

141 FERC ¶ 61,135  
UNITED STATES OF AMERICA  
FEDERAL ENERGY REGULATORY COMMISSION

Before Commissioners: Jon Wellinghoff, Chairman;  
Philip D. Moeller, John R. Norris,  
Cheryl A. LaFleur, and Tony T. Clark.

California Independent System  
Operator Corporation

Docket No. ER12-2669-000

ORDER CONDITIONALLY ACCEPTING TARIFF REVISIONS

(Issued November 19, 2012)

1. On September 20, 2012, the California Independent System Operator Corporation (CAISO) filed proposed revisions to its open access transmission tariff (Tariff) to implement a Replacement Requirement for Resource Adequacy Maintenance Outages (Replacement Requirement)<sup>1</sup> pursuant to section 205 of the Federal Power Act (FPA)<sup>2</sup> and part 35 of the Commission's regulations.<sup>3</sup> The proposed Replacement Requirement creates a resource adequacy and outage management replacement procedure intended to ensure sufficient resource adequacy capacity will be operationally available to reliably operate the grid and meet the load obligations of the load-serving entities while minimizing CAISO procurement of capacity through a backstop mechanism. As discussed below, we conditionally accept CAISO's Proposal, subject to the submission of a compliance filing modifying CAISO's Proposal as directed herein.

**I. Background**

2. On July 20, 2006, the California Public Utilities Commission (CPUC) adopted a replacement rule (CPUC Rule) that requires each jurisdictional load-serving entity to meet its resource adequacy requirement with capacity that is available and not on an extended scheduled maintenance outage during a resource adequacy compliance month.<sup>4</sup>

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<sup>1</sup> CAISO September 20, 2012 Replacement Requirement for Resource Adequacy Maintenance Outages (CAISO Proposal).

<sup>2</sup> 16 U.S.C. § 824d (2006).

<sup>3</sup> 18 C.F.R. Part 35 (2012).

<sup>4</sup> CAISO Proposal at 5 (citing CPUC Decision D.06-07-031 (July 20, 2006)).

The CPUC Rule provides a methodology for determining how scheduled outages of resource adequacy resources will be counted to assess whether a load-serving entity has procured sufficient resource adequacy capacity to meet its monthly resource adequacy obligations. The CPUC Rule requires each load-serving entity to procure additional capacity to meet its resource adequacy requirement when the availability of a resource is significantly affected by a scheduled maintenance outage. Under the CPUC Rule, a resource cannot be counted as resource adequacy capacity if the number of days it is scheduled for a maintenance outage during the month exceed 25 percent of the number of days in a summer month (May through September) or extend longer than two weeks in a non-summer month (October through April). A load-serving entity that includes a resource scheduled for a maintenance outage in its monthly resource adequacy plan with an expected duration that exceeds the applicable seasonal limit has an obligation to procure replacement resource adequacy capacity. During validation of the resource adequacy filings, the CPUC compares the filings with outage information to confirm that outages have been correctly counted or replaced.

3. CAISO states that after the CPUC Rule had been in effect for several years, questions about its efficacy were raised in successive annual CPUC resource adequacy proceedings. The load-serving entities that supported eliminating the rule argued that the CPUC Rule, in combination with the CAISO's standard capacity product, limited the ability of resource adequacy capacity to be exchanged between different entities. CAISO states that some parties questioned whether the CPUC Rule provided the correct incentives for scheduling planned outages at resource adequacy resources or for replacing the capacity on outage. There was also concern that the criteria in the rule for determining whether a resource with a scheduled outage could be counted as resource adequacy capacity were overly generous and could undermine the resource adequacy program's objective of ensuring that sufficient resource adequacy capacity will be available to CAISO when and where needed.<sup>5</sup>

4. On June 23, 2011, the CPUC found that its rule should be terminated because it "stands in the way of making the [standard capacity product] commercially viable because [load-serving entities] still need to negotiate complex replacement provisions in each contract individually."<sup>6</sup> The CPUC determined that its rule should remain in effect for 2012 and terminate for compliance year 2013. The CPUC strongly encouraged CAISO to work quickly with stakeholders to develop alternative procedures and tools to reliably operate the grid without the current CPUC Rule.<sup>7</sup>

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<sup>5</sup> *Id.* at 5.

<sup>6</sup> *Id.* (quoting CPUC Decision D.11-06-022 at P 25 (June 23, 2011)).

<sup>7</sup> *Id.* at 5-6 (citing CPUC Decision D.11-06-022 at P 31).

## II. Proposal

5. CAISO proposes the Replacement Requirement to address resource adequacy capacity that is scheduled for a maintenance outage and which will not be operationally available to CAISO for all or a portion of the month, but which has been listed as resource adequacy capacity for the month. The Replacement Requirement apportions responsibility for replacement between the load-serving entities and the suppliers, depending on the timing of the outage request.<sup>8</sup>

6. Under CAISO's Proposal, scheduling coordinators for load-serving entities are subject to the Replacement Requirement to the extent CAISO determines that certain resource adequacy capacity scheduled for an approved maintenance outage must be replaced with available capacity. CAISO's Proposal requires scheduling coordinators for the load-serving entities to replace resource adequacy capacity approved for a maintenance outage to the extent that CAISO determines that total available resource adequacy capacity will be less than the resource adequacy reliability margin for each day of the month. CAISO's Proposal provides that if the system total available resource adequacy capacity is short on a day, the scheduling coordinator for each load-serving entity that failed to include the requisite amount of available resource adequacy capacity in its plan will be required to provide replacement capacity. If the scheduling coordinator for the load-serving entity does not provide sufficient replacement capacity, and the resource does not cancel or reschedule its approved maintenance outage, CAISO will have the ability to procure backstop capacity.<sup>9</sup>

7. Pursuant to CAISO's Proposal, the operators of resource adequacy resources are subject to the Replacement Requirement after the monthly supply plans are submitted. CAISO states that its Proposal is expected to increase the likelihood that a request to schedule a maintenance outage can be accommodated if they provide equivalent replacement capacity. CAISO's Proposal specifies that after submitting their monthly supply plans to CAISO, the operators of resource adequacy resources may schedule a maintenance outage, or reschedule an approved maintenance outage, during the resource adequacy month, if they include an equivalent amount of replacement capacity with their request.

