White Paper #2:
Proposal #2 for Tariff Filing for Interim Capacity Procurement Mechanism

California Independent System Operator
Market & Product Development Group
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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 to be implemented at Market Redesign and Technology Update (“MRTU”) start-up 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 Interim Capacity Procurement Mechanism (“ICPM”)\(^1\) with FERC on January 17, 2008 and to propose an effective date coincident with the start of the MRTU markets.\(^2\) As the culmination of a lengthy and rigorous stakeholder process, the proposal described in this paper effectively and efficiently meets the objectives of the backstop mechanism, is compatible with both the MRTU market design and the state RA framework, and strikes a reasonable balance between the divergent views of the CAISO stakeholders.

Currently the backstop need is met by the Reliability Capacity Services Tariff (“RCST”), which will expire at the end of 2007 and must therefore be replaced with a new mechanism that is appropriate for the MRTU markets. RCST provides the CAISO with a “backstop” to the California Public Utilities Commission (“CPUC”) and local regulatory authorities (“LRA”) RA processes, whereby the CAISO can procure additional capacity, when needed, to reliably operate the CAISO Controlled Grid.

The RCST allows the CAISO to procure capacity in advance of the compliance year if a LSE has not procured the full amount of its RA Requirement (“RAR”) in advance of the RA compliance year, or if the portfolio of resources procured by all LSEs in a local area for the upcoming compliance year and provided to the CAISO is not sufficient to fully meet the RAR in the local area.

The RCST also allows the CAISO to procure additional capacity during the compliance year if an LSE has not procured the full amount of its RAR in the month-ahead time frame or if a “Significant Event” occurs that renders the RA capacity that has been provided to the CAISO to be inadequate to reliably operate the grid. For example, a sustained outage of a generation or transmission facility could create a circumstance where additional capacity would need to be procured during the compliance year, and this type of procurement would then be done under the Significant Event authority.

At stakeholder meetings on May 18 and June 6, 2007, the CAISO discussed development of a successor to the RCST, the ICPM. An initial CAISO proposal (hereinafter referred to as (“Proposal #1”) was posted in a white paper on June 29, 2007. Proposal #1 was discussed at a stakeholder meeting on July 25, 2007, and stakeholders provided written comments on

\(^1\) This mechanism is called “interim” because it will include a sunset date at the end of 2010. Prior to that date the CAISO will reopen the matter of backstop procurement to explore possible changes or enhancements to ICPM to reflect changed market conditions.

\(^2\) During the first three months of 2008, until the start of MRTU, the CAISO would use the daily FERC must-offer obligation (“MOO”) to access capacity needed to reliably operate the grid. The daily Must Offer Waiver Denial (“MOWD”) process based on the FERC MOO would function as the backstop.
August 9, 2007. The present white paper presents a revised proposal (hereinafter referred to as “Proposal #2”) for stakeholder consideration.

Proposal #2 improves upon Proposal #1 in the following key areas where the initial proposal was viewed by stakeholders as either unsatisfactory, controversial, or both:

1. An earlier sunset date, thus reducing the amount of time for which the ICPM tariff language would be in effect;
2. A more narrowly specified trigger and an iterative process for designating resources, including an opportunity for stakeholders to engage with the CAISO as soon as 30 days after a Significant Event procurement;
3. Different pricing mechanisms that distinguish between the two distinct purposes of the ICPM procurement: backstopping the RA process, and procuring capacity if needed to address Significant Events;
4. More transparent process to define the amount of time that a resource would be paid for its service, and a decrease in the minimum term of payment from three months to one month;
5. Ability of a resource to decline an offer from the CAISO to be designated under ICPM (it is an option; not mandatory);
6. Detailed information would be posted describing each instance of ICPM procurement within 30 days of when the procurement occurred, and this ICPM procurement data would be analyzed to help evaluate how well LSE- procured RA resources are meeting the CAISO operational needs, which will help the CPUC and LRAs improve their RA programs over time; and
7. Extended the project schedule by two months to provide additional time to work with stakeholders to develop the optimal ICPM design.

During the stakeholder process to date, stakeholders have expressed divergent points of view on many of the elements in the initial ICPM proposal. It is not likely that Proposal #2 has eliminated all controversies, nor is it likely that there will be unanimous stakeholder support for each and every element of the proposal. However, the CAISO has made significant changes to many of the key elements of the previous proposal and believes that Proposal #2 does a better job of finding the right balance on the controversial items than its predecessor did.

Overview of this Proposal:

Proposal #2 extends many of the RCST provisions, while making some modifications that are designed, inter alia, to make the mechanism compatible with the MRTU market design and Applicable Reliability Criteria (“ARC”).

ICPM Proposal #2 is consistent with RCST in that it provides for the same two primary types of backstop procurement. Under “Type 1” procurement the CAISO would procure capacity (a) in advance of the compliance year if an LSE has not procured the full amount of its RAR by the time of the required RA 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 (b) during the compliance year if an LSE has not procured the full amount of its RAR in the month-ahead time frame. Under “Type 2” procurement the CAISO would procure additional

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3 As part of ARC, the CAISO must comply with applicable North American Electric Reliability Council/Western Electricity Coordinating Council (“NERC/WECC”) requirements, including Minimum Operating Reliability Criteria (“MORC”).
capacity during the compliance year if a “Significant Event” occurs that creates a need to supplement LSE-procured RA capacity to ensure reliable grid operation. A Significant Event could be, for example, a sustained outage of a generation or transmission facility.

ICPM Proposal #2 modifies the RCST design to obtain certain improvements and address stakeholder concerns. Key modifications are listed below.

Sunset Date – The ICPM tariff provisions would sunset on December 31, 2010. A stakeholder process would be initiated in the first quarter of 2010 to review and assess the continuing need for a CAISO backstop mechanism and evaluate the performance of the ICPM.

Pricing - This proposal includes a significant change in the pricing mechanism from what was in Proposal #1 and is in the RCST. The RCST and Proposal #1 established a single price for all procurement. Stakeholders made a number of proposals for revising this approach, including maintaining the basic methodology but adopting a new target price (higher or lower than the RCST price) or adopting a market-based mechanism, such as auctions or standing sealed-bid offers. In general, CAISO found that the various proposals did not appropriately define the product being procured in each situation and did not clearly distinguish the pricing basis for procurement under different market conditions. To clarify the product and pricing, Proposal #2 uses two pricing mechanisms that distinguish between the two distinct purposes of the ICPM procurement – (1) backstopping the RA process and (2) procuring capacity if needed to address Significant Events – and reflect pricing objectives in each case.

- **Backstop to RA Process** - Procurement to backstop the RA process in each local area and at the system level would be priced using a demand curve that is capped at the cost of new entry (“CONE”). The price would equal the CONE when the actual total installed capacity (RA and non-RA) in an area is less than or equal to the RAR, and would decline with increasing installed capacity surplus until it reaches a price floor. The pricing mechanism would not require an auction; rather, the price would be determined by the point on the demand curve that corresponds to the actual quantity of installed capacity. Payments above the price floor would be adjusted ex post for peak energy rents (“PER”), actual resource performance (i.e., availability), and a monthly shaping factor that pays the resources a higher percentage of the capacity price during the summer months and a lower percentage during the non-summer months. Payments at the price floor are not ex post adjusted. The CONE estimate used for the cap is $162.48/kW-year and is an average of the CONE for simple-cycle combustion turbine generating plants (“CTs”) in California derived from a June 2007 California Energy Commission (“CEC”) analysis. The price floor is $21.20/kW-year, which is based on the simple average of the CEC estimates of the fixed operating and maintenance (“O&M”) costs of the same type of unit. By providing for the range of prices just described, the demand curve supports the market design principle that prices should reflect scarcity. Moreover, by setting the price based on installed capacity rather than explicitly offered capacity, the pricing mechanism prevents the exercise of supplier market power.

- **Backstop for Significant Event** - In contrast to the pricing for RA backstop, procurement to address Significant Events would be priced based solely on going-forward costs. CAISO does not interpret such procurement as backstopping the RA...
process, which is a forward market intended to elicit new entry if needed. Rather, the CAISO is procuring capacity for a Significant Event on a temporary basis from available non-RA capacity. While scarcity of available non-RA generation in a local area may suggest a scarcity value for such capacity, there is no simple pricing mechanism to determine such a price given consideration of local market power. Moreover, the sporadic and unpredictable nature of Significant Events means that procurement for such events should not be interpreted as a signal for new entry. As such, CAISO proposes instead a payment based on the market design principle of paying a price sufficient to compensate the resource fairly for its availability for the needed term of the procurement. Although non-RA resources will not be required to accept designation, the CAISO believes the proposed payment will be sufficient to elicit the voluntary availability of the designated unit for the term desired. More specifically, the payment of a sufficient component of going forward costs will cover costs related to keeping the resource operable (i.e., not shutting down) for the designated period of the compliance year, and offering its capacity to the CAISO on a daily basis for commitment and dispatch. As with the price floor discussed above, this payment will be based on the fixed O&M component of the going forward cost of a simple-cycle CT due to the fact that such units’ going forward costs tend to be higher than those of other units. The proposed payment is $21.20/kW-year with no \textit{ex post} deduction for PER.

\textbf{Reporting} - A detailed report would be posted within 30 days of when the CAISO has procured a resource through the ICPM that describes the reason for and duration of the procurement to ensure that all ICPM procurement is fully transparent to the market. In addition to the posting of ICPM procurement reports, the CAISO also would post a monthly report within 10 calendar days after the end of each month of the non-market commitments of non-RA capacity (i.e., capacity procured manually by the CAISO operators) and repeated market commitments of non-RA capacity (i.e., capacity procured by the Residual Unit Commitment (“RUC”) feature of MRTU) and why such resources were committed. These monthly reports would provide timely feedback to stakeholders and regulators on how well RA resources, by themselves, are meeting all of the various operational needs of the CAISO. It is expected that this feedback loop would, over time, lead to improvements in the RA programs by their sponsors and less reliance on ICPM procurement.

\textbf{Summary Tables} - The first table below provides a summary of the key elements of the ICPM, and illustrates the differences between the two major types of products: (1) “Type 1” ICPM Procurement where the CAISO procures forward to backstop the RA process, and (2) “Type 2” ICPM Procurement where the CAISO procures during the compliance year to address an immediate, unexpected an enduring Significant Event.

The second table below provides a summary of the compensation that would be provided to resources under proposed pricing mechanism. It shows the range of prices that are likely to occur under the proposed pricing proposal, and the elements of the total compensation that would be paid to a resource that was designated under the ICPM.
Key Elements of Interim Capacity Procurement Mechanism

“Type 1” ICPM Procurement
CAISO Procures Forward to Backstop Resource Adequacy Process

<table>
<thead>
<tr>
<th>Trigger</th>
<th>Term of Designation</th>
<th>Price</th>
<th>Cost Allocation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Deficiency in Year-Ahead System showing</td>
<td>5-months (May – Sept)</td>
<td>Determined by a demand curve, capped at cost of new entry in shortage areas (with ex post deductions for peak energy rents and adjustment by shaping factors) with a declining price reflecting surplus capacity down to a price floor based on a going forward cost (with no ex post deductions, but a shaping factor is used).</td>
<td>Costs would be allocated only to the deficient load serving entity</td>
</tr>
<tr>
<td>Deficiency in Month-Ahead System showing</td>
<td>1 month</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Deficiency in Year-Ahead Local showing</td>
<td>12-months (compliance year is currently Jan – Dec)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Deficiency in Year-Ahead Local capacity procured due to “Effectiveness Factors”</td>
<td>12-months (compliance year is currently Jan – Dec)</td>
<td></td>
<td>Costs would be allocated to all load serving entities in Transmission Access Charge area based on Load share</td>
</tr>
</tbody>
</table>

“Type 2” ICPM Procurement
CAISO Procures during Compliance Year to Address an Immediate, Unexpected and Enduring Significant Event

<table>
<thead>
<tr>
<th>Trigger</th>
<th>Term of Designation</th>
<th>Price</th>
<th>Cost Allocation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Significant Event has been determined to have occurred</td>
<td>1-month or greater (maximum is up to time the CAISO determines Sig. Event will remain in effect, but not extend into the subsequent compliance year)</td>
<td>A uniform price based on the going forward cost of a simple cycle combustion turbine, estimated as $21/kW-year. No ex post deductions.</td>
<td>Costs would be allocated to all load serving entities in Transmission Access Charge area (or areas, depending on event) based on Load share</td>
</tr>
</tbody>
</table>
## Compensation to Resources under Proposed Pricing Mechanism

### “Type 1” ICPM Backstop Procurement

CAISO Procures Forward to Backstop Resource Adequacy Process

<table>
<thead>
<tr>
<th>Local Area Name</th>
<th>Surplus or (Deficit) of Qualified Installed Capacity (%)</th>
<th>Compensation Formula</th>
<th>Target Annual Capacity Price ($/kW-year)</th>
<th>List of All Price Components</th>
</tr>
</thead>
<tbody>
<tr>
<td>Big Creek/Ventura</td>
<td>48%</td>
<td>Compensation = Price times Quantity, where:</td>
<td>$21.20</td>
<td>Monthly Shaping Factor times $21.20/kW-yr.</td>
</tr>
<tr>
<td>Greater Bay</td>
<td>33%</td>
<td>P = Monthly Shaping Factor times Target Annual Capacity Price</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kern</td>
<td>33%</td>
<td>Q = Net Qualifying Capacity times Availability Factor</td>
<td></td>
<td></td>
</tr>
<tr>
<td>North Coast/North Bay</td>
<td>31%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Greater Fresno</td>
<td>26%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LA Basin</td>
<td>19%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Humbolt</td>
<td>3%</td>
<td>Compensation = Price times Quantity, where:</td>
<td>Slightly less than $162.48</td>
<td>(Monthly Shaping Factor times slightly less than $162.48/kW-yr.) minus 95% of Peak Energy Rents</td>
</tr>
<tr>
<td>San Diego</td>
<td>(4%)</td>
<td>Same as Humbolt case</td>
<td>$162.48</td>
<td>(Monthly Shaping Factor times $162.48/kW-yr.) minus 95% of Peak Energy Rents</td>
</tr>
<tr>
<td>Sierra</td>
<td>(15%)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stockton</td>
<td>(32%)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### “Type 2” ICPM Backstop Procurement

CAISO Procures during Compliance Year to Address an Immediate, Unexpected and Enduring Significant Event

<table>
<thead>
<tr>
<th>Compensation Formula</th>
<th>Target Annual Capacity Price ($/kW-year)</th>
<th>List of All Price Components</th>
</tr>
</thead>
<tbody>
<tr>
<td>Compensation = Price times Quantity, where:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>P = Monthly Shaping Factor times Target Annual Capacity Price</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q = Net Qualifying Capacity times Availability Factor</td>
<td></td>
<td></td>
</tr>
<tr>
<td>$21.20</td>
<td></td>
<td>Monthly Shaping Factor times $21.20/kW-yr.</td>
</tr>
</tbody>
</table>
2. Changes made to Proposal #1

The CAISO has considered stakeholder comments and revised its initial proposal. Proposal #2 improves upon Proposal #1 in the following key areas where the initial proposal was viewed by stakeholders as either unsatisfactory, controversial, or both.

- The stakeholder process has been extended by two months to provide additional time to work with stakeholders and attempt to address their concerns (the date for the Board of Governors’ consideration of the ICPM proposal has been moved from October 17-18, 2007 to December 12-13, 2007).
- The proposed sunset date for the tariff provisions has been decreased by two years, from December 31, 2012 to December 31, 2010.
- The effective date for the ICPM tariff has been moved from January 1, 2008 to the start of MRTU. For the period January 1, 2008 up to the start of MRTU the CAISO will use the daily FERC MOO as the backstop, supplemented, if necessary, by Reliability Must-Run Agreement (“RMR”) contracting authority with a new cost allocation to backstop the local RAR.
- To provide greater transparency, the trigger and process for designating resources to address a Significant Event now employs a 3-step, iterative process. The process allows stakeholders an opportunity to engage with the CAISO as soon as 30 days after the CAISO has made a Significant Event procurement.
- The definition of Significant Event has been revised to make it clearer that a Significant Event is intended to mean a situation where the CAISO cannot meet ARC solely with the RA resources that have been made available to it.
- The pricing methodology has been revised to reflect the two distinct products that the ICPM capacity provides: backstop to the RA process, and backstop for Significant Events. The pricing structure would result in not all resources being paid CONE (or close to CONE), which was a significant concern for many stakeholders.
- An annual escalation factor is no longer included in the proposal. The proposed sunset date of December 31, 2010 provides an opportunity for stakeholders to revisit the pricing methodology in spring 2010.
- The committed term (i.e., amount of time) that a resource, once designated, would be paid for its service has been refined. There is now a monthly product, as suggested by some stakeholders, in addition to the multi-month products previously proposed.
- This proposal makes it optional for a resource to accept a request for designation by the CAISO (i.e., the resource can decline the request to become an ICPM resource).
- The information that would be reported has been increased substantially from what was included in Proposal #1. The information that would be posted when there is ICPM procurement, and how quickly it would be posted, is described in detail, and additional data would be posted, as requested by stakeholders, to increase the feedback loop, which should improve RA programs over time.

The CAISO believes that Proposal #2 is a balanced approach in response to the divergent views expressed by stakeholders. For example, some entities felt that the Target Annual Capacity Price in Proposal #1 was too high, which others felt it was too low. The CAISO feels that overall, the elements in the proposal are reasonable.
3. The Issue

The RCST authority under the pre-MRTU tariff will expire on December 31, 2007. The CAISO believes that a “backstop” capacity procurement mechanism is an appropriate feature to complement the MRTU market design, and that it is necessary “as a last resort” to enable the CAISO to maintain reliable grid operations. However, many stakeholders have voiced concerns about the continuation of the RCST mechanism beyond December 31, 2007. The CAISO has tried to develop with stakeholders a successor mechanism that has broad support. The CAISO’s initial proposal for a successor, posted on June 29, 2007, would have been effective January 1, 2008. However, stakeholders expressed many concerns with that proposal, and, based on extensive stakeholder feedback, the CAISO decided to extend the project schedule two months to address stakeholder concerns. Under the new schedule, the successor to RCST cannot be effective any sooner than the start of MRTU on March 31, 2008. In the period from January 1, 2008 until the start of MRTU the CAISO would rely on existing tariff provisions to provide backstop capacity. However, as ordered by FERC, the daily FERC MOO will expire at the start of MRTU and the CAISO must have a successor to the RCST in place by that time. Therefore, the CAISO desires to work with stakeholders to implement a successor to the RCST that would become effective coincident with the start of the MRTU tariff.  

4. Stakeholder Process

On September 10, 2007, the CAISO posted a stakeholder process timeline that described the steps to develop an ICPM. On December 12-13, 2007, the CAISO intends to seek approval from the CAISO Board of Governors regarding the policy elements of an ICPM 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 to FERC on January 17, 2008.

A stakeholder outreach effort was initiated in April 2007, consisting of informal discussions with stakeholders to better understand the issues. Stakeholder meetings were held on May 18, June 6 and July 25, 2007 to formally gather input. An “issues paper” was posted on May 9, and Proposal #1 was posted in a white paper on June 29. Stakeholders provided formal written comments on May 25 and August 9. These comments were considered in preparing Proposal #2. Summaries of the most recent stakeholder comments (submitted on August 9) are included in section 5. All of the documents described in this section, as well as the materials that were posted for the three stakeholder meetings, can be found at http://www.caiso.com/1bc5/1bc5db284cc80.html.

Proposal #2 will be discussed at a stakeholder meeting on October 15, 2007. Written stakeholder comments are due on October 24, 2007, and should be sent to kjohnson@caiso.com. The written comments that are received will be posted to the CAISO web page at http://www.caiso.com/1bc5/1bc5db284cc80.html.

Attachment 1 provides a list of acronyms used in this paper. Key milestones for the stakeholder process and the ICPM tariff filing are provided in Attachment 2. Summaries of the written stakeholder comments that were submitted on August 9, 2007 regarding Proposal #1 are provided in Attachment 3.

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5 MRTU is scheduled for a “go live” date of March 31, 2007 for an initial trade date of April 1, 2008.
5. Origin of Current Backstop Authority

On August 26, 2005, the Independent Energy Producers Association (“IEP”) initiated the RCST Litigation challenging the FERC imposed daily FERC MOO as unjust and unreasonable and recommending that the daily FERC MOO be replaced with a tariff-based procurement mechanism. On March 31, 2006, an Offer of Settlement was filed that proposed the institution of an RCST that included modifications to the existing daily FERC MOO. Under the Offer of Settlement, as approved by FERC, the RCST provides the CAISO with a reliability backstop procurement mechanism to ensure the reliable operation of the CAISO Controlled Grid and modifies the compensation generators receive for the needed capacity they provide. This Offer of Settlement will expire on December 31, 2007.

