

Memorandum

To: ISO Board of Governors

From: Anjali Sheffrin, Director, Market & Product Development
Keith Johnson, Senior Market & Product Developer

Date: March 18, 2008

Re: *Decision on Transitional Capacity Procurement Mechanism Tariff Filing*

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;

- 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 TPCM, 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 TPCM 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 TPCM 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 TPCM 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 <http://www.caiso.com/1f65/1f65791614bd0.html>.

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

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

a) Escalating the Target Annual Capacity Price by CPI – 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/kW-year 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.

c) Using Cost of New Entry to set the Target Annual Capacity Price – 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.

d) Increasing Daily Capacity Payment Factor from 1/17 to 1/8 – 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.

e) Use of RCST Pricing Methodology versus ICPM Pricing Methodology - In its initial proposal,¹ 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, 2008.² 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.

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

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

- 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.

2. Minimum Term of Significant Event – 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)

3. Designation Process for a Significant Event – 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 does not support a prescriptive “hard trigger” for a Significant Event because it would not allow 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.

4. Backstop for Local RA Deficiencies – 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.

5. ICPM Procurement in Resource Adequacy Showings – 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