## 127 FERC ¶ 61,298 UNITED STATES OF AMERICA FEDERAL ENERGY REGULATORY COMMISSION

Before Commissioners: Jon Wellinghoff, Chairman; Suedeen G. Kelly, Marc Spitzer,

and Philip D. Moeller.

California Independent System Operator Corporation

Docket No. ER09-1064-000

## ORDER ACCEPTING IN PART AND REJECTING IN PART TARIFF REVISIONS SUBJECT TO MODIFICATION

(Issued June 26, 2009)

1. On April 28, 2009, the California Independent System Operator Corporation (CAISO) filed its Resource Adequacy Standard Capacity Product (SCP)<sup>1</sup> and Ancillary Service Must-Offer Obligation (A/S Must-Offer Obligation) proposal 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 SCP will facilitate the selling, purchasing and trading of resource adequacy capacity, and through the A/S Must-Offer Obligation, the CAISO will enhance grid reliability. As discussed below, the Commission accepts in part and rejects in part the SCP and A/S Must-Offer Obligation, subject to modification, effective January 1, 2010, as requested by the CAISO, with the exception of tariff sections 40.9.2(2), 40.9.4.1, and 40.9.4.2.1(1), which will become effective on June 28, 2009.<sup>4</sup>

<sup>&</sup>lt;sup>1</sup> CAISO April 28, 2009 Ancillary Service Must-Offer Obligation and Resource Adequacy Standard Capacity Product Filing in Docket No. ER09-1064-000 (CAISO Filing).

<sup>&</sup>lt;sup>2</sup> 16 U.S.C. § 824(d) (2000 & Supp. V. 2005).

<sup>&</sup>lt;sup>3</sup> 18 C.F.R. Part 35 (2008).

<sup>&</sup>lt;sup>4</sup> The CAISO requests that the Commission rule on the A/S Must-Offer Obligation and SCP by June 27, 2009, so that the parties negotiating resource adequacy capacity contracts for the 2010 compliance year will have certainty about how these provisions will apply to resource adequacy capacity, and so the CAISO has time to make the necessary systems and software changes.

## I. <u>Background</u>

- 2. The CAISO proposes the SCP and the A/S Must-Offer Obligation to enhance its resource adequacy program, which is designed to ensure that adequate resources are available when and where needed to serve load, meet appropriate reserve requirements, and support the reliable operations of the CAISO-controlled grid. According to the CAISO, stakeholders expressed their desire to have this product implemented in the CAISO's Market Redesign Technology Upgrade (MRTU) Tariff as soon as possible, so that it may be used as the basis for capacity contracting during 2009 for the 2010 resource adequacy compliance year. In developing the SCP, the CAISO states that it was guided by four main criteria: (1) improving grid reliability; (2) streamlining stakeholder contracting efforts and facilitating contract tradability; (3) satisfying regulatory requirements; and (4) implementing a standard resource adequacy capacity product in time for application to the 2010 resource adequacy compliance year.<sup>5</sup> In addition, the CAISO states that implementation of the SCP responds to the Commission's directive in the order on the MRTU Tariff to develop and institute performance criteria for resource adequacy resources. To meet its objectives, the CAISO states that the SCP establishes standards for measuring the availability of resource adequacy capacity for most resources, sets up a system of availability penalties for resources that fall short of their requirements, and provides incentives for availability by distributing the penalty payments to those resources that exceed their requirements.
- 3. As for the A/S Must-Offer Obligation, the CAISO states that it is necessary to fill a current gap in the MRTU Tariff. Under the current provisions of the MRTU Tariff, resource adequacy resources generally have an obligation to submit economic bids or self-schedules in the day-ahead market for all of the energy associated with their resource adequacy capacity. Resource adequacy capacity is also expected to be available to provide energy in the residual unit commitment process and, with certain exceptions, in the real-time market. These obligations comprise what is referred to as the resource adequacy must-offer obligation. However, as currently constituted, the MRTU Tariff does not specifically require resource adequacy resources that are certified to provide ancillary services to offer both energy and ancillary services, nor does the tariff specifically allow resource adequacy resources to self-provide ancillary services to fulfill

<sup>&</sup>lt;sup>5</sup> CAISO Filing at 3.

<sup>&</sup>lt;sup>6</sup> *Id.* at 9 (citing *Cal. Indep. Sys. Operator Corp.*, 116 FERC  $\P$  61,274 (2006) (MRTU Order), order on reh'g, 119 FERC  $\P$  61,076 (2007), order on reh'g and denying motion to reopen record, 120 FERC  $\P$  61,271 (2007)).

<sup>&</sup>lt;sup>7</sup> *Id.* at 35-36.

their resource adequacy obligation. The CAISO asserts that this omission unreasonably limits its ability to co-optimize the capabilities of resource adequacy capacity, which could lead to higher costs or insufficient procurement of ancillary services. The CAISO asserts that the A/S Must- Offer Obligation will: ensure that sufficient capacity is available to the CAISO in all hours to meet system demand plus the operating requirements of the grid; support the CAISO's requirement to procure in the integrated forward market 100 percent of its forecasted real-time ancillary services requirements; ensure that buyers of resource adequacy receive the full reliability benefits of their expenditure; and enable CAISO market participants to obtain fully the benefits of co-optimization in the MRTU markets. The CAISO requests a waiver of the Commissions regulations to allow its proposed tariff sheets, with the exception of sections 40.9.2(2), 40.9.4.1, and 40.9.4.2.1(1), to become effective more than the 120-days after they were submitted, on January 1, 2010. The CAISO requests that sections 40.9.2(2), 40.9.4.1, and 40.9.4.2.1(1) become effective upon issuance of the order.

## II. Notice, Intervention, and Responsive Pleadings

4. Notice of the proposed tariff revisions was published in the *Federal Register*, 74 Fed. Reg. 22,534 (2009), with motions to intervene, comments, and protests due on or before May 19, 2009. Timely motions to intervene, comments, and/or protests were filed by the following: (1) Mirant Energy Trading, LLC, Mirant Delta, LLC and Mirant Potrero, LLC; (2) Alliance for Retail Energy Markets (AReM); (3) Modesto Irrigation District; (4) Cogeneration Association of California and the Energy Producers and Users Coalition; (5) Northern California Power Agency (NCPA); (6) the Cities of Anaheim, Azusa, Banning, Colton, Pasadena and Riverside California (Six Cities); (7) J.P. Morgan Ventures Energy Corporation and BE CA LLC (J.P. Morgan); (8) Dynegy Morro Bay, LLC, Dynegy Moss Landing, LLC, Dynegy Oakland, LLC, and Dynegy South Bay, LLC, (Dynegy); (9) Golden State Water Company; (10) Power and Water Resources Pooling Authority; (10) The Metropolitan Water District of Southern California (Metropolitan); (11) the City and County of San Francisco; (12) California Department of Water Resources State Water Project (SWP); (13) Powerex Corporation (Powerex); (14) San Diego Gas and Electric Company (SDG&E); (15) Southern California Edison Company (SoCal Edison); (16) Western Power Trading Forum (WPTF); (17) NRG Power Marketing LLC, Cabrillo Power I LLC, Cabrillo Power II LLC, El Segundo Power

<sup>&</sup>lt;sup>8</sup> *Id.* at 39-40.

<sup>&</sup>lt;sup>9</sup> The CAISO requests that the Commission issue an order on the instant proposal by June 27, 2009. The CAISO further requests that tariff sections 40.9.2(2), 40.9.4.1, and 40.9.4.2.1(1) be effective upon the date of issuance in order to facilitate negotiation of resource adequacy contracts for the 2010 year.

LLC, and Long Beach Generation LLC (NRG); (18) Pacific Gas and Electric Company (PG&E); (19) Calpine Corporation (Calpine); (20) Santa Clara, California doing business as Silicon Valley Power, and the M-S-R Public Power Agency (SVP); (21) California Municipal Utilities Association (CMUA); (22) Macquarie Cook Power, Inc.; and (23) RRI Energy, Inc. A notice of intervention was filed by the California Public Utilities Commission (CPUC).

5. Answers, reply comments, and/or answers to answers were filed by the following: (1) CAISO; (2) SoCal Edison; (3) NCPA; (4) PG&E; (5) Six Cities; (6) CPUC; and (7) Metropolitan.

#### III. Discussion

#### A. Procedural Matters

6. Pursuant to Rule 214 of the Commission's Rules of Practice and Procedure, 18 C.F.R. § 385.214 (2008), the timely, unopposed motions and notices to intervene serve to make the entities that filed them parties to this proceeding. Rule 213(a)(2) of the Commission's Rules of Practice and Procedure, 18 C.F.R. § 385.213(a)(2) (2008), prohibits an answer to a protest unless otherwise ordered by the decisional authority. We are not persuaded to accept answers, reply comments, and/or answers to answers filed by the CAISO, SoCal Edison, NCPA, PG&E, Six Cities, CPUC, and Metropolitan and will, therefore, reject them.

## **B.** Substantive Matters

7. The Commission accepts in part and rejects in part the CAISO's proposed tariff sheets, as modified, discussed and ordered below, effective January 1, 2010, as requested, with the exception of tariff sections 40.9.2(2), 40.9.4.1, and 40.9.4.2.1(1), which will be effective on June 28, 2009. With respect to the proposed tariff sheets for which the CAISO requests waiver to allow them to become effective on January 1, 2010, more than 120 days after filing, the Commission grants the CAISO's requested waiver and the requested January 1, 2010 effective date. We deny the CAISO's request that tariff sections 40.9.2(2), 40.9.4.1, and 40.9.4.2.1(1) become effective upon issuance, and instead find that these tariff sections will become effective on June 28, 2009, following the expiration of the 60-day prior notice requirement set forth in the FPA.<sup>10</sup>

 $<sup>^{10}</sup>$  16 U.S.C. § 824(d) (2006). See e.g., Utah Power and Light Company, 30 FERC  $\P$  61,015, at 61,024 & n.9 (1985).

## C. Standard Capacity Product

8. We find that having an SCP will enable market participants to efficiently and flexibly buy, sell, and trade resource adequacy capacity without the burden of negotiating the availability requirements of each transaction individually. By establishing uniform metrics that can be incorporated by reference into the bilateral resource adequacy contracts, the SCP will provide market participants with a readily-available means to satisfy their resource adequacy requirements, and thereby enhance reliability. Accordingly, the Commission finds that the SCP, as modified below, is just and reasonable and hereby accepted. In addition, we note that this order primarily addresses the contested features of the CAISO's proposal. With respect to the proposed tariff revisions that are not contested and not specifically discussed herein, the Commission finds that they are just and reasonable and are hereby accepted.

## 1. Availability Standards

- 9. To ensure there is sufficient generation capacity to meet the CAISO's reliability needs, and because resource adequacy resources receive capacity payments for providing resource adequacy capacity, the CAISO expects that the full amount of a resource's resource adequacy capacity will be available to the CAISO. The only exception to this expectation is when a resource is on a forced equipment outage or de-rate, including a temperature related ambient de-rate, that diminishes its ability to provide the full amount of its contractual capacity. Consistent with these expectations, the proposed SCP includes provisions to encourage and measure the availability of resource adequacy capacity, as well as availability incentive payments to reward high availability and financial non-availability charges to discourage poor operating performance. <sup>11</sup>
- 10. Under the SCP, the CAISO proposes to develop specific monthly availability targets and to compare the monthly operating status of non-exempt resource adequacy resources against the monthly targets. The CAISO states that the proposed availability standards are based on the availability of the resource adequacy resource fleet that is providing reliability to the CAISO system during the availability assessment hours (the pre-defined peak hours of that respective month) for the previous three years. The CAISO explains that it is proposing a unique availability standard for each month of the year in order to create availability targets that take into account the fact that different months of the year have different outage profiles. In essence, therefore, each monthly availability standard will be an average of the historic availability of the entire resource adequacy resource fleet for that month. The standards developed under this methodology

<sup>&</sup>lt;sup>11</sup> CAISO Filing at 3.

will apply to resource specific resource adequacy capacity, regardless of whether this capacity is internal to the CAISO or imported. 12

11. In contrast, the CAISO proposes a static target availability of 100 percent for non-resource specific resource adequacy imports, which are not associated with specific generating resources and do not have outages comparable to those affecting specified individual generating resources. Under the SCP, these resources would be expected to offer 100 percent of their resource adequacy capacity into the CAISO's markets in all hours for which they are contracted. According to the CAISO, this 100 percent availability target recognizes that capacity from non-resource specific resource adequacy imports, unlike capacity provided by individual resource adequacy resources, is not provided by a specified resource that could be unavailable due to a forced outage or derate. Rather, the CAISO explains that the resource adequacy capacity for a non-resource specific import can be provided by any resource available to the resource adequacy provider either directly or through a trading partner. The CAISO asserts that this lack of dependence on any specific physical resource provides sufficient flexibility to the resource adequacy provider to enable full delivery of the resource adequacy capacity in all hours for which it is designated as a resource adequacy resource. <sup>13</sup>

## **Comments and Protests**

- 12. NCPA, SVP, Powerex, Six Cities and CMUA raise concerns about the proposed 100 percent availability standard for non-resource specific imports. In contrast, Calpine supports the proposed availability standards and elaborates that: (1) the proposed availability standards apply fleet-wide, throughout the CAISO market; (2) the standards are neither unit-specific nor individualized for different types of resources; and (3) the availability standards provide a means of differentiating the levels of performance of resource adequacy resources.<sup>14</sup>
- 13. In opposition to the CAISO's proposed 100 percent availability standard, NCPA states that the options available to a non-resource specific resource are not necessarily as uniformly flexible as the CAISO suggests. First, NCPA asserts that the CAISO's

<sup>&</sup>lt;sup>12</sup> Non-resource specific capacity that is internal to the CAISO is exempt from all availability standards. *See infra* P 68.

<sup>&</sup>lt;sup>13</sup> CAISO Filing at 3.

