



California Independent  
System Operator Corporation

June 22, 2010

The Honorable Kimberly D. Bose  
Secretary  
Federal Energy Regulatory Commission  
888 First Street, NE  
Washington, DC 20426

Re: California Independent System Operator Corporation,  
Docket Nos. ER10-\_\_\_\_\_ and ER06-615  
Extension of Standard Capacity Product to Resource Adequacy  
Resources with Qualifying Capacity Determined by Historical  
Output

Dear Secretary Bose:

The California Independent System Operator Corporation (ISO) hereby submits for filing proposed amendments<sup>1</sup> to the effective ISO Tariff<sup>2</sup> to implement Phase 2 of the standard capacity product (SCP) in response to Paragraphs 56 and 58 of the Commission's June 26, 2009 Order on the ISO's original SCP filing<sup>3</sup> and Paragraph 1218 of the Commission's September 21, 2006 Order concerning the Market Redesign and Technology Upgrade,<sup>4</sup> and in conformance with Tariff Section 40.4.5.<sup>5</sup> The proposed amendments will: 1) extend SCP to resource adequacy (RA) resources with qualifying capacity determined by historical output; 2) establish a three-month advisory

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<sup>1</sup> This filing is submitted pursuant to Section 205 of the Federal Power Act, 16 U.S.C. § 824d, and Section 35.15 of the Commission's regulations, 18 C.F.R. § 35.15.

<sup>2</sup> Capitalized terms not otherwise defined herein have the meanings set forth in the Master Definition Supplement, Appendix A to the ISO Tariff.

<sup>3</sup> *Cal. Indep. Sys. Operator Corp*, 127 FERC ¶ 61,298 (2009) (June 26 Order). On August 10, 2009, the ISO submitted a compliance filing in Docket No. ER09-1064-003 to make certain modifications to the SCP mechanism required in the June 26 Order. On May 20, 2010, the Commission issued an Order on Compliance Filing that conditionally accepted the ISO's compliance filing subject to further modification to eliminate use of a separate formula in instances where the resource's monthly availability is less than the resource's minimum operating value. *Cal. Indep. Sys. Operator Corp*, 131 FERC ¶ 61,148 (2010) (May 20 Order").

<sup>4</sup> *Cal. Indep. Sys. Operator Corp*, 116 FERC ¶ 61,3274 at P 1218 (2006) (September 21 Order).

<sup>5</sup> Tariff Section 40.4.5 provides that: "No later than 12 months after the effective date of this Section 40, the CAISO will issue a report outlining a proposal with respect to performance criteria for Resource Adequacy Resources. The CAISO will collaborate with the CPUC and other Local Regulatory Authorities to develop the performance criteria to be submitted to FERC. The Scheduling Coordinator for a Resource Adequacy Resource shall provide or make available to the CAISO, subject to the confidentiality provisions of this CAISO Tariff, all documentation requested by the CAISO to determine, develop or implement the performance criteria, including, but not limited to, NERC Generating Availability Data System data."

period for the settlement of non-availability charges and availability incentive payments applicable to these resources: 3) modify existing SCP provisions in ISO Tariff Sections 40.9.4.2, 40.9.5, and 40.9.6.1(3) to clarify the types of outages considered when determining the non-availability of RA resources; and 4) correct Section 40.9.6.3 to ensure that excess non-availability funds are properly allocated to load. This proposal is referred to as SCP II.

In the June 26 Order, the Commission approved the ISO's tariff modification to initially adopt the SCP and the ancillary service must-offer obligation for RA resources. These provisions became effective on January 1, 2010. The purposes of SCP are to: (1) enhance reliability by applying availability payments and non-availability charges to RA capacity as financial incentives to be available to the ISO during designated peak hours; and (2) establish uniform metrics that enable market participants to efficiently and flexibly buy, sell, and trade RA capacity without the burden of negotiating the availability requirements of each transaction. As proposed by the ISO and approved in the June 26 Order, certain RA resources are temporarily exempt from the SCP availability charges and payments, including resources whose qualifying capacity value is determined by the California Public Utilities Commission (CPUC) or a local regulatory authority using historical output that has not been adjusted to correct for the possible double-counting of outages. The resources subject to this historical determination of qualifying capacity include wind, solar, non-dispatchable cogeneration, non-dispatchable biomass and non-dispatchable geothermal facilities. In the June 26 Order, the Commission emphasized that the exemptions were temporary and directed the ISO to work with stakeholders, the CPUC, and local regulatory authorities toward ending the exemptions in a timely manner.<sup>6</sup> In this filing, the proposed SCP II tariff modification will end the exemption for these resources and extend the application of SCP to RA resources with qualifying capacity determined by historical output.

The ISO proposes an effective date of January 1, 2011 for the proposed SCP II tariff provisions, except for Sections 40.9.2(2), 40.9.4.1, and 40.9.4.2.1(1), for which the ISO requests the effective date be the date of the Commission's Order approving the SCP II because these tariff sections contemplate ISO or market participant action prior to January 1, 2011. An effective date of January 1, 2011 for the other SCP II tariff provisions is consistent with calendar-year cycle of the RA program and coincident with the start of the 2011 RA compliance year. The ISO requests that the Commission grant all appropriate waivers to allow the tariff provisions to go into effect on these dates, including a waiver of Section 35.3 of the Commission's Regulations, which requires that rate schedules be tendered for filing no less than 60 days and no more than 120 days prior to the proposed effective date. The ISO also requests that the Commission issue an order approving the SCP II on or about August 23, 2011 so that: (1) the parties negotiating RA capacity contracts will have certainty about how these provisions will apply to the suppliers of RA capacity during the 2011 RA compliance year (load serving entities must submit their RA showings to the ISO by September 30, 2011),<sup>7</sup> and (2) the

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<sup>6</sup> June 26 Order at P. 58.

<sup>7</sup> Any delay in issuance of a Commission order beyond the 60-day timeframe could result in SCP

ISO can begin making the necessary changes to its systems and software in order to allow SCP II to be implemented by the January 1, 2011 effective date. This will also afford the ISO adequate time to follow the Business Practice Manual change management process and revise the affected manuals prior to the implementation date.

## **I. EXECUTIVE SUMMARY**

The ISO developed SCP to achieve four key objectives: (1) improve grid reliability; (2) streamline stakeholder contracting efforts and facilitate contract tradability; (3) meet regulatory requirements; and (4) implement a standard RA capacity product in time to apply for the 2010 RA compliance year. Under SCP, all RA capacity that is confirmed through monthly RA supply plans is subject to the SCP provisions, including the availability determination, and resultant non-availability charges and availability incentive payments, unless otherwise expressly exempt or deferred from application of the provisions during initial implementation.

The ISO implemented the first phase of SCP on January 1, 2010. The ISO did not apply SCP to RA resources whose qualifying capacity is determined by the CPUC or a local regulatory authority based on historical output data rather than based on maximum or nameplate capacity. It was inappropriate at that time to apply SCP to these resources given the manner in which the CPUC rules determine a resource's RA qualifying capacity which could, in combination with SCP, result in double counting of the impact of forced outages and de-rates. The Commission's June 26 Order had approved exemption of these resources. In that order, however, the Commission emphasized that the exemptions were temporary and directed the ISO to work with stakeholders, the CPUC and local regulatory authorities toward ending the exemptions in a timely manner. The Commission further directed the ISO to post a biannual status report on its website as a means for FERC and market participants to monitor the progress of efforts to sunset the exemptions and assess whether the efforts are unreasonably delayed. The instant filing is intended to comply with the Commission's directive.

The SCP II proposal will end the temporary exemption from SCP for the RA resources whose qualifying capacity is determined by historical output. As proposed, the SCP provisions will apply to these resources in the 2011 compliance year. Ending the exemption for these resources is just and reasonable because it will: 1) ensure that there is no undue discrimination among or unduly preferential treatment for certain types of RA resources; 2) move toward the ultimate development and implementation of a long-term RA framework in which there is a uniform availability standard applicable to all RA resources; 3) align with a fundamental principle underlying both the RA program and SCP that the full amount of every resource's RA capacity should be available to the ISO, unless the resource is on a forced equipment outage or de-rate that diminishes its ability to provide the full amount of its RA capacity; 4) improve the availability of RA capacity by applying SCP, as a financial incentive measure, to these

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implementation being delayed.

currently exempt RA resources; and 5) be consistent with the Commission's June 26 Order that made clear that the exemptions were temporary and directed the ISO to work with stakeholders, the CPUC and local regulatory authorities toward ending the exemptions in a timely manner.

Under SCP II, the contracts under which the resources with qualifying capacity based on historical data supply RA capacity may be grandfathered from application of the SCP non-availability charges and availability incentive payments, provided that they meet criteria set forth in existing tariff provisions and were executed or submitted for approval to the local regulatory authority prior to the date of the Commission order approving the SCP II proposal in this proceeding. Use of that date as the deadline for the grandfathering provisions for these resources is consistent with the deadline date the Commission established for grandfathering in the initial implementation of SCP.

The SCP II proposal will also modify the formula for determining SCP availability as will be applied to these resources. The proposal adds proportional de-rated capacity as a component of the calculation to recognize that any forced outage or temperature-related ambient de-rate that reduces the resource's capacity below its maximum or nameplate capacity during an SCP assessment hour will proportionately reduce its ability to fully deliver its net qualifying capacity in that hour. The use of this methodology for resources with qualifying capacity based on historical hourly energy output is necessary to account for the fundamental difference between them and the resources covered by the original SCP proposal, whose qualifying capacity is calculated based on their maximum or nameplate capacity.

The SCP II proposal adds another component to availability determination to consider of the resource's RA capacity as designated in its supply plan for the month to recognize specifically the hours in which the actual energy delivered to the ISO grid by a resource equals or exceeds the RA capacity value designated in the resource's supply plan. In hours where the energy delivered to the ISO grid by a resource with qualifying capacity based on historical data equals or exceeds the resource's RA capacity designated in the supply plan, the resource will be considered 100% available.

Further, the SCP II proposal will modify ISO Tariff Section 40.9.6 to add a provision to that section that establishes a three-month advisory period as a transitional measure for the RA resources that will become subject to SCP as a result of this filing. Specifically, the modification provides for the non-availability charges and availability incentive payments to be calculated and published on settlement statements for the RA resources whose qualifying capacity is determined by historical output, but not actually be assessed on invoices to those resources for a three-month advisory period following the effective date of SCP II. The three-month advisory period will help facilitate the transition to SCP II by these RA resources by allowing them to observe how their management of forced outages and de-rates, and reporting of those events, affects the SCP availability calculation, without incurring financial consequences during the transition. It will also provide an opportunity for the ISO to put a proactive monitoring team in place, to identify activity that is producing non-availability charges and work with

the scheduling coordinators for the resources in an effort to avoid the assessment of charges due to inadvertent errors

Other tariff modifications proposed in the SCP II proposal are: 1) amend Sections 40.9.4.2, 40.9.5, and 40.9.6.1(3) to remove the “non-ambient de-rate” category of outage report as unnecessary and duplicative of other outage categories; and 2) correct Section 40.9.6.3 to more appropriately allocate any non-availability charge funds above the cap by crediting those funds against the real-time neutrality charge to metered ISO demand for that trade month.

The ISO proposes an effective date of January 1, 2011 for the proposed SCP II tariff provisions, except for Sections 40.9.2(2), 40.9.4.1, and 40.9.4.2.1(1), for which the ISO requests the effective date be the date of the Commission’s Order approving the SCP II because these tariff sections contemplate ISO or market participant action prior to January 1, 2011. The ISO also requests that the Commission issue an order approving the SCP II on or about August 23, 2011 so that: (1) the parties negotiating RA capacity contracts will have certainty about how these provisions will apply to the suppliers of RA capacity during the 2011 RA compliance year (load serving entities must submit their RA showings to the ISO by September 30, 2011), and (2) the ISO can begin making the necessary changes to its systems and software in order to allow SCP II to be implemented by the January 1, 2011 effective date.

## **II. BACKGROUND**

### **A. Initial SCP Tariff Amendment**

The RA program was implemented to ensure that adequate resources are available when and where needed to serve load, meet appropriate reserve requirements, and support reliable operation of the ISO controlled grid. Each year the ISO’s RA process begins with the publication of the Locational Capacity Technical Study and the Deliverability Study. The Locational Capacity Technical Study determines the minimum capacity needed in each identified transmission constrained “load pocket” or local capacity area to ensure reliable grid operations. The Deliverability Study establishes the deliverability of generation in the ISO balancing authority area and the total import capability for each import path allocated to each load serving entity. The information contained in these reports, along with generator data, is used to compile the annual Net Qualifying Capacity Report, which lists the net qualifying capacity values of all participating generators and other generating units that request inclusion in the RA program for the next RA compliance year.

Load serving entities use the Net Qualifying Capacity report to identify resources eligible to contract for RA Capacity to satisfy their RA requirements. In the year-ahead and month-ahead timeframes, load serving entities are required to provide RA plans to the ISO demonstrating that their RA requirements will be met for that reporting period by identifying the specific resources with which they have contracted for RA capacity. Scheduling coordinators for these RA Resources also submit year-ahead and monthly

supply plans to the ISO verifying the commitment to make available the RA Capacity. The ISO then cross-validates the RA plans and supply plans.