6. CAISO Proposal #2

The CAISO proposes to retain the basic RCST concept but has made numerous modifications to the existing RCST tariff provisions. The CAISO recognizes that stakeholders have divergent views on many of the elements of the current RCST. A number of options for developing a revised pricing methodology were presented by stakeholders. Some were market-based, while others were cost-based. To evaluate these options and to provide a foundation for a revised proposal, the CAISO has identified the following criteria:

- Improve definition of the interim capacity product;
- Provide the correct incentives for suppliers to make units available for designation (thus minimizing use of Exceptional Dispatch);
- Provide transparent procurement prices;
- Ensure that pricing rules for interim capacity support efficient forward (bilateral) markets for RA;
- Reflect market and system conditions in the price associated with forward and spot procurement of interim capacity in different locations;
- Minimize reliance on backstop procurement where possible by allowing LSEs to procure interim capacity through bilateral transactions;
- Mitigate local market power when procuring interim capacity;
- Minimize administrative costs and implementation issues.

The CAISO believes that Proposal #2 represents a balanced approach for an interim backstop mechanism that will allow the CAISO to procure the resources necessary to reliably operate the grid. The CAISO will facilitate discussion among stakeholders in an attempt to build consensus on a comprehensive proposal. This section provides a discussion of each of the elements of Proposal #2.

6a) Need for Backstop Mechanism

In Proposal #1, the CAISO stated that a “backstop” is an appropriate mechanism to complement the MRTU market design, and that it is necessary “as a last resort” to enable the CAISO to maintain reliable grid operations in the event LSEs do not meet RARs. RA resources do not meet specific local reliability needs; or grid conditions change and create a need for the CAISO to procure capacity in order to maintain reliable operations.

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6 RCST was established as a result of FERC approval of an Offer of Settlement in Independent Energy Producers Association v California Independent System Operator Corporation, FERC Docket No. EL05-146 [“RCST Litigation”].
The CAISO has noted in its discussions with stakeholders that although the RA programs that are in place do provide certain capacity to meet load, and the RA programs are being improved every year, there may be instances during the year where RA resources are not sufficient to meet all of the operational needs of the grid operator and allow it to meet ARC. Without a flexible means to procure capacity to address unforeseen or changed circumstances or inherent inefficiencies or deficiencies in RA programs, the CAISO could be placed in the position in the Day-Ahead time frame of planning for the interruption of firm load or needing to obtain access to non-RA Participating Generator Agreement (“PGA”) resources. It is prudent to allow the CAISO the ability to procure resources when necessary to maintain reliable operations when such instances occur, and the CAISO should then provide feedback on such use to the CPUC and LRAs so that RA programs can be improved in the future.

CAISO Proposal #2
The CAISO position has not changed since Proposal #1. The CAISO believes that the backstop mechanism described in this proposal is an appropriate mechanism to complement the MRTU market design. The proposed backstop mechanism is necessary “as a last resort” to enable the CAISO to maintain reliable grid operations given the potential for events such as those described in this paper.

6b) Proposed Filing Date

In Proposal #1, the CAISO intended to request approval to make a filing from the CAISO Board of Governors at their September 6-7, 2007 Board meeting, and then make a tariff filing on September 11, 2007. This schedule was being pursued in an attempt to have the new backstop mechanism in place during November 2007, so that, if needed, the CAISO could procure backstop capacity in December 2007 prior to January 1, 2008 for the 2008 calendar year.

The impetus for this schedule was that if the CAISO had new backstop authority in mid- to late-November 2007 it could procure any deficiency in December 2007 after the LSEs final opportunity for 2008 RA showings on December 3, 2007. The CAISO noted that absent such new backstop authority, if there was a RA showing deficiency, the CAISO would only have its RMR contracting authority to make up the deficiency. The CAISO preferred to use the backstop tariff authority to procure any needed “last resort” capacity for 2008 rather than rely on RMR due to the superior cost allocation of the backstop (if capacity is procured under a RMR contract the costs of such procurement are spread to all load in the PTO service territory, whereas costs for capacity procured under the backstop mechanism can be better targeted to the entities that caused the deficiency). Having a new backstop authority in mid-November 2007 would have been ideal given the procurement timeline for the January through December 2008 compliance year.

CAISO Proposal #2
In August 2007 the CAISO decided to add two months to the stakeholder process to allow more time to work with stakeholders on the new backstop mechanism. This extension was necessary as there were many elements of Proposal #1 that stakeholders expressed concern about, and stakeholders wanted more time to work though the remaining issues,

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7 As part of ARC, the CAISO must comply with applicable North American Electric Reliability Council/Western Electricity Coordinating Council (“NERC/WECC”) requirements, including Minimum Operating Reliability Criteria (“MORC”).
including the process for designation resources and the pricing methodology. By adding this
time to the schedule, the first opportunity to request approval from the CAISO Board of
Governors to make a filing is at their December 12-13, 2007 Board meeting. If the CAISO
Board approves making a filing at that meeting, a filing would be made on January 17, 2008.
In the filing the CAISO would propose an effective date coincident with the start of the MRTU
tariff. Because FERC will likely require 60 days to review the filing before issuing its
decision, a January 17, 2008 filing will hopefully yield a favorable FERC Order in mid-March
2008, which would allow it to be in effect at the start of MRTU.

Given that the CAISO will not have new backstop authority in mid- to late-November 2007 as
initially planned, if the CAISO finds it necessary to procure additional local capacity to cure a
deficiency in a 2008 RA showing for a local requirement (where such deficiency, if any,
would be revealed after the LSEs final opportunity for 2008 RA showings on December 3,
2007), then the CAISO will use its RMR contracting authority to make up the 2008 local
deficiency. If such an action becomes necessary (and the CAISO will not know if such an
action is needed until early December 2007 – and it is possible that no procurement by the
CAISO will be required), then the CAISO will convene a stakeholder process to develop a
new methodology for allocating the costs of any RMR procurement made by the CAISO
solely for the purpose of curing a local deficiency in a 2008 RA showing for a local
requirement. The goal of the new methodology would be to allocate the costs for the local
capacity procured under the RMR contract to just the entity that caused the local deficiency.

6c) Requested Effective Date

In Proposal #1, as discussed above in section 9b, Proposed Filing Date, the CAISO initially
intended to make a FERC filing on September 11, 2007 and request an effective date of no
later than November 15, 2007.

CAISO Proposal #2

The CAISO now proposes to make a filing on January 17, 2008. In the filing the CAISO
would request an effective date concurrent with the start date of MRTU. An extension of
the effective date to the start of MRTU provides an opportunity for the CAISO to engage in
further dialog with stakeholders to address elements of the proposal such as the designation
process and pricing that are of concern to stakeholders.

This timetable means that, for the period January 1, 2008 forward until the start of MRTU, the
daily FERC MOO will still be in effect and the CAISO Tariff will revert back to the tariff
provisions that were in effect prior to the FERC approval of the Offer of Settlement in the
RCST Litigation. The CAISO would not have the new backstop authority in early 2008, but it
would have the daily FERC MOO and RMR contracting authority (with a new cost allocation
mechanism if needed for instances where RMR contracting was used to procure local
capacity to make up a deficiency in a 2008 RA showing for a local requirement).

6d) Extent of Changes to Current RCST

In Proposal #1, the CAISO proposed to continue the general RCST structure with some
modifications to ensure compatibility with the MRTU market design and ARC, as well as
certain other enhancements. The CAISO argued that it makes sense to extend some of the
RCST provisions and make modifications in some places to adapt it to function effectively

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8 MRTU is scheduled for a “go live” date of March 31, 2007 for an initial trade date of April 1, 2008.
under MRTU because stakeholders have invested substantial resources in developing it, FERC has found it to be just and reasonable, and many stakeholders have stated a desire to use it as a framework for developing the successor mechanism.

CAISO Proposal #2
Like Proposal #1, this proposal uses the general RCST framework and extends many of the provisions of the RCST. However, as discussed below, the CAISO is proposing a number of changes to the existing RCST mechanism.

As discussed in Proposal #1, the CAISO has identified a number of issues with the RCST that affect its ability to fully provide for CAISO operational needs. The CAISO believes that these issues need to be addressed and remedied. While some stakeholders may feel it is preferable for the successor mechanism to be more prescriptive and/or have more specificity than the RCST, particularly 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. Some deficiencies restricting the designation include:

- RCST provides that the CAISO can only procure “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.” Because the CAISO can only designate whole units, this restriction can prevent the CAISO from procuring needed increments of capacity (e.g., even if the CAISO has determined that it needs 100 megawatts (“MW”) from a 200 MW resource, it is restricted from procuring any additional capacity).
- The trigger for a Significant Event in 2007 is based on a material difference in CAISO Controlled Grid operations relative to what was assumed by the CPUC and LRAs in developing Local RAR for 2007 that causes, or threatens to cause, a failure to meet ARC. The CAISO has needs for capacity that go beyond just local capacity.

6e) No Daily FERC Must-Offer Obligation

Prior to FERC approval of the RCST, FERC ordered that the daily FERC MOO would expire at the start of MRTU. Therefore, the current market feature that requires that certain types of resources make themselves available to the CAISO on a daily basis (the “daily FERC MOO) will not be present under MRTU.

CAISO Proposal #2
FERC has ordered that the daily FERC MOO will expire at the start of MRTU. The CAISO is not proposing to include a provision in the ICPM tariff akin to the daily FERC MOO.

6f) Scope (Obligations of ICPM Resource and Use of RMR)

This section discusses whether the product/service to be procured under the ICPM would be just a “pure capacity product” or whether it also might include certain types of services such as black start and/or voltage support that are currently provided through RMR contracting. This section also discusses what the obligations of a resource would be once it is procured under the new backstop mechanism.

Note that in the early phase of the stakeholder process some stakeholders requested that the new backstop include both “pure capacity” services and certain services that are currently provided through RMR contracting. In Proposal #1 the CAISO reported that it had
considered this request, but determined that the ICPM would be a pure capacity product and would not include the other types of services discussed above.

CAISO Proposal #2
The CAISO proposes to procure a “capacity only” type of product, under a tariff-based schedule for service, with filed terms and conditions. The CAISO would be paying for a call option on the capacity of a resource that is equivalent to the RA based offer obligation. Thus, a resource procured under the ICPM would essentially be treated like an RA resource. An ICPM resource would have a daily offer obligation for both Energy and Ancillary Services, would have to submit a $0 availability bid in RUC, and would no longer be eligible for Frequently Mitigated Unit (“FMU”) Bid Adders. Some limited amount of RMR contracting would continue into 2008 and beyond as may be required for additional services such as Black Start and Dual Fuel. As discussed in detail with stakeholders, and described in detail in Proposal #1, the CAISO would continue to minimize RMR contracting to the maximum extent possible in 2008 and beyond. RMR contracting has significantly decreased in each of the last two years and is expected to continue to decline in the future.

6g) Sunset Date

Many stakeholders have suggested that a sunset date may be a way to get stakeholders to agree now on a replacement for the RCST. A sunset date would make the new backstop tariff provisions “interim,” and allow an opportunity to reassess the mechanism at a later date when more information will be known, such as how well MRTU is working, when a future capacity pricing mechanism might be available and what it might look like, and how well the new backstop mechanism is working.

In Proposal #1, the CAISO proposed that the backstop tariff provisions would automatically sunset on the earlier of midnight on December 31, 2012, or the effective date of a replacement capacity pricing mechanism that eliminates such backstop, and no party waives their Section 205/206 rights to propose modifications to or elimination of the backstop mechanism.

CAISO Proposal #2
The CAISO has revised its earlier proposal to be responsive to stakeholder concerns. The CAISO now proposes that the new backstop would automatically sunset on midnight on December 31, 2010. This date would provide the CAISO and stakeholders with a full two years of operational data for the peak summer months (summer 2008 and summer 2009). Much more information regarding a long-term capacity pricing mechanism (perhaps including a capacity market) also would be available in 2010. The CAISO would convene a stakeholder process in early 2010 (likely in March 2010) to revisit and assess the ICPM.

The CAISO believes that it does not make sense to propose a sunset date any sooner than December 31, 2010 as it will take at least six to eight months to develop a successor to the ICPM. So, for example, a sunset date as early as December 31, 2009 would give the CAISO and stakeholders only one year of peak summer data (summer 2008). Under this scenario, to develop a successor to the ICPM the CAISO would need to convene a stakeholder process in about March 2009 to have a chance at having an updated mechanism in place on December 31, 2009. This would mean re-visiting the ICPM, and all of the attendant expenditure of effort by the CAISO and stakeholders, only one year from the initial effective date.
6h) Tariff Provisions until Long-Term Capacity Pricing Mechanism

One of the topics raised in Proposal #1 was whether there needs to be a mechanism that would be in effect either starting in late 2007 or on January 1, 2008, and continuing up to the start of MRTU, and another, slightly different, “MRTU-ized” interim capacity procurement mechanism that would be in effect under MRTU. In essence, the question revolved around, “Can one mechanism be made to work starting around January 1, 2008 and going forward, or are two mechanisms needed?”

In Proposal #1, the CAISO proposed that the filing would request that the RCST provisions related to the daily FERC MOO and FMU Bid Adder be retained until the start of MRTU, at which point they would sunset automatically. The other tariff provisions proposed by the CAISO would apply to any RCST designations to be effective January 1, 2008 and beyond and would remain in effect until the sunset date provisions are triggered.

CAISO Proposal #2
The CAISO has revised its previous proposal, due in large part to its decision in August 2007 to add two months to the schedule to further work with stakeholders on the tariff provisions. The CAISO now proposes that the ICPM would be effective concurrent with the start of MRTU. The RCST will expire on December 31, 2007. Starting on January 1, 2008 and continuing until the start of MRTU, the CAISO Tariff will revert back to the tariff provisions that were in effect prior to the FERC approval of the Offer of Settlement in the RCST Litigation. The new backstop would automatically sunset on midnight on December 31, 2010 and the CAISO would convene a stakeholder process in early 2010 to reassess the need and design of an extended ICPM.

6i) Tariff Provisions after Long-Term Capacity Pricing Mechanism

Proposal #1 discussed whether the proposal for the new backstop mechanism should address the time period during MRTU following implementation of a long-term capacity pricing mechanism. In Proposal #1, the CAISO stated that the ICPM filing should not address this future time period as it is premature to do so now since the future “end state” cannot be predicted at this time.

CAISO Proposal #2
Stakeholders and the CAISO agree that it is premature to address this topic now. Therefore, the ICPM filing would not address this time period.

6j) Use of Backstop

In Proposal #1, the CAISO proposed that new backstop mechanism would be used to cover the following situations.

- An LSE has not procured sufficient RA capacity on its own to meet its RA obligations, it has been given an opportunity to cure the deficiency and has not done so, and the CAISO needs to procure capacity on behalf to the deficient LSE to bring the RA capacity up to the RA capacity requirement.
- Each LSE in a local area procures the total MW amount of their local RA obligation, but that portfolio of resources procured by all LSEs in the local area is not adequate in that local area due to “effectiveness factors” associated with the resources that were procured and the CAISO has to procure some addition MW of capacity.
A single significant event, or a combination of smaller events, occurs that either violates an assumption in the RA program that was used to determine the RA capacity obligation, or produces a material change in system conditions or in ISO-Controlled Grid Operations, and it requires the CAISO to procure additional capacity to continue to reliably operate the grid.

CAISO Proposal #2
The CAISO has not changed the proposed use of the backstop mechanism from Proposal #1. The CAISO proposes that the CAISO would use the new backstop authority to procure capacity in the following circumstances:

1. Type 1 Backstop Procurement, where the CAISO procures capacity forward to cure a Resource Adequacy deficiency – Ensure that each LSE procures all of the capacity that it is required to procure to meet its applicable local and system RA capacity requirements. (For example, the CAISO would make sure that the capacity of the procured RA resources meets the 115 percent requirement established by the CPUC for the LSEs under the CPUC’s jurisdiction. The CAISO also would make sure that the capacity of the procured RA resources meets the capacity requirement established by the applicable LRA for each LSE that is under that LRA’s jurisdiction.) Action by the CAISO would include:
   a. The CAISO procuring capacity in instances where an LSE fails to contract for its full RAR (i.e., the LSE fails to make up an identified deficiency in an RA showing, whether annual local, annual system, or monthly system), after being given an opportunity to do so by the CAISO, and is “short” in its RA showing, or otherwise violates a “counting rule” or “counting constraint” (like the Path 26 counting constraint) and therefore is short.
   b. The aggregate amount of resources that are contracted for in a local area by the applicable LSEs and included in their RA showings is in compliance with the aggregate MW amount of the RA capacity requirement, but the CAISO still needs additional capacity to comply with ARC due to the “effectiveness” of the individual units that have been procured by LSEs and now form the aggregate portfolio that the CAISO has available for its use.

2. Type 2 Backstop Procurement, where the CAISO procures capacity to address an immediate, unexpected, resource shortage, which is likely to be lasting and/or recurring - A Significant Event occurs, or is expected to occur, that causes, or threatens to cause, a failure to meet ARC, and the CAISO determines that capacity should be procured through the backstop tariff to address the Significant Event and allow the CAISO to continue to reliably operate the grid.

6k) Process and Trigger for Backstop
As discussed in earlier papers related to the ICPM, the CAISO acknowledged that it is important that the process used to procure backstop capacity be transparent to all stakeholders. Specifically, stakeholders have told the CAISO that the timing of events, actions taken by the CAISO to assess the impact of these events, and timeliness of reporting actions taken by the CAISO are essential elements of the ICPM. Therefore, the CAISO has

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9 The CAISO also may need to procure backstop capacity in the circumstance where LSEs may be compliant with RA requirements, but insufficient capacity was procured in a specific load pocket. This issue can arise because an LRA may allow the aggregation of load pockets in a particular Transmission Access Charge (“TAC”) area for procurement compliance purposes. For example, the CPUC allows for the aggregation of load pockets in the Pacific Gas and Electric Company TAC area.
considered the following stakeholder comments in developing a revised proposal for triggering the designation of capacity under the ICPM.

**CAISO Proposal #2**
The CAISO may need to procure capacity to address three broad needs. As a result, the mechanism and criteria leading to a procurement decision should appropriately be based on triggers that align with the underlying need. The broad types of events that might initiate the proposed process are summarized in the table below. A more detailed description of the proposed processes is provided below.

<table>
<thead>
<tr>
<th>Event Type</th>
<th>Backstop Purpose</th>
<th>Trigger</th>
</tr>
</thead>
<tbody>
<tr>
<td>LSE Procurement Shortfall</td>
<td>LSE has not contracted for its full RA requirement, after being given an opportunity to cure by the CAISO</td>
<td>Known deficiency in LSE RA showing that it is not cured by an LSE</td>
</tr>
<tr>
<td>Local Effectiveness Deficiency</td>
<td>Additional local capacity is needed beyond the aggregate acquired by compliant LSEs</td>
<td>Engineering analysis identifies a deficiency in meeting the local capacity needs</td>
</tr>
<tr>
<td>Significant Event</td>
<td>A single substantial operational event, or a combination of smaller events, has occurred that requires additional capacity not provided by LSE obligations for RA system and local capacity</td>
<td>Awareness of an event or events that may be significant and enduring, analyzed and found to endanger the CAISO’s ability to reliably operate the system with the remaining RA resources</td>
</tr>
</tbody>
</table>

The CAISO proposes to follow the process described below for each situation.

**LSE Procurement Shortfall**
The need for this capacity arises because one or more LSEs have not reflected sufficient RA resources in their RA showings to meet their obligations as established by their respective LRA. Therefore, the CAISO needs to procure capacity on behalf of the LSE(s).

a) The CAISO would analyze the showings submitted by LSE(s) to determine if there is a deficiency. The CAISO will assess based on the total system RA needs. i.e. other LSEs may have cured the deficiency through over-procurement.

b) If there is no deficiency, the CAISO would take no action.

c) If there is a deficiency, the CAISO would (1) notify the SC for the LSE and the LRA of the deficiency and provide an opportunity for the LSE to cure the deficiency, (2) if the LSE does not cure the deficiency, the CAISO would proceed to procure resources to meet the deficiency.

d) The CAISO would procure the minimum capacity necessary to meet RA requirements, subject to limitations on partial unit purchases,

e) All costs would be charged to the LSE(s) that contributed to the deficiency and consistent with the cost allocation described later in this paper.