<sup>&</sup>lt;sup>14</sup> Calpine Comments in Docket No. ER09-1064-000 at 4 (May 19, 2009) (Calpine Comments).

position does not take into consideration the nature of the seller's generation fleet. 15 Second, NCPA notes that if a seller suffers outages, it may not have other generation that is able to be delivered to the specified point of delivery, or it may suffer from transmission interruptions that make delivery to that point impossible. NCPA does not dispute that non-resource specific system resources are likely to be more reliable than sales dependent on a particular generating unit. However, NCPA maintains that the CAISO's conclusion that 100 percent availability is achievable for each hour used to measure availability, is not necessarily correct. NCPA also observes that the CAISO is able to track non-resource specific system imports because they must use a designated delivery point to enter the CAISO system. Moreover, NCPA argues that the CAISO's proposed unit substitution policy provides suppliers of resource specific capacity a great deal of flexibility. Thus, NCPA asserts that the CAISO's proposal to hold non-resource specific resources to a higher availability standard, because of their flexibility, is not warranted, and unjustly discriminates against non-resource specific system resources, which may (or may not) also be able to replace capacity from a large pool of available capacity. NCPA states that it is not suggesting that both non-resource specific system resources and resource-specific resources supplying system resource adequacy capacity should be subject to a 100 percent availability target, but rather that non-resource specific system resources should be subject to the same availability standards as applied to all other resource specific resources.<sup>16</sup>

14. Similarly, SVP argues that the 100 percent availability standard for non-resource specific resources is unduly discriminatory. First, SVP rejects the justifications offered by the CAISO, including the supposed lack of "[o]utage data upon which to measure availability and apply the financial incentives." SVP contends that the CAISO's proposal acknowledges that the CAISO can determine whether and where non-resource specific resources are delivered, at least to the extent the resources are imported into the CAISO balancing authority area. According to SVP, the lack of outage reporting is

<sup>&</sup>lt;sup>15</sup> NCPA argues that, for example, a system resource based on hydroelectric resources (such as the Western Area Power Administration Central Valley Project) is subject to regulatory, environmental, flood control and water usage constraints, which may well affect availability from time to time. NCPA Comments in Docket No. ER09-1064-000 at 4 (May 19, 2009) (NCPA Comments).

<sup>&</sup>lt;sup>16</sup> *Id.* at 5-6.

<sup>&</sup>lt;sup>17</sup> City of Santa Clara, California and the M-S-R Public Power Agency Protest in Docket No. ER09-1064-000 at 7 (May 19, 2009) (quoting CAISO Filing at 31) (SVP/M-S-R Protest).

irrelevant because the CAISO knows if there has been a failure to deliver. Thus, SVP argues that the level of performance of non-resource specific resource imports can be measured, and can be compared with the metric established by the resources that do provide outage reporting. SVP also argues that because under the SCP proposal resource specific and non-resource specific resources both have the option and ability to substitute resources, the supposedly greater flexibility of non-resource specific resources does not justify imposition of the 100 percent availability standard.<sup>18</sup>

- 15. In addition, SVP argues that the CAISO's attempt to differentiate non-resource specific resources from resource specific resources ignores the fact that some imports are backed by a limited number of resources that are inhibited by regulatory and environmental constraints. Thus, SVP explains that if one use-limited resource is unavailable, it is likely that the pool of similar use-limited resources is unavailable for the same reason. As a result, SVP submits that the pool of resources available for substitution is not as broad as the CAISO represents. Accordingly, SVP argues that, at least for imports, the non-resource specific resources should be measured against the same availability metric applicable to resource specific resources, and should enjoy the same 2.5 percent bandwidth applicable to resource specific resources.<sup>19</sup>
- 16. Powerex argues that the CAISO would not need to create a separate mechanism by which to apply the SCP to non-resource specific imports if the CAISO would agree to modify its tariff, regarding availability obligations, and its business practice manuals, regarding the use of generated bids, as discussed below. However, Powerex asserts that, to the extent the CAISO believes this separate mechanism should remain in place, it should clarify that it will not include certain hours in the calculation of a resource's availability under sections 40.9.7.1 and 40.9.7.2 of the MRTU Tariff. Specifically, Powerex requests that the CAISO exclude from its availability calculation the hours in which scheduling coordinators are prohibited by the MRTU Tariff from bidding into the CAISO's markets, such as when the intertie transmission paths are de-rated to zero. According to Powerex, inclusion of these hours would unfairly penalize non-resource specific imports for hours in which they were prohibited from scheduling transmission into the CAISO's markets.

<sup>&</sup>lt;sup>18</sup> *Id.* at 7-8.

<sup>&</sup>lt;sup>19</sup> *Id.* at 9.

<sup>&</sup>lt;sup>20</sup> See infra P 21, 130, respectively.

<sup>&</sup>lt;sup>21</sup> Powerex Comments in Docket No. ER09-1064-000 at 8-9 (May 19, 2009) (Powerex Comments).

- 17. Six Cities argue that the CAISO significantly overstates the extent to which the scheduling coordinator for a non-resource specific import can obtain capacity from a variety of resources. Six Cities explain that the available capacity of a generation resource depends not only on the availability of generation capacity, but also upon the availability of transmission across the specific scheduling point. Thus, Six Cities assert that for transmission outages that reduce or eliminate the transfer capability at the scheduling point, the scheduling coordinator will not be able to supply substitute capacity, even if generation resources are available.<sup>22</sup>
- 18. Further, Six Cities contend that it is unreasonable to apply the 100 percent availability standard to non-resource specific resources in a way that ignores the potential for transmission outages when non-resource specific resource adequacy resources within the CAISO balancing authority area are not subject to any availability standard. Six Cities observe that the CAISO appears to rely on the absence of resource identifications (IDs) for those non-resource specific resources delivered within the CAISO balancing authority area as the basis of its justification for the differential treatment. Moreover, Six Cities reject the CAISO's proffered justification, arguing that the existence of resource IDs for those resources delivered at scheduling points does not justify the application of an unrealistic availability standard to those resources.<sup>24</sup>
- 19. Six Cities propose two possible alternatives to the 100 percent availability standard. First, Six Cities offer that the CAISO could develop availability standards for the affected resources that include consideration of historical patterns for transmission outages and de-rates that have affected the transfer capability at each designated scheduling point. Alternatively, Six Cities propose that the CAISO could exclude from application of the availability standard circumstances where failure to make a resource available results from transmission outages or de-rates.<sup>25</sup>

<sup>&</sup>lt;sup>22</sup> Cities of Anaheim, Azusa, Banning, Colton, Pasadena, and Riverside, California Protest in Docket No. ER09-1064-000 at 4 (May 19, 2009) (Six Cities Protest). Six Cities note that as proposed, the MRTU Tariff specifies that a non-resource specific system resource must be offered to the CAISO's markets at its designated scheduling point, apparently precluding potential substitution of capacity at any other scheduling point.

<sup>&</sup>lt;sup>23</sup> *Id.* (citing CAISO Filing at 19).

<sup>&</sup>lt;sup>24</sup> *Id.* at 4-5.

<sup>&</sup>lt;sup>25</sup> *Id.* at 5.

- 20. CMUA objects to the CAISO's proposal to hold non-resource specific system imports to a 100 percent availability requirement, stating that these resources are, by definition, imports, and that the CAISO seeks to hold imports to a higher level of availability than in-area resources. CMUA states that the CAISO erroneously assumes that imports are much more flexible than in-area resources. CMUA notes that a transmission outage or de-rate could impair delivery from a designated tie point. CMUA also notes that in-area resources have the ability to substitute a non-resource adequacy resource for a resource adequacy resource in the event of an outage. CMUA therefore requests that both imports and in-area resources be subject to the same availability requirements.<sup>26</sup>
- 21. Powerex suggests that certain aspects of the CAISO's proposed tariff language are not sufficiently clear and should be revised.<sup>27</sup> First, with regard to resources that have received schedules in the day-ahead market, Powerex claims that the CAISO's proposed tariff language does not specifically state that the obligation to remain available would extend only to the given trading hour. Powerex proposes that it would be more precise and more consistent with the rest of this section to modify section 40.6.2 to specify that the resource's obligation is limited to the trading hour for which it receives a schedule and requests that the CAISO add language to that effect. Second, Powerex observes that it appears, based on the CAISO's proposed tariff language, that resource adequacy resources that do not receive schedules in the day-ahead market, except those associated with short-start units or long-start units, do not have any obligation to remain available for that trading hour. Powerex submits that if this is correct, the CAISO should clarify this in section 40.6.2.<sup>28</sup>
- 22. SWP states that section 40.9.4.2 of the MRTU Tariff should be modified to make it clear that outages due to uncontrollable forces will not be counted against availability. SWP also requests modification of section 40.6 to be consistent with section 40.5

<sup>&</sup>lt;sup>26</sup> CMUA Protest in Docket No. ER09-1064-000 at 5 (May 19, 2009) (CMUA Protest). The City and County of San Francisco support the positions taken and the relief sought in the CMUA Protest. The City and County of San Francisco Comments in Docket No. ER09-1064-000 at 4 (May 19, 2009).

<sup>&</sup>lt;sup>27</sup> Powerex Comments at 4.

<sup>&</sup>lt;sup>28</sup> *Id.* at 7.

<sup>&</sup>lt;sup>29</sup> SWP Comments in Docket No. ER09-1064-000 at 9-10 (May 19, 2009) (SWP Comments).

concerning modified reserve sharing load serving entities.<sup>30</sup> This would entail changing the title of section 40.6.1 from Day Ahead Availability to Day Ahead Scheduling and Bidding Requirements, and changing the first sentence of section 40.6.1 to read "Scheduling Coordinators on behalf of Reserve Sharing LSEs supplying Resource Adequacy Capacity. . . ."<sup>31</sup>

- 23. With regard to the determination of availability standards, NRG requests that the Commission clarify that the MRTU Tariff requires the CAISO to calculate generator availability data based on the North American Electric Reliability Corporation Generator Availability Data System. NRG states that, while the MRTU Tariff appears to require the submission of Generator Availability Data System data, the CAISO generally views the submission of Generator Availability Data System data as voluntary. NRG argues that a failure to require Generator Availability Data System data will lead to inconsistent and incomplete performance data. Therefore, NRG urges the Commission to direct the CAISO to implement rules to use Generator Availability Data System data in determining unit availability for resource adequacy purposes in the next 180 days.<sup>32</sup>
- 24. Finally, NRG states that the Commission should direct the CAISO to set a date to implement testing of capacity resources for ambient temperature de-rates. NRG states that periodic testing for performance under stressed conditions should be an integral part of earning an SCP rating. NRG notes that current testing procedures do not account for the fact that certain qualified capacity is unlikely to perform at temperature and humidity conditions reflective of a stressed system. NRG states that the CAISO should implement a standardized testing approach that allows the CAISO to ascertain the amount of capacity that can reasonably be expected to perform under stressed conditions.<sup>33</sup>

#### **Commission Determination**

25. The Commission finds the CAISO's proposed availability standard for resource specific capacity to be just and reasonable. The CAISO has appropriately based the standard on the past performance of the resource adequacy fleet and not on a specific number. This will ensure that each resource is measured by a fair and achievable

<sup>&</sup>lt;sup>30</sup> *Id.* at 10-11.

<sup>&</sup>lt;sup>31</sup> *Id.* at 11.

 $<sup>^{\</sup>rm 32}$  NRG Protest in Docket No. ER09-1064-000 at 15 (May 19, 2009) (NRG Protest).

<sup>&</sup>lt;sup>33</sup> *Id.* at 17.

standard that will stay relevant as market conditions change. By having one standard for the entire resource fleet, rather than multiple standards for multiple generation types, the CAISO will ensure that no one resource will be unduly favored by low standards, unduly punished by high standards, or destabilized by the high variability of standards for resource types with a small number of units. Accordingly, the Commission accepts the CAISO's availability standard for resource specific capacity.

- 26. However, the Commission finds that the CAISO has not shown that its proposed 100 percent standard for non-resource specific imports is just and reasonable. While we agree that the interchangeable nature of non-resource specific resources may make them more flexible than resource specific capacity, the CAISO has not provided adequate justification to support implementing a standard of perfect performance for these resources. The 100 percent standard does not appear to be grounded in any rigorous evaluation of the historic availability of such resources, or in any other empirical process. Rather, it seems that the CAISO has based its proposed treatment of non-resource specific imports on unsupported assumptions regarding the flexibility of these resources, and what such resources should be able to provide under ideal conditions.
- 27. The Commission shares commenters' concerns that non-resource specific imports may be subject to transmission outages at the interties, or constrained generation and transmission resources beyond such ties, which could prevent imports from meeting the 100 percent availability standard. Also, we find that this availability standard has not been properly supported by the CAISO. Therefore, we cannot find that the 100 percent availability standard is just and reasonable for non-resource specific imports. Accordingly, the Commission directs the CAISO to submit a revised availability standard proposal with regard to non-resource specific imports within 45 days of the date of this order.
- 28. Powerex requests two clarifications in the MRTU Tariff. First, it requests that section 40.6.2 of the tariff make clear that, for entities with schedules in the day-ahead market, the obligation to remain available extends only to those trading hours for which they are scheduled. Second, Powerex requests that the tariff make clear that unscheduled resources in the day-ahead market have no real-time obligation to remain available, except those associated with short or long-start resources. The Commission finds that Powerex's proposed clarifications to section 40.6.2 of the MRTU Tariff would be helpful in clarifying the tariff's availability obligations. Therefore, the Commission directs the CAISO to clarify the availability obligations described in section 40.6.2, consistent with the modification proposed by Powerex, in a compliance filing within 45 days of the date of this order. However, because we are directing the CAISO to submit a revised availability standard proposal, discussed above, we will not require the CAISO to incorporate Powerex's requested modification to sections 40.9.7.1 and 40.9.7.2 to exclude from the availability calculation hours when a non-resource specific resource is precluded from bidding due to a transmission path that has been de-rated to zero. Rather,

we expect the CAISO to consider Powerex's request, along with the other concerns expressed in the comments and protests and by the Commission in this order, as it crafts its revised proposal.