In response to the ISO's Market Redesign and Technology Upgrade Tariff filing, several parties suggested that the ISO develop performance criteria for RA requirements. In its September 21 Order, the Commission agreed with these parties and urged the ISO to implement such requirements as soon as that task could be accomplished.<sup>8</sup> The Commission stated that, given that planning reserve margins depend on generation performance, local regulatory authorities will have a better ability to determine adequate reserve margins once the performance criteria are in place.<sup>9</sup> The ISO developed its initial SCP proposal in response to the Commission's direction and the existing tariff requirement to institute performance standards for RA resources.<sup>10</sup>

In addition, as the RA program evolved, participants identified a need to develop a standardized availability measure in order to facilitate the selling, buying and trading of capacity to meet RA requirements. That measure, with appropriate availability requirements and incentives, would also enhance the ability of the ISO to ensure reliable grid operations. The need to address this matter was highlighted during the ISO's Market Initiatives Roadmap process in 2008 where development of a standardized availability measure was ranked the highest priority out of a list of over 70 initiatives.<sup>11</sup> Stakeholders expressed their desire to have this product implemented in the ISO Tariff as soon as possible for use as the basis for capacity contracting during 2009 for the 2010 RA compliance year. Accordingly, the ISO undertook a stakeholder process and developed its initial SCP proposal on a timeline that would meet these objectives.

ISO staff collaborated with stakeholders during a nine-month initiative to develop an effective SCP that would help streamline the RA program, satisfy the requirements of stakeholders, and support the reliability needs of the ISO. In developing the SCP, the ISO was guided by four overarching criteria: (1) improve grid reliability; (2) streamline stakeholder contracting efforts and facilitate contract tradability; (3) meet regulatory requirements; and (4) implement a standard RA capacity product promptly, *i.e.*, in time to apply for the 2010 RA compliance year.

On April 28, 2009, the ISO filed its initial SCP proposal to achieve each of the aforementioned objectives. As proposed, all RA capacity that is confirmed through the supply plans will be subject to the SCP provisions, including the availability standards and incentives, unless otherwise expressly exempt or deferred from application of the provisions during initial implementation. In the June 26 Order, the Commission approved SCP, with modifications. The Commission found that establishing uniform

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<sup>8</sup> September 21 Order at P. 1218.

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

<sup>10</sup> This filing is meant to fulfill the commitment in ISO Tariff Section 40.4.5. See fn 5.

<sup>11</sup> *Market Initiatives Roadmap Process, Final Report on Ranking of High Priority Market Initiatives 7/7/2008* <http://caiso.com/1ff9/1ff9aee434530.pdf>

metrics for use in bilateral RA contracts will provide market participants with a means to readily satisfy their RA requirements, and will thereby enhance reliability.<sup>12</sup> As discussed below, the Commission also approved exemption of the RA resources with qualifying capacity determined by historical output, but made clear that the exemptions were temporary and directed the ISO to work with stakeholders, the CPUC, and local regulatory authorities toward ending the exemptions in a timely manner.<sup>13</sup>

The ISO implemented the first phase of SCP as approved in the June 26 Order to take effect starting January 1, 2010. The RA capacity subject to SCP is tracked by the ISO for availability during specified availability assessment hours of each month (*i.e.*, the extent to which the total amount of a resource's RA capacity is available and not on a forced equipment outage or derate). The resource's calculated availability is subject to non-availability charges or availability incentive payments depending on direction and number of MWs by which the resource deviates from the monthly SCP availability standard. For the resources covered by the first phase of SCP the ISO assesses availability on only the amount of capacity that a resource has sold as RA capacity, *i.e.*, if a resource with a 100 MW maximum capacity has sold only 50 MW as RA capacity, then the ISO, for purposes of the SCP availability calculation, will consider only the availability of that 50 MW from the resource.

Under SCP, having an accepted set of minimum standards and incentives in the Tariff benefits the ISO by increasing the availability of the RA resources and benefits stakeholders by streamlining their RA contracting negotiations.

## **B. Temporary Exemption of Resources with Qualifying Capacity Determined by Historical Output**

In the first phase of SCP, the ISO did not apply SCP to RA resources whose qualifying capacity is determined by the CPUC or a local regulatory authority based on historical output data rather than based on maximum or nameplate capacity. In the initial SCP filing, the ISO explained that it would be inappropriate at that time to apply SCP to these resources given the manner in which the CPUC rules determine a resource's RA qualifying capacity which could, in combination with SCP, result in double counting of the impact of forced outages. The CPUC bases the qualifying capacity values for wind, solar and qualifying facility (QF) resources on the historical hourly energy each such resource has delivered to the ISO grid. To the extent these resources experience forced outages or de-rates, such outages or de-rates will affect the resources' hourly energy deliveries, which the CPUC methodology then reflects in reduced qualifying capacity values for these resources for the following RA compliance year. If the resources were also subject to SCP, their qualifying capacity value would be reduced for the following year under the CPUC rules and they could be assessed an SCP unavailability charge in the current year due to the same forced outage or de-rate, which would essentially result in a "double penalty."

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<sup>12</sup> June 26 Order at P. 8.

<sup>13</sup> June 26 Order at P. 58.

In the June 26 Order, FERC accepted the ISO's proposal to exempt the resources whose qualifying capacity is determined by historical output from application of SCP.<sup>14</sup> The Commission emphasized, however, that the exemptions were temporary and directed the ISO to work with stakeholders, the CPUC and local regulatory authorities toward ending the exemptions in a timely manner. The Commission further directed the ISO to post a biannual status report on its website as a means for FERC and market participants to monitor the progress of efforts to sunset the exemptions and assess whether the efforts are unreasonably delayed.<sup>15</sup> The instant filing is intended to comply with the Commission's directive.

Consistent with the June 26 Order, the ISO participated in the CPUC's RA proceeding, *Order Instituting Rulemaking to Oversee the Resource Adequacy Program, Consider Program Refinements, and Establish Annual Local Procurement Obligations*, Docket No. RM09-10-032, to support eliminating the double counting issue so that the resources with qualifying capacity based on historical data may be included in SCP. On March 12, 2010, the ISO submitted comments that recommended that the CPUC modify its counting rules for RA resources whose qualifying capacity for RA purposes is based on historical actual hourly output data either to (1) eliminate forced outage and de-rate hours from the calculation of an RA resource's qualifying capacity, or (2) use proxy energy output values for those hours.<sup>16</sup>

On May 25, 2010, a CPUC Administrative Law Judge served and posted on the CPUC's website a proposed decision which proposes to change the CPUC's qualifying capacity calculation in order to eliminate the potential of the double penalty occurring with the ISO's SCP.<sup>17</sup> If adopted by the CPUC, the proposed decision will eliminate the historical outage and de-rate data from the qualifying capacity calculation for these RA resources for the same hours as those included in the SCP availability calculation. These hours will be replaced with proxy data. The CPUC is expected to consider the proposed decision no sooner than 30 days from the date it was mailed to the parties.

### **C. SCP II Stakeholder Process**

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<sup>14</sup> June 26 Order at P. 56-58.

<sup>15</sup> In addition, the ISO did not initially apply SCP to demand response RA resources. The ISO believed that it was inappropriate at that time to apply SCP to demand response resources given the initiatives underway at both the CPUC and ISO to change the manner in which demand response participates in the California market. Further, the manner in which these resources are currently participating in the power system does not readily allow imposition of the availability standards. For example, the majority of demand response resources do not schedule using resource IDs, which means they do not report availability and the ISO has no ability to track the status of these resources. The June 26 Order accepted the exemption of demand response RA resources from SCP. Because the aforementioned initiatives are still in progress, the instant filing does not propose to end the exemption for these resources.

<sup>16</sup> The ISO's comments are posted on the website at <http://www.caiso.com/2757/2757eaa51e890.pdf>.

<sup>17</sup> See CPUC Proposed Decision, Docket No. RM09-10-032, pp. 32-36, posted on the CPUC's website at <http://docs.cpuc.ca.gov/efile/PD/118450.pdf>.



In December 2009, the ISO initiated a stakeholder process to develop the SCP II proposal that would extend SCP to the temporarily exempt resources whose qualifying capacity is determined by historical output. The stakeholder process involved multiple conference calls with stakeholders, issuance of several white papers discussing SCP II issues, and numerous opportunities for stakeholders to provide input into the development of the SCP II proposal.<sup>18</sup>

The ISO began the stakeholder process on December 4, 2009 by publishing an issue paper that described the issues associated with the SCP II initiative. The ISO conducted a conference call on the issue paper on December 11, 2009 and stakeholders thereafter responded with written comments. On January 19, 2010, the ISO published a straw proposal, based on those comments, that described the scope of the proposal as: (1) extension of SCP to the temporarily exempt resources with qualifying capacity determined by historical output; (2) modification of existing SCP Tariff provisions to clarify the types of outages considered in determining the non-availability of RA resources and properly allocate excess non-availability funds to load; (3) measurement of the availability of non-resource specific system resources that provide RA capacity (NSR-RA); and (4) development of an alternative mechanism to the CPUC rule requiring load serving entities to replace RA capacity on planned outage in the event the CPUC eliminates that rule.<sup>19</sup> A stakeholder conference call on the straw proposal was held on January 26, 2010, followed by further written comments one week later.

Based on stakeholder input on the straw proposal, the ISO on February 19, 2010 produced a draft final proposal that further streamlined and clarified the elements of SCP II. One significant change in the draft final proposal was inclusion of a proposed methodology for calculating the hourly SCP availability of the resources with qualifying capacity based on historical output. The methodology recognized that any forced outage or temperature-related ambient de-rate that reduces the resource's nominal capacity during an SCP assessment hour will proportionately reduce its ability to deliver its net qualifying capacity in that hour. Another change was removing item (3) noted above, development of an SCP availability metric for NRS-RA resources, from the SCP II initiative for consideration in a different stakeholder process focused on other issues relevant to NRS-RA resources. Stakeholders had the opportunity to provide input on the draft final proposal during a stakeholder conference call on February 26, 2010 or through submission of written comments.

On March 18, 2010, the ISO produced a white paper, entitled Alternative Options for the Availability Standard and Replacement Rule Components of the Standard Capacity Product II Initiative. The white paper targeted two specific issues for further

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<sup>18</sup> The SCP stakeholder record can be found at <http://www.caiso.com/2479/2479e7362d1e0.html> . This record includes the ISO's Issues Papers, initial as well as revised, ISO SCP and A/S MOO proposals, all comments submitted by stakeholders during the stakeholder process, all stakeholder meeting presentations, and the draft SCP and A/S MOO tariff language.

<sup>19</sup> As discussed further below, items (3) and (4) were subsequently removed from the scope of the SCP II initiative.

discussion. The ISO sought stakeholder comments on an alternative for calculating the hourly availability of the resources with qualifying capacity determined by historical output that would take into account the resource's actual energy delivery to the ISO grid during an assessment hour as well as its available RA capacity calculated as proposed in the draft final proposal in determining its availability for SCP purposes. In response to stakeholder requests, the ISO also developed and asked for stakeholder input on alternatives to the CPUC's replacement rule that would require the supplier to replace RA capacity on a lengthy planned outage (*i.e.*, item (4) above). Stakeholders discussed these issues during a conference call on March 24, 2010 and subsequent written comments.

On April 6, 2010, the ISO posted its revised draft final proposal.<sup>20</sup> This final paper further refined the SCP II proposal, based on additional stakeholder discussions and input, by proposing to adopt the alternative in the whitepaper for calculating the hourly SCP availability of resources with qualifying capacity determined by historical output. Also, given a lack of stakeholder consensus for the ISO's possible alternatives to the CPUC's replacement rule, the revised draft final proposal removed this issue from the scope of SCP II and will instead consider it in a future stakeholder initiative. The ISO obtained input from stakeholders on the revised draft final proposal through a conference call on April 13, 2010 and written comments submitted on April 21, 2010.

The SCP II proposal was presented to the ISO Governing Board on May 17, 2010 and the Board authorized this filing.<sup>21</sup>

The ISO posted draft tariff language for SCP II May 11, 2010. Stakeholders provided comments on the draft language on May 18, 2010, and these comments were discussed during a stakeholder conference call on May 20, 2010. The ISO posted a second draft of the tariff language on May 20, 2010 and accepted further comments from stakeholders on May 27, 2010.

### **III. STANDARD CAPACITY PRODUCT II**

#### **A. End of SCP Exemption for RA Resources Whose Qualifying Capacity Value is Determined by Historical Output**

The most significant change proposed in SCP II is simple and straightforward -- RA resources whose qualifying capacity is determined by historical output<sup>22</sup> that were

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<sup>20</sup> The draft final proposal is provided in Attachment C to this filing.

<sup>21</sup> The Memorandum presented to the ISO Board of Governors regarding the *Decision on Standard Capacity Product Phase II* is provided as Attachment D to this filing.