**Local Effectiveness Deficiency**
The CAISO expects that LSEs will acquire sufficient capacity at levels that meet the established locational needs. However, it is possible that the combination of resources acquired will not be fully effective in addressing all contingencies that underlie the local
capacity requirements. Therefore, the need for this capacity arises because the local RA resources procured by LSEs are found to be ineffective in meeting all contingencies.

a) The CAISO would analyze the showings submitted by LSE(s) to determine whether additional local capacity is needed beyond the aggregate amount procured by compliant LSEs.
   I. The CAISO will load the resources procured by LSEs and included in their annual local showings into its grid model and analyze the portfolio of resources against the same study assumptions used to establish the local capacity requirement to see if sufficient capacity has been procured in the local area to meet the local capacity requirement.
   b) If there is no deficiency, the CAISO would take no action.
   c) If there is a deficiency, the CAISO would procure the minimum sufficient capacity to alleviate the deficiency.
   d) All costs would be charged to the LSEs based on their proportionate contribution to TAC Area peak Demand.

**Significant Event**
The need for this capacity arises because the CAISO has experienced a set of operating conditions that cannot be met within the obligations to meet ARC. Therefore, the CAISO proposes to perform an assessment of whether an event or events have occurred (1) that violate, are inconsistent with, or reflect a material change from an assumption in the RA program or (2) that otherwise threaten reliable grid operations. This will include an assessment of the expected event duration as the CAISO believes the event should be enduring for the CAISO to procure capacity on a forward basis pursuant to the backstop mechanism. In addition, stakeholder comments have indicated their desire to engage in a dialog with CAISO management regarding any supplemental procurement of capacity. With these points to consider, the CAISO proposes to utilize a three-step designation process to initiate backstop procurement.

**Step One:**
I. 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.
II. CAISO would evaluate if that event or events cause, or threatens to cause, a failure to meet ARC.
III. Based on i and ii, CAISO would determine if the event constitutes a Significant Event (see the definition below of Significant Event for more details).
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:**
- 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).

- 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 CAISO operations personnel to understand the basis for that designation.
- 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.

A Significant Event designation made in a given compliance year would not extend into the subsequent compliance year.

Note: The CAISO proposes to report instances where it has procured capacity under the new backstop mechanism. Section 9m provides the details regarding the report content. In addition, 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 in the proposed report required in step one of this process.

**61) Definition of Significant Event**

The CAISO believes that a flexible means is needed to procure capacity 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 time frame of planning for the interruption of firm load or failing to meet ARC. 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 concept of Significant Event is an element that was discussed at length at the May 18, June 6, and July 25, 2007 stakeholder meetings. The CAISO acknowledges that this reason for backstop procurement by the CAISO should be appropriately defined. However, establishing a clear definition is challenging due to the very nature of unforeseen events that are nevertheless high impact events that cause the CAISO to be unable to meet requirements for reliable system operations. Most parties have reflected in their written comments that it is important that this concept be well defined, and a detailed listing be provided, if possible, of examples that could trigger procurement for a Significant Event. The CAISO provided such a listing in its first whitepaper. In this second proposal, the CAISO has attempted to refine that listing and continues to reinforce its intention that ICPM procurement will be based on a determination of need for additional capacity and not specifically triggered by the events provided as examples.
CAISO Proposal #2

In response to stakeholder comments the CAISO has made some changes to the definition of Significant Event since Proposal #1A. The CAISO now proposes that Significant Event be defined as: a single substantial event, or a combination of smaller events, that is determined by the CAISO to either:

- results in a material difference from what was assumed in the RA program for purposes of determining the RA capacity requirement, or
- produce a material change in system conditions or in ISO-Controlled Grid Operations, that cause, or threatens to cause, a failure to meet ARC absent the prospective use of a non-RA resource(s) on a consistent basis.

The events that the CAISO might evaluate to determine whether a Significant Event has occurred include the following events and any similar types of events:

1. Loss of a facility, for any cause, that affects its capability, including but not limited to:
   a. Loss of a local RA resource after annual LSE RA showing
   b. 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
   c. Loss of a facility, CAISO Controlled or not, that affects the deliverability of RA, RMR or other resource available to the CAISO, or affects the operation of the grid

2. Grid study error, forecast changes, incorrect assumptions, bad data, or modeling inaccuracies, including, but not limited to:
   a. An official change in the adopted Load forecast by the CEC after it has been used in RA showings by LSEs
   b. Error in load distribution factors affecting local RA
   c. Voltage or reactive resource modeling errors or resource changes
   d. Errors relative to deliverability of RA resources to load
   e. Changes in non-CAISO Controlled Grid affecting previous assumptions

3. Changes in applicable NERC or WECC reliability criteria or operating policies affecting the CAISO

4. Insufficiency of RA units in RUC resulting in consistent use of non-RA units (Note: The use of non-RA units as described above would be a trigger for the CAISO to then assess if a Significant Event has occurred. Having to use non-RA resources in RUC may mean that there are not enough RA resources and the CAISO has to call on non-RA resources in RUC or that there are sufficient RA resources but the economic optimization used in RUC selects a non-RA resource.)

5. RUC and any subsequent Hour-Ahead Scheduling Procedure (“HASP”) or real time run of the SCUC cannot converge by themselves with only RA units and requires manual addition by the CAISO of non-RA units. (Note: Same clarifying comment applies as at the end of #5 above.)

6. Change in federal or state law or regulation; court action; or imposition of environmental restrictions that affect the operation of resources
6m) Reporting

In Proposal #1 the CAISO proposed extending the current RCST reporting obligations for use under the ICPM tariff. At the July 25, 2007 stakeholder meeting, parties stated that they would like the CAISO to report at least as much information as is currently required under the RCST tariff. In addition, stakeholders requested that the CAISO report additional information, such as use of non-RA resources, so that effective feedback can be provided to the CPUC and LRAs to allow them to improve their RA programs. Stakeholders also requested that the CAISO commit to issuing reports on a timely and regular basis, and ensure that the CAISO meets the timing obligations in the CAISO tariff.

CAISO Proposal #2

The CAISO proposes to use the reporting framework that is in the RCST for the new backstop mechanism, and to augment that reporting by posting additional information as described below. ICPM reports would appropriately maintain the confidentiality of market sensitive information, while providing enough data so that the CAISO, stakeholders, the CPUC and LRAs can consider the effectiveness of RA programs and future enhancements to those programs.

Report 1: Designation of a Resource under the ICPM Tariff

This report would be posted to the CAISO web site within 30 days of when the CAISO has procured a resource through the ICPM tariff authority. The CAISO would provide a market notice of the availability of this report. The report would include the items listed below.

1. Description of the reason for the designation (the categories are: LSE Procurement Shortfall, Local Effectiveness Deficiency, or Significant Event, and the report would discuss why it was necessary to procure under the ICPM authority)
2. If the reason for the designation is for a Significant Event, the description will 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 for all backstop designations:
   a. Resource name
   b. Amount of capacity procured (MW)
   c. Date capacity was procured (month/day/year)
   d. Duration of the designation (days)
   e. Price

Report 2: Non-Market Commitments and Repeated Market Commitments of Non-RA Capacity and Why it was Committed

This report would be posted to the CAISO web site within 10 calendar days after the end of each month, looking back at previous month. It would report on the following:

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10 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.
1. Any non-market commitments of non-RA capacity (i.e., capacity procured manually by the CAISO operators).

2. Repeated market commitments of non-RA capacity (i.e. capacity procured by RUC). The term “repeated” is defined as every fourth time a unit is committed. The monthly report will include every instance where a unit has been committed 4, 8, 12, etc. times in a calendar year.

This report would not include commitments of RA capacity, RMR capacity, nor capacity that has been designated as ICPM. The CAISO would provide a market notice of the availability of this report. A matrix is provided below that shows the type of information that would be included in this report.

<table>
<thead>
<tr>
<th>Resource Name</th>
<th>IOU service area and local area (if applicable)</th>
<th>Maximum capacity committed over the event (MW)</th>
<th>How capacity was procured (RUC, PGA via emergency, etc)</th>
<th>Reason capacity was committed</th>
<th>Were all RA resources used first? If not, why not?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non-Market Commitments and Repeated Market Commitments of Non-RA Capacity during Month</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Some stakeholders have asked if the CAISO, CPUC and CEC can provide additional, historic actual data to assist stakeholders in assessing how well RA programs are performing and to help improve future RA programs (see the list below). The data may be provided to as fine a level of granularity as daily (if it changes daily), with the information posted to a public web site. The CAISO notes that some of this data is already posted to the CAISO web site, and, where applicable, the hyperlink to access the information on a CAISO web site is provided below. Some of this data may also be available on the web sites of the CPUC and CEC. The CAISO is willing to work with the CPUC and CEC to explore the extent to which such information is available, and whether it can be posted to a public web site. For the CAISO, the extent to which this information already exists in CAISO systems, is readily available, and has no legal restrictions to posting it, will be a determining factor on whether this information is posted by the CAISO. The types of data that have been requested be posted are:

**Historic Actual Data**
- Net imports
- Demand response/interruptible load – The CPUC has this information, which is provided to the CPUC by the investor-owned utilities. The CPUC periodically issues reports on this information. The CPUC would need to post this data.
- Actual load, by zone or location
- Aggregate wind contribution on peak
### Allocation Data

- Import allocations [http://www.caiso.com/1c44/1c44b2dd750.html](http://www.caiso.com/1c44/1c44b2dd750.html)
- Aggregate Path 26 allocations – The CPUC has this information as it was developed to implement a CPUC Order to establish a counting convention that is applicable to the LSEs that are under CPUC jurisdiction. The CPUC would need to post this data.

### 6n) Committed Term of Payments

The committed term of payments is addressed in the RCST. The circumstances under which capacity would be procured under the new backstop mechanism are similar in most cases to the circumstances addressed in the RCST. The one difference is that this proposal has two new situations that could arise under Significant Event that were not present in the RCST (RUC/HASP/SCUC, and changes in federal or state law).

### CAISO Proposal #2

The length of time over which the payment would be made would vary based on the situation associated with the procurement. The committed terms of payment proposed herein are similar to those in the RCST.

The minimum committed term of payment would be one month. The committed payment term can extend beyond one month depending on the situation. The table below describes the terms applicable for specific applications of the backstop mechanism.

<table>
<thead>
<tr>
<th>Situation:</th>
<th>Committed Term:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Deficiency in:</td>
<td></td>
</tr>
<tr>
<td>a) Year-Ahead System showing (including violation of Path 26 counting constraint)</td>
<td>a) Minimum of 5 months (May-Sept)</td>
</tr>
<tr>
<td>b) Year-Ahead Local showing (short in showing, or effectiveness)</td>
<td>b) Calendar year for either situation</td>
</tr>
<tr>
<td>c) Month-Ahead System showing (including violation of Path 26 counting constraint)</td>
<td>c) 1 month</td>
</tr>
</tbody>
</table>

A Significant Event” has occurred:

The need for this capacity arises because the CAISO has experienced a set of operating conditions that cannot be met within its obligation to meet ARC. Therefore, the CAISO proposes to perform an assessment to determine the magnitude and duration of additional capacity. The resulting designation of any additional capacity will be consistent with that assessment.

Minimum of 1 month, and maximum of up to time CAISO determines that event will remain in effect, but not extend into the subsequent compliance year (refer to section 9k, Process and Trigger for Backstop, for a discussion of the 3-step process that will be used for Significant Event designations).
6o) Target Annual Capacity Price (Basis of Compensation)

The RCST provides for a “target annual capacity price.” This price is adjusted by monthly shaping factor and availability performance factors. Some stakeholders argue that this price is not justified for interim capacity procurement from existing generation units, while others argue that the pricing basis is correct, but that more recent estimates of CONE require updating of the target annual capacity price.

CAISO Proposal #2

In response to stakeholder comments, CAISO has evaluated several options for revising the compensation formulas in the RCST Settlement and those proposed in the earlier version of the White Paper. The criteria for evaluating the options were presented in Section 6, above.

Evaluation of Options

Two types of options were discussed by stakeholders: (1) to retain the RCST fixed price methodology, but change the target annual capacity price; and (2) to adopt a market-based pricing method, such as an auction or solicitation of sealed-bid standing offers. In general, CAISO found that the various proposals did not appropriately define the product being procured in each situation and did not clearly distinguish the pricing basis for procurement under different market conditions. These concerns lead to the revised proposal presented in the next section. Before discussing that proposal, it is useful to review the prior options.

A starting point is to consider options that do not modify the RCST pricing methodology, but rather propose that the target annual capacity price itself is incorrect, being either too low or too high, and should thus be revised. Some stakeholders argue that a price based on recent estimates of CONE should be set in all circumstances, while others argue that only a cost-based price should be paid for backstop capacity procured from existing units. Neither of these proposals adequately consider the relationship of pricing for backstop capacity procurement and forward RA procurement, nor the effect of market supply conditions on backstop prices. As will be discussed further below, to correct RA deficiency, a fixed high price, such as the CONE, sends the wrong price for surplus areas, while a fixed low price sends the wrong price for areas at, or close to, deficiency. On the other hand, there is a basis for not paying a price based on CONE for transitional procurement in response to Significant Events.

Alternatively to fixed price proposals, several stakeholders have proposed market-based approaches to determine the target annual capacity price, such as periodic auctions or solicitation of standing, sealed-bid offers. With a price cap set at CONE or some multiple, such methods might result in prices between the cap and a lower price, such as a cost-based price, depending on the location. In reviewing these options, as discussed in more detail below, CAISO’s primary concerns are the difficulty of implementation and market power mitigation. Auctions would be more administratively burdensome to implement and administratively less efficient than a simple tariff-based pricing mechanism. Moreover, auctions are not appropriate for procurement in response to Significant Events. Also, both

11 A number of auction designs are currently being examined in some detail in the CPUC RA proceedings as well as by CAISO in its parallel efforts to examine centralized capacity market designs. See, e.g., California ISO, Assessment of Centralized Capacity Market Proposals, September 14, 2007.
an auction approach and standing offers would require appropriate market power mitigation, which would require additional rules and evaluation.

Devising a pricing method that considers all the evaluation criteria and respects market design and fundamental economic principles, but which does not involve an auction or sealed-bid solicitation, still requires a fairly complicated design. The CAISO develops such a proposal here. The advantage of proceeding with this design at the present time is that it provides a better market basis for backstop pricing, allowing for more rational price signals to the forward RA bilateral markets and simplifying the pricing of procurement in response to Significant Events.

Summary of CAISO Proposal

The major details of the CAISO proposal are as follows. As noted in section 9(k), backstop capacity is being procured for three types of events:

- An LSE is deficient in its RA showing [Type 1a];
- An LSE’s local RA showing is compliant, but needs to be adjusted for purposes of effectiveness [Type 1b];
- A Significant Event requires temporary procurement of additional capacity [Type 2].

CAISO proposes that the designation types support two different pricing rules. Type 1a and 1b procurement will take place before the delivery period to provide a forward, short-term (annual, multi-monthly) backstop for the RA market. The “Type 1” pricing rule will be used for both Type 1a and 1b procurements. These types of procurements take place because the forward RA market has failed to clear – the RA requirement has not been met with sufficient supply, either at the system or local area level – and hence a market-based capacity price is needed for any interim procurement by CAISO on behalf of LSEs. Because the long-term market has failed to clear, and assuming the absence of market power, marginal pricing principles would suggest that the incremental MW procured by CAISO in response to RA deficiency should be capped at CONE or a multiple of CONE. Put another way, while these incremental MW will in practice be procured from existing capacity, the deficiency price is known by the forward markets and hence must be able to signal up to the CONE price to elicit an efficient forward procurement strategy. This principle is now standard in designs for resource adequacy markets, whether they clear on a multi-year, annual or monthly basis. The principle is also embodied in the CPUC penalties for RA deficiency, as discussed below.

Setting a backstop price cap at CONE does not mean that such a price will clear the marginal MW in a competitive market. When there is a surplus of capacity, the market price should clear well below CONE. However, under the RCST pricing method, there was no “demand curve” to reflect relative capacity shortage or surplus in different locations. Hence, based on designs used for such purposes in markets for capacity, CAISO is now proposing to define demand curves for capacity which will allow the backstop target price to drop from the CONE in conditions of surplus. In the presence of market power, suppliers can withhold to affect the market clearing price. Hence, in addition to the demand curve, CAISO proposes to cap the price offered for procurement of Type 1 interim capacity at a price determined by clearing all capacity against the demand curve as if they were price-takers. In theory, this

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To provide appropriate market incentives, the price cap could be greater than CONE, as it is in several other ISO capacity markets. However, for reasons discussed below, CAISO proposes CONE as the cap.
methodology ensures that the price does not reflect market power (although as discussed below, in deficient locations, this pricing mechanism could put upward pressure on forward prices).

In contrast to Type 1 procurement, “Type 2” procurement takes place when a Significant Event happens in which full RA procurement under existing RA requirements proves insufficient to meet reliability needs. That is, the market for RA has cleared, but the RA requirements have not covered the capacity needs created by the Significant Event. Market design principles would suggest that CAISO is not, in this instance, seeking to send a price signal to the forward market, but rather is primarily paying to use available capacity during the Significant Event. If established on the basis of opportunity costs for the long-term capacity product, the price for such capacity should in principle be low, because non-RA generation that is available during the year will have no alternative uses, and hence no opportunity costs, for their capacity. However, such units may still not be covering their fixed costs, due to the presence of market power mitigation in the energy markets. These considerations suggest a Type 2 procurement price that, at a minimum, reflects a payment for some significant component of going forward costs. If a market-based approach is taken, e.g., if such units are allowed to submit an a capacity offer similar to that in the RUC, there may be a market power issue due to the scarcity of available units for designation in many such circumstances. The CAISO has thus evaluated two pricing options for this circumstance: first, using the same pricing method as for Type 1 purchases, which potentially reflects market scarcity and corrects for market power; and second, pricing that covers a unit’s fixed O&M component of going forward costs on a monthly basis and is not subsequently adjusted for PER. CAISO proposes that the second approach -- basing the procurement price on going forward costs -- is the preferred option.

Formula for Type 1 Annual Capacity Target Price

As noted, in contrast with the earlier version of the White Paper, CAISO now proposes to base the Type 1 annual capacity target price on updated estimates of CONE in California undertaken by the CEC. 13 If a demand curve is used, the annual capacity target price will effectively become the horizontal upper bound of the curve, as discussed below, with prices below that cap generated when capacity clears the sloped portion of the demand curve. Note that as with the RCST payment rule, all Type 1 payments will be adjusted ex post for PER and also modified by a monthly shaping factor and availability factor. These additional pricing modifications are discussed in Sections 9(q-r).

Determination of CONE for ICPM purposes. Stakeholders and state agencies have suggested a number of methods for calculating CONE. Of the studies that CAISO has reviewed to date, the most robust data-set is found in the draft CEC study. The following table summarizes the average of the total fixed cost estimates for a small simple cycle CT (50 MW) by type of power plant developer based on a survey of 15 such plants that came into operation between 2001 and 2006. 14 CAISO proposes to base its annual capacity target

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14 This table, provided to CAISO by the CEC, converts data on fixed costs in the CEC study that was presented in $/MWh to $/kW-year. The plants surveyed are listed in CEC, “Comparative Costs of California Central Station Electricity Generation Technologies,” pg. 23, Table 11.
price on a simple average of these estimates, which results in a CONE value of $162.48/kW-year.\textsuperscript{15}

CEC Estimates of Fixed Costs of Simple Cycle CTs in $/kW-year

<table>
<thead>
<tr>
<th>In-Service Year =2007</th>
<th>Size MW</th>
<th>Capital &amp; Financing</th>
<th>Insurance</th>
<th>Ad Valorem</th>
<th>Fixed O&amp;M</th>
<th>Taxes</th>
<th>Total Fixed Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Small Simple Cycle - Merchant Plant</td>
<td>50</td>
<td>145.30</td>
<td>7.25</td>
<td>9.25</td>
<td>20.74</td>
<td>41.85</td>
<td>224.38</td>
</tr>
<tr>
<td>Small Simple Cycle - IOU</td>
<td>50</td>
<td>112.91</td>
<td>4.10</td>
<td>7.30</td>
<td>21.16</td>
<td>19.46</td>
<td>164.93</td>
</tr>
<tr>
<td>Small Simple Cycle - POU</td>
<td>50</td>
<td>64.98</td>
<td>6.04</td>
<td>5.45</td>
<td>21.66</td>
<td>0.00</td>
<td>98.13</td>
</tr>
</tbody>
</table>

The average estimates of fixed costs presented in the CEC study do not offer insight into local area variation in such costs. Hence, while CONE will be different in each local area, for purposes of administrative simplicity, and in the absence of empirical data, CAISO proposes to use the value of $162.48/kW-year as a target capacity price for all locations.