- 29. The Commission finds that it is unnecessary to make SWP's proposed modification to section 40.9.4.2 regarding not counting outages due to uncontrollable forces against availability. The CAISO already protects entities from being considered in default of obligations due to uncontrollable forces. Thus, we find that the CAISO's MRTU Tariff already includes the substance of SWP's requested revision. We further find that SWP's requested modifications to section 40.6.1 are unnecessary, as the tariff is sufficiently clear.
- 30. We also find NRG's request to require Generator Availability Data System data to be unnecessary. The tariff provision cited by NRG as mandating the use of Generator Availability Data System data plainly states that such data could be one set of documentation of the CAISO, but does not mandate the use of such data. Additionally, the Commission finds no compelling need to require such data.
- 31. Further, the Commission rejects NRG's request that the CAISO set a date certain for testing capacity resources for ambient temperature de-rates, as the proposal is not adequately supported and could be burdensome to implement.

## 2. Availability Incentives and Non-Availability Charges

- 32. The CAISO states that the SCP will provide financial incentives for each resource adequacy resource to meet or exceed the monthly availability standard. The CAISO provides that on a monthly basis, it will assess non-availability charges to resources whose availability falls short of the availability standard and applicable dead band, and will provide availability incentive payments to resources whose availability exceeds the availability standard and applicable dead band. According to the CAISO, the use of a dead band of 5 percent around the availability standard (2.5 percent on either side of the target availability value) will ensure that incentive payments and non-availability charges will only be assessed when resource adequacy resources perform materially better or worse than the established availability standard.
- 33. Further, the CAISO proposes to apply non-availability charges to resource adequacy capacity, based on performance, as follows: (1) if the resource's actual

<sup>&</sup>lt;sup>34</sup> MRTU Tariff § 14.1.

<sup>&</sup>lt;sup>35</sup> *Id.* § 40.4.5.

availability is less than 50 percent for a given month, the resource's entire resource adequacy capacity will be subject to the non-availability charge; (2) if the resource's actual availability is greater than 50 percent, but less than the availability standard minus 2.5 percent, the resource will be assessed the non-availability charge for that portion of its resource adequacy capacity equal to the availability standard minus 2.5 percent minus the resource's actual availability for that month; (3) if the resource's actual availability is equal to or greater than the availability standard minus 2.5 percent, it will not be subject to a non-availability charge; and (4) any forced outage, non-ambient de-rate, or temperature-related de-rate of a resource that the CAISO has accepted as a substitute for a resource adequacy resource will be applied in calculating the availability of the resource for which it is substituting.<sup>36</sup>

34. The CAISO proposes a non-availability charge rate equal to the monthly Interim Capacity Procurement Mechanism (ICPM) payment<sup>37</sup> and an incentive payment equal to the total non-availability charges for the month divided by the total resource adequacy capacity eligible for an incentive payment. In addition, the CAISO states that it will cap the potential availability incentive payment in any given month at three times the non-availability charge rate. Availability incentive payments will be paid only from the revenues the CAISO receives from the imposition of non-availability charges on the resources that do not meet the availability standard for that trade month. The CAISO states that this will ensure that the SCP is revenue neutral and does not depend on revenues from other sources.<sup>38</sup>

#### **Comments and Protests**

35. Calpine supports the adoption of financial incentives rather than physical de-rates of net qualifying capacity to reward and penalize performance that is sufficiently above or below industry averages. According to Calpine, financial incentives have the advantage of facilitating a closed-funding mechanism by which penalties collected from sub-par resources exclusively fund incentive payments earned by stellar performing resource adequacy resources. However, Calpine recommends one change to the proposed funding mechanism. Calpine recommends that any excess penalty payments

<sup>&</sup>lt;sup>36</sup> CAISO Filing at 30.

<sup>&</sup>lt;sup>37</sup> Resources dispatched under the ICPM receive a \$41/kW-year capacity payment and are afforded the opportunity to cost justify a higher payment upon showing that their going-forward costs plus 10 percent exceed the \$41/kW-year payment. *Cal. Indep. Sys. Operator Corp.*, 125 FERC ¶ 61,053, at P 23-44 (2008), *reh'g pending* (ICPM Order).

<sup>&</sup>lt;sup>38</sup> CAISO Filing at 4.

should carry over from month-to-month to be available to fund any future incentive payments that would not be covered by sufficient penalty amounts in such months, rather than being refunded on a monthly basis to load, as proposed by the CAISO. Calpine further proposes that if, over the course of an annual accounting period, excess penalty amounts have been collected and not disbursed to resources eligible for incentive payments, the excess penalty amounts could be refunded to load at the end of the annual accounting period.<sup>39</sup>

- 36. Calpine also asserts that use of the ICPM price for this limited purpose is acceptable as a measure for the funding of incentive payments and penalties.<sup>40</sup>
- 37. NCPA and SVP assert that the CAISO's proposal for imposing non-availability charges creates poor incentives. NCPA and SVP explain that under the CAISO proposal, once a unit falls below the 50 percent actual availability level, that unit has no incentive to try to remain available at all, because a unit that maintained an actual availability of zero percent would be penalized in a similar manner as a unit that maintained an actual availability of 49 percent.<sup>41</sup>
- 38. In order to provide an incentive for units to remain available at some achievable dispatchable level, NCPA and SVP suggest that the non-availability charge be assessed on the prorated basis for the entire range of the dispatchable resource adequacy capacity until the unit falls below its minimum operating level, at which point it would not be dispatchable and would be assessed the full non-availability charge, rather than applying a 50 percent floor. SVP argues that without modification, the CAISO's proposal regarding the 50 percent threshold should be rejected.
- 39. In addition, SVP argues that it is unclear how the non-availability charge would apply to resources that are only partially committed to provide resource adequacy services when they experience a partial outage. SVP states that it believes the CAISO's intent is to apply the non-availability charge only if the partial outage causes the unit to provide less than the resource adequacy capacity, but asserts that this is not made clear in the CAISO's proposal. Thus, SVP contends that the CAISO must clarify that the

<sup>&</sup>lt;sup>39</sup> Calpine Comments at 5.

<sup>&</sup>lt;sup>40</sup> *Id.* at 5-6.

<sup>&</sup>lt;sup>41</sup> NCPA Comments at 6; SVP/M-S-R Protest at 11.

<sup>&</sup>lt;sup>42</sup> NCPA Comments at 6; SVP/M-S-R Protest at 12.

availability assessment is limited to the portion of the capacity that is either designated as resource adequacy capacity, or sold as resource adequacy capacity.

## **Commission Determination**

- 40. In general, we find the CAISO's proposal to use financial incentive payments to reward resources that exceed the target availability and impose charges to discourage poor performance to be just and reasonable. We agree with the CAISO that the use of the dead band of 5.0 percent around the availability standard will ensure that incentive payments and non-availability charges will only be assessed when resources perform materially better or worse than the established standard. We also find that the CAISO's proposal to cap the potential availability incentive payment in any given month at three times the non-availability charge rate is a reasonable way to avoid windfall payments to a limited set of resource adequacy resources.
- 41. However, we agree with NCPA and SVP that the CAISO's proposed use of 50 percent availability as the threshold for subjecting a resource's entire resource adequacy capacity to the non-availability charge creates perverse incentives and could potentially have an adverse impact on reliability. A resource performing at 49.9 percent of the target availability would be providing a substantially different service to the CAISO than a resource performing at one percent. Yet, under the CAISO's proposed 50 percent availability threshold, both resources would be subject to penalties for their entire resource adequacy capacity. Thus, we find that the proposed use of a 50 percent availability threshold is not just and reasonable. The assessment of non-availability charges should more accurately reflect the actual value of the capacity being provided. A graduated approach that establishes incremental non-availability charges throughout the entire dispatchable range of resource adequacy capacity above a resource's minimum operating level would more properly align with the CAISO's stated goals of providing incentives for resource adequacy resources to achieve greater availability while ensuring sufficient generation capacity to meet the CAISO's reliability needs. Accordingly, we direct the CAISO to submit a revised proposal for the assessment of non-availability charges that takes a graduated approach within 45 days of the date of this order.
- 42. Finally, we accept the CAISO's proposal to settle non-availability charges and incentive payments on a monthly basis and credit any revenues associated with excess non-availability charges against the real-time neutrality charge for that trade month. Accordingly, a monthly mechanism for allocating the benefits and burdens of providing capacity-type services recognizes the monthly nature of the resource adequacy program and is an equitable way for the CAISO to ensure that its capacity needs are satisfied.<sup>43</sup>

(continued)

<sup>&</sup>lt;sup>43</sup> In approving the ICPM and Exceptional Dispatch tariff provisions, the

43. We will not require the clarification requested by SVP regarding the application of non-availability charges to resources with partial resource adequacy capacity. We find that the proposed tariff language is sufficiently clear that the CAISO will calculate a resource's availability and assess any applicable non-availability charges only on the resource adequacy portion of a resource's total capacity.

## 3. Exemptions from SCP Program

- a. Temporary Exemption for Resources Whose Qualifying
  Capacity is Based on Historical Output that Does Not
  Correct for Outages and for Demand Response Resources
- 44. The CAISO states that it will not initially apply the availability standards to resources whose resource adequacy qualifying capacity is determined by historical output from the CPUC or a local regulatory authority that does not adjust the historical output data to correct for the potential double counting of outages. The CAISO provides that currently such resources include wind, solar, and qualifying facility resources. The CAISO maintains that it is inappropriate to apply the SCP non-availability charges to these resources, given the current CPUC rules for determining resource adequacy qualifying capacity. The CAISO explains that the CPUC bases the resource adequacy qualifying capacity value for wind, solar, and qualifying facility resources on historical performance. Thus, the CAISO provides that to the extent these resources experience forced outages or de-rates, any resulting reduction in availability is reflected in their qualifying capacity values for the following resource adequacy compliance year. In addition, the CAISO states that it will not initially apply the availability standards to demand response resources. The CAISO maintains that it is inappropriate to apply non-

Commission emphasized the importance of properly aligning the CAISO's backstop procurement mechanisms with the temporal features of the resource adequacy program. ICPM Order, 125 FERC ¶ 61,053 at P 89 (accepting the CAISO's proposed minimum 30-day ICPM designation in part because it is consistent with the resource adequacy program); *see Cal. Ind. Sys. Operator Corp.*, 126 FERC ¶ 61,150, at P 145-147 (2009) (finding that offers of monthly ICPM designations to exceptionally dispatched non-resource adequacy resources ensures equitable compensation for all resources providing capacity-type services).

<sup>44</sup> In other words, an outage will result in a physical penalty in the form of reduced qualifying capacity for resource adequacy purposes. Thus, the imposition of a further financial penalty due to a forced outage or de-rate under the SCP program would effectively result in a double penalty.

availability charges to these resources given that initiatives are underway at both the CPUC and CAISO to change the manner in which demand response is treated in the California markets.<sup>45</sup>

#### **Comments and Protests**

- 45. The CPUC supports the CAISO's proposal to defer the definition of performance metrics and penalties for certain intermittent and demand response resources until tariff language can be developed to accommodate the unique characteristics of these resources. The CPUC anticipates issuing a final decision in its on-going resource adequacy proceeding that will address CAISO requests to revamp the method for calculating the net qualifying capacity of certain intermittent resources.
- 46. Calpine also supports temporary exemptions for resource adequacy resources (whether demand resources or certain renewable and qualifying facility resources) whose qualifying capacity is determined on a basis that does not correct for outages. Calpine recognizes that certain resources' net qualifying capacity is measured based on historic physical availability and that those resources should not also be subject to on-going financial penalties for unavailability. However, Calpine believes that the CAISO should evaluate the performance of all resource adequacy resources and publish summary performance reports for units exempt from the availability standards, using the same criteria that apply to thermal units fleet-wide in California. Calpine states that such information would be valuable for future consideration of the effectiveness of the resource adequacy program and the feasibility of broadening the applicability of availability standards and performance incentives. Calpine also believes that the exemption for renewables and qualifying facilities should sunset and not apply to new resources after a date certain, such as January 1, 2011.

<sup>&</sup>lt;sup>45</sup> CAISO Filing at 4. The CAISO states that it intends to revisit this issue at a later date, in conjunction with the CPUC and stakeholders to consider revisions to the demand response program and the CPUC's procedures for determining resource adequacy qualifying capacity in order to eliminate the possibility of double counting outages.

<sup>&</sup>lt;sup>46</sup> CPUC Comments in Docket No. ER09-1064-000 at 4 (May 19, 2009) (citing Proposed *Decision Adopting Local Procurement Obligations for 2010 and Further Refining the Resource Adequacy Program*, issued May 15, 2009 in Rulemaking R.08-01-025) (CPUC Comments).

<sup>&</sup>lt;sup>47</sup> Calpine Comments at 6.

- 47. Metropolitan supports the CAISO's proposal to exempt wind, solar, and qualifying facility resources. Metropolitan explains that although the CAISO's proposal does not include non-qualifying facilities in the list of exempted resources, the proposed tariff language contains a functional definition of exempt facilities, and it asserts that its small conduit hydroelectric facilities would satisfy that functional definition. Metropolitan contends that to the extent that the CPUC or a local regulatory authority continues to use historical performance data for determining a generating facility's resource adequacy qualifying capacity, the exemption should be permanent. Metropolitan asks the Commission to direct the CAISO to revise its tariff language accordingly. 48
- 48. SWP supports the exemption of existing contracts and the deferral of demand side resources from the application of availability requirements. SWP states that it further appreciates the CAISO's clarification regarding use-limited resources.<sup>49</sup>
- 49. In contrast, WPTF states that several of the proposed exemptions would be unjust and unreasonable and unduly discriminatory if approved. WPTF asserts that since the resources would be providing the same product (resource adequacy capacity), they should be subject to the same availability requirements and penalties as other resources that provide resource adequacy capacity. Specifically, WPTF objects to the CAISO's proposal to exempt resource adequacy capacity whose net qualifying capacity is based on historical output and may include hours in which the resource was on outage. However, WPTF states that the solution to the potential double penalty problem identified by the CAISO is for the CPUC to amend its counting rules for net qualifying capacity. WPTF argues that correcting this problem through an exemption from the SCP standards would be making a second mistake in the hope of correcting the first.
- 50. WPTF states that an initial decision in CPUC Rulemaking 08-01-025 indicates that the CPUC could eliminate the double counting problem and assuage the CAISO's concerns, and notes that the CAISO has offered to revisit its exemption in light of a change in counting rules. However, WPTF states that this offer provides no comfort, as the CAISO has not committed to reviewing its exemption within a certain timeframe after

<sup>&</sup>lt;sup>48</sup> Metropolitan Water District of Southern California Comments in Docket No. ER09-1064-000 at 7-9 (May 19, 2009).

