Requirement for Suppliers of Resource Adequacy Capacity to Replace Capacity on Scheduled Outage

STRAW PROPOSAL

August 19, 2010
Market and Infrastructure Development Division
Requirement for Suppliers of Resource Adequacy Capacity to Replace Capacity on Scheduled Outage

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1. Introduction

The California Independent System Operator Corporation (“ISO”) issues this straw proposal to reopen the stakeholder process to develop ISO tariff provisions that would require a supplier of resource adequacy (“RA”) capacity to provide replacement capacity to the ISO when the RA capacity is unavailable due to an extended scheduled (or planned) outage. The need for the proposed ISO provisions arises from indications from the California Public Utilities Commission (“CPUC”) that it is considering eliminating the current RA replacement rule which applies to its jurisdictional load-serving entities (“LSEs”). In addition, some stakeholder have argued that including the replacement provisions in the ISO tariff would further standardize the RA Standard Capacity Product and make it more conducive to trading among LSEs.

The CPUC currently has a replacement requirement in its RA rules, but has encouraged the ISO and other parties to explore in an ISO stakeholder process a tariff-based approach for a replacement requirement.¹ As requested by the CPUC, the ISO will explore putting a comparable replacement requirement in its tariff to ensure that the CPUC rule elimination does not adversely affect the adequacy of available RA capacity to meet ISO operational needs. In the CPUC’s most recent RA proceeding for 2011 RA rules (see footnote 1), and in previous other ISO stakeholder processes, the CPUC and many stakeholders have expressed a preference that the replacement requirement provisions apply to suppliers rather than LSEs, which would make the RA standard capacity product more easily tradable. The ISO previously considered including a replacement requirement in the ISO tariff as part of the Standard Capacity Product II (“SCP II”) stakeholder process, but determined this topic was out of that initiative’s scope. Hence it will be addressed here in this new stakeholder process.

In the following sections, this paper provides: a description of the stakeholder process, background information on the existing CPUC replacement rule, a summary of the previous discussions that the ISO held with stakeholders earlier this year to consider ISO tariff based replacement provisions, a new ISO straw proposal for stakeholder comment and discussion, and next steps in the stakeholder process.

2. Stakeholder Process

This straw proposal will be discussed during a stakeholder conference call on August 26, 2010. The ISO is planning to present a proposal to the ISO Board of Governors at their meeting on December 15-16, 2010, and make a filing to the Federal Energy Regulatory Commission during 2011 for new tariff provisions that would become effective on January 1, 2012.² The major milestones in this stakeholder initiative are listed below.

¹ See CPUC Decision 10-06-036, June 24, 2010, Decision Adopting Local Procurement Obligations for 2011 and Further Refining the Resource Adequacy Program, Order Instituting Rulemaking to Oversee the Resource Adequacy Program, Consider Program Refinements, and Establish Annual Local Procurement Obligations, Rulemaking 09-10-032, at page 23. “We encourage CAISO and other parties to continue exploring the tariff-based approach in CAISO’s stakeholder processes.”

² If the CPUC eliminates its replacement requirement, the expected effective date for the change is January 1, 2012.
Aug 19  Post straw proposal
Aug 24  Post agenda and presentation for Aug 26 conference call
Aug 26  Hold stakeholder conference call on straw proposal (10:00-12:00)
Sept 3  Receive stakeholder written comments on straw proposal
Sept 21 Post draft proposal
Sept 24 Post agenda and presentation for Sept 28 meeting
Sept 28 Hold stakeholder meeting on draft proposal (9:00-12:00)
Oct 6  Receive stakeholder written comments on draft proposal
Oct 21 Post draft final proposal
Oct 26 Post agenda and presentation for Oct 28 meeting
Oct 28 Hold stakeholder call on draft final proposal (1:00-4:00)
Nov 5  Receive stakeholder written comments on draft final proposal
Dec 15-16 Present proposal to ISO Board of Governors
2011  File tariff at FERC
2011  Order issued by FERC (60 days after Dec 1 filing date)
Jan 1, 2012 Effective date of new tariff provisions

A web page has been established for this initiative that provides access to meeting materials, proposals, and stakeholder written comments. This information can be found at http://www.caiso.com/27f1/27f1da3b56ef0.html.