Purpose of Proposed Demand Curve and Market Clearing Methodology. CAISO proposes to use a sloped demand curve as a means to establish market-based pricing for interim capacity. There will not be an auction to clear this demand curve, but rather, CAISO will clear the market with existing actual capacity MW, as described below. This pricing method has the property that although it does not clear an auction for capacity, it does offer a reasonable approximation of the upper bound on a clearing price in the absence of physical or economic withholding (i.e., market power). The cleared price is then used as a proxy for a market price. These features of the proposed pricing mechanism are based on elements of capacity market designs that have been adopted or proposed in other ISO markets. There is substantial commentary on such design features in various FERC dockets and elsewhere.

Definition of Demand Curve. A sloped demand curve would be defined for each local area as well as for system purchases. As shown in Figure 1, the demand curve under consideration has four key parameters: (1) a price cap for purchases when the market is short on capacity; (2) an inflection point that determines when the market is provided with a scarcity price signal; (3) a slope that provides buyers with a proxy willingness to pay for capacity up to some maximum MW; and (4) a zero price intercept, where the price of capacity is set to $0/MW. As an alternative to (4), the curve can also include (5) a price floor that sets a minimum payment.

\textsuperscript{15} The average of the three costs listed in the “Total Fixed Cost” column of the table.
CAISO proposes the following parameters for the locational demand curves:

(1) the cap will be set at CONE.\textsuperscript{16}

(2) the inflection point will be at 100% of local or system RA requirements.

(3,4) the zero price intercept will be set at 112% of RA requirements for system areas and 118% of RA requirements for local areas. The slope of the demand curve at each location will be determined by the line between the zero price intercept and the point defined by the RA MW requirement and the price estimate of CONE. As discussed above, setting prices by using demand curves for procurement greater than the requirement does not in this instance imply purchases over and above the requirement. The purpose of defining those curves is simply to reflect in a reasonable fashion the impact of market conditions on procurement. CAISO proposes a steeper slope for the demand curve in system areas than for the demand curve in local areas. This sends a slightly higher price signal for surplus capacity on the sloped part of the demand curve in the local areas, consistent with reliability needs.

A final issue is whether in a location that has sufficient surplus, the procurement price for Type 1 interim capacity should ever be $0/MW. In capacity auction designs with demand curves, the capacity price could approach $0/MW in conditions of sufficient surplus capacity. At that point, the ISO is typically buying well in excess of the resource adequacy target.

\textsuperscript{16} Other demand curves for capacity, such as those used by the New York ISO, set the cap at a multiple of CONE if the market clears sufficiently below the capacity requirement. However, CAISO will not propose a price cap greater than CONE for purposes of deriving a backstop price under an interim capacity procurement mechanism. Such a price cap may be considered in concert with a longer-term centralized capacity market design. See, e.g., California ISO, Assessment of Centralized Capacity Market Proposals, September 14, 2007.
However, under the ICPM, CAISO is not actually purchasing capacity in excess of the CPUC RAR, so while there is economic rationale for having the price drop in locations with a surplus, there is also rationale for a price floor. CAISO has considered a number of alternative price floors. There are two basic categories: (1) a price floor subject to the ex post adjustments discussed in section 9 (q-r); or (2) a price not subject to the ex post adjustment. To be consistent with the demand curve pricing mechanism, the price floor would have to be subject to an ex post deduction, but then the floor would have to be greater than the deduction for the payment to remain positive. E.g., if the PER and other adjustments summed to $30/kW-year, then the price floor would have to be greater than that price to result in a positive payment. Alternatively, the price floor payment could not be subject to the deduction. However, that approach then alters the effective price determined by the demand curve, because the price floor would be a payment equivalent financially to a higher payment at some point on the sloped part of the demand curve, but a higher payment subject to an ex post deduction. Neither of these approaches is ideal, but there is justification for ensuring that the procurement price never drops below some reasonable component of going forward costs. Moreover, with this interim proposal, as discussed next, the effective prices in local areas are likely to either be at the cap or at the floor. CAISO thus proposes that:

(5) the price floor will be the a payment based on the fixed O&M component of going forward costs proposed for Type 2 procurement, as discussed below, and set at $21.20/kW-year. Payments at the price floor will not be subject to ex post adjustments.

Setting the Capacity Target Price. The total capacity MW used to clear the demand curve for each local area and for system areas will be determined by CAISO based on annual reliability assessments. For each local area, the total capacity MW is evaluated annually in the Local Capacity Requirements (LCR) Study, using methods largely similar to those used by the CPUC in its determining its resource adequacy requirements. Essentially, any local area that is determined to be deficient in the LCR study, the Type 1 capacity target price would be at the demand curve cap (assuming that there is interim capacity available to procure). For any local area that has surplus capacity, the price would be read from the sloped section of the demand curve or would be set at the price floor. Figure 2 illustrates the price determination for three hypothetical local areas (LA).

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Preliminary analysis shown in the Table below suggests that if the proposed zero price intercepts are used for these demand curves, effectively four of the local areas will have an interim capacity backstop price at or close to CONE and the remainder will have sufficient surplus capacity that the interim backstop price will be the price floor. See also the second table in the Executive Summary, above.

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

<table>
<thead>
<tr>
<th>Local Area Name</th>
<th>Total '2008 LCR Need based on Category C with Operating Procedure (MW)</th>
<th>Total Qualifying Capacity (MW)</th>
<th>Surplus or (Deficit) (MW)</th>
<th>Surplus or (Deficit) (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Humbolt</td>
<td>175</td>
<td>180</td>
<td>5</td>
<td>3%</td>
</tr>
<tr>
<td>North Coast/North Bay</td>
<td>676</td>
<td>883</td>
<td>207</td>
<td>31%</td>
</tr>
<tr>
<td>Sierra</td>
<td>2092</td>
<td>1780</td>
<td>(312.00)</td>
<td>(15%)</td>
</tr>
<tr>
<td>Stockton</td>
<td>786</td>
<td>536</td>
<td>(250.00)</td>
<td>(32%)</td>
</tr>
<tr>
<td>Greater Bay</td>
<td>4688</td>
<td>6214</td>
<td>1526</td>
<td>33%</td>
</tr>
<tr>
<td>Greater Fresno</td>
<td>2382</td>
<td>2991</td>
<td>609</td>
<td>26%</td>
</tr>
<tr>
<td>Kern</td>
<td>486</td>
<td>646</td>
<td>160</td>
<td>33%</td>
</tr>
<tr>
<td>LA Basin</td>
<td>10130</td>
<td>12093</td>
<td>1963</td>
<td>19%</td>
</tr>
<tr>
<td>Big Creek/Ventura</td>
<td>3658</td>
<td>5396</td>
<td>1738</td>
<td>48%</td>
</tr>
<tr>
<td>San Diego</td>
<td>3033</td>
<td>2919</td>
<td>(114.00)</td>
<td>(4%)</td>
</tr>
<tr>
<td>Total</td>
<td>28106</td>
<td>33638</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

1/ Source: CAISO “2008 Local Capacity Technical Analysis Report and Study Results,” Updated April 3, 2007, table on page 4 of 85 pages. 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.

2/ 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.
Issues with the proposed demand curve method. The sloped demand curve and the market clearing method proposed here solve certain problems currently faced in interim capacity procurement, notably the used of a fixed price for procurement in all areas, but raise other issues. Some of those issues are discussed here. CAISO argues that on balance the demand curve method has sufficient attractive properties for use in the ICPM.

As already noted, one concern about using a sloped demand curve is that the mechanism is intended to procure capacity up to the MW that clear the demand. This raises concerns about procuring excess capacity. However, in this instance, CAISO will not be using the demand curve to purchase capacity MW greater than the CPUC RA target. Rather, the CAISO will be using the demand curve solely to procure backstop capacity up to the RA target. The demand curve in this case is used to address local market power concerns and to estimate a market-based price when procuring capacity in areas with surplus capacity available.

Another difficulty raised when proposing sloped demand curves is the choice of parameters. Unlike the RA market design debates, the ICPM process does not have the time-frame to fully explore stakeholder preferences for the values of parameters. As an interim mechanism, these parameters can always be modified upon development of a more permanent RA market design or in any future iterations of ICPM.

Another concern that CAISO has evaluated is the interaction between the proposed Type 1 pricing mechanism, CPUC penalties for RA deficiency, and forward bilateral markets for RA. With respect to CPUC penalties, CPUC has not yet granted a waiver nor issued a penalty, and hence the interaction between the CAISO pricing proposal and CPUC penalties in affecting forward prices is ambiguous. However, we anticipate that buyers and sellers will have different incentives in response to the pricing mechanism. Since LSEs face CPUC penalties for deficiency, they may have less incentive to influence forward prices through the threat of shifting procurement to the backstop mechanism, in locations where prices might appear lower through that mechanism. On the other hand, sellers could, in some circumstances, use the backstop price to negotiate a higher forward RA price, particularly in locations where capacity is tight. Obviously, the ability of sellers to raise capacity prices would depend on the market structure, including existing contracts, in each local area.

Finally, to some observers, the proposed Type 1 pricing mechanism may appear to be too closely related to proposed designs for centralized capacity markets and hence may be considered to impinge on the deliberations of the ongoing CPUC RA proceeding. The proposed Type 1 pricing mechanism does share certain features in common with some capacity market designs, notably a target price for clearing the RA requirement based on CONE and the use of a sloped demand curve for price determination above the RA requirement. However, while the ICPM does seek to procure capacity, and hence should

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18 The CPUC sets penalties for RA deficiency which are 300% of the CONE price (this price is not ex ante defined by the CPUC) for failure to acquire sufficient capacity for System RAR and 100% of CONE for failure to meet Local RAR. The CPUC has clarified that in the event that an LSE is deficient both in System and Local RAR, penalties are not additive. Rather the larger System penalty will apply. The CPUC has also adopted a price of $40/kW-year as a trigger for granting a waiver for Local RAR. Section 3.3.10, CPUC Decision D0606064 Effective Date: June 29, 2006. Available at http://www.cpuc.ca.gov/PUBLISHED/FINAL_DECISION/57644.htm
follow pricing principles consistent with a capacity product, this pricing mechanism is clearly not a full capacity market design. Most notably, there is no centralized auction cleared against the demand curve. Also, consistent with the existing RA program, there is substantial emphasis on bilateral procurement: LSEs that are deficient are given opportunities to contract bilaterally before the backstop procurement, or, in a Significant Event, soon after the procurement. And both the price floor and the Type 2 pricing discussed next are based on going forward costs rather than a market-based price. In sum, the revised ICPM improves the definition and pricing of the interim capacity product while not creating any impediments to development of alternative future RA market designs.

Formula for Type 2 Capacity Target Price

Type 2 procurement of interim capacity presents a challenge for pricing because of the characteristics of the market for such spot capacity purchases. From a market design perspective, the capacity product is usually a long-term product intended to support system reliability. Within the year or the month, generation not already procured as long-term RA that is available for short-term capacity procurement has in principle no opportunity cost for its capacity – i.e., no alternative sales opportunities. On the other hand, such units may still not be covering their fixed costs, due to the presence of market power mitigation in the energy markets, which suggests a minimum price of either (a) an availability offer that allows suppliers to represent their minimum acceptable offers, or (b) coverage of some amount of going forward costs sufficient to support availability over a multi-month period. The concern with market-based availability offers is that once market pricing is made available, locational market power becomes a potential problem and price caps and/or demand curves become desirable.

CAISO has thus evaluated two pricing proposals that could be appropriate for Type 2 procurement: a CONE-based method essentially the same as that for Type 1 pricing; and a pricing method based solely on going-forward costs. CAISO presents these two options for consideration by stakeholders.

Type 2 pricing based on the proposed Type 1 pricing mechanism

One option is to price Type 2 purchases in a similar fashion to Type 1 purchases. As noted, CAISO is proposing to use a proxy pricing method for Type 1 using a demand curve capped at CONE. The same method could be used to procure capacity needed for Type 2 situations: CAISO would identify generators available for designation following a significant event and offer them the Type 1 payment for their location. This would result in a CONE-based scarcity price in local areas with a capacity shortage, and a price at the floor in other local areas.

The advantage of using this pricing method is that a high market proxy price is being used in locations where capacity is scarce, consistent with the Type 1 situation. The primary disadvantage of adopting this pricing method for Type 2 is the concern, noted in stakeholder comments, that a CONE-based scarcity price is being paid to available capacity in some circumstances. Unlike the Type 1 situation, there is no market rationale for paying a target price at or close to CONE during Significant Events; it could be any arbitrary scarcity price. Moreover, during Significant Events, units in local areas with surplus capacity or outside local areas could also have locational scarcity value if CAISO determines that it needs to designate them for operational reasons. But the demand curve would not recognize that. Hence, the Type 1 pricing mechanism would be assigning a scarcity premium on a
discriminatory basis. And in general, determining the appropriate scarcity value for capacity during Significant Events using a voluntary market mechanism, such as standing offers, would raise locational market power issues. Primarily for these reasons, CAISO proposes instead the second option, as described below.

**Type 2 pricing based on going forward costs**

An alternative pricing basis for Type 2 procurement is to pay a single fixed price that covers a significant component of going forward costs. CAISO proposes that the target price would be based on the fixed O&M costs of a reference unit, defined as the simple cycle CT. The proposed target price is the average fixed O&M cost of the reference unit as determined by the CEC study. This simple average can be calculated from the table above, as $21.20/kW-year.\textsuperscript{19}

The target price was determined so as to be high enough to cover the primary going forward costs of most units. Such a price has the disadvantage that it does not rely on market-based pricing, hence does not reflect opportunity cost or scarcity. CAISO thus proposes that such Type 2 payments would not be adjusted ex post. That is, a supplier will receive the same payment regardless of any other market revenues that it makes simultaneously.\textsuperscript{20} This pricing rule should ensure that any generator that is making energy and ancillary service revenues has the incentive to accept designation.

**6p) Escalating Target Annual Capacity Price**

Because the interim capacity procurement mechanism is likely to be in place for a number of years, a methodology may be needed to adjust the base price (the target annual capacity price) over time. This topic was discussed with stakeholders at the May 18, 2007 and June 6, 2007 stakeholder meetings. One concept that was discussed was an escalation formula such as an inflation adder.

**CAISO Proposal #2**

As discussed in Section 9(o), the proposed pricing formulas in this version of the White Paper have substantially changed the basis of compensation as compared with the RCST Settlement. These changes make continuation of the proposal for an annual increase in the target annual capacity price less straightforward than with the single price offered under the RCST. First, under the Type 1 proposal, while the CONE estimate used to set the cap could in principle be increased using the escalation formula, prices would also be set using the sloped region of the demand curve or a price floor. Hence, a fixed percentage increase in the target capacity price would not necessarily translate into a similar fixed percentage increase in capacity payments. Second, under the Type 2 proposal, there is no target annual capacity price but rather a payment based on going forward costs. Given these factors, CAISO proposes that for the period of the ICPM, an escalation factor not be included.

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\textsuperscript{19} The average of the three costs listed in the “Fixed O&M” column of the table.

\textsuperscript{20} However, non-RA units that are designated will be treated like other RA resources and as such will be required to participate in the Day-Ahead Residual Unit Commitment (RUC) but allowed only to submit $0/MWh availability bids.
6q) Formula for Capacity Payment

The RCST provides a formula for the capacity payment, which considers Net Qualifying Capacity, an Availability Factor, and Peak Energy Rents. Under the modified ICPM pricing proposals, this formula would now be applied to the proposed Type 1 capacity payment.

**CAISO Proposal #2**
The CAISO proposes to continue the general approach reflected in the RCST Settlement for the proposed Type 1 capacity payment. The revised formula would be:

\[(\text{Net Qualifying Capacity}) \times (\text{Availability Factor}) \times (\text{difference between Monthly payment based on Demand Curve and 95\% of Peak Energy Rent})\]

The Peak Energy Rent calculation under MRTU would change to reflect “Gen Hubs” versus the zonal prices in the current RCST language.

6r) Formula for Monthly Capacity Charge

The RCST provides a formula for the monthly capacity charge, which considers a monthly shaping factor and a target annual capacity price. Under the modified ICPM pricing proposals, this formula would now be applied to the proposed Type 1 capacity payment.

**CAISO Proposal #2**
The CAISO proposes to continue the general approach reflected in the RCST Settlement, but updated to reflect the new pricing formulas. The Type 1 formula would be:

\[(\text{Monthly shaping factor}) \times (\text{Demand Curve value measured in $/kW-year})\]

6s) Allocation of Costs

In Proposal #1, the CAISO noted that the RCST provides for an allocation of costs for system, local and Significant Event procurements; therefore, since the ICPM proposal has similar procurement categories, the RCST framework should be used to the extent possible for the cost allocation applicable to new backstop mechanism.

**CAISO Proposal #2**
The CAISO proposes to continue the general approach reflected in the RCST language in Section 43.8 of the current CAISO Tariff, with some additional changes as described below. The proposed methodology to allocate the total costs of ICPM capacity payments is summarized below for each of the ICPM procurement situations. Numeric examples also are provided.

**Backstop to RA Process**

The types of procurement where the CAISO procures to backstop the RA process (Type 1 procurement), are discussed below.
Annual System ICPM Designations (i.e., deficiency in year-ahead System showing) –
Allocated pro rata to each SC-RA Entity based on its portion of the aggregate Year-Ahead System Deficiency.21
Example 1: If an LSE was determined to have not procured sufficient capacity to meets its Year-Ahead System showing based on targets established by the CPUC or LRA (e.g., LSE fails to procure 10 MW of its five summer month requirement even after being provided an opportunity to cure the deficiency), then the CAISO would procure 10 MW for each the five summer months under the ICPM and charge that LSE the cost of that procurement. This assumes the CAISO can purchase exactly 10 MW from a resource. Generally, under MRTU there should not be a “lumpiness” issue because the CAISO will not be limited to buying whole units. Nevertheless, lumpiness could arise if the minimum operating level of the only available resource is greater than the deficiency. In that circumstance, the deficient LSE is still the only LSE charged for the ICPM procurement.

Local ICPM Designations (i.e., deficiency in year-ahead Local showing) – Allocated pro rata to each SC-RA Entity based on the ratio of its Local RA Requirement Deficiency to the aggregate Local RA Requirement Deficiency in each TAC Area.

Example 1: If the LSEs are short by less or equal with the total LSE Local RA Requirement Deficiency, then split the cost to the deficient LSEs based on the Ratio of its Local RA Requirement Deficiency to the aggregate Local RA Requirement Deficiency in Local Reliability Area. LSE 1 is deficient by 50 MW, LSE 2 is deficient by 100 MW, and the CAISO can solve all the deficiency by securing a 100 MW unit. The costs would be split 33.33% to LSE 1 and 66.67% to LSE 2 (Note: this may occur because system resources procurement by LSEs have some level of effectiveness in resolving the criteria violation).

Example 2: If the LSEs are short by more than the total LSE Local RA Requirement Deficiency, and additional local capacity must be procured by the CAISO due to “effectiveness factors” reasons, then the cost will be split to the deficient LSEs based on their deficiency first and split the rest to all LSEs in the TAC area. LSE 1 is deficient by 50 MW, LSE 2 is deficient by 100 MW, and the CAISO can solve all the deficiency, and the effectiveness factors considerations, by buying a 200 MW unit. The costs would be split 50 MW to LSE 1, 100 MW to LSE 2, and 50 MW to all LSEs in the TAC area based on the ratio of each LSE’s contribution to peak Demand in the TAC Area as determined by CEC Demand Forecasts.

Example 3: If all LSEs are compliant and there still is a deficiency (effectiveness of overall LSE portfolios fails to resolve all criteria violations), then the cost will be shared by all LSEs in the TAC area based on the ratio of each LSE’s contribution to peak Demand in the TAC Area as determined by CEC Demand Forecasts. All LSEs are compliant, but the CAISO needs to solve the effectiveness deficiency by securing a 100 MW unit. The costs would be split to all LSEs in the TAC area in accordance with their proportionate contribution to peak TAC Area Demand.

