adder pursuant to Section 34.1.2.1.1, and the total Imbalance Energy payments received when that Generating Unit is operating at minimum load, shall be limited to the Qualifying Capacity of the FERC Must-Offer Generator's Generating Unit times the maximum Monthly TCPM Charge (established in Schedule 6 of Appendix F) reduced by the Monthly PER (established in Schedule 6 of Appendix F). This Section 40.14 shall expire at midnight on the day before the MRTU Tariff goes into effect.

#### 40.14.1 Allocation of Must-Offer Capacity Payments

The ISO shall determine whether the Must-Offer Capacity Payment costs for each FERC Must-Offer Generator Generating Unit operating during a waiver denial period are due to (1) local reliability requirements, (2) zonal requirements, or (3) Control Area-wide requirements. For each month, the ISO shall sum the Must-Offer Capacity Payments costs and shall allocate those costs as follows: (1) if the Generating Unit was operating to meet local reliability requirements, the Must-Offer
 Capacity Payment costs shall be considered incremental locational costs and shall be

allocated in accordance with Section 40.8.6 (1).

- (2) if the Generating Unit was operating due to Zonal requirements, the Must-Offer Capacity Payment costs shall be allocated in accordance with Section 40.8.6 (2)
- (3) if the Generating Unit was operating to satisfy an ISO Control Area-wide need, the Must-Offer Capacity Payment costs shall be allocated in accordance with Section 40.8.6 (3).

## 40.15 Must-Offer Reporting Requirements

Sections 40.15 through 40.15.4 shall expire at midnight on the day before the MRTU Tariff goes into effect.

## 40.15.1 Must-Offer Waiver Denial Report

The ISO shall publish a Must-Offer Waiver Denial Report ("MOWD Report") on the ISO Website on a weekly basis and shall provide a market notice of its availability. The MOWD Report shall indicate the category of the must-offer waiver denial, i.e., local, zonal or system, and the amount of megawatts involved in each category. On a daily basis, thirty (30) days after the Trade Day, the ISO will publish on OASIS the allocation of Un-Recovered Minimum Load Costs for TCPM and Resource Adequacy Resources and Minimum Load Costs for FERC Must-Offer Generators.

## 40.15.2 Monthly Minimum Load Cost Report

On a monthly basis, thirty (30) days after the Trade Day, the ISO will publish on ISO Website, the monthly allocation of Un-Recovered Minimum Load Costs for TCPM and Resource Adequacy Resources, Minimum Load Costs for FERC Must-Offer Generators.

## 40.15.3 Multiple Denial of FERC Must-Offer Waivers

If the ISO issues a denial of must-offer waivers to a FERC Must-Offer Generator on four separate days in any calendar year, the ISO shall evaluate whether a TCPM Significant Event has occurred that warrants designation of the FERC Must-Offer Generator to provide service under the TCPM ("MOWD Evaluation"). The ISO shall conduct a MOWD Evaluation after every four separate days on which the ISO denies a must-offer waiver request for such a FERC Must-Offer Generator.

#### 40.15.4 TCPM Significant Event/Repeat Waiver Denial Report

The ISO shall publish the results of its assessment of the MOWD Evaluation ("TCPM Significant Event/Repeat MOWD Report"), including an explanation of its decision whether to designate FERC Must-Offer Generator capacity as TCPM, on the ISO Website on a weekly basis unless no TCPM Significant Events or MOWD Evaluations occurred during the week. The ISO will provide a market notice of the availability of each TCPM Significant Event/Repeat MOWD Report. The TCPM Significant Event/Repeat MOWD Report shall explain why the ISO denied the must-offer waiver request that triggered the assessment of whether a TCPM Significant Event occurred, and whether any Resource Adequacy Resources, RMR units, or resources designated to provide service under the TCPM were available and called upon by the ISO prior to its denial of the FERC Must-Offer Generator's must-offer waiver request. The ISO shall also explain why Non-Generation Solutions were insufficient to prevent the use of denials of must-offer waivers for local reasons. In the event that the ISO denies a must-offer waiver request for local or system reasons that do not constitute a TCPM Significant Event or is not due to a Resource Adequacy Resource non-performance, the report shall include an explanation for such issuance and shall be signed by the ISO's Vice President of Operations.

#### 41 Procurement of RMR.

42 Assurance of Adequate Generation and Transmission to meet Applicable Operating and Planning Reserve.

#### 42.1 Generation Planning Reserve Criteria.

Generation planning reserve criteria shall be met as follows:

**42.1.1** On an annual basis, the ISO shall prepare a forecast of weekly Generation capacity and weekly peak Demand on the ISO Controlled Grid. This forecast shall cover a period of twelve months and be posted on the WEnet and the ISO may make the forecast available in other forms at the ISO's

Reserve in the hour, determined in accordance with Section 8.12.3A bears to the total deviation Replacement Reserve in that hour.

#### 43 Transitional Capacity Procurement Mechanism

This section 43 of the ISO Tariff shall be referred to as the Transitional Capacity Procurement Mechanism (TCPM). The provisions of the TCPM supersede the provisions of the Reliability Capacity Services Tariff, except with respect to the provisions concerning payment and cost allocation to the extent necessary to determine any final payments and charges for service conducted under the Reliability Capacity Services Tariff. The TCPM shall expire at midnight on the day before the MRTU Tariff goes into effect except that the provisions concerning compensation, cost allocation and settlement shall remain in effect until such time as TCPM resources have been finally compensated for their services rendered under the TCPM prior to the termination of the TCPM, and the ISO has finally allocated and recovered the costs associated with such TCPM compensation.

#### 43.1 Designation

The ISO shall have the authority provided in this Section 43 to designate Eligible Capacity or System Resources to provide services under the TCPM as set forth in this Section 43.

#### 43.2 Local TCPM Designations

The ISO may designate Eligible Capacity to provide services under the TCPM to meet local reliability needs to the extent provided in this Section 43.2.

### 43.2.1.3 Local TCPM Designations for Deficiencies

Following the ISO's identification of any Local Resource Adequacy Requirement Deficiency, the ISO may designate Eligible Capacity to provide services under the TCPM consistent with the criteria set forth in Section 43.2.2. The ISO may designate Eligible Capacity to provide service under this Section 43.2.1.3 to the extent necessary to satisfy any remaining Local Resource Adequacy Deficiency only after: (i) RMR Units have been designated in the local area reliability study process, and (ii) completion of the evaluation process set forth in Section 40.7 of Appendix CC. Designations

# CALIFORNIA INDEPENDENT SYSTEM OPERATOR CORPORATION FERC ELECTRIC TARIFF Second Revised Sheet No. 479A.02 THIRD REPLACEMENT VOLUME NO. I Superseding Substitute First Revised Sheet No. 479A.02 of Eligible Capacity to provide services under the TCPM made pursuant to this section shall have a minimum commitment term of one (1) month and a maximum commitment term of one (1) year, based on the period(s) of overall shortage as reflected in the annual Resource Adequacy Plans that have been submitted, provided that the term of the designation may not extend into a subsequent Resource Adequacy Compliance Year and no term shall go beyond midnight on the day before the MRTU Tariff

goes into effect.

#### 43.2.1.4 Collective Deficiency in Local Capacity Area Resources.

The ISO shall have the authority to designate Eligible Capacity where the Local Capacity Area Resources specified in the annual Resource Adequacy Plans of all applicable Scheduling Coordinators, after the opportunity to cure under Section 43.2.1.4.1 has been exhausted, fail to ensure compliance in one or more Local Capacity Areas with the Local Capacity Technical Study criteria provided in Section 40.3.1.1 of Appendix CC. The ISO shall have the authority under this Section 43.2.1.4, regardless of whether such resources satisfy, for the deficient Local Capacity Area, the minimum amount of Local Capacity Area Resources identified in the Local Capacity Technical Study, but only after assessing the effectiveness of Generating Units under RMR Contracts, if any, and all Resource Adequacy Resources reflected in all submitted annual Resource Adequacy Plans, whether or not such Generating Units under RMR Contracts and Resource Adequacy Resources are located in the applicable Local Capacity Area. The ISO may, pursuant to this Section 43.2.1.4, designate Eligible Capacity in an amount and location sufficient to ensure compliance with the Reliability Criteria applied in the Local Capacity Technical Study. Eligible Capacity designated under this Section shall have a minimum commitment term of one (1) month and a maximum commitment term of one year, based on the period(s) of overall shortage as reflected in the annual Resource Adequacy Plans that have been submitted. The term of the designation may not extend into a subsequent Resource Adequacy Compliance Year. Moreover, no term shall go beyond midnight on the day preceding the implementation of the MRTU Tariff.

# 43.2.1.4.1 LSE Opportunity to Resolve Collective Deficiency in Local Capacity Area Resources.

Where the ISO determines that a need for Eligible Capacity exists under Section 43.2.1.4, but prior to any designation of Eligible Capacity, the ISO shall issue a market notice, no later than fifteen (15) days after the Scheduling Coordinator for an LSE is required to submit its annual Resource Adequacy Plans, identifying the deficient Local Capacity Area, the quantity of capacity that would permit the deficient Local Capacity Area to comply with the Local Capacity Technical Study criteria provided in Section 40.3.1.1 of Appendix CC and, where only specific resources are effective to resolve the Reliability Criteria deficiency, the ISO shall provide the identity of such resources. Any Scheduling Coordinator for an LSE may submit a revised annual Resource Adequacy Plan within thirty (30) days after the ISO issues the market notice herein, demonstrating procurement of additional Local Capacity Area Resources consistent with the market notice issued under this Section.

Any Scheduling Coordinator for an LSE that provides such additional Local Capacity Area Resources consistent with the market notice under this Section shall have its share of any TCPM procurement costs under Section 43.8 reduced on a proportionate basis. If the full quantity of capacity is not reported to the ISO under revised annual Resource Adequacy Plans in accordance with this Section, the ISO may designate Eligible Capacity sufficient to alleviate the deficiency.

#### 43.2.2 Selection of Eligible Capacity Designated for Local Reliability

The ISO will make designations of Eligible Capacity under Section 43.2 based on the lowest overall cost for each Local Capacity Area considering the following factors: the effectiveness of the Eligible Capacity, the quantity of Eligible Capacity of the resource relative to the remaining amount of capacity that is needed; and the Start-Up and Minimum Load Costs associated with the Eligible Capacity. The ISO shall have reasonable allowance to designate under the TCPM an amount of Eligible Capacity from a Generating Unit that is slightly more or slightly less than a deficiency due to the quantity of Eligible Capacity from such Generating Unit that is available and suitable to meet the deficiency, consistent with the criteria in this section.

### 43.3 System TCPM Designations

The ISO may designate Eligible Capacity to the extent provided in this Section 43.3.

#### 43.3.1 Annual System TCPM Designations

Following the ISO's review under Section 40.7 of Appendix CC of the annual Resource Adequacy Plans submitted pursuant to Section 40.2.1 of the ISO Tariff and Sections 40.2.1.1, 40.2.2.4, 40.2.3.4 or 40.2.4 of Appendix CC, and its review of any designation of Eligible Capacity pursuant to Section 43.2.1.3, the ISO may designate Eligible Capacity or System Resources to provide services under the TCPM under this Section 43.3 to the extent necessary to cover the aggregate Year-Ahead System Resource Deficiency consistent with the criteria set forth in Section 43.3.3.

A designation of Eligible Capacity or System Resources to provide services under the TCPM made pursuant to this Section 43.3.1 shall be for a minimum term of three months, provided that, at the discretion of the ISO, the designation term may be extended up to a maximum term of the five summer months of May through September, provided that the term of the designation may not extend into a subsequent Resource Adequacy Compliance Year, and provided further, that in no event shall the term of any TCPM designation under this section extend beyond midnight on the day before the MRTU Tariff goes into effect.

#### 43.3.2 Monthly System TCPM Designations

Following its review under Section 40.7 of Appendix CC of the monthly Resource Adequacy Plans submitted by Scheduling Coordinators pursuant to Section 40.2.2, the ISO may designate Eligible Capacity or System Resources to provide services under the TCPM under this Section 43.3 to the extent necessary to cover the aggregate Month-Ahead System Resource Deficiency consistent with the criteria set forth in Section 43.3.3.

Designations of Eligible Capacity or System Resources to provide services under the TCPM made pursuant to this Section 43.3.2 shall be for the lesser of three months or the remainder of the calendar year, provided that the term of the designation may not extend into a subsequent Resource Adequacy Compliance Year, and provided further, that in no event shall the term of any TCPM designation under this section extend beyond midnight on the day before the MRTU Tariff goes into effect.

### 43.3.3 Selection of Eligible Capacity Designated for System Reliability

The ISO will make designations of Eligible Capacity or System Resources under this Section 43.3 based on the following factors: the effectiveness of the Eligible Capacity in addressing local and/or zonal constraints in addition to meeting system needs; the quantity of Eligible Capacity of the resource; the Start-Up and Minimum Load Costs associated with the Eligible Capacity; and the effectiveness of the Eligible Capacity at reducing the Minimum Load Costs that might otherwise be incurred as a result of must-offer waiver denials. System Resources shall be subject to the ISO's established import limits as specified in accordance with Section 40.5.2.2. The ISO shall have reasonable allowance to designate under the TCPM an amount of Eligible Capacity from a Generating Unit or System Resource that is slightly more or slightly less than a deficiency due to the quantity of Eligible Capacity from such Generating Unit or System Resource that is available and suitable to meet the deficiency, consistent with the criteria in this section.

#### 43.4 Designations For TCPM Significant Events

The ISO may designate Eligible Capacity or System Resources to provide service on a prospective basis under this Section 43.4 following a TCPM Significant Event, to the extent necessary to maintain compliance with Reliability Criteria and taking into account the expected duration of the TCPM Significant Event. Capacity designated under Section 43.4 shall have an initial term of thirty (30) days. If the ISO determines that the TCPM Significant Event is likely to extend beyond the thirty (30) day period, the ISO shall extend the designation for another sixty (60) days. During this additional sixty (60) day period, the ISO will provide Market Participants with an opportunity to provide alternative solutions to meet the ISO's operational and reliability needs in response to the TCPM Significant Event, rather than rely on the ISO's designation of capacity under the TCPM. The ISO shall consider and implement, if acceptable to the ISO in accordance with Good Utility Practice, such alternative solutions provided by Market Participants in a timely manner. If Market Participants do not submit any alternatives to the designation of TCPM capacity

that are fully effective in addressing the deficiencies in Reliability Criteria resulting from TCPM Significant Event, the ISO shall extend the term of the designation under Section 43.4 for the expected duration of the TCPM Significant Event. If there is a reasonable alternative solution that fully resolves the ISO's operational and reliability needs, the ISO will not extend the designation under Section 43.4. The term of the designation may not extend into a subsequent Resource Adequacy Compliance Year. Moreover, in no event shall the term of such TCPM designation extend beyond midnight on the day before the MRTU Tariff goes into effect. Any TCPM designations under this section shall be in accordance with the criteria set forth in Section 43.4.1.

#### 43.4.1 Selection of Eligible Capacity for TCPM Significant Events

The ISO will make designations of Eligible Capacity under Section 43.4 based on the lowest overall cost for each TCPM Significant Event considering the following factors: the effectiveness of the Eligible Capacity, the quantity of Eligible Capacity of the resource relative to the remaining amount of capacity that is needed; and the Start-Up and Minimum Load Costs associated with the Eligible Capacity. The ISO shall have reasonable allowance to designate under the TCPM an amount of Eligible Capacity from a Generating Unit that is slightly more or slightly less than the capacity necessary to remedy a TCPM Significant Event due to the quantity of Eligible Capacity of such Generating Unit that is available and suitable to meet the TCPM Significant Event, consistent with the criteria in this section.

#### 43.5 Obligations of a Resource Designated under the TCPM

#### 43.5.1 Must-Offer Obligations

Generating Units designated under the TCPM shall be subject to all of the availability, must-offer, dispatch, testing, reporting, and verification obligations applicable to Resource Adequacy Resources identified in Resource Adequacy Plans under Section 40.6A of the ISO Tariff. Generating Units designated under the TCPM must offer available capacity into the Ancillary Services markets to the extent capable.

#### 43.5.2 Replacement Option

If a Generating Unit designated under the TCPM is unavailable when issued a must-offer waiver denial by the ISO pursuant to Section 40.7.6 of the ISO Tariff, the Scheduling Coordinator for the resource may, within 2 hours for a must-offer waiver denial issued prior to the Hour-Ahead market and within 30 minutes for a must-offer waiver denial issued in Real-Time, substitute capacity from such Generating Unit with Eligible Capacity that: (i) is located at the same bus, or (ii) if not located at the same bus, is located in the same Local Capacity Area, and which meets the ISO's effectiveness and operational needs, including size of resource, as determined by the ISO in its reasonable discretion. If the Scheduling Coordinator substitutes such Eligible Capacity, the Scheduling Coordinator must pay all additional Minimum Load Costs, Start-Up Costs, Emissions Costs (above the corresponding costs of the Generating Unit that is being substituted), and any bilateral contract costs incurred by the Scheduling Coordinator, as a result of the substitution. The actual Availability of the substitute resource will be used for the purposes of the calculations in Appendix F, Schedule 6.

#### 43.5.3 Termination of Obligations

If a Participating Generator's Eligible Capacity is designated by the ISO under the terms of the TCPM, and the Participating Generator has not filed a notice to withdraw from the Participating Generator Agreement ("PGA"), then the Participating Generator shall be obligated to perform in

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accordance with the TCPM for the term of the TCPM designation. If a Participating Generator's Eligible Capacity is designated under the terms of the TCPM after the Participating Generator has filed a notice to withdraw from its PGA, then the Participating Generator shall be obligated to perform in accordance with the TCPM until the date that its PGA effectively terminates, but the Participating Generator shall be under no obligation to so perform after the effective date of the PGA termination. If a Participating Generator's Eligible Capacity is designated under the TCPM after the Participating Generator shall be under no obligation to so perform after the effective date of the PGA termination. If a Participating Generator's Eligible Capacity is designated under the TCPM after the Participating Generator has filed notice to withdraw from its PGA, and the Participating Generator agrees to provide service under the TCPM, then the Participating Generator will enter into a PGA for the designated generating unit and invoice the ISO for any actual applicable restoration costs as provided in the RMR Service Agreement.

#### 43.6 TCPM Report

#### 43.6.1 TCPM Designation Market Notice

The ISO shall issue a market notice within two (2) Business Days of a TCPM designation. The market notice shall include a preliminary description of what caused the TCPM Significant Event, the name of the resource(s) procured, the preliminary expected duration of the TCPM Significant Event, the initial designation period, and an indication that a designation report is being prepared.

#### 43.6.2 Designation of a Resource under the TCPM Tariff

The ISO shall post a designation report to the ISO Website and provide a market notice of the availability of the report within the earlier of thirty (30) days of procuring a resource under the TCPM or ten (10) days after the end of the month. The designation report shall include the following information:

 A description of the reason for the designation (LSE procurement shortfall, Local Capacity Area Resource effectiveness deficiency, or TCPM Significant Event), and an explanation of why it was necessary for the ISO to utilize the TCPM authority);

- (2) The following information would be reported for all backstop designations:
  - (a) the resource name;
  - (b) the amount of TCPM Capacity designated (MW),
  - (c) an explanation of why that amount of TCPM Capacity was designated,
  - (d) the date TCPM Capacity was designated,
  - (e) the duration of the designation; and
  - (f) the price for the TCPM procurement; and
- (3) If the reason for the designation is a TCPM Significant Event, the ISO will also include:
  - (a) a discussion of the event or events that have occurred, why the ISO has procured TCPM Capacity, and how much has been procured;
  - (b) an assessment of the expected duration of the TCPM Significant Event;
  - (c) the duration of the initial designation (thirty (30) days); and
  - (d) a statement as to whether the initial designation has been extended
     (such that the backstop procurement is now for more than thirty (30)
     days), and, if it has been extended, the length of the extension.

#### 43.7 Payments to Resources Designated Under the TCPM

#### 43.7.1 TCPM Capacity Payment

Scheduling Coordinators representing resources designated under this Section 43 will receive a TCPM Capacity Payment equal to the product of the Net Qualifying Capacity, the relevant Availability Factor as determined in accordance with Appendix F, Schedule 6, and the difference between the monthly TCPM charge and 95% of the Peak Energy Rent, i.e., Net Qualifying Capacity x Availability Factor x (Monthly TCPM Charge (Monthly Peak Energy Rent x .95)). The ISO shall determine the Availability Factor, Monthly TCPM Charge and Monthly Peak Energy Rent in accordance with Appendix F, Schedule 6 of the Tariff. For purposes of this section 43.7.1, the term Net Qualifying Capacity shall mean the Megawatt

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value for a TCPM resource as reflected in the document entitled Qualifying Capacity Megawatt Values for RA Planning Purposes (or any successor document) as posted on the ISO website, provided that, to the extent a particular resource has a stated monthly value(s), the applicable Net Qualifying Capacity shall be the average of the stated values for the months in which the resource will have an TCPM designation. For purposes of the TCPM designation, except for TCPM Significant Events, availability shall be calculated as the ratio of: (1) the sum of the Net Qualifying Capacity MW for each hour of the month across all hours of the month, where the actual capacity MW available to the ISO shall be substituted for Net Qualifying Capacity MW for each hour the resource is not on an Authorized Outage, to (2) the product of Net Qualifying Capacity MW and the total hours in the month. For purposes of TCPM designations for TCPM Significant Events, the Availability Factor shall be calculated as the ratio of: (1) the sum of the TCPM Capacity MW for each hour across all hours of the month or part of the month for which a unit is designated, whichever is applicable, where the actual capacity MW available to the ISO, if less than the TCPM Capacity MW, shall be substituted for TCPM Capacity MW for each hour the resource is not available and is not on an authorized Outage, to (2) the product of TCPM Capacity MW and the total hours in the in the month or part of the month for which a unit is designated, whichever is applicable. For purposes of this section, an Authorized Outage shall be limited to the following: (a) an ISO-approved, planned outage that exists at the time of TCPM designation and is scheduled to occur during the term of an TCPM designation provided that (i) such outage is not the result of a prior outage that was forced or not otherwise scheduled and approved by the ISO, and (ii) such outage may be rescheduled by the ISO during the term of the TCPM designation period, provided that the term of the ISO-approved outage and the capacity derate at time of the TCPM designation are not exceeded, or (b) an ISO-approved maintenance outage that is scheduled during the TCPM designation period, provided such outage is not the result of a prior outage that was forced or not otherwise scheduled and approved by the ISO.

## 43.7.2 Minimum Load, Emissions and Start-Up Costs

#### 43.7.2.1 Minimum Load Costs

Scheduling Coordinators representing resources designated under this Section 43 shall be eligible for

recovery of Minimum Load Costs in the same manner that Scheduling Coordinators representing

Resource Adequacy Resources included in Resource Adequacy Plans are eligible for the recovery of

such costs under Sections 40.6B of the Tariff.

## 43.7.2.1.1 Allocation of Unrecovered Minimum Load Costs

Unrecovered Minimum Load Costs under Section 43.7.2.1 shall be allocated in accordance with Section

40.6B.5 of the ISO Tariff.

## 43.7.2.2 Emissions Costs

Scheduling Coordinators representing resources designated under this Section 43 shall be eligible for recovery of Emissions Costs in the same manner that Scheduling Coordinators representing Resource Adequacy Resources included in Resource Adequacy Plans are eligible for the recovery of such costs under Sections 40.11 of the ISO Tariff.

### 43.7.2.2.1 Recovery of Emissions Costs

The ISO will recover funds to pay Emissions Costs under Section 43.7.2.2 in accordance with Sections 40.11 of the ISO Tariff.

#### 43.7.2.3 Start-Up Costs

Scheduling Coordinators representing resources designated under this Section 43 shall be eligible for recovery of Start-Up Costs in the same manner that Scheduling Coordinators representing Resource Adequacy Resources included in Resource Adequacy Plans are eligible for the recovery of such costs under Sections 40.12 of the ISO Tariff.

## 43.7.2.3.1 Recovery of Start-Up Costs

The ISO will recover funds to pay Start-Up Costs under Section 43.7.2.3 in accordance with Sections 40.12 of the ISO Tariff.

## 43.8 Allocation of TCPM Capacity Payment Costs

For each month, the ISO shall allocate the costs of TCPM Capacity Payments made pursuant to Section 43.7.1 as follows:

- (1) <u>Annual System TCPM Designations</u>: If the ISO makes TCPM designations under Section 43.3.1, then the ISO will allocate the total costs of TCPM Capacity Payments for such TCPM designations (for the full term of those TCPM designations) pro rata to each deficient SC-RA Entity based on its portion of the aggregate Year-Ahead System Resource Deficiency.
- (2) <u>Monthly System TCPM Designations</u>: If the ISO makes TCPM designations under Section 43.3.2, then the ISO will allocate the total costs of TCPM Capacity Payments for such
TCPM designations (for the full term of those TCPM designations) pro rata to each deficient SC-RA Entity based on its portion of the aggregate Month-Ahead System Resource Deficiency.

- (3) Local TCPM Designations. If the ISO makes local TCPM designations, then the ISO will allocate the total costs of TCPM Capacity Payments for such TCPM designations (for the full term of those TCPM designations) pro rata to each Scheduling Coordinator for a deficient RA Entity based on the ratio of its Local Resource Adequacy Requirement Deficiencies within a TAC Area. To the extent there is a Local Resource Adequacy Requirement Deficiency in two or more Local Capacity Areas that can be satisfied by designating a single unit under the TCPM, the ISO shall allocate the total costs of TCPM Capacity Payments for such TCPM designation (for the full term of the designation) pro rata to each Scheduling Coordinator for an RA Entity that has a Local Resource Adequacy Requirement Deficiency in such Local Capacity Areas based on the ratio of its Local Resource Adequacy Requirement Deficiency in such Local Capacity Areas based on the ratio of its Local Resource Adequacy Requirement Deficiency in such Local Capacity Areas based on the ratio of its Local Resource Adequacy Requirement Deficiency in such Local Capacity Areas based on the ratio of its Local Resource Adequacy Requirement Deficiency in those Local Capacity Areas.
- (4) <u>Collective Local Capacity Shortfalls.</u> If the ISO makes designations under Section 43.2.1.4 the ISO shall allocate the costs of such designations to all Scheduling Coordinators for LSEs in the TAC Area(s) in which the deficient Local Capacity Area was located. The allocation will be based on such Scheduling Coordinators' proportionate share of Load in such TAC Area(s) as determined in accordance with Section 40.3.2 of Appendix CC, excluding Scheduling Coordinators for LSEs that procured additional capacity in accordance with Section 43.2.1.4.1 on a proportionate basis, to the extent of their additional procurement.

