

**BEFORE THE  
PUBLIC UTILITIES COMMISSION  
OF THE STATE OF CALIFORNIA**

Order Instituting Rulemaking to Oversee     )  
the Resource Adequacy Program, Consider     )  
Program Refinements, and Establish Annual     )     R.09-10-032  
Local Procurement Obligations.             )  
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**CALIFORNIA INDEPENDENT SYSTEM OPERATOR CORPORATION  
COMMENTS ON PROPOSED DECISION**

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Pursuant to Article 14 of the California Public Utilities Commission (“CPUC” or “Commission”) Rules of Practice and Procedure, the California Independent System Operator Corporation (“ISO”) respectfully submits these comments on the Proposed Decision of Administrative Law Judge Gamson issued on May 23, 2011 (“Proposed Decision”). The Proposed Decision adopts local procurement obligations for the 2012 Resource Adequacy (“RA”) compliance year as well as certain refinements to the Commission’s RA program.

**I. SUMMARY**

The Proposed Decision recommends that the replacement rule be eliminated for compliance year 2012 without either a successor methodology or alternative measures in effect. The ISO has serious concerns that discontinuing the replacement rule, before other adequate means are in place to account for RA capacity on a scheduled maintenance outage, will compromise the objectives of the Commission’s RA program and adversely impact system reliability unless the ISO undertakes costly backstop procurement. If the Commission intends to eliminate the replacement rule, it is

important that the timing of the end date for the replacement rule be coordinated to provide adequate opportunity for an alternative to be developed and implemented. The ISO strongly urges the Commission to revise the Proposed Decision to retain the replacement rule for compliance year 2012 and until the ISO implements outage management tools with enhanced functionality.

**II. THE PROPOSED DECISION SHOULD BE REVISED TO RETAIN THE REPLACEMENT RULE FOR COMPLIANCE YEAR 2012 AND UNTIL THE ISO IMPLEMENTS ALTERNATIVE OUTAGE MANAGEMENT TOOLS**

In D.06-07-031 (July 20, 2006), the CPUC adopted the replacement rule that requires each jurisdictional load serving entity to meet its RA requirement with RA capacity that is available and not on an extended scheduled maintenance outage during a compliance month. The replacement rule provides a methodology for determining how scheduled outages of RA resources will be counted to assess whether a load serving entity has procured sufficient RA capacity to meet its monthly RA obligations. Under the existing replacement rule, a resource cannot be counted as monthly RA capacity if its days of scheduled outage exceed 25 percent of the days in a summer month (May through September) or extend longer than two weeks in a non-summer month (October through April); and the load serving entity that has contracted with a resource subject to such outage has an obligation to procure replacement RA capacity.

During several recent RA proceedings, CPUC jurisdictional load serving entities have suggested that the Commission consider eliminating the replacement rule from its RA requirements. Elimination of the replacement rule would relieve these load serving entities of any obligation to procure additional RA capacity to meet their RA requirement for months where some of their RA capacity is unavailable due to a scheduled

maintenance outage. The parties that have supported eliminating the rule primarily argue that it limits the tradability of RA capacity as a standard capacity product by imposing an obligation on the individual load serving entity to replace RA capacity on scheduled outage that is not counted under the rule.

As stated in the ISO's previous comments in the recent RA proceedings where this issue was considered, including Phase 1 of this proceeding, the ISO does not oppose removing the replacement rule from the CPUC RA program; provided, however, that its elimination will not adversely affect the reliability of the ISO balancing authority area. The fundamental purpose of the RA program is to ensure that sufficient resources are available when and where needed to maintain the reliability of the system. If the Commission intends to eliminate the replacement rule, steps must be taken to ensure that scheduled outages will not cause shortfalls in available RA capacity that degrade system reliability or substantially increase the frequency of backstop procurement. It is important that the timing of the end date for the replacement rule be coordinated to provide adequate opportunity for an alternative to be developed and implemented.

Unfortunately, the Proposed Decision recommends that the replacement rule be eliminated for compliance year 2012 without either a successor methodology or alternative measures in effect. The ISO has serious concerns that discontinuing the replacement rule, before other adequate means are in place to account for RA capacity on a scheduled maintenance outage, will compromise the objectives of the Commission's RA program and adversely impact system reliability unless costly backstop procurement is undertaken.

In D.04-01-050, the Commission described the fundamental concept of RA and the role of RA Requirements as follows:

Resource procurement traditionally involves the Commission developing appropriate frameworks so that the entities it regulates will provide reliable service at least cost. This involves determining an appropriate demand forecast and then ensuring that the utility either controls, or can reasonably expect to acquire, the resources necessary to meet that demand, even under stressed conditions such as hot weather [footnote omitted] or unexpected plant outages. Resource Adequacy seeks to address these same issues. In developing our policies to guide resource procurement, the Commission is providing a framework to ensure resource adequacy by laying a foundation for the required infrastructure investment and assuring that capacity is available when and where it is needed.<sup>1</sup>