Monthly System ICPM Designations (i.e., deficiency in month-ahead system showing) –
Allocated pro rata to each SC-RA Entity based on its portion of the aggregate Month-Ahead System Deficiency.22

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21 The Year-Ahead System Deficiency is defined as the monthly deficiency in meeting Year-Ahead System RA Requirements as determined by the CPUC and applicable LRAs.
22 The Month-Ahead System Deficiency is defined as the monthly deficiency in meeting the Month-Ahead System RAR as determined by the CPUC and applicable LRAs for each RA Entity subject to their jurisdiction.
Example 1: If an LSE was determined to have not procured sufficient capacity to meet its month-ahead system target, as determined by the CPUC or LRA (let’s say it was required to procure 20 MW more than it did for the upcoming compliance month, and it did not do so after being asked to procure that amount), then the CAISO would procure 20 MW for that one month under the ICPM and charge that LSE the cost of that procurement. Assuming that the CAISO could purchase exactly 20 MW from a resource (i.e., there is no lumpiness of procurement such as the minimum operating level of the only available resource is 45 MW), then that LSE, and only that LSE, would be charged for the one-month ICPM procurement.

**Backstop for Significant Event**

Where the CAISO procures to backstop for a Significant Event (Type 2 procurement), the CAISO would use the actual load for each month as recorded in the CAISO settlement system for cost allocation purposes.

**Significant Event Designations**  
Allocated to all SC-RA Entities in the TAC Area(s) in which the Significant Event caused or threatened to cause a failure to meet ARC based on SCs’ RA Entity Load Share Percentage(s) in such TAC Area(s).

Example 1: If an LSE is short in its Local RA requirement (it has a local deficiency compared to its local RA capacity requirement, which would be revealed in its annual local showing that is provided “year-ahead”), and even if that deficiency did not initially trigger the CAISO procuring the deficiency year-ahead when it was initially identified (which could happen if other LSE procurement ensured the ability to meet ARC), plus there is additional local capacity that needs to be procured by the CAISO due to a Significant Event, then the cost of the backstop procurement would be split first to the deficient LSE based on its deficiency and then the rest of the cost would be shared by all of the LSEs in the TAC area based on each LSEs’ contribution metered contribution to actual peak Demand for each month of the ICPM procurement. LSE 1 is deficient by 50 MW compared to its local RA requirement (this could happen for any RA month during the compliance year), and the CAISO can solve all the local deficiency and the Significant Event considerations by buying a 200 MW unit. The costs would be split 50 MW to LSE 1, and then 150 MW to all LSEs in the TAC area.

Note: The CAISO could procure capacity to address operating situations that may be of a system or local nature, or for the geographic area north of Path 26 or south of Path 26. The cost allocation discussed above would allocate costs to entities in one TAC area if only one TAC Area was affected, or to entities in more than one TAC area if more than one TAC Area was affected.

**Debits and Credits**

At the July 25, 2007 stakeholder meeting, a stakeholder asked if the CAISO would consider giving an LSE that is “long” in its RA showing a “credit” when allocating the costs of ICPM procurement, and, conversely, giving an LSE that is “short” in its RA showing a “debit.” Note that in this section of the proposal (see examples above) that the CAISO is proposing to review RA showings and first charge ICPM costs to LSEs that have not fulfilled their RAR. This would occur before the CAISO would spread any remaining cost to the market (in the examples above this can happen in both the “effectiveness” and Significant Event situations). The CAISO does not propose to provide a mechanism for a “credit” when a LSE is “long” in

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23 The 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 by the total coincident peak Load of all RA Entities in the TAC Area.
its RA showing as the CAISO does not believe that it is appropriate to signal to LSEs that it is appropriate to over-procure. It is not the CAISO’s intention to encourage or provide an incentive for LSEs to over-procure and buy more resources than are necessary. An LSE, on its own, may elect to procure for its overall portfolio greater capacity from local resources than is required, but the CAISO believes this is an LSE decision based on many factors and the CAISO should not be required to provide benefits to an LSE that has procured beyond its minimum RAR. Further, “long” capacity, in this scenario, has not prevented the need for backstop procurement. All local capacity is likely effective to some degree in minimizing the need for backstop capacity; therefore it is not evident that “long” capacity should be given more weight than capacity from a LSE who is short, but whose capacity is more effective. The more equitable solution is to continue to require each LSE to pay based on its load ratio.

6) Selection among Multiple Resources

In Proposal #1 the CAISO noted that the CAISO will need to select one or more resources to resolve a deficiency or address effectiveness factors or Significant Events. The CAISO noted that the RCST addresses how the CAISO would select among multiple resources if all are not required to resolve the problem. The CAISO proposed to continue the general approach reflected in the RCST Settlement in Section 43.2.2, and Section 43.3.3. Also, the CAISO proposed a change to the RCST program to allow the CAISO to designate a partial unit to provide service under the backstop mechanism.

CAISO Proposal #2

The CAISO proposes to continue the general approach reflected in the RCST Settlement. The criteria for selection of backstop resources is currently provided in the RCST language in Section 43.2.2, Selection of Eligible Capacity Designated for Local Reliability, and Section 43.3.3, Selection of Eligible Capacity Designated for System Reliability.

The CAISO also proposes a change to the existing RCST program to allow the CAISO to designate a partial unit to provide service under the capacity backstop mechanism. Specifically, the CAISO proposes to revise the provisions of Sections 43.2.2 and 43.3.3 wherein the CAISO can only procure "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" to where the CAISO can procure partial capacity of a resource to meet the RA requirements. The CAISO believes that this change is appropriate to provide for reliable operation of the grid.

In general, the RCST criteria and the revised rule for partial unit procurement will prevent any "ties" among available units during Significant Events, when operational considerations are paramount. However, when procuring to backstop the forward RA market, in the event that following consideration of the criteria, there remains more than one eligible backstop resource at the declared price, then there will be a need for a tie-breaking rule. The efficient rule would be to then seek price offers from the remaining suppliers until a minimum procurement price is reached. To minimize administrative effort and to maintain the timeliness of the procurement process, CAISO proposes two options for stakeholder consideration: (1) all eligible suppliers will be informed of the tie and allowed one week to provide an offer at a lower price, upon which CAISO will select the winning offer(s); (2) alternatively, CAISO will not seek additional offers but will use a random selection rule to identify the winning offer(s).
6u) Obligation (PGA Resources and to Accept ICPM Designation)

Stakeholders have asked the CAISO to clarify the obligations of Generating Units that have a contractual relationship with the CAISO and their obligations under the CAISO Tariff to stand ready to assist the CAISO in instances where the CAISO may need assistance. Stakeholders also have asked if the CAISO request to designate a resource as an “ICPM resource” under the ICPM tariff authority is an option for a resource (i.e., the resource does not have to accept the designation), or if it is mandatory (i.e., the resource has to accept the CAISO request for the resource to be designated as an “ICPM resource” – it cannot decline)

CAISO Proposal #2

To clarify for stakeholders: The current CAISO Tariff provides that a PGA resource must respond to a CAISO Dispatch instruction unless it is incapable of doing so. The CAISO does not plan to revise the current CAISO Tariff in any way regarding this pre-existing tariff requirement. (Stakeholders have asked for clarification, and the CAISO is providing it here.)

Regarding whether the ICPM designation, when requested by the CAISO, is an option or is mandatory (i.e., the resource has a choice of whether to accept the CAISO request and become an "ICPM resource," or it can decline the offer), the CAISO proposes that the ICPM offer is an option and the resource can decline the offer.

If CAISO is unable to procure sufficient capacity at the established ICPM price, there is no further capacity procurement backstop suggested in this proposal. Instead, CAISO will rely on Exceptional Dispatch if there is an operational need for capacity.

6v) Allocation of RA Credit

LSEs that procure resources to fulfill their RA obligations are entitled to include those resources in their RA showings. This section addresses the circumstances where an LSE charged for ICPM procurement would be able to include ICPM capacity in its RA showing.

In Proposal #1, the CAISO proposed that if the CAISO procures backstop capacity for an LSE because the LSE is short in meeting RA requirements as shown by its RA showing, the procured ICPM resources would be “credited” to the deficient LSE (the LSE could include the resource in its RA showing). However, if the CAISO procures for other reasons ("effectiveness" or Significant Event), the procured backstop resources would not be credited to any LSE, regardless of if the LSE(s) was deficient or not.

CAISO Proposal #2

The CAISO is not against the principle that an LSE should be able to count ICPM capacity for which it is charged in its RA showing. However, as described below, there is a temporal issue with how and when an LSE would know its share of the ICPM procurement in time to include it in a RA showing. There may not always be sufficient time between when the CAISO procures a resource under the ICPM and the date when the compliance showing must be submitted for an upcoming compliance month. This temporal issue occurs because an RA showing needs to be submitted at least one month in advance of the applicable month for which an LSE is submitting a RA showing. This timing problem will be less of an issue for the procurement instances of Annual System ICPM Designations (i.e., deficiency in year-ahead System showing) and Local ICPM Designations (i.e., deficiency in year-ahead Local showing), than it will be for the procurement instances of Monthly System ICPM Designations (i.e., deficiency in month-ahead System showing) and Significant Event Designations. For
the former instances, there will be some months of the compliance year for which there will be adequate time between when the CAISO procures and when the RA showing is due. But there may be some months when this will not hold true.

The mismatch is most acute for Significant Event procurement, where the cost of the procurement is spread among affected LSEs by their respective load share of peak Demand in the TAC area for that month (with the load share determined based on the actual load of each LSE in that month, with data taken from the CAISO settlement system). If actual metered load data is needed to determine costs, and RA showing as required in advance of the month, then the CAISO would be unable to accurately credit LSEs for their cost contribution to the ICPM capacity procured for a Significant Event. This factor may militate in favor of utilizing CEC Demand Forecast data to assign the costs of Significant Event procurement. Using actual metered data, on the other hand, better takes into consideration load migration and the beneficiaries of the Significant Event ICPM procurement.

In summary, the CAISO notes that:

- Where the CAISO procures capacity under the ICPM to backstop the RA process, the procured backstop resources could likely be “credited” to the deficient LSE (the LSE may have time to include the resource in its RA showing).
- However, where the CAISO procures for a Significant Event, although LSEs could include the ICPM capacity in their RA showings, the practical effect is that it would be difficult to do so. One point to note is that, by definition, when there is procurement for Significant Event reasons, the LSE is already fully resourced relative to their RAR, and so the additional ICPM capacity would serve to simply add to their already sufficient RA showing.
## Attachment 1

### List of Acronyms

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Definition</th>
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<tbody>
<tr>
<td>ARC</td>
<td>Applicable Reliability Criteria</td>
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<tr>
<td>AReM</td>
<td>Alliance for Retail Energy Markets</td>
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<tr>
<td>CAISO</td>
<td>California Independent System Operator</td>
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<td>CDWR</td>
<td>California Department of Water Resources</td>
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<td>CEC</td>
<td>California Energy Commission</td>
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<td>CMUA</td>
<td>California Municipal Utilities Association</td>
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<tr>
<td>Constellation</td>
<td>Constellation Energy Commodities Group, Constellation NewEnergy, Inc, and Constellation Generation Group, LLC</td>
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<tr>
<td>CPUC</td>
<td>California Public Utilities Commission</td>
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<td>DR</td>
<td>Demand Response</td>
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<tr>
<td>Dynegy</td>
<td>Dynegy Power Marketing, Inc.</td>
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<tr>
<td>EOB</td>
<td>Electricity Oversight Board</td>
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<td>FERC</td>
<td>Federal Energy Regulatory Commission</td>
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<td>FMU</td>
<td>Frequently Mitigated Unit</td>
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<tr>
<td>FNM</td>
<td>Full Network Model</td>
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<tr>
<td>IEP</td>
<td>Independent Energy Producers Association</td>
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<td>IFM</td>
<td>Integrated Forward Market</td>
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<td>Locational Capacity Requirement</td>
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<td>Load Serving Entity</td>
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<td>MOO</td>
<td>Must-Offer Obligation</td>
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<td>MORC</td>
<td>Minimum Operating Reliability Criteria</td>
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<tr>
<td>MRTU</td>
<td>Market Redesign and Technology Upgrade</td>
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<td>MSC</td>
<td>Market Surveillance Committee</td>
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<td>Megawatt</td>
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<td>North American Electric Reliability Council</td>
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<td>Net Qualifying Capacity</td>
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<td>PGA</td>
<td>Participating Generator Agreement</td>
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<td>Pacific Gas and Electric Company</td>
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<td>PRM</td>
<td>Planning Reserve Margin</td>
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<tr>
<td>PTO</td>
<td>Participating Transmission Owner</td>
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<tr>
<td>RA</td>
<td>Resource Adequacy</td>
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<td>RA MOO</td>
<td>Resource Adequacy Must-Offer Obligation</td>
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<td>RCST Litigation</td>
<td>IEP v CAISO, FERC Docket No. EL05-146</td>
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<td>Reliability Must-Run</td>
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<td>RUC</td>
<td>Residual Unit Commitment</td>
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<td>SCE</td>
<td>Southern California Edison Company</td>
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<tr>
<td>SH</td>
<td>Stakeholders</td>
</tr>
<tr>
<td>Six Cities</td>
<td>Cities of Anaheim, Azusa, Banning, Colton, Pasadena, and Riverside, California</td>
</tr>
<tr>
<td>Acronym</td>
<td>Description</td>
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<td>--------------------------------------------</td>
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<td>SWP</td>
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<td>Western Electricity Coordinating Council</td>
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<td>MOWD</td>
<td>Must Offer Waiver Denials</td>
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Attachment 2

Key Milestones

The key milestones for the stakeholder process and the tariff filing are provided below.

1. Posting of Proposal #2
   Oct 5  ISO posts Proposal #2

2. Development of Final Proposal
   Oct 15  ISO holds a stakeholder meeting at ISO from 10:00 a.m. – 4:00 p.m.
   Oct 24  Stakeholders submit their written comments on Proposal #2
   Oct 25  ISO posts the written comments submitted on Proposal #2
   Nov 1  ISO posts the Final Proposal
   Nov 8  ISO holds a stakeholder conference call from 10:00 a.m. – 2:00 p.m.

3. Development of MSC Opinion
   Nov 15  MSC posts the draft MSC Opinion
   Nov 21  MSC holds a conference call to adopt the MSC Opinion
   Nov 22-23  Thanksgiving Holiday
   Nov 27  MSC submits to ISO the adopted MSC Opinion

4. Request for Approval by Board of Governors
   Nov 28  ISO completes Board documents, including MSC Opinion
   Dec 12-13  ISO requests approval from Board to make tariff filing

5. Development of Tariff Language
   Dec 20  ISO posts draft tariff language for review - start of 2-week comment period
   Dec 25  Christmas Day Holiday
   Jan 1  New Year’s Day Holiday
   Jan 4  Stakeholders submit their written comments on draft tariff language
   Jan 8  ISO holds stakeholder conference call from 10:00 a.m. – 2:00 p.m.

6. Filing of Tariff and Decision from FERC
   Jan 17  ISO makes tariff filing
   Jan 18  Start of FERC 60-day review period
   Mar 18  FERC issues Order on filing; establishes an effective date
   Mar 31  Introduction of MRTU markets - for initial trade date of April 1
Attachment 3

Stakeholder Written Comments Submitted on Proposal #1

This attachment provides summaries of the written stakeholder comments that were due on August 9, 2007 regarding Proposal #1. Note that in July 2007 when the CAISO solicited written comments from stakeholders, it asked each stakeholder to state its level of support for each of the elements of Proposal #1 as “Agree,” “Disagree,” or “Neutral.” This information, where provided by stakeholders, is presented below.

Written Stakeholder Comments on Overall Proposal #1

**SCE:** Agree to Neutral. Largely agree with the proposal, except advocate a 2-year term or year-to-year term in consideration of the many market changes that are on-going. Strongly oppose an open-ended designation process for backstop procurement beyond identified System and Local RA showing deficiencies.

**PG&E:** Support general approach of proposal. Recommend that designations for Significant Events should be subject to Board approval and, further, pricing should not pre-empt the future RA structure process currently under consideration and should remain at RCST levels, adjusted for inflation, absent full justifications for any departure.

**CPUC:** State’s current and foreseeable energy market design would benefit from CAISO having a mechanism by which to procure backstop capacity in the event that LSEs operating within the CAISO fail to procure adequate resources in a timely fashion. Believe such procurement should be permissible if either extreme, unanticipated circumstances change fundamental assumptions about the grid’s operation upon which LSEs’ RA requirements were based; or CPUC resource procurement programs fail to provide sufficient generation to satisfy CAISO minimum operational reserve requirements. Remain concerned with some aspects of current proposal. Language proposed does not clearly elucidate the circumstances in which it will procure, and in some instances appears to permit procurement beyond those resources necessary for CAISO operational needs.

**EOB:** Support making a fair payment to generators that provide a capacity reservation service, but cannot support the proposed, except advocate a 2-year term or year-to-year term in consideration of the many market changes that are on-going. Term of mechanism should be no longer than two years. The price of the basic RCST payment must be revisited. There is no need to define or to include "Significant Event" in the mechanism. The following items must be removed from the proposal: FMU Bid Adder, "Availability Factor," using the cost of constructing new peaking generating units to determine the payment, and increasing the payment on an annual basis due to the increase in the cost of constructing new peaking units.

**Williams:** Disagree. Agree with some aspects, but, in general, do not support the proposal. In 2006, Williams’ non-RA units provided 83 unit-days of capacity service which helped the CAISO serve unprecedented levels of demand, but was never designated to provide RCST service under the implementation of RCST. Aspects of RCST proposal that Williams opposed (including price and deduction of non-spin revenues) have not been sufficiently addressed in ICPM. Do not believe the proposal has sufficiently addressed the deficiencies in RSCT and cannot support it.

**Dynegy:** Strongly disagree with proposal as it appears to just be an extension of existing RCST with minor modifications to payment. RCST proposal was a negotiated settlement that is set to expire on December 31, 2007, and am not in favor of extending this settlement. Any proposal should embrace the following principles: satisfy CAISO operating requirements, promote development of robust capacity market or improve RA process, be consistent with
existing RA and LCR protocols, provide appropriate cost compensation for the service, and integrate into MRTU. Proposal violates principles 2, 3, and 4.

**Mirant:** Agree and Disagree. Support ICPM I as an interim measure until such time as a capacity market is implemented in California. Concerned about use of ICPM for Significant Events or emergency situations.

**Constellation:** Following principles should guide development: should be only one backstop mechanism; procurement should be triggered by transparent and well-defined criteria; procurement should never pre-empt or “front run” capacity procurement by LSEs; procurement should not result in commitment of resources that exceed the RA requirements, and procurement should provide appropriate compensation and should model that payment based on cost-of-new entry and PER deductions.

**AREM:** Neutral. Additional details are required before AREM can determine whether it can support the proposal. ICPM is not necessarily a superior cost allocation mechanism to RMR as CAISO states several times in paper. The lack of any zonal RA rules in tariff are also of concern. Support more discussion of concept of a “credit” or “debit” as a way to target who was responsible for the backstop procurement or who should get a reduced charge for such procurement.

**MWD:** Disagree. ICPM is unnecessary. CAISO should rely on its MRTU design and its planning criteria for system and local capacity needs. CAISO has sufficient authority under existing tariff and MRTU to address any additional requisite capacity procurement.

**CDWR:** Disagree. Urge CAISO to defer its consideration of this program. Such a deferral would be consistent with FERC’s mandates for market-based reliability solutions, and CAISO’s assertion that RCST intervention would no longer be necessary once CAISO’s MRTU is implemented.

**NCPA:** Neutral. Believe that CAISO should have the tools that are needed to ensure reliability, but those tools cannot be provided at any cost to the market. Proposed backstop should only be utilized when absolutely needed to ensure reliability, and not be used in lieu of general market alternatives.

**Six Cities:** Disagree. Overall, proposal appears overly broad and likely to result in unnecessary procurement of capacity resources.

### a) Need for Backstop Mechanism

**SCE:** Agree. Support development of a backstop capacity procurement mechanism that can be in effect by the end of 2007. It is inappropriate to rely on RMR because the RMR cost allocation is inconsistent with the RA structure.

**PG&E:** Existing RA program is intended to provide the resources needed by CAISO; however, there are circumstances that create an interim need for some limited backstop procurement authority by CAISO. As a successor to RCST, generally support the CAISO ICPM proposal with some limited changes and enhancements, with particular emphasis on the CAISO demonstration of need for any ICPM designations and clear justification for the price of resulting payments.