(5) <u>TCPM Significant Event Designations.</u> If the ISO makes any TCPM Significant Event designations under Section 43.4, the ISO shall allocate the costs of such designations to all Scheduling Coordinators for LSEs that serve Load in the TAC Area(s) in which the TCPM Significant Event caused or threatened to cause a failure to meet Reliability Criteria based on the percentage of actual MWh Load of each LSE represented by the Scheduling Coordinator in the TAC Area(s) to total MWh Load in the TAC Area(s) as recorded in the ISO Settlement system for the actual days during any Settlement month period over which the designation has occurred.

#### 43.9 Crediting of TCPM Capacity

The ISO shall credit TCPM designations to the resource adequacy obligations of Scheduling Coordinators for Load Serving Entities as follows:

- (a) To the extent the cost of TCPM designation under Section 43.2.1.3 is allocated to a Scheduling Coordinator on behalf of a LSE under Section 43.8.(3), the ISO shall provide the Scheduling Coordinator on behalf of the LSE, for the term of the designation, credit towards (1) the LSE's Local Capacity Area Resource obligation under Section 43.2.1.3 in an amount equal to the LSE's pro rata share of the TCPM Capacity designated under Section 43.2.1.3 and (2) the LSE's Demand and Reserve Margin requirements determined under Section 40 in an amount equal to the LSE's pro rata share of the TCPM Capacity designated under Section 43.2.1.3.
- (b) To the extent the cost of ISO designation under Section 43.2.1.4 is allocated to a Scheduling Coordinator on behalf of a LSE under Section 43.8 (4), the ISO shall provide the Scheduling Coordinator on behalf of the LSE, for the term of the designation, credit towards the LSE's Demand and Reserve Margin requirements determined under Section 40 in an amount equal to the LSE's pro rata share of the TCPM Capacity designated under Section 43.2.1.4.

- (c) To the extent the cost of TCPM designation under Section 43.3.1 is allocated to a Scheduling Coordinator on behalf of a LSE under Section 43.8.(1), and the designation is for greater than one month under Section 43.3.1, the ISO shall provide the Scheduling Coordinator on behalf of the LSE, for the term of the designation, credit towards the LSE's Demand and Reserve Margin requirements determined under Section 40 in an amount equal to the LSE's pro rata share of the TCPM Capacity designated under Section 43.3.1.
- (d) The credit provided in this Section shall be used for determining the need for the additional designation of TCPM Capacity under Section 43.1 and for allocation of TCPM costs under Section 43.8.
- (e) For each Scheduling Coordinator that is provided credit pursuant to this Section, the ISO shall provide information, including the quantity of capacity procured in MW, necessary to allow the CPUC, other Local Regulatory Authority, or federal agency with jurisdiction over the LSE on whose behalf the credit was provided to determine whether the LSE should receive credit toward its resource adequacy requirements adopted by such agencies or authorities.

Water Project; capacity of a Generating Unit with a Reliability Must-Run contract, during the term of such contract; capacity of a
Resource Adequacy Resource that is identified in any Resource
Adequacy Plan in accordance with Section 40, during the time that such capacity is identified on the Resource Adequacy Plan; and capacity that has been designated to provide service under the TCPM, during the term of the designation.

# Eligible Customer(i) any utility (including Participating TOs, Market Participants and<br/>any power marketer), Federal power marketing agency, or any<br/>person generating Energy for sale or resale; Energy sold or<br/>produced by such entity may be Energy produced in the United

CALIFORNIA INDEPENDENT SYSTEM OPERATOR CORPORATIONFERC ELECTRIC TARIFFSecond Revised Sheet No. 513.00THIRD REPLACEMENT VOLUME NO. IISuperseding First Revised Sheet No. 513.00

Month-Ahead System	The monthly deficiency in meeting the Month-Ahead System
<b>Resource Deficiency</b>	Resource Adequacy Requirements as determined under
	Section 40.7 of Appendix CC following the opportunity to resolve
	deficiencies that is provided under Section 40.7 of Appendix CC.
Monthly Peak Load	The maximum hourly Demand on a Participating TO's
	transmission system for a calendar month, multiplied by the
	Operating Reserve Multiplier.
Monthly TCPM Charge	The monthly charge determined in accordance with Appendix F,
	Schedule 6.
<u>MRTU Tariff</u>	The ISO Tariff that will implement the ISO's Market Redesign
	and Technology Upgrade ("MRTU").

	RPORATION Third Revised Sheet No. 521A Superseding Second Revised Sheet No. 521A		
Generation or other equipment needed to maintain acceptable			
voltage levels on the ISO Controlled Grid and to meet reactive			
capacity requirements at points of interconnection on the ISO			
Controlled Grid.			
The competitive generation market controlled and coordinated			
by the ISO for arranging	real-time Imbalance Energy.		
The readjustment of scheduled Generation or Demand side			
management measures,	to relieve Congestion or manage		
Energy imbalances.			
Those items of technical	data and operating characteristics		
relating to Generation, tr	ansmission or distribution facilities		
which are identified to th	e owners of such facilities as being		
information, supplied in a	accordance with the ISO Tariff, to assist		
the ISO to maintain relia	bility of the ISO Controlled Grid and to		
carry out its functions.			
	voltage levels on the ISC capacity requirements at Controlled Grid. The competitive generate by the ISO for arranging The readjustment of sche management measures, Energy imbalances. Those items of technical relating to Generation, tr which are identified to th information, supplied in a the ISO to maintain reliat		

CALIFORNIA INDEPENDENT SYSTEM OPERATOR CORPORATION FERC ELECTRIC TARIFF Fifth Revised Sheet No. 528 THIRD REPLACEMENT VOLUME NO. II Superseding Fourth Revised Sheet No. 528

reasonable uneconomic portion of costs associated with Generationrelated assets and obligations, nuclear decommissioning, and capitalized Energy efficiency investment programs approved prior to August 15, 1996 and as defined in the California Assembly Bill No. 1890 approved by the Governor on September 23, 1996. **Short Start** Generating Units that that have a cycle time less than five hours (Start-Up Time plus Minimum Run Time is less than five hours) have a Start Up Time less than two hours, and that can be fully optimized with respect to this cycle time. Site Control Documentation reasonably demonstrating: (1) ownership of, a leasehold interest in, or a right to develop a site for the purpose of constructing the Generating Facility; (2) an option to purchase or acquire a leasehold site for such purpose; or (3) an exclusivity or other business relationship between Interconnection Customer and the entity having the right to sell, lease or grant Interconnection Customer the right to possess or occupy a site for such purpose. A logging application that allows Market Participants to notify the ISO Scheduling and Logging system for the ISO of when a unit's properties change due to physical problems. Users can California (SLIC) modify the maximum and minimum output of a unit, as well as the ramping capability of the unit. Small Generating Facility A Generating Facility that has a Generating Facility Capacity of no

more than 20 MW.

CALIFORNIA INDEPENDENT SYSTEM OPERATOR CORPORATION FERC ELECTRIC TARIFF THIRD REPLACEMENT VOLUME NO. II Superse

<u>Tax Exempt Participating</u> <u>TO</u>	A Participating TO that is the beneficiary of outstanding Tax Exempt Debt issued to finance any electric facilities, or rights associated therewith, which are part of an integrated system including transmission facilities the Operational Control of which is transferred to the ISO pursuant to the TCA.
TCA (Transmission	The agreement between the ISO and Participating TOs establishing
Control Agreement)	the terms and conditions under which TOs will become Participating
	TOs and how the ISO and each Participating TO will discharge their
	respective duties and responsibilities, as may be modified from time to
	time.
<u>TCPM</u>	The Transitional Capacity Procurement Mechanism contained in
	Section 43.
TCPM Capacity	Eligible Capacity that has been designated under the TCPM.
TCPM Capacity Payment	The payment provided pursuant to Section 43.7.1 of the ISO Tariff.
TCPM Significant Event	A Significant Event is a substantial event, or a combination of events,
	that is determined by the ISO to either result in a material difference
	from what was assumed in the RA program for purposes of
	determining the RA capacity requirements, or produce a material
	change in system conditions or in ISO-Controlled Grid Operations, that
	causes, or threatens to cause, a failure to meet Reliability Criteria
	absent the recurring use of a non-RA resource(s) on a prospective
Taskalasi Orasifiastiana	basis.
Technical Specifications	Parts B to G (inclusive) of Appendix O.
Third Party Supply	Energy that is deemed to have been purchased from third parties to supply Station Power load during the Netting Period.
<u>Tie Point Meter</u>	A revenue meter, which is capable of providing Settlement Quality Meter Data, at a Scheduling Point or at a boundary between UDCs within the ISO Controlled Grid.
<u>TO (Transmission Owner)</u>	An entity owning transmission facilities or having firm contractual
	rights to use transmission facilities.
<u>TO Tariff</u>	A tariff setting out a Participating TO's rates and charges for
	transmission access to the ISO Controlled Grid and whose other terms
	and conditions are the same as those contained in the document
	referred to as the Transmission Owners Tariff approved by FERC as it may be amended from time to time.

TOC

The single point of contact at the transmission operations center of Pacific Gas & Electric Company.

Tolerance BandThe tolerance band expressed in terms of Energy (MWh) for the<br/>performance requirement for Generating Units, System Units and<br/>imports from dynamically scheduled System Resources for each<br/>Settlement Interval will equal the greater of the absolute value of: 1) 5<br/>MW divided by number of Settlement Intervals per Settlement Period<br/>or 2) three percent (3%) of the relevant Generating Unit's,<br/>dynamically scheduled System Resource's or System Unit's<br/>maximum output (Pmax), as registered in the Master File, divided by<br/>number of Settlement Intervals per Settlement Period. The maximum<br/>output (Pmax) of a dynamically scheduled System Resource will be<br/>established by agreement between the ISO and the Scheduling<br/>Coordinator representing the System Resource on an individual case<br/>basis, taking into account the number and size of the

#### CALIFORNIA INDEPENDENT SYSTEM OPERATOR CORPORATION FERC ELECTRIC TARIFF THIRD REPLACEMENT VOLUME NO. II Supersedim

#### Agreement

Year-Ahead System

**Resource Adequacy** 

Year-Ahead System

**Resource Deficiency** 

**Requirements** 

Zone

Agreement dated June 18, 1999 among the WSCC and certain of its Member transmission operators, as such may be amended from time to time.

The amount of Qualifying Capacity that a RA Entity must reflect in its year-ahead Resource Adequacy Plan submitted pursuant to Section 40.2.1 in compliance with Resource Adequacy Rules adopted by the CPUC or a Local Regulatory Authority, as applicable.

The monthly deficiency in meeting Year-Ahead System Resource Adequacy Requirements as determined under Section 40.7 of Appendix CC following the opportunity to resolve deficiencies that is provided under Section 40.7 of Appendix CC.

A portion of the ISO Controlled Grid within which Congestion is expected to be small in magnitude or to occur infrequently. "Zonal" shall be construed accordingly.

Zonal Settlement IntervalThe Zonal Settlement Interval Ex Post Price in a Settlement Interval in<br/>each Zone will equal the absolute-value Energy-weighted average of<br/>the Dispatch Interval Ex Post Prices in each Zone, where the weights<br/>are the system total Instructed Imbalance Energy, except Regulation<br/>Energy, for the Dispatch Interval.

## ISO TARIFF APPENDIX F Schedule 4

## Participating Intermittent Resources Forecasting Fee

A charge up to \$.10 per MWh shall be assessed on the metered Energy from Participating Intermittent Resources. The amount of the charge shall be specified in the ISO Tariff.

#### Participating Intermittent Resources Process Fee

A Process Fee charge shall be assessed, for each calendar quarter, to each Exporting Participating Intermittent Resource that exported Energy in the quarter. On an annualized basis, the aggregate quarterly charges shall total to \$10,000. The charge is not volumetric, and shall be calculated as follows:

(\$10,000/4)/N =squarterly charge N = number of Participating Intermittent Resources exporting Energy in the quarter

#### Participating Intermittent Resources Export Fee

A Participating Intermittent Resources Export Fee shall be assessed to Exporting Participating Intermittent Resources each calendar quarter. The Participating Intermittent Resources Export Fee shall be calculated as the product of (1) the sum of all settlement costs avoided by Participating Intermittent Resources for the preceding calendar quarter, or portion thereof, consisting of Charge Types 1597 [FERC Must-offer Obligation Capacity Payment System Allocation], 1697 [Tier 1 MLCC Allocation for System Needs], 1797 [Tier 1 MLCC Allocation of Resource Adequacy for System Needs], 1897 [Tier 1 MLCC Allocation of TCPM for System Needs], and 4487 [Allocation of Excess Cost for Instructed Energy], but excluding charges for Uninstructed Energy associated with Charge Type 4407 and Transmission Loss Obligation associated with Charge Type 4450, (2) by the ratio of the total MW/h generated by an Exporting Participating Intermittent Resource during the calendar quarter, or portion thereof (based on metered output), by the total MW/h generated by all Participating Intermittent Resources during the calendar quarter, or portion thereof (based on metered output), and (3) by the percentage of the Exporting Participating Intermittent Resource's capacity deemed exporting under EIRP 5.3 or Export Percentage.

Participating Intermittent Resources Export Fee per Participating Intermittent Resource =

Program Costs x (MW/h individual Participating Intermittent Resource/MW/h all Participating Intermittent Resources) x Export Percentage

## ISO TARIFF APPENDIX F Schedule 6

#### **TCPM SCHEDULES**

## Monthly TCPM Charge

The Monthly TCPM Charge shall be calculated by multiplying the monthly shaping factors by the target annual capacity price (\$86/kW-yr).

## **Monthly Shaping Factors**

	<u>SP-15</u>	<u>NP-15/ZP-26</u>
Jan	6.7%	4.9%
Feb	5%	4.9%
Mar	5%	5.6%
Apr	5.8%	4.6%
May	6.3%	4.8%
Jun	8.3%	5.1%
Jul	15.8%	13.7%
Aug	17.5%	15.3%
Sept	11.7%	13.8%
Oct	5.8%	8.7%
Nov	6.3%	8.8%
Dec	5.8%	9.8%

Total 100% 100%

#### Availability

The target Availability for a resource designated under TCPM is 95%. Incentives and penalties for availability above and below the target are as set forth in the table below, entitled "Availability Factor Table." The ISO will calculate availability on a monthly basis using actual availability data. The "Availability Factor" for each month shall be calculated using the following curve:

## AVAILABILITY FACTOR TABLE

<b>Availability</b> (excluding only Scheduled Maintenance)	Capacity Payment Factor	Availability Factor
100%	3.3%	1.139
99%	3.3%	1.106
98%	3.3%	1.073
97%	2.5%	1.040
96%	1.5%	1.015
95%	-	1.000
94%	-1.5%	.985
93%	-1.5%	.970
92%	-1.5%	.955
91%	-1.5%	.940
90%	-1.5%	.925
89-80%	-1.7%*	.908755
79-41%	-1.9%*	.736014
-40%	-	0.0

\*The "Capacity Payment Factor" decreases by 1.7% and 1.9% respectively for every 1% decrease in availability.

The capacity payment will be adjusted upward from the 95% Availability starting point by the positive percentages listed as the Capacity Payment Factor above, by the amounts listed for each availability factor above 95%, so that, for example, if a 97% Availability is achieved for the month (as described below), then the capacity payment for that month would be the monthly value for 95% plus an additional 4% (1.5% for the first percent Availability above 95%, and 2.5% for the second percent Availability above 95%). Reductions in capacity payment will be made correspondingly according to the Capacity Payment Factor above for monthly availability levels falling short of the 95% availability starting point.

#### **Calculation of the Monthly PER**

The ISO shall calculate the Monthly Peak Energy Rent ("Monthly PER") as follows: immediately following the end of the month the ISO will determine all those hours during which the Reference Resource would

have been dispatched (based on Reference Resource characteristics) to provide either energy or nonspinning reserves and will calculate, on a per kW-Month basis, the total dollar amount of rent (earnings in excess of proxy unit variable costs calculated using Reference Resource unit characteristics) that would have been earned by the Reference Resource. The Reference Resource will be assumed to have been dispatched for energy in any hour in which the hourly energy price described below is greater than the Reference Resource variable cost; the ISO shall use its day ahead Non-spinning Reserve price to calculate the rent for all hours in which the Reference Resource is not assumed dispatched to provide energy (i.e., any hour where the hourly price is less than the Reference Resource variable costs).

Hourly price profiles will be determined using the shaping factors for SP-15 and NP15/ZP-26 that appear below. Hourly energy prices shall be the weighted average of: (1) the applicable zonal on/off peak dayahead index prices set forth in Platts Megawatt Daily, shaped to hourly profiles using the factors set forth below, and (2) the applicable zonal ISO hourly average real-time energy prices. For TCPM, the index/ex post weighting will be 75/25.

The assumed heat rate of the Reference Resource will be 10,500 BTU/kWh. Variable operations and maintenance costs shall be based on the Energy Information Administration AEO Electricity Market Module Assumptions, which are currently \$3.36/MWh. An emissions allowance of \$0.71/MWh shall be used to estimate variable costs. Gas prices for the Reference Resource will be based on a daily gas price based on Equation C1-8 (Gas) of the Schedules to the Reliability Must Run Contract for the relevant Service Area (San Diego Gas & Electric Company, Southern California Gas Company or Pacific Gas and Electric Company) or, if the resource is served from one of those three Service Areas then from the nearest of those Service Areas.

	Mon-Fri	Mon-Fri	Mon-Fri	Sat	Sat	Sat	Sun	Sun	Sun
	JAN-MAY	JUN-SEPT	OCT-DEC	JAN-MAY	JUN-SEPT	OCT-DEC	JAN-MAY	JUN-SEPT	OCT-DEC
N1	1.05454758	1.00584021	0.99435526	1.43649	1.120844	1.073148	0.755403	0.759704	0.783346
N2	0.85716711	0.86062114	0.91898795	1.032749	1.092377	0.978957	0.600188	0.683139	0.701588
N3	0.75399836	0.79068297	0.92144851	0.758585	0.91744	0.921009	0.458319	0.636187	0.68291
N4	0.71058351	0.79900018	0.89479611	0.680278	0.892744	0.911836	0.444573	0.616409	0.662295
N5	0.78267681	0.8161591	0.94516384	0.630256	0.909543	0.926083	0.362844	0.5641	0.662342
N6	1.02256586	0.86829359	1.10962719	0.623168	0.709153	0.947344	0.293086	0.335463	0.707489
N7	0.75351629	0.46629678	0.84979936	0.459933	0.363102	0.835985	0.324748	0.244038	0.795325
N8	0.88610975	0.66277777	0.86218587	0.741872	0.587123	0.805198	0.576432	0.514076	0.804009
N9	0.93647065	0.72748598	0.87228518	0.967023	0.960062	0.891018	0.923411	0.756354	0.873764
N10	0.98013307	0.83355915	0.99306313	1.050452	0.998448	0.917894	1.087891	0.848836	0.970588
N11	1.05081328	0.91348904	0.97923559	1.079888	0.984474	1.02248	1.303241	0.94756	1.027355
N12	1.068781	0.96178966	0.98802244	1.086984	1.03194	0.961419	1.304385	1.158765	1.097895
N13	1.06644102	1.07695356	0.99576872	1.083005	1.00669	0.992817	1.283414	1.168292	1.059999
N14	1.09775977	1.22226563	1.06440722	1.072448	1.0038	1.04347	1.281892	1.283789	1.110655
N15	1.09364901	1.38229366	1.11766171	1.053707	1.124805	1.05608	1.263359	1.309879	1.150637
N16	1.0841716	1.44680734	1.14665908	1.048562	1.135933	1.056274	1.316946	1.317595	1.140864
N17	1.02358917	1.3710053	1.1033917	1.049893	1.362503	1.087482	1.311524	1.567664	1.232842
N18	0.9788975	1.21057642	0.95748393	1.049616	1.327635	1.081109	1.30229	1.71578	1.406331
N19	0.94570613	1.03868542	1.10717179	1.036387	1.126072	1.09328	1.321985	1.367096	1.419466
N20	0.96174495	0.91022871	1.13578926	1.048527	0.943973	1.193558	1.393578	1.139089	1.494944
N21	1.11577915	0.94038191	1.03355639	1.133815	1.001619	1.076201	1.778309	1.551657	1.39373
N22	0.95643767	0.8354037	0.79351865	1.037886	1.04182	0.885733	1.392837	1.473652	1.062792
N23	1.56132501	1.66415743	1.17445625	1.670367	1.287221	1.205472	1.150247	1.253671	0.972486
N24	1.25713576	1.19524538	1.04116487	1.168106	1.070678	1.036151	0.769097	0.787205	0.786348

NP-15

Attachment B

Transitional Capacity Procurement Mechanism (TCPM) Amendment Filing – Blacklines

**Currently Effective Tariff** 

March 28, 2008

#### 34.1.2.1.1 Frequently Mitigated Adders

Generating Units of Participating Generators for which the ISO denies a must-offer waiver request and for which only a portion of their capacity is Eligible Capacity, as well as self-scheduled Generating Units of Participating Generators that have Eligible Capacity, that submit Supplemental Energy bids that are mitigated under Section 3.2.2.2 of Appendix P five times in a single Trading Day, based on five-minute dispatch periods, shall receive a supplemental payment adder ("Frequently Mitigated Adder") for the Dispatched Energy that is mitigated for each mitigated interval in that Trading Day beginning with the 10-minute settlement interval of the fifth mitigation and continuing for each following 10-minute settlement interval through the remainder of the Trading Day, provided that the Frequently Mitigated Adder plus the Mitigated Price does not exceed the resources' original Supplemental Bid. The Frequently Mitigated Adder shall be \$40 per megawatt hour multiplied by the ratio of the Eligible Capacity (excluding any portion of minimum load capacity that is not also Resource Adequacy, RMR or designated under RCSTTCPM) to the total Qualifying Capacity (excluding minimum load level) of the Generating Unit. Generating Units shall not receive Frequently Mitigated Adders in connection with decremental dispatches.

The total amount of Frequently Mitigated Adders that any Generating Unit can receive in a Trading Day shall not exceed the Must-Offer Capacity Payment that the Generating Unit would have received pursuant to Section 40.14 if the ISO had denied a must-offer waiver denial request. Further, Frequently Mitigated Adders will stop accruing in any calendar month once the combined value for that month of Frequently Mitigated Adders, Must-Offer Capacity Payments and <u>Mm</u>inimum <u>L</u>oad imbalance energy payments under Section 40.8.3 reaches the level of the Monthly <u>RCST-TCPM</u> Charge (established in Schedule 6 of Appendix F) reduced by the PER (established in Schedule 6 of Appendix F) reduced by the PER (established in Schedule 6 of Appendix F) for that month multiplied by the megawatts of Eligible Capacity of that Generating Unit. This Section 34.1.2.1.1 shall expire at midnight on the earlier of the day before the MRTU Tariff goes into effect or the day preceding the effective date of any successor backstop capacity procurement mechanism to the RCST.

\* \* \*

#### 34.3 Real-Time Dispatch.

\* \* \*

The ISO, using RTD Software, shall economically Dispatch each Generating Unit, Curtailable Demand, System Unit, Interconnection schedule or System Resource that is effective to: (i) meet Imbalance Energy requirements and eliminate any Price Overlap in real time, subject to the limitation on the Dispatch of Spinning Reserve and Non-Spinning Reserve set forth in Section 34.3.0.3, and (ii) relieve Congestion, if necessary, to ensure System Reliability and to maintain Applicable-Reliability Criteria. The ISO shall determine that additional output is needed if the current output levels of the Regulation Generating Units, System Units, and System Resources deviate from their preferred operating points by more than a specified threshold (to be determined by the ISO), or to meet the projected Imbalance Energy requirements for the next Dispatch Interval. The ISO shall employ a multi-interval constrained optimization methodology (RTD Software) to calculate an optimal dispatch for each Dispatch Interval within a time horizon that shall extend to the end of the next hour. The ISO shall Dispatch resources that have submitted Energy Bids over the time horizon to meet forecasted Imbalance Energy requirements minimizing the Imbalance Energy procurement cost over the entire time horizon, subject to resource and transmission system constraints. However, Dispatch Instructions shall be issued for the next Dispatch Interval only. The ISO also shall instruct resources to start up or shut down over the time horizon based on their submitted and validated Start-Up Fuel Costs, Minimum Load Costs and Energy Bids\_and, in addition to these costs, the optimization shall also include for FERC Must-Offer Generators, 1/8<sup>th</sup> of the applicable Monthly TCPM Charge and the Generating Unit's first bid price segment to represent its minimum load Energy payment. These resources shall receive binding start-up or shut-down predispatch instructions as required by their startup time. The ISO shall only start resources that can start within the time horizon. The ISO may shut down resources that do not need to be on-line if constraints within the time horizon permit. However, resources providing Regulation or Spinning Reserve shall not be shut down. On-line resources providing Non-Spinning or Replacement Reserve shall also not be eligible for shutdown, unless their minimum down time does not exceed 10 minutes.

#### 40.6A.6 Resource Adequacy Resource Obligation Process.

Resource Adequacy Resources may seek a waiver of the obligation to offer all Available Generation, as set forth in Section 40.6A.4 of this ISO Tariff, for one or more of their units. All Resource Adequacy

\* \* \*

Resources obligated under their respective Resource Adequacy Plans that have not submitted Day-Ahead Energy Schedules will be deemed to have requested a waiver, either implicitly or explicitly, of the obligation to offer all Available Generation. If conditions permit, the ISO may, at its sole discretion, grant waivers and allow a Resource Adequacy Resource to remove one or more Generating Units from service and, in doing so, the ISO will first grant waivers to FERC Must-Offer Generators, on a non-discriminatory basis, that are not also Resource Adequacy Resources <u>or resources designated under the TCPM</u>, and then, if permissible, the ISO may grant waivers to Resource Adequacy Resources or resources designated as <u>RCST\_TCPM</u> on a non-discriminatory basis.