<sup>22</sup> For ease of discussion, this filing refers generally to "historical output" as the basis for calculating a resource's qualifying capacity. It should be understood, however, that in the case of QF resources, the more precise term would be "historical energy delivery to the ISO grid." The reason for this distinction is that for such resources, the actual energy output of the resource is used primarily to serve the needs of a host facility that has the first claim to such energy, with any additional energy output being provided to the ISO grid. For calculating qualifying capacity for RA purposes, then, it is appropriate to consider the hourly

temporarily exempt from SCP will become subject to those provisions. Proposed ISO Tariff Section 40.9.2(4) deletes the language that exempts these resources from the SCP availability standards, non-availability charges and availability payments, and the additional reporting requirements of Section 40.9. As a result of deleting the exemption, these RA resources will be fully subject to the SCP provisions.

The ISO submits that ending the exemption for these resources is just and reasonable and necessary to ensure that there is no undue discrimination among or unduly preferential treatment for certain types of RA resources. The ISO supports the ultimate development and implementation of a long-term RA framework in which there is a uniform availability standard applicable to all RA resources. The reversal of the temporary exemption for the resources with qualifying capacity based on historical information is a step toward reaching that goal.

In addition, extending SCP to the RA resources with qualifying capacity based on historical output is consistent with a fundamental principle underlying both the RA program and SCP that the full amount of every resource's RA capacity should be available to the ISO, unless the resource is on a forced equipment outage or de-rate that diminishes its ability to provide the full amount of its RA capacity. The ISO believes that applying SCP, as a financial incentive measure, to these currently exempt RA resources will improve the availability of RA capacity. The provision of all available RA capacity to the ISO is critical to ensuring that there is sufficient generation capacity when and where needed to serve load, meet appropriate reserve requirements, and support reliable operation of the ISO controlled grid, and that RA resources make available the RA capacity for which they receive contractual capacity payments.

Further, ending the exemption is consistent with the Commission's June 26 Order. In that order, the Commission emphasized that the exemptions were temporary and directed the ISO to work with stakeholders, the CPUC and local regulatory authorities toward ending the exemptions in a timely manner.

The ISO believes that ending the temporary exemption from SCP for the RA resources with qualifying capacity based on historical data is both timely and appropriate to ensure that all RA resources are treated fairly and without undue discrimination. The issue that led to exempting these resources from initial application of SCP is near closure. In the first phase of SCP, the ISO did not apply SCP to RA resources whose qualifying capacity is determined by the CPUC or a local regulatory authority based on historical output data because of the potential double penalty issue. Under the CPUC counting rules, a forced outage or de-rate reduces a resource's qualifying capacity for the subsequent RA compliance year. If SCP was applicable, the resource could also be assessed an SCP unavailability charge for the same forced outage or de-rate, which would result in a double penalty. The CPUC proposed decision served on May 25, 2010 recommends changing the qualifying capacity

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energy delivered to the ISO grid rather than the full output of the resource. To simplify this discussion the term "output" is used throughout this transmittal letter, with the understanding just described.

calculation in order to eliminate the potential of the double penalty occurring with the ISO's SCP. If adopted by the CPUC, the proposed decision will eliminate energy output data for the historical outage and de-rate hours from the qualifying capacity calculation for these resources and will replace the energy output for those hours with proxy data that reflects average output under non-outage/de-rate conditions. Accordingly, the rationale for exempting these resources from SCP will no longer exist.

## **B. Application of SCP to RA Resources Whose Qualifying Capacity Value is Determined by Historical Output**

### **1. Existing SCP Provisions**

As a result of deleting the exemption, the RA resources whose qualifying capacity is determined by historical output will be fully subject to the existing SCP provisions in the ISO Tariff. Except for the methodology for calculating hourly availability, as described below, these are the same provisions that were adopted and applied to non-exempt RA resources in the first phase of SCP, including the following:

- Section 40.9.1 – contains general SCP provisions,
- Section 40.9.3 -- establishes the five-hour range during which the ISO will track the availability of RA resources,
- Section 40.9.4 – describes the availability determination,
- Section 40.9.4.1 – provides for the calculation and posting of monthly availability standards for the following RA compliance year,
- Section 40.9.4.2.1 – allows RA resources to substitute non-RA capacity for RA capacity that is on a forced outage or de-rate,
- Section 40.9.4.2.2 – determines the accounting for a de-rate of a unit with an RA commitment for part of its capacity,
- Section 40.9.5 – establishes outage reporting requirements ,
- Section 40.9.6.1 – determines the RA capacity subject to non-availability,
- Section 40.9.6.2 – calculates the non-availability charge, and
- Section 40.9.6.3 – calculates the availability incentive payment.

In addition to the foregoing list of applicable tariff sections, the RA resources with qualifying capacity based on historical output will be subject to several existing SCP provisions, which the ISO is proposing to modify to better accommodate extending SCP to those resources. These provisions are Sections 40.9.2(2) and 40.9.2(3) that set specific criteria for RA capacity procured under a power supply contract to be exempt from non-availability charges and availability incentive payments, Section 40.9.4.2 that sets forth the availability calculation for RA resources, and Section 40.9.6 that describes the determination of non-availability charges and availability incentive payments.

### **2. Modification to Sections 40.9.2 (2) and 40.9.2 (3)**

Existing ISO Tariff Sections 40.9.2 (2) and 40.9.2 (3) include a “grandfathering”

provision that allows resource-specific RA capacity under a contract either executed prior to June 28, 2009 or submitted to the appropriate local regulatory authority for approval prior to that date to request exemption from the SCP availability standards and incentives for the remainder of current contract period. The exemption includes an increase in capacity expressly provided for during the original term of the contract. Upon expiration of the current contract period (even if there is a subsequent right of extension), the contract is no longer eligible for grandfathering and is fully subject to the SCP requirements.

Under SCP II, the ISO proposes to retain the existing criteria required by these sections for a power supply contract to be eligible for grandfathering and extend them to the resources with qualifying capacity based on historical data, with one exception -- the June 28, 2009 deadline date. In the June 26 Order, the Commission rejected the ISO's proposal to set January 1, 2009 as the deadline date for the grandfathering provision and determined that the date instead should be June 28, 2009 in order to satisfy statutory notice requirements. Consistent with the Commission's decision in the June 26 Order, the ISO proposes to amend Sections 40.9.2 (2) and 40.9.2 (3) to change the June 28, 2009 deadline date to the date of the Commission order approving the SCP II proposal in this proceeding. For purposes of this filing, the ISO uses August 23, 2010 in the tariff sheets as the placeholder for the date of the order. The ISO will file revised tariff sheets that contain the correct date once the order is issued and the date is known.

The ISO submits that using the date of the order is consistent with the June 26 Order and satisfies the notice requirement of Section 205 of the Federal Power Act that requires 60-days advance notice to the Commission and the public of any change in rates, charges, classification, or service, or in any rule, regulation, or contract relating thereto.<sup>23</sup> In addition, use of the date of the Commission's order as the deadline date for the grandfathering provision should allow sufficient time before the 2011 compliance year for the ISO to review the grandfathering requests by these resources and determine which of their power supply contracts are eligible grandfathering.

### **3. Modification to Section 40.9.4.2**

Tariff Section 40.9.4.2 describes the methodology for calculating the monthly performance of an individual RA Resource against the monthly SCP availability standards. Under this provision, availability is calculated as the sum of the resource's hourly available RA capacity over all of the availability assessment hours of the month, divided by the sum of the resource's hourly RA capacity as designated in the supply plan for those hours, then multiplied by 100 to obtain a percentage amount. The resource will be determined to be less than 100% available in a given month if it has any forced outages or temperature-related ambient de-rates that impact the availability of its RA capacity during the availability assessment hours of that month. The ISO is not proposing to change this part of the calculation and will apply it to the resources

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<sup>23</sup> 16 U.S.C. § 824(d) (2006).

covered under the SCP II proposal in the same manner as it applies to the resources covered under the prior SCP proposal.

The ISO does propose to modify Section 40.9.4.2, however, to include a separate method for calculating hourly available RA capacity that is more appropriate for RA resources whose qualifying capacity is based on historical output, in contrast to RA resources covered by the first phase of SCP whose qualifying capacity is based on their maximum or nameplate capacity. The proposed method considers three quantities for determining hourly available RA capacity in each availability assessment hour: (1) the actual amount of energy the resource delivered to the ISO grid during that hour, (2) the resource's RA capacity as designated in its supply plan for the month, and (3) the resource's net qualifying capacity as reduced for that hour by the same percentage by which any forced outages or temperature-related ambient de-rates reduced the resource's capacity from its maximum or nameplate capacity.

The calculation of hourly available RA capacity in the SCP II proposal, expressed as a formula, is as follows:

$$\text{Hourly Available RA Capacity} = \text{Min} (\text{RA Capacity}, \text{Max} (\text{Actual Energy}, \text{Proportional De-rated Capacity}))$$

Where:

RA Capacity = RA Capacity designated in the Supply Plan

Actual Energy = Total actual energy delivered by the resource in the Availability hour

Proportional De-rated Capacity = Resource's Net Qualifying Capacity as reduced for that hour by the same percentage by which any Forced Outages or temperature-related ambient de-rates reduced the resource's capacity from its maximum or nameplate capacity

In the formula, proportional de-rated capacity recognizes that any forced outage or temperature-related ambient de-rate that reduces the resource's capacity below its maximum or nameplate capacity during an SCP assessment hour will proportionately reduce its ability to fully deliver its net qualifying capacity in that hour. The logic for this methodology is that the resource's qualifying capacity, and hence its net qualifying capacity, was calculated based on its actual energy output or delivery to the ISO grid during hours in which its maximum physical capacity was fully available.<sup>24</sup> The use of

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<sup>24</sup> This assumes, as noted earlier, that the CPUC adopts its proposed decision, which will modify the current qualifying capacity calculation methodology to exclude energy output data for outage or de-rate hours and replace that data with average data reflective of full availability of the resource's nameplate capacity. The net qualifying capacity is derived from the qualifying capacity by considering the capability of the transmission grid to fully deliver the resource's output to serve ISO load, and is not affected by the performance of the resource.

this methodology for resources with qualifying capacity based on historical hourly energy output is necessary to account for a fundamental difference between them and the resources covered by the original SCP proposal, whose qualifying capacity is calculated based on their maximum or nameplate capacity. For the latter type of resource, a partial de-rate of the resource's maximum capacity may not impact its ability to fully deliver its RA commitment. For example, a 200 MW fossil fuel power plant may contract to provide 150 MW of RA capacity, may experience a partial de-rate from 200 MW down to 150 MW, and still be fully capable of providing 150 MW of RA capacity. In contrast, the nature of the resources covered by SCP II is such that their RA qualifying capacity is based on energy produced when their nameplate capacity is fully available. For example, a 200 MW wind farm may only qualify for 40 MW of RA capacity because, during the hours for which its qualifying capacity was calculated and its 200 MW of capacity were fully available, it produced on average 40 MWh of energy. If this resource then experiences a de-rate from 200 MW down to 150 MW of capacity, it would be expected to produce on average only 30 MWh of energy during that hour. Based on this logic, the ISO believes that the methodology best reflects the impact of a forced outage or de-rate on the ability of the resource to fully deliver its net qualifying capacity.<sup>25</sup>

The calculation of hourly available RA capacity for resources covered by the SCP II proposal, however, does not rely exclusively on proportional de-rated capacity. In response to comments made by some stakeholders, the ISO added consideration of the resource's RA capacity as designated in its supply plan for the month to recognize specifically the hours in which the actual energy delivered to the ISO grid by a resource equals or exceeds the RA capacity value designated in the resource's supply plan. Therefore, in hours where the energy delivered to the ISO grid equals or exceeds the resource's RA capacity designated in the supply plan, the resource is considered 100% available and its hourly available RA capacity equals its full designated RA capacity. In hours where the actual amount of energy delivered by the resource was less than the RA capacity value designated in its supply plan, the resource's hourly available RA capacity will equal the maximum of the actual amount of energy delivered during the hour or the proportional de-rated capacity value.

#### **4. Modification to Section 40.9.6**

Existing Tariff Section 40.9.6 describes how the non-availability charges and availability incentive payments will be assessed. An RA resource with a monthly

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<sup>25</sup> Some stakeholders argued that this logic should not apply to QF resources because those resources typically have physical operating characteristics that make them more like fossil fuel plants than like the wind and solar resources. The ISO's view, however, is that the RA value of these resources is more like that of the wind or solar resources due to the fact that the QF host facilities have the first claim to their energy output, with the ISO grid receiving only the excess energy output. This fact is, after all, the reason why their qualifying capacity is based on their historical hourly energy delivery to the ISO grid and not on their maximum or nameplate capacity. Therefore, it is appropriate to treat the QF resources and the intermittent resources the same for purposes of RA qualifying capacity and for SCP availability assessment.

availability calculation more than 2.5% below the monthly availability standard is subject to a non-availability charge for that month. An RA resource with a monthly availability calculation more than 2.5% above the monthly availability standard is eligible for an availability incentive payment for that month. An RA resource with a monthly availability calculation within 2.5% above or below the monthly availability standard is not be eligible for either an incentive payment or an unavailability charge for the month.

The modification proposed by the ISO does not alter the methodology described in Section 40.9.6. Instead, the ISO proposes to add a provision to that section that establishes a three-month advisory period as a transitional measure for the RA resources that will become subject to SCP as a result of this filing. Specifically, the modification provides for the non-availability charges and availability incentive payments to be calculated and published on settlement statements for the RA resources whose qualifying capacity is determined by historical output, but not actually be assessed on invoices to those resources for a three-month advisory period following the effective date of SCP II.