3. Background

3.1. Replacement Requirements

Replacement requirements for resource adequacy resources on scheduled outages are currently specified by the CPUC for its jurisdictional LSEs. At present, there are no comparable replacement requirement provisions for scheduled outages in the ISO Tariff.

3.2. CPUC Scheduled Outage Rules

The CPUC’s rules require LSEs subject to CPUC jurisdiction (“CPUC-LSEs”) to show that they have procured required levels of RA capacity, on both an annual and monthly basis. For example, in the annual RA filing process, all CPUC-LSEs are required to meet 90% of their system and 100% of their local RA capacity requirements. CPUC-LSEs will incur specific penalties if these requirements are not fulfilled.

On a monthly basis, CPUC-LSEs must adhere to the scheduled outage counting rules established in CPUC Decision D. 06-07-031 which adopted policy on both scheduled and forced outages for purposes of the system monthly RA filing. In contrast, the local RA filings are not affected by scheduled or forced outages. Thus, the following section and table apply only to the monthly system RA filings, not the annual local RA filings.

As described in the CPUC 2010 RA Guide, for RA counting purposes, a scheduled outage is any outage that is designated "Approved Planned" in the Scheduling and Logging System of California (“SLIC”) system, the ISO system for logging outages. LSEs are advised to verify a

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3 The ISO Tariff uses the term “Maintenance Outage” to refer to scheduled outages of generation and transmission facilities. The terms “planned outage”, and “scheduled outage” as used in this paper, have the same meaning as the tariff definition of “Maintenance Outage”.

4 The filing requirements are described in more detail in the section below.
unit’s outage status with their scheduling coordinator for each resource prior to including it in the RA filing. The CPUC and the ISO will compare the amount of claimed capacity in the annual system RA and monthly RA filings with ISO planned outage information to verify compliance. An LSE filing may be disapproved due to a variance between unit availability and the capacity listed in the RA filings.

All outage schedules and changes to outage schedules for a RA resource are subject to ISO approval. If the ISO approves a change to the outage schedule, the outage schedule change will not change the RA counting of the resource. If the ISO denies an outage request, the RA resource is expected to remain available. If a unit has a scheduled outage that curtails only part of the unit’s capacity, an LSE may count the RA capacity that is not curtailed.

The amount of capacity that can count towards an LSE’s system RA requirement will be the total Net Qualifying Capacity (“NQC”) for the applicable filing month minus the computed curtailment amount. The CPUC and ISO staff will verify RA capacity against scheduled outage information in SLIC and will only allow capacity that is not under a scheduled outage to count towards a LSEs’ system RA requirement, subject to the scheduled outage counting rules in the table below. Any approved changes to outages occurring after the filing due date will not affect an LSE’s compliance. The provisions below are applicable to CPUC LSEs.

<table>
<thead>
<tr>
<th>Scheduled Outage Rules for CPUC LSEs</th>
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<tbody>
<tr>
<td>From D.06-07-031, p.10</td>
</tr>
<tr>
<td><strong>Time Period</strong></td>
</tr>
<tr>
<td>Summer</td>
</tr>
<tr>
<td>May through September</td>
</tr>
<tr>
<td>Non-Summer Months</td>
</tr>
<tr>
<td>October through April</td>
</tr>
</tbody>
</table>

LSEs are required to make system and local year-ahead filings, respectively, as well as month-ahead filings to demonstrate procurement of sufficient capacity to meet established RA requirements. Annual RA filings are submitted in the October/November timeframe each year. The year-ahead local RA filings must demonstrate that each LSE has procured capacity to satisfy 100% of established local capacity requirements. For CPUC LSEs, local capacity requirements are adopted annually by the CPUC, based on the annual ISO LCR Study. The local capacity requirements represent a constant amount of necessary local capacity for each month. The year-ahead system RA filings must include a demonstration that each LSE has
satisfied 90% of their system RA requirements. Scheduled outages for generation are not reflected in either the year-ahead system or local filings. Thus, the identified system and local resources are assumed to be available 100% of the time throughout the year.