The hours for which waivers are not granted shall constitute Waiver Denial Periods. A Waiver Denial Period shall be extended as necessary to accommodate the unit minimum up and down times. Units shall be on-line in real time during Waiver Denial Periods, or they will be in violation of the availability. Exceptions shall be allowed for verified forced outages or as otherwise set forth in Section 40.6A.5. The ISO may revoke waivers as necessary due to outages, changes in Load forecasts, or changes in system conditions. The ISO shall determine which waiver(s) will be revoked, and shall notify the relevant Scheduling Coordinator(s). To the extent conditions permit, the ISO will revoke the waivers of Resource Adequacy Resources and RCST-TCPM resources prior to revoking the waivers of FERC Must-Offer Generators. The ISO shall inform a Resource Adequacy Resource that its Waiver request has been approved, disapproved or revoked, and shall provide the Resource Adequacy Resource with the reason(s) for the decision, which reasons shall be non-discriminatory apart from the status of whether the unit is a Resource Adequacy Resource. The ISO will: (1) notify Resource Adequacy Resources of the ISO decisions on pending Waiver requests received no later than 10:00 a.m. (beginning of Hour Ending 11) no later than 11:30 a.m. (middle of Hour Ending 12) on the day before the operating day for which the Waivers are requested; (2) at any time but no later than 11:30 a.m. on the following day, notify Resource Adequacy Resources of the ISO decisions on Waiver requests that were submitted to the ISO after 10:00 a.m. (beginning of Hour Ending 11) on the day before; (3) end Waiver Denial Periods at any time; (4) revoke Waivers at any time, while making best attempts to revoke a Waiver at least 90 minutes prior to the time a unit would be required to be on-line generating at its Pmin; and (5) revoke a waiver denial for a

Short-Start Resource Adequacy Resource at any time and such revocation will be communicated via a ISO real-time dispatch or unit commitment instruction.

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#### 40.7 FERC Must-Offer Obligations.

#### 40.7.1 Applicability.

The requirements of Section 40.7 shall apply to (a) all Participating Generators, and (b) all persons, regardless of whether the person is a "public utility" as defined in Section 201 of the Federal Power Act, that own or control one or more non-hydroelectric Generating Units or System Units or System Resources located in California from which energy or capacity is either: (i) sold through any market operated by the ISO, or (ii) transmitted over the ISO Controlled Grid. Each person described in this Section 40.7.1 is referred to in the ISO Tariff as a "FERC Must-Offer Generator", provided that such person with Eligible Capacity designated as RCST-TCPM Capacity shall not be considered a FERC Must-Offer Generator to the extent, and for the term, of the RCST-TCPM Capacity designation. The requirements of this Section 40.7 shall apply to all non-hydroelectric Generating Units located in California that are owned or controlled by a FERC Must-Offer Generator.

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## 40.7.6 FERC Must-Offer Obligation Process.

FERC Must-Offer Generators may seek a waiver of the obligation to offer all available capacity, as set forth in Section 40.7.4 of this ISO Tariff, for one or more of their Generating Units or System Units. All FERC Must-Offer Generators obligated under the must-offer obligation that have not submitted Day-Ahead Energy Schedules will be deemed to have requested a waiver, either implicitly or explicitly, of the obligation to offer all Available Generation. If conditions permit, the ISO may, at its sole discretion, grant waivers and allow a FERC Must-Offer Generator to remove one or more Generating Units or System Units from service. In doing so, the ISO will first grant waivers to FERC Must-Offer Generators, on a nondiscriminatory basis, that are not also Resource Adequacy Resources <u>or resources designated under the</u> <u>TCPM</u> and then, if permissible, the ISO may grant waivers to Resource Adequacy Resources or resources designated as <u>RCST-TCPM</u> on a non-discriminatory basis. The hours for which waivers are not granted shall constitute Waiver Denial Periods. A Waiver Denial Period shall be extended as necessary to accommodate Generating Unit minimum up and down times. Generating Units shall be on-line in real time during Waiver Denial Periods, or they will be in violation of the must-offer obligation. Exceptions shall be allowed for verified forced outages. The ISO may revoke waivers as necessary due to outages, changes in Load forecasts, or changes in system conditions. The ISO shall determine which waiver(s) will be revoked, and shall notify the relevant Scheduling Coordinator(s). To the extent conditions permit, the ISO will revoke the waivers of Resource Adequacy Resources and RCST\_TCPM resources prior to revoking the waivers of other FERC Must-Offer Generators. The ISO shall inform a FERC Must-Offer Generator that its Waiver request has been approved, disapproved or revoked, and shall provide the FERC Must-Offer Generator with the reason(s) for the decision, which reasons shall be non-discriminatory. The ISO will: (1) notify FERC Must-Offer Generators of the ISO decisions on pending Waiver requests received no later than 10:00 a.m. (beginning of Hour Ending 11) no later than 11:30 a.m. (middle of Hour Ending 12) on the day before the operating day for which the Waivers are requested; (2) at any time but no later than 11:30 a.m. on the following day, notify FERC Must-Offer Generators of the ISO decisions on Waiver requests that were submitted to the ISO after 10:00 a.m. (beginning of Hour Ending 11) on the day before; (3) end Waiver Denial Periods at any time; and (4) revoke Waivers at any time, while making best attempts to revoke a Waiver at least 90 minutes prior to the time a unit would be required to be on-line generating at its Pmin.

#### 40.14 Capacity Payments Under the FERC Must-Offer Obligation.

As set forth in this Section, Generating Units of FERC Must-Offer Generators that are eligible to recover Minimum Load Costs pursuant to Section 40.8 shall also be eligible to recover a Must-Offer Capacity Payment during Waiver Denial Periods, in addition to such Minimum Load Costs, provided the Generating Unit does not have an RMR contract, is not a Resource Adequacy Resource and is not designated as <u>RCSTTCPM</u>. The Must-Offer Capacity Payment shall equal 1/<u>8</u>17<sup>th</sup> of the Monthly <u>RCST\_TCPM</u> Charge as specified in Schedule 6 of Appendix F per megawatt for each day of the Waiver Denial Period, adjusted pro rata for any hours of that day in which the Generating Unit was ineligible for the recovery of Minimum Load Costs. For any Trading Day of a calendar month, if the sum of (i) total Must-Offer

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Capacity Payments that a FERC Must-Offer Generator has received for a Generating Unit under this Section 43.14 during that month, (ii) the total Imbalance Energy payments received when that Generating Unit is running at minimum load, and (iii) the Frequently Mitigated Adder under Section 34.1.2.1.1 during the calendar month, exceeds the Qualifying Capacity times the maximum Monthly RCST\_TCPM Charge (established in Schedule 6 of Appendix F) reduced by the Monthly PER (established in Schedule 6 of Appendix F), the FERC Must-Offer Generator shall not be eligible to receive Must-Offer Capacity Payments or the Frequently Mitigated Adder under Section 34.1.2.1.1 for that Generating Unit for that Trading Day, nor for any other Trading Day in the remainder of the calendar month (but shall continue to recover Minimum Load Costs and imbalance Energy payments). If a FERC Must-Offer Generator (i) has been denied one or more must-offer waiver(s) for any Trading Day(s) of a calendar month for a Generating Unit, (ii) is eligible for a Must-Offer Capacity Payment for such Trading Day(s), and (iii) the Generating Unit is either subsequently or previously designated as TCPM Capacity within that calendar month pursuant to Section 43.4, the total compensation that the FERC Must-Offer Generator shall receive for that calendar month from the combination of Must-Offer Capacity Payments, a TCPM Capacity Payment, the Frequently Mitigated Adder pursuant to Section 34.1.2.1.1, and the total Imbalance Energy payments received when that Generating Unit is operating at minimum load, shall be limited to the Qualifying Capacity of the FERC Must-Offer Generator's Generating Unit times the maximum Monthly TCPM Charge (established in Schedule 6 of Appendix F) reduced by the Monthly PER (established in Schedule 6 of Appendix F). This Section 40.14 shall expire at midnight on the earlier of the day before the MRTU Tariff goes into effect-or the day preceding the effective date of any successor backstop capacity procurement mechanism to the RCST.

## 40.15 Must-Offer Reporting Requirements

Sections 40.15 through 40.15.4 shall expire at midnight on the earlier of the day before the MRTU Tariff goes into effect-or the day preceding the effective date of any successor backstop capacity procurement mechanism to the RCST.

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## 40.15.1 Must-Offer Waiver Denial Report

The ISO shall publish a Must-Offer Waiver Denial Report ("MOWD Report") on the ISO Website on a weekly basis and shall provide a market notice of its availability. The MOWD Report shall indicate the category of the must-offer waiver denial, *i.e.*, local, zonal or system, and the amount of megawatts involved in each category. On a daily basis, thirty (30) days after the Trade Day, the ISO will publish on OASIS the allocation of Un-Recovered Minimum Load Costs for RCST-TCPM and Resource Adequacy Resources and Minimum Load Costs for FERC Must-Offer Generators.

#### 40.15.2 Monthly Minimum Load Cost Report

On a monthly basis, thirty (30) days after the Trade Day, the ISO will publish on ISO Website, the monthly allocation of Un-Recovered Minimum Load Costs for RCST\_TCPM and Resource Adequacy Resources, Minimum Load Costs for FERC Must-Offer Generators.

## 40.15.3 Multiple Denial of FERC Must-Offer Waivers

If the ISO issues a denial of must-offer waivers to a FERC Must-Offer Generator on four separate days in any calendar year, the ISO shall evaluate whether a <u>TCPM</u> Significant Event has occurred that warrants designation of the FERC Must-Offer Generator to provide service under the <u>RCST\_TCPM</u> ("MOWD Evaluation"). The ISO shall conduct a MOWD Evaluation after every four separate days on which the ISO denies a must-offer waiver request for such a FERC Must-Offer Generator.

#### 40.15.4 <u>TCPM</u> Significant Event/Repeat Waiver Denial Report

The ISO shall publish the results of its assessment of the MOWD Evaluation ("<u>TCPM</u> Significant Event/Repeat MOWD Report"), including an explanation of its decision whether to designate FERC Must-Offer Generator capacity as <u>TCPMRCST</u>, on the ISO Website on a weekly basis unless no <u>TCPM</u> Significant Events or MOWD Evaluations occurred during the week. The ISO will provide a market notice of the availability of each <u>TCPM</u>.Significant Event/Repeat MOWD Report. The <u>TCPM</u>.Significant Event/Repeat MOWD Report shall explain why the ISO denied the must-offer waiver request that triggered the assessment of whether a <u>TCPM</u>.Significant Event occurred, and whether any Resource Adequacy Resources, RMR units, or resources designated to provide service under the <u>TCPMRCST</u> were available and called upon by the ISO prior to its denial of the FERC Must-Offer Generator's mustoffer waiver request. The ISO shall also explain why Non-Generation Solutions were insufficient to prevent the use of denials of must-offer waivers for local reasons. In the event that the ISO denies a must-offer waiver request for local or system reasons that do not constitute a <u>TCPM</u> Significant Event or is not due to a Resource Adequacy Resource non-performance, the report shall include an explanation for such issuance and shall be signed by the ISO's Vice President of Operations.

43 Transitional Capacity Procurement MechanismReliability Capacity Services Tariff

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This section 43 of the ISO Tariff shall be referred to as the Reliability-Transitional\_Capacity Procurement MechanismServices Tariff ("TCPMRCST"). The provisions of the TCPM supersede the provisions of the Reliability Capacity Services Tariff, except with respect to the provisions concerning payment and cost allocation to the extent necessary to determine any final payments and charges for service conducted under the Reliability Capacity Services Tariff. The TCPMRCST as well as changes made to other Sections to implement the Offer of Settlement filed on March 31, 2006 in Docket No. EL05-146 (changes to Sections 34.1.2.1.1; 34.1.2.1.2; 40.6A.6; 40.7.1; 40.7.6; 40.14; 40.14.1; 40.15; 40.15.1; 40.15.2; 40.15.3; 40.15.4; Appendix F Schedule 6; and Appendix P, Attachment A) shall expire at midnight on the earlier of the day before the MRTU Tariff goes into effect or the day preceding the effective date of any successor backstop capacity procurement mechanism to the RCST-except that the provisions concerning compensation, cost allocation and settlement shall remain in effect until such time as <u>TCPMRCST</u> resources have been finally compensated for their services rendered under the <u>TCPMRCST</u> prior to the termination of the <u>TCPMRCST</u>, and the ISO has finally allocated and recovered the costs associated with such <u>TCPMRCST</u> compensation.

#### 43.1 Designation

The ISO shall have the authority provided in this Section 43.1 to designate Eligible Capacity or System Resources to provide services under the <u>TCPMRCST</u> as set forth in this Section 43.

## 43.2 Local <u>TCPMRCST</u> Designations

The ISO may designate Eligible Capacity to provide services under the <u>TCPMRCST</u> to meet local reliability needs to the extent provided in this Section 43.2.

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#### 43.2.1.3 2008 Local TCPMRCST Designations for Deficiencies

Following the ISO's identification of any Local Resource Adequacy Requirement Deficiency, the ISO may designate Eligible Capacity to provide services under the <u>TCPMRCST</u> consistent with the criteria set forth in Section 43.2.2. The ISO may designate Eligible Capacity to provide service under this Section 43.2.1.<u>3</u> to the extent necessary to satisfy any remaining Local Resource Adequacy Deficiency only after: (i) RMR Units have been designated in the local area reliability study process-for 2008, and (ii) completion of the evaluation process set forth in Section 40.7 of Appendix CC. Designations of Eligible Capacity to provide services under the <u>TCPMRCST</u> made pursuant to this section shall have a <u>minimum commitment term of one (1) wear, based on the period(s) of overall shortage as reflected in the annual Resource Adequacy Plans that have been submitted, provided that the term of the designation may not extend into a subsequent Resource Adequacy Compliance Year and no term shall go beyond term that commences upon the day after the ISO provides notice to the MRTU Tariff goes into effect or the day preceding the effective date of any successor backstop capacity procurement mechanism to the RCST.</u>

#### 43.2.1.4 Collective Deficiency in Local Capacity Area Resources.

The ISO shall have the authority to designate Eligible Capacity where the Local Capacity Area Resources specified in the annual Resource Adequacy Plans of all applicable Scheduling Coordinators, after the opportunity to cure under Section 43.2.1.4.1 has been exhausted, fail to ensure compliance in one or more Local Capacity Areas with the Local Capacity Technical Study criteria provided in Section 40.3.1.1 of Appendix CC. The ISO shall have the authority under this Section 43.2.1.4, regardless of whether such resources satisfy, for the deficient Local Capacity Area, the minimum amount of Local Capacity Area Resources identified in the Local Capacity Technical Study, but only after assessing the effectiveness of Generating Units under RMR Contracts, if any, and all Resource Adequacy Resources reflected in all submitted annual Resource Adequacy Plans, whether or not such Generating Units under RMR Contracts are located in the applicable Local Capacity Area. The ISO may, pursuant to this Section 43.2.1.4, designate Eligible Capacity in an amount and location sufficient to ensure compliance with the Reliability Criteria applied in the Local Capacity Technical Study.

Eligible Capacity designated under this Section shall have a minimum commitment term of one (1) month and a maximum commitment term of one year, based on the period(s) of overall shortage as reflected in the annual Resource Adequacy Plans that have been submitted. The term of the designation may not extend into a subsequent Resource Adequacy Compliance Year. Moreover, no term shall go beyond midnight on the day preceding the implementation of the MRTU Tariff.

## 43.2.1.4.1 LSE Opportunity to Resolve Collective Deficiency in Local Capacity Area Resources.

Where the ISO determines that a need for Eligible Capacity exists under Section 43.2.1.4, but prior to any designation of Eligible Capacity, the ISO shall issue a market notice, no later than fifteen (15) days after the Scheduling Coordinator for an LSE is required to submit its annual Resource Adequacy Plans, identifying the deficient Local Capacity Area, the quantity of capacity that would permit the deficient Local Capacity Area, the quantity of capacity that would permit the deficient Local Capacity Area to comply with the Local Capacity Technical Study criteria provided in Section 40.3.1.1 of Appendix CC and, where only specific resources are effective to resolve the Reliability Criteria deficiency, the ISO shall provide the identity of such resources. Any Scheduling Coordinator for an LSE may submit a revised annual Resource Adequacy Plan within thirty (30) days after the ISO issues the market notice herein, demonstrating procurement of additional Local Capacity Area Resources consistent with the market notice issued under this Section.

Any Scheduling Coordinator for an LSE that provides such additional Local Capacity Area Resources consistent with the market notice under this Section shall have its share of any TCPM procurement costs under Section 43.8 reduced on a proportionate basis. If the full quantity of capacity is not reported to the ISO under revised annual Resource Adequacy Plans in accordance with this Section, the ISO may designate Eligible Capacity sufficient to alleviate the deficiency.

## 43.2.2 Selection of Eligible Capacity Designated for Local Reliability

The ISO will make designations of Eligible Capacity under Section 43.2 based on the lowest overall cost for each <del>2008</del>-Local Capacity Area considering the following factors: the effectiveness of the Eligible Capacity, the quantity of Eligible Capacity of the resource relative to the remaining amount of capacity that is needed; and the Start-Up and Minimum Load Costs associated with the Eligible Capacity. The ISO shall have reasonable allowance to designate under the <del>RCST</del><u>TCPM</u> an amount of Eligible Capacity

from a Generating Unit that is slightly more or slightly less than a deficiency due to the quantity of Eligible Capacity from such Generating Unit that is available and suitable to meet the deficiency, consistent with the criteria in this section.

#### 43.3 System RCST\_TCPM\_Designations

The ISO may designate Eligible Capacity for calendar year 2008 to the extent provided in this Section 43.3.

#### 43.3.1 Annual System <u>TCPMReliability Capacity Services</u> Designations

Following the ISO's review under Section 40.7 of Appendix CC of the annual <del>2008</del>-Resource Adequacy Plans submitted pursuant to Section 40.2.1 of the ISO Tariff and Sections 40.2.1.1, 40.2.2.4, 40.2.3.4 or 40.2.4 of Appendix CC, and its review of any <del>2008</del>-designation of Eligible Capacity pursuant to Section 43.2.1<u>.3</u>, the ISO may designate Eligible Capacity or System Resources to provide services under the <u>RCST-TCPM</u> under this Section 43.3 to the extent necessary to cover the aggregate Year-Ahead System Resource Deficiency consistent with the criteria set forth in Section 43.3.3.

A designation of Eligible Capacity or System Resources to provide services under the <u>TCPMRCST</u> made pursuant to this Section 43.3.1 shall be for a minimum term of three months, provided that, at the discretion of the ISO, the designation term may be extended up to a maximum term of the five summer months of May through September, <u>provided that the term of the designation may not extend into a</u> <u>subsequent Resource Adequacy Compliance Year,</u> and provided further, that in no event shall the term of any <u>TCPMRCST</u> designation under this section extend beyond midnight on the <del>earlier of the</del> day before the MRTU Tariff goes into effect-or the day preceding the effective date of any successor backstop capacity procurement mechanism to the RCST.

#### 43.3.2 Monthly System <u>TCPMReliability Capacity Services</u> Designations

Following its review under Section 40.7 of Appendix CC of the monthly Resource Adequacy Plans submitted by Scheduling Coordinators pursuant to Section 40.2.2, the ISO may designate Eligible Capacity or System Resources to provide services under the <u>TCPMRCST</u> under this Section 43.3 to the extent necessary to cover the aggregate Month-Ahead System Resource Deficiency consistent with the criteria set forth in Section 43.3.3.

Designations of Eligible Capacity or System Resources to provide services under the <u>TCPMRCST</u> made pursuant to this Section 43.3.2 shall be for the lesser of three months, or the remainder of the calendar year, provided that the term of the designation may not extend into a subsequent Resource Adequacy <u>Compliance Year, and provided further, that in no event shall the term of any TCPM designation under</u> this section extend beyond midnight on the day before the MRTU Tariff goes into effect or the period of time until the MRTU Tariff becomes effective or the period of time until a successor backstop capacity procurement mechanism to the RCST becomes effective.

#### 43.3.3 Selection of Eligible Capacity Designated for System Reliability

The ISO will make designations of Eligible Capacity or System Resources under this Section 43.3 based on the following factors: the effectiveness of the Eligible Capacity in addressing local and/or zonal constraints in addition to meeting system needs; the quantity of Eligible Capacity of the resource; the Start-Up and Minimum Load Costs associated with the Eligible Capacity; and the effectiveness of the Eligible Capacity at reducing the Minimum Load Costs that might otherwise be incurred as a result of must-offer waiver denials. System Resources shall be subject to the ISO's established import limits as specified in accordance with Section 40.5.2.2. The ISO shall have reasonable allowance to designate under the RCST\_TCPM an amount of Eligible Capacity from a Generating Unit or System Resource that is slightly more or slightly less than a deficiency due to the quantity of Eligible Capacity from such Generating Unit or System Resource that is available and suitable to meet the deficiency, consistent with the criteria in this section.

#### 43.4 RCST Designations For TCPM Significant Events

The ISO may designate Eligible Capacity or System Resources to provide service <u>on a prospective basis</u> under this Section 43.4 following a <u>TCPM</u> Significant Event, <u>to the extent necessary to maintain</u> <u>compliance with Reliability Criteria</u> and taking into account the expected duration of the <u>TCPM</u> Significant Event, if such an RCST designation is necessary to remedy any resulting material difference in ISO <u>Controlled Grid operations for 2008 relative to the assumptions reflected in the 2008 Local Capacity</u> <u>Technical Analysis or, for 2006, relative to the assumptions reflected in the LARN Report for 2006.</u> <u>Capacity designated under Section 43.4 shall have an initial term of thirty (30) days. If the ISO</u> <u>determines that the TCPM Significant Event is likely to extend beyond the thirty (30) day period, the ISO</u> shall extend the designation for another sixty (60) days. During this additional sixty (60) day period, the ISO will provide Market Participants with an opportunity to provide alternative solutions to meet the ISO's operational and reliability needs in response to the TCPM Significant Event, rather than rely on the ISO's designation of capacity under the TCPM. The ISO shall consider and implement, if acceptable to the ISO in accordance with Good Utility Practice, such alternative solutions provided by Market Participants in a timely manner. If Market Participants do not submit any alternatives to the designation of TCPM capacity that are fully effective in addressing the deficiencies in Reliability Criteria resulting from TCPM Significant Event, the ISO shall extend the term of the designation under Section 43.4 for the expected duration of the TCPM Significant Event. If there is a reasonable alternative solution that fully resolves the ISO's operational and reliability needs, the ISO will not extend the designation under Section 43.4. The term of the designation may not extend into a subsequent Resource Adequacy Compliance Year. Moreover, An RCST designation due to a Significant Event shall have a minimum term of three months and a maximum term up to the period of time which the ISO determines the Significant Event will remain in effect, provided that in no event shall the term of such RCST TCPM designation extend beyond midnight on the earlier of the day before the MRTU Tariff goes into effect or the day preceding the effective date of any successor backstop capacity procurement mechanism to the RCST. Any RCST TCPM designations under this section shall be in accordance with the criteria set forth in Section 43.43.13.

#### 43.4.1 Selection of Eligible Capacity for TCPM Significant Events

The ISO will make designations of Eligible Capacity under Section 43.4 based on the lowest overall cost for each TCPM Significant Event considering the following factors: the effectiveness of the Eligible Capacity, the quantity of Eligible Capacity of the resource relative to the remaining amount of capacity that is needed; and the Start-Up and Minimum Load Costs associated with the Eligible Capacity. The ISO shall have reasonable allowance to designate under the TCPM an amount of Eligible Capacity from a Generating Unit that is slightly more or slightly less than the capacity necessary to remedy a TCPM Significant Event due to the quantity of Eligible Capacity of such Generating Unit that is available and suitable to meet the TCPM Significant Event, consistent with the criteria in this section.

#### 43.5 Obligations of a Resource Designated under the RCSTTCPM

#### 43.5.1 Must-Offer Obligations

Generating Units designated under the <u>RCST\_TCPM</u> shall be subject to all of the availability, must-offer, dispatch, testing, reporting, and verification obligations applicable to Resource Adequacy Resources identified in Resource Adequacy Plans under Section 40.6A of the ISO Tariff. Generating Units designated under the <u>TCPMRCST</u> must offer available capacity into the Ancillary Services markets to the extent capable.

#### 43.5.2 Replacement Option

If a Generating Unit designated under the <u>TCPMRCST</u> is unavailable when issued a must-offer waiver denial by the ISO pursuant to Section 40.7.6 of the ISO Tariff, the Scheduling Coordinator for the resource may, within 2 hours for a must-offer waiver denial issued prior to the Hour-Ahead market and within 30 minutes for a must-offer waiver denial issued in Real-Time, substitute capacity from such Generating Unit with Eligible Capacity that: (i) is located at the same bus, or (ii) if not located at the same bus, is located in the same Local Capacity Area, and which meets the ISO's effectiveness and operational needs, including size of resource, as determined by the ISO in its reasonable discretion. If the Scheduling Coordinator substitutes such Eligible Capacity, the Scheduling Coordinator must pay all additional Minimum Load Costs, Start-Up Costs, Emissions Costs (above the corresponding costs of the Generating Unit that is being substituted), and any bilateral contract costs incurred by the Scheduling Coordinator, as a result of the substitution. The actual Availability of the substitute resource will be used for the purposes of the calculations in Appendix F, Schedule 6.

#### 43.5.3 Termination of Obligations

If a Participating Generator's Eligible Capacity is designated by the CAISO under the terms of the <u>TCPMRCST</u>, and the Participating Generator has not filed a notice to withdraw from the Participating Generator Agreement ("PGA"), then the Participating Generator shall be obligated to perform in accordance with the <u>TCPMRCST</u> for the term of the <u>TCPMRCST</u> designation. If a Participating Generator's Eligible Capacity is designated under the terms of the <u>TCPMRCST</u> after the Participating Generator has filed a notice to withdraw from its PGA, then the Participating Generator shall be obligated to perform in accordance with the <u>TCPMRCST</u> until the date that its PGA effectively

terminates, but the Participating Generator shall be under no obligation to so perform after the effective date of the PGA termination. If a Participating Generator's Eligible Capacity is designated under the <u>TCPMRCST</u> after the Participating Generator has filed notice to withdraw from its PGA, and the Participating Generator agrees to provide service under the <u>TCPMRCST</u>, then the Participating Generator will enter into a PGA for the designated generating unit and invoice the ISO for any actual applicable restoration costs as provided in the RMR Service Agreement.