The ISO believes that the three-month advisory period will help facilitate the transition to SCP II by these RA resources, some of which are not currently participating generators in the ISO markets. The advisory period will allow these resources to observe how their management of forced outages and de-rates, and reporting of those events, affects the SCP availability calculation, without incurring financial consequences during the transition. It will also provide an opportunity for the ISO to put a proactive monitoring team in place, to identify activity that is producing non-availability charges and work with the scheduling coordinator for the resource(s) in an effort to avoid the assessment of charges due to inadvertent errors. Based on the ISO's experience with the implementation of the first phase of SCP, the review performed by the proactive monitoring team should detect problem areas early and allow them to be corrected during the advisory period. This in turn should substantially reduce the number of settlements disputes that the ISO receives and must process. For these reasons, the ISO requests that the Commission approve the three-month advisory period as a fair and reasonable transition measure.

**C. Clarification of Outage Categories Under Sections 40.9.4.2, 40.9.5, and 40.9.6.1(3)**

Existing Tariff Sections 40.9.4.2, 40.9.5, and 40.9.6.1(3) refer to three categories of outages in their respective discussions of outage reporting requirements and consideration of outages in determining the availability of RA resources, as follows:

- Section 40.9.4.2 provides that an RA resource will be determined to be less than 100% available in a given month if it has any *Forced Outages, non-ambient derates, or temperature-related ambient derates* that impact the availability of its RA capacity during the availability assessment hours of that month. (emphasis added).



- Section 40.9.5 requires the scheduling coordinators for RA resources with a maximum output capability of 1 MW or more, but which do not report outages under Section 9.3.10, to provide equivalent availability-related information that includes “all *Forced Outages, non ambient de-rates, and temperature-related ambient de-rates* that have occurred over the previous calendar month.” (emphasis added).
- Section 40.9.6.1(3) provides that “[a]ny *Forced Outage, non-ambient de-rate, or temperature-related ambient de-rate*” of a substitute resource will be applied in calculating the availability of RA resource for which it was substituting.” (emphasis added).

During the stakeholder process for SCP II, stakeholders advised the ISO that the three outage categories referenced in these sections – forced, non-ambient de-rate, and temperature-related ambient de-rate – were unclear and created uncertainty as to the category into which a forced outage or de-rate fit. In response to this input, the ISO reviewed the language and determined that two outage categories would suffice to capture the types of outages and de-rates that must be reported and taken into account in determining the availability of RA resources for SCP purposes. Accordingly, the ISO proposes to clarify these sections by removing the “non-ambient de-rate” category as unnecessary. This category can be eliminated as redundant because the definition of Outage in the tariff includes a reduction in capacity, which is the same as a de-rate.<sup>26</sup> The ISO believes that this change is reasonable and should be accepted by the Commission since it is for clarification purposes only and will not change the types of outages and de-rates to be reported nor affect the availability calculation.

#### **D. Correction of Distribution of Availability Incentive Payments Under Section 40.9.6.3**

Existing Tariff Section 40.9.6.3 describes the methodology for determining the eligibility of RA resources to receive an availability incentive payment and for allocating the payments. The availability incentive payments are funded entirely through the monthly non-availability charges collected in the same trade month. The monthly availability incentive payment rate is equal to the total amount of non-availability charges assessed for the trade month divided by the total RA capacity that is eligible to receive the availability incentive payment that month – the eligible capacity is that capacity that has exceeded the availability standard plus the 2.5% tolerance band. Section 40.9.6.3 also specifies, however, the availability incentive payment rate in a given month can not exceed three times the non-availability charge rate. The purpose of this cap is to avoid windfall payments to a limited set of RA resources in instances where, in a particular month, the ISO collects a large amount of non-availability charge revenues while only one or very few RA resources are eligible to receive availability incentive payments. Under the existing language of this section, any non-availability charge funds in excess of the cap are not distributed to eligible RA resources, but are

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<sup>26</sup> ISO Tariff, Appendix A, Master Definitions Supplement defines “Outage” as “Disconnection, separation or reduction in capacity, planned or forced, of one or more elements of an electric system.”

instead credited against the real-time neutrality charge for that trade month in accordance with Section 11.5.2.3.

The ISO has determined that the cite to Section 11.5.2.3, Revenue Neutrality Resulting from Changes in LAP Load Distribution Factors, does not result in the correct allocation of these funds. The reference to the methodology in Section 11.5.2.3 limits the allocation of the funds to metered ISO demand that is settled at one of the three default load aggregation points. The ISO believes that it would be more appropriate to allocate any non-availability charge funds above the cap to all metered ISO demand, irrespective of whether it is settled at a default load aggregation point or at another internal location. This allocation methodology is proper because the SCP provisions apply to the RA resources procured by all load in the ISO balancing authority area, irrespective of whether that load is settled at one of the default load aggregation points, and therefore any excess funds should be allocated back to all metered ISO demand. For that reason, the ISO proposes to modify Section 40.9.6.3 to eliminate the reference to Section 11.5.2.3 and to provide that non-availability funds above the cap should be credited against the real-time neutrality charge to metered ISO demand for that trade month.

## **V. EFFECTIVE DATE AND REQUEST FOR WAIVER**

The ISO proposes an effective date of January 1, 2011 for the SCP II tariff provisions, other than Sections 40.9.2(2), 40.9.2(3), 40.9.4.1, and 40.9.4.2.1(1). An effective date of January 1, 2011 is consistent with the calendar-year cycle of the RA program and coincident with the start of the 2011 RA compliance year. Because the four referenced provisions contemplate potential ISO or market participant action prior to January 1, 2011, the ISO requests an effective date for these tariff provisions on the date of the Commission's order approving SCP II for such resources. The ISO requests that the Commission grant all necessary waivers, including a waiver of the notice requirements in Section 35.3 of the Commission's Regulations, to permit the proposed tariff sheets to become effect on these dates.

In addition, the ISO requests that the Commission issue an order approving the SCP II proposal on or about August 23, 2010. A timely order will (1) provide certainty to the parties negotiating RA capacity contracts about how these provisions will apply to the suppliers of RA capacity during the 2011 RA compliance year (load serving entities must submit their RA showings to the ISO by September 30, 2011),<sup>27</sup> and (2) allow the ISO to begin making the necessary changes to its systems and software in order to allow SCP II to be implemented by the January 1, 2011 effective date. This will also afford the ISO adequate time to follow the Business Practice Manual change management process and revise the affected manuals prior to the implementation date.

## **VI. EXPENSES**

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<sup>27</sup> Any delay in issuance of a Commission order beyond the 60-day timeframe could result in SCP implementation being delayed.

No expense or cost associated with this filing has been alleged or judged in any judicial proceeding to be illegal, duplicative, unnecessary, or demonstratively the product of discriminatory employment practices.

## **VII. COMMUNICATIONS**

Correspondence and other communications regarding this filing should be directed to:

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## **VIII. SERVICE**

The ISO has served copies of this transmittal letter, and all attachments, on the California Public Utilities Commission and the California Energy Commission, and all parties with effective Scheduling Coordinator Service Agreements under the ISO Tariff,. In addition, the ISO is posting this transmittal letter and all attachments on the ISO website.

## **IX. CONTENTS OF THIS FILING**

This filing comprises:

This Transmittal Letter

Attachment A: Clean Tariff Sheets from the Tariff

Attachment B: Blacklined Tariff Sheets showing changes from the Tariff

Attachment C: ISO's Revised Draft Final Proposal Standard Capacity Product II

Attachment D: Memorandum to the ISO Board of Governors Re Decision on Standard Capacity Product Phase II

**X. CONCLUSION**

The ISO respectfully requests that the Commission approve the proposed SCP II proposals, without modification, suspension, or hearing on or about August 23, 2010 so they can be implemented to become effective on the dates requested herein.

Respectfully submitted,



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**Attachment A – Clean Sheets**  
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- (2) Capacity under a resource specific power supply contract that existed prior to June 28, 2009 and Resource Adequacy Capacity that was procured under a contract that was either executed or submitted to the applicable Local Regulatory Authority for approval prior to June 28, 2009, and is associated with specific Generating Units or System Resources, will not be subject to Non-Availability Charges or Availability Incentive Payments. Such contracted Resource Adequacy Capacity, except for non Resource-Specific System Resources, will be included in the development of Availability Standards and will be subject to any Outage reporting requirements necessary for this purpose. The exemption will apply only for the initial term of the contract and to the MW capacity quantity and Resource Adequacy Resources specified in the contract prior to June 28, 2009. The exemption shall terminate upon the conclusion of the initial contract term. Exempt contracts may be re-assigned or undergo novation on or after June 28, 2009, but the exemption shall not apply for any extended contract term, increased capacity quantity or additional resource(s) beyond those specified in the contract prior to June 28, 2009. Scheduling Coordinators for Resource Adequacy Resources subject to these contracts will be required to certify the start date of the contract, the expiration date, the Resource ID(s), and the amount of Resource Adequacy Capacity associated with each Resource ID included in the contract. For a Resource Adequacy Resources whose Qualifying Capacity value is determined by historical output, the Capacity under a resource specific power supply contract or Resource Adequacy Capacity that was procured under a contract that was either executed or submitted to the applicable Local Regulatory Authority for approval that meets the requirements in this subsection (2) will not be subject to Non-Availability Charges or Availability Incentive Payments, except that the deadline date for either type of contract shall be August 23, 2010 instead of June 28, 2009.

- (3) For a contract entered into prior to June 28, 2009 that provides for the amount of Resource Adequacy Capacity to increase during the original term of the contract, based on a ratio of the Resource Adequacy Resource's output or due to an addition of capacity, the exemption provided in subsection (2) of this Section 40.9.2 will apply to the additional capacity allowed under the contract; provided that the capacity increase (i) is expressly contained in the provisions of the contract, (ii) occurs during the primary term of the contract; and (iii) does not result from contract extensions or other amendments to the original terms and conditions of the contract. Scheduling Coordinators for Resource Adequacy Resources subject to contracts that provide for such capacity increases or additions must include in their certification, in addition to the requirements of subsection (2) of this Section 40.9.2, (i) the citation to any contract provisions that might entitle them to increased exempt Resource Adequacy Capacity from the contracted resources during the primary term of the contract; (ii) the amount of additional capacity to which they might be entitled; and (iii) the actual effective date of the capacity increase. If the actual amount of capacity and/or the actual effective date of the capacity increase is not known at the time of the initial certification, the Scheduling Coordinator shall provide a supplemental certification(s) when this information becomes known. For a Resource Adequacy Resources whose Qualifying Capacity value is determined by historical output the exemption provided in subsection (2) of this Section 40.9.2 will apply to an increase in the Capacity under a resource specific power supply contract or Resource Adequacy Capacity that was procured under a contract that was either executed or submitted to the applicable Local Regulatory Authority for approval that meets the requirements in this subsection (3), except that the deadline date for either type of contract to be exempt shall be August 23, 2010 instead of June 28, 2009.

- (4) Demand response resources will not be used to determine Availability Standards, will not be subject to Non-Availability Charges or Availability Incentive Payments, and will not be subject to the additional Outage reporting requirements of this Section 40.9.



- (1) Resource Adequacy Resources exempted in Section 40.9.2;
- (2) Non-Resource-Specific System Resources;
- (3) Resources between one (1) MW and ten (10) MW subject to the reporting requirements of Section 40.9.5, until such time that the CAISO has received the outage reports and can begin to utilize the data; and
- (4) Use-Limited Resources for Compliance Year 2010 and 2011.

**40.9.4.2 Availability Calculation for a Resource Adequacy Resource.**

The CAISO will calculate the monthly availability for each Resource Adequacy Resource subject to this Section 40.9.4 as follows:

- (1) The sum of the hourly available Resource Adequacy Capacity of the resource over all Availability Assessment Hours of the month, divided by the sum of the hourly Resource Adequacy Capacity of the resource as designated in the Supply Plan for the resource for those hours, and multiplied by 100 to obtain a number between zero percent (0%) and one hundred percent (100%). A Resource Adequacy Resource will be determined to be less than one hundred percent (100%) available in a given month if it has any Forced Outages or temperature-related ambient de-rates that impact the availability of its designated Resource Adequacy Capacity during the Availability Assessment Hours of that month.

- (2) For Resource Adequacy Resources whose Qualifying Capacity value is determined by historical output, its hourly available Resource Adequacy Capacity for Each Availability Assessment hour will be determined from three components: the total actual amount of Energy the resource delivered during that hour; Adequacy Capacity of the resource as designated in its Supply Plan; and the resource's Net Qualifying Capacity as reduced for that hour by the same percentage by which any Forced Outages or temperature-related ambient de-rates reduced the resource's capacity from its PMax capacity. If the total actual amount of Energy delivered by the resource in an Availability Assessment hour is greater than or equal to the amount of Resource Adequacy Capacity designated in the Supply Plan, the hourly available Resource Adequacy Capacity for the hour will equal the resource's Resource Adequacy Capacity as designated in its Supply Plan. If the total actual amount of Energy delivered by the resource in an Availability Assessment hour is less than the amount of Resource Adequacy Capacity designated in the Supply Plan, the hourly available Resource Adequacy Capacity of the resource for that hour will be the higher of the total actual Energy the resource delivered in that hour or the resource's Net Qualifying Capacity as reduced for that hour by the same percentage by which any Forced Outages or temperature-related ambient de-rates reduced the resource's capacity from its PMax capacity. For Resource Adequacy Resources whose Qualifying Capacity value is determined by historical output, its hourly available Resource Adequacy Capacity for Each Availability Assessment hour will be determined from three components: the total actual amount of Energy the resource delivered during that hour; the Resource Adequacy Capacity of the resource as designated in its Supply Plan; and the resource's Net Qualifying Capacity as reduced for that hour by the same percentage by which any Forced Outages or temperature-related ambient de-rates reduced the resource's capacity from its PMax capacity.