8. CAISO also provides for short-notice outages without replacement capacity through off-peak opportunity outages and short-notice opportunity outages. An operator may request an off-peak opportunity outage to the extent an outage begins and ends during off-peak hours. An operator may request a short-notice opportunity outage if CAISO determines that system conditions and the overall outage schedule provide an

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<sup>8</sup> *Id.* at 11.

<sup>9</sup> *Id.* at 13.

opportunity for CAISO to accommodate the outage without a detrimental effect on the reliable operation of the grid.<sup>10</sup>

9. The Replacement Requirement proposes a backstop mechanism under which CAISO may procure capacity to replace resource adequacy capacity that will not be operationally available due to a maintenance outage and that was not replaced under the Replacement Requirement for load-serving entities. The proposed backstop provisions authorize CAISO to procure resource adequacy maintenance outage backstop capacity for a minimum commitment of one day and a maximum commitment of 31 days, as needed, when CAISO determines that replacement is necessary but the scheduling coordinator for a load-serving entity does not provide the required outage replacement capacity and the operator for the resource does not reschedule or cancel the approved maintenance outage.<sup>11</sup> The compensation as proposed includes a payment that is equal to the product of three factors: (1) the number of days the resource provides resource adequacy maintenance outage backstop capacity; (2) the MW amount of the backstop capacity provided net of any maintenance outages or forced outages; and (3) the fixed Capacity Procurement Mechanism capacity price, on a *pro rata* daily basis, in effect pursuant to Tariff Section 43.7.1.<sup>12</sup>

10. The Replacement Requirement would replace the CPUC Rule, which is set to expire for the January 2013 resource adequacy month. Under CAISO's Proposal, resource adequacy and supply plans will be due 45 days ahead of the resource adequacy month. For the January 2013 resource adequacy month only, CAISO has shortened this requirement so that resource adequacy and supply plans are due 41 days ahead of the resource adequacy month. CAISO requests that the Replacement Requirement become effective on November 20, 2012.<sup>13</sup>

### **III. Notice, Interventions, and Responsive Pleadings**

11. Notice of the proposed CAISO Tariff revisions was published in the *Federal Register*, 77 Fed. Reg. 59,599 (2012), with motions to intervene, comments, and protests due on or before October 11, 2012. Timely motions to intervene, comments, and/or protests were filed by the following: Northern California Power Agency (NCPA); GenOn Parties; Cities of Anaheim, Azusa, Banning, Colton, Pasadena and Riverside, California; California Department of Water Resources State Water Project; Dynegey

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<sup>10</sup> *Id.* at 13.

<sup>11</sup> *Id.* at 14.

<sup>12</sup> *Id.* at 41.

<sup>13</sup> *Id.* at 2.

Morro Bay, LLC, Dynegy Moss Landing, LLC, Dynegy Oakland, LLC, and Dynegy Marketing and Trade, LLC; M-S-R Public Power Agency; San Diego Gas and Electric Company (SDG&E); Pacific Gas and Electric Company (PG&E); Energy Producers and Users Coalition (EPUC); Cogeneration Association of California (CAC); City of Santa Clara, California, doing business as Silicon Valley Power (SVP); J.P. Morgan Ventures Energy Corporation and BE CA LLC (J.P. Morgan); and NRG Power Marketing LLC, Cabrillo Power I LLC, Cabrillo Power II LLC, El Segundo Power LLC, Long Beach Generation LLC, High Plains Ranch II LLC, NRG Solar Alpine LLC, NRG Solar Borrigo, LLC NRG Solar Blythe LLC, NRG Solar Roadrunner LLC, and Avenal Solar Holdings LLC (NRG). Southern California Edison (SoCal Edison) submitted a motion to intervene and comments out-of-time.

12. CAISO and NCPA filed answers to the comments and protests. NRG and CAC filed answers in response to CAISO's Answer.

#### **IV. Discussion**

##### **A. Procedural Matters**

13. Pursuant to Rule 214 of the Commission's Rules of Practice and Procedure, 18 C.F.R. § 385.214 (2012), the timely, unopposed motions to intervene serve to make the entities that filed them parties to this proceeding. Pursuant to Rule 214(d) of the Commission's Rules of Practice and Procedure, 18 C.F.R. § 385.214(d) (2012), the Commission will grant SoCal Edison's late-filed motion to intervene given its interest in the proceeding, the early stage of the proceeding, and the absence of undue prejudice or delay.

14. Rule 213(a)(2) of the Commission's Rules of Practice and Procedure, 18 C.F.R. § 385.213(a)(2) (2012), prohibits an answer to a protest and answer unless otherwise ordered by the decisional authority. We will accept the answers filed by CAISO, NCPA, NRG, and CAC because they provided information that assisted us in our decision-making process.

##### **B. Substantive Matters**

###### **1. Scope of the Replacement Requirement**

###### **a. Comments**

15. J.P. Morgan states that under the CPUC Rule a load-serving entity could demonstrate compliance by showing that it had procured sufficient capacity to satisfy its projected peak monthly load plus 15-17 percent, but states that under CAISO's Proposal the sufficiency of available capacity will be evaluated for each day of the month. J.P. Morgan asserts that the CPUC Rule has been adequate, and argues that

CAISO has not demonstrated that reliability has been harmed.<sup>14</sup> J.P. Morgan further argues that to minimize disruptions to resource adequacy contracts, CAISO should transition to its Replacement Requirement by using the CPUC Rule for one year.<sup>15</sup>

16. J.P. Morgan states that the long advance notice requirement of maintenance outages could disrupt the ability of load-serving entities to manage outages and outage risks. J.P. Morgan argues that CAISO's provisions may incent load-serving entities to delay maintenance rather than coordinating in advance with CAISO.<sup>16</sup>

17. PG&E argues that that CAISO's replacement capacity provisions are unnecessary and impose unduly burdensome costs on load-serving entities. PG&E contends that CAISO has sufficient authority to permit outages while ensuring reliability since it: (1) has the authority to approve or reject maintenance outages based on reliability criteria; and (2) has the authority to call on resource adequacy resources and backstop resources as necessary in the operating timeframe. PG&E states that CAISO's Proposal is likely to add costs to the market with no reliability benefit and urges the Commission to reject it.<sup>17</sup>

18. If the Proposal is not rejected, PG&E asserts that it should be modified so that changes in scope or duration of a scheduled outage do not reclassify the entire outage as needing replacement capacity. PG&E argues that it is not just and reasonable for a change in the duration of the outage to be treated as a new request that would require replacement capacity for the entire duration. PG&E states that this provision will result in more conservative outage schedules and increased procurement costs for load-serving entities. PG&E argues that only the incremental amount should require replacement capacity.<sup>18</sup>

19. SDG&E agrees that the Proposal should be rejected, contending that it would arbitrarily and discriminatorily impose additional obligations and costs on SDG&E and its customers.<sup>19</sup> SDG&E further asserts that CAISO's Proposal is unnecessary, as CAISO already has significant authority to coordinate planned outages. SDG&E further

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<sup>14</sup> J.P. Morgan at 6-7.