<sup>&</sup>lt;sup>49</sup> SWP Comments at 3.

<sup>&</sup>lt;sup>50</sup> WPTF Protest in Docket No. ER09-1064-000 at 4 (May 19, 2009) (WPTF Protest).

the change in counting rules, and that, if the counting rules are not changed, the CAISO's temporary exemption could become a permanent one.<sup>51</sup>

- 51. WPTF also argues that the CAISO's proposed exemption of demand response resources from availability requirements is unwarranted. WPTF states that how a resource will participate in the CAISO's markets is irrelevant to how much demand response capacity a resource provides. WPTF notes that demand response is currently providing a substantial amount of resource adequacy capacity despite the fact that demand response can only be used by the CAISO in a Stage 2 emergency and that the CAISO will deploy non-resource adequacy capacity to avoid a Stage 2 emergency. WPTF states that the CAISO's proposed exemption would treat resources providing the same product very differently. <sup>52</sup>
- 52. WPTF states that the solution to the uncertainty of providing availability requirements to the CAISO is to limit the types of demand response that can provide resource adequacy or to modify demand response rules such that demand response can comply with availability requirements. While WPTF concedes that the Commission does not have jurisdiction over the CPUC's Resource Adequacy Program, WPTF states that the CAISO can ensure that non demand response resources are not discriminated against by this exemption. <sup>53</sup>
- 53. Dynegy supports WPTF's protest.<sup>54</sup> Dynegy further urges the Commission to reject the CAISO's proposal to exempt resources whose net qualifying capacity is determined using historical data from the availability penalties and incentives of the SCP merely because the recent proposed decision in the CPUC's Track 2 resource adequacy rulemaking did not address the issue of forced outages being included in net qualifying capacity calculations.<sup>55</sup>

<sup>&</sup>lt;sup>51</sup> *Id.* at 6.

<sup>&</sup>lt;sup>52</sup> *Id.* at 7-8.

<sup>&</sup>lt;sup>53</sup> *Id.* at 8.

<sup>&</sup>lt;sup>54</sup> Dynegy Protest in Docket No. ER09-1064-000 at 3 (May 19, 2009) (Dynegy Protest).

<sup>&</sup>lt;sup>55</sup> *Id.* at 3-4 (citing Proposed *Decision Adopting Local Procurement Obligations* for 2010 and Further Refining the Resource Adequacy Program, issued May 15, 2009 in Rulemaking R.08-01-025).

- 54. Likewise, NRG objects to the open-ended nature of several of the CAISO's proposed exemptions. NRG argues that these open-ended exemptions would put high performers at a competitive disadvantage by failing to provide rewards for high availability. Thus, NRG proposes that the Commission require that all resources participating in the CAISO's resource adequacy programs be subject to uniform performance standards by January 1, 2011. NRG argues that, with the expansion of renewable resources due to renewable performance standards, establishing the performance obligation for the countable capacity of these resources is critical to both buyers and sellers when they negotiate contract prices and terms. NRG states that the establishment of a firm sunset date for the exemption would aid the establishment of these performance standards.
- 55. With regard to the exemption for demand response resources, NRG states that the lack of a credible performance standard for these resources harms reliability and undermines the capacity value for resources performing up to the SCP requirements. Accordingly, NRG states that there should also be a January 1, 2010 date certain for establishing performance standards for demand response resources.<sup>57</sup>

## **Commission Determination**

- 56. We accept the CAISO's proposal to exempt from the proposed availability standards resources whose qualifying capacity is determined by historical output. As the CAISO explains, existing resource adequacy rules treat certain resources differently in determining their amount of qualifying capacity. Under the existing CPUC market rules, resources whose qualifying capacity is determined by historical output are penalized for poor performance through a reduction of their qualifying capacity. Therefore, it would be a harsh result to apply the same availability standards, which are designed to penalize poor performance, to resources already subject to qualifying capacity adjustments. We find that doing so could potentially result in penalizing such resources twice for the same outage or de-rate. As long as this counting feature of the market continues, we find the proposed exemption to be permissible and not unduly discriminatory.
- 57. We also accept the CAISO's proposal to temporarily exempt demand response resources due to on-going efforts to enhance the manner in which demand response resources participate in the CAISO's markets. We acknowledge the CAISO stakeholder initiatives and CPUC proceedings to enhance the manner in which demand response resources participate in the CAISO's markets, and therefore we are not inclined to take

<sup>&</sup>lt;sup>56</sup> NRG Protest at 3.

<sup>&</sup>lt;sup>57</sup> *Id.* at 6.

any action in the instant proceeding that might disrupt these current processes or delay the filing of proposed demand response enhancements with the Commission. Accordingly, we find the CAISO's proposal to *temporarily* exempt demand response resources is supported and not unduly discriminatory.

58. To be clear, we find the CAISO's proposal to exempt these resources to be just and reasonable and not unduly discriminatory because these issues are being addressed in ongoing CAISO and CPUC proceedings and the exemptions are, therefore, temporary. To that end, we direct the CAISO to work with stakeholders, the CPUC, and local regulatory authorities to determine when the proposed exemptions should ultimately sunset, and the CAISO and stakeholders should diligently work toward a sunset in a timely manner. In this regard, we direct the CAISO to post a biannual status report relating to the application of availability standards to all resource adequacy resources on its internet web site. The CAISO should post the first such report within 45 days of the date of this order. The reports will serve as a means for the Commission and market participants to monitor the progress of these efforts to sunset the exemptions and as the basis for the market participants and the Commission to determine if the efforts to sunset the exemptions are unreasonably delayed.

## b. Applicability of the SCP to Existing Contracts

59. The CAISO proposes a grandfathering provision to exempt from the SCP capacity under contracts either executed prior to January 1, 2009 or submitted to the appropriate local regulatory authority for approval prior to that date, which otherwise would be subject to the availability standards and incentives, for the remainder of the current contract period. The CAISO explains that upon expiration of the current contract period, even if there is a subsequent right of extension, the contract would no longer be eligible for grandfathering and would be fully subject to the SCP requirements. In the event that a pre-existing agreement is assigned or undergoes novation during the grandfathered period, the CAISO states that it would be exempt from the SCP only to the extent of the initial contract period and megawatt quantity, and for the resource specified in the agreement in effect on December 31, 2008. The CAISO asserts that this grandfathering proposal respects existing contractual arrangements and will ensure that such contracts are not subject to duplicative or potentially conflicting availability standards.<sup>58</sup>

<sup>&</sup>lt;sup>58</sup> The CAISO notes that the CPUC supports the proposed end date for existing contracts to be eligible for grandfathering and notes that market participants have been on notice since August 2008 that the CAISO was intending to implement an SCP that would enforce availability standards for resource adequacy resources commencing with the 2010 resource adequacy compliance year. CAISO Filing at 6.

60. The CAISO states that the December 31, 2008 end date is necessary to deter a rush by parties, before the SCP becomes effective, to enter into new resource adequacy contracts with extended multi-year terms for the purpose of avoiding SCP availability obligations. The CAISO explains that the use of this end date for eligibility for grandfathering will also promote reliability and limit the ability of load serving entities and poor-performing resources to essentially lean on other resources because their recently negotiated contracts do not have any availability standards (or have availability standards that are less stringent than those proposed with the SCP). The CAISO argues that the December 31, 2008 end date is also reasonable because load serving entities are now beginning the process of negotiating new resource adequacy contracts for the 2010 resource adequacy compliance year. According to the CAISO, an eligibility end date during the second or third quarter of 2009 would potentially result in some new resource adequacy contracts for 2010 being subject to the SCP, but others being subject only to the availability provisions contained in individual contracts. Finally, the CASIO provides that a December 31, 2008 eligibility end date makes it more likely that the same availability standard would apply to all new 2010 resource adequacy compliance year contracts. 59

## **Comments and Protests**

- 61. Calpine, J.P Morgan, Six Cities, CMUA, SoCal Edison, NRG,<sup>60</sup> and Golden State Water Company<sup>61</sup> generally support the CAISO's proposal to grandfather resource adequacy resources committed under existing contracts.
- 62. Although Six Cities support the CAISO's proposal to exempt capacity resources procured under contracts executed prior to January 1, 2009, Six Cities observe that some contracts for long-term resources include provisions that increase the capacity rights covered by the contracts. Six Cities argue that the parties should be entitled to the benefit of the bargain struck in those contracts. Thus, Six Cities assert that in order to maintain the full balance of benefits and burdens under such contracts, the exemption should extend to capacity that becomes available under the term of such a contract at a future time during the initial terms of a contract. Six Cities add that such treatment is consistent

<sup>&</sup>lt;sup>59</sup> *Id*.

<sup>&</sup>lt;sup>60</sup> NRG states that these contracts have had a reasonable opportunity to incorporate changes to resource adequacy provisions.

<sup>&</sup>lt;sup>61</sup> Golden State Water Company Comments in Docket No. ER09-1064-000 at 6 (May 19, 2009).

with the Commission's general policy of honoring the terms of existing contracts, but without expanding unduly the scope of the exemption for such contracts. <sup>62</sup>

- 63. CMUA seeks clarification with regard to section 40.9.2(2), which states that the exemption for existing contracts will apply only for the initial term of the contract and to the megawatt capacity specified in the contract. CMUA states that certain resource-specific power contracts do not specify a specific megawatt output but may specify a ratio of a particular resource. Thus, CMUA states that it is unclear how contracts with shares of resources will be handled and argues that such contracts should be treated consistent with contracts that specify fixed megawatt amounts.<sup>63</sup>
- 64. SoCal Edison argues that the CAISO's proposed cut-off for this exemption does not provide for the appropriate treatment of contracts executed in good faith after January 1, 2009, but before the effective date of the SCP. SoCal Edison maintains that all contracts executed before the effective date of the SCP must be exempted because those contracts executed after January 1, 2009, but before the effective date, will not address the new availability requirements and financial consequences of non-compliance with the SCP. SoCal Edison adds that the Commission's final ruling on the SCP could involve substantive changes to the proposed tariff language. Thus, SoCal Edison cautions that this uncertainty could result in parties foregoing the risk of such contracting by avoiding contracting, or could result in increased costs to load serving entities in order to account for unknown changes to the SCP once it is adopted. SoCal Edison maintains that the CAISO's fear that parties will rush out and sign long-term contracts to avoid the SCP availability obligations is small when compared to the impacts of not extending grandfathering beyond January 1, 2009.

## **Commission Determination**

65. The Commission finds that, as a general matter, the CAISO's proposal to exempt existing contracts is just and reasonable. However, due to the notice requirements of section 205 of the FPA, we reject the CAISO's proposed January 1, 2009 cut-off date for grandfathering existing contracts. Section 205 of the FPA states, in relevant part, that

 $<sup>^{62}</sup>$  Six Cities Protest at 11 (citing e.g., Cal. Indep. Sys. Operator Corp., 104 FERC ¶ 61,129, at P 15-18 (2003); Cal. Indep. Sys. Operator Corp., 82 FERC ¶ 61,325, at 62,277 (1998)).

<sup>&</sup>lt;sup>63</sup> CMUA Protest at 11-12.

<sup>&</sup>lt;sup>64</sup> Southern California Edison Company Comments in Docket No. ER09-1064-000 at 3-5 (May 19, 2009) (SoCal Edison Comments).

"[u]nless the Commission otherwise orders, no change shall be made by any public utility in any such rates, charges, classification, or service, or in any rule, regulation, or contract relating thereto, except after 60 days' notice to the Commission and to the public." Notice, for purposes of the FPA, was provided by the CAISO to the Commission and to the public on April 28, 2009, the date on which the SCP proposal was filed with the Commission. Consequently, we will allow the grandfathering provision to become effective on June 28, 2009.

- 66. We share the CAISO's concern that contracting parties could use the time between the issuance of this order and the effective date to negotiate contracts designed to circumvent the availability standards approved herein. Thus, we reject SoCal Edison's proposal to exempt all contracts executed prior to the effective date of the SCP (January 1, 2010). Accordingly, we find that an exemption for contracts executed prior to June 28, 2009 satisfies statutory notice requirements, while mitigating the potential for parties to contract around the SCP availability standards. We direct the CAISO to make this revision in a compliance filing no later than 45 days from the date of this order.
- 67. The Commission finds the clarifications proposed by Six Cities and CMUA are just and reasonable. With respect to Six Cities' requested clarification, we find that if the original grandfathered contract permits capacity additions, then allowing such capacity additions during the initial term of the grandfathered contract would preserve the original agreement without allowing indefinite contract extension. Regarding CMUA's proposed clarification, we find it consistent with the intent of the grandfathering provision to allow contracts executed before June 28, 2009 to specify a ratio of a particular resource, rather than a megawatt quantity, for exemption from availability standards. Accordingly, we direct the CAISO to make these clarifications in a compliance filing no later than 45 days from the date of this order.