The monthly RA filings demonstrate how LSEs have satisfied 100% of their system RA requirements for a given month. The monthly filings include resources used to satisfy the local capacity requirements but which also count towards satisfying the broader system requirements. In the monthly filings, LSEs indicate whether a resource is on a scheduled outage and identify replacement capacity for those resources on a scheduled outage. Under the current requirements, LSEs are not required to replace local capacity on a scheduled outage with other local capacity. However, the ISO can deny a scheduled outage request due to local conditions. CPUC and ISO staff, respectively, review the quantity of local capacity submitted in the monthly RA filings. The ISO's Outage Management Department monitors the quantity of local capacity on scheduled outage as part of the outage review process. While the CPUC’s current replacement rule obligates LSEs to replace RA capacity on a scheduled outage of certain duration, the rules effectively permit LSEs to replace local capacity on a scheduled outage with system capacity.

4. Prior ISO Stakeholder Process on Replacement Requirements

The ISO issued four replacement requirement proposals earlier this year in the SCP II stakeholder process. Information on the SCP II stakeholder process can be found at http://www.caiso.com/27c4/27c498742940.html. The first proposal was issued in the January 19, 2010 Straw Proposal in that initiative. The second proposal was issued in the February 22, 2010 Draft Final Proposal. Subsequently, the ISO proposed revisions to both proposals in the Alternative Options Paper posted on the ISO’s website on March 18, 2010. The last proposal was issued in the April 7, 2010 Revised Draft Final Proposal. Stakeholders were given the opportunity to comment on each of these proposals in writing and on conference calls. In the rounds of comments on the ISO proposals, many stakeholders expressed concern with the possibility of a mandatory replacement requirement and associated Interim Capacity Procurement Mechanism (“ICPM”) charges for replacement capacity regardless of system conditions or reserve levels.

The ISO’s prior proposals on the replacement requirements are summarized in the table below.

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5 For further information about ISO outage management, see ISO Tariff Section 9 and the Business Practice Manual for Outage Management.
### Summary of Previous ISO Replacement Requirement Proposals