<sup>15</sup> *Id.* at 4-5.

<sup>16</sup> *Id.* at 9.

<sup>17</sup> PG&E at 3-4.

<sup>18</sup> *Id.* at 4-5

<sup>19</sup> SDG&E at 1.

notes that CAISO itself acknowledges that significant improvements can be made simply by greater diligence in planning.<sup>20</sup>

20. SDG&E contends that CAISO's Proposal will set back the development of a standard capacity product. SDG&E explains that under the CPUC Rule buyers and sellers of resource adequacy capacity negotiated complex terms and conditions to assign cost responsibility for the replacement of capacity in the case of outages, and that these terms and conditions can preclude secondary market transactions. SDG&E argues that CAISO's Proposal will complicate the negotiation of these terms and conditions by placing responsibility for replacement on both buyer and seller, and will complicate other resource adequacy initiatives aimed at establishing a standard capacity product currently underway at the CPUC.<sup>21</sup>

21. SDG&E maintains that CAISO improperly applies the 15 percent planning margin intended for long- term compliance as a daily operational requirement. SDG&E notes that CAISO acknowledges that this level of reserves is not required in all hours to meet operational requirements.<sup>22</sup>

22. SDG&E explains that, when multiple maintenance requests reduce capacity below the 115 percent threshold on a given day, the last request submitted as time stamped by CAISO is the first to be assigned responsibility for obtaining replacement capacity.<sup>23</sup> SDG&E asserts that this methodology is arbitrary.

23. SDG&E argues that to the extent the Commission finds that capacity replacement is required, that obligation should be handled between the resource adequacy resource and CAISO, possibly as part of the outage request-approval transaction.<sup>24</sup> SDG&E further argues that CAISO should work to facilitate replacement capacity for whoever has the obligation of providing it. Thus, SDG&E recommends the creation of a replacement capacity market where requests can be offered, procured, and cleared.<sup>25</sup>

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<sup>20</sup> *Id.* at 8.

<sup>21</sup> *Id.* at 12-14.

<sup>22</sup> *Id.* at 9-10.

<sup>23</sup> *Id.* at 11.

<sup>24</sup> *Id.* at 15.

<sup>25</sup> *Id.* at 16.

24. NCPA supports the short-notice opportunity outage, stating that it is an essential element of the Proposal providing necessary flexibility to load-serving entities. NCPA emphasizes that there are times during the month when there is sufficient capacity available for an outage to occur without compromising reliability, and that the short-notice opportunity outage grants CAISO operators the discretion to determine whether an outage would adversely impact reliability at any time that reserves fall below the 115 percent threshold.<sup>26</sup>

25. SoCal Edison filed comments supporting CAISO's Proposal, asserting that the Tariff amendments represent a reasonable compromise among competing interests.<sup>27</sup> SoCal Edison states that it would be insufficient to simply eliminate the CPUC Rule and attempt to rely solely on the 15 percent planning reserve margin to provide sufficient capacity reserves to maintain grid reliability while allowing for maintenance outages.<sup>28</sup> SoCal Edison also submits that the Replacement Requirement is very compatible with a fungible standard capacity product by providing a clear timeline and delineation of responsibility for the replacement of capacity on a planned outage between a load-serving entity and generator.<sup>29</sup>

**b. CAISO Answer**

26. In response to PG&E, CAISO argues that it has justified its Proposal and asserts that it is necessary to have a Replacement Requirement for maintenance outages to ensure that it has sufficient resource adequacy capacity following the expiration of the CPUC Rule.<sup>30</sup> CAISO asserts that its Proposal is narrowly tailored to require replacement capacity for only those days when maintenance outages cause total resource adequacy capacity to fall below the reliability margin. CAISO argues that its Proposal merely fills in "gaps" in the resource adequacy plan by substituting resource adequacy capacity for resource adequacy resources that will be operationally unavailable because of a maintenance outage.

27. With regard to SDG&E's opposition to its Proposal, CAISO states that its Proposal falls in the zone of reasonableness by ensuring sufficient resource adequacy capacity, while minimizing replacement costs and CAISO procurement. CAISO further

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<sup>26</sup> NCPA at 4-5. SVP endorses NCPA's comments. SVP at 3.

<sup>27</sup> SoCal Edison at 2.

<sup>28</sup> *Id.* at 2-3.

<sup>29</sup> *Id.* at 3-4.

<sup>30</sup> CAISO Answer at 4.



asserts that SDG&E does not identify any deficiency that would render the Proposal unjust and unreasonable.<sup>31</sup>

28. CAISO further argues that the Replacement Requirement does not impose additional obligations on load-serving entities. CAISO states that the purpose of the resource adequacy program is to provide sufficient capacity to support the safe and reliable operation of the grid. CAISO asserts that load-serving entities cannot satisfy this obligation by providing resource adequacy capacity for only part of the month or only a portion of its capacity.<sup>32</sup>

29. CAISO contends that its Proposal strengthens gaps in the CPUC Rule, which only requires that resource adequacy capacity be replaced if it is out for longer than one or two weeks depending on the season. However, CAISO points out that reliability problems may emerge with shorter maintenance outages. Moreover, CAISO notes that the resource adequacy program already requires load-serving entities to procure a specified amount of capacity to be available. CAISO states that its Replacement Requirement fills in the gaps by requiring load-serving entities to procure capacity on the days that resources will be unavailable.<sup>33</sup>

30. Regarding assertions that its Replacement Requirement will lead to an arbitrary and discriminatory replacement obligation, CAISO argues that a load-serving entity creates risk for itself by submitting a resource adequacy plan where a certain portion of the capacity will be unavailable for part of the month. CAISO notes that if a load-serving entity submits a plan where all of its capacity is available for the full month, it will ensure that it has no replacement obligation.<sup>34</sup>

31. CAISO argues that improving outage coordination would not remove the need for a Replacement Requirement. CAISO states that it receives maintenance requests up to 18 months in advance and may not have the relevant annual or monthly resource adequacy plans when it approves the outage, so it does not know if the resource will be included in the resource adequacy plan.<sup>35</sup>

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<sup>31</sup> *Id.* at 5-6.