## 43.6 <u>TCPMRCST</u> Report

## 43.6.1 TCPM Designation Market Notice

The ISO shall issue a market notice within two (2) Business Days of a TCPM designation. The market notice shall include a preliminary description of what caused the TCPM Significant Event, the name of the resource(s) procured, the preliminary expected duration of the TCPM Significant Event, the initial designation period, and an indication that a designation report is being prepared. The ISO shall publish a monthly report on the ISO Website which shall show the resources designated under RCST, the megawatts of each RCST capacity designation, the duration of RCST designations, the reason for the RCST designation, and all payments, excluding costs covered in the Minimum Load Cost Report described in Section 43.11.2 herein, in dollars, itemized for system purposes as well as for each 2008 Local Capacity Area, whichever is applicable. The ISO will provide a market notice of the availability of this report.

## 43.6.2 Designation of a Resource under the TCPM Tariff

The ISO shall post a designation report to the ISO Website and provide a market notice of the availability of the report within the earlier of thirty (30) days of procuring a resource under the TCPM or ten (10) days after the end of the month. The designation report shall include the following information:

> (1) A description of the reason for the designation (LSE procurement shortfall, Local Capacity Area Resource effectiveness deficiency, or TCPM Significant Event), and an explanation of why it was necessary for the ISO to utilize the TCPM authority);

(2) The following information would be reported for all backstop designations:

- (a) the resource name;
- (b) the amount of TCPM Capacity designated (MW),
- (c) an explanation of why that amount of TCPM Capacity was designated,
- (d) the date TCPM Capacity was designated.
- (e) the duration of the designation; and
- (f) the price for the TCPM procurement; and
- (3) If the reason for the designation is a TCPM Significant Event, the ISO will also include:
  - (a) a discussion of the event or events that have occurred, why the ISO has procured TCPM Capacity, and how much has been procured;
  - (b) an assessment of the expected duration of the TCPM Significant Event;
  - (c) the duration of the initial designation (thirty (30) days); and
  - (d) a statement as to whether the initial designation has been extended
     (such that the backstop procurement is now for more than thirty (30)
     days), and, if it has been extended, the length of the extension.

#### 43.7 Payments to Resources Designated Under the RCSTTCPM

#### 43.7.1 RCST\_TCPM\_Capacity Payment

Scheduling Coordinators representing resources designated under this Section 43 will receive a RCST TCPM Capacity Payment equal to the product of the Net Qualifying Capacity, the relevant Availability Factor as determined in accordance with Appendix F, Schedule 6, and the difference between the monthly <u>TCPMRCST</u> charge and 95% of the Peak Energy Rent, *i.e.*, Net Qualifying Capacity x Availability Factor x (Monthly <u>RCST-TCPM</u> Charge (Monthly Peak Energy Rent x .95)). The ISO shall determine the Availability Factor, Monthly <u>TCPMRCST</u> Charge and Monthly Peak Energy Rent in accordance with Appendix F, Schedule 6 of the Tariff. For purposes of this section 43.7.1, the term Net Qualifying Capacity shall mean the Megawatt value for a <u>TCPMRCST</u> resource as reflected in the document entitled Qualifying Capacity Megawatt Values for RA Planning Purposes (or any successor document) as posted on the ISO website, provided that, to the extent a particular resource has a stated monthly value(s), the applicable Net Qualifying Capacity shall be the average of the stated values for the months in which the resource will have an <u>TCPMRCST</u> designation.

For purposes of the TCPMRCST designation, except for TCPM Significant Events, Aavailability shall be calculated as the ratio of: (1) the sum of the Net Qualifying Capacity MW for each hour of the month across all hours of the month, where the actual capacity MW available to the ISO shall be substituted for Net Qualifying Capacity MW for each hour the resource is not on an Authorized Outage, to (2) the product of Net Qualifying Capacity MW and the total hours in the month. For purposes of TCPM designations for TCPM Significant Events, the Availability Factor shall be calculated as the ratio of: (1) the sum of the TCPM Capacity MW for each hour across all hours of the month or part of the month for which a unit is designated, whichever is applicable, where the actual capacity MW available to the ISO, if less than the TCPM Capacity MW, shall be substituted for TCPM Capacity MW for each hour the resource is not available and is not on an authorized Outage, to (2) the product of TCPM Capacity MW and the total hours in the in the month or part of the month for which a unit is designated, whichever is applicable. For purposes of this section, an Authorized Outage shall be limited to the following: (a) an ISO-approved, planned outage that exists at the time of TCPMRCST designation and is scheduled to occur during the term of an TCPMRCST designation provided that (i) such outage is not the result of a prior outage that was forced or not otherwise scheduled and approved by the ISO, and (ii) such outage may be rescheduled by the ISO during the term of the <u>TCPMRCST</u> designation period, provided that the term of the ISO-approved outage and the capacity derate at time of the <u>TCPMRCST</u> designation are not exceeded, or (b) an ISO-approved maintenance outage that is scheduled during the TCPMRCST designation period, provided such outage is not the result of a prior outage that was forced or not otherwise scheduled and approved by the ISO.

#### \* \* \*

## 43.8 Allocation of RCST\_TCPM\_Capacity Payment Costs

For each month, the ISO shall allocate the costs of <u>TCPM</u><del>RCST</del> Capacity Payments made pursuant to Section 43.7.1 as follows:

- (1) <u>Annual System TCPMRCST Designations</u>: If the ISO makes <u>TCPMRCST</u> designations under Section 43.3.1, then the ISO will allocate the total costs of <u>TCPMRCST</u> Capacity Payments for such <u>TCPMRCST</u> designations (for the full term of those <u>TCPMRCST</u> designations) pro rata to each <u>deficient</u> SC-RA Entity based on its portion of the aggregate Year-Ahead System <u>Resource</u> Deficiency.
- (2) <u>Monthly System TCPMRCST Designations</u>: If the ISO makes <u>TCPMRCST</u> designations under Section 43.3.2, then the ISO will allocate the total costs of <u>TCPMRCST</u> Capacity Payments for such <u>TCPMRCST</u> designations (for the full term of those <u>TCPMRCST</u> designations) pro rata to each <u>deficient</u> SC-RA Entity based on its portion of the aggregate Month-Ahead System <u>Resource</u> Deficiency.
- (3) Local TCPMRCST Designations for 2008. If the ISO makes local TCPMRCST designations for 2008, then the ISO will allocate the total costs of TCPMRCST Capacity Payments for such TCPMRCST designations (for the full term of those TCPMRCST designations) pro rata to each Scheduling Coordinator for an deficient RA Entity based on the ratio of its Local Resource Adequacy Requirement Deficiency to the sum of the Local Resource Adequacy Requirement Deficiency in two or more 2008-Local Capacity Areas that can be satisfied by designating a single unit under the TCPMRCST, the ISO shall allocate the total costs of TCPMRCST Capacity Payments for such TCPMRCST designation (for the full term of the designation) pro rata to each Scheduling Coordinator for an RA Entity that has a Local Resource Adequacy Requirement Deficiency Requirement Deficiency in such 2008-Local Capacity Areas based on the ratio of its Local Resource Adequacy Requirement Deficiency Requirement Deficiency in such 2008-Local Capacity Areas based on the ratio of its Local Resource Adequacy Requirement Deficiency in the ratio of its Local Resource Adequacy Requirement Deficiency in the ratio of its Local Resource Adequacy Requirement Deficiency in the ratio of its Local Resource Adequacy Requirement Deficiency in such 2008-Local Capacity Areas based on the ratio of its Local Resource Adequacy Requirement Deficiency in the aggregate Local Resource Adequacy Requirement Deficiency in those 2008-Local Capacity Areas.
- (4) <u>Collective Local Capacity Shortfalls. If the ISO makes designations under Section</u>
   <u>43.2.1.4 the ISO shall allocate the costs of such designations to all Scheduling</u>
   <u>Coordinators for LSEs in the TAC Area(s) in which the deficient Local Capacity Area was</u>

located. The allocation will be based on such Scheduling Coordinators' proportionate share of Load in such TAC Area(s) as determined in accordance with Section 40.3.2 of Appendix CC, excluding Scheduling Coordinators for LSEs that procured additional capacity in accordance with Section 43.2.1.4.1 on a proportionate basis, to the extent of their additional procurement.Significant Event RCST Designations for 2006: If the ISO makes any Significant Event RCST designations under Section 43.4 during 2006, the ISO will allocate the costs of such designations to all SC-RA Entities in the TAC Area(s) in which the Significant Event caused or threatened to cause a failure to meet Applicable Reliability Criteria based on Scheduling Coordinators' RA Entity Load Share Percentage(s) in such TAC Area(s).

(5) TCPM Significant Event Designations-for 2008. If the ISO makes any TCPM Significant Event designations under Section 43.4, the ISO shall allocate the costs of such designations to all Scheduling Coordinators for LSEs that serve Load in the TAC Area(s) in which the TCPM Significant Event caused or threatened to cause a failure to meet Reliability Criteria based on the percentage of actual MWh Load of each LSE represented by the Scheduling Coordinator in the TAC Area(s) to total MWh Load in the TAC Area(s) as recorded in the ISO Settlement system for the actual days during any Settlement month period over which the designation has occurred. If the ISO makes any Significant Event RCST designations under Section 43.4 during 2008, the ISO will allocate the costs of such designations to all SC-RA Entities in the TAC Area(s) in which the Significant Event caused or threatened to cause a failure to meet Reliability Criteria based on Scheduling Coordinators' 2008 RA Entity Load Share Percentage(s) in such TAC Area(s).

#### 43.9 Crediting of TCPM Capacity

The ISO shall credit TCPM designations to the resource adequacy obligations of Scheduling Coordinators for Load Serving Entities as follows:

> (a) To the extent the cost of TCPM designation under Section 43.2.1.3 is allocated to a Scheduling Coordinator on behalf of a LSE under Section 43.8.(3), the ISO shall provide the Scheduling Coordinator on behalf of the LSE, for the term of the

designation, credit towards (1) the LSE's Local Capacity Area Resource obligation under Section 43.2.1.3 in an amount equal to the LSE's pro rata share of the TCPM Capacity designated under Section 43.2.1.3 and (2) the LSE's Demand and Reserve Margin requirements determined under Section 40 in an amount equal to the LSE's pro rata share of the TCPM Capacity designated under Section 43.2.1.3.

- (b) To the extent the cost of ISO designation under Section 43.2.1.4 is allocated to a Scheduling Coordinator on behalf of a LSE under Section 43.8 (4), the ISO shall provide the Scheduling Coordinator on behalf of the LSE, for the term of the designation, credit towards the LSE's Demand and Reserve Margin requirements determined under Section 40 in an amount equal to the LSE's pro rata share of the TCPM Capacity designated under Section 43.2.1.4.
- (c) To the extent the cost of TCPM designation under Section 43.3.1 is allocated to a Scheduling Coordinator on behalf of a LSE under Section 43.8.(1), and the designation is for greater than one month under Section 43.3.1, the ISO shall provide the Scheduling Coordinator on behalf of the LSE, for the term of the designation, credit towards the LSE's Demand and Reserve Margin requirements determined under Section 40 in an amount equal to the LSE's pro rata share of the TCPM Capacity designated under Section 43.3.1.
- (d)
   The credit provided in this Section shall be used for determining the need for the

   additional designation of TCPM Capacity under Section 43.1 and for allocation of

   TCPM costs under Section 43.8.
- (e) For each Scheduling Coordinator that is provided credit pursuant to this Section, the ISO shall provide information, including the quantity of capacity procured in MW, necessary to allow the CPUC, other Local Regulatory Authority, or federal agency with jurisdiction over the LSE on whose behalf the credit was provided to determine whether the LSE should receive credit toward its resource adequacy requirements adopted by such agencies or authorities.

\* \* \*

# ISO TARIFF APPENDIX A Master Definitions Supplement

\* \* \*

Eligible Capacity	Operative of Operation Heile of Devicing the Operation benefated
<u>Engine oupdoity</u>	Capacity of Generating Units of Participating Generators located
	within the ISO Control Area except the following: capacity
	associated with hydroelectric generation, nuclear generation, QFs,
	generation resources within a Metered Subsystem, resources
	owned by the California Department of Water Resources, State
	Water Project; capacity of a Generating Unit with a Reliability Must-
	Run contract, during the term of such contract; capacity of a
	Resource Adequacy Resource that is identified in any Resource
	Adequacy Plan in accordance with Section 40, during the time that
	such capacity is identified on the Resource Adequacy Plan; and
	capacity that has been designated to provide service under the
	RCSTTCPM, during the term of the designation.
	* * *
Monthly RCST TCPM	The monthly charge determined in accordance with Appendix F,
<u>Charge</u>	Schedule 6.
	* * *
RCST	The Reliability Capacity Services Tariff, as set forth in Section
	43 of this ISO Tariff.
	* * *
Significant Event	For 2006, a "Significant Event" is an event that results in a material
	difference in ISO Controlled Grid operations relative to what was
	difference in ISO Controlled Grid operations relative to what was assumed in developing the LARN Report for 2006 that causes, or
	assumed in developing the LARN Report for 2006 that causes, or
	assumed in developing the LARN Report for 2006 that causes, or threatens to cause, a failure to meet Applicable Reliability Criteria. For
	assumed in developing the LARN Report for 2006 that causes, or threatens to cause, a failure to meet Applicable Reliability Criteria. For 2008, a "Significant Event" is an event that results in a material
	assumed in developing the LARN Report for 2006 that causes, or threatens to cause, a failure to meet Applicable Reliability Criteria. For 2008, a "Significant Event" is an event that results in a material difference in ISO Controlled Grid operations relative to the 2008 Local
	assumed in developing the LARN Report for 2006 that causes, or threatens to cause, a failure to meet Applicable Reliability Criteria. For 2008, a "Significant Event" is an event that results in a material difference in ISO Controlled Grid operations relative to the 2008 Local Capacity Technical Study that causes, or threatens to cause, a failure
<u>TCPM</u>	assumed in developing the LARN Report for 2006 that causes, or threatens to cause, a failure to meet Applicable Reliability Criteria. For 2008, a "Significant Event" is an event that results in a material difference in ISO Controlled Grid operations relative to the 2008 Local Capacity Technical Study that causes, or threatens to cause, a failure to meet Applicable Reliability Criteria.

\* \* \*
TCPM Capacity	Eligible Capacity that has been designated under the TCPM.		
<u>RCST-TCPM Capacity</u> Payment	* * * The payment provided pursuant to Section 43.7.1 of the ISO Tariff.		
	* * *		
<u>TCPM Significant Event</u>	A Significant Event is a substantial event, or a combination of events, that is determined by the ISO to either result in a material difference from what was assumed in the RA program for purposes of determining the RA capacity requirements, or produce a material change in system conditions or in ISO- Controlled Grid Operations, that causes, or threatens to cause, a failure to meet Reliability Criteria absent the recurring use of a non-RA resource(s) on a prospective basis.		
2007 Local Reliability Area	An area for which the CPUC or applicable Local Regulatory Authority has established a Local Resource Adequacy Requirement for 2007 for		
<u>2007 RA Entity Load</u> Share Percentage	RA Entities subject to their jurisdiction. An RA Entity's proportionate share of load in a TAC Area for purposes of 2007 Significant Event RCST designations. The 2007 RA Entity Load Share Percentage shall be calculated for each RA Entity by dividing the RA Entity's actual coincident peak Load in each TAC Area for 2006 by the total coincident peak Load of all RA Entities in the TAC Area in 2006.		
	* * *		

ISO TARIFF APPENDIX F Schedule 4

\* \* \*

### Participating Intermittent Resources Export Fee

A Participating Intermittent Resources Export Fee shall be assessed to Exporting Participating Intermittent Resources each calendar quarter. The Participating Intermittent Resources Export Fee shall

be calculated as the product of (1) the sum of all settlement costs avoided by Participating Intermittent Resources for the preceding calendar quarter, or portion thereof, consisting of Charge Types 1597 [FERC Must-offer Obligation Capacity Payment System Allocation], 1697 [Tier 1 MLCC Allocation for System Needs], 1797 [Tier 1 MLCC Allocation of Resource Adequacy for System Needs], 1897 [Tier 1 MLCC Allocation of <del>RCST-<u>TCPM</u></u> for System Needs], and 4487 [Allocation of Excess Cost for Instructed Energy], but excluding charges for Uninstructed Energy associated with Charge Type 4407 and Transmission Loss Obligation associated with Charge Type 4450, (2) by the ratio of the total MW/h generated by an Exporting Participating Intermittent Resource during the calendar quarter, or portion thereof (based on metered output), by the total MW/h generated by all Participating Intermittent Resources during the calendar quarter, or portion thereof (based on metered output), and (3) by the percentage of the Exporting Participating Intermittent Resource's capacity deemed exporting under EIRP 5.3 or Export Percentage.</del>

Participating Intermittent Resources Export Fee per Participating Intermittent Resource =

Program Costs x (MW/h individual Participating Intermittent Resource/MW/h all Participating Intermittent Resources) x Export Percentage

\* \* \*

### ISO TARIFF APPENDIX F Schedule 6

### RCST TCPM SCHEDULES

### Monthly RCST TCPM Charge

The Monthly <u>RCST\_TCPM</u> Charge shall be calculated by multiplying the monthly shaping factors by the target annual capacity price (\$7386/kW-yr).

### **Monthly Shaping Factors**

	<u>SP-15</u>	<u>NP-15/ZP-26</u>
Jan	6.7%	4.9%
Feb	5%	4.9%
Mar	5%	5.6%
Apr	5.8%	4.6%
Мау	6.3%	4.8%
Jun	8.3%	5.1%
Jul	15.8%	13.7%
Aug	17.5%	15.3%
Sept	11.7%	13.8%
Oct	5.8%	8.7%

Nov	6.3%	8.8%
Dec	5.8%	9.8%
Total	100%	100%

### Availability

The target Availability for a resource designated under <u>RCST-TCPM</u> is 95%. Incentives and penalties for availability above and below the target are as set forth in the table below, entitled "Availability Factor Table." The ISO will calculate availability on a monthly basis using actual availability data. The "Availability Factor" for each month shall be calculated using the following curve:

<b>Availability</b> (excluding only Scheduled Maintenance)	Capacity Payment Factor	Availability Factor
100%	3.3%	1.139
99%	3.3%	1.106
98%	3.3%	1.073
97%	2.5%	1.040
96%	1.5%	1.015
95%	-	1.000
94%	-1.5%	.985
93%	-1.5%	.970
92%	-1.5%	.955
91%	-1.5%	.940
90%	-1.5%	.925
89-80%	-1.7%*	.908755
79-41%	-1.9%*	.736014
-40%	-	0.0

### **AVAILABILITY FACTOR TABLE**

\*The "Capacity Payment Factor" decreases by 1.7% and 1.9% respectively for every 1% decrease in availability.

The capacity payment will be adjusted upward from the 95% Availability starting point by the positive percentages listed as the Capacity Payment Factor above, by the amounts listed for each availability factor above 95%, so that, for example, if a 97% Availability is achieved for the month (as described below), then the capacity payment for that month would be the monthly value for 95% plus an additional 4% (1.5% for the first percent Availability above 95%, and 2.5% for the second percent Availability above 95%). Reductions in capacity payment will be made correspondingly according to the Capacity Payment Factor above for monthly availability levels falling short of the 95% availability starting point.

### **Calculation of the Monthly PER**

The ISO shall calculate the Monthly Peak Energy Rent ("Monthly PER") as follows: immediately following the end of the month the ISO will determine all those hours during which the Reference Resource would have been dispatched (based on Reference Resource characteristics) to provide either energy or non-spinning reserves and will calculate, on a per kW-Month basis, the total dollar amount of rent (earnings in excess of proxy unit variable costs calculated using Reference Resource unit characteristics) that would have been earned by the Reference Resource. The Reference Resource will be assumed to have been dispatched for energy in any hour in which the hourly energy price described below is greater than the Reference Resource variable cost; the ISO shall use its day ahead Non-spinning Reserve price to calculate the rent for all hours in which the Reference Resource is not assumed dispatched to provide energy (i.e., any hour where the hourly price is less than the Reference Resource variable costs).

Hourly price profiles will be determined using the shaping factors for SP-15 and NP15/ZP-26 that appear below. Hourly energy prices shall be the weighted average of: (1) the applicable zonal on/off peak dayahead index prices set forth in Platts Megawatt Daily, shaped to hourly profiles using the factors set forth below, and (2) the applicable zonal ISO hourly average real-time energy prices. For 2006, the index/ex post weighting will be 50/50, respectively. For 2007<u>TCPM</u>, the index/ex post weighting will be 75/25, respectively.

The assumed heat rate of the Reference Resource will be 10,500 BTU/kWh. Variable operations and maintenance costs shall be based on the Energy Information Administration AEO Electricity Market Module Assumptions, which are currently \$3.36/MWh. An emissions allowance of \$0.71/MWh shall be used to estimate variable costs. Gas prices for the Reference Resource will be based on a daily gas price based on Equation C1-8 (Gas) of the Schedules to the Reliability Must Run Contract for the relevant Service Area (San Diego Gas & Electric Company, Southern California Gas Company or Pacific Gas and Electric Company) or, if the resource is served from one of those three Service Areas then from the nearest of those Service Areas.

	Mon-Fri	Mon-Fri	Mon-Fri	Sat	Sat	Sat	Sun	Sun	Sun
	JAN-MAY	JUN-SEPT	OCT-DEC	JAN-MAY	JUN-SEPT	OCT-DEC	JAN-MAY	JUN-SEPT	OCT-DEC
N1	1.05454758	1.00584021	0.99435526	1.43649	1.120844	1.073148	0.755403	0.759704	0.783346
N2	0.85716711	0.86062114	0.91898795	1.032749	1.092377	0.978957	0.600188	0.683139	0.701588
N3	0.75399836	0.79068297	0.92144851	0.758585	0.91744	0.921009	0.458319	0.636187	0.68291
N4	0.71058351	0.79900018	0.89479611	0.680278	0.892744	0.911836	0.444573	0.616409	0.662295
N5	0.78267681	0.8161591	0.94516384	0.630256	0.909543	0.926083	0.362844	0.5641	0.662342
N6	1.02256586	0.86829359	1.10962719	0.623168	0.709153	0.947344	0.293086	0.335463	0.707489
N7	0.75351629	0.46629678	0.84979936	0.459933	0.363102	0.835985	0.324748	0.244038	0.795325
N8	0.88610975	0.66277777	0.86218587	0.741872	0.587123	0.805198	0.576432	0.514076	0.804009
N9	0.93647065	0.72748598	0.87228518	0.967023	0.960062	0.891018	0.923411	0.756354	0.873764
N10	0.98013307	0.83355915	0.99306313	1.050452	0.998448	0.917894	1.087891	0.848836	0.970588
N11	1.05081328	0.91348904	0.97923559	1.079888	0.984474	1.02248	1.303241	0.94756	1.027355
N12	1.068781	0.96178966	0.98802244	1.086984	1.03194	0.961419	1.304385	1.158765	1.097895
N13	1.06644102	1.07695356	0.99576872	1.083005	1.00669	0.992817	1.283414	1.168292	1.059999
N14	1.09775977	1.22226563	1.06440722	1.072448	1.0038	1.04347	1.281892	1.283789	1.110655
N15	1.09364901	1.38229366	1.11766171	1.053707	1.124805	1.05608	1.263359	1.309879	1.150637
N16	1.0841716	1.44680734	1.14665908	1.048562	1.135933	1.056274	1.316946	1.317595	1.140864
N17	1.02358917	1.3710053	1.1033917	1.049893	1.362503	1.087482	1.311524	1.567664	1.232842
N18	0.9788975	1.21057642	0.95748393	1.049616	1.327635	1.081109	1.30229	1.71578	1.406331
N19	0.94570613	1.03868542	1.10717179	1.036387	1.126072	1.09328	1.321985	1.367096	1.419466
N20	0.96174495	0.91022871	1.13578926	1.048527	0.943973	1.193558	1.393578	1.139089	1.494944
N21	1.11577915	0.94038191	1.03355639	1.133815	1.001619	1.076201	1.778309	1.551657	1.39373
N22	0.95643767	0.8354037	0.79351865	1.037886	1.04182	0.885733	1.392837	1.473652	1.062792
N23	1.56132501	1.66415743	1.17445625	1.670367	1.287221	1.205472	1.150247	1.253671	0.972486
N24	1.25713576	1.19524538	1.04116487	1.168106	1.070678	1.036151	0.769097	0.787205	0.786348

### NP-15

### Weekday January through June

Hour	January	February	March	April	May	June
1	0.9	0.97	1.018	0.973	0.951	0.945
2	0.858	0.908	0.896	0.902	0.839	0.826
3	0.839	0.885	0.828	0.849	0.756	0.745
4	0.836	0.876	0.821	0.824	0.717	0.727
5	0.887	0.977	0.948	0.878	0.879	0.794
6	1.155	1.11	1.068	1.008	1.086	0.908
7	0.898	0.933	0.79	0.779	0.6	0.474
8	1.007	1	0.892	0.92	0.778	0.613
9	1.017	1.004	0.941	0.94	0.875	0.711
10	1.011	1.019	0.983	0.991	0.976	0.806
11	0.976	0.994	1.027	1.024	1.035	1.04
12	0.98	0.99	1.038	1.038	1.074	1.087
13	0.972	0.994	1.055	1.075	1.126	1,127
14	0.983	0.984	1.06	1.098	1.193	1.201
15	0.955	0.963	1.039	1.072	1.175	1.247
16	0.896	0.932	0.994	1.031	1.147	1.26
17	0.899	0.905	0.956	0.965	1.089	1.216
18	1.171	1.044	0.983	0.914	0.997	1.12
19	1.158	1.136	1.167	0.944	0.882	1.012
20	1.075	1.067	1.082	1.06	0.965	0.965
21	1.059	1.06	1.048	1.14	1.153	1.119
22	0.941	0.975	0.946	1.009	0.935	0.999
23	1.371	1.213	1.305	1.383	1.536	1.733
24	1,153	1.062	1,117	1.183	1.235	1.322