If the total actual amount of Energy delivered by the resource in an Availability Assessment hour is greater than or equal to the amount of Resource Adequacy Capacity designated in the Supply Plan, the hourly available Resource Adequacy Capacity for the hour will equal the resource's Resource Adequacy Capacity as designated in its Supply Plan. If the total actual amount of Energy delivered by the resource in an Availability Assessment hour is less than the amount of Resource Adequacy Capacity designated in the Supply Plan, the hourly available Resource Adequacy Capacity of the resource for that hour will be the higher of the total actual Energy the resource delivered in that hour or the resource's Net Qualifying Capacity as reduced for that hour by the same percentage by which any Forced Outages or temperature-related ambient de-rates reduced the resource's capacity from its PMax capacity. The Resource Adequacy Capacity for each resource will be determined in accordance with the following formula:

$$\text{Hourly Available Resource Adequacy Capacity} = \text{Min} (\text{RA Capacity}, \text{Max} (\text{Actual Energy}, \text{Proportional Derated Capacity}))$$

Where:

RA Capacity = Resource Adequacy Capacity designated in the Supply Plan

Actual Energy = Total actual Energy delivered by the resource in the Availability hour

Proportional Derated Capacity = Resource's Net Qualifying Capacity as reduced for that hour by the same percentage by which any Forced Outages or temperature-related ambient de-rates reduced the resource's capacity from its PMax capacity

If the SC for the Resource Adequacy Resource requests to convert from a Forced Outage to a Maintenance Outage in accordance with Section 9.3.3, the SC must terminate the existing Forced Outage and submit a new request for a Maintenance Outage. In the event the CAISO rejects the request to convert from a Forced Outage to a Maintenance Outage due to reliability criteria, the Outage will not be converted and the Forced Outage will continue. Outages properly submitted for temperature-related ambient derates for a Use Limited Resource will be counted against its availability only until such time as the Use Limited Resource reaches its energy limit constraint, at which time such Outages or derates will no longer count against the availability of the Use Limited Resource for the relevant month.

**40.9.5 Outage Reporting.**

Scheduling Coordinators for Generating Units or Resource-Specific System Resources that are also Resource Adequacy Resources with a maximum output capability of one (1) MW or more, but which do not meet the requirement to provide information on Forced Outages in accordance with Section 9.3.10, shall provide equivalent availability-related information in the form and on the schedule specified in the Business Practice Manuals. This information shall identify all Forced Outages and temperature-related ambient de-rates that have occurred over the previous calendar month and shall contain all relevant details needed to enable the CAISO to perform the availability calculation for the resource in accordance with Section 40.9.4, including: the start and end times of any Outages or

de-rates. Scheduling Coordinators for Resource Adequacy Resources whose maximum output capability is ten (10) MW or more shall report Outage-related information in accordance with the reporting obligations in Section 9.3.10.

**40.9.6 Non-Availability Charges and Availability Incentive Payments.**

A Resource Adequacy Resource that is subject to the availability assessment in accordance with Section 40.9.4 and whose monthly availability calculation under Section 40.9.4.2 is more than two and a half percent (2.5%) below the monthly Availability Standard will be subject to a Non-Availability Charge for the month. A Resource Adequacy Resource subject to Section 40.9.4 whose availability calculation under Section 40.9.4.2 is more than two and a half percent (2.5%) above the monthly Availability Standard will be eligible for an Availability Incentive Payment for the month. For Resources whose Qualifying Capacity is determined by their historical output, the CAISO will calculate but not apply through the settlements process the Non-Availability Charges or Availability Incentive Payments to Trading Days within three months of the effective date that SCP applies to those Resources.

- (2) No Non-Availability Charge will be applied when a Resource Adequacy Resource's actual availability, calculated in accordance with Section 40.9.4.2 for a given month, is equal to or greater than the Availability Standard less two and a half percent (2.5%).
- (3) Any Forced Outage or temperature-related ambient de-rates of a resource that the CAISO has accepted as a substitute for a Resource Adequacy Resource in accordance with Section 40.9.4.2.1 will be applied in calculating the availability of the Resource Adequacy Resource for which it is substituting.

#### **40.9.6.2 Determination of the Non-Availability Charge.**

The per-MW Non-Availability Charge rate will be the Monthly ICPM Capacity Payment price as specified in Schedule 6 of Appendix F of this CAISO Tariff. The Non-Availability Charge for a Resource Adequacy Resource shall be determined by multiplying the resource's capacity subject to the Non-Availability Charge calculated in accordance with Section 40.9.6.1 by the Non-Availability Charge rate.

#### **40.9.6.3 Availability Incentive Payment.**

Scheduling Coordinators for Resource Adequacy Resources that achieve monthly availability that is more than two and a half percent (2.5%) above the monthly Availability Standard are eligible to receive the monthly Availability Incentive Payment. This payment will be funded entirely through the monthly Non-Availability Charges assessed for the same month. For each resource eligible for the Availability Incentive Payment, its eligible capacity will be that portion of its designated Resource Adequacy Capacity equal to its actual availability calculated in accordance with Section 40.9.4.2 minus the Availability Standard percent minus two and a half percent (2.5%). The monthly Availability Incentive Payment rate will equal the total Non-Availability Charges assessed for the month divided by the total Resource Adequacy Capacity eligible to receive the Availability Incentive Payment that month, provided that the Availability Incentive Payment rate shall not exceed three times the Non-Availability Charge rate. The Availability Incentive Payment the CAISO shall pay to each eligible resource will equal the product of its eligible capacity and the Availability Incentive Payment rate. Any remaining Non-Availability Charge funds that are not distributed to eligible Resource Adequacy Resources will be credited against the Real-Time neutrality charge to metered CAISO Demand for that Trade Month.

**Attachment B - Blacklines**  
**Standard Capacity Product Phase II Amendment**  
**ER10-\_\_\_\_-000**  
**June 22, 2010**



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#### **40.9.2 Exemptions.**

The following exemptions apply to the CAISO's Availability Standards program of this Section 40.9:

- (1) Resources with a Pmax less than one (1.0) MW will not be used to determine Availability Standards, will not be subject to Non-Availability Charges or Availability Incentive Payments, and will not be subject to the additional Outage reporting requirements of this Section 40.9.
- (2) Capacity under a resource specific power supply contract that existed prior to June 28, 2009 and Resource Adequacy Capacity that was procured under a contract that was either executed or submitted to the applicable Local Regulatory Authority for approval prior to June 28, 2009, and is associated with specific Generating Units or System Resources, will not be subject to Non-Availability Charges or Availability Incentive Payments. Such contracted Resource Adequacy Capacity, except for non Resource-Specific System Resources, will be included in the development of Availability Standards and will be subject to any Outage reporting requirements necessary for this purpose. The exemption will apply only for the initial term of the contract and to the MW capacity quantity and Resource Adequacy Resources specified in the contract prior to June 28, 2009. The exemption shall terminate upon the conclusion of the initial contract term. Exempt contracts may be re-assigned or undergo novation on or after June 28, 2009, but the exemption shall not apply for any extended contract term, increased capacity quantity or additional resource(s) beyond those specified in the contract prior to June 28, 2009. Scheduling Coordinators for Resource Adequacy Resources subject to these contracts will be required to certify the start date of the contract, the expiration date, the Resource ID(s), and the amount of Resource Adequacy Capacity associated with each Resource ID included in the contract. For a Resource Adequacy Resources whose Qualifying Capacity value is determined by historical output, the Capacity under a resource specific

power supply contract or Resource Adequacy Capacity that was procured under a contract that was either executed or submitted to the applicable Local Regulatory Authority for approval that meets the requirements in this subsection (2) will not be subject to Non-Availability Charges or Availability Incentive Payments, except that the deadline date for either type of contract shall be August 23, 2010 instead of June 28, 2009.

- (3) For a contract entered into prior to June 28, 2009 that provides for the amount of Resource Adequacy Capacity to increase during the original term of the contract, based on a ratio of the Resource Adequacy Resource's output or due to an addition of capacity, the exemption provided in subsection (2) of this Section 40.9.2 will apply to the additional capacity allowed under the contract; provided that the capacity increase (i) is expressly contained in the provisions of the contract, (ii) occurs during the primary term of the contract; and (iii) does not result from contract extensions or other amendments to the original terms and conditions of the contract. Scheduling Coordinators for Resource Adequacy Resources subject to contracts that provide for such capacity increases or additions must include in their certification, in addition to the requirements of subsection (2) of this Section 40.9.2, (i) the citation to any contract provisions that might entitle them to increased exempt Resource Adequacy Capacity from the contracted resources during the primary term of the contract; (ii) the amount of additional capacity to which they might be entitled; and (iii) the actual effective date of the capacity increase. If the actual amount of capacity and/or the actual effective date of the capacity increase is not known at the time of the initial certification, the Scheduling Coordinator shall provide a supplemental certification(s) when this information becomes known. For a Resource Adequacy Resources whose Qualifying Capacity value is determined by historical output the exemption provided in subsection (2) of this Section 40.9.2 will apply to an increase in the Capacity under a resource specific power supply contract or Resource Adequacy Capacity that was procured under a contract that was either executed or submitted to the applicable Local Regulatory Authority for approval that meets the requirements in this

subsection (3), except that the deadline date for either type of contract to be exempt shall be August 23, 2010 instead of June 28, 2009.

- (4) Demand response resources ~~and resources whose Qualifying Capacity value 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 possible double-counting of Outages~~ will not be used to determine Availability Standards, will not be subject to Non-Availability Charges or Availability Incentive Payments, and will not be subject to the additional Outage reporting requirements of this Section 40.9.
- (5) Resource Adequacy Capacity provided through contracts for Energy from non-specified resources delivered within the CAISO Balancing Authority Area will not be used to determine Availability Standards, will not be subject to Non-Availability Charges or Availability Incentive Payments, and will not be subject to the additional Outage reporting requirements of this Section 40.9; and
- (6) Resource Adequacy Resources of a Modified Reserve Sharing LSE or a Load following MSS will be used to determine the Availability Standards and will be subject to any Outage reporting requirements necessary for this purpose. Non-Local Capacity Area Resource Adequacy Resources of a Modified Reserve Sharing LSE or a Load following MSS will not be subject to Non-Availability Charges or Availability Incentive Payments, but those entities shall remain responsible for any other applicable deficiency payments under this CAISO Tariff or the applicable MSS Agreement.

Exclusions from the Availability Standards and Outage reporting requirements established in this Section 40.9 are for this Section 40.9 alone and do not affect any other obligation arising under the CAISO Tariff.

\* \* \*

#### **40.9.4.2 Availability Calculation for a Resource Adequacy Resource.**

The CAISO will calculate the monthly availability for each Resource Adequacy Resource subject to this Section 40.9.4 as follows:

(1) ~~The~~ sum of the hourly available Resource Adequacy Capacity of the resource over all Availability Assessment Hours of the month, divided by the sum of the hourly Resource Adequacy Capacity of the resource as designated in the Supply Plan for the resource for those hours, and multiplied by 100 to obtain a number between zero percent (0%) and one hundred percent (100%). A Resource Adequacy Resource will be determined to be less than one hundred percent (100%) available in a given month if it has any Forced Outages, ~~non-ambient de-rates~~, or temperature-related ambient de-rates that impact the availability of its designated Resource Adequacy Capacity during the Availability Assessment Hours of that month.