<sup>32</sup> *Id.* at 6-7.

<sup>33</sup> *Id.* at 7-8.

<sup>34</sup> *Id.* at 8-10.

<sup>35</sup> *Id.* at 10-11.

32. CAISO disagrees with SDG&E that the replacement obligation should only be placed on suppliers. CAISO states that the resource adequacy obligation is placed on load-serving entities, and points out that the resource adequacy program is administered by the CPUC which does not have jurisdiction over wholesale suppliers. CAISO explains that load-serving entities are in the best position to exercise control of forward procurement, while suppliers are better able to manage intra-month availability.<sup>36</sup>

33. CAISO states that PG&E misunderstands its Proposal with regard to revisions to approved maintenance outages. CAISO asserts that any approved portion of the maintenance outage would be unaffected by any revision. CAISO states that only the incremental portion of the outage would be considered as a new request.<sup>37</sup>

34. CAISO takes issue with SDG&E's assertion that the Replacement Requirement will cause last minute uncertainty. CAISO explains that to the extent a maintenance outage is requested less than 45 days from the beginning of the resource adequacy month, the replacement responsibility rests on the supplier. CAISO states that load-serving entities will be informed of their replacement obligation 25 days from the beginning of the resource adequacy month.<sup>38</sup>

35. CAISO disputes SDG&E's contention that it is using the 15 percent planning reserve margin as an operational margin. CAISO states that it is using it as a resource adequacy compliance margin to ensure that there is enough available capacity in advance of the resource adequacy month. CAISO submits that if it was using its planning reserve margin as an operational margin short-notice and off-peak opportunity outages, which it provides for in the Tariff, would not be possible.<sup>39</sup>

36. In addition, CAISO disagrees with SDG&E's claim that the Replacement Requirement will oblige load-serving entities to procure replacement capacity when CAISO has approved maintenance outages to the extent that total available system resources are below 115 percent. CAISO states that its analysis is limited to resource adequacy capacity, and that it will compare available resource adequacy capacity to its resource adequacy reliability margin. CAISO also provides that as the resource adequacy month gets closer it might be possible to allow resource adequacy capacity to go below the 115 percent threshold. Finally, with respect to the standard capacity product, CAISO

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<sup>36</sup> *Id.* at 11-12.

<sup>37</sup> *Id.* at 17.

<sup>38</sup> *Id.* at 18-19.

<sup>39</sup> *Id.* at 19-20.

states that its program is a reliability measure that makes the product more fungible by shifting the burden for replacement to suppliers for intra-month maintenance outages.<sup>40</sup>

**c. Commission Determination**

37. As discussed below, we conditionally accept CAISO's Proposal, and find that it is just and reasonable and not unduly discriminatory. Allowing the CPUC Rule to lapse without a CAISO administered Replacement Requirement in place would considerably alter the function of the resource adequacy program with respect to maintenance outages. CAISO's resource adequacy provisions have been designed to function alongside the CPUC's Replacement Requirement. Allowing, the CPUC's Replacement Requirement to lapse without a substitute would create an impermissible gap which would allow for considerable ambiguity as to how the resource adequacy provisions of the Tariff interact with maintenance outages. For example, requiring CAISO to manage outages without a Replacement Requirement may cause the CAISO to act with much greater caution in approving maintenance outages, resulting in less efficient scheduling of these outages. Moreover, in its decision eliminating the replacement rule, the CPUC recognized that the absence of a Replacement Requirement created a gap in the CAISO's resource adequacy provisions and encouraged CAISO to move quickly to create a substitute.<sup>41</sup> We therefore agree that CAISO's Proposal is necessary.

38. Several commenters note that CAISO's Proposal is more stringent than the CPUC Rule, most notably because the Replacement Requirement is enforced for each day of the month and because it does not allow an exemption for short-term outages. The Commission's obligation is to evaluate whether CAISO's Proposal is just and reasonable and not unduly discriminatory. In designing the Replacement Requirement, CAISO identified several potential gaps in the CPUC Rule, which its Proposal attempts to remedy. Commenters' assertions that these gaps should not be addressed because they have not caused reliability problems in the past are not persuasive. We agree with CAISO that short-term outages might combine to cause reliability problems on certain days during the month, and that the Replacement Requirement is designed to avoid such problems. Reliability problems often occur unexpectedly. Thus, we find that it is appropriate for a control area operator to guard against potential reliability problems even where none have occurred in the past.

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<sup>40</sup> *Id.* at 23.

<sup>41</sup> The CPUC stated that "[w]e strongly encourage the CAISO to quickly begin working with all stakeholders to develop the necessary procedures and tools to reliably operate without the current replacement rule." CPUC Decision D.11-06-022 at P 31 (June 23, 2011).

39. We agree with CAISO's rationale for dividing the obligation between load-serving entities and suppliers based on the timing of the request. This demarcation encourages suppliers to identify maintenance needs in a timely manner in order to allow load-serving entities to procure adequate forward capacity for any needed replacement. Moreover, it appropriately places responsibility on the supplier for short-notice maintenance requests. That responsibility encourages adequate planning and intra-month availability where possible. Similarly, we also find that CAISO's methodology which provides that the last request submitted is the first to be assigned responsibility for providing replacement capacity is just and reasonable. This process encourages adequate planning on behalf of the load-serving entity and the supplier.

40. With regard to PG&E's concern that changes in scope or duration of a scheduled outage should not reclassify the entire outage as needing replacement capacity, we accept CAISO's clarification that any approved portion of the maintenance outage would be unaffected by any revision and that only the incremental portion of the outage would be considered as a new request.