#### c. Other Exemptions

68. The CAISO also proposes to exempt from the SCP program resources with a capacity of less than 1 megawatt because of the small size and absence of operating data for many of these resources. In addition, the CAISO intends to exempt the non-local capacity of modified reserve sharing load serving entities and load following metered subsystems. However, the CAISO proposes to apply the SCP to the local capacity

(continued)

<sup>&</sup>lt;sup>65</sup> 16 U.S.C. § 824(d) (2006).

<sup>&</sup>lt;sup>66</sup> CAISO Filing at 14.

<sup>&</sup>lt;sup>67</sup> The term "load following metered subsystem" is not defined in the MRTU Tariff. Generally, a metered subsystem is a geographically contiguous system located

resources of these entities. According to the CAISO, the capacity nominated by these entities is essential to the CAISO's local reliability needs, and these entities may be subject to any charge the CAISO might impose if it needs to procure backstop capacity in a local area. Thus, the CAISO asserts that it is important to treat all capacity nominated as local capacity area capacity the same, regardless of what type of load serving entity nominates it. With respect to non-local capacity of these entities, the CAISO states that they have strong financial incentives to provide fully for their share of system needs in every operating hour, so the SCP incentives are unnecessary, inappropriate, and potentially duplicative. 68 Finally, the CAISO proposes to exempt resource adequacy contracts for non-resource specific energy delivered within the CAISO balancing authority area. The CAISO explains that because energy provided under this type of contract does not use a single, unique CAISO resource ID, the CAISO cannot identify the specific source of energy associated with the transaction. As a result, the CAISO states that it is unable to apply the availability standard and incentives to the underlying resource adequacy capacity. The CAISO notes, however, that it will not exempt nonresource specific contracts for delivery at the CAISO balancing authority area border. According to the CAISO, the magnitude and importance of non-resource specific imports necessitates the inclusion of these resources to prevent significant gaps in the SCP.

#### **Comments and Protests**

69. SVP fully agrees with the CAISO that its load following metered subsystem obligations obviate the need for application of the SCP to the non-local capacity area resources of load following metered subsystems. However, SVP asserts that the duplication that would result from application of the SCP to the metered subsystems extends beyond the non-local resource adequacy resources and includes all resource adequacy resources of the load following metered subsystem. SVP contends that unlike other load serving entities, as a load following metered subsystem, SVP has sufficient incentives to ensure that its designated local resource adequacy resources are available because of the financial penalties imposed by its metered subsystem agreement, should SVP fail to have sufficient resources available to meet its load. Thus, SVP asserts that

within a single zone, subsumed within the CAISO control area, that has been operating as an electric utility for a number of years prior to the CAISO operations date as a municipal utility, water district, irrigation district, state agency or federal power administration. Load following is typically defined as the use of generation to meet the hour-to-hour and daily variations in system load. Load following metered subsystems use their generation to meet load in real time. *See Cal. Indep. Sys. Operator Corp.*, 124 FERC ¶ 61,043, at n.19 (2008) (citations omitted).

<sup>&</sup>lt;sup>68</sup> CAISO Filing at 7.

adding the standard resource capacity requirements and potential non-availability penalties, in addition to the load following metered system penalties, results in a double charge. <sup>69</sup>

70. SVP argues that rather than addressing the double-charge issue, the CAISO focuses on its use of local resource adequacy procurement to assess cost responsibility for backstop procurement. However, according to SVP, the backstop procurement costs are different from the compliance penalties built into the metered subsystem agreement. SVP contends that the backstop procurement has been applied to the load following metered subsystems because it is a capacity charge, whereas the load following metered subsystem penalty addresses an inability to deliver energy. Thus, SVP submits that the SCP non-availability charge would duplicate the metered subsystem penalty because both charges address failures to deliver energy. Accordingly, SVP asserts that all load following metered subsystem resources should be exempt from the non-availability charge.

## **Commission Determination**

- 71. The Commission finds that the CAISO's proposed exemption for non-resource specific energy delivered within the CAISO balancing authority area is just and reasonable. The CAISO notes that it cannot incorporate these resources into the availability standards because, unlike the non-resource specific imports that are scheduled under a specific, trackable resource ID, internal non-resource specific resources do not utilize resource IDs. As the CAISO has explained, use of resource IDs alerts the CAISO to the location on the CAISO grid at which the import supplier is required to offer its capacity. Thus, in the case of the non-resource specific imports, the CAISO has a way to measure on an hourly basis whether these resources have offered the full amount of their resource adequacy capacity into the day-ahead market. In contrast, because internal non-resource specific resources do not utilize resource IDs, the CAISO is not able to properly calculate the availability of these resources. If the availability of this non-resource specific capacity cannot be calculated, then the availability standard cannot be applied to such capacity.
- 72. The Commission finds that the CAISO's exemption for the non-local capacity of load following metered subsystems is reasonable. The fact that system resources, unlike

<sup>&</sup>lt;sup>69</sup> SVP/M-S-R Protest at 10.

<sup>&</sup>lt;sup>70</sup> *Id.* at 11.

<sup>&</sup>lt;sup>71</sup> CAISO Filing at 31.

local capacity resources, procured by load following metered subsystems are not subject to the resource adequacy requirements of the MRTU Tariff provides a reasonable basis for treating these resources differently.

- 73. However, the Commission disagrees with SVP's argument that there should be an analogous exemption for the local capacity resources of load following metered subsystems. The election to become a load following metered subsystem, including the associated penalties, should not exempt the required local capacity resources of these entities from equal treatment under the SCP availability standards. Unlike the non-local capacity of load following metered subsystems, the local capacity of these resources is subject to the resource adequacy provisions of the MRTU Tariff. Therefore, these resources should be treated similarly to other resource adequacy capacity. Accordingly, we find that application of the SCP non-availability charges to the local capacity resources of load following metered subsystems is appropriate.
- 74. The Commission also finds that the exemption of resources with a capacity of less than 1 MW is just and reasonable. The Commission agrees with the CAISO that their small size and the absence of reporting data justify their exemption.

### 4. <u>Unit Substitution</u>

According to the CAISO, a resource adequacy provider will be able to substitute non-resource adequacy capacity for resource adequacy capacity on forced outage in order to avoid having the outage counted against the resource adequacy resource's availability. The CAISO explains that substitute capacity for a resource adequacy resource on forced outage must be provided by capacity that is not already designated as resource adequacy capacity for the compliance period. The CAISO states that substitute capacity may be offered in a megawatt quantity that is less than the resource adequacy capacity of the resource on forced outage, in which case the resource adequacy provider would receive partial credit against its availability score. The CAISO asserts that this substitution option benefits resource adequacy providers by enabling them to avoid a reduction in their monthly availability score. The CAISO states that it and other market participants would benefit to the extent such substitution enables the CAISO to avoid the need to engage in backstop procurement. The CAISO notes that its proposed rules for substitution recognize the distinct need for local versus system resource adequacy capacity. According to the CAISO, a key principle behind the design of these rules is the principle that an acceptable substitute for a resource adequacy resource having an outage should enable the CAISO to avoid having to procure backstop capacity to replace the services of the original resource adequacy resource. The CAISO explains that this principle is intended to ensure that electricity customers do not pay twice for the same

resource adequacy capacity services, once through the load serving entity's procurement of resource adequacy capacity and again through the CAISO's procurement of backstop capacity.<sup>72</sup>

- 76. With respect to the requirements for substituting local capacity area resources, the CAISO states that its proposed substitution provisions provide two separate opportunities for resources to qualify for substitution. First, the CAISO notes that a provider of local resource adequacy capacity can pre-qualify a substitute resource in advance of the start of the resource adequacy compliance year by proposing to the CAISO a specific replacement resource that is located at the same bus as the local resource adequacy resource and has similar operational characteristics. Once this substitute is approved by the CAISO, if the original local resource adequacy resource suffers a forced outage during the compliance year, the resource adequacy provider may offer, and the CAISO will accept, the pre-qualified substitute. The CAISO explains that this prequalification approach allows substitute resources that are essentially electrically equivalent to the resource they are replacing to automatically qualify for substitution. According to the CAISO, under these circumstances it can be ensured that in all day-to-day operating conditions that might arise, it will not have to procure backstop capacity because the substitute unit was an adequate replacement for the original resource. Second, the CAISO states that even if a resource does not satisfy the pregualification standard, the provider of local resource adequacy capacity may offer to substitute a non-pre-qualified substitute resource within the same local capacity area at the time of the outage of its local resource adequacy resource. The CAISO may (or may not) accept it, depending on how well it meets the CAISO's effectiveness and operational needs as compared with the original resource. The CAISO will determine the suitability for substitution based on prevailing system conditions at the time of the outage.
- 77. The CAISO states that a provider of system resource adequacy capacity that does not count towards meeting the requirements of any local capacity area will be able to offer any available non-resource adequacy capacity to substitute for its unavailable resource adequacy resource, subject only to the CAISO's deliverability requirements, and the CAISO will accept it if prevailing system conditions allow it to do so.<sup>73</sup>

#### **Comments and Protests**

78. Dynegy and J.P. Morgan argue that the same performance requirements that apply to the resource adequacy product should also apply to the substitution provisions of the

<sup>&</sup>lt;sup>72</sup> *Id.* at 5.

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

SCP. Accordingly, Dynegy and J.P. Morgan oppose the CAISO's proposal to limit substitution to those resources which are either "electrically equivalent" or meet the CAISO's "operational and effectiveness needs" on the grounds that it imposes requirements beyond those requirements currently imposed on resource adequacy capacity or on resource adequacy procurement. 74 These commenters explain that, under current resource adequacy rules, local resource adequacy capacity can be procured from anywhere within a local capacity area to meet the CAISO established requirements for that area. Therefore, they argue that an equal amount of non-resource adequacy capacity should be substitutable for local resource adequacy capacity so long as the non-resource adequacy capacity is in the same local capacity area as the resource adequacy capacity. Dynegy argues that the CAISO's additional requirements above this would make the SCP superior to the resource adequacy capacity product currently implemented by the CPUC. Similarly, J.P. Morgan argues that such additional requirements make the SCP inconsistent with the resource adequacy rules and therefore unreasonable. Accordingly, Dynegy and J.P. Morgan argue that the CAISO should unconditionally permit resource owners to substitute resources within an individual local capacity area. 75

79. J.P. Morgan rejects the CAISO's comparison to the substitution procedures previously approved by the Commission under the Reliability Capacity Services Tariff (RCST)<sup>76</sup> and Transitional Capacity Procurement Mechanism (TCPM).<sup>77</sup> J.P. Morgan insists that any similarity between the currently proposed unit substitution policy and those previously approved procedures is irrelevant because those tariff provisions are no longer effective. J.P. Morgan points out that the current tariff provisions include no unit substitution policy or procedures. However, J.P. Morgan claims that the ICPM Tariff does permit consideration of resources outside of a local area when determining whether an ICPM designation is necessary. Thus, J.P. Morgan concludes that the CAISO, in its own ICPM Tariff provisions, has acknowledged that resources need not reside at the

<sup>&</sup>lt;sup>74</sup> Dynegy Protest at 4, J.P. Morgan Ventures Energy Corporation and BE CA LLC Comments in Docket No. ER09-1064-000 at 7-8 (J.P. Morgan Comments).

<sup>&</sup>lt;sup>75</sup> Dynegy Protest at 7, J.P. Morgan Comments at 10.

<sup>&</sup>lt;sup>76</sup> The RCST was a backstop capacity procurement mechanism that expired on May 31, 2008. The RCST is fully described in: *Indep. Energy Producers Ass'n v. Cal. Indep. Sys. Operator Corp.*, 118 FERC ¶ 61,096 (2007), *order on reh'g*, 121 FERC ¶ 61,276 (2007); and *Cal. Indep. Sys. Operator Corp.*, 121 FERC ¶ 61,281 (2007).

<sup>&</sup>lt;sup>77</sup> The TCPM was a backstop capacity procurement mechanism that was approved by the Commission for use for the period following the sunset of the RCST until MRTU went live. The TCPM is fully described in *Cal. Indep. Sys. Operator Corp.*, 123 FERC ¶ 61,229 (2008), *reh'g pending*.

same bus (i.e., be electrically equivalent) and that consideration of prevailing system conditions is not a necessary precondition to providing local capacity service. Furthermore, J.P. Morgan asserts that because the ICPM and the SCP are intended for different purposes, any comparison between the two products is inapt.<sup>78</sup>

## **Commission Determination**

- 80. The Commission accepts the CAISO's proposal to allow unit substitution of non-resource adequacy capacity for resource adequacy capacity, as proposed, for both local capacity resources and system resources. The proposal provides resource adequacy capacity with additional flexibility in meeting its obligations under the resource adequacy program while ensuring overall system reliability. Moreover, we find that the CAISO's proposed substitution provisions are compatible with the requirements of the resource adequacy program and achieve the CAISO's stated objective without imposing an undue burden on resource adequacy capacity.
- 81. We find Dynegy's and J.P. Morgan's concern that the CAISO's imposition of additional, more stringent standards may be inconsistent with the resource adequacy program reflects a mischaracterization of the current rules of the resource adequacy program. Neither the resource adequacy program nor the MRTU Tariff's resource adequacy rules contain provisions that would allow a supplier to substitute non-resource adequacy capacity for local resource adequacy capacity in the event of an outage. The SCP proposal introduces this option to resource adequacy suppliers, thereby providing these suppliers additional flexibility in meeting their obligations under their resource adequacy contracts. Therefore, we find that any comparison between rules of the resource adequacy program and SCP-related rules regarding the use of non-resource adequacy as a substitute is misplaced, since the resource adequacy program has no rules in place regarding substitution of non-resource adequacy capacity for resource adequacy capacity.
- 82. Moreover, the rules referenced by Dynegy and J.P. Morgan pertain to the substitution of *resource adequacy capacity* from one unit for resource adequacy capacity from an unavailable resource adequacy resource in the same capacity locality. This substitution of resource adequacy capacity for resource adequacy capacity is materially different from what has been proposed by the CAISO in the instant filing, which involves the substitution of *non-resource adequacy capacity* for unavailable resource adequacy capacity. As explained below, prior to pre-qualification for use as substitute capacity under the SCP non-resource adequacy capacity must be assessed for its ability to meet the load serving entity's requirements under the resource adequacy program. This

<sup>&</sup>lt;sup>78</sup> J.P. Morgan Comments at 11.

assessment is needed even if the non-resource adequacy capacity in question is located in the same local capacity area as the resource adequacy capacity it is intended to replace. As a result, the substitution of non-resource adequacy capacity for resource adequacy capacity raises novel issues that are not contemplated in the rules for substitution of resource adequacy capacity for resource adequacy capacity under the resource adequacy program, which necessitate different standards for the SCP substitution rules. Thus, attempts to highlight "inconsistencies" between the two sets of rules are inappropriate because they ignore the fundamental differences between the two types of substitution.

