



California ISO
Your Link to Power

Draft Final Proposal
Standard Capacity Product II

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Standard Capacity Product II

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1. Executive Summary

The Standard Capacity Product II Draft Final Proposal, known as “SCP II” addresses a number of issues related to the Resource Adequacy (RA) program and to the ISO’s previous filing of the Standard Capacity Product (SCP) and the order of the Federal Energy Regulatory Commission (FERC) with respect to that filing. The following topics which were covered in last month’s SCP II straw proposal are contained in this document:

- Extend SCP to RA resources that were temporarily exempt from SCP, in compliance with FERC’s Order on June 26, 2009
- Ensure reliability in the event the that California Public Utilities Commission (CPUC) eliminates the “replacement rule” for RA capacity on planned outages
- Clarify existing tariff language to provide a clearer understanding of two sections related to (1) the allocation of surplus availability charge funds and (2) the types of outages that impact availability.

The proposal for the measurement of availability for Non-Resource Specific System Resources that provide RA capacity (NRS-RA) has been deleted from the Draft Final Proposal. This issue was added to last month’s straw proposal because the ISO intended to implement functionality to insert generated bids for non-resource specific system resources that provide RA capacity and fail to fully bid that capacity into the day-ahead market. The rules and procedures for such generated bids are being developed in a separate stakeholder process entitled “Bids and Outage Reporting for Non-Resource Specific Resource Adequacy Resources.”¹ Because the timing for the generated bids initiative has been delayed, the generated bid functionality will not be in place in time for the January 2011 implementation of SCP II. Accordingly, the ISO has removed the availability measurement issue for NRS-RA from this draft final proposal and will instead consider the issue as part of the generated bids initiative.

The following paragraphs provide a summary of the proposed changes contained in this initiative.

First, in the 2008 Market Initiatives Roadmap process, the implementation of a standard product for trading RA capacity was given the highest ranking of all the initiatives. To that end the ISO and stakeholders worked together to design the Standard Capacity Product tariff amendment. This amendment was filed with FERC on April 28, 2009 and FERC issued its Order on the filing on June 26, 2009 (June 26, Order). In its filing the ISO requested a deferral in applying SCP provisions to certain types of resources. It was requested that wind, solar, non-dispatchable cogeneration, non-dispatchable biomass and non-dispatchable geothermal facilities be temporarily exempted from SCP until the ISO, CPUC and local regulatory authorities (LRAs) could work together to develop a strategy to avoid the potential for “double counting” of historical outages that may have occurred without this exemption. This SCP II proposal tackles the issue of applying SCP to these types of resources. Additionally, SCP has been defined as “in scope” for Phase 1 of the CPUC’s current RA rulemaking proceeding for 2011 which allows the ISO the opportunity to coordinate with CPUC staff to align the CPUC’s rules for calculating qualifying capacity with the SCP availability standards.

¹ For more information on this initiative, please see the Generated Bids and Outage Reporting for Non-Resource Specific RA Resources web page at: <http://www.caiso.com/2488/2488b47711c30.html>.

In the April 2009 FERC filing, the ISO also requested that Demand Response (DR) be temporarily exempted from SCP due to ongoing CPUC proceedings and ISO stakeholder processes to revise the DR programs. Because these proceedings are still ongoing, and there are questions related to the correct measure of availability for DR, the ISO has taken this topic out of scope for this effort but suggests that another stakeholder process commence to deal specifically with DR issues in relation to RA and SCP.

Also stakeholders have suggested that SCP would be more fungible if the CPUC eliminated the rule that requires load serving entities (LSEs) to replace RA capacity on a planned outage and instead required suppliers to offer that replacement capacity through rules implemented in the ISO tariff. The SCP II draft final proposal proposes some changes to accommodate this request.

Finally, 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.

The ISO plans to post bring this initiative to the Board of Governors for decision in March. A tariff filing is scheduled for April, 2010.