<table>
<thead>
<tr>
<th>Straw Proposal</th>
<th>For All Planned Outages, Voluntary Replacement with ICPM Risk.</th>
</tr>
</thead>
<tbody>
<tr>
<td>January 2010</td>
<td>Supplier files planned outages in monthly supply plan and SLIC. Supplier can replace the RA resource with non-RA capacity in accordance with the SCP unit substitution rules. If ISO accepts the substitute capacity, the supplier will have met its replacement requirement for that planned outage. ISO options: (1) deny or reschedule the requested planned outage, (2) approve the requested outage and procure via ICPM, or (3) approve the requested outage and not procure by ICPM. If ICPM is needed procured, the ISO will allocate the cost of the replacement capacity to the supplier of the RA capacity on the planned outage.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Draft Final Proposal</th>
<th>For Planned Outages More Than One Week: Mandatory Replacement with Definite ICPM, Unless System and Local-for-Local Replacement.</th>
</tr>
</thead>
<tbody>
<tr>
<td>February 2010</td>
<td>Supplier files planned outages in its monthly supply plan and SLIC. Supplier must replace each RA resource with non-RA capacity. If the replacement is not made, the ISO will procure by ICPM. For local RA, the supplier must make a “best effort” to replace in the same local area. If a local replacement is offered and accepted, the scheduling coordinator has fulfilled its obligation. If not, the scheduling coordinator should offer a system resource, and will be allocated a share of the ICPM cost in proportion to that RA resource’s share of the total RA capacity in the local area that was out of service at the time of the ICPM designation.</td>
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<tr>
<th>Revised Draft Final Proposal</th>
<th>For Planned Outages More Than One Week: Mandatory Replacement with ICPM Risk, Unless System and Local-for-Local Replacement.</th>
</tr>
</thead>
<tbody>
<tr>
<td>March 2010</td>
<td>Same as February Draft Final Proposal, except that: Supplier of an RA resource on planned outage that does not provide any replacement, or that offered system for local RA capacity, will be subject to ICPM cost allocation, if ICPM is required. “Best effort” language was removed.</td>
</tr>
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| Revised Straw Proposal       | Same as January Straw Proposal, except as described and shown in bold/underline: ISO options: (1) deny or reschedule the requested planned outage based on defined criteria, (2) approve the requested outage and procure via ICPM based on defined criteria. For (1) above, planned outages are currently approved based on reliability only. ISO Outage Management department to establish the criteria and process needed to determine these new decision requirements. For (2) above, offering the replacement of system capacity for local RA capacity may |
In the SCP II stakeholder initiative, the Southern California Edison Company (“SCE”) stated in its April 1, 2010 written comments that the ISO should not file its replacement obligation for planned outages with FERC unless the CPUC elects not to replace it with another alternative such as SCE’s proposal of adding a planned outage adder to LSEs’ RA requirement. The ISO notes that it is undertaking this current replacement requirement stakeholder initiative in response to a request from the CPUC for parties to explore in an ISO stakeholder process a tariff-based approach for a replacement requirement. SCE and other stakeholders are encouraged to participate in the ISO’s current replacement requirement stakeholder process, and this stakeholder process does not preclude stakeholders from making proposals at the CPUC for mechanisms to address the replacement requirement, including adding a planned outage adder to the LSEs’ RA requirement. The ISO will actively participate in CPUC proceedings. However, there is a timing problem here between the ISO and CPUC processes and their outcomes. The ISO requests that stakeholders offer comments on how to address this problem. One option may be for the ISO to delay the filing of its replacement requirement tariff provisions until closer to the implementation date when CPUC action is more certain. The ISO’s primary concern is that the CPUC not eliminate its replacement requirement unless the RA program is modified in a manner that meets the ISO’s operational needs or the ISO has new requirements within its tariff to meet those needs.

5. New ISO Straw Proposal

The ISO offers the following straw proposal for stakeholder consideration and comment. The proposal is not yet fully detailed, but offers a basic solution framework and then identifies a number of more detailed design questions that will need to be addressed in developing the next iteration of the proposal.

The basic solution framework the ISO proposes is as follows:

1. ISO tariff provisions will require the supplier of RA capacity to provide replacement capacity when an RA resource in the supplier’s supply plan is on a planned outage whose duration (D) is longer than a tariff-specified number of days (X).

2. If D is less than or equal to X there is no replacement requirement.

The ISO is not proposing a value for X at this time, but notes that X = 7 is comparable to the existing CPUC rule which does not impose a replacement requirement on the LSE whose procured RA resource will be on planned outage no more than 7 days of the month. For the proposed ISO rule, the appropriate value for X will be a topic for further discussion.

3. If D is greater than X, the supplier must designate replacement capacity of equal MW to the RA capacity that is not available.

A question for discussion is whether the supplier must provide the replacement capacity for the full duration of the outage (i.e., D days), or only for the days beyond the threshold number of days that triggers the replacement requirement (i.e., D-X days).

4. Replacement capacity will not be required to have any specific locational or operational characteristics. However, it must be deliverable to the grid; i.e., it must have a sufficient NQC value associated with the non-RA capacity it offers to replace the original RA resource. In addition, the replacement capacity must be available to the ISO at a level equal to or better than the original RA resource. This means: (1) if the original resource is non-use-limited, the replacement must be non-use-limited, and (2) if the original resource is available...
24x7 the replacement must be available 24x7; if the original is available only for a subset of hours in accordance with the procurement “buckets” defined in the CPUC’s RA rules, the replacement must be available for at least the same subset of hours.