- 83. With respect to the substitution requirements for system capacity, we find the CAISO's proposal allowing for the substitution of any available non-resource adequacy capacity, subject only to the CAISO's deliverability requirements and prevailing system conditions, to be just and reasonable and accept this provision as proposed.
- 84. In addition, we find the CAISO's proposal to subject non-resource adequacy capacity to pre-qualification standards to be just and reasonable. We agree with the CAISO that the prequalification of non-resource adequacy resources as substitutes is an appropriate method for providing flexibility to suppliers, while protecting against duplicative capacity payments due to ineffective substitutions. As the CAISO has explained, a blanket requirement to accept automatically the substitution of any non-resource adequacy capacity for an existing local capacity area resource located in the same local capacity area could result in a situation where substitute capacity is not effective in meeting constraints, thus requiring the CAISO to procure additional local capacity to meet local reliability needs.
- 85. If the replacement non-resource adequacy capacity resource is an ineffective substitute for the original local capacity resource, the CAISO would have to procure additional local backstop capacity that is effective in addressing the particular operating condition that exists at the time of the substitution. The result would be duplicative capacity payments made to two resources providing the same block of capacity: the ineffective, non-resource adequacy capacity resource accepted ahead of time as substitute, and the local capacity resource ultimately procured as backstop capacity by the CAISO. This double-payment scenario would fall on the load serving entities because, as the CAISO explains, load serving entities would not have an opportunity to cure any realtime collective deficiency and avoid being allocated a pro rata share of backstop costs. The possibility of a double-payment by load serving entities for the same capacity catalyzes a need for an upfront assessment of potential non-resource adequacy capacity's effectiveness in replacing resource adequacy capacity. Accordingly, we find that the CAISO's proposal to establish a pre-qualification policy for substitute capacity, based on the principles of electrical equivalence and operational effectiveness, is a just and reasonable method of ensuring reliability, providing flexibility, and avoiding the need to procure duplicative backstop capacity.

86. Finally, contrary to J.P. Morgan's assertions, the CAISO may properly consider prevailing system conditions in its determination of whether a proposed substitution is acceptable. Regardless of the frequency with which a non-resource adequacy unit would be unsuitable as replacement for resource adequacy capacity in the same local capacity area, both J.P. Morgan and Dynegy ignore the fact that the CAISO proposal will provide suppliers with additional flexibility and opportunities to avoid having outages count against their availability. Moreover, as discussed above, the electrical equivalence and operational and effectiveness requirements are just and reasonable, and necessary to avoid charging load for the same capacity twice.

## 5. Outage Reporting

87. The CAISO explains that in order to develop the availability standards and administer the SCP program, it will need to have appropriate information on outages and de-rates of resource adequacy resources. The CAISO states that it will utilize information that is already reported whenever possible, but notes that certain additional reporting requirements are necessary to provide the required outage information. First, the CAISO proposes to require outage reporting by resource specific imports that are resource adequacy resources similar to the reporting required of internal resource adequacy resources. In addition, the CAISO proposes to require resources with a maximum output capability of 1 megawatt or more, but which are not subject to the existing outage reporting requirements, to provide monthly information on forced outages.

#### **Comments and Protests**

88. NCPA, SVP, Six Cities, and CMUA oppose the CAISO's proposal to require resource adequacy units with a maximum output capability between 1 and 10 megawatts, which are not otherwise required to provide forced outage information under section 9.3.10, to provide monthly outage reports containing the information necessary to calculate availability. NCPA contends that this requirement will create unnecessary administrative burdens for little benefit. NCPA estimates that units of this size make up approximately 1 to 2 percent of the available system capacity, but account for about 30 percent of the number of units in the CAISO balancing authority area. NCPA explains that applying the reporting requirement to these units would require both market participant and CAISO effort and time to process and validate. If significant numbers of these small units are designated as resource adequacy capacity, NCPA states that the result would be to increase time and effort significantly while having a minimal impact on grid reliability. NCPA notes that, under the current tariff, these units are exempt from

<sup>&</sup>lt;sup>79</sup> CAISO Filing at 29.

outage reporting requirements because it has been determined that these outages do not impose a material impact on reliability and that such a requirement would be costly and burdensome for small units, many of which are unmanned and which are small enough that their outages cannot easily be detected remotely. Accordingly, NCPA advocates elimination of this compliance element from the SCP.

- 89. According to SVP, the CAISO's proposed requirement may discourage small generators from continuing to provide resource adequacy services due to the potential cost of new data collection equipment and processes. In addition, SVP suggests that the CAISO's proposed requirement may indirectly devalue small renewable resources by increasing their costs and making them too expensive for resource adequacy purposes. SVP also points out that the proposed requirements may require the modification of existing resource contracts.<sup>81</sup>
- 90. Similarly, Six Cities observe that the current Scheduling Logging for the CAISO, SLIC, <sup>82</sup> outage reporting requirements do not apply to such resources, presumably because such resources do not have a significant impact on the reliability of the CAISO balancing authority area. Six Cities maintain that the SCP availability standards do not provide independent justification for imposing this obligation on small resources. Thus, in the absence of additional justification, Six Cities contend that resources with less than 10 megawatts of capacity should be exempt from both the availability standards and the proposed outage reporting requirements. <sup>83</sup>
- 91. Likewise, CMUA states that the CAISO has not shown significant reliability improvements that would result from this additional reporting requirement. Thus, CMUA requests that the Commission reject these requirements and direct commencement of a stakeholder process to address any additional CAISO need for small generator outage information.<sup>84</sup>

NCPA Comments at 7.

<sup>&</sup>lt;sup>81</sup> SVP/M-S-R Protest at 17.

<sup>&</sup>lt;sup>82</sup> SLIC is a logging application that allows market participants to notify the CAISO when a generating unit's properties change due to physical problems. Users can modify the maximum and minimum output of a unit, as well as the ramping capability of the unit. (Scheduling and Logging for the CAISO (SLIC), Appendix A, MRTU Tariff).

<sup>&</sup>lt;sup>83</sup> Six Cities Protest at 10.

<sup>&</sup>lt;sup>84</sup> CMUA Protest at 11.

92. In contrast, SoCal Edison does not object to the reporting of outage information for small generating units, but argues that the proposed requirement should be rejected due to a lack of details regarding how the CAISO plans to address implementation issues.<sup>85</sup>

## **Commission Determination**

- 93. We find the CAISO's proposal to require 1 to 10 megawatt units to report outages to be just and reasonable. The Commission has generally rejected the argument that a market participant's small size should exempt it from reporting requirements designed to assist the CAISO in ensuring the reliability of the grid. While these units comprise a relatively small portion of total system capacity, it would be imprudent to simply ignore this capacity without a compelling reason. Here the CAISO is merely requiring these smaller units to submit monthly data on forced outages and de-rates. We find that these monthly submissions will not impose significant costs on smaller entities. Moreover, these resources voluntarily participate in and therefore obtain the benefits of the resource adequacy program. We find this reporting requirement to be reasonable given the benefits otherwise obtained by these resources. Thus, we do not agree with commenters that this requirement is overly burdensome for 1 to 10 megawatt units that are supplying resource adequacy capacity.
- 94. We also find the CAISO's proposal to extend outage reporting to resource specific imports to be reasonable. This will allow these resources to be fully integrated into the resource adequacy program.

## D. Ancillary Services Must-Offer Obligation

# 1. <u>Inclusion of Ancillary Services in Existing Resource Adequacy</u> <u>Must-Offer Obligation</u>

95. The CAISO explains that under the current tariff, certain resource adequacy resources have a resource adequacy must-offer obligation for energy. According to the CAISO, the proposed amendment recognizes that grid reliability and market efficiency require that resource adequacy resources have an A/S Must-Offer Obligation as well as an energy must-offer obligation. The CAISO states that the A/S Must-Offer Obligation would apply to all resource adequacy resources currently subject to the resource adequacy must-offer obligation which are also certified to provide ancillary services.

<sup>&</sup>lt;sup>85</sup> SoCal Edison Comments at 9-10.

<sup>&</sup>lt;sup>86</sup> Cal. Indep. Sys. Operator Corp., 113 FERC ¶ 61,187, at P 39 (2005).

The CAISO asserts that an A/S Must-Offer Obligation will enable the CAISO to cooptimize the use of energy and ancillary service capabilities of resource adequacy capacity in its markets and ensure that the CAISO balancing authority area ancillary service requirements are met.

- 96. The proposed A/S Must-Offer Obligation would require all resource adequacy resources to submit economic bids to provide or self-schedule ancillary services for the entirety of their resource adequacy capacity. Failure to do so will result in the CAISO inserting a zero bid for that capacity to provide ancillary services. The CAISO proposes to exempt hydroelectric units and limited use resources (e.g., wind) from this requirement.<sup>87</sup>
- 97. The CAISO states that the A/S Must-Offer Obligation will not alter the applicability of the existing resource adequacy must-offer obligation, and that it is not dependent on whether the resource adequacy capacity is subject to the SCP availability provisions. Rather, the CAISO explains that the A/S Must-Offer Obligation would simply allow the CAISO to utilize the capability of resource adequacy capacity that is already subject to the resource adequacy must-offer obligation for energy. According to the CAISO, an A/S Must-Offer Obligation will enable the CAISO to utilize both the energy production and ancillary service capabilities of resource adequacy capacity in an optimal manner, thereby resulting in the most efficient use of the resource adequacy capacity that has been procured. Further, the CAISO explains that because it is required to procure 100 percent of its forecasted real-time ancillary service requirements in the integrated forward market, if the resource adequacy must-offer obligation were limited to energy, the CAISO could find itself in a position where it has more energy bids than it needs, but an insufficient ancillary service supply being offered to meet applicable reliability requirements, even though there is sufficient available resource adequacy capacity to provide those ancillary services. The CAISO believes that such an outcome would undermine the main purpose of the resource adequacy program, which is to ensure that sufficient capacity is available to the CAISO to meet demand and operational requirements. Thus, the CAISO asserts that an A/S Must-Offer Obligation for resource adequacy resources mitigates the possibility of such an outcome.<sup>88</sup>

<sup>&</sup>lt;sup>87</sup> CAISO Filing at 7-8. The CAISO states that because hydro resources and use-limited resources are not subject to the resource adequacy must-offer obligation, the CAISO is simply carrying over these resources' Commission-approved exemption from the resource adequacy must-offer obligation to apply to A/S Must-Offer Obligation as well.

<sup>88</sup> *Id.* at 8.

## **Comments and Protests**

- 98. Calpine asserts that the expansion of resource adequacy resources' obligations via the A/S Must-Offer Obligation is not an essential component of an SCP and should be evaluated independently of the SCP proposal. In particular, Calpine states that the CAISO has not demonstrated a systemic flaw in the resource adequacy program that deprives it of sufficient ancillary service bids. Calpine argues that there is a discordance between requiring thousands of megawatts of capacity to bid for both ancillary services and energy, when the CAISO's potential deficiency of ancillary services bids is likely to be infrequent and of much lesser magnitude. Calpine points out that the recent CAISO Department of Market Monitoring report concludes that the frequency and amount of hourly ancillary service bid deficiencies "was relatively low and for all services combined roughly the same in 2008 as in 2007."89 Calpine notes that in the relatively few incidents when ancillary service bids have been deficient, the average deficiency level has been less than 10 percent for most ancillary services. Thus, Calpine submits that the CAISO has not demonstrated a substantial need to impose new must-offer obligations on resource adequacy resources in order to deal with infrequent and relatively low levels of ancillary service bid deficiencies.
- 99. Calpine is generally concerned about imposing new requirements upon resource adequacy resources, which lack a compensation mechanism that reflects different reliability capabilities. According to Calpine, the fact that the CAISO proposes to pay resources subject to the A/S Must-Offer Obligation for their opportunity costs merely purports to hold such resources harmless from the additional must-offer obligation because the mechanism does not allow such resources to realize financial rewards commensurate with their enhanced capabilities and performance. Moreover, Calpine explains that even demonstration of opportunity costs associated with a resource adequacy resource bidding into the ancillary services markets is an issue potentially fraught with controversy. Thus, Calpine argues that the CAISO should be held to a higher standard of proof to demonstrate that it has a significant problem with ancillary service bid deficiencies, and that any such deficiencies are associated with the absence of an A/S Must-Offer Obligation. 90

<sup>&</sup>lt;sup>89</sup> Calpine Comments at 7 (quoting CAISO Department of Market Monitoring *Market Issues and Performance, 2008 Annual Report* at 4.12 (April 2009)).

<sup>&</sup>lt;sup>90</sup> *Id.* at 8.