### Saturday January through June

Hour	January	February	March	April	May	June
1	0.999	1.073	1.104	0.982	1.071	1.064
2	0.905	0.971	0.922	0.917	0.957	0.882
3	0.899	0.962	0.889	0.883	0.839	0.828
4	0.875	0.93	0.868	0.855	0.814	0.803
5	0.91	0.917	0.88	0.904	0.826	0.788
6	0.972	0.993	0.88	0.969	0.836	0.818
7	0.795	0.854	0.777	0.761	0.603	0.411
8	0.874	0.906	0.844	0.848	0.728	0.522
9	0.992	1.015	0.932	0.929	0.885	0.645
10	1.028	1.037	0.997	0.999	0.984	0.806
11	1.005	1.048	1.027	1.042	1.047	1.055
12	1.005	1.033	1.027	1.053	1.069	1.089
13	0.978	1.009	1.032	1.054	1.096	1.122
14	0.939	0.967	0.983	1.042	1.093	1.165
15	0.882	0.939	0.963	1.022	1.086	1.203
16	0.871	0.892	0.949	0.973	1.071	1.255
17	0.945	0.899	0.934	0.962	1.063	1.254
18	1.196	1.03	1.016	0.912	1.011	1.17
19	1.195	1.155	1.199	1.047	0.934	1.075
20	1.141	1.076	1.165	1.113	1.058	0.984
21	1.114	1.104	1.133	1.165	1.237	1.143
22	1.04	1.036	1.022	1.076	1.035	1.102
23	1.323	1.117	1.331	1.327	1.478	1.622
24	1,117	1.038	1.126	1 164	1.18	1,194

### Sunday January through June

Hour	January	February	March	April	May	June
1	0.897	0.85	0.787	0.869	0.794	0.854
2	0.806	0.792	0.762	0.771	0.7	0.7
3	0.745	0.802	0.716	0.732	0.628	0.622
4	0.706	0.802	0.695	0.722	0.594	0.519
5	0.707	0.794	0.707	0.696	0.623	0.469
6	0.782	0.793	0.72	0.671	0.585	0.445
7	0.818	0.873	0.691	0.711	0.471	0.372
8	0.882	0.912	0.819	0.826	0.635	0.522
9	0.975	1.007	0.945	0.926	0.757	0.631
10	1.035	1.073	1.029	1.002	0.87	0.75
11	1.03	1.065	1.069	1.059	1.059	1.019
12	1.049	1.063	1.112	1.101	1.126	1.141
13	1.043	1.065	1.147	1.118	1.176	1.268
14	1.029	1.061	1.141	1.127	1.239	1.341
15	1.003	1.033	1.11	1.097	1.279	1.44
16	0.98	1.004	1.115	1.11	1.295	1.482
17	1.039	1.006	1.091	1.052	1.336	1.528
18	1.324	1.161	1.179	1.033	1.363	1.403
19	1.37	1.305	1.421	1.191	1.231	1.321
20	1.338	1.248	1.366	1.35	1.327	1.242
21	1.286	1.213	1.288	1.469	1.471	1.381
22	1.166	1.144	1.191	1.318	1.263	1.291
23	1.079	1.066	1.082	1.127	1.239	1.339
24	0.912	0.869	0.816	0.922	0.938	0.92

### Weekday July through December



### Saturday July through December



### Sunday July through December

Hour	July	August	Septemb	October	Novembe	Decembe
			er		r	r
1	0.834	0.81	0.884	0.868	0.916	0.889
2	0.739	0.729	0.688	0.685	0.788	0.809
3	0.679	0.672	0.527	0.562	0.613	0.698
4	0.655	0.653	0.489	0.574	0.576	0.634
5	0.61	0.657	0.463	0.558	0.586	0.68
6	0.496	0.647	0.512	0.613	0.62	0.747
7	0.445	0.549	0.527	0.573	0.666	0.777
8	0.587	0.618	0.619	0.697	0.776	0.848
9	0.719	0.704	0.713	0.708	0.997	0.985
10	0.877	0.854	0.901	0.829	1.103	1.052
11	1.005	0.991	1.035	1.102	1.143	1.067
12	1.106	1.154	1.178	1.163	1.151	1.052
13	1.167	1.151	1.318	1.154	1.125	1.029
14	1.254	1.25	1.353	1.24	1.138	0.993
15	1.339	1.358	1.347	1.252	1.085	0.929
16	1.432	1.43	1.354	1.272	1.063	0.92
17	1.447	1.467	1.375	1.235	1.279	1.146
18	1.383	1.396	1.372	1.407	1.346	1.351
19	1.301	1.278	1.314	1.481	1.395	1.387
20	1.194	1.243	1.336	1.517	1.296	1.317
21	1.336	1.322	1.359	1.477	1.217	1.279
22	1.217	1.171	1.24	1.18	1.097	1.241
23	1.221	1.053	1.171	1.115	1.096	1.188
24	0.956	0.843	0.923	0.735	0.927	0.983

\* \* \*

### ATTACHMENT C



California Independent System Operator Corporation

# Memorandum

Re:	Decision on Transitional Capacity Procurement Mechanism Tariff Filing
Date:	March 18, 2008
From:	Anjali Sheffrin, Director, Market & Product Development Keith Johnson, Senior Market & Product Developer
To:	ISO Board of Governors

### This memorandum requires Board action.

### **EXECUTIVE SUMMARY**

With implementation of the Market Redesign and Technology Update ("MRTU") delayed beyond March 31, 2008, the California Independent System Operator ("CAISO") is faced with developing a temporary mechanism to compensate generators for providing backstop capacity. Backstop capacity is required when the capacity secured by load serving entities ("LSE") is not sufficient to meet Resource Adequacy needs and when unforeseen events require the CAISO to procure additional resources. The CAISO recently obtained Board approval for an interim capacity procurement mechanism that will go into effect upon implementation of MRTU, and there is a proceeding underway at the Federal Energy Regulatory Commission ("FERC") related to that product. The current backstop capacity procurement mechanism is the Reliability Capacity Services Tariff ("RCST"), and FERC extended the RCST beyond its original expiration date with the understanding that RCST would remain in effect until the earlier of MRTU implementation or the implementation of an alternative backstop capacity procurement mechanism. FERC indicated that it expected the CAISO to follow through on its commitment to initiate a new stakeholder process and modify the RCST should MRTU be delayed, and the Transitional Capacity Procurement Mechanism ("TCPM") is the product of this effort. The CAISO anticipates that the TCPM will be in effect for the short period of time between June 1, 2008 and the start of MRTU, when the Interim Capacity Procurement Mechanism ("ICPM") will go into effect. If the TCPM proposal is approved by the Board, the CAISO will file the tariff language by the end of March 2008. FERC would then have 60 days to issue a decision, which will result in the new backstop mechanism being in place on June 1, 2008.

The TCPM will update the currently-effective RCST and serve as a transition to the ICPM. It changes the RCST in the following ways:

- Increases the Target Annual Capacity Price from \$73/kW-year to \$86/kW-year
- Increases the current daily capacity payment from a factor of 1/17 to a factor of 1/8 of the target monthly capacity payment.
- Incorporates the following ICPM tariff provisions to begin the transition to ICPM:
  - One-month minimum term for Significant Event designations;
  - ICPM definition of Significant Event;

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- o Three-step designation process for Significant Events;
- Reports where Significant Event designations extend beyond 30-days;
- Backstop procurement for collective deficiencies and cost allocation; and
- Counting backstop procurement in Resource Adequacy showings.

The TCPM is compatible with the current pre-MRTU market design and California's existing Resource Adequacy program and does not conflict with efforts underway to design a long-term Resource Adequacy framework. Management believes that this proposal constitutes a reasonable and balanced approach that takes into account the widely divergent views of stakeholders.

### MOTION

Moved, that the ISO Board of Governors approves the Transitional Capacity Procurement Mechanism as outlined in the memorandum dated March 18, 2008, and related attachments; and

Moved, that the ISO Board of Governors authorizes Management to make all the necessary and appropriate filings with the Federal Energy Regulatory Commission to implement this proposal.

### BACKGROUND

Over the past two months, CAISO staff has collaborated with stakeholders to develop a transitional capacity procurement mechanism to serve as a backstop mechanism for capacity from June 1 to the start-up of MRTU. The TCPM is intended to modify the currently-effective RCST, to enable the CAISO to supplement LSE-based Resource Adequacy capacity procurement as needed to ensure reliable grid operations. The CAISO would be able to procure capacity to backstop any deficiencies in Resource Adequacy procurement or address a Significant Event. The CAISO would pay TCPM resources a tariff-based price for the service provided, and the term of the service would vary depending on the period of the deficiency or the duration of the Significant Event. For example, if an LSE did not procure sufficient capacity to meet its full Resource Adequacy requirement, and it did not cure the deficiency when given an opportunity to do so, then the CAISO would procure the needed capacity to fulfill the Resource Adequacy requirement.

As was the case with the ICPM, parties are polarized on many of the key issues. This proposal reflects several modifications to the initial proposal made to stakeholders two months ago in an attempt to address stakeholder concerns and balance stakeholder positions. These modifications include increasing the capacity price, withdrawing the ability for the CAISO to procure a "partial unit," exploring changes to the CAISO resource commitment software, and supporting LSEs being able to count backstop procurement in Resource Adequacy showings. However, even with these changes, this proposal is not without controversy, and there is not unanimous support for it. Despite this, Management believes that the proposal constitutes a reasonable and balanced approach that takes into account the widely divergent views expressed by stakeholders. It also is important to note that these tariff provisions are expected to be effect for a period of a few months at most.

### **KEY PROPOSAL ELEMENTS**

Given the time constraints, extremely short-term nature of the TCPM, and the fact that the RCST was designed to work under the current, pre-MRTU market design, the CAISO has decided to retain the general RCST framework and made some modifications to it to update the compensation paid to resources and provide the CAISO with broader authority to designate resources to meet reliability needs. The CAISO believes that it makes sense to utilize the RCST design and make modifications to it because FERC has previously found the RCST to be just and reasonable and the CAISO business systems are already configured to support the RCST processes thereby allowing for an effective implementation without potential delays associated with new system requirements for a transitional product.

The TCPM proposal is consistent with the current RCST in that it provides for the same two primary types of backstop procurement. The CAISO would be able to procure capacity (1) in advance of the compliance year if an LSE has not procured the full amount of its Resource Adequacy requirement by the time of the required Resource Adequacy showing, or if the portfolio of resources procured by all LSEs in a local area is not sufficient to fully meet the operating needs of the local area, or (2) during the compliance year if an LSE has not procured the full amount of its Resource Adequacy requirements in the month-ahead time frame. Further, the CAISO would be able to procure additional capacity during the compliance year if a Significant Event occurs that creates a need to supplement LSE-procured Resource Adequacy capacity to ensure reliable grid operations. For example, a Significant Event could be a sustained outage of a generation or transmission facility.

The TCPM proposal modifies the current RCST in the following ways:

- Modifies the current RCST Target Annual Capacity Price from \$73/kW-year minus peak energy rents ("PER") to a value of \$86/kW-year minus PER. It does this by escalating the RCST capacity price for two years using the Consumer Price Index ("CPI") and then applies a 10% adder that can account, *inter alia*, for an inflation escalator for 2008 and costs not captured by the CPI.
- Increases the current daily Must Offer Obligation capacity payment that is in the RCST from a factor of 1/17 to a factor of 1/8 to increase compensation to resources providing reliability benefits and recognize that the commitment of these resources is essentially a daily designation of capacity as opposed to a monthly or longer designation.
- Changes the minimum term of a Significant Event designation from three months to one month.
- Changes the definition of a Significant Event in the current RCST to the definition that is contained in the ICPM, adds the tariff language from the ICPM for a "three-step" designation process, and adds the tariff language from the ICPM for the report due 30 days after designation of a resource under a Significant Event that explains whether the designation will be extended beyond the initial 30 days.
- Adds tariff language from the ICPM to address how the CAISO would backstop for Resource Adequacy deficiencies relative to local requirements, and how the CAISO would address a collective deficiency relative to the local Resource Adequacy requirement and the associated cost allocation.
- Adds tariff language from the ICPM to address allowing LSEs to "count" certain TCPM procurement in Resource Adequacy showings.

### **STAKEHOLDER PROCESS**

Under the CAISO Tariff, the RCST was set to expire on December 31, 2007. On October 12, 2007, the Independent Energy Producers Association filed a motion at FERC requesting that FERC require the CAISO to file the ICPM proposal to be effective January 1, 2008. In an order issued on December 20, 2007, FERC ruled that the ICPM need not be filed and made effective on January 1, 2008, and instead preliminarily concluded that the RCST should be extended until the earlier of the start of MRTU or implementation of an alternative backstop mechanism. FERC initiated a Section 206 proceeding to address the limited issue of whether the RCST should be extended. Comments and reply comments were filed in January 2008, and FERC has indicated that it should be able to render a decision by March 30, 2008. In the December 20, 2007 order, FERC also stated that it expected that the CAISO would work with stakeholders and modify the RCST if implementation of MRTU was delayed.

In February 2008, the CAISO started an initiative to work with stakeholders on an expedited basis to develop an alternative backstop mechanism that would go into effect on June 1, 2008 and extend until implementation of MRTU. An initial proposal was posted on February 13, 2008, a conference call was held on February 21, 2008, and stakeholders were encouraged to provide written comments no later than February 28, 2008. Written comments were received from 10 entities. The CAISO considered the written comments and posted a revised proposal on March 4, 2008. A conference call was held on March 7, 2008 to discuss, explain, and clarify the revised proposal. All of the written comments that have been submitted by stakeholders, and the proposals and conference call materials, can be found at <a href="http://www.caiso.com/1f65/1f65791614bd0.html">http://www.caiso.com/1f65/1f65791614bd0.html</a>.

### POSITIONS OF THE PARTIES AND JUSTIFICATION FOR PROPOSAL

A matrix that summarizes the stakeholder written comments received on the initial proposal is included in Attachment B. The matrix describes the positions of the parties on each element of the proposal and Management's response.

Provided below is a summary of the justification for each element of the proposal (to be clear, the elements of the proposal are the limited number of changes that are proposed to be made to the RCST tariff language). The full TCPM proposal is included as Attachment A to this memorandum and provides a detailed discussion of the CAISO's justification for each of element of the proposal.

### 1. Pricing and Compensation

As was the case with the ICPM stakeholder process, the appropriate capacity price and overall level of compensation have been the most complicated and controversial issues in the TCPM stakeholder process. As in the ICPM process, stakeholders are again split, with one group, LSEs, favoring a price for the interim product on the low end of the scale, and another group, the resource owners, advocating a much higher price. The same dichotomy is true with respect to the daily capacity payment, with the LSEs advocating no change from the current 1/17 daily capacity payment and resource owners seeking a substantial increase. The CAISO has weighed these conflicting positions and attempted to balance widely divergent views. It is also important to note that the RCST and ICPM are both the subject of ongoing proceedings at FERC and stakeholders have made a series of filings in support of their positions. As a result, it has been difficult to get stakeholders to move from their litigation positions, and this has likely accounted for the limited amount of give-and-take that

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has occurred in the TCPM stakeholder process. The key pricing and compensation elements are discussed below.

<u>a) Escalating the Target Annual Capacity Price by CPI</u> – Stakeholders that serve load generally support the concept of some increase in the Target Annual Capacity Price. There is not significant opposition to this type of change to the current RCST price of \$73/kW-year. However, there are some LSEs that question the need to increase the \$73/kW-year price at all, and they ask why the RCST cannot just be extended for a few additional months. Generation owners do not support the proposal to escalate the price by the CPI, and instead they support a substantial increase in the price, to a price well over \$100/kW-yr. (prices of \$117 and \$145 have been proposed). Given that the RCST price that was agreed upon by the Settling Parties was implemented in 2006, the CAISO believes that it is reasonable to escalate the \$73/kW-year value to update it to reflect inflation in 2006 and 2007. The CAISO proposes to escalate the \$73/kW-year using an inflation adder based on the National CPI value for each of these two years. The actual CPI for 2006 is 2.5% and the actual CPI for 2007 is 4.1%. Applying this amount of escalation brings the price up to \$78/kW-year.

b) Further escalating the Target Annual Capacity Price by Applying a 10% Adder – Stakeholders that serve load do not support the concept of further increasing the Target Annual Capacity Price by applying a 10% adder. They do not think it is justified, and have asked for empirical evidence of the need to escalate the price beyond updating the price through a CPI escalator. Again, there are some LSEs that question the need to increase the \$73/kW-year price at all, and they ask why the RCST cannot just be extended for a few additional months. Generation owners do not support the proposal to further escalate the price by applying a 10% adder, and instead they support a substantial increase in the price, as mentioned above, to a price well over \$100/kW-year. This further escalation of the price, through a 10% adder, which would bring the Target Annual Capacity Price to \$86/kW-year, is supportable for the following reasons:

- First, to account for inflation for 2008 and inflation for cost components not captured by the CPI. Although no stakeholder has proposed an alternative inflation indicator, other indicators relevant to the industry and reviewed by CAISO are higher than CPI. Also, the CAISO does not have complete information regarding the costs of existing resources, so the additional 10% accounts for costs that the CAISO is unable to accurately quantify.
- Second, the adder recognizes that rate setting is not a perfect science and that there may be a
  number of just and reasonable prices within a zone of reasonableness. The proposed \$86/kWyear price reflects an attempt to balance the disparate positions of the LSEs and the generation
  owners, while maintaining the CAISO's belief that cost of new entry is inappropriate for an
  interim capacity backstop mechanism.

Even after applying the two escalation factors discussed above, the Target Annual Capacity Price remains within the range of the fixed costs of existing units and cost of new entry, which was an important consideration in FERC finding that the RCST price is just and reasonable. Thus, not only does the \$86/kW-year price reflect an attempt to fairly balance the interests of stakeholders, it also satisfies the just and reasonable standard under the Federal Power Act.

<u>c) Using Cost of New Entry to set the Target Annual Capacity Price</u> – Stakeholders that represent generation owners have proposed establishing a Target Annual Capacity Price set at recent estimates of cost of new entry. However, consistent with the CAISO's position and rationale in the recent RCST

extension and ICPM filings, the CAISO believes that the TCPM backstop mechanism, which will only be in place for a matter of months, is not the appropriate mechanism to send new entry price signals to the market. Hence, the CAISO has not updated the Target Annual Capacity Price to reflect recent estimates of cost of new entry, as reflected, e.g., in the 2007 California Energy Commission study.

<u>d) Increasing Daily Capacity Payment Factor from 1/17 to 1/8</u> – The FERC Must-Offer Obligation daily capacity payment is currently 1/17 of the monthly target capacity price. This payment level was agreed to in the context of the RCST Settlement. LSEs are advocating no change from the current 1/17 daily capacity payment and resource owners are seeking a substantial increase. As with the level of the Target Annual Capacity Price, there is no scientific way to determine what the single appropriate level of the daily payment should be. Similarly, the CAISO acknowledges that this proposed change in the daily capacity payment is not intended to reflect a general principle of capacity pricing. The CAISO has attempted to balance the positions of the parties and ensure that generators are appropriately compensated for the reliability services they provide when denied a Must-Offer Waiver Request. For this temporary product, the CAISO proposes to increase this value to 1/8 of the monthly target capacity price. This change is justified for the following reasons.

- First, as with the increase in the Target Annual Capacity Price, it increases compensation to resources providing reliability benefits pursuant to a mandatory Must-Offer Obligation.
- Second, the payment recognizes that this is essentially a daily designation of capacity as
  opposed to a monthly designation or longer.

Finally, as with the current RCST, the total monthly revenues that a generator can earn will remain capped at the monthly capacity payment.

<u>e) Use of RCST Pricing Methodology versus ICPM Pricing Methodology</u> - In its initial proposal,<sup>1</sup> the CAISO offered two options for TCPM pricing: a refreshing of the RCST price (Option 1), or adoption of the pricing scheme utilized in the ICPM (Option 2). The CAISO also invited stakeholders to suggest any alternatives on which some consensus might be reached. The only other significant change from the RCST or ICPM approaches that was suggested by any stakeholder was cost of new entry-based pricing for all TCPM designations and Must-Offer Waiver Denials.

A number of stakeholders expressed preference for the ICPM pricing model (Option 2). Under this approach, the CAISO would have established a TCPM capacity price of \$41/kW-year, as was included in the ICPM filing that was made on February 8, 2008.<sup>2</sup> This price would be used instead of the \$73/kW-year Target Annual Capacity Price minus a PER that is in the RCST. In contrast, under an ICPM approach, the \$41/kW-year would be a flat payment. A significant difference from the ICPM pricing is that CAISO did not propose that under TCPM, suppliers would have the option to file at FERC for higher payments justified on the basis of recovery of components of annual fixed costs.

On further evaluation of the two pricing approaches, the CAISO decided not pursue the ICPM-type pricing. The CAISO has instead elected to retain the existing RCST pricing scheme for the TCPM, but is modifying the Target Annual Capacity Price as indicated above (Option 1). The CAISO is doing this for several reasons.

<sup>&</sup>lt;sup>1</sup> The initial proposal can be found at <u>http://www.caiso.com/1f6c/1f6cc3152be20.pdf</u>.

<sup>&</sup>lt;sup>2</sup> The February 8, 2009 ICPM filing can be found at <u>http://www.caiso.com/1f67/1f67d9d453990.pdf</u>.

- First, the RCST was designed and approved by FERC as a just and reasonable approach under a pre-MRTU market design that includes a daily Must-Offer Obligation. On the other hand, ICPM was designed to function under the MRTU market design and was intended as a voluntary service that a resource is not obligated to accept.
- Second, as recently as December 20, 2007, FERC found the RCST approach to be just and reasonable. On the other hand, FERC has not yet ruled on the ICPM proposal.
- Third, ICPM included the opportunity for a resource to make a cost justification filing at FERC if the resource's going forward costs exceed \$41/kW-year. However, unlike MRTU, a daily Must-Offer Waiver Denial process exists today. Allowing a cost justification option is not administratively feasible under these circumstances.

<u>2. Minimum Term of Significant Event</u> – The minimum term for a Significant Event designation is currently three months in the RCST. Management proposes to change the minimum term from three months to one month consistent with that proposed under the ICPM, because it is necessary to work with the proposed "three-step" process for Significant Event designations where the initial designation period is for only 30 days. (The three-step process does provide that the designation can be extended beyond the initial 30 days if the Significant Event lasts longer than 30 days, in which case the designation would continue until the Significant Event is resolved)

<u>3. Designation Process for a Significant Event</u> – The CAISO proposes to use the process that is in the ICPM that sets forth the determination of the need for TCPM procurement, triggering events and interaction with stakeholders to help address and solve the problem. Stakeholders have some concerns with the designation process for a Significant Event and feel that the mechanism for designation should to be more prescriptive and/or specific than what is already included in the RCST. LSEs have stated conditional support for this element of the proposal, primarily as a result of the discretion provided to the CAISO in making Significant Event designations. These same concerns were voiced in the ICPM stakeholder process. Generation owners do not support this element of the proposal.

Management believes that adequate flexibility is necessary to avoid the unintended consequences of an overly prescriptive approach. In that regard, Management believes that the Significant Event provisions of the RCST are overly prescriptive, and more flexibility is needed. In particular, sufficient flexibility is needed so that the CAISO can address unforeseen or changed circumstances or inherent inefficiencies or deficiencies in Resource Adequacy programs where lack of action by the CAISO to address a known problem could place the CAISO in the position of facing the possible interruption of firm load or failure to meet Reliability Criteria. The CAISO to exercise prudent judgment, i.e. may force designations on a prospective basis even though the event that led to use of the unit has ended.

<u>4. Backstop for Local RA Deficiencies</u> – FERC has already recognized that the CAISO needs the authority to engage in backstop procurement to maintain reliable system operations, "even though LSEs have adequately met their immediate local capacity obligation." The ICPM addressed the issue of a potential "collective shortfall" situation where the portfolio of resources procured by all Scheduling Coordinators for LSEs in a local area, although consistent with each LSE's individual obligation, is not sufficient to fully meet the Reliability Criteria for the local area. The CAISO proposes to supplement the current RCST by adopting the ICPM proposal, including cost allocation, with respect to designations to address collective shortfalls. It should be noted that by incorporating

the ICPM proposal, LSEs will have an opportunity to cure the collective shortfall prior to any CAISO backstop procurement. There is near unanimous support among stakeholders for updating this aspect of the current backstop mechanism and filling this gap in the TCPM.

<u>5. ICPM Procurement in Resource Adequacy Showings</u> – The RCST is silent on the topic of allowing LSEs to "count" RCST procurement in Resource Adequacy showings when the CAISO procures under the RCST. This concept was not included in the RCST when it was created in 2006. This topic was brought up and addressed in the ICPM stakeholder process, and the ICPM tariff includes language that addresses this matter. Similarly, Management recommends that the TCPM tariff also permit the product to count in Resource Adequacy showings for Resource Adequacy backstop purposes. This does not allow LSEs to include capacity procured by the CAISO for a Significant Event in subsequent Resource Adequacy showings because it would result in a decrease of the available Resource Adequacy capacity, which would only exacerbate the conditions that lead to the Significant Event.

6. Designation of a Partial Unit – The CAISO initially proposed filing for the authority to procure a portion of a resource under the TCPM, i.e., the ability to procure a "partial unit." During the TCPM February 21, 2008 stakeholder conference call, one of the stakeholders noted the potential difficulty in implementing a partial unit designation when the current MOO process uses the full capacity of each resource. Subsequent to the February 21, 2008 call, the CAISO considered this comment and further reviewed this element of the TCPM proposal in more detail. Based on a more detailed review of this topic, the CAISO has concluded that a "partial unit" designation does not work under the current market design with a FERC Must-Offer Obligation and has removed this element from the proposal. The CAISO now proposes to use the RCST language, wherein the CAISO must be able to find a whole unit that is available to remedy the deficiency or reliability problem, and which is either "slightly more or slightly less" than the amount of additional capacity needed by the CAISO. The CAISO is not pursuing this change for TCPM because significant changes would have to be made to CAISO market and settlement systems to be able to calculate and pay resources that are due both a TCPM payment and a partial daily payment. Such changes to CAISO systems are not justifiable given the transitional, extremely short-term nature of the TCPM and the CAISO's need to focus its resources on MRTU implementation. Stakeholders have expressed support for partial unit designations, but, as discussed above, it is not justifiable for such a short-term product. Stakeholder comments indicate that stakeholders are concerned that staying with "whole unit" procurement could lead to over-procurement. This is not the case. What the CAISO has found to date under RCST based on actual operations is that the whole unit standard results in fewer, not greater, designations, as the CAISO must be able to find an available resource that is of a size that closely matches the need (and this may not be able to be achieved).