In D.05-10.042, the Commission further elaborated on the fundamental tenets of the RA program. The Commission emphasized that it was seeking through the RA program “to ensure that the infrastructure required for reliability actually occurs.”<sup>2</sup> The Commission also stressed that it was seeking “to ensure that the generation capacity made possible through that investment is available to the grid at the times and at the locations it is needed” and that the “capacity must be sufficient for stressed conditions, *i.e.*, sufficient generation should be available under peak demand conditions even when there are unexpected outages.”<sup>3</sup> Importantly, the Commission stated that its “policy that RAR should ensure that capacity is available when and where it is needed means that the RAR program design must be consistent with the CAISO’s operational needs.”<sup>4</sup> In that regard, the Commission stated that “it is pointless to design a regulatory system that encourages investment in order to create capacity unless that capacity is actually

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<sup>1</sup> D.04-01-050, pp. 10-11.

<sup>2</sup> D.04-01-042, p. 7.

<sup>3</sup> *Id.* at 7-8.

<sup>4</sup> *Id.* at 10.

available to the grid operator to serve load where it exists.”<sup>5</sup> The Commission also recognized that the RA program should seek to provide reliability at least cost.<sup>6</sup>

To achieve these objectives, the Commission established an RA program whereby the forward capacity procurement obligations of jurisdictional load serving entities are based on meeting monthly peak loads, plus a reserve margin.<sup>7</sup> The qualifying capacity counting conventions determine the quantity of a resource’s capacity that satisfies the forward commitment obligation.<sup>8</sup>

The ISO submits that these objectives of the RA program will be compromised if the replacement rule is discontinued before other adequate means are adopted to account for the RA capacity that is on a scheduled maintenance outage and unavailable to the ISO. Without the replacement rule, load serving entities could meet their RA requirement with a portfolio of resources that have substantially lower availability than allowed under the current rule. For example, a load serving entity with a monthly RA requirement of 16,000 MW can comply with the current rule in summer months by providing a portfolio of RA resources that are all on scheduled outage 25 percent of the days of the month. Thus, for one week, the load serving entity’s portfolio could consist of 4,000 MW of resources on scheduled outage and only 12,000 MW of RA capacity available to the ISO. If the replacement rule is discontinued, the load serving entity in the same summer month could provide a portfolio of resources on scheduled outage for 50 percent of the days of the month, which would translate to only 8,000 MW of RA

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<sup>5</sup> Elsewhere in D.05-10-042 the Commission noted that “[a]s set forth throughout our decisions on Resource Adequacy, including this one, a key purpose of our RAR is to ensure that resources are made available to the CAISO when and where they are needed.” D.05-10-042, p. 15.

<sup>6</sup> *Id.* at 8.

<sup>7</sup> D.05-10-042, pp. 43-51.

<sup>8</sup> D.04-10-035, p. 21.

capacity available to the ISO for half the month. On a broader perspective, if the percentage of total RA capacity on a scheduled maintenance outage during a summer month increases by only a few percentage points above the 50 percent ceiling set in the current rule, thousands of MWs of capacity will no longer be available to the ISO.

Absent a replacement obligation or alternative measures to address the shortfall, there may be not be sufficient RA capacity available when and where needed. Simply put, the RA program will fail to deliver sufficient available capacity to meet the monthly peak demand plus the 115 percent reserve requirement. The resulting regulatory program will produce the unintended consequence of encouraging procurement that is less expensive but is under no obligation to actually be available to the grid operator.

With regard to the cost impact, it is possible that discontinuing the replacement rule will provide an incentive to LSEs to fulfill their capacity obligations by procuring resources that have an ISO-approved outage scheduled in the upcoming RA month. Such capacity would have an attractively low price, because it is not expected to provide the capacity service for the full RA month. If the units are then fully counted for RA purposes, but are not available for a significant portion of the month due to a scheduled outage, the ISO could be required to engage in backstop procurement to access non-RA units in order to maintain reliable grid operations. The use of exceptional dispatch or the capacity procurement mechanism to procure needed capacity will result in, at a minimum, monthly capacity payments to the non-RA units, which costs will be passed on to ratepayers in addition to the cost of the RA capacity that was on scheduled outage. This clearly creates an opportunity to shift the cost of RA capacity procurement to other LSEs that should not be promoted. Retention of the

replacement requirement for the interim, while other measures are being developed, will help avoid the incurrence of redundant costs and potential cost shift.

In addition, the absence of a replacement obligation will adversely affect the ISO's ability to approve scheduled maintenance outages, until other outage management tools are developed. ISO Tariff Section 9.3.6.4.1 requires the ISO Outage Coordination Office to evaluate requested maintenance outages<sup>9</sup> on the basis of whether such outages are likely to have a detrimental effect on the efficient use and reliable operation of the ISO controlled grid or the facilities of a connected entity. Under this standard, the ISO manages scheduled maintenance outages based on reliability. All scheduled outage requests are prioritized on a first-come, first-served basis, with the exception of those requests that are received as a part of the ISO long-range planning process, from the 1st until the 15th of the month, which ISO deems to have been received at the same time. The standard does not provide for the ISO to manage outages based on RA considerations. The ISO does not treat RA resources any differently than non-RA resources for outage management purposes. In fact, because requests for planned outages are submitted for approval prior to the outage start date, and sometimes weeks or months in advance of that date, the ISO is unlikely to know at the time it's considering the request that the resource will be RA capacity during the outage period.