41. We disagree with J.P. Morgan that the advance notice provisions of the Tariff create an incentive to delay maintenance. Rather, CAISO's Proposal incents load-serving entities to coordinate with CAISO as early as possible to avoid the Replacement Requirement. For example, on days when replacement capacity is required, earlier scheduled maintenance outages are less likely to incur a Replacement Requirement. We also disagree with J.P. Morgan that the revised Tariff provisions will disrupt the ability of load-serving entities to manage maintenance outages. While the Tariff provisions require advance notice in the resource adequacy supply, CAISO also allows entities to reschedule maintenance outages after the supply plan has been submitted, and to schedule short-notice outages to the extent it will not threaten reliability.

42. Similarly, we disagree with SDG&E that CAISO is using its 15 percent resource adequacy capacity margin as an operational requirement. CAISO's Proposal is aimed at maintaining sufficient capacity to satisfy its resource adequacy requirements using a Replacement Requirement that is similar in concept to the one currently used by the CPUC. It does not contemplate changes to the operating reserve requirements. Indeed, several provisions of CAISO's Proposal, such as the opportunity to request short-notice outages without replacement, provide for circumstances where maintenance outages may be allowed without replacement even where capacity falls below the resource adequacy capacity margin.<sup>42</sup> These provisions explicitly contemplate a less stringent operating reserve margin than the resource adequacy margin used for monthly planning.

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<sup>42</sup> See proposed Tariff sections 9.3.1.3.2.2 and 9.3.1.3.3.3.

43. We further disagree that the Replacement Requirement harms the standard capacity product. One of the primary objectives of the Replacement Requirement is to make the standard capacity requirement more fungible. We find that shifting the burden for replacement to suppliers for intra-month maintenance outages accomplishes this goal. By standardizing the division of burdens associated with replacement capacity between load-serving entities and suppliers, CAISO makes it more likely that resource adequacy capacity can be transferred from one load-serving entity to another without complicated renegotiation.

44. Upon finding that CAISO's Proposal is just and reasonable, we need not consider the merits of alternative proposals.<sup>43</sup> Thus, we will not consider J.P. Morgan's proposal that the CPUC Rule should remain in effect for another year, nor will we consider SDG&E's assertion that a replacement capacity market is appropriate. Finally, we note that if issues arise as CAISO gains experience with the Replacement Requirement, parties may always come back to the Commission. For these reasons, we conditionally accept CAISO's Proposal and, as discussed herein, find it to be just and reasonable and not unduly discriminatory.

## 2. Combined Heat & Power Resources

### a. Comments

45. CAC and EPUC state that the Proposal is unjust and unreasonable when applied to combined heat and power (CHP) generators since certain contracts already clearly allocate responsibilities between buyer and seller.<sup>44</sup> CAC and EPUC state that in CHP

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<sup>43</sup> Pursuant to section 205 of the FPA, the Commission limits its evaluation of a utility's proposed tariff revisions to an inquiry into "whether the rates proposed by a utility are reasonable – and not to extend to determining whether a proposed rate schedule is more or less reasonable to alternative rate designs." *City of Bethany v. FERC*, 727 F.2d 1131, 1136 (D.C. Cir. 1984). The proposed revisions "need not be the only reasonable methodology." *Oxy USA v. FERC*, 64 F.3d 679, 692 (D.C. Cir. 1995). As a result, even if an intervenor develops an alternative proposal, the Commission must accept a section 205 filing if it is just and reasonable, regardless of the merits of the alternate proposal. *Southern California Edison Co., et al*, 73 FERC ¶ 61,219, at 61,608 n.73 (1995) ("Having found the Plan to be just and reasonable, there is no need to consider in any detail the alternative plans proposed by the Joint Protestors." (citing *City of Bethany*, 727 F.2d at 1136)).

<sup>44</sup> CAC and EPUC refer to *pro forma* contracts approved by the CPUC as part of a comprehensive settlement between utilities and qualifying facilities and CHP facilities in California. See CAC at 3 & n.2; EPUC at 3 & n.2.

settlement contracts the replacement capacity is the responsibility of the buyer, and in return the seller faces penalties to the extent it does not meet performance standards. CAC and EPUC assert that CAISO's Proposal would impose additional duplicative burdens on CHP generators by requiring them to procure replacement capacity.<sup>45</sup>

46. CAC and EPUC state further that the provisions are incompatible with the type of capacity product supplied by cogeneration resources. CAC and EPUC explain that they must harmonize their provision of capacity with their obligations to reliably serve their host facility with thermal and electric energy, and that their current contracts allow a buyer to procure energy for resource adequacy purposes but do not specify an amount.<sup>46</sup>

47. Third, CAC and EPUC argue that the Proposal imposes a significant burden on cogeneration resources, as load-serving entities have the expertise and opportunity to recover costs associated with outages but cogeneration facilities do not. CAC and EPUC assert that the new impositions would cause cogeneration facilities to close.<sup>47</sup>

48. CAC and EPUC argue that CAISO failed to take cogeneration contracts into account. CAC and EPUC note that their settlement contracts provide for a far more lenient outage schedule, and so CAISO's Proposal would represent a significant departure from those contracts. CAC and EPUC assert that the options CAISO provides for generators assume that the generator will be able to schedule the outage with sufficient notice and that the outage would not compromise grid reliability. CAC and EPUC submit that there are certain circumstances where they must schedule maintenance on short-notice and during peak hours.<sup>48</sup>

49. Finally, CAC and EPUC state that it is disingenuous for CAISO to argue that since the CPUC Rule has been in effect for years, settlement contracts should have taken it into account. CAC and EPUC argue that the CPUC Rule placed all replacement responsibility on the load-serving entity and that the current Proposal represents a significant shift in responsibilities.<sup>49</sup>

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<sup>45</sup> CAC at 5-6; EPUC at 5-6.

<sup>46</sup> CAC at 6-7; EPUC at 6-7.

<sup>47</sup> CAC at 7; EPUC at 7.

<sup>48</sup> CAC at 8-9; EPUC at 8-9.

<sup>49</sup> CAC at 10; EPUC at 10.