### MANAGEMENT RECOMMENDATION

Management recommends that the Board of Governors approve the policy elements underlying the proposed TCPM as described in this memorandum and attachments, and authorize Management to file the conforming tariff provisions necessary to implement the new mechanism.

Attachments

Attachment A: Proposal for TCPM Tariff Filing Attachment B: Stakeholder Process for TCPM Tariff Filing

Attachment A



# Final Proposal to Board of Governors for Transitional Capacity Procurement Mechanism Tariff Filing

Prepared by Keith Johnson Market & Product Development Group California Independent System Operator March 18, 2008

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### Final Proposal to Board of Governors for Transitional Capacity Procurement Mechanism Tariff Filing

### Section 1 Executive Summary

The purpose of this initiative is to develop and obtain Board of Governors and Federal Energy Regulatory Commission ("FERC") approval for a tariff-based capacity procurement mechanism that would be in place staring June 1, 2008 and extend until implementation of the Market Redesign and Technology Update ("MRTU") that will enable the California Independent System Operator ("CAISO") to supplement or "backstop" Load Serving Entity ("LSE")-based Resource Adequacy ("RA") capacity procurement as needed for reliable grid operation. The CAISO's goal is to file this new Transitional Capacity Procurement Mechanism ("TCPM") with FERC on March 28, 2008 and to propose an effective date of June 1, 2008. The TCPM is meant to update the currently-effective Reliability Capacity Services Tariff ("RCST") and to serve as a transition to the Interim Capacity Procurement Mechanism ("ICPM") that is intended to become effective upon implementation of MRTU.

Given the time constraints facing the CAISO and the extremely short-term nature of the TCPM, the CAISO proposes generally to retain the RCST structure, but to make some modifications to the RCST to update the compensation paid to resources and facilitate the CAISO's ability to designate resources to meet Reliability Criteria.<sup>1</sup> The CAISO believes that it makes sense to utilize the RCST design as the base for the TCPM and make modifications to it, reflecting some of the elements of the recently-filed ICPM and updating the compensation mechanisms, because stakeholders have invested substantial resources in developing the RCST (and the ICPM), FERC has previously found the RCST to be just and reasonable, and the CAISO has a limited amount of time to develop a proposal and file it in time for implementation on June 1, 2008. In addition, the CAISO business systems are already configured to support the RCST processes, thereby allowing for an effective implementation without potential delays associated with any new system requirements. This proposal modifies the current RCST in the following key areas:

- Modifies the current RCST capacity price from \$73/kW-year minus Peak Energy Rents ("PER") to a value of \$86/kW-year minus PER.
- Increases the current daily Must Offer Obligation ("MOO") capacity payment from a factor of 1/17 to a factor of 1/8.
- Changes the minimum term of a Significant Event designation from three months to one month.
- Changes the definition of a Significant Event to the definition in the ICPM, adds the ICPM "three-step" designation process, and adds the report in ICPM that is due 30 days after a Significant Event designation that explains whether that designation will be extended beyond the initial 30 days.
- Adds tariff language from the ICPM to address how CAISO would address a collective deficiency relative to the local RA requirement and the associated cost allocation.
- Adds tariff language from the ICPM tariff filing to address allowing LSEs to "count" certain TCPM procurement in RA showings.

<sup>&</sup>lt;sup>1</sup> As part of Reliability Criteria, the CAISO must comply with applicable North American Electric Reliability Council/Western Electricity Coordinating Council ("NERC/WECC") requirements, including Minimum Operating Reliability Criteria ("MORC").

### Section 2 Proposal

### 1. Background

On August 26, 2005, the Independent Energy Producers Association ("IEP") initiated litigation challenging the FERC imposed daily FERC MOO as unjust and unreasonable and recommended that the daily FERC MOO be replaced with a tariff-based capacity procurement mechanism. On March 31, 2006, an Offer of Settlement was filed that proposed the institution of a RCST that included modifications to the existing daily FERC MOO. As ultimately approved by FERC on February 13, 2007, the RCST provides the CAISO with a backstop procurement mechanism to ensure the reliable operation of the CAISO Controlled Grid and modified the compensation generators receive for the capacity they provide. The RCST allows the CAISO to procure capacity in advance of the compliance year to backstop RA procurement and during the compliance year to backstop for a "Significant Event." The RCST was to expire on December 31, 2007; however, FERC has extended the RCST subject to the outcome of the proceeding in Docket No. EL08-20.

In anticipation of the expiration of the RCST, in April 2007 the CAISO initiated a stakeholder process to develop a successor to the RCST to become effective upon implementation of MRTU. That successor backstop mechanism is the ICPM that the CAISO filed with FERC on February 8, 2008.

In an order issued on December 20, 2007, FERC indicated its expectation that the CAISO would follow through with its commitment to work with stakeholders and modify the RCST if implementation of MRTU is delayed beyond summer 2008. Given that MRTU may not be implemented by June 1, 2008, the CAISO has initiated this stakeholder process to work with stakeholders to make modifications to the RCST that would go into effect on June 1, 2008 and extend until implementation of MRTU. The RCST was designed to work with the existing market design; therefore, it makes sense to modify the RCST as opposed to designing an entirely new backstop mechanism from scratch, especially given the timing constraints the CAISO is facing. In that regard, the CAISO developed a project schedule to present the TCPM proposal to its Board of Governors at the Board's March 26-27, 2008 meeting and file the proposal by the end of March so that it can get a FERC order prior to June 1, 2008.

### 2. Stakeholder Process

An initial proposal was posted on February 13, 2008. A conference call was held on February 21, 2008 to discuss the initial proposal with stakeholders. Stakeholders were encouraged to provide written comments no later than February 28, 2008, and written comments were received from 10 entities. This revised proposal was posted on March 4, 2008. A conference call will be held on March 7, 2008 to discuss the revised proposal with stakeholders. All of the written comments that have been received, and the proposals and conference call materials, can be found at <a href="http://www.caiso.com/1f65/1f65791614bd0.html">http://www.caiso.com/1f65/1f65791614bd0.html</a>.

### 3. Board Approval, Filing and Effective Dates

On March 26-27, 2008, the CAISO intends to seek approval from the CAISO Board of Governors regarding the policy elements of the TCPM and to make a tariff filing reflecting

those elements of policy. If such approval is granted, the CAISO would develop the appropriate tariff provisions and make a tariff filing on March 28, 2008. The filing would request an effective date of June 1, 2008, with the tariff provisions expiring on the date of MRTU implementation.

### 4. Acronyms and Milestones

Attachment 1 provides a list of acronyms used in this proposal. Key milestones for this initiative are provided in Attachment 2.

### 5. Proposed Changes to the RCST

Attachment 3 provides the RCST tariff provisions that are currently in effect. These tariff provisions are the base from which this proposal is based. Tariff language that was filed in the December 28, 2007 RCST Compliance filing is still pending at FERC and is highlighted in gray shading.

The proposed policy changes to the base RCST tariff provisions are discussed in the sections below. Because of the need to expedite this initiative, the CAISO has identified six key areas for revision. It is critical to maintain a narrow scope in order to have an alternate backstop mechanism available by June 1, 2008. The CAISO will engage stakeholders in a discussion of the specific tariff language for the TCPM during March 2008 (see Attachment 2 for the key milestones in the TCPM tariff development process).

### Background

In its initial proposal,<sup>2</sup> the CAISO offered two options for TCPM pricing: a refreshing of the RCST price or adoption of the pricing scheme utilized in the ICPM proposal. The CAISO also invited stakeholders to suggest any alternatives on which some consensus might be reached. The only other significant change from the RCST or ICPM approaches that was suggested by any stakeholder was cost of new entry ("CONE")-based pricing for all TCPM designations and Must-Offer Waiver Denials ("MOWDs").

A number of stakeholders expressed preference for the ICPM pricing model. Under this approach, the CAISO would have established a TCPM capacity price of \$41/kW-year, as was included in the ICPM filing that was made on February 8, 2008.<sup>3</sup> This price would be used instead of the \$73/kW-year Target Annual Capacity Price, minus a PER, that is in the RCST. In contrast, under an ICPM approach, the \$41/kw-year would be a flat payment. A significant difference from the ICPM pricing is that CAISO did not propose that under TCPM, suppliers would have the option to file at FERC for higher payments justified on the basis of recovery of components of annual fixed costs.

On further evaluation of the two pricing approaches, and despite the views of certain stakeholders, CAISO decided not pursue the ICPM-type pricing. The CAISO has instead elected to retain the existing RCST pricing scheme for the TCPM, but is modifying the Target Annual Capacity Price as indicated above. The CAISO is doing this for several reasons. First, RCST was designed and approved by FERC as a just and reasonable approach under a pre-MRTU market design that includes a daily MOO. On the other hand, ICPM was

<sup>&</sup>lt;sup>2</sup> The initial proposal can be found at <u>http://www.caiso.com/1f6c/1f6cc3152be20.pdf</u>.

<sup>&</sup>lt;sup>3</sup> The February 8, 2009 ICPM filing can be found at <u>http://www.caiso.com/1f67/1f67d9d453990.pdf</u>.

designed to function under the MRTU market design and was intended as a voluntary service that a resource is not obligated to accept. Second, as recently as December 20, 2007, FERC found the RCST approach to be just and reasonable. On the other hand, FERC has not yet ruled on the ICPM proposal. Third, ICPM included the opportunity for a resource to make a cost justification filing at FERC if the resource's going forward costs exceed \$41/kW-year. However, unlike MRTU, a daily MOWD process exists today. Allowing a cost justification option is not administratively efficient under these circumstances. Allowing the option potentially could result in a "hollow promise" because it is uncertain whether generation owners would expend the time and resources to make cost justification filings at FERC for daily MOWDs (on the other hand, only longer-term designations are available under ICPM). Even assuming *arguendo* that these filings were to be made, it seems administratively burdensome for resources, interveners and FERC to be dealing with cost justification filings every time there is a daily MOWD. Fourth, FERC's December 20, 2007 order establishing the Section 206 proceeding appears to contemplate that the CAISO would modify the RCST (see Paragraph 38).

The CAISO recognizes that the TCPM is not a perfect proposal; however, the CAISO had an extremely limited amount of time to develop the proposal and evaluate options and the details of each and every element of the capacity backstop mechanism. Further, stakeholders were polarized on many of the key issues. That required the CAISO to "call the balls and strikes" and attempt to develop a proposal that was both reasonable and principled, yet balanced, all while facing significant time constraints. The CAISO believes that the TCPM, which will probably only be in effect for four to six months, is just and reasonable especially given these circumstances.

### 5a. Capacity Price

The CAISO proposal for the capacity price is described in this section: The CAISO believes that the proposal is a reasonable approach to provide an updated compensation scheme for MOO and TCPM capacity. As the proposal builds on the current RCST pricing method, it is presented here with minimal supporting detail (which can be found elsewhere).<sup>4</sup>

Proposal (these four elements come as a package)

- Escalate the current RCST Target Annual Capacity Price of \$73/kW-year (which was initially proposed in the RCST Offer of Settlement that was filed at FERC on March 31, 2006) for two years using the National Consumer Price Index ("CPI"), and then increase that value by applying a 10% adder which would result in an updated Target Capacity Price of \$86/kW-year.<sup>5</sup>
- Deduct PER from the capacity price to determine a net capacity price.
- Use the heat rate of 10,500 BTU/kWh that is in the current RCST for the hypothetical proxy unit for purposes of determining the PER.
- Use the seasonal shaping factors that are in the RCST as the shaping factors for the TCPM (see the RCST language in Appendix F, Schedule 6 of the currently effective tariff, in Attachment 3).

The Target Annual Capacity Price under RCST is \$73/kW-year. Given that the Target Annual Capacity Price that was agreed upon by the Settling Parties was implemented in

<sup>&</sup>lt;sup>4</sup> See Attachment 3 of this proposal for the currently effective RCST tariff language.

<sup>&</sup>lt;sup>5</sup> The actual CPI for 2006 is 2.5% and the actual CPI for 2007 is 4.1%. The \$86 number is a rounded value.

2006, the CAISO believes that it is reasonable to escalate the \$73/kW-year value to update it. The CAISO proposes to escalate the \$73/kW-year using an inflation adder based on the National Consumer Price Index ("CPI") to reflect inflation in 2006 and 2007. The actual CPI for 2006 is 2.5% and the actual CPI for 2007 is 4.1%. The RCST Settlement was concluded in 2006 and has remained a fixed price ever since. An adjustment for general price inflation is thus appropriate under these circumstances.

In addition, the CAISO proposes to increase the escalated Target Annual Capacity Price value by 10%. This further escalation in the target capacity price is supported for the following reasons, which the CAISO does not disaggregate:

- First, to account for inflation for 2008 and inflation for cost components not captured by the CPI. Although no stakeholder proposed an alternative inflation indicator, other indicators relevant to the industry and reviewed by CAISO are higher than CPI. Also, the CAISO does not have complete information regarding the annual fixed costs of existing resources, so another purpose of the additional 10% is to account for costs that the CAISO is unable to quantity with any degree of accuracy.
- Second, the adder recognizes that rate setting is not a perfect science and that there may be a number of just and reasonable prices within a zone of reasonableness. The proposed target capacity price also reflects an attempt to balance the disparate positions of the loads and the suppliers, while maintaining the CAISO's belief that cost of new entry ("CONE") is inappropriate for an interim capacity backstop mechanism.

Even applying the escalation factors proposed by the CAISO, the Target Annual Capacity Price remains within the range of the fixed costs of existing units and CONE. Thus, not only does the price reflect an attempt to fairly balance the interests of stakeholders, it also satisfies the just and reasonable standard under the Federal Power Act.

Some stakeholders proposed establishing a Target Annual Capacity Price set at recent estimates of CONE. However, consistent with CAISO's position and rationale in the recent RCST extension and ICPM filing, the CAISO believes that the TCPM backstop mechanism, which will only be in place for a matter of months, is not the appropriate mechanism to send new entry price signals to the market. Hence, the CAISO has not updated the Target Annual Capacity Price to reflect recent estimates of CONE, as reflected, e.g., in the CEC study.

The CAISO also asked stakeholders to evaluate other changes to the RCST target pricing elements. In the absence of sufficient stakeholder consensus on modifications, the CAISO proposes that:

- PER would be deducted from the capacity payment as is currently done under the RCST (see section 40.14 and Appendix F, Schedule 6). The CAISO is not proposing to change how the PER and the capacity payment currently interact in the RCST.
- The hypothetical proxy unit that is used to determine the PER in the current RCST has a heat rate of 10,500 BTU/kWh. The CAISO proposes to continue to use this heat rate.

The RCST language in Appendix F, Schedule 6 of the currently effective tariff, in Attachment 3 would need to be revised to implement any proposed change.

### 5b. Daily Capacity Payment

The MOO daily capacity payment is currently 1/17 of the monthly target capacity price. This payment level was agreed to in the context of the RCST Settlement. As with the level of the target capacity price, in the time-frame available, the CAISO cannot analytically evaluate what the "right" level of the daily payment should be. A number of factors would have to be considered to make this determination, including evaluation of generator revenues from CAISO and bilateral markets. Similarly, the CAISO acknowledges that this proposed change in the daily capacity payment is not intended to reflect a general principle of capacity pricing. The CAISO has attempted to balance the positions of the parties and ensure that generators are appropriately compensated for the reliability services they provide when denied a Must Offer Waiver Request. The CAISO proposes, for this temporary program, to increase the daily capacity payment to 1/8 of the monthly target capacity price. This change in the daily capacity payment is justified for the following reasons.

- First, as with the increase in the Target Annual Capacity Price, it increases compensation to resources providing reliability benefits pursuant to a mandatory MOO.
- Second, the payment recognizes that this is essentially a daily designation of capacity as opposed to a monthly designation or longer.

As with the current RCST, the total monthly revenues that a generator can earn will remain capped at the monthly capacity payment.

### Changes to Real-Time Commitment Application

The CAISO is currently investigating the feasibility of implementing potential changes to its RTC application that would reduce the number of commitments of non-RA and non-RMR resources. Specifically, the CAISO is exploring whether it might be able to incorporate into the RTC optimization proxy values to represent the additional costs paid to the non-RA, non-RMR units. The specific cost components under consideration are described below.

- Adding in the unit's first bid price segment to the min load cost. This bid price would be a proxy for the Market Clearing Price and would represent the "double payment" of min load cost and energy that is paid to non-RA resources under RCST.
- Adding in a value representing an estimate of the daily capacity payment to the startup cost.

Adding these two cost components into the RTC optimization could result in a significant reduction in MOO commitments in RTC. Note that the proxy values are approximate and not exact values. The CAISO is still in the process of exploring the feasibility of these changes and is interested in discussing with stakeholders the approximate values to use in the optimization, especially the daily capacity payment, which can vary with the PER.

The RCST language in Section 40.14 of the currently effective tariff in Attachment 3 would need to be revised to implement this proposed change.

### 5c. Minimum Term of a Significant Event

The minimum term for a Significant Event designation is currently three months in the RCST. The CAISO proposes to change the minimum term from three months to one month consistent with that proposed under the ICPM. Based on operating experience under the RCST, the CAISO realizes that it is more appropriate to move to one month as this better aligns with operating needs. As discussed below, the CAISO is also proposing to adopt the designation process for Significant Events, including the opportunity for market participants to propose alternatives for longer-term Significant Events

The RCST language in Section 43.4 of the currently effective tariff in Attachment 3 would need to be revised to implement this proposed change.

### 5d. Designation Process for a Significant Event

The RCST provides, under section 40.15.3, that if the CAISO issues a denial of a must-offer waiver request to a FERC Must-Offer Generator on four separate days in any calendar year, the CAISO is required to evaluate whether a Significant Event has occurred that warrants designation of the FERC Must-Offer Generator to provide service under the RCST ("MOWD Evaluation"). The CAISO is required to conduct a MOWD Evaluation after every four separate days on which the CAISO denies a must-offer waiver request for such a FERC Must-Offer Generator.

The RCST further provides under section 40.15.4 that the CAISO shall publish the results of its assessment of the MOWD Evaluation ("Significant Event / Repeat MOWD Report"), including an explanation of its decision whether to designate FERC Must-Offer Generator capacity as RCST, on the CAISO Website on a weekly basis unless no Significant Events or MOWD Evaluations occurred during the week. The Significant Event / Repeat MOWD Report shall explain why the CAISO denied the must-offer waiver request that triggered the assessment of whether a Significant Event occurred, and whether any RA Resources, Reliability Must-Run Agreement ("RMR") units, or resources designated to provide service under the RCST were available and called on by the CAISO prior to its denial of the FERC Must-Offer Generator's must-offer waiver request. The CAISO shall also explain why Non-Generation Solutions were insufficient to prevent the use of denials of must-offer waivers for local reasons. In the event that the ISO denies a must-offer waiver request for local or system reasons that do not constitute a Significant Event or is not due to a RA Resource non-performance, the report shall include an explanation for such issuance and shall be signed by the CAISO's Vice President of Operations.

The CAISO proposes the following changes to the RCST tariff language to create the designation process for a Significant Event under the TCPM:

- Change the definition of Significant Event in the current RCST to the definition of Significant Event that was proposed in the ICPM;
- Add the tariff language from the ICPM tariff filing for the "three-step" designation process for Significant Events; and
- Add the tariff language from the ICPM tariff filing for the report that is due 30 days after designation of a resource under a Significant Event that explains whether that designation will be extended beyond the initial 30-day procurement under the three-step process.

The RCST provides the following definition of a Significant Event: *"For 2006, a "Significant Event" is an event that results in a material difference in ISO Controlled Grid operations relative to what was assumed in developing the LARN Report for 2006 that causes, or threatens to cause, a failure to meet Applicable Reliability Criteria. For 2007, a "Significant Event" is an event that results in a material difference in ISO Controlled Grid operations relative to what was assumed by the CPUC and Local Regulatory Authorities in developing* 

Local Resource Adequacy Requirements for 2007 that causes, or threatens to cause, a failure to meet Applicable Reliability Criteria."

While some stakeholders may feel it is preferable for the TCPM to be more prescriptive and/or have more specificity than the RCST with regard to Significant Event designations, the CAISO believes that adequate flexibility is necessary to avoid the unintended consequences of an overly prescriptive approach for Significant Event designations, particularly given that TCPM will be a useful reliability tool for the 2008 peak season. A flexible means is needed to address unforeseen or changed circumstances or inherent inefficiencies or deficiencies in RA programs where lack of action by the CAISO to address a known problem could place the CAISO in the position, in the Day-Ahead timeframe, of planning for the interruption of firm load or failing to meet Reliability Criteria. The CAISO proposes that a sufficiently flexible definition of Significant Event be used, which would allow the CAISO to address contingencies and unexpected system conditions and ensure its ability to satisfy reliability requirements. The CAISO proposes that the TCPM tariff language would include the following definition of Significant Event: "A Significant Event is a substantial event, or a combination of events, that is determined by the CAISO to either result in a material difference from what was assumed in the RA program for purposes of determining the RA capacity requirements, or produce a material change in system conditions or in CAISO-Controlled Grid Operations, that causes, or threatens to cause, a failure to meet Reliability Criteria absent the recurring use of a non-RA resource(s) on a prospective basis."

The CAISO proposes to follow the designation process described below for Significant Events under the TCPM, rather than the process described in the current RCST. This process is equivalent to the process filed at FERC on February 8, 2008 for the ICPM. Adoption of the approach described below for the TCPM is a reasonable transition to the ICPM process.

### Procurement to Backstop for a Significant Event

The need for procuring capacity under the TCPM arises because the CAISO has experienced a set of operating conditions that cannot be met within its obligations to meet Reliability Criteria. The CAISO would perform an assessment of whether an event or events have occurred that would constitute a Significant Event. The CAISO proposes to utilize a three-step designation process to initiate backstop procurement under a Significant Event.

### Step One:

- The CAISO would identify an event or events that may violate an assumption in the RA program or result in a material change in system conditions or in CAISO-Controlled Grid Operations. The event or events can include events that triggered a Repeat MOWD Evaluation.
- II. The CAISO would evaluate if that event or events cause, or threatens to cause, a failure to meet Reliability Criteria.
- III. Based on i and ii, the CAISO would determine if the event constitutes a Significant Event.
- IV. If the answer is "no," the CAISO would take no further action.
- V. If the answer is "yes," the CAISO would determine if the Significant Event is of an enduring nature that indicates the need for procuring backstop capacity on a forward basis.
- VI. If the answer is "no" the CAISO would take no further action.
- VII. If the answer is "yes" the CAISO would (1) procure needed backstop resources on a forward basis for a period of 30 days, and (2) post an explanation of the Significant

Event and inform the market participants of the need to procure the backstop capacity as well as the expected duration of the Significant Event.

### Step Two:

- I. If the CAISO determined in completing its explanation of the Significant Event that the event has an expected duration greater than 30 days, then it would extend that designation for another 60 days (for a total of 90 days from beginning of Significant Event).
- II. During this extended time, market participants would have the opportunity to review the CAISO explanation for the Significant Event and engage in a dialog with the CAISO to understand the basis for that designation.
- III. Market participants would be encouraged to provide solutions that meet the CAISO operational needs. These would include options such as; procurement of capacity by LSEs, operational fixes by Participating Transmission Owners ("PTOs"), additional Demand Response ("DR"), etc.

Step Three:

- I. Before the end of the 90-day period, the CAISO would conduct an assessment of proposed solutions to determine whether they sufficiently mitigate the ongoing need for the designated capacity.
- II. If the answer is "yes", and a specific solution is undertaken, the CAISO would not extend the designation of capacity procured for the Significant Event.
- III. If the answer is "no" in total or partially, the CAISO would extend the necessary capacity for the remaining expected duration of the Significant Event.

The CAISO proposes to add to the RCST tariff language in Attachment 3 the tariff language from the ICPM tariff filing for the report that is due 30 days after designation of a resource under a Significant Event that explains whether that designation will be extended beyond the initial 30-day procurement under the three-step process. The Significant Event designation report would be posted to the CAISO web site within 30 days of when the CAISO has procured a resource through the TCPM tariff authority as a Significant Event, i.e., after the MOWD Evaluation the CAISO has determined that a Significant Event has occurred and a resource has been procured for an initial 30-day period. The CAISO would provide a market notice of the availability of this report. The report<sup>6</sup> would include the items listed below.

- 1. Description of the reason for the designation, and why it was necessary to procure under the TCPM authority)
- 2. The description would include a discussion of the:
  - a. Event or events that have occurred (what happened, what is going on, what criteria was violated, why the CAISO has procured backstop capacity, and how much has been procured)
  - b. Initial assessment of the expected duration of the Significant Event
  - c. Duration of the initial designation (30 days)
  - d. Whether the initial designation has been extended (such that the backstop procurement is now for more than 30 days), and, if it has been extended, the length of the extension (days)
- 3. The following information would be reported:
  - a. Resource name

<sup>&</sup>lt;sup>6</sup> The CAISO does not expect that it will need to designate a resource for more than one instance during the calendar year. If this were to be necessary, the CAISO proposes to fully describe why the additional designation is required.

- b. Amount of capacity procured (MW)
- c. Date capacity was procured (month/day/year)
- d. Duration of the designation (days)
- e. Price

The RCST tariff language in Sections 40.15.3, 40.15.4, and 43.4 of the currently effective tariff in Attachment 3 would need to be revised to implement this proposed change.