### **Commission Determination**

- 100. We accept the CAISO's proposal to implement the A/S Must-Offer Obligation. Further, we disagree with Calpine's claim that the CAISO has failed to justify a need for an A/S Must-Offer Obligation. Rather, we find that implementation of the proposed A/S Must-Offer Obligation will support the primary goal of the resource adequacy program, which is to ensure that sufficient capacity is available to the CAISO in all hours to meet system demand and the operating requirements of the transmission grid.
- 101. We agree with the CAISO that implementation of the A/S Must-Offer Obligation will prevent suppliers from withholding ancillary services, as well as allow for a more efficient procurement of ancillary services. We further agree with the CAISO's assertion that without an A/S Must-Offer Obligation, the MRTU Tariff requirement that it procure 100 percent of its forecasted ancillary services needs by the close of the integrated forward market could create incentives for withholding ancillary services bids, thereby driving prices for ancillary services artificially high. In light of these facts, we find that the A/S Must-Offer Obligation will provide the CAISO with sufficient bids for ancillary services to meet its 100 percent requirement by the close of the integrated forward market without causing the artificial inflation of ancillary service prices.
- Regarding the requirement that resource adequacy capacity submit ancillary services bids in the day-ahead market, we do not agree with Calpine that this requirement will unduly burden resource adequacy capacity. We note that Calpine did not object to the CAISO's specified justifications for the A/S Must-Offer Obligation, but offered only general disagreement with the need for such a requirement. Further, we do not agree that these resources should receive additional compensation for complying with the A/S Must-Offer Obligation. Instead, we find it reasonable for resource adequacy capacity to submit ancillary services bids in the day-ahead market. Submission of bids by resource adequacy capacity that is already bidding its capacity into the day-ahead market, as required by the resource adequacy program rules, in no way unduly burdens such resources. These resources have already committed their output to the CAISO market when they became resource adequacy resources. The A/S Must-Offer Obligation is consistent with that previous commitment. We also note that Calpine has provided no support for including additional compensation related to the A/S Must-Offer Obligation, nor has Calpine attempted to enumerate an appropriate level of additional compensation. Further, to ensure that a resource will be indifferent between providing any mix of energy and ancillary services, the price of ancillary services already factors in the locational marginal price of energy for each resource in its calculation.<sup>91</sup> Thus, we find no merit in

<sup>&</sup>lt;sup>91</sup> MRTU Tariff § 27.1.2.

Calpine's contention that resources will not be adequately compensated for complying with the A/S Must-Offer Obligation.

103. We likewise disagree with Calpine's assertion that the A/S Must-Offer Obligation will not allow resources to realize financial rewards commensurate with their enhanced capabilities and performance. Resource adequacy capacity that provides ancillary services will be paid the market price for ancillary services, commensurate with the services they provide. To the extent that Calpine is arguing for additional compensation above and beyond the market price for the services provided, we find that Calpine has provided no support for such compensation. Insofar as Calpine is seeking additional capacity revenue for resource adequacy capacity that provides ancillary services, we note that resource adequacy capacity payments are the result of bilateral negotiations that are not governed by the MRTU Tariff.

### 2. Curtailment of Energy Self-Schedules for Ancillary Services

104. The CAISO states that it will honor the energy self schedules of resource adequacy capacity unless the CAISO is unable to procure 100 percent of its ancillary service requirements. In such cases, the CAISO proposes that it would curtail an energy self-schedule, or portion thereof, to provide ancillary service. The CAISO states that the resource adequacy capacity so utilized to provide ancillary service will not cause financial harm to scheduling coordinators with these resources. The CAISO explains that these scheduling coordinators will be paid in accordance with the CAISO's existing provisions governing the calculation of ancillary service marginal prices, which take account of the energy opportunity costs such capacity incurs by not earning the energy price for the curtailed megawatt-hour of the self-schedule. The CAISO elaborates that because self-schedules are submitted without associated economic bids, the CAISO proposes to utilize the resource adequacy resource's generated bid for purposes of the opportunity cost calculation, and also to offer resource adequacy providers the option of requesting Commission approval of additional opportunity cost compensation if the calculation based on the generated bid is not sufficient to cover the actual opportunity costs incurred.92

# **Comments and Protests**

105. NCPA, SVP, Six Cities and CMUA are concerned that if units that are self-scheduled for energy have their schedules reduced in order to provide ancillary services, such curtailments may have adverse financial impacts. Specifically, NCPA, SVP, Six Cities, and CMUA assert that the CAISO has provided no evidence that high ancillary

<sup>&</sup>lt;sup>92</sup> CAISO Filing at 8.

service prices will be sufficient to compensate scheduling coordinators for their exposure to additional uplift charges. Further, NCPA, SVP, Six Cities, and CMUA reject the CAISO's position that the benefits of the co-optimization of energy and ancillary services render their exposure to additional charges just and reasonable. To protect against these potential additional charges, NCPA, SVP, Six Cities and CMUA request that the Commission require the CAISO to include a provision to hold harmless scheduling coordinators whose energy self-schedules are curtailed in favor of ancillary services.<sup>93</sup>

106. Six Cities and CMUA express concern that the substitution of ancillary services for energy self-schedules may trigger violations of local reliability requirements and/or cause load shedding. Six Cities assert that the CAISO should modify its proposed policy for curtailing energy self-schedules in favor of ancillary services to state explicitly that such curtailment will not occur when the energy self-schedule is necessary to meet local reliability requirements. In addition, both CMUA and Six Cities argue that the CAISO should include in its tariff an explicit process by which a load serving entity can challenge and request reversal of a curtailment of an energy self-schedule when such curtailment would threaten reliability.<sup>94</sup>

## **Commission Determination**

107. We will not require the CAISO to add a hold harmless provision to its A/S Must-Offer Obligation proposal to insulate scheduling coordinators whose energy self-schedules are curtailed in favor of ancillary services from the potential charges that may result from such curtailment. As the CAISO explains, such curtailments would only occur when ancillary services supplies are extremely short. As a result, when ancillary service supply is short, ancillary service prices are expected to be sufficiently high to mitigate any exposure to uplift charges resulting from the curtailment. More importantly, the benefits of the CAISO's ability to co-optimize energy and ancillary services accrue to the entire system, not just to individual load serving entities. Thus, we agree with the CAISO that any exposure to additional costs associated with the curtailment of energy self-schedules for ancillary services is justified in light of the system-wide benefits that all market participants, including these affected scheduling coordinators, will realize.

<sup>&</sup>lt;sup>93</sup> NCPA Comments at 8-10; SVP/M-S-R Protest at 15-16; Six Cities Protest at 8-9; CMUA Protest at 7-9.

<sup>&</sup>lt;sup>94</sup> CMUA Protest at 9; Six Cities Protest at 6.

<sup>&</sup>lt;sup>95</sup> CAISO Filing at 44-45.

108. We also find it unnecessary to require the CAISO to include the additional tariff provisions requested by Six Cities and CMUA to explicitly preclude the curtailment of energy self-schedules when such curtailment would threaten local reliability. First, as discussed further below, the CAISO has already recognized that such provisions are warranted in the case of a metered subsystem that manages congestion and losses within its area of responsibility, and has proposed tariff language to explicitly preclude curtailment of self-schedules for loads within the metered subsystem. Furthermore, with the exception of the metered subsystems, the CAISO retains the ultimate responsibility for maintaining grid reliability. Thus, we find that the CAISO is in the best position to make decisions regarding curtailments and their potential impact on reliability.

# 3. Exemption for Hydroelectric and Use-Limited Resources

109. The CAISO states that it will not insert generated ancillary service capacity bids for hydroelectric resource adequacy resources and use-limited resource adequacy resources. According to the CAISO, under the current resource adequacy must-offer obligation, these resources are only required to offer energy and capacity as available, consistent with their submitted use plans, and this A/S Must-Offer Obligation proposal is not intended to expand the coverage of the existing must-offer obligation provision. In addition, the CAISO explains that it will not curtail, for the purpose of meeting ancillary service requirements, the energy self-schedule of a resource adequacy resource that is submitted by the scheduling coordinator for a metered subsystem and is internal to that metered subsystem.<sup>97</sup>

### **Comments and Protests**

110. SVP argues that, despite the CAISO's assurances, the CAISO's A/S Must-Offer Obligation proposal could be read to expand the obligations of load following metered subsystems. Specifically, SVP states that it is unclear what the CAISO means by "[a resource adequacy] resource that is ... internal to that [metered subsystem]." SVP posits that this statement may be an indication that the CAISO intends to apply the new must-offer obligation to a subset of metered subsystem resources. If this is the case, SVP asserts that the CAISO's proposal conflicts with the existing exemption from the must-offer obligation applicable to load following metered subsystems. SVP maintains that

<sup>&</sup>lt;sup>96</sup> Id.; see also CAISO Filing Attachment B, §§ 40.5.1, 40.6.1.

<sup>&</sup>lt;sup>97</sup> *Id.* at 8.

<sup>&</sup>lt;sup>98</sup> SVP/M-S-R Protest at 14 (quoting CAISO Filing at 8).

because the ancillary services must-offer obligation is not intended to expand existing obligations, the CAISO must clarify that load following metered subsystems are not subject to any aspect of the proposed A/S Must-Offer Obligation.

- 111. SWP states that the CAISO should make its intention to exempt hydroelectric resources from mandatory ancillary services provisions clear in the tariff. SWP states that there are times hydroelectric facilities must perform other functions, such as water management, and cannot always be called upon to provide ancillary services. SWP notes that the CAISO acknowledged this in its filing, but states that certain proposed tariff provisions appear to contain a flat mandate about the provision of ancillary services regardless of what type of generation is used. 99
- 112. In contrast, SDG&E argues that, taking into account all of their various restrictions and limitations, hydro and use-limited resources have more capacity than energy, and are therefore particularly suitable for providing ancillary services (rather than energy) under the economic dispatch algorithms used by the CAISO to preserve system reliability at least cost. SDG&E explains that the scheduling coordinator for these resources is in the best position to know how these limitations and restrictions affect the ability of the plants to produce energy and ancillary services at any given point in time, but the scheduling coordinator is largely blind to the system operational needs of the CAISO. According to SDG&E, without this operational knowledge, the owner cannot co-optimize the production of energy and ancillary services from these resources. Moreover, SDG&E asserts that using these resources sub-optimally is becoming increasingly problematic because of the rapid introduction of non-dispatchable renewable resources currently underway in California. Thus, SDG&E contends that recognizing the importance of dispatching these units efficiently to serve broad system needs is a key to crafting a non-discriminatory A/S Must-Offer Obligation requirement. 100
- 113. According to SDG&E, the CAISO correctly notes that hydro and use-limited resource adequacy resources are subject to the current resource adequacy must-offer obligation, so there is no question that the scheduling coordinators for these resources are legally mandated to offer the unit's available energy and capacity. SDG&E argues that exemption of these resources from the A/S Must-Offer Obligation would leave the CAISO without any effective measures for ensuring that hydro and use-limited resources

<sup>&</sup>lt;sup>99</sup> SWP Comments at 6.

 $<sup>^{100}</sup>$  SDG&E Protest in Docket No. ER09-1064-000 at 4 (May 19, 2009) (SDG&E Protest).

will be co-optimized with other resources to produce competitive outcomes in the CAISO's energy and ancillary services markets. <sup>101</sup>

- 114. SDG&E further asserts that, to support its proposal, the CAISO relies on a "dubious principle" that the A/S Must-Offer Obligation must not expand coverage of the existing resource adequacy must-offer obligation. SDG&E argues that this principle cannot trump section 205 of the FPA's strictures against undue discrimination. Specifically, SDG&E states that the CAISO cannot exempt a significant number of critical resources from its A/S Must-Offer Obligation without justifying the exclusion by demonstrating that the deviation is necessary, and that workable alternative procedures are in place to ensure results that fall within the just and reasonable zone permitted by section 205. <sup>102</sup>
- 115. SDG&E notes that scheduling coordinators have market-based tools to ration the limited production capabilities of hydro and use-limited resources by offering the units at marginal opportunity cost prices. Thus, SDG&E asserts that it is practical to have these units participate in the CAISO's market-based, economic dispatch protocols, thereby cooptimizing the energy and ancillary services that can be produced by use-limited resources. SDG&E explains that all generators have some type of use limitations, such as scheduled and forced outages and permit restrictions, so the types of resources being singled-out for exclusion from the A/S Must-Offer Obligation differ only in degree, not in kind. SDG&E argues that the factual predicate that previously supported disparate must-offer treatment of hydro and use-limited resources has evaporated with the introduction of the new market design and higher caps on offer prices. Consequently, SDG&E contends that the CAISO's decision to leave this obsolete, disparate treatment in place as part of the new A/S Must-Offer Obligation is unnecessary, unduly discriminatory, and must be rejected. 103
- 116. Finally, SDG&E asserts that the CAISO should be directed to make a compliance filing to present tariff language designed to provide a comparable A/S Must-Offer Obligation for all resource adequacy resources, including hydro and use-limited resources. With regard to the latter, SDG&E would prefer that the CAISO adopt a version in which the scheduling coordinator for a hydro or use-limited resource files annually a plan that details the various operational limits and restrictions that must be observed by the unit, and generally how the scheduling coordinator plans to assess

<sup>&</sup>lt;sup>101</sup> *Id.* at 6.

<sup>&</sup>lt;sup>102</sup> *Id*.