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<sup>9</sup> Maintenance Outages refer to both scheduled transmission and generation outages. ISO Tariff, Appendix A, Master Definitions, defines "Outage" as follows: A period of time during which an Operator (i) takes its transmission facilities out of service for the purposes of carrying out routine scheduled maintenance, or for the purposes of new construction work or for work on de-energized and live transmission facilities (e.g., relay maintenance or insulator washing) and associated equipment; or (ii) limits the capability of or takes its Generating Unit or System Unit out of service for the purposes of carrying out routine scheduled maintenance, or for the purposes of new construction work.

The scheduled outage counting criterion and replacement obligation provide flexibility to the ISO in approving scheduled outages. They allow the ISO to rely on replacement capacity being available for a unit on scheduled outage, which in turn allows the ISO to more easily accommodate unanticipated outages and reduces cancellations or other schedule modifications. It has been necessary for the ISO to cancel some scheduled outages due to system reliability concerns; elimination of the replacement requirement will likely exacerbate this situation and lead to further scheduled outages being cancelled. However, as the operating day approaches and system conditions change, the ISO does not have authority to either cancel an approved scheduled outage or recall a generator from an approved scheduled outage, in order to avoid backstop procurement even if the former would be considered a more cost-effective use of resources. Again, retaining the replacement rule until other outage tools can be developed provides needed flexibility for outage management and will help avoid backstop procurement.

The optimal solution to the concerns just discussed is for the Commission to revise the Proposed Decision to retain the replacement rule for at least the upcoming 2012 compliance year. Maintaining the status quo will help ensure that the end of the existing replacement obligation will be coincident with implementing alternative measures. Further, it will afford the ISO the opportunity to develop the enhanced outage management tools described elsewhere in these comments that will be a more direct and effective way for the ISO to respond to elimination of the CPUC replacement rule than other suggested approaches, such as moving the replacement obligation into



the ISO's tariff or adopting the planned outage adder advanced by Southern California Edison Company.

In D.10-06-036, the Commission encouraged the ISO and other parties to explore a tariff-based solution to discontinuing the replacement obligation.<sup>10</sup> As requested, the ISO considered a tariff-based approach through an ISO stakeholder process -- Replacement Requirement for Scheduled Generation Outages.<sup>11</sup> On August 19, 2010, the ISO posted a straw proposal suggesting a supplier-based replacement obligation, which would have required a supplier of RA capacity to provide replacement capacity to the ISO when the RA capacity is unavailable due to an extended scheduled maintenance outage. The ISO received 18 sets of comments from stakeholders on the straw proposal, the vast majority of which opposed one or more elements of the straw proposal. In response to this stakeholder disagreement with the straw proposal, the ISO suspended the stakeholder process in order to take time to consider formulating a revised proposal. The ISO has since concluded that development of new and enhanced outage management functionality may be a more advanced and cost-effective means for the ISO to account for RA capacity on a scheduled maintenance outage in the event that the CPUC discontinues the replacement rule.

The ISO is working to develop the necessary policy, tariff provisions, and tools to manage scheduled generation outages without the replacement rule, for potential implementation in 2013. This effort involves three possible projects that will augment the management and coordination of transmission facilities and generation resources, including RA resources. The projects under consideration would: 1) integrate the

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<sup>10</sup> D.10-06-036, p. 24.

<sup>11</sup> Documents related to this stakeholder initiative are posted on the ISO's website at <http://www.caiso.com/27f1/27f1da3b56ef0.html>.

functionality of an existing tool into the ISO's real-time systems to provide increased visibility of RA resources for operational purposes; 2) develop comprehensive functionality to track and manage RA resources at a sufficient level of detail to reliably manage scheduled generation outages without the existing replacement rule; and 3) augment outage management and coordination functionality to optimize the scheduling of transmission and generation outages. The ISO expects to have a prototype of an optimization tool by the end of 2011, with additional development occurring in 2012.

For the reasons discussed above, the ISO strongly urges the Commission to revise the Proposed Decision and retain the replacement rule for compliance year 2012, and until the ISO has implemented alternative measures. Eliminating the replacement rule at this juncture would unnecessarily shift the ISO's attention and resources to rapid deployment of interim measures, which would hinder development of the long-term outage management policy and technology that will elevate the RA program to a higher level of functionality. In addition, discontinuing the rule would likely lead to increased backstop procurement in order to make up for the unavailable capacity and maintain reliable grid operations, which will increase the costs borne by ratepayers. Instead, the ISO proposes to undertake development of the necessary policy and tools to better manage scheduled maintenance outages and facilitate eliminating the replacement rule.

### III. CONCLUSION

The ISO respectfully requests that the CPUC issue an order consistent with the ISO's comments herein.

Respectfully submitted,

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