### 5e. Backstop for Local Resource Adequacy Deficiencies

The FERC has already recognized that the CAISO needs the authority to engage in backstop procurement to maintain reliable system operations, "even though LSEs have adequately met their immediate local capacity obligation."<sup>7</sup> The ICPM addressed the issue of a potential "collective shortfall" situation where the portfolio of resources procured by all Scheduling Coordinators for LSEs in a local area, although consistent with each LSE's individual obligation, is not sufficient to fully meet the Reliability Criteria for the local area.

The CAISO proposes to supplement the current RCST by adopting the ICPM proposal, including cost allocation, with respect to designations to address collective shortfalls. It should be noted that by incorporating the ICPM proposal, LSEs will have an opportunity to cure the collective shortfall prior to any CAISO backstop procurement.

The RCST language, Sections 43.2 and 43.8 in the CAISO's currently effective tariff (see Attachment 3) would need to be revised to implement this proposed change.

### 5f. Allowing LSEs to Count TCPM Procurement in RA Showings

The RCST is silent on the topic of allowing LSEs to "count" RCST procurement in RA showings when the CAISO procures under the RCST (i.e., there is no language on this subject in the RCST). This concept was not included in the RCST when it was created in 2006. This topic was brought up and addressed in the ICPM stakeholder process. The ICPM tariff includes language that addresses this matter. The CAISO proposes to supplement the current RCST by adding the tariff language from the ICPM tariff filing to address allowing LSEs to "count" certain TCPM procurement in RA showings.<sup>8</sup>

A new section would be added in the TCPM tariff to implement this proposed change.

### 6. Designation of a Partial Unit

The CAISO initially proposed filing for the authority to procure a portion of a resource under the TCPM, i.e., the ability to procure a "partial unit." During the TCPM February 21, 2008 stakeholder conference call, one of the stakeholders noted the potential difficulty in implementing a partial unit designation when the current MOO process uses the full capacity of each resource. Since the February 21, 2008 call, the CAISO has considered this comment and further reviewed this element of the TCPM proposal in more detail internally. Based on a more detailed review of this topic, the CAISO has now concluded that a "partial unit" designation does not work under the current market design with a FERC MOO and has decided to remove this element from the proposal. The CAISO now proposes to use the

<sup>&</sup>lt;sup>7</sup> California Indep. Sys. Operator Corp., et. al., 122 FERC ¶ 61,017 (2008) at P 63-64.

<sup>&</sup>lt;sup>8</sup> The February 8, 2008 ICPM filing can be found at <u>http://www.caiso.com/1f67/1f67d9d453990.pdf</u>.

RCST language, wherein the CAISO must be able to find a whole unit that is available to remedy the deficiency or reliability problem, and which is either "slightly more or slightly less" than the amount of additional capacity needed by the CAISO. The reason for this change is discussed in more detail below.

Unlike the MRTU design where RA (i.e., future must offer) capacity can be designated for portions of a unit, the pre-MRTU system has a MOO requirement that applies to the entire capacity of a resource. This presents conflicts between the MOO proxy bid process, which ensures that a resource has bids between its Pmin and Pmax, and a partial designation. If a resource is partially designated under TCPM and it is dispatched through proxy bids to a level above its designation, it may be eligible for additional compensation, which could be proposed as a partial daily payment for the capacity not covered by the TCPM designation. As a result of this, significant changes would have to be made to CAISO market and settlement systems to be able to calculate and pay resources that are due both a TCPM payment and a partial daily payment, including identifying these situations after the fact and calculating a pro-rata amount for the daily payment. In any event, such changes to CAISO systems are not justifiable given the transitional, extremely short-term nature of the TCPM and the CAISO's need to focus its resources on MRTU implementation. The CAISO appreciates the input of stakeholders in helping to come up with viable solutions.

### Attachment 1

### List of Acronyms

CAISO CEC CPI CPUC DR FERC FMU ICPM IEP LCR LRA LSE MOO MORC MOWD MRTU MSC	California Independent System Operator California Energy Commission Consumer Price Index California Public Utilities Commission Demand Response Federal Energy Regulatory Commission Frequently Mitigated Unit Interim Capacity Procurement Mechanism Independent Energy Producers Association Locational Capacity Requirement Local Regulatory Authority Load Serving Entity Must-Offer Obligation Minimum Operating Reliability Criteria Must-Offer Waiver Denial Market Redesign and Technology Upgrade Market Surveillance Committee
MW NERC	Megawatt North American Electric Reliability Council
NQC NRG	Net Qualifying Capacity NRG Energy
PER	Peak Energy Rents
PGA	Participating Generator Agreement
PTO	Participating Transmission Owner
RA	Resource Adequacy
RCST RMR	Reliability Capacity Services Tariff Reliability Must-Run Agreement
RUC	Residual Unit Commitment
SCUC	Security Constrained Unit Commitment
TAC	Transmission Access Charge
TCPM	Transitional Capacity Procurement Mechanism
WECC	Western Electricity Coordinating Council

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### Attachment 2

### **Key Milestones of Stakeholder Process**

- February 13 Post draft proposal
- February 21 Stakeholder conference call on draft proposal
- February 28 Stakeholder written comments due on draft proposal
- March 4 Post revised proposal
- March 7 Stakeholder conference call on revised proposal
- March 10 Post draft tariff language
- March 18 Stakeholder written comments due on draft tariff language
- March 20 Stakeholder conference call on draft tariff language
- March 26-27 Request Board of Governors approval of proposal
- March 28 File TCPM tariff with FERC

Attachment 3

### **Current RCST Tariff**

### [See separate file for contents of Attachment 3]

Attachment B

# Stakeholder Process for Transitional Capacity Procurement Mechanism Tariff Filing

# **1. Summary of Stakeholder Process**

Stakeholders submitted one round of written comments to the CAISO on the following date:

February 28, 2008 – 10 sets of comments received

Stakeholder comments are posted at: http://www.caiso.com/1165/1165791614bd0.html

Other stakeholder efforts include:

Stakeholder conference calls

February 21, 2008 (47 telephone participants) March 7, 2008 (34 telephone participants)

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2. Summary of Written Comments Submitted on February 28, 2008<sup>1</sup>

<sup>1</sup> The written stakeholder comments presented here were submitted on the initial February 13, 2008 proposal. The CAISO subsequently created a revised proposal that was posted on March 4, 2008 and discussed with stakeholders on a conference call on March 7, 2008. The Board has now been provided with the final proposal (Attachment A).

A list of abbreviations is provided at the end of this document.

Feb 13, 2008 Proposal	Load Serving Entities, Energy Service Providers, End-Use Customers	Resource Owners	Management Response
1. Approach –	AReM: Conditional Support. There is no time now for another protracted debate; that debate	Dynegy: Oppose. Believe that	RCST was designed to work with
Generally retain	should (and will) take place at FERC. If parties attempt to extend debate, recommend that	RCST structure was	existing market design and
RCST structure and	CAISO file a continued extension of RCST, as currently constituted, until MRTU.	inappropriately retained beyond	CAISO business systems are
use as base tariff	CDWR SWP: Conditional Support. Since TCPM is for short duration and ICPM has been	expiration date in RCST	already configured to support
language for TCPM	filed at FERC, continuation of RCST appears to be best option.	settlement	RCST processes. Given limited
filing, with changes	CMUA: Support. Concur it makes little sense to revisit controversial issues when TCPM is	Reliant: Conditional Support.	time available to develop a tariff
made to RCST in six	expected to be of short duration and CAISO has already filed its successor.	Do not outright object to using	and that TCPM would be in effect
areas listed below in	NCPA: Support. Considering short duration of time in which TCPM should be effective this	RCST as base for amending	for only a few months, use of
this template as	element of proposal is appropriate.	tariff. Could better support	RCST structure is reasonable.
items 2 through 7.	PG&E: Conditional Support. TCPM should reflect ICPM design in favor of expiring RCST.	approach if CAISO recognized	
	Do not endorse or support development of new backstop that differs substantially from either	that TCPM capacity is distinct	
	RCST or ICPM.	capacity product and must be	
	SCE: Support. Given time constraints and short-term nature of TCPM, believe that TCPM	fairly compensated. Several	
	should be developed in a manner that reflects maximized administrative efficiency.	features of TCPM would	
	SDG&E: Support.	perpetuate price discrimination.	
	<u>Six Cities</u> : Conditional Support. Generally agree that it does not make sense to devote substantial resources on new backstop. Support retention of basic RCST framework.		

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A list of abbreviations is provided at the end of this document.

Feb 13, 2008 Proposal	Load Serving Entities, Energy Service Providers, End-Use Customers	Resource Owners	Management Response
Note: CAISO has revised the initial proposal shown below to add a 10% adder to Option 1.	<u>AReM</u> : Slightly Prefer Option 2. Could live with Option 1, but only if quick agreement on pricing. Inadequate time for alternative nonocals.	<u>Dynegy</u> : Offers Alternative to Option 1. Use method in RCST. with price between fixed	CAISO has weighed conflicting positions and attempted to balance
<ol> <li><u>Capacity Price</u> - <u>Option 1</u>: Update RCST price from \$73/kW-year minus Peak Energy Rents ("PER") to price of \$78/kW-year minus PFR:</li> </ol>	CDWR SWP: Conditional Support for Option 2. Adoption should be fair since price is based on going forward cost. Request hypothetical cost impact analysis of Options 1 and 2 based on 2007 bills.	cost of existing generation and CONE, but use updated cost of SCE peaker projects for CONE, which results in	widely divergent views. Management believes that RCST-type pricing of Option 1 is preferable,
<ol> <li>Escalate RCST price for 2 years using National Consumer Price Index ("CPI"), (Actual CPI = 2.5% in 2006 and 4.1% in 2007). If stakeholders believe different escalator should he used should provide it</li> </ol>	<u>CMUA</u> : Conditionally Support Option 2. Trying to extend RCST pricing will result in intractable debates. ICPM pricing appears well calculated to allow recovery of going forward costs. NCPA: Sumort Ontion 2. Considering short duration of TCPM.	\$117.10/KW-yr. Difficult to support rate that includes no recovery of capital costs. Reliant: Oppose Options 1 and	and it is reasonable to escalate the price to \$86/kW-yr. by updating the \$73 to 2008 levels
<ol> <li>2) Hypothetical proxy unit used for determining PER has heat rate of 10,500 BTU/kWh. Seek input on changes are appropriate.</li> <li>2) Sessonal straning factor in PCST would be used as</li> </ol>	this element is appropriate. CONE pricing is not appropriate. <u>PG&amp;E</u> : Support Option 2. Would avoid <i>issues</i> , debates and delays associated with Option 1 pricing aspects. Option 2 pricing provided hood takeholder sumont under ICPM	<ol> <li>Appropriate compensation</li> <li>Appropriate compensation is updated CONE. Recent CEC analysis supports CONE of \$145 54/kW-war. Opnose</li> </ol>	and then applying a 10% adder. The \$86/kW-yr. price balance the interests of stakeholders and
Option 2: Use price of \$41/kW-year with no deduction for PER as is done in ICPM: 1) Use price of \$41/kW-year, which is minimum price proposed in ICPM.	SCE: Support Option 2. Consistent with ICPM proposal that was result of extensive stakeholder discussion. SDG&E: Supports Option 2. Favor compensation values that both proximate those used under current RCST, and assist in smooth transition to ICPM.	Option 2 as going forward costs are not relevant measure for services provided.	satisfies the just and reasonable standard as it is within range of fixed costs of existing units and cost of new entry.
<ol> <li>No PER deduction from price (and hence no need for determining a proxy unit).</li> <li>Level "1/12" shaping factor in ICPM used as shaping factor for TCPM.</li> <li>To extent stakeholders have alternative proposal, they are urged to present such alternatives.</li> </ol>	Six Cities: Support Option 2. Pricing should provide generators appropriate compensation for use of existing capacity. Oppose any suggestion that pricing should be based on CONE.		

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A list of abbreviations is provided at the end of this document.

Feb 13, 2008	Load Serving Entities, Energy Service Providers, End-Use Customers	Resource Owners	Management Response
Proposal			
3. Daily Capacity	AREM: No comment.	Dynegy: Oppose. Do not	There is no scientific way to
Payment - Daily	CDWR SWP: Oppose: Daily MOO cost should not be increased without cost-based	support extension of daily	determine what the single
payment under	showing that rates are just and reasonable. Proposal lacks justification for increase. May	payment mechanism. Instead	appropriate level of the daily
RCST is 1/17 of the	support if justification provided.	urges CAISO to designate	capacity payment should be.
monthly target	<u>CMUA</u> : Conditionally Oppose. CAISO should explain its rationale. Would reconsider if	TCPM for 2-month minimum	CAISO has attempted to balance
capacity price.	showing is made as to why this proposed change is justified, and just and reasonable.	term for any use of non-RA	the positions of parties and ensure
CAISO proposes to	NCPA: Oppose. No quantitative information or analysis to justify this change has been	capacity. If insist on retaining	that generator owners are
increase payment	provided.	daily payments, payment	appropriately compensated for
factor to 1/8.	PG&E: Oppose. Has not been any evidence indicating that current 1/17 payment is	should be set at 1/3	reliability services when denied a
CAISO sought input	insufficient; lacking a definitive description or substantiation of the problem. Increase	Reliant: Oppose. However,	Must Offer Waiver Request. The
on appropriate level	appears arbitrary.	support direction of change but	total monthly revenues that a
of daily capacity	SCE: Opposes. No sufficient justification for the increase to 1/8. The basis for negotiated	it fails to go far enough. Daily	generator can earn from daily
payment and	1/17 <sup>th</sup> value is still valid. It is not appropriate to use a randomly chosen value.	compensation should be	capacity payments will remain
reasons for the	SDG&E: Oppose. Generally supportive of an increased payment, but troubled that	replaced by full TCPM target	capped at the monthly capacity
level.	proposed increase is arbitrarily. Cannot endorse until number is supported with empirical	capacity payment for a 3-month	payment, thus protecting LSEs
	data.	term.	against overpayment.
	Six Cities: Oppose. CAISO has not provided sufficient justification for effectively doubling		· · · · ·
	the payment.		

Feb 13, 2008 Proposal	Load Serving Entities, Energy Service Providers, End-Use Customers	Resource Owners	Management Response
Note: CAISO initially proposed this	AReM: Support. Concurs that CAISO should only	Dynegy: If CAISO adopts this, offer two	After detailed internal review,
element for TCPM, but no longer	procure what is needed to meet the reliability needs.	necessary conditions: (1) minimum quantity that	Management is now NOT proposing
proposes this item. The initial	CDWR SWP: Conditional Support: May be appropriate.	can be désignated is unit's dispatchable (not	this feature as it has concluded that
proposal and stakeholder written	Should describe compensation details.	manual) minimum load, and (2) designation	such designations will not work under
comments are provided herein for	CMUA: Support.	never be less than operating level at which	the current market design and the
the Board's information.	NCPA: Support. This will reduce risk of over	CAISO requires unit to operate at to maintain	significant changes that would need to
	procurement.	reliability.	be made to market and settlement
	PG&E: Support. May provide CAISO with added	Reliant: Oppose, unless "partial unit" is clarified	systems are not justifiable given
4. Designation of a Partial Unit –	capabilities to avoid current limitations of "whole units."	to mean Eligible Capacity. Compensation	extremely short-term nature of TCPM
CAISO proposes to change	SCE: Supports.	should be based on Eligible Capacity of	and the need to focus resources on
provision in RCST wherein CAISO	SDG&E: Support. Will avoid over- procurement in some	resource, not on arbitrarily designated slices of	MRTU.
can only procure a "whole" unit to	situations, and may decrease overall costs.	partial unit capacity. Partial unit designation	
allow the CAISO under the TCPM	Six Cities: Support. CAISO should not be forced to	proposal is discriminatory and unjust and	CAISO now proposes to use the
to procure a "partial unit."	procure more capacity than required for system	unreasonable attempt to cut costs at expense of	existing RCST language, wherein
	reliability.	just and reasonable compensation.	CAISO must procure whole units.

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A list of abbreviations is provided at the end of this document.

Feb 13, 2008 Proposal	Feb 13, 2008 Proposal   Load Serving Entities, Energy Service Providers, End-Use Customers	Resource Owners	Management Response
5. Designation Process	AReM: Conditional Support. See no need for this change for this very, short-term period. If	Dynegy: Oppose. Do not support	Management believes
for Significant Event –	other parties agree to change, can support it.	extension of daily payment	adequate flexibility is
CAISO proposes to	CDWR SWP: Support: Greater transparency and greater opportunity for market participants	mechanism, but instead urge CAISO	necessary and
change designation	to resolve problems prior to CAISO non-market power purchases should be pursued.	to designate for 2-month minimum	prescriptive approach is
process to use Significant	<u>CMUA</u> : Conditional Support. While have continued concerns about Significant Event	term for any CAISO use of non-RA	not appropriate. Use of
Event definition in ICPM;	designations and increased CAISO flexibility, may be willing to accept this as part of an	capacity.	ICPM provisions will
add "three-step"	overall package.	Reliant: Oppose. Unilateral	start the transition to the
designation process that	NCPA: Conditional Support. Maintain concerns regarding loosely" defined nature of	discretion to declare a Significant	ICPM. CAISO does not
is in the ICPM; and add a	Significant Event procurement, but may be willing to accept this as part of an overall package.	Event as defined by CAISO is	support a prescriptive
report to stakeholders	PG&E: Support. TCPM should reflect ICPM provisions where possible.	flawed and unduly discriminatory.	"hard trigger" for a
when the initial 30-day	SCE: Conditional Support. Support the process, but want two revisions: Significant Event	Trigger should be when a unit is on	Significant Event
designation has been	should be triggered only when a physical event impacts grid's operating reliability criteria, and	call to CAISO pursuant to availability	because it may force
extended (also in the	CAISO has itself offered justification that a 30-day extension is valid and that an automatic	obligations. Either a single denial of	designations on a
ICPM).	60-day minimum contract extension is not warranted.	a MOO waiver request or a	prospective basis even
	SDG&E: Support.	Significant Event designation should	though the event that
	Six Cities: Support. Remain concerned that Significant Event definition is too open-ended.	trigger a full capacity payment.	led to use of the unit
	· ·		has ended.

Feb 13, 2008 Proposal	Feb 13, 2008 Proposal   Load Serving Entities, Energy Service Providers, End-Use Customers	Resource Owners	Management Response
6. Minimum Term of a	AReM: Support. One-month term is necessary to minimize potential for over-procurement	<u>Dynegy</u> : Oppose. Believe	This change is necessary to
Significant Event -	because no RA credit is provided to LSEs.	that a 2-month minimum	work with the proposed "three-
CAISO proposes to	CDWR SWP: Support.	term is appropriate. A unit	step" process for Significant
change minimum term	<u>CMUA</u> : Support. Approach allows CAISO to match designation with reason for requirement.	that remains available for	Event designations where the
from three months in the	NCPA: Support. Proposed change will reduce risk of over procurement and will allow CAISO	CAISO use incurs costs in	initial designation period is for
RCST to one month	to procure capacity based on actual need.	months that CAISO does not	only 30 days. (The three-step
consistent with that	PG&E: Support: ICPM provides improved linkage between length of event and length of	need it. It is reasonable to	process does provide that
proposed under ICPM.	commitment. Specifically endorses this adoption to better align TCPM with ICPM.	pay some of those	designation can be extended
	SCE: Support.	previously incurred costs	beyond initial 30 days if
	SDG&E: Support. Altering minimum term should mitigate over-procurement in certain	when CAISO needs the unit	Significant Event lasts longer
	situations and will help decrease overall costs of these designations.	later on.	than 30 days. The designation
	Six Cities: Support. Support adoption of provisions that will allow CAISO to limit its backstop	Reliant: Oppose. Minimum	would continue until Significant
	procurement to amounts actually needed and for duration of need, and opportunity to cure by	term should be 3 months.	Event is resolved.).
	LSEs.		

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Feb 13, 2008 Proposal	Feb 13, 2008 Proposal Load Serving Entities, Energy Service Providers, End-Use Customers	Resource Owners	Management Response
7. Backstop for Local	AReM: Oppose. Do not see need to add this procurement option, particularly when time has already	Dynegy: Support.	Management believes that it
Resource Adequacy	passed for determining a collective deficiency for 2008.	Reliant: Oppose	is appropriate to update the
<b>Deficiencies</b> – CAISO	CDWR SWP: Support. Particularly support cost allocation based on contribution to coincident peak.	adoption of ICPM	backstop tariff provisions to
proposes to supplement	CMUA: Support.	tariff language.	reflect the most recent
RCST tariff language by	NCPA: No Comment.		related provisions approved
adopting ICPM tariff	PG&E: Support. While favor more targeted commitment periods that might be needed to address		by FERC.
language with respect to	collective shortfalls (rather than an annual 12 month commitment), support staff proposal.		
designations to address	SCE: Conditionally Support. "Given chance to cure" must encompass an appropriate notice and		LSEs will have opportunity to
collective shortfalls,	adequate time for affected LSE to make necessary business decisions.		cure collective shortfall prior
including cost allocation.	SDG&E: No comment.		to any CAISO procurement.
1	Six Cities: Conditional Support. If accompanied by provisions that will increase flexibility of CAISO		Cost allocation for local
	procurement and allow LSEs opportunity to address CAISO needs through their own procurement.		collective deficiency is based
			on coincident peak load.

Note: The CAISO also invited stakeholders to list "Other Issues." The comments that were submitted are provided below.

Stakeholder	Management Response
A. AREM: RA Credit. Current RCST language provides no RA credit to LSEs for procurement of any length.	A. and E: CAISO proposes to include in the TCPM the tariff provisions t
CAISO must provide RA credit to any LSE allocated TCPM costs for any TCPM procurement with term of more	that are in the ICPM that support allowing LSEs to "count" certain TCPM
than 30 days. This will require changing cost allocation formula.	procurement in RA showings.
B. AReM: Cost Allocation for System Deficiency. Current cost allocation in RCST for deficiency in System RA	B. and G: Agree with these comments and will incorporate this in the
resources found in annual evaluation could be read to charge the System deficiency to all LSEs. CAISO should	TCPM tariff language.
insert the "deficient" after "each" in Section 43.8 to make tariff clear.	C: TCPM will use the cost allocation language from the ICPM for
C. CDWR SWP: Significant Event cost allocation. Seek clarification if Significant Event cost allocation under	Significant Event designations. This language is not based on
TCPM will be based on coincident peak as applied in current RCST.	coincident peak.
D. PG&E: Transition Into and Out of TCPM. In event that resources are committed under RCST, CAISO proposal	D: Transition provisions are not needed for TCPM as the tariff
should include transition provisions. Similar provisions should be included to address possible transitions between	provisions will be designed to terminate at the start of MRTU. TCPM
TCPM and ICPM.	designations will not extend out into MRTU. (RCST designations must
E. PG&E: Support for RA Credit with TCPM Designations. To extent capacity is secured by CAISO through	terminate upon implementation of TCPM.)
TCPM, CAISO should cooperate with CPUC and LRAs to allow RA credit. While PG&E has suggested in past that	E: TCPM will be filed to be effective on June 1, 2008. In its December
such credits should be also provided for certain classes of Significant Events, at the minimum, CAISO TCPM	20, 2007 order, FERC did not state that the TCPM must be
proposal should adopt ICPM crediting provisions.	implemented by March 31, 2008.
F. Reliant: Effective date of TCPM. Effective date of TCPM should be April 1, 2008 which coincides with FERC	-
extension of RCST beyond December 31, 2007.	
G. SCE: Cost Allocation for Capacity to Address Deficiency. Understand that when CAISO procures to address a	
local RA deficiency, associated costs shall be allocated to only those entities contributing to deficiency. Suggest	
that word 'deficient' be inserted in section 43.7.1:	

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# List of Acronyms

AReM CAISO	Alliance for Retail Energy Markets California Independent Svstem Operator
CDWR SWP	California Department of Water Resources, State Water Project
CMUA	California Municipal Utilities Association
CONE	Cost of new entry
CPUC	California Public Utilities Commission
Dynegy	Dynegy, Inc.
FERC	Federal Energy Regulatory Commission
ICPM	Interim Capacity Procurement Mechanism
LRA	Local Regulatory Authority
LSE	Load Serving Entity
MRTU	Market Redesign and Technology Upgrade
NCPA	Northern California Power Agency
PER	Peak Energy Rent
PG&E	Pacific Gas and Electric Company
RA	Resource Adequacy
RCST	Reliability Capacity Services Tariff
Reliant	Reliant Energy, Inc.
RMR	Reliability Must-Run Agreement
SCE	Southern California Edison Company
SDG&E	San Diego Gas & Electric Company
Six Cities	Cities of Anaheim, Azusa, Banning, Colton, Pasadena and Riverside, California
TCPM	Transitional Capacity Procurement Mechanism