**Williams:** Disagree. Rational for CAISO to want to have a product to backstop inadequacies in RA forward procurement, but it is highly unlikely that the CAISO would ever designate for RA deficiency, given the strong preference for and repeated opportunities for LSE to meet their RA requirements. Obvious that CAISO is unwilling or unable to procure capacity service in advance to address issues with the current RA program. While DR meets the CAISO tariff definition of a RA Resource, CAISO was apparently unwilling to use DR prior to calling on FERC-MOO units, as required in Section 40.7.6 of the CAISO’s tariff. This unwillingness to use DR certainly would contribute to the CAISO’s operational need for a backstop capacity product, but it seems highly unlikely that the CAISO would use ICPM to designate capacity in advance because the RA showings, in which DR would count towards
meeting requirements, would simply be deemed adequate. This same contradiction applies to LD contracts; CAISO likely would not designate ICPM in advance to account for LD contracts, as LD contacts also count towards meeting RA, but, as was demonstrated last summer, the CAISO will still use un-contracted physical generating capacity to meet its real-time needs, because the CAISO cannot dispatch LD contracts in real-time. Publishing effectiveness factors in the LCR studies also makes it unlikely that the CAISO will ever backstop for local procurement that is sufficient in aggregate amount but insufficient in effectiveness. Altogether, the primary reason the CAISO would need to designate would be after something has happened that leaves the CAISO with insufficient resources to meet reliability needs. Thus it appears that the primary product the CAISO will want to purchase is short-term, after-the-fact capacity.

Mirant: Agree. Do not believe a backstop mechanism should be required if the RA rules have been well designed to assure that sufficient capacity is available to meet contingencies. With that said, a backstop is required in the nascent stages of RA implementation and until such time as a capacity market is implemented. Agree that there is a need for a backstop for purposes of meeting LSE resource adequacy deficiencies and local capacity needs that result from inadequacies in the LSE LCR showing that result from effectiveness factors. Do not support the ICPM for purposes of significant events as emergency situations are scarcity issues that should properly be addressed through reserve shortage pricing. Therefore, capacity procurement for significant events must be: 1) interim until shortage pricing is implemented in 2009 (1 year after implementation of M RTU); and 2) confined to instances that meet specified criteria, such as a prolonged period of operating reserves at or below 7%. CAISO’s stated need for the ICPM for emergency events reflects the lack of a scarcity pricing/shortage pricing element in its existing energy and AS market designs. The purpose of shortage pricing is to attract resources to the market under stressed conditions and to maximize the participation of demand response. Use of a capacity backstop to make up for a lack of shortage pricing is sub-optimal and therefore support the backstop mechanism for significant events only until such time as scarcity pricing is implemented in 2009.

Constellation: Neutral. Believe that well designed and stable market structures should not require capacity backstop procurement, other than to procure for specific LSE failures to comply with the RAR requirements. Continue to believe that the PRM should be specifically designed to assure a reliable system even as Significant Events occur during a compliance period. If the CAISO continues to believe that it should have backstop procurement authority for other Significant Events, propose that the Significant Event trigger that causes backstop procurement to occur should be very precisely defined.

AReM: Agree. At a minimum, agree that this mechanism is needed as an enforcement tool for RA – i.e., if LSEs are deficient in meeting their RARs, CAISO may procure using this mechanism and then charge the deficient LSEs for this backstop procurement. At the same time, concerned about expanding the use of this mechanism to broader purposes. Believe that RMR contracts may continue to be necessary as a mitigation tool for suppliers that exert market power.

MWD: Disagree. If an LSE is short, notify LSE, then its LRA before invoking backstop. If additional generation is needed in a local area due to effectiveness factors, notify LSE of additional need, then its LRA if LSE doesn’t respond before invoking backstop.

CDWR: Disagree. FERC has ruled that RUC process will serve as CAISO backstop mechanism: "the RUC process is a reliability backstop mechanism that the CAISO implements when the day-ahead bids from load do not procure sufficient resources to meet the CAISO’s identified reliability needs." FERC also noted that, “since resource adequacy units would be the first to be committed in the RUC process; we expect it would rarely be necessary to procure RUC capacity from non-resource adequacy resources. It is not clear to SWP that another reliability backstop mechanism is needed. Encourages CAISO to provide quantitative studies with empirical data that
demonstrates that ICPM backstop mechanism is needed beyond a RUC backstop mechanism. Additionally, concerned that time spent developing and implementing an additional backstop mechanism jeopardizes the tight MRTU implementation timeline.

**NCPA**: Neutral. Believe that CAISO should have the required tools available to ensure reliability for LSEs, but this tool must be limited in scope to ensure that it is only utilized for its specific intended purpose.

**Six Cities**: Disagree. Given RA requirements and established reserve margins, it is not clear why a backstop procurement process is necessary.

### b) Proposed Filing Date

**SCE**: Neutral.

**Williams**: Disagree. Given that it is highly unlikely that the CAISO would have the need to, or would, designate ICPM in advance, ICPM should be effective by January 1, 2008. Should the worst-case scenario emerge - the LSE showings are deficient, and the CAISO needs to make forward designation – the CAISO could still wait until December 31, 2007 to designate ICPM capacity. (The CAISO would not have to wait until December 31 to conduct the analysis needed to determine whether it needed to designate ICPM on December 31.) That would require the CAISO to file the ICPM proposal by November 1, 2007.

**Mirant**: Agree.

**Constellation**: Agree.

**AReM**: Neutral. At the July 25 meeting, the CAISO said it would delay its filing of the ICPM until October 2007 to allow more time for a stakeholder process. Concur that more time is necessary considering the complex and controversial issues that must be resolved. Suggest that CAISO consider requesting an extension of the current arrangement until the start of MRTU. If MRTU will be delayed for several months, CAISO could use this time to obtain consensus on the ICPM, which could then be implemented at the start of MRTU.

**MWD**: Disagree. Given widespread stakeholder opposition to many elements of CAISO proposal, additional time needed to develop a consensus proposal.

**NCPA**: Neutral. Filing date should be driven by the proposal itself, rather than a predefined deadline. To the extent the proposal can be developed to reflect the needs and suggestions of CAISO market participants in a timely matter consistent with the predetermined deadline, then it could move forward. If proposal is still under debate, and issues raised by market participants are still pending, proposal should be fully developed prior to filing, regardless of the predefined deadlines.

**Six Cities**: Neutral.

### c) Requested Effective Date

**SCE**: Agree. Effective date before the end of 2007 is appropriate to allow for backstop procurement for RA showing deficiencies.

**Williams**: Disagree. CAISO should seek an effective date of December 31, 2007.

**Mirant**: Agree.

**Constellation**: Agree.

**AReM**: Neutral. See discussion for 9b. Suggest making the effective date concurrent with MRTU startup to allow more time for stakeholder discussions.

**MWD**: Disagree. May not be feasible in light of substantial stakeholder opposition to current proposal.

**CDWR**: Disagree. Recommend that consideration of the ICPM be deferred pending resolution of SWP’s concerns. Recommend that ICPM be implemented effective with the start date of MRTU.

**NCPA**: Neutral. ICPM should be designed to coordinate with other CAISO Tariff provisions in place at the time of implementation. If ICPM is implemented according to proposed time table, it must be written in a way that is coordinated initially with the IRRP RA program, prior
to assuming applicability with the MRTU RA program (which contain different provisions and treatments).

Six Cities: Neutral.

d) Extent of Changes to Current RCST

SCE: Agree to Neutral. Largely agree with proposal, except advocate a 2-year term or year-to-year term in consideration of the many market changes that are on-going. Strongly oppose an open-ended designation process for backstop procurement beyond identified System and Local RA showing deficiencies.

PG&E: Support the development and implementation of RCST and recognize the continuing need for limited backstop procurement authority. Generally support the ICPM proposal, since in most ways it reflects a consistency with the RCST approach. However, believe that ICPM should (1) clearly limit and justify the CAISO’s procurement authority; (2) be priced in accordance with the value it provides, and (3) be in place until the new RA structure is in place, and thereafter be adapted to support that structure to the extent necessary and appropriate or, if unnecessary, eliminated at that time. Protracted negotiations to develop the existing RCST produced a balanced and complex settlement. Significant deviations from RCST will greatly complicate and slow the development of a successor mechanism.

Williams: Disagree. Believe the following issues must be addressed: (1) benchmark price of new capacity (2); deduction of non-spin revenues from the capacity payment; (3) CAISO discretion to designate ICPM; and (4) term of the designation. Unlikely to support the ICPM until all these issues are addressed.

Mirant: Agree and Disagree. Support using RCST as a backstop mechanism for RA deficiencies until such time as a capacity market and a scarcity pricing mechanism are implemented. Do not support extension of the current RCST price or the level of CAISO discretion in assessing whether a Significant Event warrants a RSCT designation. Recommend several modifications to the June 29 proposal that should occur when extending RCST.

Constellation: Neutral. Agree that the existing RCST framework represents a good starting point for developing the ICPM. Several modifications to RCST and CAISO proposals contained in the June 29 White Paper are necessary. Do not support a simple extension of current provisions of RCST.

AReM: Neutral. Willing to consider an ICPM structured like RCST, but require more specifics.

MWD: Neutral.

CDWR: Disagree. Recommend that existing RCST mechanisms relating to the MOO and bid mitigation be retained until the start of MRTU.

NCPA: Neutral. Changes to the current RCST structure should continue to define and limit the applicability of this mechanism. Purposes of exercising authority proposed in ICPM should be specifically identified to avoid abuse, which could result in both cost shifting among Market Participants and unneeded cost uplifts.

e) No Daily FERC Must-Offer Obligation

SCE: Neutral. Proposal is consistent with FERC orders, but CAISO should require generation resources to justify why they are not submitting bids in RUC when they elect to withhold resources from the CAISO market after the commencement of MRTU.

Williams: California’s RA program, implemented on June 1, 2006, which includes a PRM, should provide the CAISO with all of the capacity it requires to operate reliably, including under MRTU. If RA does not provide CAISO with resources it needs, deficiencies should be
addressed through the RA program, not by retaining a separate MOO, which would only serve to diminish the urgency to get the RA program right.

Mirant: Agree.
Constellation: Agree.
AReM: Neutral. Not something with which to “agree” or “disagree.” It is a given.
MWD: Neutral.
NCPA: Neutral. Believe this element is consistent with the intent of RA, but as stated above should not cause the CAISO to use the ICPM in an inappropriate manner. ICPM is primarily meant to be a backstop mechanism for RA deficiencies. CAISO must incorporate limitations to avoid having the ICPM become an operation tool. Procurement under a Significant Event should be limited to “significant events” that threaten reliability and should not be used for day-to-day operations.

f) Scope (Obligations of ICPM Resource and Use of RMR)

SCE: Agree.
PG&E: Support the RCST-like product proposed by the CAISO, in which resources designated under ICPM would have the same daily must-schedule or MOO as RA resources. ICPM should not, by design, replace RMR generation. While RMR cost allocation issues remain, until the significant market changes associated with MRTU prove to provide stable, well functioning markets, CAISO should not too hastily modify the RMR process (used to address both local reliability and market power mitigation) to establish a preference for either RMR or interim resources procured under ICPM.
EOB: The FMU Bid Adder unfairly burdens consumers because it rewards generators for submitting bids that are so high as to normally be unallowable within a power-constrained area. It pays back to these generators the money that the market-power mitigation process was designed to take away. It distorts the energy market by rewarding noncompetitive behavior and violates the Federal Power Act requirement that all rates be just and reasonable. There is absolutely no logical basis for including the FMU Bid Adder in the RCST mechanism.
Williams: Agree. Product acquired through ICPM should be capacity with an obligation to offer into CAISO markets, and nothing more.
Mirant: Agree. Should be a capacity only product. CAISO should undertake efforts to develop a market-based procurement mechanism, such as an auction, for not-capacity service such as black start capability.
Constellation: Agree with modification/clarification. Agree that backstop procurement should be a tariff-based activity and designated resources should be subject to the same obligations as an RA resource. However, that the proposal says that the product will be pure capacity seems to imply that there could be other forms of backstop procurement, such as the continuation of RMR. Believe the RMR should be phased out in 2008 and that if there are other specific products and/or services that the CAISO believes will need to be procured through a backstop mechanism, those product and/or services should be specified in the backstop tariff, or provided through specifically designed ancillary services.
AReM: Agree. Product should be “pure capacity,” concerned that proposed payment structure may not accomplish that.
MWD: Disagree. Either choose to keep RMR as backstop procurement if such contracts will continue for voltage support and black stop, or develop new market products for such services.
NCPA: Agree. ICPM is meant to be a backstop procurement mechanism for RA, and should be consistent with the product of RA. RA is a capacity only product, as a result capacity procured under ICPM should be equivalent to RA capacity, and should not be extended beyond that purpose.
Six Cities: Disagree. Scope of backstop procurement that would be permitted is overly broad. To the extent procurement is expected to be necessary to address defects in the RA program, the appropriate response is to address demonstrated defects directly, rather than establishing additional procurement mechanisms. In general, it is not clear why LSE procurement cannot and should not be relied upon to address any capacity needs.

g) Sunset Date
SCE: Disagree. Advocate a 2-year mechanism or year-to-year mechanism in consideration of the many market changes that are on-going and the uncertainty that such changes create. A shorter-term mechanism is preferable because it provides an established opportunity to make modifications to the mechanism that account for known and anticipated market structure changes.
EOB: Believe such a long period (sunset on December 31, 2012) is unnecessary, counter-productive to California’s RA policy and DR programs, and cannot currently support it. RCST must not operate as a crutch for either the CAISO or LSEs, which is likely to happen given a 2012 sunset date. RCST should run no longer than two years; at end of two years, CAISO can come forward with an analysis, and if necessary, a proposal for continuing RCST.
Williams: Disagree. While Williams hopes that Track 2 of the RA proceeding creates a structure that eliminates the need for the ICPM, as long as the primary use of ICPM will be to procure short-term capacity for unforeseen events, there will always be a need for this product. Nevertheless, this after-the-fact product must be designed not to interfere with forward procurement and must adequately compensate resources for the reliability services they provide without any forward commitment.
Mirant: Agree and Disagree. Support CAISO proposal of extending the RCST until December 2012 or the effective date of capacity backstop replacement (such as a capacity market). Believe, however, that provisions for capacity procurement for emergencies or “significant events” should only exist until the implementation of scarcity pricing. Pursuant to the FERC order the CAISO is ordered to implement shortage pricing within one year of MRTU implementation. Capacity procurement for emergency situation should extend no later than Spring 2009.
Constellation: Agree with modification/clarification. Do not object to the proposed sunset provisions. However, CAISO proposal seems to indicate that its authority to procure under RMR could continue for as along as the backstop procurement authority is in place. Recommend that there should be no further procurement under RMR after 2007.
AREM: Agree. A 5-year termination date is acceptable with 205/206 rights. Could also agree to a shorter termination date. Any longer time period would be problematic because of the significant possibility that market conditions will change and create unintended consequences.
MWD: Disagree. Way too lengthy. Suggest ICPM have a maximum duration of two years, then evaluate whether it should be continued, modified, or discontinued.
NCPA: Neutral. Support the concept of a 3 year term for ICPM. This will establish short term stability regarding the intended purpose of the mechanism, but will allow adjustments in the near future that may be needed per experience under MRTU.
Six Cities: Agree. Would be appropriate to attach a sunset date to any procurement mechanism so as to require a comprehensive review of the continuing need for any such mechanism.

h) Tariff Provisions Until Long-Term Capacity Pricing Mechanism
SCE: Neutral to Disagree. Support the continued use of the existing RCST until MRTU commences, and implementation of ICPM upon the commencement of MRTU. Believe ICPM must be reviewed prior to a long-term RA program being implemented in California.
Williams: Disagree. CAISO should file its ICPM proposal to be effective on or just before January 1, 2008. Will oppose any “bridging” extension of the current RCST settlement.

Mirant: Agree.

Constellation: Agree with modification/clarification. Subject to the discussion of discontinuing RMR in 2008. Do not oppose the proposal.

AReM: Disagree. CAISO appears to be proposing having simultaneous authority for at least three separate backstop procurement mechanisms. Oppose this approach because it would confuse the market and result in three CAISO prices for the same capacity product. Suggest having the current RCST remain in place until MRTU is implemented and then superseded by the ICPM at MRTU startup. RMR would continue as a separate mechanism for special cases like market power mitigation.

MWD: Agree.

NCPA: Neutral. It is unclear about the meaning of an “end state” RA procurement and capacity pricing mechanism. If this is intended to mean a type of centralized capacity market, believe that this is a problematic trigger because the concept of a centralized capacity market administered by the CAISO has not been defined.

i) Tariff Provisions After Long-Term Capacity Pricing Mechanism

SCE: Agree. Believe ICPM should be a year-to-year determination until MRTU is fully implemented and long-term RA rules are adopted and implemented. Attempting to adopt a long-term backstop mechanism without knowing what modifications will be made to the future market design is inappropriate given the uncertainties involved.

Williams: Disagree. CAISO should file its ICPM to be effective on or just before January 1, 2008. Will oppose any “bridging” extension of the current RCST settlement.

Mirant: Neutral.

Constellation: Agree.

AReM: Agree. Too speculative to address at this time.

MWD: Agree. Too speculative to address at present.

NCPA: Agree. This topic is premature.

j) Use of Backstop

SCE: Agree. Support CAISO having a backstop product for LSE RA deficiencies (System and Local), as well as properly defined significant events.

PG&E: Short term needs (hours or days) that cannot be met by RA resources are best addressed through daily energy and RUC markets or through the use of CAISO emergency powers. Longer term events that are significant and enduring should be addressed by ICPM designation, as approved by the CAISO Board and justified by CAISO staff and management.

CPUC: Generally support the CAISO having a well-defined backstop capacity procurement role until and after MRTU implementation and FERC MOO expires. Believe backstop mechanism should be designed to procure capacity when LSEs fail to meet their RA requirements under their respective RA System and Local programs, or when events outside of those accounted for in the RA planning reserve margin impede CAISO’s ability to maintain its necessary operating reserves.

EOB: Recognizes that CAISO may need a tool to respond to the hypothetical need to procure RA units when a LSE fails to comply with its CPUC RA requirements, or with CAISO Tariff requirements in the case of non-CPUC jurisdictional entities. Only when there is demonstrated under-procurement of RA capacity by a LSE, and after giving the LSE a reasonable amount of time to cure the efficiency, should the CAISO be authorized to procure RCST capacity as RA.
Williams: Agree. Agree with proposed use of the backstop. Believe the backstop must be constructed not just to avoid interfering with RA procurement, but to encourage RA procurement of all the resources needed to reliably operate the grid.

Mirant: Agree and Disagree. Support the use of a backstop to make up for LSE deficiencies and capacity shortages that result from effectiveness factors in local capacity areas. These designations should occur annually after LSEs have made their year-ahead RA showings and result in an annual RCST designation. Oppose the broad use of RCST as proposed to procure capacity “as needed” to reliably operate the grid. The PRM is supposed to address load forecast error. Regarding LD contracts and DR, CPUC has made a determination that these resources count toward the RAR. To the extent CAISO procures capacity through RCST to make up for the lack of performance of these resources, there will be little incentive to correct the underlying problem and remedy RA weaknesses going forward. The other deficiencies seem to relate to the CAISO’s lack of flexibility to designate resources to cure a deficiency and react to an emergency. Agree that if the CAISO must procure capacity to make up for a LSE deficiency it should do so on a year-ahead basis. The slightly more or slightly less provision is overly restrictive. Do not support broad flexibility for CAISO to procure capacity within the year to address emergencies. The CAISO “significant event” backstop is fundamentally a surrogate for scarcity pricing. Since FERC has earmarked implementation of scarcity pricing for 1 year after MRTU implementation, the capacity backstop for this purpose should sunset upon adoption of scarcity pricing as well as reflect pricing the would occur under a scarcity situation.

Constellation: Agree for some portions; Disagree for other portions. Agree that CAISO should have backstop procurement authority to make up for deficient LSE RAR compliance demonstrations (including deficiencies that may result from non-CPUC jurisdictional entities), and due to effectiveness factors (although the term “effectiveness factors” as used to trigger backstop procurement needs to be fully defined). Do not support broad tariff language that says the CAISO may “Procure any additional capacity that is needed by the CAISO to reliably operate the grid” unless the criteria under which this additional capacity is procured are fully specified in the tariff and reported to market participants no later than one month after the procurement occurs.