**b. CAISO Answer**

50. CAISO states that there is no requirement that suppliers submit replacement capacity with their outage requests. If an outage request is submitted without replacement capacity, it will not be automatically denied; rather, the ISO Outage Coordination Office will review each request and determine whether and when it can be accommodated.<sup>50</sup>

51. CAISO explains that if a CHP resource schedules its major maintenance outages six months in advance, the outage replacement responsibility would fall to the load-serving entity. If the CHP resource schedules a short-notice opportunity outage or an off-peak opportunity outage for the remainder of its maintenance outages, those outage types have no Replacement Requirement. CAISO submits that it will endeavor to accommodate such outages upon request by any resource adequacy resource.<sup>51</sup>

52. Moreover, CAISO asserts that a CHP resource is not obligated to replace resource adequacy capacity in instances where its output is reduced because the industrial host reduces energy consumption or changes production periods. CAISO explains that the unit contingent nature of the resource is not a factor in determining a CHP facility's availability for purposes of providing replacement capacity. Rather, CAISO's Proposal addresses only maintenance outages, where the resource adequacy capacity will be unavailable because the resource is scheduled to take a maintenance outage during the resource adequacy month. In this regard, CAISO submits that there is no difference in the operational characteristics between CHP resources and all other resource adequacy resources.<sup>52</sup>

53. CAISO states that although the settlement contracts may include provisions for providing notice of maintenance outages to the buyer, this does not remove those CHP suppliers that are providing resource adequacy capacity and participating in CAISO's markets from following its maintenance outage Tariff provisions.<sup>53</sup> CAISO argues that a party cannot avoid compliance with its Tariff by executing a third party contract. In fact, CAISO notes that CHP facilities' *pro forma* contract requires CHP facilities to comply with CAISO's Tariff.

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<sup>50</sup> CAISO Answer at 34.

<sup>51</sup> *Id.* at 34-35.

<sup>52</sup> *Id.* at 36.

<sup>53</sup> *Id.* at 37.

54. In its answer, CAC states that it understands that short-notice opportunity outages and off-peak opportunity outages are included in CAISO's Tariff, but CAC argues that those options will not provide it with a sufficient opportunity to schedule outages. CAC states that it may need to schedule an outage on less than three days' notice or during peak hours.

55. CAC also states that CAISO misunderstands the unit-contingent nature of its contracts. CAC states that it will receive penalties for a reduction in output for any reason, and not just because of those related to its industrial host. CAC states that its concern is that the Replacement Requirement is duplicative, since it has already accepted the financial consequences of providing a unit contingent product.

**c. Commission Determination**

56. The Commission finds that CAC and EPUC have not identified an operational difference for CHP resources that would require an exemption from the Replacement Requirement. We note that unit contingent resources do not have an obligation to deliver energy separate from the energy delivered to the host and provide resource adequacy capacity as a part of that generation. Thus, we find that commenters' concerns relating to the unit contingent nature of CHP facilities, which may incur unexpected outages, are misplaced, as this scenario does not fall within the scope of planned maintenance outages that are subject to the Replacement Requirement. Commenters' assertion that they do not have sufficient resources to procure replacement capacity is also not persuasive, since: (1) they are not required to provide replacement capacity in order to have a maintenance outage approved; and (2) should they wish to provide replacement capacity in their maintenance request, CAISO has committed to organizing a centralized bulletin board<sup>54</sup> for acquiring such replacement capacity. We further note that resources may work with CAISO to schedule/reschedule maintenance outages to avoid the Replacement Requirement, so CHP resources should not be exposed to additional, overly burdensome obligations.

57. CAC states that CHP resources sometimes need to schedule a maintenance outage on less than three days notice and during peak hours. We find that this is not a convincing reason to exempt these resources from a Replacement Requirement. Resource adequacy capacity is most needed at peak hours. We therefore find that CHP resources should be required to replace their capacity to the extent they schedule short-notice maintenance outages during peak hours and CAISO determines that they are not able to accommodate a short-notice opportunity outage. Exempting these resources from the Replacement Requirement would be contrary to the purpose of the resource adequacy program and to the goal of establishing a standard capacity product.

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<sup>54</sup> See CAISO Proposal at 26.



58. Moreover, the Tariff already contains considerable restrictions on requesting an outage on less than three days notice.<sup>55</sup> So the ability of a resource to request an extremely short-notice maintenance outage is already at CAISO's discretion. The short-notice opportunity outage continues to allow CAISO to approve such an outage at short notice without replacement, since the provision contains no hard deadline.

59. We disagree that the CHP resources should be exempt from the Replacement Requirement because of penalties or obligations contained in their contracts. Provisions negotiated as part of a third party contract should not exempt CHP resources from their obligations under the Tariff. Moreover, the provisions contained in the Proposal do not increase CHP resources' exposure to these penalties. Instead, the provisions assign a Replacement Requirement to the extent a resource schedules a maintenance outage during a period where resource adequacy capacity is needed, and as noted above, CAISO includes numerous opportunities in the Tariff to avoid a Replacement Requirement where possible. Finally, while entities are obliged to follow CAISO's Tariff, CAISO's Proposal does not modify the financial obligations under existing contracts. To the extent entities have separately agreed to alternative financial responsibilities concerning the procurement of replacement capacity, the tariff modifications proposed in this proceeding do not change those responsibilities.

### 3. Backstop Procurement

#### a. Comments

60. J.P. Morgan argues that the shortening of the term of backstop procurements in the proposed Tariff revisions could cause CAISO to rely on the proposed resource adequacy backstop provisions rather than existing Capacity Procurement Mechanism (CPM) provisions. J.P. Morgan states that this would undermine the careful balance struck between suppliers, CAISO, and load-serving entities in formulating the CPM. Moreover, J.P. Morgan asserts that existing CPM provisions permit CAISO to procure sufficient backstop capacity to maintain reliability.<sup>56</sup>

61. NRG argues that CAISO's Proposal to reduce the term of backstop procurement represents a collateral attack on the settlement recently approved by the Commission in the CPM proceeding.<sup>57</sup> NRG asserts that the proposed Replacement Requirement backstop is no different from the CPM except that the length of designation is shorter,

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<sup>55</sup> CAISO Tariff at section 9.3.3.

<sup>56</sup> J.P. Morgan at 7-9.