(2) For Resource Adequacy Resources whose Qualifying Capacity value is determined by historical output, its hourly available Resource Adequacy Capacity for Each Availability Assessment hour will be determined from three components: the total actual amount of Energy the resource delivered during that hour; Adequacy Capacity of the resource as designated in its Supply Plan; and the resource's Net Qualifying Capacity as reduced for that hour by the same percentage by which any Forced Outages or temperature-related ambient de-rates reduced the resource's capacity from its PMax capacity. If the total actual amount of Energy delivered by the resource in an Availability Assessment hour is greater than or equal to the amount of Resource Adequacy Capacity designated in the Supply Plan, the hourly available Resource Adequacy Capacity for the hour will equal the resource's Resource Adequacy Capacity as designated in its Supply Plan. If the total actual amount of Energy delivered by the resource in an Availability Assessment hour is less than the amount of Resource Adequacy Capacity designated in the Supply Plan, the hourly available Resource Adequacy Capacity of the resource for that hour will be the higher of the total actual Energy the resource delivered in that hour or the resource's Net Qualifying Capacity as reduced for that hour by the same percentage by which any Forced Outages or temperature-related ambient de-rates reduced the resource's capacity from its PMax capacity. For Resource Adequacy Resources whose Qualifying Capacity value is determined by historical output, its hourly available Resource Adequacy Capacity

for Each Availability Assessment hour will be determined from three components: the total actual amount of Energy the resource delivered during that hour; the Resource Adequacy Capacity of the resource as designated in its Supply Plan; and the resource's Net Qualifying Capacity as reduced for that hour by the same percentage by which any Forced Outages or temperature-related ambient de-rates reduced the resource's capacity from its PMax capacity. If the total actual amount of Energy delivered by the resource in an Availability Assessment hour is greater than or equal to the amount of Resource Adequacy Capacity designated in the Supply Plan, the hourly available Resource Adequacy Capacity for the hour will equal the resource's Resource Adequacy Capacity as designated in its Supply Plan. If the total actual amount of Energy delivered by the resource in an Availability Assessment hour is less than the amount of Resource Adequacy Capacity designated in the Supply Plan, the hourly available Resource Adequacy Capacity of the resource for that hour will be the higher of the total actual Energy the resource delivered in that hour or the resource's Net Qualifying Capacity as reduced for that hour by the same percentage by which any Forced Outages or temperature-related ambient de-rates reduced the resource's capacity from its PMax capacity. The Resource Adequacy Capacity for each resource will be determined in accordance with the following formula:

$$\text{Hourly Available Resource Adequacy Capacity} = \text{Min (RA Capacity, Max (Actual Energy, Proportional Derated Capacity))}$$

Where:

RA Capacity = Resource Adequacy Capacity designated in the Supply Plan

Actual Energy = Total actual Energy delivered by the resource in the Availability hour

Proportional Derated Capacity = Resource's Net Qualifying Capacity as reduced for that hour by the same percentage by which any Forced Outages or

temperature-related ambient de-rates reduced the resource's capacity from its PMax capacity

If the SC for the Resource Adequacy Resource requests to convert from a Forced Outage to a Maintenance Outage in accordance with Section 9.3.3, the SC must terminate the existing Forced Outage and submit a new request for a Maintenance Outage. In the event the CAISO rejects the request to convert from a Forced Outage to a Maintenance Outage due to reliability criteria, the Outage will not be converted and the Forced Outage will continue. Outages properly submitted for temperature-related ambient derates for a Use Limited Resource will be counted against its availability only until such time as the Use Limited Resource reaches its energy limit constraint, at which time such Outages or derates will no longer count against the availability of the Use Limited Resource for the relevant month.

The start and end times used in calculating the availability of each resource each month will be the Outage time reported in the SLIC system or through the alternative reporting process of Section 40.9.5 for resources not included in the SLIC system.

\* \* \*

#### **40.9.5 Outage Reporting.**

Scheduling Coordinators for Generating Units or Resource-Specific System Resources that are also Resource Adequacy Resources with a maximum output capability of one (1) MW or more, but which do not meet the requirement to provide information on Forced Outages in accordance with Section 9.3.10, shall provide equivalent availability-related information in the form and on the schedule specified in the Business Practice Manuals. This information shall identify all Forced Outages, ~~non-ambient de-rates,~~ and temperature-related ambient de-rates that have occurred over the previous calendar month and shall contain all relevant details needed to enable the CAISO to perform the availability calculation for the resource in accordance with Section 40.9.4, including: the start and end times of any Outages or de-rates, the MW availability in all Availability Assessment Hours, and the causes of any Forced Outages or de-rates. Scheduling Coordinators for Resource Adequacy Resources whose maximum output capability is ten (10) MW or more shall report Outage-related information in accordance with the reporting obligations in Section 9.3.10.

#### **40.9.6 Non-Availability Charges and Availability Incentive Payments.**

A Resource Adequacy Resource that is subject to the availability assessment in accordance with Section 40.9.4 and whose monthly availability calculation under Section 40.9.4.2 is more than two and a half percent (2.5%) below the monthly Availability Standard will be subject to a Non-Availability Charge for the month. A Resource Adequacy Resource subject to Section 40.9.4 whose availability calculation under Section 40.9.4.2 is more than two and a half percent (2.5%) above the monthly Availability Standard will be eligible for an Availability Incentive Payment for the month. For Resources whose Qualifying Capacity is determined by their historical output, the CAISO will calculate but not apply through the settlements process the Non-Availability Charges or Availability Incentive Payments to Trading Days within three months of the effective date that SCP applies to those Resources.

#### **40.9.6.1 Determination of Resource Adequacy Capacity Subject to Non-Availability Charge.**

The amount of Resource Adequacy Capacity of a Resource Adequacy Resource subject to the Non-Availability Charge will be determined as follows:

- (1) A Resource Adequacy Resource with actual availability calculated in accordance with Section 40.9.4.2 that is less than the Availability Standard minus the tolerance band of two and a half percent (2.5%) for a given month will have the Non-Availability Charge assessed to that portion of its non-exempt Resource Adequacy Capacity determined in accordance with the following formula:

$$P = \max\{0, RA*(S - .025 - X/100)\}$$

Where:

P = The RA Resource's RA Capacity subject to Non-Availability Charge

S = Monthly Availability Standard as a fraction, so that  $0 < S < 1.0$

RA = The RA Resource's RA Capacity (MW) as designated in its Supply Plan, less any exempt capacity

X = The mean of the RA Resource's hourly available RC Capacity over all Availability Assessment Hours of the month (MW).

- (2) No Non-Availability Charge will be applied when a Resource Adequacy Resource's actual availability, calculated in accordance with Section 40.9.4.2 for a given month, is equal to or greater than the Availability Standard less two and a half percent (2.5%).
- (3) Any Forced Outage, ~~non-ambient de-rate~~, or temperature-related ambient de-rates of a resource that the CAISO has accepted as a substitute for a Resource Adequacy Resource in accordance with Section 40.9.4.2.1 will be applied in calculating the availability of the Resource Adequacy Resource for which it is substituting.

\* \* \*

#### **40.9.6.3 Availability Incentive Payment.**

Scheduling Coordinators for Resource Adequacy Resources that achieve monthly availability that is more than two and a half percent (2.5%) above the monthly Availability Standard are eligible to receive the monthly Availability Incentive Payment. This payment will be funded entirely through the monthly Non-Availability Charges assessed for the same month. For each resource eligible for the Availability Incentive Payment, its eligible capacity will be that portion of its designated Resource Adequacy Capacity equal to its actual availability calculated in accordance with Section 40.9.4.2 minus the Availability Standard percent minus two and a half percent (2.5%). The monthly Availability Incentive Payment rate will equal the total Non-Availability Charges assessed for the month divided by the total Resource Adequacy Capacity eligible to receive the Availability Incentive Payment that month, provided that the Availability Incentive Payment rate shall not exceed three times the Non-Availability Charge rate. The Availability Incentive Payment the CAISO shall pay to each eligible resource will equal the product of its eligible capacity and the Availability Incentive Payment rate. Any remaining Non-Availability Charge funds that are not distributed to eligible Resource Adequacy Resources will be credited against the Real-Time neutrality charge to metered CAISO Demand for that Trade Month ~~in accordance with Section 11.5.2.3.~~

\* \* \*



**Attachment C**

**ISO's Revised Draft Final Proposal Standard Capacity Product II**



California ISO  
Your Link to Power

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**Revised Draft Final Proposal**  
**Standard Capacity Product II**

**April 6, 2010**

# Standard Capacity Product II

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## 1. Executive Summary

There are two purposes for the Standard Capacity Product Phase II (SCP II) market design 1) Comply with the SCP FERC Order dated June 26, 2009 which required the ISO to implement SCP availability standards for intermittent resources<sup>1</sup>. 2) Clarify some of the existing SCP tariff wording. This revised draft final proposal reflects the final scope and result of the SCP II effort. The key elements of this proposal are:

- Implement availability standards, incentives, unit substitution and grandfathering for resources whose qualifying capacity value (QC) is determined by historical output;
- Implement clarifications to the existing SCP Tariff provisions to further elucidate the rules that are currently in place.

During the stakeholder process some related RA elements were added and removed from the scope of this design. First, Demand Response (DR) RA resources were included as part of the initiative until further evaluation revealed that a separate market design and stakeholder process would be required to align with the timing of other DR efforts and also so that emphasis could be placed on designing the appropriate availability standards for these unique resources. Later on the streamlining of the non-resource specific system RA (NRS-RA) resources was added to the scope and ultimately removed because it was subsumed in another ongoing stakeholder process devoted to NRS-RA. Finally, at stakeholder's request the ISO developed two proposals for including rules regarding the obligation of suppliers to replace RA capacity scheduled for planned outage. The goal of including this in SCP II was to enhance the fungibility and tradability of SCP by removing this obligation from load serving entities (currently administered by the California Public Utilities Commission (PUC)). In the end, most stakeholders did not support either of the ISO's proposals and the ISO decided to move this important element of the RA process into another upcoming stakeholder process to develop a more comprehensive solution.

Under this proposal the ISO has been ordered by FERC to extend SCP to RA resources whose QC is determined by historical output. Several issues have been raised during the stakeholder process related to applying the SCP provisions to these resources. The ISO believes that the current methodology that includes forced outages in the QC determination of these resources provides the proper availability incentives for resource adequacy and avoids the issues regarding the application of the SCP availability charges and payments to these resources. However, the ISO has been given clear direction from the FERC to apply the SCP standards to these resources. Therefore, the ISO has been working with the PUC in their concurrent RA proceeding<sup>2</sup> to align the counting rules for these types of resources to ensure that potential double counting of outages does not occur. As a result the ISO has developed a methodology to calculate the monthly availability of these resources based on the idea that a forced outage or temperature related ambient derate make the nominal capacity less than 100% available during an SCP assessment hour and that derate may proportionately reduce its ability to fully deliver its NQC in that hour. In the event that the actual energy delivered in that assessment hour is greater than the RA MW listed on the supply plan, the resource will be considered fully available.

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<sup>1</sup> These resources include wind, solar, non-dispatchable cogeneration, non-dispatchable biomass and non-dispatchable geothermal facilities.

<sup>2</sup> *Order Instituting Rulemaking to Oversee the Resource Adequacy Program, Consider Program Refinements, and Establish Annual Local Procurement Obligations.* Scoping Memo and Ruling of Assigned Commissioner and Administrative Law Judge Determining the Scope, Schedule, and Need for Hearing in the Proceeding December 23, 2009.

The second element of this proposal deals with clarification of existing SCP tariff language. There are two minor corrections to the RA section of the tariff (Section 40) that are being updated to clarify their meaning. First, in Section 40.9.4.2 which provides for the types of outages that can affect the availability of an RA resource, the phrase “Forced Outages, non-ambient de-rates, or temperature-related ambient de-rates” will be modified to remove the term “non-ambient de-rates” because non-ambient de-rates are included in the definition of Forced Outage. Second, Section 40.9.6.3 states that excess non-availability funds should be allocated in accordance with Section 11.5.2.3, which allocates funds to metered demand in the corresponding default LAP. We believe that the allocation should go to all metered CAISO Demand. Accordingly the ISO is proposing to modify this section.

## 2. Introduction

In 2008 the implementation of a Standard Capacity Product (SCP) was considered by stakeholders to be a crucial step forward in streamlining California’s Resource Adequacy (RA) program. As the RA program evolved over the years, participants identified a need to develop a standardized capacity product to facilitate the selling, buying and trading of capacity to meet RA requirements. Stakeholders affirmed to the ISO that their ability to efficiently transact RA contracts was hindered by the existing method of negotiating agreements between parties without a standard product definition for trade. The need for resolution was highlighted during the ISO’s Market Initiatives Roadmap process where the Standard RA Capacity Product was ranked highest priority out of a list of over 70 initiatives.<sup>3</sup> Stakeholders expressed their desire to have SCP implemented in the ISO Tariff as soon as possible in anticipation of the 2010 delivery year. As a result, in 2008 and 2009 the ISO conducted a stakeholder process for designing the SCP. Ultimately, the SCP initiative was approved by the ISO Board of Governors in March 2009. The ISO submitted its filing which was accepted in part and rejected in part by FERC in its Order dated June 26, 2009 (June 26 Order).

In the June 26 Order FERC granted temporary exemption from the SCP availability charges<sup>4</sup> and payments for:

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<sup>3</sup> *Market Initiatives Roadmap Process, Final Report on Ranking of High Priority Market Initiatives 7/7/2008* <http://caiso.com/1ff9/1ff9aee434530.pdf>

<sup>4</sup> Tariff Section 40.9.2 (<http://www.caiso.com/2471/24719720e850.pdf>) defines the types of resources that are currently exempt from the availability charges and payments of the Standard Capacity Product. Specifically subsection (4) describes these types of resources that are temporarily deferred: *Demand response resources and resources whose Qualifying Capacity value 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 possible double-counting of Outages will not be used to determine Availability Standards, will not be subject to Non-Availability Charges or Availability Incentive Payments, and will not be subject to the additional Outage reporting requirements of this Section 40.9.*

- Resources whose qualifying capacity value is determined by the CPUC or a LRA using historical output that has not been adjusted to correct for the possible double-counting of outages<sup>5</sup> (this includes wind, solar, non-dispatchable cogeneration, non-dispatchable biomass and non-dispatchable geothermal facilities) and
- Demand Response

With regard to the first bullet the Order states:

*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 derate. As long as this counting feature of the market continues, we find the proposed exemption to be permissible 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...*

This initiative known as "SCP II" proposes a methodology for ending temporary exemption for these types of resources in compliance with the June 26 Order. As explained later, a separate stakeholder process will be conducted to develop the appropriate availability metrics for Demand Response.