AREM: Neutral. Agree with item (1) – this is basically outlining the use of the ICPM as an enforcement tool for RA. Item (2) is too broad and open-ended. CAISO should first look to its energy markets to provide what is needed to operate the grid reliably. CAISO’s first goal should be to ensure that those markets work well and are not undercut by excessive backstop procurement. The only other capacity need should be those defined and triggered through a narrowly defined Significant Events’ process. ICPM prices and process will adversely affect the RA capacity market. Therefore, the CAISO needs to take all possible steps to narrow the conditions under which it will procure using ICPM.

MWD: Disagree. For first and second “functions” of new backstop: notify deficient LSE, allow brief time for response, and if no response notify its LRA and allow brief time for response before CAISO procurement.

CDWR: Disagree. Believe that if CAISO implements a backstop mechanism, CAISO should itself procure capacity and that any capacity so procured should only be procured to the extent that an LSE failed to meet CAISO guidance during its RA showing.

NCPA: Neutral and Disagree. Generally agree that intent of ICPM is to solve RA deficiencies, but is concerned with the general nature of “procure any additional capacity that is needed by the CAISO to reliably operate the grid”. ICPM should not be used as a general operation tool, because RA is meant to be a planning function, a “RA” backstop procurement mechanism should be used for the same purpose.

k) Process and Trigger for Backstop
SCE: Agree. Support CAISO proposed trigger, assuming that definition of “Significant Event” is modified as discussed in 91 below.

CPUC: Would support a transparent CAISO protocol to assess whether a Significant Event has occurred and analyze whether CAISO can use a transmission operating procedure, install transmission equipment, or employ other procurement solutions instead of declaring that a significant event has occurred. Process should be open to stakeholder input. Propose that CAISO and stakeholders form a Significant Event Advisory Committee made of CPUC staff, a representatives of LSEs, and Transmission Owner representatives and/or other market participants. This would be a quick-turn-around committee that provides feedback to the CAISO prior to the triggering a Significant Event. The assessment of whether a Significant Event has occurred should include a waiting period. CAISO should engage in backstop procurement only after the CAISO markets have proven ineffective at fulfilling the system’s reliability needs.

Williams: Disagree. If CAISO declares an emergency to call upon non-contracted capacity for any reason, it should be designated for a 3-month minimum term. Whether the need is for an “enduring” period or not is immaterial to whether that unit can recover its fixed costs and remain in operation. RUC ostensibly has the potential to provide non-contracted units with some capacity revenue. But given that all RA capacity will be required to bid into the IFM (and therefore RUC) at a $0 price, it is uncertain whether non-RA units will ever clear RUC. As a day-to-day payment stream, RUC is not likely to prove to be a dependable source of fixed cost recovery for non-contracted units. Further, suppliers will be reticent to bid into RUC at levels that might be needed to provide fixed cost recovery if those units are only running for short periods of time, as such bidding levels would almost certainly bring severe political or regulatory scrutiny. While voluntary participation in RUC might seem on its face to not warrant designation under ICPM, Williams does not see RUC as a dependable means of fixed cost recovery. Nor does Williams believe that the CAISO should have unfettered discretion to designate non-RA capacity that provides RUC service.

Dynegy: Dynegy offers the following proposal:

1. By September of each year, CAISO will issue its annual LCR and zonal and system RA requirements for the following calendar year. LCR requirements will be consistent with the CAISO LCR study findings. Criteria for the zonal and system RA requirements will be based upon the CAISO forecasts of load, its assessment of imports, hydro generation, renewable and QF generation and demand program performance forecasts.

2. After the publication of LSE LCR and RA analysis, CAISO would perform its own independent analysis comparing the LSE LCR and RA analysis/procurement with CAISO’s forecasts and publish a report.

3. Should the LSE analysis/procurement be equal to or greater than the CAISO forecast of the LCR and RA, the report will just state that fact. On the other hand, if the LSE LCR and RA forecast is less than the CAISO requirements, the CAISO will publish the deficiency number and issue a RFO to procure the desired services. The performance requirement for the RA and LCR product defined in the CAISO RFO must be exactly identical to the LCR and RA requirements of the associated CPUC capacity-only product.

4. The CAISO may reject any or all offers of available capacity for additional system or zonal RA capacity in its RFB. However, CAISO staff must provide a report to the CAISO Board outlining the reasons that they declined to procure the forecasted requirements during the next scheduled CAISO Board meeting following this action.

5. CAISO must make a good faith effort to procure additional capacity to satisfy any local area shortfalls. Should the CAISO staff decide not to satisfy LCR shortfalls, they must provide a public comprehensive report to the CAISO Board justifying this action during the next scheduled CAISO Board meeting following this action.
6. On the day before the operating day, the CAISO would first utilize all of the available RA, LCR, RMR, and other contractual capacity prior to utilizing uncommitted capacity in RUC. **Mirant**: Agree and Disagree. Support 9 (k) (1)(a-c) and the triggers and provisions to cure for LSE RA non-compliance and local capacity effectiveness factors. Do not support Significant Event trigger. Support a hard and fast trigger for Significant Event designation that reflects a specific level of operating reserves in the market (e.g. 7%). Trigger must also be tied to an anticipation that the operating reserve shortage will persist for a given period of time (e.g. 6-8 weeks). Once the trigger is hit a RCST designation would be automatic. **Constellation**: Agree and Disagree. Support the process outlined in (1) of 9(k), and specifically support allowing CAISO to procure partial units in backstop procurement. With respect to the process outlined in (2) of 9(k), do not support broad tariff that allows CAISO “to procure additional capacity beyond the RA requirements when such capacity is needed to reliably operate the system.” Seek clarification as to whether or not the analysis described in (2)(a)(1) is referring to the analysis of effectiveness factor. If so, do not object to this analysis serving as the basis for CAISO backstop procurement, as long as the term “effectiveness factors” is fully defined. Do not object to the process outlined in (2)(b) for designating resources that are needed in response to a Significant Event; however, recommend a very precise definition of Significant Event. **AReM**: Neutral. Agree with proposed RA triggers (except to the extent an LSE had implemented a poor standard) and the evaluation process outlined. Agree that CAISO should be able to procure part of a unit. Do not agree that the assessment discussed in 2 b) is sufficiently narrowly defined. For example, CAISO must define what is meant by “enduring”, or the duration of the need for the product. If it is very short term, ICPM is inappropriate. Because the minimum payment is 3 months, does the CAISO believe that the minimum duration of a need for ICPM capacity must be 3 months and that all shorter-term needs will be handled through MRTU markets? Presume that the longest-term need would be 12 months (and should be much shorter), because any identified deficiency would be captured in the next annual RA process. CAISO should confirm its position on this. Suggest that CAISO first work out the details of the Significant Events and then decide on an appropriate process to evaluate the event and determine whether additional backstop capacity must be procured. **MWD**: Disagree. For third function of new backstop, do not invoke procurement unless unanticipated deficiency will continue to exist for at least two-thirds of the committed term of payment to resource. Provide opportunity for stakeholder involvement to analyze events and alternatives to CAISO procurement. ICPM should not be invoked in an operating emergency as CAISO already has sufficient existing tariff authority to take appropriate action. ICPM is supplemental; CAISO should provide notice and solicitation to stakeholders in advance of procurement. **CDWR**: Disagree. In the rare event that CAISO forecast a temporary need for capacity beyond that supplied in its guidance, a deficient LSE should be given refreshed guidance as far in advance of the forecasted need as possible and offered the opportunity to supply the required capacity prior to purchases made by CAISO. **NCPA**: Neutral. Continue to emphasize purpose. ICPM should not be used to solve less than “significant” operational contingencies. **Six Cities**: Disagree. If LSEs collectively do not satisfy LCR requirements, then supplemental procurement by CAISO may be appropriate. Procurement due to effectiveness factors or the consequences of aggregated LCR requirements is not appropriate. If there are defects in the RA program or process, they should be addressed directly. Procurement for Significant Events as described in the white paper is not appropriate.

I) Definition of Significant Event
SCE: Disagree. Inappropriate to define a “Significant Event” as essentially a RA counting rule assumption that the CAISO disfavors. Rather, a significant “and enduring” event should be tied to a major outage on the CAISO’s system (including generation and/or transmission), and should be expected to last for an extended period of time (i.e. weeks or months, not hours or days). CAISO should be obligated to perform a reliability study and provide a report to stakeholders, utilizing the local reliability criteria as the study criteria for Significant Events. A Significant Event should trigger an analysis, followed by consideration of backstop, rather than automatic procurement, including CAISO Board approval.

PG&E: Existing RA program is intended to provide the resources needed by the CAISO, and there should be little need for additional resources. While the designation and backstop procurement needed to address specific LSE RA deficiencies or collective local area deficiencies due to effectiveness factors can be applied with objective criteria, the CAISO designation for “Significant Events” is subjective and could lead to excessive procurement. Recommend that CAISO staff fully justify any ICPM designations with reports to the Department of Market Monitoring, CAISO stakeholders, CPUC and other LRAs, the CAISO Board of Governors, and FERC. CAISO Board approval should be required for all ICPM designations required to address “Significant Events;” while the nature of such events would preclude prior approval in some instances, if reliability requires designation prior to CAISO Board approval, the designation should interim only and expire at the next CAISO Board meeting, unless affirmatively approved. Designation could reflect preferences for non-RA resources previously committed through RUC as small incentive for non-RA resources to participate in RUC.

CPUC: Concerned that CAISO proposal, is more expansive than is appropriate.
1. Loss of a facility… - In this area, backstop mechanism should be targeted at instances where drastic, unanticipated changes to the grid leave the CAISO with less than minimum operating reserves. Recommend that this item be amended to: “Loss of a facility that endangers the CAISO’s ability to maintain operating reserve greater than 7% across the system and in all Local Areas after committing all available RA resources including commitment of DR when possible.”
   a. Loss of a local RA resource… - Recommend that relationship between Local RA program and backstop authority is made clear to indicate that there are certain contingencies that are planned for as part of the LCR study, and if those contingencies occur, what the metric is to decide if backstop occurs. Possible clarifications include that backstop could be procured to address a N-2 condition but not an N-1 condition, or the Significant Event could be required to last for a certain length of time before backstop procurement occurs.
   b. Loss of RA resources in excess of 8 percent… - There are many months in which LSEs have under contract excess capacity to cover even very substantial outages. CAISO determines the timing of scheduled outages, and should endeavor to effect such planning to limit the effects of scheduled outages on grid reliability.
   c. Loss of a facility… - Need more clarity: perhaps a threshold such the loss of generator deliverability prevents the CAISO from relying on the full 7% operating reserve.
2. Demonstrated delivery of an RA resource… - Oppose CAISO backstop procurement that assumes that DR resources will not perform. Oppose use of a capacity backstop mechanism that would in effect raise the PRM for CPUC jurisdictional LSEs beyond that approved in the CPUC’s RA program. Significant Event should not be triggered because of the inherent risk of forecasting error. CAISO should make clear that Significant Event is not the error, but its effect on the operating conditions of the system by specifically referring to the overarching condition in section (1) as proposed to be amended by CPUC staff.
3a. An official change in adopted Load forecast… - If CEC increases its load forecast after the year ahead and local RA showings have been made, an advisory committee should review the magnitude of the change and determine if backstop is needed.
3b. Error in load distribution factors… - Encourage CAISO to investigate the potential for improved modeling technology if this becomes a problem under MRTU. Request clarification for how frequently FNM will be updated. CAISO should consider a program of updating the FNM on a fairly frequent basis.

3d. Errors relative to deliverability… - CAISO should make clear that Significant Event is not the error itself, but its impact on the operating conditions of the system by specifically referring to the availability of operating reserves.

4. Changes in applicable NERC… - It is unlikely that NERC/WECC will adopt more conservative criteria than are in the current adopted criteria in a timeframe that would impact an RA operating year. Suggest removing this from the definition of Significant Event.

5. Insufficiency of RA units in RUC… - Support a CAISO assessment of whether a Significant Event has occurred. Support development of a method for the analysis and reporting of RUC information similar to that requested and required for RCST use. Do not agree to the use RUC as a trigger for backstop procurement, absent long-term or pervasive deficiencies in RUC bids.

6. RUC and any subsequent HASP… - Interested in understanding the role of RUC in HASP and during the real time run of SCUC in the form of RUC reporting.

7. Change in federal or state law… - As laws and regulations develop and are imposed, they are not typically an acute operational concern in the immediate time frame. Suggest removing this as an RCST concern.

EOB: The proposal defines "Significant Event" so broadly that CAISO is given a virtual carte blanche to designate RCST units, exacerbating the incentives of CAISO to procure at any price. Contend that existing generators do not require a capacity payment in order to run over the course of short-term near-emergencies, due to both their obligation of mutual system support and the structure of California's redesigned wholesale electricity market. There is no need to include “Significant Event” into RCST.

Williams: Strongly Disagree. Do not support crafting a complex definition of Significant Event that provides CAISO discretion to designate non-RA capacity that it uses as ICPM capacity.

Mirant: Disagree. Support a definition of Significant Event for market clarity. Definition should be reflect a hard and fast trigger that reflects a circumstance where an event in the system causes the capacity under RA to be compromised in a manner that the CAISO anticipates a persisting circumstance of having to operate the system at or below 7% operating reserves. Fundamentally, that the system is at 7% during a heat wave is expected and this is the time when DR should be active. If reserve margins remain at 7% for a prolonged period of time it is an indication that something may have gone wrong in planning and a RCST may be warranted.

Constellation: Disagree. Recommend a single definition for “Significant Event,” that should provide a measurable standard that will provide transparency and market certainty about what constitutes a Significant Event, such as the following: “A Significant Event has occurred when an event, or combinations of events, has occurred that causes the availability of resources that have been committed for RA purposes for system, zonal, or local requirements to have been reduced to a level that is equal to or less than the peak load for the system, zone, or local area plus 8%, and the Significant Event is expected to continue for the lesser of (i) the remainder of the compliance period or (ii) two months.” Note that CAISO proposal includes a list of “events that the CAISO might evaluate to determine whether a Significant Event has occurred.” Do not disagree that the CAISO should consider those types of events in determining if a measurable threshold as suggested here has been triggered, but notes that PRM is intended to provide the cushion necessary to accommodate most of those events. At conclusion of each compliance period, there should be a formal stakeholder process conducted jointly by the CAISO and CPUC to review the declared Significant Events that occurred during the compliance period to determine whether the
occurrences of the Significant Events warrant modification to PRM for subsequent compliance periods.

**AREM:** Neutral. Agree that best approach is to set a clearly measurable trigger. CAISO must define the minimum duration of the event that is required before ICPM procurement can be triggered. Expect CAISO to include that this trigger will never be applied retroactively – retroactive billing for events that took place in the past create havoc for ESPs, which have significant changes to their customer base month to month and may not be able to recover costs from customers whose contracts have since terminated.

**MWD:** Disagree. Too vague and too much CAISO discretion. See above recommended criteria under item 9k).

**CDWR:** Disagree. Too vague and too much CAISO discretion. See above recommended criteria under item 9k).

**NCPA:** Neutral and Disagree. A Significant Event should be limited to the loss of large facility (generation/transmission) for an extended amount of time that impacts the ongoing reliability of the system. Would not consider a number of the examples listed within the white paper to be Significant Events. Those include, but are not limited to, insufficiency of RA units in RUC resulting in consistent use of non-RA units, RUC and any subsequent HASP or real-time run of the SCUC that cannot converge, errors related to deliverability of RA resources to load, voltage or reactive resource modeling errors or resource changes, loss of RA resources in excess of 8 percent. ICPM is not meant to satisfy day-to-day operational needs.

**Six Cities:** Definition of Significant Event is overly broad. The descriptions of Significant Events do not justify a need for backstop capacity procurement as follows:
1. Loss of facilities - LCR criteria already accounts for loss of facilities under N-1-1 in 1-in-10 peak load conditions and still maintain reliability. In the absence of a more specific identification of additional concerns with respect to loss of facilities not addressed by the LCR criteria, there is no justification for procurement of additional capacity.
2. Demonstrated delivery of RA resource below the value counted in the RA program - How is this assessment conducted? How would CAISO go about deciding whether to procure capacity or not? If this is an endemic problem, e.g., if wind power delivery is consistently below the value counted in the RA program, wouldn’t it be more appropriate to change the counting rules upstream for wind resources as opposed to having the CAISO do backstop procurement?
3. Grid study errors; - It is not clear why such concerns are not addressed in the conservative LCR study criteria and established reserve margins. Changes in applicable NERC... - Such changes do not just happen overnight, and the CAISO should be able to anticipate such changes, determine the additional requirements, if any, and let the LSEs do the procurement to the maximum extent possible.
4. Insufficient RA resources in RUC - It is not clear why this should ever occur. The potential concern should be clarified, and if it results from a defect in the RUC process, it should be addressed directly.
5. RUC non convergence - It is not clear why RUC not converge with RA resources. If there is a defect with the RUC process or software, such a defect should be addressed directly rather than leading to the procurement of additional capacity.
6. Changes in federal or state law or regulation - Changes in regulatory policy do not occur overnight. There should be sufficient time for CAISO and the stakeholders to adjust the RA program.

**m) Reporting of Backstop Procurement**

**SCE:** Agree. Reports need to be published in a timely manner consistent with CAISO tariff timelines.
CPUC: Request that CAISO provide the monthly RCST reports no later than 10 days after the end of a month until the startup of the MRTU market, when it is anticipated that the FERC MOO will no longer operate in California. The details regarding contents of such reporting should be developed in a RCST reporting protocol focused on serving the intended function of informing the CPUC and other LRAs of CAISO’s reliability needs. Request that monthly reports and Significant Event reports be published so that they can be incorporated within the RA procurement cycle to ensure that relevant information is being provided in a timely fashion to inform LSE procurement. Encourage CAISO to formally solicit feedback on the actual reports as it is also updates the process of posting these reports.

Williams: Agree, but reservations about past failures to report. Support reporting provisions described in white paper, but note that those requirements relate only to designation. The spirit of the reporting requirements under RCST were not just to report on RCST designation, but to report on any FERC-MOWD use and provide rationale as to why such use led to or did not lead to designation. Believe these reporting requirements – if the CAISO followed them – would probably have been sufficient. CAISO should report at least monthly on the use of all non-RA resources – the time, duration and cost of use and the reason for use – so this information can be used to determine if the RA program is sufficient or requires amendment.

Mirant: Agree. CAISO must make timely reports to enable remedies to the RA program that may be causing the need for backstop procurement or persisting situations of scarcity that result from underperforming resources.

Constellation: Agree with slight modification that a report on backstop procurement should be posted each month, even if backstop procurement has not occurred.

AREM: Neutral. This may be acceptable. Need more information on the current reporting process and an explanation of why the report for summer 2006 was not released until summer 2007. Under ICPM, would expect monthly reporting of the performance of RA and ICPM capacity resources and a report on any event that may trigger additional ICPM procurement within 5 business days of the event.

MWD: Agree. Comply with existing tariff requirement for timely reporting of exercise of backstop procurement. Even better, notify stakeholders as soon as possible and with enough detail to make informed decisions prior to CAISO procurement of additional capacity.

CDWR: Agree. Recommend daily reporting of quantities and location of any backstop procurement. This transparency will permit the CAISO and its market participants to find market based alternatives.

NCPA: Neutral. Support reporting requirements that improve transparency.

Six Cities: Agree.

n) Committed Term of Payments

SCE: Agree to Neutral. Appropriateness of the term of payment is a function of the total procurement backstop mechanism. Can support the proposed terms of payments in the context of the CAISO’s proposal, but may object if other elements of the CAISO proposal are modified.

PG&E: Note that commitments under ICPM of any term length must fully justified by the CAISO staff in reports to Department of Market Monitoring, CAISO stakeholders, CPUC and other LRAs, the CAISO Board of Governors, and FERC.

CPUC: CAISO describes a deficiency in the year-ahead showings as mandating a 5 month minimum commitment. There may not be a deficiency in the entire 5-month time frame, however, as load is not constant across any season. Recommends that the term of commitment be tailored to the length of the deficiency, and instead describe the commitment period perhaps as “minimum of one month with a maximum of five months, depending on the expected length of the deficiency.”
Williams: Agree (except for discretion for designation). Support a 5-month minimum term, which is consistent with the structure of California’s RA program. Believe that advance designations for local reliability or because of the Path 26 counting convention should have 1-year terms. Do not support CAISO discretion as to whether or not to designate ICPM. 

Dynegy: LCR capacity requested in the CAISO RFO must be procured on an annual basis. The minimum zonal and system RA capacity must be procured for at least one month. Uncommitted capacity that had not bid into RUC and was called by the CAISO three or more times to provide local area support during an operating year, would automatically receive an annual ICPM contract for the whole operating year. Uncommitted resources that had not bid into the RUC market and were called by the CAISO three or more times to provide system or zonal support would automatically receive a ICPM contract for at least 3 months starting the first operating day of the next operating month.