<sup>57</sup> NRG at 1 (citing *Cal. Indep. Sys. Operator, Inc.*, 138 FERC ¶ 61,112 (2012) (CPM Settlement)).

going from a minimum designation of 30 days to designations as short as one day.<sup>58</sup> In addition, NRG notes that resources would be paid the CPM price, but only for the length of the designation, which could be as short as one day, while the CPM contemplated resources being paid the CPM price for a minimum designation of 30 days. NRG states that it is unlikely that CAISO will ever have to use the replacement capacity, so extending the term to 30 days would not unduly increase costs. NRG also maintains that extending the term would encourage load-serving entities to resolve any resource adequacy deficiency in their resource adequacy plans.<sup>59</sup>

62. NCPA supports the Proposal, stating that the one-day backstop procurement period is an essential element of CAISO's Proposal. NCPA asserts that backstop procurement should be infrequent and that requiring CAISO to acquire more backstop capacity than is necessary would only harm ratepayers.<sup>60</sup>

**b. Answers**

63. CAISO asserts that NRG's argument is supported neither by the CPM Settlement, nor by the fact that engaging in short-term backstop procurement to replace resource adequacy capacity on a maintenance outage was not proposed or considered in the CPM proceeding. Further, CAISO argues that the proposed resource adequacy maintenance outage backstop authority does not replace the existing CPM provisions; it is a new backstop procurement tool in addition to the CPM designation categories that existed at the time of the CPM Settlement.<sup>61</sup>

64. CAISO provides that the Explanatory Statement for the Offer of Settlement prohibits any change, during the four-year settlement term, to the price, quantity, and term provisions in the settlement, at the time it was approved. CAISO states that the Explanatory Statement also made clear that it could propose new capacity procurement during the settlement period and that the terms of the new capacity procurement could be the same or different than the CPM settlement provisions.<sup>62</sup>

65. CAISO also states that its Replacement Requirement is tailored to avoid over-procurement of replacement capacity. Contrary to NRG's and J.P. Morgan's assertions, CAISO states that its backstop procurement is voluntary; a resource that does not want to

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<sup>58</sup> *Id.* at 4-6.

<sup>59</sup> *Id.* at 7.

<sup>60</sup> NCPA at 5.

<sup>61</sup> CAISO Answer at 23-24.

<sup>62</sup> *Id.* at 24.

be designated as a backstop resource is not required to do so, and to the extent it provides resource adequacy capacity it will be compensated.<sup>63</sup>

66. CAISO argues that, contrary to NRG's contention, its Proposal is not inconsistent with the requirement to provide resource adequacy capacity for an entire month. CAISO notes that there is no requirement for monthly replacement in its proposed Tariff sections, so its partial month backstop procurement is not inconsistent with how resource adequacy resources are treated. CAISO notes that resource adequacy replacement capacity can be procured for only part of the month. CAISO argues that forcing backstop capacity to be procured for the entire month would create an incentive for non-resource adequacy capacity to hold out for a month long contract when load-serving entities seek replacement capacity.<sup>64</sup>

67. CAISO further responds that NRG's assertions completely overlook the new revenue opportunity that the proposed resource adequacy maintenance outage backstop service will provide. CAISO asserts that the resource adequacy maintenance outage backstop will be a new service, in addition to the existing CPM designation categories. To the extent an approved resource adequacy maintenance outage must be replaced, in whole or part, through backstop procurement in order to maintain the resource adequacy reliability margin, CAISO states that the resource that receives the designation will be compensated for the service. CAISO contends that this constitutes a new opportunity for suppliers to earn capacity payments. CAISO explains that their acceptance of a designation remains voluntary, and to the extent they decline, they potentially could receive an exceptional dispatch CPM designation if the reliability conditions arise that warrant such a dispatch.<sup>65</sup>

68. NCPA argues in its answer that the one-day minimum term is an essential element of CAISO's Proposal because it allows for procurement of only as much capacity as is required, while helping keep costs below an unreasonable level for ratepayers who have already paid for resource adequacy capacity once and who also pay costs for operating reserves procured by CAISO.<sup>66</sup> NCPA asserts that the proposed backstop mechanism is distinct from the CPM, as it is an outage management tool employed by CAISO to enable coordinated and reliable planning of maintenance outages.

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<sup>63</sup> *Id.* at 28-29.

<sup>64</sup> *Id.* at 29-31.

<sup>65</sup> *Id.* at 28.

<sup>66</sup> NCPA Answer at 2.

69. In its answer, NRG argues that the only distinction that CAISO has identified between its maintenance outage backstop procurement and the CPM is the length of the term. NRG states that CAISO incorrectly argues that existing CPM designations do not already cover the maintenance outage Replacement Requirement. NRG notes that the Tariff allows CAISO to rely on the CPM when there is insufficient replacement capacity.

**c. Commission Determination**

70. We find that CAISO has not demonstrated that its proposed backstop procurement product that is included in the Replacement Requirement is just and reasonable and not unduly discriminatory. As discussed below, CAISO has not shown that its proposed backstop procurement mechanism, which covers maintenance outages and provides designations for as little as one day, is a separate mechanism than the currently approved minimum designation term of 30 days under its CPM authority. We also find that CAISO has not demonstrated that a minimum designation term of one day provides just and reasonable compensation for backstop capacity procurement.

71. We are not persuaded by CAISO that its Proposal to procure resource adequacy maintenance outage backstop capacity for a minimum commitment of one day and a maximum commitment of 31 days is a new service that is separate and distinct from the existing CPM designation categories. The CPM allows CAISO to procure backstop capacity in the case of a Significant Event, which is defined in the CAISO Tariff as:

A substantial event, or combination of events, that is determined by the CAISO to either result in a material difference from what was assumed in the resource adequacy program for purposes of determining the [r]esource [a]dequacy [c]apacity requirements, or produce a material change in system conditions or in CAISO [c]ontrolled [g]rid operations, that causes, or threatens to cause, a failure to meet [r]eliability [c]riteria absent the recurring use of a non-[r]esource [a]dequacy [r]esource(s) on a prospective basis.<sup>67</sup>

Under the CPM, designations for Significant Events are made for a minimum term of 30 days.<sup>68</sup>

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<sup>67</sup> CAISO Fifth Replacement Tariff, Appendix A; *see also Cal. Indep. Sys. Operator, Inc.*, 134 FERC ¶ 61,211, at PP 145-157 (2011) (March 2011 Order).

<sup>68</sup> CAISO Fifth Replacement Tariff, Section 43.3.5, Term – CPM Significant Event.