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# ATTACHMENT D

#### 2006 RMR Fixed Cost per Kw-Yr (Sorted by AFRR/Kw-Yr) Fixed Option

				Fixed Option			
ans Owner	Unit	Capacity (MW)	AFRR or AFRC	Payment \$ (FOP)	RMR Rate (FOP/KW-Yr)	RMR Rate (AFRR/KW-Yr)	Docket No.
SDG&E	Palomar EC 2x1	541	\$86,630,665	\$17,320,000	\$32.01	\$160.13	ER06-577-00
SDG&E	South Bay 1	145	\$10,525,748	\$10,525,748	\$72.59	\$72.59	ER06-115-00
SDG&E	South Bay 2	149	\$10,461,566	\$10,461,566	\$70.21	\$70.21	ER06-115-00
SDG&E	Encina 5	330	\$17,343,963	\$9,400,428	\$28.49	\$52.56	ER06-426-00
SDG&E	Encina 4	300	\$14,857,119	\$8,052,558	\$26.84	\$49.52	ER06-426-00
SDG&E	South Bay 3	174	\$8,151,036	\$8,151,036	\$46.85	\$46.85	ER06-115-00
SDG&E	Cab 2, Miramar	34	\$1,348,880	\$1,348,880	\$39.67	\$39.67	ER06-197-00
SDG&E	Encina 3	110	\$4,318,525	\$4,318,525	\$39.26	\$39.26	ER06-426-00
SDG&E	Cab 2, Kearney 2	55	\$1,712,457	\$1,712,457	\$31.14	\$31.14	ER06-197-00
		17	\$515,452	\$515,452	\$30.32	\$30.32	ER06-197-00
SDG&E	Cab 2, Kearney 1						
SDG&E	Cab 2, Kearney 3	57	\$1,566,704	\$1,566,704	\$27.49	\$27.49	ER06-197-00
SDG&E	Encina 2	104	\$2,599,810	\$2,599,810	\$25.00	\$25.00	ER06-426-00
SDG&E	South Bay 4	221	\$5,454,353	\$5,454,353	\$24.68	\$24.68	ER06-115-00
SDG&E	South Bay CT	14	\$320,907	\$320,907	\$22.92	\$22.92	ER06-115-00
SDG&E	Encina 1	107	\$2,311,248	\$2,311,248	\$21.60	\$21.60	ER06-426-00
SDG&E	Cab 2, El Cajon	17	\$356,507	\$356,507	\$20.97	\$20.97	ER06-197-00
SDG&E	Calpeak, Border	42	\$414,400	\$414,400	\$9.87	\$9.87	ER06-91-000
SDG&E	Calpeak, El Cajon	42	\$414,400	\$414,400	\$9.87	\$9.87	ER06-90-000
SDG&E	Calpeak, Escondido	42	\$414,400	\$414,400	\$9.87	\$9.87	ER06-92-000
		42				\$8.93	ER06-108-00
SDG&E	Miramar EC		\$416,190	\$416,190	\$8.93		
SDG&E	Calpeak, Vaca Dixon	42	\$331,520	\$331,520	\$7.89	\$7.89	ER06-93-000
SDG&E	Encina CT	16	\$69,333	\$20,800	\$1.30	\$4.33	ER06-426-00
					Average \$33 /MW	Average \$65 /MW	
SCE	Wuntington Reach 2	216	ER 380 000	E2 809 000	¢10.40	\$38.51	ER05-406-00
	Huntington Beach 2	215	\$8,280,000	\$2,898,000 \$103,500	\$13.48		
SCE	Huntington Beach 1	215	\$8,280,000		\$0.48	\$38.51	ER05-406-00
SCE	Alamitos 3	320	\$9,225,000	\$4,151,250	\$12.97	\$28.83	ER05-406-00
							ER05-138
SCE	Etiwanda 3	320	\$8,284,020	\$0	\$0.00	\$25.89	ER06-113-00
							ER05-138
SCE	Etiwanda 4	320	\$7,515,679	\$0	\$0.00	\$23.49	ER06-113-00
QQL	Edwanda 4	320	<i>41,513,015</i>	50	Average \$5 /MW	Average \$30 /MW	2100 110 00
PG&E	Los Esteros 1-4	180	\$44,463,794	\$33,347,846	\$185.27	\$247.02	ER06-268-00
PG&E	Geysers 7	38	\$6,757,876	\$3,378,938	\$88.92	\$177.84	ER06-217-00
PG&E	Geysers 12	40	\$6,529,236	\$3,264,618	\$81.62	\$163.23	ER06-217-00
PG&E	Geysers 6	40	\$6,243,311	\$3,121,656	\$78.04	\$156.08	ER06-217-00
PG&E	Geysers 17	51	\$7,255,435	\$3,627,718	\$71.13	\$142.26	ER06-217-00
PG&E	DEC	845	\$103,752,212	\$51,876,106	\$61.39	\$122.78	ER06-261-00
PG&E	Geysers 18	60	\$7,291,947	\$3,645,974	\$60.77	\$121.53	ER06-217-00
PG&E	Geysers 11	60	\$7,285,837	\$3,642,919	\$60.72	\$121.43	ER06-217-00
	00,0010				<b>\$50112</b>	• / - · · · -	ER05-343-00
PG&E	Potrero 3	206	\$17,908,424	\$8,954,212	\$43.47	\$86.93	ER06-111-00
							ER05-113 ER06-99-000
PG&E	Hunters Point 4	160	\$6,122,425	\$6,122,425	\$38.27	\$38.27	ER06-341-00
, Ode	Fighters Found 4	100	00,122,420	00,122,420	400.21	000.21	ER04-227-00
							ER05-343-00
PG&E	Contra Costa 7	345	\$22,237,027	\$11,118,514	\$32.23	\$64.46	ER06-110-00
PG&E	Pittsburg 5	312	\$15,157,190	\$7,578,595	\$24.29	\$48.58	ER05-343-00
PG&E	Pittsburg 6	317	\$15,157,190	\$7,578,595	\$23.91	\$47.81	ER05-343-00
PG&E	Oakland 1	55	\$1,450,000	\$1,087,500	\$19.77	\$26.36	ER06-266-00
PG&E	Oakland 2	55	\$1,450,000	\$1,087,500	\$19.77	\$26.36	ER06-266-00
PG&E	Oakland 3	55	\$1,450,000	\$1,087,500	\$19.77	\$26.36	ER06-266-00
PG&E	Creed	45	\$300,000	\$300,000	\$6.67	\$6.67	ER06-101-00
PG&E	Gilroy Peakers 1-2	90	\$600,000	\$600,000	\$6.67	\$6.67	ER06-98-000
PG&E	Gilroy Peakers 3-4	45	\$300,000	\$300,000	\$6.67	\$6.67	ER06-98-000
PG&E	Gilroy, Feather River	45	\$300,000	\$300,000	\$6.67	\$6.67	ER06-98-000
PG&E	Gilroy, Lambie	45	\$300,000	\$300,000	\$6.67	\$6.67	ER06-98-000
PG&E	Gilroy, Riverview	45	\$300,000	\$300,000	\$6.67	\$6.67	ER06-98-000
PG&E	Gilroy, Yuba City	45	\$300,000	\$300,000	\$6.67	\$6.67	ER06-98-000
	Gilroy, Wolfskill	45	\$300,000	\$300,000	\$6.67	\$6.67	ER06-98-000
PG&E	Goosehaven	45	\$300,000	\$300,000	\$6.67	\$6.67	ER06-112-00
							ER05-113
							ER06-99-000
PG&E	Hunters Point 1	52	\$308,337	\$308,337	\$5.93	\$5.93	ER06-341-00
FGGE	numers mount 1	02	4000,001	4000,007	40.83	40.80	
PG&E	San Joaquin Watershed	215	\$1,263,160	\$1,263,160	\$5.88	\$5.88	ER06-99-000 ER06-341-00
							ER06-99-000
PG&E	Humboldt Bay Mobiles	30	\$157,895	\$157,895	\$5.26	\$5.26	ER06-341-00 ER05-343-00
PG&E	Potrero 6	52	\$461,284	\$230,642	\$4.44	\$8.87	ER06-111-00
PG&E	Potrero 5	52	\$451,175	\$225,588	\$4.34	\$8.68	ER05-343-00 ER06-111-00
PG&E	Potrero 4	52	\$338,285	\$169,143	\$3.25	\$6.51	ER05-343-00 ER06-111-00
PG&E	Humboldt Bay 1	52	\$157,895	\$157,895	\$3.04	\$3.04	ER06-99-000 ER06-341-00
	-						ER06-99-000
PG&E	Humboldt Bay 2	53	\$157,895	\$157,895	\$2.98	\$2.98	ER06-341-00 ER06-99-000
PG&E	Kings River Watershed	336	\$947,370	\$947,370	\$2.82	\$2.82	ER06-341-00 ER06-99-000
PG&E	Helms 1	404	\$157,895	\$157,895	\$0.39	\$0.39	ER06-341-00 ER06-99-000
PG&E	Helms 2	404	\$157,895	\$157,895	\$0.39	\$0.39	ER06-341-00
							ER06-99-000

State Average \$27 /MW State Average \$52 /MW

# ATTACHMENT E

AND A MARY

\$/kW-year	
2008/Average	
<b>RMR Units</b>	

		<b>Barran</b> g ang ka	2008		2008	8	
	Units		MW	AFRC	КIN I	AFRR	\$/kW-year
PG&E							
Feathe	Feather River		45 \$	1,250,000			27.78
*Gevse	*Gevsers 6 (ER08-131)		40		÷	5,905,834	147.65
Gilrov	Gilrov Peakers 1-2 (ER08-132)		\$ 06	2,500,000			27.78
LMEC			556 \$	1			
Oaklar	Oakland 1 (ER08-124)		55		Ş	1,424,666	25.90
Oaklar	Oakland 2 (FR08-124)		55		ь	1,424,666	25.90
Oaklar	Oakland 3 (FR08-124)	, o¢	55			1,424,666	25.90
**Potre	**Potrero 3 (FR08-130)		206			17,908,519	86.93
**Portr	**Portrero 4 (FR08-130)		52		ŝ	338,267	6.51
**Potre	**Potrero 5 (FR08-130)		52		ŝ	451,143	8.68
**Portr	**Portrero 6 (FR08-130)		52		ŝ	461,272	8.87
Yuba Citv	City		45 \$	1,250,000			27.78
		Total	1303				
SDG&E		-					
	Enterprise (ER08-168)	<del></del>	42 \$	434,949.27			10.36
Border	Border (ER08-166)		42 \$	434,949.27			10.36
FI Cai	El Cajon (ER08-167)	<del>r sund</del> ekt		434,949.27			10.36
Kearn	ev 2A. B. C & D (ER08-177)				Ь	1,557,804	28.32
Kearne	Kearnev 3A, B, C & D (ER08-177)		57		ക	1,614,451	28.32
Miram		<u></u>	33		÷	934,682	28.32
South	South Bay (ER08-126)		702	:		33,775,023	48.11
		Total	973				
					1		
					Average	Average \$/kW-year	32.44

\* Geothermal Unit

\*\* Settlement with PG&E Wrap Agreement

4

1. M. M. M. . .

# ATTACHMENT F

#### FINAL

# Opinion on "Interim Capacity Payment Mechanism under MRTU"

by

### Frank A. Wolak, Chairman James Bushnell, Member Benjamin F. Hobbs, Member Market Surveillance Committee of the California ISO

#### November 21, 2007

#### 1. Introduction

The California ISO has asked the Market Surveillance Committee (MSC) to comment on its Interim Capacity Procurement Mechanism (ICPM) proposal.<sup>1</sup> The ICPM will replace the existing Reliability Capacity Services Tariff (RCST) when the Market Redesign and Technology Upgrade (MRTU) market is implemented. The ICPM will allow the ISO to supplement or backstop the resource adequacy (RA) procurement of load-serving entities (LSEs) to ensure there is sufficient generation capacity available to the ISO operators to maintain reliable grid operation in the California ISO control area.

The ISO proposal envisions two circumstances that will trigger purchases under the ICPM, what it calls Type 1 and Type 2 procurement. Type 1 procurement occurs before the compliance year if an LSE or group of LSEs has not purchased the full amount of their local or system-wide Resource Adequacy Requirement (RAR) by the time of the required RA showing for that year. Type 2 procurement occurs during the compliance year if the ISO determines that a "Significant Event" has occurred that creates a need to supplement LSE-procured capacity within the year.

The ISO has been undertaken an extensive stakeholder process to develop its ICPM proposal. The MSC has actively engaged in this process through both meetings and conference calls with ISO staff and stakeholders. The MSC also discussed this topic at previous MSC meetings starting with the June 6, 2007 joint MSC/stakeholder meeting. Because the ISO's ICPM proposal specifies an administrative price that the ISO will pay for capacity and the circumstances under which the ISO will pay this price, the design of the ICPM proposal has caused significant controversy among stakeholders. Generation unit owners typically favored higher prices for ICPM capacity and a commitment to pay this price for a longer period of time. Load-serving entities preferred lower prices and shorter time commitments to pay it. Virtually all parties agreed that the ISO should clearly specify in advance the circumstances under which it will make an ICPM procurement. The lack of stakeholder consensus of these issues implies that the ICPM process must strike a balance between divergent stakeholder desires and craft a proposal that all parties can live with until the current long-term RA proceedings at the California Public Utilities Commission (CPUC) have been completed.

We believe that the ISO's final ICPM proposal is a compromise solution that does not have any significant defects that are likely to harm system reliability or short-term market efficiency, or interfere with the functioning of the RA procurement process. We emphasize that

<sup>&</sup>lt;sup>1</sup> This proposal is summarized in the document "Final Proposal for Interim Capacity Procurement Mechanism Tariff Filing," November 9, 2007, available at http://www.caiso.com/1c91/1c91b9f063f90.pdf

this is an interim mechanism that should be re-evaluated or even eliminated once a scarcitypricing mechanism has been implemented and the long-term resource adequacy process at the CPUC has been resolved. We also believe that a number of features of the ICPM proposal address potential concerns we had with previous ICPM proposals. In particular, we were concerned that setting the cost of new entry (CONE) as the cap on the price of capacity for Type 1 procurement was likely to impact the price LSEs had to pay for RA capacity, particularly in areas likely to be subject to the exercise of local market power. Because the ICPM proposal may change as a result of stakeholder input before it is presented by the ISO Board, in this opinion we discuss features of the current ICPM that we would recommend retaining in the final proposal.

# 2. The Role of Type 1 versus Type 2 Procurement

We believe that the argument for the ISO having Type 1 procurement authority is weaker than the argument for the ISO having Type 2 procurement authority. A Type 1 procurement occurs in advance of the compliance year if an LSE fails to meet its RA capacity requirements. Because an LSE's showing of its RA capacity is made in advance of the actual compliance year, there is sufficient time for the California Public Utilities Commission (CPUC) to oversee the Type 1 procurement process, with the ISO only providing technical input on which generation capacity should be purchased. For example, if the ISO determines that there is inadequate RA. capacity procured, it can request that the CPUC procure a certain amount of capacity from a group of generation units before the start of the compliance year. If the ISO is able to identify which LSE is short relative to its RA requirements, then the process could be streamlined even more. The CPUC would order the LSE that the ISO determined is short relative to its RA requirements to purchase the necessary capacity. It is difficult to see how any purchase cost savings or administrative costs savings would be realized by giving the ISO, instead of the CPUC, the authority to make these purchases. In fact, the CPUC is likely to have a stronger incentive to procure the necessary capacity shortfall at a lower total cost than the ISO because of its legal mandate to ensure that California consumers pay just and reasonable prices for electricity.

Although an effective long-term RA process at the CPUC can virtually eliminate the need for the ISO to make Type 1 procurements on behalf of CPUC-jurisdictional entities, we recognize that there is still a case for granting the ISO the authority to make them. First, there are LSEs in the California ISO control area that are not subject to the CPUC's jurisdiction, and they consume a non-trivial percentage of the annual peak demand.<sup>2</sup> Second, although there are safeguards and incentives in the CPUC RA procurement process, it is still possible that this process could result in the CPUC-jurisdictional entities having procured inadequate capacity in certain local areas or on a system-wide basis for the ISO to maintain grid reliability.<sup>3</sup> Consequently, the option for the ISO to make a Type 1 procurement must exist as a last resort if the CPUC process fails or non-jurisdictional LSEs fail to procure adequate capacity.

<sup>&</sup>lt;sup>2</sup>Under the ISO tariff, all LSEs in the ISO control area are subject to its local resource adequacy requirements and can be assessed all or a portion of the costs of Type 1 and 2 procurements to address RA capacity shortfalls.

<sup>&</sup>lt;sup>3</sup> The CPUC RA process provides an opportunity for LSEs to eliminate any RA deficiencies identified in their initial RA showings and subjects LSEs to penalties for non-compliance with its RA requirements.

The urgency and likely duration of a Type 2 procurement argues in favor of an ISOdominated process for these purchases. First, an ISO determination that a "significant event" has occurred is necessary to trigger a Type 2 procurement. Second, the reliability consequences of a significant event may be so severe that the ISO cannot wait for a joint ISO and CPUC administrative process to identify the additional generation capacity needed before a CPUCsponsored procurement can take place. The typical Type 2 procurement is also likely to be of a very short duration, because it is triggered by an unexpected event not anticipated at the time of the annual RA showing in advance of the compliance year.

The argument for an ISO-dominated Type 2 procurement process is even stronger because this procurement only occurs within the compliance year and serves a different role from the standard RA capacity product. The primary rationale for Type 2 procurement is to ensure that the generation capacity purchased continues to bid into the short-term market. Receipt of the ICPM capacity payment is conditional on the unit owner being willing to subject its unit to the ISO's must-offer obligation. For this reason, the price and duration of payment for Type 2 ICPM procurement does not provide a signal for new generation investment. This payment must only be sufficient to ensure that a supplier that has decided to offer a generation unit into the ISO markets during the compliance year without an RA contract continues to do so because of the increased reliability need for this capacity caused by a "significant event."

# 3. Allowing the ISO Considerable Leeway to Determine a Significant Event

Virtually all stakeholders have argued that the ISO should clearly specify the circumstances that give rise to a significant event worthy of an ICPM procurement. However, one key measure of the performance of the RA procurement process is the frequency that significant events occur. The annual RA process, which requires suppliers to procure adequate generation reserves (approximately 115 percent of peak demand), is designed to provide sufficient generation capacity to the ISO operators to manage all unexpected reliability events throughout the coming year. Clearly, it is impossible for the ISO to anticipate all possible future reliability events. For this reason, we support giving the ISO the authority to make a Type 2 procurement of additional RA capacity during the compliance year if one of these events occurs.

We also support giving the ISO operators considerable discretion to declare a significant event whenever they determine that additional RA capacity is necessary to maintain grid reliability. However, the CPUC and ISO should give serious consideration to revising the annual RA requirements for the year following any year that the ISO declares a significant event. As noted above, our expectation is that significant events should rarely, if ever, occur under a properly designed RA mechanism.

We recognize there are two competing tensions in designating a significant event: (1) the need to provide the ISO with the discretion to purchase additional RA capacity if it believes that system reliability is adversely impacted by an unexpected event, and (2) the need to provide as much clarity as possible to the process used to designate significant events so that market participants do not rely on the ICPM process to meet their RA needs. We support giving the ISO substantial discretion in making this determination because the potential reliability consequences

of limiting the set of circumstances when the ISO can declare a significant event are simply too great to ignore.

# 4. Limit Interaction ICPM with Pricing of RA Products

The ICPM backstop price is likely to function as an upper bound on the prices that LSEs will pay for RA capacity, particularly in local areas with adequate generation capacity but inadequate competition among generation unit owners to sell it at a reasonable price. In these areas, the ICPM capacity price is likely to become the default price for RA capacity, because the LSE knows that it can purchase this capacity at the ICPM capacity price through a Type 1 procurement process. Consequently, if the ICPM price is set too high then retailers may be forced to pay this price for capacity in areas where suppliers have significant local market power, despite the fact that there is adequate generation capacity in the area to meet the ISO's RA needs.

The original ISO proposal was to make the cost-of-new-entry (CONE) the benchmark ICPM price for a Type 1 procurement. The local market power problem for RA capacity procurement was to be addressed through an administrative demand curve that reduces the price of a Type 1 capacity procurement if there is more generation capacity in the local area than is necessary to meet the LSE's RA requirement. This proposal raised a number of controversial questions about how to define the slope of the demand curve, how to set the value of CONE, and how to define local capacity areas. Although CONE may be justified in some local areas, in others there may be ample installed capacity, but local market power prevents it from being transacted at a reasonable price. Given the ongoing long-term RA process at the CPUC, we feel it is better to sort out these issues in the LT-RA proceeding, rather than in the ICPM process.

We support a capacity price significantly below CONE for Type 2 RA procurement. The consensus among MSC members is that Type 1 ICPM payments that address RA procurement deficits before the delivery year should be higher than payments made within the delivery year to address RA deficiencies stemming from a significant event. The distinction is that ICPM procurements before the delivery year may provide incentives for more generation capacity to exist at certain locations in the ISO control area. However, given the stakeholder controversy surrounding the appropriate price and market power mitigation mechanism for a Type 1 procurement and the interim nature of the ICPM procurement process, we understand the ISO's desire for simple administrative price for Type 1 procurement until long-term RA process at the CPUC is completed.

# 5. Limit Price and Magnitude of Duration of ICPM Procurement

As discussed above, if the RA procurement process functions as intended, then there is likely to be little need for a Type 2 ICPM procurement as the original RA process will have adequately anticipated and accounted for "normal" contingencies. Moreover, the need for Type 1 procurement can be virtually eliminated if the CPUC ensures that all jurisdictional LSEs in the ISO control area meet their local and system-wide RA requirements. This logic implies that there should be very little Type 1 and 2 ICPM procurement each year if the RA process is properly designed. If the annual RA process is properly implemented, any ICPM procurement that does occur should be Type 2 and of very short duration.

Any capacity purchased under a Type 2 ICPM procurement is, by definition, capacity that does not have a RA capacity contract, yet has still decided to invest or remain in operation and sell into the ISO's day-ahead and real-time markets for at least part of the year. For this reason, it is worth considering what an ICPM payment is "buying" under these circumstances. The ICPM payment is buying a must-offer requirement from the generation unit. This procurement would occur when a unit that had been viewed as surplus capacity under normal conditions becomes critically needed because of a "significant event." One might expect that under these circumstances, the energy and ancillary services prices paid to this unit would rise, increasing the incentives for it to offer into these markets of its own volition (*i.e.* without a must-offer requirement). It is important to note that these units were presumably offering into the market at other times without being required to do so before the Type 2 ICPM designation. However, several possible complications could arise under the current market design that argue in favor of a positive ICPM payment for a Type 2 procurement.

It is possible that local market power mitigation combined with relatively low price caps on the ISO's energy and ancillary services markets would prevent market prices from rising to the levels necessary to induce this unit to offer sufficient capacity at critical times.<sup>4</sup> Certain generation units may be needed to provide services that are not fully priced by the current market design, such as a local form of a slow response time (30 to 60 minutes) operating reserve. In this circumstance, the must-offer requirement and the Type 2 ICPM payment fills the reliability and revenue gaps left by this unpriced service. One last important factor is the residual unit commitment (RUC) payment that could be earned by a non-RA unit. Under some circumstances a firm may be able to earn considerable revenues through RUC payments that stem from some form of local market power that the unit owner is endowed with as a result of the significant event. A generation unit that is not under must-offer could in theory offer only a portion of its capacity into the market. Even though the bid price of this capacity is subject to local market power mitigation, the unit's offer quantities would not be regulated. Requiring the unit to sell Type 2 ICPM capacity under these circumstances prevents the exercise of significant local market power.

As noted earlier, because the units that are at risk to be called upon to provide Type 2 ICPM capacity have already made a decision to participate in the ISO's markets without an RA payment, we believe that the payment for Type 2 ICPM capacity should at most recover the generation unit's going-forward fixed costs. If the ISO's bid caps are too low, without an ICPM capacity payment, the unit owner might not recover its going forward-fixed costs from energy and ancillary services sales.<sup>5</sup> The \$41/kW-year ICPM payment for Type 1 and Type 2

<sup>&</sup>lt;sup>4</sup> The example of a plant that has been temporarily "mothballed" for a season has been raised as another rationale for a positive Type 2 ICPM payment, but we do not have sufficient information to determine how prevalent such circumstances are.

<sup>&</sup>lt;sup>5</sup> It is important to note that the market power mitigation mechanism limits the prices *offered* into the market, rather than the market-clearing price itself. Under a fully integrated scarcity pricing scheme with a sufficiently high price cap, firms can recover their fixed costs even when they are offering their units into the market at marginal cost, as the local market power mitigation mechanism requires that they do.

procurement makes it very unlikely that a unit owner will receive revenues that do not recover its variable operating costs and going-forward fixed costs.<sup>6</sup>

The ISO is also considering whether to allow a unit owner to decline an ICPM designation. We support prohibiting unit owners from declining a Type 2 ICPM designation, particularly for procurements caused by local or regional capacity shortfalls where only one or a small number of generation unit owners can provide the product. We believe the case for this prohibition is much weaker for Type 2 designations made for system-wide capacity shortfalls. Providing a generation unit owner with the option to reject this designation sets up the following perverse incentive. Only those unit owners able to exercise substantial unilateral market power by not being subject to the ISO's must-offer requirement will refuse the ICPM designation. The unit owners unable to exercise much unilateral market power without a must-offer requirement will instead elect to receive the ICPM payment. These units are those most likely to be offering into the energy and ancillary services markets at reasonable pries anyway. In short, a policy that creates a special designation such as Type 2, but makes it optional to accept this designation, creates an adverse selection problem that could raise costs to consumers without significantly improving grid reliability.

Allowing parties the option to decline an ICPM designation could lead to the following costly series of events under either Type 1 or Type 2 procurement: The ISO devotes significant time and effort to determining the most appropriate generation resource for an ICPM designation, and the unit owner declines this designation for the reasons discussed above. This would unnecessarily increase the cost of the ICPM procurement process and likely result in the ISO purchasing ICPM capacity from units less able to meet its reliability needs. To address concerns that a supplier may be unable to recover the costs associated with their participation in the California market under an ICPM designation, the ISO should allow a supplier to make a cost-of-service filing at FERC to recover any annual revenue shortfalls. These incentives are likely to have far more adverse market efficiency and system reliability consequences for Type 2 procurements caused by local or regional capacity shortfalls, than those caused by system-wide shortfalls.

#### 6. Concluding Comments

Consistent with our November 9, 2007 opinion on the long-term resource adequacy, we are concerned with the central role played by the must-offer requirement in California's resource adequacy policies. In a market with an increasing share of imported, energy limited, and intermittent energy, must-offer requirements become less meaningful, because these kinds of resources are physically unable to offer their capacity into the market a significant fraction of the hours of the year. We suspect that California policymakers and the ISO will soon need to explore what options exist for ensuring reliable grid operation beyond the currently constituted must-offer paradigm. As noted above, the authority to make a Type 1 ICPM procurement can assigned to the CPUC, which essentially eliminates the need for the ISO to engage ICPM procurement before the compliance year for all CPUC-jurisdictional entities. This leaves the Type 2 designation of previously "surplus" units under the ISO's discretion. This capacity is

<sup>&</sup>lt;sup>6</sup> We note that the ISO proposes to scale this annual payment to the time and duration of the ICPM procurement using monthly shaping factors which could make this statement less likely to be true.

already available to operate, so the Type 2 designation is to ensure this capacity adheres to the must-offer requirement. If the redesign of the market and RA policies allows the ISO to move beyond a must-offer requirement to focus on the provision of specific operating reserves, then the need for Type 2 ICPM procurement can also be eliminated. However, before this is done we recommend that the ISO determine what changes to its short-term operating reserve procurement process are necessary to ensure that adequate operating reserves are available for reliable grid operation in the absence of a must-offer requirement.