Mirant: Disagree. Support the commitment term for ISO designation to cure LSE RA deficiencies. Do not oppose the commitment term for Significant Event resources, however, opposes the proposed payment for the term. Since the Significant Event is a surrogate for a properly functioning scarcity pricing mechanism, pricing must reflect such shortage conditions. Under the CAISO proposal the resource would be compensation for just a fraction of its fixed costs. More concerning is that the CAISO can wait to procure the resource until mid-year and pay a fraction of the annualized capacity price. Support a multiple of the CONE price if the CAISO decides mid-year that it requires additional capacity to meet emergency situations. A multiple of CONE would be a proxy for a scarcity price that would normally provide an incentive to LSEs (or the CAISO) to procure sufficient capacity in advance. An alternative approach would be a daily payment of a percentage of the annual CONE for each call. Support further discussion about how a daily payment could work without a MOO.

Constellation: Agree and Disagree. The term of the capacity procurement should be for the same term of the shortfall (if the LSE shortfall was for the annual compliance showing, the backstop procurement should be for the annual period; if the LSE shortfall is with respect to a monthly compliance showing, then the backstop procurement shall be for a monthly period). Matching the CAISO procurement specifically to the LSE shortfall will ensure that CAISO procurement does not pre-empt or “front run” LSE compliance – if the CAISO procures for 3 months of capacity to make up for an LSE’s month-ahead compliance demonstration, that means that the CAISO has procured on behalf of the LSE for the second and third months, even though the LSE has not yet been shown to be deficient. In response to a Significant Event, the term of the commitment shall be for the greater of (i) three months or (ii) the duration of the Significant Event; provided, however, that CAISO procurement shall not extend beyond the end of the current Compliance period.

AReM: Neutral. This should be revised only once the triggers and the duration of the product desired by the CAISO are decided.

MWD: Disagree. Seems likely to be excessive in most instances.

CDWR: Disagree. Any backstop procurement should be made in monthly increments and monthly guidance should be issued by CAISO as far in advance as possible.

NCPA: Neutral and Disagree. Recommend that procurement for deficiency associated with year-ahead showing should be a minimum of 3 to 5 months, depending on the deficiency. This would be more consistent with a designation due to a deficiency identified in the monthly demonstration. The simple fact that a year-ahead showing consist of 5 months does not constitute a 5-month designation. Designations should be based on need, not administrative ease. Commitment term for local RA deficiencies should also be limited to 3 months. The CAISO has not provided justification for an annual local RA requirement when considering the variability of peak loads throughout the year.

Six Cities: Disagree. Committed term should be no longer than necessary to address demonstrated needs. In most instances, the committed terms of payments should be one
month. CAISO should not procure local capacity during non-peak months simply because there is an indicated deficiency measured against peak month needs.

**o) Basis of Compensation (Target Annual Capacity Price)**

SCE: Agree. Support the use of proxy price for new peaking facility as basis for compensation, including the use of monthly shaping factors and PER deductions.

PG&E: ICPM is a short term backstop process; however, CAISO proposes pricing intended to stimulate new construction. ICPM payments are not intended to stimulate new construction, nor has the CAISO or any other parties suggested that new construction would result from such payments. The proposal to establish significantly higher pricing for ICPM than currently provided through RCST runs the risk of distorting market transactions. Support an RCST price, with justified inflation adjustments, for such 3 to 12 month designation periods; shorter designation periods such as monthly or less as proposed by some stakeholders might merit higher proposed prices. If CAISO adopts the use of partial units, proposed higher prices could be considered further and as part of the overall compensation.

EOB: The dollar amount of the proposed basic RCST payment is far too high for its intended purpose - impacts consumers directly and indirectly by influencing the price of RA contracts. It makes no economic or policy sense to pay existing generators a RCST payment based not on their fixed cost of operation but instead based on the fixed cost of constructing a brand new generation facility. Yet the current and proposed RCST procedure pays current RCST units based on the cost of new construction. RCST was never about incenting new generation, nor should RCST be considered in that light. Using the cost of new generation as the proxy renders the RCST rate unjust and unreasonable, and thus illegal under the FPA. Contend that the RCST payment must be based on the cost structure of existing RCST units in California - cost to existing units for providing their uncommitted capacity to the CAISO real-time market. Recommend basing the RCST payment on a portion of fixed costs, plus incremental variable costs - might be approximated by paying the RCST unit 125 percent (125%) of its reference price. The proposal evidences its belief that the RCST payment must be high enough to force a LSE’s to comply with its RA obligations; contend that such a position is both misguided and short-sighted. While agree that RA contract prices will be discounted relative to the RCST price due to the uncertainty associated with RCST designation, there is no question that the RCST price will have an economic impact on RA contract prices.

Williams: Neutral. Note that the use of the Gen Hub price to determine the PER instead of the unit’s nodal price may be a boon to the resource (if the generator’s nodal price is greater than the Gen hub price) or a disadvantage (if the generator’s nodal price is less than the Gen Hub price). Why does the CAISO propose to use the Gen Hub price instead of the nodal price?

Dynegy: Offer an alternative price proposal, as follows: On October 31, suppliers wishing to provide RA and LCR services in response to CAISO RFO would provide sealed bids for both available capacity and price for each service for the next operating year, as follows: (a) the LCR offer must be submitted for an annual capacity product (annual available capacity and annual price), (b) the zonal and system RA product offers must include two $/kW-month prices: one price for six summer months (May - October) and the second price for the six winter months (November-April), and (c) the hourly capacity product price (in $/kW-hour) that CAISO can utilize when calling for capacity from uncommitted resources that has not bid into the RUC market. This daily price would also include a fee for start-up, minimum-load, and minimum operating hours. When CAISO issues the RFO, it would provide the suppliers 48 hours to refresh their capacity offers submitted on October 31. For suppliers who fail to submit a revised offer, CAISO would utilize the offered available capacity and price numbers.
submitted on October 31. On the day before the operating day, CAISO would first utilize all of the available RA, LCR, RMR, and other contractual capacity prior to utilizing uncommitted capacity in RUC. For uncommitted resources that have bid into the RUC market, CAISO would pay bid or better as outlined in CAISO MRTU design documents. Uncommitted capacity that has not bid into the RUC market and is called upon by CAISO would receive the Hourly ($/kW-hour) price. When CAISO calls upon the uncommitted capacity that has not bid into CAISO RUC, it would pay the start-up cost and adhere to the operational constraints minimum operating hour and minimum-load level of the resource.

Mirant: Agree.

Constellation: Have not formed a specific opinion on the appropriate compensation, except to note that the compensation should be based on the cost of new entry less PER for the system, zonal, or local capacity. CAISO should specify the studies that it has used to develop it proposed compensation, and parties should be permitted to review and comment upon those studies. Once the cost of new entry studies have been reviewed, the appropriateness of a phase-in and monthly shaping factors can be further discussed. Note that type of cost-of-new-entry studies have been prepared for use in the Eastern Markets, most notably in New York, where the cost-of-new-entry and PER deductions are re-evaluated for use in their demand curve capacity markets every 3 years. The possibility of conducting an auction was raised, and believe it may be worthwhile to discuss this approach to determine whether it is feasible.

AREM: Neutral. Agree that ICPM product is “pure capacity,” but the proposed price is not a capacity price but one that must be adjusted by PER and other factors, which complicates the payment calculation and makes it difficult for ESPs to project the price they will pay for this service. If parties cannot agree on a pure capacity price, then this approach may be acceptable. Parties have mentioned the concept of a sealed-bid auction to set the capacity price. Would like further discussion of this concept. Although there may be a need to set a tariff price for situations in which there is no competitive option, auction could be an elegant solution.

MWD: Disagree. If generation exists, inappropriate to use new generation cost as a proxy unless this is intended as a planning tool, which would be inconsistent with stated purpose. Ascertain why existing generation is not participating in market.

NCPA: Neutral. Have not formalized a position on this issue.

Six Cities: Disagree. White paper makes clear that the backstop mechanism is for the purpose of procuring existing capacity, not new capacity. There is no justification for compensating owners of existing capacity based on the costs for new construction.

p) Formula for Escalating Target Annual Capacity Price

SCE: Agree. Generally support payment proposal ($73 escalated at 2.5% per year), although acknowledge that new generation capacity prices can be shown to be slightly higher depending on the assumptions utilized. Reasonableness of the target annual capacity price is ultimately dependent on the other terms of the interim backstop procurement mechanism.

PG&E: If ICPM pricing departs from RCST, other than as necessary to adjust for inflation, it must be fully justified, and must be set in accordance with the value of the product it provides. CAISO cannot simply look to the eastern markets for pricing, as the product provided by those markets, and the structure and purpose of those markets, are not the same as those of ICPM. Moreover, the future RA structure has not yet been determined, and CAISO has announced that it has not prejudged the form that structure will take - inappropriate to base pricing of ICPM on projections of the pricing that future RA program might have if it takes the form of an eastern-style market.

EOB: If monthly RCST payment was based upon the fixed costs of existing generation units providing their uncommitted capacity to the CAISO, then would have no objection to revisiting the level of the monthly payment every 2 years to be sure that such units are
compensated adequately. Unfortunately, that is not the case because the proposal continues to base the RCST payment on the cost of new construction. Using the wrong proxy to approximate the cost to existing generation units results in an unjust and unreasonable rate. Adding an annual increase to an incorrectly calculated RCST payment merely compounds the harm to consumers.

**Williams:** Disagree. Escalating the capacity price over 1 or 2 years makes sense, but over a 5-year term a re-opener after 2 years to re-evaluate the cost of new entry makes more sense. The starting price must be defined properly - support a price that both reflects the cost of new construction in California and is consistent with the design of the PER deduction.

**Mirant:** Disagree. Support a mechanism that reflects the CONE; however, the escalation of CONE must be representative of the true costs of construction, not limited to inflation (construction costs have escalated considerably in recent years). It appears that the proxy prices used in the proposal for new generation are outdated; have attached more recent studies conducted by the New York ISO and CEC. CAISO should consider working toward locational capacity prices consistent with the LCR and locational marginal pricing.

**Constellation:** See comment for item 9(o).

**AReM:** Disagree. Recommend more discussion of the auction concept as an alternative to this approach. Do not agree that price should be based on CONE - it is only appropriate when the product sought is far enough in the future that the market must provide a signal for new investment. This is not the case with ICPM capacity, whose purpose is to provide backstop procurement for RA program for short duration under very narrow circumstances. ICPM price will drive the price for RA capacity. For example, the capacity portion of the RCST price ($40) was used by the CPUC as a trigger by which LSEs could request a waiver from meeting the Local RAR. The RA capacity prices rose to nearly match this trigger price. Concerned that same RA interplay is likely to occur with ICPM pricing. ICPM capacity price should be based on an average of existing generation units that could be called on for this purpose. Alternatively, may support continuing with the current RCST price and adjusting it annually based on the CPI. Opposes price progression in proposal where price reaches CONE in the last year of the tariff.

**MWD:** Agree.

**NCPA:** Neutral. Have not formalized a position, but do not agree that a proxy unit should be based on the last incremental MW of capacity added to the system. Compensation will be provided to existing units, which does not justify establishing a proxy based on the cost of an emergency peaker resource.

**Six Cities:** Disagree. See comment above for item 9o).

**q) Formula for Capacity Payment**

**SCE:** Agree to Neutral. Appropriateness of payment formula is a function of the total procurement backstop mechanism. Can support the proposed payment formula in the context of the proposal, but may object if other elements of proposal are modified.

**EOB:** The proposal carries forward the current scheme for paying bonus payments to generators that make their uncommitted capacity available more than 95% of the time. Generators that make such units available less than 95% of the time receive a reduced amount of the monthly RCST payment. A generator should only get the monthly RCST payment if the unit is actually available and responds to every dispatch order from CAISO during that month. If the RCST unit fails to comply with any dispatch order, it should forfeit the entire monthly RCST payment. The proposed bonus payment scheme does not reflect the correct measure of performance, which is the degree of conformance to a contractual obligation. Cannot support availability factor bonus payments.

**Williams:** Disagree. Strongly disagree with deduction of non-spinning revenues from the monthly capacity payment unless the price of this service reflects the capacity cost of a generating unit that can start and fully load in 10 minutes. The structure of PER must reflect
the choice of technology for the benchmark price. If benchmark unit represents a frame-type unit, that cannot start and load in 10 minutes, PER should not include non-spinning reserve revenues. If the benchmark unit is an aero-derivative unit that can start and load in 10 minutes, it would then be appropriate to include non-spinning reserve revenues in PER.

Mirant: Agree.
Constellation: See 9(o).
AReM: Neutral. May be acceptable if the CAISO decides to continue the RCST pricing approach for ICPM.
MWD: Neutral.
NCPA: Neutral. Have not formalized a position on this issue, but believes that reducing compensation based on opportunity costs (in the form of a PER) is appropriate.
Six Cities: Disagree. See comment above for item 9o).

r) Formula for Monthly Capacity Charge
SCE: Agree.
Williams: Neutral. Do not object to shaping the monthly payments.
Mirant: Agree.
Constellation: See comment for item 9(o).
AReM: Neutral. May be acceptable if CAISO decides to continue the RCST pricing approach for ICPM.
MWD: Neutral.
NCPA: Neutral. Have not formalized a position on this issue.
Six Cities: Disagree. See comment above for item 9o).

s) Allocation of Costs
SCE: Agree. Support the cost allocation proposal. Urges CAISO to begin working on RMR cost allocation changes as soon as possible in the event that RMR designations for RA showing deficiencies becomes necessary.
Williams: Agree. Support proposed cost allocation.
Mirant: Agree.
Constellation: Agree. Do not oppose the continued use of the RCST cost allocation methodologies. It should be clear in tariff that costs of backstop procurement by CAISO to make up for LSE RAR deficiencies should be allocated directly to the deficient LSE, including direct allocation to any deficient non-CPUC jurisdictional entity that is found to be deficient.
AReM: Disagree. Concur that any LSE designated as deficient in meeting its RAR should be allocated the costs of ICPM to cure the deficiency. Note that CAISO cannot determine whether LSEs are deficient for system or zonal needs under its current tariff arrangement, which AReM sees as a flaw in current design. Support investigating an approach whereby CAISO could “credit” LSEs that meet or exceed a reasonable standard or “debit” those that do not when assigning ICPM costs.
MWD: Disagree. Allocate any costs to deficient LSE that had the opportunity to contract for a resource. Capacity costs are based on the need to meet a coincident peak load. Therefore, any backstop capacity costs should be allocated exclusively to the LSE(s) in the actual load pockets that have given rise to the deficiency. Off-peak loads from pumped-storage RA resources should not be included in any cost allocations.
CDWR: Costs should be allocated to LSEs that are deficient meeting their RA guidance. If additional RA capacity is required, the cost of procuring that capacity should be allocated in proportion to each LSE’s share of the coincident peak. Regardless of methodology chosen for allocation of costs, pump energy associated with pump storage operations should not be included in cost allocation.
NCPA: Neutral. Believe that mechanisms should be made available that will allow LSEs to self-provide services to the extent possible. CAISO must ensure that ICPM does not create significant cost shifting among market participants. Costs incurred should be allocated pursuant to cost causation principles.

Six Cities: At this time it is not clear how the allocation of costs to “deficient” LSEs would work. Consider the following hypothetical: Assume two LSEs: LSE 1 and LSE 2. LSE 1's LCR obligation = 100 MW, LSE 2’s LCR obligation = 100 MW, LSE 1’s LCR resources = 100 MW every month except August is 50 MW, and LSE 2’s LCR resources = 70 MW every month except August is 120 MW. If CAISO procures 30 MW in backstop procurement year-round, how would CAISO allocate the procurement costs between these two LSEs?

**t) Selection Among Multiple Resources**


CPUC: CAISO recommends that it be able to designate portions of capacity from units, so as to only get what it needs and not more. Recommend adding the condition that CAISO will endeavor to first procure capacity from RA resources that are only partially committed at the time the Significant Event arises to ensure that all units are efficiently operated before committing a new unit.

Williams: Neutral. Partial unit designation must be discussed as part of the whole package of price, terms and conditions. For example, CAISO ability to cherry-pick part of a unit for a very short term at a low price might meet CAISO needs but would likely provide no meaningful contribution towards fixed cost recovery for that unit. Partial unit designation also has implications for the benchmark unit used to set the price – it would not be appropriate for the CAISO to have the ability to designate a partial-unit quantity of capacity (e.g., 20 MW) if the benchmark unit is a 160 MW frame turbine. Agree that in no case should a partial designation be for less than the unit’s minimum load. This issue warrants further development and discussion.

Mirant: Disagree.

Constellation: Agree. Do not oppose the proposals for selection among multiple units or ability to designate partial units.

AReM: Agree. Agree with this change because it gives the CAISO more flexibility in its procurement and may lower costs for consumers.

MWD: Neutral.

NCPA: Neutral. Have not formalized a position on this issue.

**u) Obligation (PGA Resources and to Accept ICPM Designation)**

SCE: Agree. Strongly support.

Williams: Neutral. Do not object to require a unit to be designated to provide ICPM service when requested by the CAISO, but still do not support aspects of the proposal for ICPM service, including price, including non-spin revenues in the PER, and CAISO discretion regarding designation.

Mirant: Agree.

Constellation: Disagree. Do not believe that a unit should be required, pursuant to its obligations under the PGA, to agree to a backstop procurement arrangement at the request of CAISO. The obligation of PGA units to respond to CAISO dispatch notices should remain in effect.

AReM: Neutral. Believe that all market participants would benefit from a better written explanation of when PGA resources would be “obligated” to enter into a backstop arrangement, and whether this obligation would be to enter into an ICPM arrangement or
something else. If something else, how that would work and what price would be paid should be described.  

MWD: Neutral.

NCPA: Neutral. The designation and dispatch authority of a resource contained within Schedule 14 of a Metered Subsystem Agreement may only be dispatched according to the provisions of the Metered Subsystem Agreement.

v) Allocation of RA Credit

SCE: Neutral. Should be deferred to the CPUC for resolution.

Mirant: Agree.

Constellation: Agree.

AREM: Disagree. Agree that the deficient LSE should be able to use the credit in its RA showing. However, if CAISO has procured ICPM capacity for effectiveness or Significant Events and socialized those costs to LSEs, the LSEs paying those costs must receive an RA credit representing a proportional share of the procured capacity, based on load-ratio share, that can be used for their RA showings. This is similar to how RMR works today and how RCST is intended to work. Credit would have to be revised monthly for LSEs to reflect load migration. Strongly disagree with the proposal that says, “the procured backstop resources would not be credited …”

MWD: Agree.

CDWR: LSE’s should be able to claim as RA requirement, the proportion of resources for which each LSE is financially responsible. If CAISO procures additional backstop capacity to address deficiencies that result from effectiveness factors or Significant Events, these acquisitions should count toward each LSE consistent with the agreed upon split in financial responsibility. For example, each LSE in the TAC area which has been allocated a cost should be able to report backstop procurement in its RA showing.

NCPA: Neutral.

Other Comments and Ideas provided by Stakeholders

In the template that was provided to stakeholders for their use in submitting written comments, stakeholders were given an opportunity to provide other comments and ideas for the CAISO’s consideration. That information is presented below. The CAISO believes it has addressed these comments in the various features and descriptions of Proposal #2.

AREM: Two new concepts were discussed on July 25. Support further discussion and evaluation of sealed-bid auction to set the ICPM capacity price, and “credits” and “debits” for LSEs to better target cost allocation by CAISO.

MWD: CAISO appears to have little faith in its own MRTU design with its redundant mechanisms for obtaining generation capacity during an operating event, including RUC, RA, LCR and system emergencies. CAISO study criteria for local capacity, with N-2+, should be more than adequate for unforeseen outages. CAISO can meet WECC/NERC criteria by declaring system emergencies or dropping load if necessary. As long as the LSE has the opportunity to procure needed resources for LCR, LSE should be responsible for the consequences of not having enough contracted resources. Allocation of capacity costs should be on a time-sensitive basis. Support seasonal LRA requirements.

NCPA: Resources procured under a RMR contract will be made available to the market pursuant to the provisions of the RMR contract. Capacity associated with these resources shall remain with the owner of facility, and not allocated pursuant to a CPUC provision. It has been recognized throughout this stakeholder process that RMR resources are not interchangeable with the product procured under ICPM. CAISO does not have authority to allocate RMR capacity beyond the scope of the RMR contract.