5. The same requirements would apply for summer and non-summer months. In particular, this straw proposal would eliminate the partial replacement provision of the CPUC rule that applies for outages of duration between one and two weeks during non-summer months. The partial replacement provision is appropriate in the context of whole-month capacity replacement by LSEs under the CPUC rule, but it would not be appropriate under an ISO rule that creates a daily replacement requirement on suppliers.

In addition to the basic solution framework described above, there are several design details and issues to be addressed in developing a complete proposal. First, there are two inter-related design issues that the ISO believes are important to resolve. These are:

- The ISO rule should include incentives for a supplier to schedule its maintenance outage and identify replacement capacity as early as possible. From the perspective of outage coordination, it would be optimal for the supplier to have its outage approved and its replacement resource identified in time to include this information in the RA supply plan it submits to the ISO 30 days prior to the start of the RA compliance month.
- The ISO rule must specify consequences for a supplier that fails to provide replacement capacity. Consequences could entail, for example, a pre-specified charge per MW of capacity that was not replaced, or exposure to the cost of any backstop procurement the ISO must perform during the period when the RA resource on outage was not replaced, or some combination of these measures. The ISO invites suggestions from stakeholders on this question.

6. To address these issues ISO proposes the following approach for consideration and comment.

   a. If the supplier’s RA supply plan includes both an ISO-approved outage and a designation of acceptable replacement capacity of sufficient MW, the supplier will be deemed to have complied with the requirement and will not be assessed backstop costs or other penalty charges associated with this requirement for the particular outage in question.

   b. If the supplier requests a maintenance outage in accordance with the ISO tariff after its supply plan is filed and offers acceptable replacement capacity, and if the ISO approves the requested outage, the supplier will be deemed to have complied with the requirement and will not be assessed backstop costs or other penalty charges associated with this requirement for the particular outage in question.

   c. If the supplier requests a maintenance outage in accordance with the ISO tariff after the supply plan is filed and does not offer acceptable replacement capacity, and if the ISO approves the outage, the supplier will be assessed its proportionate share of any backstop procurement costs incurred during the period when the RA capacity on outage was not replaced by the supplier. The ISO does not yet propose a formula for calculating the supplier’s share of such cost, and invites suggestions from stakeholders on this question.

   d. As noted above, it is also possible to assess a penalty to a supplier that fails to provide acceptable replacement capacity as required in the form of a simple pre-specified per-
MW-day charge. The ISO does not intend the proposed assessment of backstop procurement costs as described in step c to necessarily preclude application of a pre-specified per MW charge as well. The ISO invites stakeholder comments on the relative merits of and their preferences regarding these two types of penalty charges, applied either separately or in combination, or suggestions for other approaches.

One further area the ISO has identified for comment is application of the replacement requirement to suppliers of RA capacity to non-CPUC jurisdictional LSEs. While the CPUC’s existing replacement requirement does not apply to non-jurisdictional LSEs, any such provisions incorporated into the ISO tariff would apply to all suppliers of RA capacity on a non-discriminatory basis unless there is a clear basis for special provisions for this subset of RA suppliers. The ISO invites stakeholder suggestions and comments on this topic.

6. Next Steps

The ISO will host a stakeholder conference call on August 26, 2010 from 10:00 a.m. -12:00 p.m. to review and discuss this straw proposal. Stakeholders are encouraged to submit written comments on the straw proposal to replacement@caiso.com by close of business September 3, 2010. The ISO has developed a template that it asks stakeholders to use to submit their written comments. The template will be posted at the following web address by August 26, 2010: http://www.caiso.com/27f1/27f1da3b56ef0.html. The ISO will post the written comments that it receives to that web address by September 8, 2010.

The ISO will consider stakeholder input as it prepares a draft proposal that will be posted on September 21, 2010. A stakeholder meeting will be held on September 28, 2010 from 9:00 a.m.-12:00 p.m. to review and discuss the draft proposal.