Two tariff clarifications are also included in this SCP II proposal. Neither of these changes will affect the SCP design; instead they further elucidate the rules that are currently in place.

Section 3 of this paper will provide more detail regarding the scope of this initiative and will cover the reasoning for those items, which, although they may have been considered, during the process, ended up out of scope. These items include ending the temporary exemption for Demand Response RA resources, changing the provisions for Non-Resource Specific RA System Resources, and tariff provisions to consider the replacement of RA capacity scheduled for planned outage.

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<sup>5</sup> Under the existing CPUC RA counting rules, resources whose qualifying capacity is determined by historical output are penalized for poor performance by reducing their qualifying capacity for the following compliance year. The historical output used in the calculation is not currently adjusted to reflect the decrease in output that may arise during the period of a forced outage. Under SCP, the actual availability of a resource in a given month is determined based on the extent to which it has forced outages that impact its RA capacity. Applying both of these standards to these types of resources could be exceedingly severe because a resource potentially could be penalized for the same outage (or derate) twice.

Section 4 of the paper covers the methodology for the availability standard proposed for intermittent RA resources.

The last section, Section 5, outlines the remaining elements of the stakeholder process. The ISO intends bring this initiative to the Board of Governors in May followed by a FERC filing in June. All comments should be submitted to [scpm@caiso.com](mailto:scpm@caiso.com).

### **3. Scope of the SCP II Proposal**

The stakeholder process for this initiative seemed ever-changing. On December 4, 2009 the ISO released the first SCP II Issue Paper. The scope of the initiative spanned the availability standards, availability incentives, unit substitution and grandfathering for temporarily exempt RA resources. Two topics were specifically excluded – the consideration of including scheduled outages within SCP (also known as the “replacement rule”) and implementation issues associated with the existing SCP program. This initial vision was limited to complying with the June 26 Order.

Following a stakeholder conference call, stakeholder comments, involvement in the California Public Utilities Commission (PUC) 2009 RA proceeding and internal research and analysis the ISO issued its straw SCP II proposal on January 19, 2010. The scope changed in a number of ways. First, it was determined that demand response (DR) would require a separate stakeholder process due to the ongoing process of defining the DR products and determining the appropriate availability measures. Second, a separate stakeholder process had commenced to address the outage and generated bid issues associated with Non-Resource Specific System Resources (NRS-RA) which would provide the ability to streamline the availability measures of these RA resources within SCP. This new topic was included in the scope of SCP II. Third, based on feedback from stakeholders and the PUC, the ISO offered to work collaboratively with the PUC to transition the treatment of scheduled outages for RA purposes from the PUC’s replacement rule for load serving entities to another approach putting the obligation for replacing this capacity on the supplier. Finally, the ISO included some clarifications to the existing SCP tariff provisions in this document.

On February 19, the SCP II vision was further refined in the Draft Final Proposal. In this document, the ISO provided some additional clarity to the availability calculation and, based on additional feedback regarding our straw proposal for the replacement rule, refined the ISO’s approach to the supplier’s obligation to substitute for capacity on planned outage. Additionally, due to timing issues, the NRS-RA topic was moved over to the stakeholder process dealing with that overall issue and was eliminated from the SCP II initiative. In addition, changes were made to the availability calculation to now include a proportional derate attribute to reflect availability for resources whose qualifying capacity (QC) is determined by historical output. Additional detail regarding this methodology can be found in Section 4 of this paper. The replacement rule provisions changed also. In the previous straw proposal, a supplier could choose whether to provide a replacement for their RA capacity that was going to have a scheduled outage (although they ran the risk of ICPM charges). In the draft final proposal, the procurement of replacement of RA capacity on planned outage became mandatory.

A number of stakeholders had concerns about both the availability calculation and the proposed replacement rule in the draft final proposal. In an effort to provide more time to gain broader stakeholder support and iron out further details, the original plan to take the SCP II proposal to the Board of Governors in March changed and a May Board date was established. In March, the ISO issued a paper offering some alternative options to the availability calculation and the replacement rule for stakeholder review and comment. First, the ISO offered an alternative to

the availability calculation which considers the actual energy a resource produced during a forced outage in assessing the SCP metric. Also, some stakeholders suggested that cogeneration facilities should be handled differently than other intermittent RA resources and while this was considered, the ISO concluded that all intermittents should be handled in the same fashion. Second, both of the previous versions of replacement rule (straw proposal and draft final proposal) were reviewed and refined. The ISO also proposed that the PUC maintain its current replacement rules to allow further exploration of alternative approaches.

As a result of all of these considerations and discussions, this revised draft final proposal reflects the final scope of the SCP II effort. The key elements of this proposal are:

- Implement availability standards, incentives, unit substitution and grandfathering for resources whose qualifying capacity value is determined by historical output;
- Implement clarifications to the existing SCP Tariff provisions to further elucidate the rules that are currently in place.

The following elements are not in scope:

- Implementation issues associated with the existing SCP process
- Demand Response – The ISO will begin a separate stakeholder process to design the implementation of SCP for these resources
- NRS-RA modifications – These are being handled in another stakeholder process
- Replacing RA capacity on scheduled outage – This effort should remain with the PUC until the ISO develops a comprehensive plan for RA capacity in the upcoming stakeholder process related to the replacement of ICPM.

#### **4. Implementation of SCP for Intermittent Resources**

In its proposal on Phase 1 of the CPUC rulemaking proceeding on RA matters for 2011,<sup>6</sup> the ISO suggested changes to the CPUC RA counting rules that would resolve the potential double counting issue for resources whose QC value is determined by historical output and clear a path for the ISO to implement the non-availability charges and payments to these types of resources. The ISO proposed that the CPUC modify its counting methodology for these resources by either (1) eliminating the forced outage and derate hours from its calculation of QC for RA resources, or (2) use proxy energy output values for these hours. The second approach conforms to the methodology that the CPUC previously approved to account for planned outages in the QC calculation for these types of resources.<sup>7</sup> In this methodology the CPUC would rely on historical outage data it has gathered to determine the hours in which a proxy value would be inserted to determine a QC value, so that there would be no adverse impact on a resource's QC due to forced outages or derates.

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<sup>6</sup> *Order Instituting Rulemaking to Oversee the Resource Adequacy Program, Consider Program Refinements, and Establish Annual Local Procurement Obligations R.09-10-032*, California Independent System Operator Corporation Proposals on Phase 1 Issues.  
<http://www.caiso.com/271c/271c77ad5da50.pdf>

<sup>7</sup> *Order Instituting Rulemaking to Consider Annual Revisions to Local Procurement Obligations and Refinements to the Resource Adequacy Program*. Decision Adopting Local Procurement Obligations for 2010 and Further Refining the Resource Adequacy Program Decision 09-06-028 June 18, 2009 pg 29 [http://docs.cpuc.ca.gov/published/FINAL\\_DECISION/102755.htm](http://docs.cpuc.ca.gov/published/FINAL_DECISION/102755.htm)



In compliance with the June 26 Order, it is clear that implementing SCP for resources whose QC value is determined by historical output is not limited solely to CPUC jurisdictional entities. These types of RA resources who are subject to LRAs other than the CPUC will also be subject to the standard capacity product provisions with the implementation of SCP II. Currently LRAs use their own methodology to establish their qualifying capacity criteria, and in the event that they don't the ISO will fall back on Section 40.8 of the Tariff, *CAISO Default Qualifying Capacity Criteria* to establish these values.

Consistent with its proposal to the CPUC, the ISO in this initiative proposes to extend to the exempt intermittent resources the same availability incentives, unit substitution and grandfathering rules that are currently in effect and applicable to other RA resources.

Under the current ISO SCP tariff provisions for RA Resources, the ISO establishes a unique target availability value for each month of the compliance year, calculated using the historic actual availability of the RA resource fleet during the availability assessment hours during each respective month over each of the past three years.<sup>8</sup> This historical data is acquired from SLIC. The ISO proposes to continue this methodology to the extent that the data is available for these types of resources. If SLIC does not contain the monthly data for the past three years, the ISO will treat these resources in a similar manner to new RA resources. This means that as the outage data is collected it will be included in future availability standard calculations.

The source of forced outage and temperature related ambient derate information for these resources will also conform to the current SCP rules<sup>9</sup>. All resources over 10 MW are required to report this information in the ISO's SLIC system per Tariff Section 9.3.10. Resources that are 1 MW or more but which are below the 10 MW threshold are required to provide this outage and derate information as described in Tariff Section 40.9.5 and in the *BPM for Reliability Requirements* Section 8.4.1.1. RA resources between 1 and 10 MW are required to report their forced outage information in SLIC no later than 3 days after the end of the month. ISO Operating Procedure T-113 also provides additional detail regarding this process. As described in Tariff Section 40.9.2, devoted to the SCP availability calculations non-availability will still be determined based on forced outages and temperature related ambient derates. In their verbal and written comments some stakeholders expressed concern regarding the applicability of these SLIC reporting types to their various forms of generation. In general, forced outages are those situations where a resource is expected to be available but due to some type of unexpected occurrence (e.g. mechanical failure) the resource cannot meet its capacity obligation. This means that, for example, normal variations in output from a Qualifying Facility, will not constitute a forced outage.

For RA resources whose NQC is based on their historical energy production,<sup>10</sup> the ISO proposes the following methodology for calculating the actual monthly SCP availability. The proposed methodology is based on the principle that the observed historical production of such

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<sup>8</sup> Per Tariff Section 40.9.4.1 there are a few types of RA resources that are currently excluded from this calculation. They are (1) resources exempted in Tariff Section 40.9.2 (2) Non-Resource Specific System Resources, (3) resources between 1 and 10 MW subject to Section 40.9.5 until such time that the CAISO has received outage reports and can begin to utilize that data, and (4) use-limited resources for compliance years 2010 and 2011.

<sup>9</sup> In a separate stakeholder process intermittent resource outage reporting rules have been implemented to refine the forecasting accuracy; however they may result in more stringent application of availability standards for intermittent resources. The ISO intends to address this issue and ensure that all RA resources forced outages are tracked at the same level.

<sup>10</sup> These types of resources include wind, solar, non-dispatchable cogeneration, non-dispatchable biomass and non-dispatchable geothermal facilities.

a resource, on which its NQC is based, occurred during hours when the nominal capacity of the resource (e.g., its Pmax) was fully available.<sup>11</sup> For such a resource, any forced outage or temperature related ambient derate that makes its nominal capacity less than fully available during an SCP assessment hour will proportionately reduce its ability to fully deliver its NQC in that hour. After the month if the actual energy delivered was greater than or equal to the RA sold then the RA resource will be considered 100% available. However, if the actual energy delivered was less than the RA sold the ISO will measure availability on the maximum of the actual energy delivered or the proportional derate value.

**Determination of Proportional Derate value**

Resource information

Pmax	100 MW
Net Qualifying Capacity	15 MW
RA Sold	10 MW

Example 1 – 20 MW Derate

In this example assume that the resource’s Pmax is derated from 100 MW to 80 MW due to a forced outage or temperature-related ambient derate. Because the NQC of 15 MW was calculated based on the resource’s production when the 100 MW of capacity was fully available, having the resource only 80 percent available (i.e., 80 MW capacity instead of 100 MW) will limit its availability to meet its RA obligation to 12 MW, or 80 percent of its 15 MW NQC. If the resource had sold 15 MW of RA capacity, this derate would have caused it to be 3 MW short for purposes of its SCP availability metric. This example assumed, however, the resource sold only 10 MW of RA capacity, which is less than the 12 MW it is available to provide, and therefore the resource is considered to be 100 percent available and its SCP metric is not affected by the 20 percent derate to its Pmax.

Example 2 – 50 MW Derate

In this example assume that the resource is derated from 100 MW to 50 MW. Because its NQC of 15 MW was based on the resource’s production when the 100 MW of capacity was fully available, having the resource only 50 percent available will limit its availability to meet its RA obligation to 7.5 MW, or 50 percent of its 15 MW NQC. Since the resource sold 10 MW of RA capacity and is now capable of providing only 7.5 MW of RA, the resource is considered to be only 75 percent available for purposes of the SCP availability metric in this hour.

**Consideration of the Actual Energy Delivered**

Using Example 2 as a guide, the modified calculation would compare the resource’s actual energy delivery to the ISO grid during the same hour, and assess the SCP metric for the hour based on the formula:

$$\text{Min}(100\%, \text{Max}(\text{energy delivery}; \text{proportional derate metric})).$$

Example 1. Actual energy delivery for the hour = 12 MWh. Resource is 100% available.

Example 2. Actual energy delivery for the hour = 9 MWh. Resource is 90% available.

Example 3. Actual energy delivery for the hour = 7.5 MWh or less. Resource is 75% available.

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<sup>11</sup> Accordingly, as noted above, in parallel to the ISO’s SCP II initiative the ISO has proposed revisions to the CPUC’s qualifying capacity methodology for such resources to ensure that those hours in which a resource’s nominal capacity was not fully available will not adversely affect the resource’s qualifying capacity value.