72. We find, based on the Tariff language, that maintenance outages are contemplated within the existing Significant Event definition. Moreover, in the CPM Proposal, CAISO stated that it considered expanding the circumstances for procuring CPM capacity to allow transmission and/or generation maintenance outages. However, CAISO determined that under its existing Tariff provisions, maintenance outages are already covered under its Significant Event procurement authority.<sup>69</sup> Also, as NRG notes, CAISO has not identified a distinction between its proposed backstop procurement mechanism and the backstop mechanism covered by the CPM except in the length of term it has proposed.

73. We further note that CAISO proposes to compensate resources via the CPM price. However, under the Replacement Requirement, the price would be paid over the length of the designation, possibly as little as one day, rather than over a minimum 30-day designation term that is required under CPM. Since the inception of backstop capacity procurement in California, determining an appropriate backstop capacity compensation has been a careful balancing act that has considered both \$/kW-year and the minimum designation term.<sup>70</sup> In this instance CAISO proposes to use the existing CPM price, but not the minimum 30-day designation term. We find that this results in a very different compensation scheme than what was contemplated and approved for the CPM. CAISO has failed to demonstrate that this compensation is just and reasonable. For these reasons, we find that the proposed backstop procurement mechanism is not distinguishable from the CPM, which allows for backstop procurement of resource adequacy capacity for maintenance outages under its Significant Event designation. Accordingly, we reject the proposed backstop capacity procurement mechanism, and instead require CAISO to make these designations under its existing CPM authority. The CAISO is hereby directed to submit a compliance filing within 30 days from of the date of this order that deletes the proposed backstop capacity procurement mechanism Tariff revisions, as discussed above.

74. Finally, we find that concerns that the CPM Settlement should not be disturbed are misplaced. The CPM Settlement dealt with a narrow range of issues predominately relating to CAISO's exceptional dispatch authority and compensation. The definition of

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<sup>69</sup> CAISO CPM Proposal, Docket No. ER11-2256-000, at 12-13 (2010) (filed Dec. 1, 2010).

<sup>70</sup> See, e.g., March 2011 Order, 134 FERC ¶ 61,211; *Cal. Indep. Sys. Operator Corp.*, 125 FERC ¶ 61,053, at P 41 (2008), *order on reh'g*, 134 FERC ¶ 61,132 (2011); *Cal. Indep. Sys. Operator Corp.*, 123 FERC ¶ 61,229, at P 59 (2008); *Indep. Energy Producers Ass'n v. Cal. Indep. Sys. Operator Corp.*, 118 FERC ¶ 61,096, at P 73 (2007), *order on reh'g*, 121 FERC ¶ 61,276 (2007), *order on clarification*, 122 FERC ¶ 61,091 (2008).

a Significant Event and the 30-day minimum designation term that are at issue here were accepted by the Commission in the March 2011 Order.<sup>71</sup>

**4. Miscellaneous**

**a. Comments**

75. PG&E argues that requiring compliance in every hour will result in unnecessary costs. Thus, PG&E submits that only the availability assessment hours should be used.<sup>72</sup>

76. SDG&E objects to the practice of pre-selecting resources as replacement capacity. SDG&E further takes issue with the notion that load-serving entities can avoid replacement costs by procuring replacement capacity in excess of their reasonable resource adequacy requirements.<sup>73</sup>

**b. CAISO Answer**

77. CAISO states that PG&E provides no support for its assertion that a Replacement Requirement based on availability assessment hours would be sufficient. CAISO further provides that PG&E's argument is based on a misunderstanding of system modeling. CAISO asserts that forced outages are random, and that its standard capacity product filing, which focuses on forced outages, used the availability assessment hours to focus on the times when resource adequacy capacity was most needed. Moreover, CAISO notes that maintenance outages usually occur during off-peak hours, and that it would not be prudent to ignore those outages in the Replacement Requirement, since reliability problems could occur during those times.<sup>74</sup>

78. CAISO argues that the option for load-serving entities to submit a list of capacity designated as replacement capacity should be retained. CAISO states that listing a resource would not subject it to additional obligations unless it is actually selected as replacement capacity. CAISO explains that to the extent a load-serving entity does not want to submit a list of replacement capacity it may elect not to do so.<sup>75</sup>

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<sup>71</sup> See March 2011 Order, 134 FERC ¶ 61,211 at PP 145-157, 172-199.

<sup>72</sup> PG&E at 5.

<sup>73</sup> SDG&E at 11.

<sup>74</sup> CAISO Answer at 16.

<sup>75</sup> *Id.* at 20-21.

**c. Commission Determination**

79. The Commission agrees with CAISO that it would be inappropriate to consider only the availability assessment hours when evaluating whether replacement capacity is required for a maintenance outage. We also agree that maintenance outages may occur during off-peak hours and can cause reliability problems during those hours. Accordingly, we will not direct CAISO to modify its Proposal as suggested by PG&E.

80. The Commission agrees with CAISO that the submission of a list of replacement capacity is optional, and is designed to reduce compliance costs for load-serving entities. Since submitting the list of replacement capacity is optional, a load-serving entity could decline to submit such a list if it was not beneficial to the load-serving entity. Accordingly, the Commission concludes that there is no disadvantage to a load-serving entity or any other entity from including this option in the Tariff. Further, we disagree with SDG&E that this option represents a requirement that load-serving entities procure more than their resource adequacy capacity to avoid replacement costs. CAISO does not require any load-serving entity to provide more available capacity than their resource adequacy requirements. Instead CAISO is requiring that unavailable capacity be replaced, and is giving load-serving entities the option to pre-designate certain capacity for that purpose. Moreover, as noted above, CAISO provides numerous opportunities in its Tariff for load-serving entities to avoid the Replacement Requirement for maintenance outages through proper scheduling.

The Commission orders:

(A) CAISO's proposed Tariff sheets are hereby conditionally accepted for filing, to become effective November 20, 2012, as requested, subject to a compliance filing modifying CAISO's Proposal, as discussed in the body of this order.

(B) CAISO is hereby directed to submit a compliance filing within 30 days of the date of this order, as consistent with the directives discussed in the body of this order.

By the Commission.

( S E A L )

Nathaniel J. Davis, Sr.,  
Deputy Secretary.

Document Content(s)

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