<sup>&</sup>lt;sup>103</sup> *Id.* at 7-8.

opportunity costs for purposes of establishing the unit's price sensitive offers in the dayahead and real-time markets. SDG&E elaborates that each day during the course of the year the scheduling coordinator should determine the minimum and maximum amounts of energy and ancillary services that can be produced by the unit the next day, and submit multi-part price offers designed to allow the CAISO to ration use of the unit based on the scheduling coordinator's assessment of marginal opportunity costs. At the end of the year, SDG&E provides that the scheduling coordinator should submit, as part of next year's annual use plan, an assessment of how well its opportunity cost-based offers resulted in the unit being dispatched to provide an efficient mixture of energy and ancillary services consistent with the use-restrictions that had to be observed. 104

- 117. According to SDG&E, the CAISO and its market monitoring unit need not wait for the end of year assessment before acting, if it appears that the scheduling coordinator's offers are based on an exercise of market power rather than a rational assessment of opportunity costs. SDG&E specifies that the CAISO market monitor should be paying close attention to the offers emanating from hydro and use-limited resources to ensure competitive outcomes. SDG&E states that the goal should be to enable these units to receive a fully competitive price for their limited production not to extract monopoly rents in the name of distorted assessments of opportunity costs. By reviewing the unit's price sensitive offers in the context of its annual use plan, SDG&E contends that the market monitor should be able to discern any effort by the scheduling coordinator to set non-competitive prices in the CAISO's markets. 105
- 118. Likewise, SoCal Edison opposes the CAISO's proposed exemption of use-limited resources from the ancillary services must-offer-obligation. SoCal Edison points out, with respect to dispatchable use-limited resources, that the current MRTU Tariff requires these resources to submit supply bids in the day-ahead market, subject to certain conditions. SoCal Edison argues that this obligation constitutes a resource adequacy must-offer obligation, therefore, these resources should be subject to the A/S Must-Offer Obligation. SoCal Edison asserts that excluding these resources could jeopardize the CAISO's ability to co-optimize resource adequacy capacity and could threaten grid reliability. SoCal Edison adds that non-dispatchable use-limited resources also have a resource adequacy must-offer obligation in the sense that they are required to provide their expected available energy. Thus, SoCal Edison contends that these use-limited resources should have the same obligation as other resources with respect to the A/S Must-Offer Obligation to ensure that they are held to the same degree of accountability for providing ancillary services. SoCal Edison recognizes that certain shortcomings in

<sup>&</sup>lt;sup>104</sup> *Id.* at 8.

<sup>&</sup>lt;sup>105</sup> *Id.* at 9.

the MRTU software complicate the imposition of an A/S Must-Offer Obligation for use-limited resources, but concludes that these deficiencies are not sufficient grounds to abandon the obligation. <sup>106</sup>

- 119. Calpine finds inexplicable the proposed imposition of an A/S Must-Offer Obligation on thermal resources, while ancillary service-certified generation with often greater flexibility, i.e., hydroelectric resources and use-limited resources, is exempted from providing generated bids, and, by extension, from the A/S Must-Offer Obligation. Calpine explains that these resources' energy and ancillary services offers should also be co-optimized, consistent with the intended purpose of the A/S Must-Offer Obligation. <sup>107</sup>
- 120. NRG insists that all capacity resources should be required to participate in the energy market. Specifically, NRG argues that the Commission should reject the CAISO proposal to exempt self-provided ancillary services from the energy offer obligation. NRG states that this proposal limits participation in the energy markets without explanation. NRG argues that this will prevent the market from optimizing in a way that sends efficient price signals. <sup>108</sup>
- 121. Further, NRG asserts that the Commission should initiate a process to reconsider exempting "use plan" resources. NRG states that the current means of managing these resources is inefficient and that MRTU provides an opportunity to reconsider whether a market mechanism that allows certain types of resources to withhold energy remains just and reasonable. In particular, NRG asserts that the MRTU markets should provide owners of use-limited resources with appropriate market mechanisms to manage their scarcity. NRG further argues that the Commission should direct the CAISO to apply the A/S Must-Offer Obligation to all resources certified to provide ancillary services. NRG states that the CAISO's proposal to exempt hydroelectric resources from an ancillary service offer requirement is unjust, discriminatory, and without merit. NRG contends that market efficiency requires that exemptions to offer into the ancillary services market be minimized and eventually phased out. Thus, NRG argues that this proposal exempts the very resources most needed to accommodate wind and other intermittent resources.

<sup>&</sup>lt;sup>106</sup> SoCal Edison Comments at 7.

<sup>&</sup>lt;sup>107</sup> Calpine Comments at 8.

<sup>&</sup>lt;sup>108</sup> NRG Protest at 9.

<sup>&</sup>lt;sup>109</sup> *Id.* at 10.

#### **Commission Determination**

- 122. We find the CAISO's exemption from the A/S Must-Offer Obligation for use-limited resources and hydroelectric facilities to be just and reasonable. Use-limited resources and hydroelectric facilities are unique in that they are unable to operate continuously on a daily basis. Ancillary services are difficult to incorporate into the use plans for use-limited resources, since it is unclear how ancillary services translate into actual energy usage. Thus, the Commission agrees that it would be difficult, at this time, for the CAISO to optimize a balance between energy and ancillary services from these resources. Meanwhile hydroelectric facilities are constrained by responsibilities beyond electric generation, such as water management and other environmental objectives, which may prevent them from offering ancillary service bids even when they are able to offer energy bids.
- 123. SoCal Edison, NRG, SDG&E, and Calpine argue that because hydroelectric and use-limited resources are resource adequacy resources, they should be required to comply with the A/S Must-Offer Obligation. However, these commenters disregard the specific challenges posed by including these resources. If hydroelectric and use-limited resources are forced to comply with the A/S Must-Offer Obligation, then hydroelectric resources will be obliged to submit ancillary services bids when they cannot provide ancillary services, and the CAISO will be forced to find a balance between ancillary services and energy for use-limited resources when it has admitted that it knows of no way of calculating an optimal balance. Such issues go beyond mere software problems, and constitute a legitimate reason to exempt these resources from offering ancillary service bids.
- 124. If such resources were forced to comply with the A/S Must-Offer Obligation in order to participate in the resource adequacy program, several adverse effects could result. First, the CAISO's lack of ability to effectively co-optimize energy and ancillary services for these resources could lead to situations where these resources are either consistently underused or overused. Moreover, some resources, such as hydroelectric resources, may be unable to provide resource adequacy capacity as a result of the A/S Must-Offer Obligation, when it would conflict with their water management duties. This would make applying the A/S Must-Offer Obligation for these resources unreasonable because such resources may, as a result of these other duties, not participate in the resource adequacy program thereby making resource adequacy capacity more expensive. This harm could outweigh any benefits gained from applying the A/S Must-Offer

<sup>&</sup>lt;sup>110</sup> MRTU Tariff Appendix A, see also CAISO Filing at 43-44.

<sup>&</sup>lt;sup>111</sup> CAISO Filing at 43.

Obligation to all resources. It is therefore reasonable to grant this limited exception to the A/S Must-Offer Obligation.

- 125. SDG&E and NRG argue that market-based solutions should be developed to allow hydroelectric and use-limited resources to regulate their production of ancillary services and energy. However, as discussed above, we find that the CAISO's proposal to exempt certain resources from the A/S Must-Offer Obligation is just and reasonable. Therefore, it is not necessary for the Commission to make findings on the reasonableness of alternative proposals. Moreover, these solutions ignore the already-stated problem that the CAISO currently lacks the ability to co-optimize energy and ancillary services in the case of use-limited resources. The Commission cannot simply direct the CAISO to solve this problem when no workable solution has been offered.
- 126. We agree with NRG's argument that the self provision of ancillary services should not count against a resource adequacy resource's obligation to offer energy into the CAISO's markets. As NRG argues, such a provision limits participation in energy markets and is contrary to the purpose of the must-offer obligation. Resources supplying resource adequacy capacity have the obligation to offer energy into CAISO markets to ensure that resource adequacy capacity is available and that markets will be sufficiently liquid. The self provision of ancillary services does not satisfy this energy obligation. Accordingly, we direct the CAISO to modify its tariff such that the self provision of ancillary services no longer frees resource adequacy from its energy offer obligation. The CAISO should include this modification in a compliance filing within 45 days of the date of this order.
- 127. The Commission will not require the CAISO to clarify its tariff as SWP suggests. We find that the tariff is sufficiently clear regarding hydroelectric and use-limited resources. Nor will we require the clarification requested by SVP regarding the

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 [this inquiry] does not 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). *See also Oxy USA v. FERC*, 64 F.3d 679, 692 (D.C. Cir. 1995) (the proposed revisions need not be the only reasonable methodology); *PJM Interconnection, LLC*, 122 FERC ¶ 61,082, at P 67 and n.8 (2008) (citing *Petal Gas Storage, L.L.C. v. FERC*, 496 F.3d 695, 703 (D.C. Cir. 2007) (Commission is not required to choose the best solution, only a reasonable one)); *Exxon Mobil Oil Corp. v. FERC*, 487 F.3d 945, 955 (D.C. Cir. 2007) (Commission need not adopt the best possible policy as long as the agency has acted within the scope of its discretion and reasonably explained its actions).

exemption from the A/S Must-Offer Obligation for load following metered subsystems. We find that the proposed tariff language is sufficiently clear that the A/S Must-Offer Obligation applies only to non-load following metered subsystems, making additional clarification unnecessary.

# 4. Other Ancillary Services Must-Offer-Obligation Issues

128. CMUA argues that ancillary service substitution may trigger violations in local reliability requirements. CMUA notes that certain local reliability requirements dictate that internal generation must run to serve load, and that, at certain times, there may be an absolute requirement for a unit to run for energy so that counterflows are created and firm load shedding is avoided. CMUA states that it sees no evidence that this concern will be captured by the full network model. According to CMUA, the CAISO should establish a process to confirm that all operational restraints are captured in the full network model or ensure that a process exists to override the results of the market software in the event of a violation of operational limitations. <sup>113</sup>

129. NRG requests that the Commission direct the CAISO to clarify how its market software will optimize partial resource adequacy resources. NRG argues that the must-offer obligation for these resources should only apply to the portion of the resource adequacy resource procured. Similarly, Calpine is concerned with the implementation of the proposed A/S Must-Offer Obligation, particularly for generation facilities that only have a partial resource adequacy contract covering less than a resource's full net qualifying capacity. Specifically, Calpine argues that the application of the A/S Must-Offer Obligation to partial resource adequacy units can and will result in CAISO consideration of both the resource adequacy capacity and the ancillary service capacity, thereby effectively requiring the unit to bid capacity well in excess of its resource adequacy obligations. According to Calpine, rather than co-optimizing between energy and ancillary services, the CAISO could take both. Until such time as the CAISO software can be modified to co-optimize either energy or ancillary services, Calpine contends that the A/S Must-Offer Obligation should be deferred, at least as it would apply to partial unit resource adequacy contracts.

130. Powerex suggests changes to tariff section 40.6.8 to clarify how the CAISO will generate bids for resource adequacy capacity that has not been submitted in the day-

<sup>&</sup>lt;sup>113</sup> CMUA Protest at 8.

<sup>&</sup>lt;sup>114</sup> NRG Protest at 14.

<sup>&</sup>lt;sup>115</sup> Calpine Comments at 9.

ahead or real-time markets, and for which the CAISO has not received notice of an outage. Powerex notes that, as proposed, the tariff indicates that the generated bids for energy will be calculated as provided in the CAISO's Business Practice Manuals and the generated bid for ancillary services will equal zero dollars. Powerex asserts that the CAISO should clarify that, if a scheduling coordinator for a resource adequacy resource submits a partial bid for the resource's resource adequacy capacity, the CAISO should insert a generated bid only for the remaining resource adequacy capacity. Further, Powerex explains that the CAISO software is not currently generating bids for system resources providing resource adequacy capacity at the interties. Thus, Powerex requests the CAISO to modify its tariff and Business Practice Manual language to explicitly clarify that the CAISO will insert a generated bid for any remaining resource adequacy capacity provided by system resources that have not submitted a bid in the day-ahead or real-time markets, and that generated bids for such resources will be \$0/MWh.

### **Commission Determination**

- 131. With regard to Six Cities' and CMUA's concern about local reliability requirements, the Commission finds that no tariff modification or additional process is necessary. The CAISO has an obligation to comply with applicable reliability standards in the operation of its market. If the normal operation of the market fails to take these reliability standards into account, the CAISO has tools, such as Exceptional Dispatch, to preserve system reliability. Its
- 132. Further, we find the concerns expressed by NRG and Calpine regarding the application of the A/S Must-Offer Obligation to partial resource adequacy resources to be unfounded. The proposed tariff revisions make clear that under the A/S Must-Offer Obligation, the CAISO will only have access to the portion of a unit's capacity that is subject to a resource adequacy contract. A partial resource adequacy resource will not be obligated to submit ancillary service or energy bids for its non-resource adequacy capacity. Therefore, we find that additional clarification on this issue is unnecessary.
- 133. We agree with Powerex that the CAISO should clarify that a generated bid should only be submitted by the CAISO for remaining resource adequacy capacity if a generator

<sup>&</sup>lt;sup>116</sup> Powerex Comments at 6.

<sup>&</sup>lt;sup>117</sup> MRTU Tariff § 7.2.

<sup>&</sup>lt;sup>118</sup> *Id.* § 34.9.1.

<sup>&</sup>lt;sup>119</sup> See MRTU Tariff, proposed § 40.6.2.

has only submitted a partial bid. We also agree that the CAISO should be submitting generated bids for non-bidding resource adequacy capacity at the interties if it is not already doing so, however, a tariff change is not required to make this clear. To the extent that the CAISO has not been submitting such generated bids, the Commission directs the CAISO to do so as soon as possible.

#### The Commission orders:

- (A) The CAISO's proposed tariff sheets are hereby accepted, as modified and discussed in the body of this order.
- (B) The Commission hereby grants waiver of the 120-day notice requirement to permit the proposed tariff sheets (except tariff sections 40.9.2(2), 40.9.4.1, and 40.9.4.2.1(1)) to become effective on January 1, 2010, as requested by the CAISO.
- (C) The Commission rejects the CAISO's proposal that its proposed tariff sheets concerning tariff sections 40.9.2(2), 40.9.4.1, and 40.9.4.2.1(1) be effective on the date of issuance and accepts these tariff sheets to be effective on June 28, 2009, following 60 days' notice.
- (D) The Commission hereby rejects the CAISO's proposed January 1, 2009 cut-off date for grandfathering contracts, and directs that the cut-off date for grandfathering contracts will be June 28, 2009, following 60 days' notice.
- (E) The CAISO is hereby directed to submit a compliance filing within 45 days of the date of this order that includes tariff modifications and proposal revisions, consistent with the directives in the body of this order.
- (F) The CAISO is hereby directed to post a biannual report on its web site within 45 days of the date of this order, as discussed in the body of this order.

By the Commission.

(SEAL)

Nathaniel J. Davis, Sr., Deputy Secretary.