The availability calculation for other generating units and System Resources will not be changed by this methodology.

It is anticipated that the unit substitution policy in Tariff Section 40.9.4.2.1 and grandfathering rules in tariff section 40.9.2 (3) will apply, as they do today although the date for grandfathering of these resources has changed from previous proposals. All SCP II-type RA capacity under a resource specific supply contract that was signed or submitted to the applicable regulatory authority prior to FERC's approval of this filing will be eligible for grandfathering as described in the tariff.<sup>12</sup>

## 5. Clarifications to Existing SCP Tariff Provisions

There are two minor changes which the ISO is proposing to clarify existing tariff language.

- Section 40.9.4.2 – Availability Calculation for a Resource Adequacy Resource – describes the availability determination as follows:

*“A Resource Adequacy Resource will be determined to be less than one hundred percent (100%) available in a given month if it has any Forced Outages, non-ambient derates, or temperature-related ambient derates that impact the availability of its designated Resource Adequacy Capacity during the Availability Assessment Hours of that month.”*

The phrase *“Forced Outages, non-ambient derates, or temperature-related ambient derates”* suggests that there are three different states that could affect the availability of a resource instead of two. The ISO proposes to correct the language to read *“Forced Outages or temperature-related ambient derates.”*

- Section 40.9.6.3 – Availability Incentive Payment – This section of the tariff describes the methodology for determining the eligibility of RA Resources to receive an availability incentive payment, the amount that they will be paid and in the event there are excess funds after all RA Resources have been awarded their availability incentive payments, the manner in which excess funds will be allocated. Because the amount of potential availability incentive payment is capped at three times the non-availability charge rate for that trade month, it is possible that excess funds may exist. The last sentence in this paragraph explains the allocation of any excess non-availability charge funds that are not distributed to eligible RA resources in a trade month. Under Section 40.9.6.3:

*“Any remaining Non-Availability Charge funds that are not distributed to eligible Resource Adequacy Resources will be credited against the Real-Time neutrality charge for that Trade Month in accordance with Section 11.5.2.3”.*

The cite to Section 11.5.2.3, Revenue Neutrality Resulting from Changes in LAP Load Distribution Factors, does not reflect the ISO's intent in the previous SCP stakeholder initiative. Accordingly, the ISO proposes to change the wording *“credited against the Real-Time neutrality charge for that Trade Month in accordance with Section 11.5.2.3”* to read *“credited against the Real-Time neutrality charge to metered CAISO Demand for that Trade Month.”* The original language referring to the methodology of Section 11.5.2.3 would limit the allocation of funds to metered CAISO Demand<sup>13</sup> that is

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<sup>12</sup> Previous proposals for SCP II we contemplated a grandfathering date of June 28, 2009.

<sup>13</sup> CAISO Demand is defined in the tariff as “Power delivered to Load Internal to CAISO Balancing Authority Area.” Metered CAISO Demand includes all CAISO Demand that is metered.

scheduled at one of the three Default LAPs. The ISO now proposes to clarify Section 40.9.6.3 to reflect the original intent of the SCP proposal, which was to allocate the funds to all metered CAISO Demand, irrespective of whether it is scheduled at a Default LAP or at another internal location.

## **6. Next Steps**

April 9 – SCP II Revised Draft Final Proposal Presentation available on ISO website (<http://caiso.com/2479/2479e7362d1e0.html>)

April 13 –Conference Call with Stakeholders

April 20 – Stakeholder Comments due to [scpm@caiso.com](mailto:scpm@caiso.com)

May 17, 18 – Board of Governors meeting

**Attachment D**

**Memorandum to the ISO Board of Governors Re: Decision on Standard Capacity Product  
Phase II**



# Memorandum

**To:** ISO Board of Governors

**From:** Keith Casey, Vice President, Market & Infrastructure Development

**Date:** May 10, 2010

**Re:** **Decision on Standard Capacity Product Phase II**

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*This memorandum requires Board action.*

## EXECUTIVE SUMMARY

The first phase of the ISO standard capacity product (SCP), which was approved last year, provides a standardized framework for resource adequacy contracting and provides enhancements to the resource adequacy program. Resource adequacy requirements are imposed on load serving entities by the California Public Utilities Commission (CPUC) and other local regulatory agencies to ensure that the ISO has adequate generation capacity offered into its markets to reliably operate the grid. Before the ISO's standard capacity product was implemented, there were no standard performance measures that provided incentives for resource adequacy units being counted on for grid reliability to be available to the ISO.

The ISO benefits from the standard capacity product by having an accepted set of minimum standards and incentives in the tariff to increase the availability of these resources. Stakeholder contracting negotiations are also streamlined by having a common set of standards in the tariff.

Management is seeking Board approval of the following two proposed enhancements to the resource adequacy program, known as standard capacity product phase II (SCP II):

1. Extending SCP to wind, solar, non-dispatchable cogeneration, non-dispatchable biomass and non-dispatchable geothermal resource adequacy resources that were previously exempt from the SCP measures; and
2. Modifying certain existing tariff sections related to resource adequacy to further elucidate current rules.

The initial standard capacity product was approved by FERC in June 2009. The key elements of the standard capacity product include:

- Availability standards. To ensure that there is enough generation capacity to meet the ISO's needs, there is an expectation that the full contracted amount of capacity of resource adequacy resources will be available to the ISO, i.e., the resource is not on a forced equipment outage or derate that diminishes its ability to provide the full amount of its contractual capacity obligation. Under the standard capacity product, resource availability is measured on a monthly basis and compared against a single availability target based on the historic performance of the resource adequacy resource fleet during the peak hours of each month of the previous three years.
- Availability incentives. This product provides incentives for each resource adequacy resource to meet or exceed the target availability standard. On a monthly basis the ISO assesses non-availability charges to resources whose availability fall short of the target and provides credit payments to resources whose availability exceeds the target. Availability payments are funded on a revenue neutral basis through the financial penalty revenues.
- Resource substitution. This provision allows a supplier of resource adequacy capacity tied to a specific generating unit to substitute an alternative resource in the event of a forced outage. The resource owners benefit from this provision by avoiding potential charges for non-availability and the ISO benefits by allowing additional flexibility to avoid backstop procurement.

In its order, FERC accepted the ISO's proposal to exempt renewable, non-dispatchable cogeneration, and demand response resources from the standard capacity product availability standards to provide time for the CPUC to align their rules to avoid possible double counting of forced outages and potentially over penalizing these resources. At that time, the ISO committed to work with the CPUC and file further tariff provisions to extend the standard capacity product availability standards to all resource adequacy resources.

This proposal brings the ISO one step closer to that goal by extending the standard capacity product provisions to include wind, solar, non-dispatchable cogeneration, non-dispatchable biomass and non-dispatchable geothermal facilities. Additionally, Management proposes changes to certain aspects of existing resource adequacy rules that will:

- Clarify the types of outages considered when determining resource non-availability; and
- Ensure that credit payments are properly allocated to load.

### ***MOTION***

***Moved, that the ISO Board of Governors approves the policy to implement the second phase of standard capacity product and approves the modifications to existing resource adequacy rules, as detailed in the memorandum dated May 10, 2010; and***

***Moved, that the ISO Board of Governors authorizes Management to make all necessary and appropriate filings with the Federal Energy Regulatory Commission to implement the proposed tariff change.***

## **DISCUSSION AND ANALYSIS**

### ***Standard capacity product extension***

For several years, stakeholders urged the ISO to adopt certain tariff elements to standardize aspects of bilateral resource contracts to facilitate the contracting process. Following an extensive stakeholder process, the ISO Board of Governors approved the first phase of the standard resource adequacy capacity product proposal in March 2009. The key elements of the SCP decision are the implementation of resource availability standards, creating a target for resource adequacy resource performance and availability incentives to encourage resources to meet or exceed that standard. FERC approved the ISO's tariff implementing these changes in June 2009. In its order, FERC granted temporary exemptions from the standard capacity product availability payments and charges for:

1. Resources whose qualifying capacity value is determined by the CPUC or a local regulatory authority using historical output that has not been adjusted to correct for the possible double-counting of outages (this includes wind, solar, non-dispatchable cogeneration, non-dispatchable biomass and non-dispatchable geothermal facilities); and
2. Demand response.

FERC directed the ISO to work with stakeholders, the CPUC, and local regulatory authorities to determine when the proposed exemptions should ultimately sunset. This initiative, known as "SCP II", addresses the FERC order by extending the standard capacity product provisions to the first category of resource adequacy resources listed above.

Implementing the standard capacity product for resources whose qualifying capacity value is determined by historical output is not limited solely to CPUC jurisdictional entities. It also applies to resource adequacy resources that are subject to local regulatory authorities. Currently local regulatory authorities use their own methodology to establish their qualifying capacity criteria, and in the event that they fail to do so, the ISO applies a default methodology defined in the tariff to establish these values.

For resource adequacy resources whose net qualifying capacity<sup>1</sup> is based on their historical energy production, the ISO proposes calculating the actual monthly standard

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<sup>1</sup> Net qualifying capacity is determined by the ISO based on a deliverability assessment of the CPUC-determined qualifying capacity values.



capacity product availability based on the principle that the observed historical production of such a resource, on which its net qualifying capacity is based, occurred during hours when the nominal capacity of the resource was fully available. For such a resource, any forced outage or temperature related ambient de-rate that makes its nominal capacity less than fully available during an standard capacity product assessment hour will have its availability proportionally reduced in the monthly standard capacity product availability calculation. As a secondary check, the ISO will review the actual energy that these resources produced to ensure that, during a forced outage period, they do not get assessed charges if they produced energy in excess of the amount of resource adequacy capacity that they were obligated to provide.

Management is not at this time proposing to apply the standard capacity product availability calculations to demand response resources. We intend to commence a separate stakeholder process later this year to develop appropriate standard capacity product provisions for demand response resource adequacy resources for the 2012 resource adequacy compliance year (beginning in January 2012).

### ***SCP tariff modifications***

In addition to extending the SCP provisions to previously exempt resources, the ISO proposal for SCP II also includes two tariff modifications to the resource adequacy section of the tariff (section 40). First, in Section 40.9.4.2 which provides for the types of outages that can affect the availability of an resource adequacy resource, the phrase “Forced Outages, non-ambient de-rates, or temperature-related ambient de-rates” will be modified to remove the term “non-ambient de-rates” because non-ambient de-rates are included in the definition of forced outage. Second, Section 40.9.6.3 states that excess non-availability funds should be allocated in accordance with Section 11.5.2.3, which allocates funds to metered demand in the corresponding default load aggregation point. However, the original SCP policy intended that the allocation should go to all metered ISO demand. Accordingly Management proposes to modify this section.

### **POSITIONS OF THE PARTIES**

In their most recent comments on the SCP II proposal, the majority of the market participants (Cogeneration Association of California, NextEra, SDG&E, PG&E, Dynegy, Calpine) either supported or did not object to the proportional de-rate availability calculation methodology. However, three of the commenters (PG&E, Dynegy and Calpine) do not support the consideration of the actual energy delivered. They believe that this treatment is asymmetrical; energy production should not serve as a proxy for availability only in cases when it favors these resources. Management believes that while the proportional de-rate methodology accurately accounts for a resource adequacy resource’s availability, if the actual energy delivered covers the capacity obligation; it should be taken into account.

The joint comments of CalWEA and the Large-scale Solar Association do not support Management’s proposal and indicate that the availability calculation is flawed. They recommend that SCP availability charges and payments provisions are not needed for

intermittent resources, given all of their other incentives regarding availability. While we appreciate this perspective, Management believes the current proposal provides a reasonable approach for subjecting these resources to availability standards and provides a more equitable application of the rule to all resources (except demand response, which will be handled in a future design effort).

Also, in the most recent set of stakeholder comments, other topics were discussed.

- Four commenters (Dynergy, PG&E, NextEra, CalWEA/LSA) supported the ISO's stance regarding the deferral of the implementation of a supplier replacement rule, conversely one commenter (AReM) was disappointed because, in their view, adding a supplier replacement rule to the tariff would enable enhanced tradability and fungibility of the standard capacity product.
- Two commenters had suggestions regarding the tariff clarifications. The Cogeneration Association of California supported the removal of "non-ambient de-rate" from Section 40.9.4.2 of the tariff, however they propose that Management add language to ensure that normal variations in output from a Qualifying Facility are not considered forced outages. SDG&E opposes Management's proposal to allocate surplus availability incentive payments to all metered ISO demand because they believe that not all metered demand shoulders RA requirements and do not face the prospect of being penalized for having insufficient capacity. Instead, they support the current language which allocates these funds to only the three default load aggregation points. In response to SDG&E's concerns, the tariff provides that resource adequacy provisions are applicable to all load serving entities with the exception of those with a metered peak less than 1 MW. Thus, Management is implementing this change to ensure consistency with the intention of the original proposal and extend the allocation to all metered ISO demand, instead of limiting it to the three default load aggregation points.

A stakeholder matrix is included as Attachment A to this memorandum and provides a summary of stakeholders' written comments.

## **MANAGEMENT RECOMMENDATION**

Management recommends that the Board approve the policy to implement the second phase of standard capacity product and modify tariff provisions as outlined in this memorandum and authorize Management to make all necessary and appropriate filings with FERC to implement the proposed tariff change.