2. Introduction

Effective January 1, 2010, the ISO implemented the RA Standard Capacity Product (SCP) as approved by FERC order dated June 26, 2009 (ER09-1064-000).² FERC approved the SCP on the grounds that it will: (1) enable market participants to efficiently and flexibly buy, sell, and trade RA capacity without the burden of negotiating the availability requirements of each transaction; and (2) establish uniform metrics and provide market participants with a readily-available means to satisfy their RA requirements, which will enhance reliability. Under SCP, the ISO has, in broad terms, developed an availability standard for each month of the year that compares to the actual monthly availability of the RA capacity of each RA resource, based on the resource’s total hourly available RA capacity over all availability assessment hours of the month divided by its total hourly RA capacity for those hours. An RA resource whose actual monthly availability exceeds the target availability standard (plus a 2.5 percent tolerance band) is eligible to receive an availability incentive payment. Conversely, an RA resource whose actual monthly availability falls below the target availability standard (minus a 2.5 percent tolerance band) is subject to a non-availability charge for the month. The availability incentive payments are funded by, and only to the extent of, the non-availability charges that are assessed for the same month.

² The FERC order is located on the CAISO website at: <http://www.caiso.com/23d9/23d9c3c11970.pdf>

In the June 26 Order, FERC accepted in part and rejected in part the ISO tariff amendments to implement SCP. In that order, FERC granted temporary exemptions from the SCP availability charges and payments 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 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”, addresses the FERC order.

The ISO’s SCP filing also proposed, and the FERC order approved with some modifications, to calculate SCP availability differently for non-resource specific system resources that provide RA capacity (referred to as “NRS-RA resources”) as compared to the approach adopted for internal RA resources. The approach for internal RA resources is based on capacity outages and de-rates reported to the ISO via the SLIC system. But this approach could not be applied to NRS-RA resources because these resources, not being associated with specific generating resources, do not use resource IDs, have comparable outages or capacity de-rates or utilize the SLIC system. The SCP proposal as approved by FERC therefore assesses the SCP availability of NRS-RA resources based on their submission of economic bids or self-schedules in the SCP compliance hours, specifically, whether they have fully offered their RA capacity to the ISO markets during those hours.

In the same order that approved this approach for NRS-RA resources, FERC directed the ISO to implement procedures to insert generated bids for NRS-RA resources that fail to fully offer their RA capacity in all hours as required by their supply plans. Due to the timing and implementation schedule of a separate initiative addressing the insertion generated bids for NRS-RA resources, implementation of this feature will be delayed to a future date.

The ISO proposes to apply the current SCP rules in designing SCP II. The key features of the current standard capacity product are as follows:

- Availability Standard. Resource availability is measured on a monthly basis and compared against a single availability standard or target based on the historic performance of the RA resource fleet during the peak hours of each month of the previous year.
- Availability Incentives. Each resource is expected to meet or exceed the target availability standard. On a monthly basis, the ISO assesses non-availability charges to resources whose availability falls short of the target, and will provide availability incentive payments to resources whose availability exceeds the target. The availability incentive payments are funded by the non-availability charges, and any excess of non-availability charges is refunded to metered CAISO Demand, so that this mechanism is revenue neutral on a monthly basis.
- Unit Substitution. A resource owner is able to substitute a non-RA resource for an RA resource on forced outage in order to avoid the outage being counted against the RA resource’s availability. A pre-approval process is required for substitute local RA

capacity to ensure that the replacement capacity is comparable to the original RA capacity in an operational sense.

- Transition to SCP. There are provisions for transitional grandfathering of existing RA contracts that were executed prior to June 28, 2009.

Although compliance with the FERC Order was the main driver in initiating the SCP II design effort at this time, the concurrent CPUC RA proceeding raise another issue to include in this process. Phase 1 of the CPUC's RA rulemaking proceeding for 2011 includes an issue entitled *Standard Capacity Product as a Commercially-Viable Product*.³ This issue relates to whether the CPUC should retain the planned outage replacement obligation of jurisdictional LSEs for RA capacity. The CPUC's replacement rule requires an LSE to procure additional RA capacity to meet its RA requirements in months where some of its RA capacity is significantly affected by a planned outage. Several stakeholders in that rulemaking proceeding have suggested that the CPUC eliminate the replacement rule in favor of another method for replacing this capacity that places the replacement obligation on the supplier of RA capacity rather than the LSE. The proponents of this change believe that it will make SCP a more fungible product and therefore should be considered in this stakeholder effort. In its proposal to the CPUC on Phase 1 issues in Docket No. R.09-10-032, the ISO did not oppose removing the replacement rule if it could be done in a way that would not adversely affect the reliability of the ISO balancing authority area. Parties have suggested that, if the CPUC eliminates the replacement rule, the ISO could amend its tariff to provide an alternative mechanism to address the potential reduction in the amount of available capacity due to planned outages.

3. Scope of the SCP II Proposal

The SCP II initiative will cover three issues: extending SCP to the temporarily exempt intermittent resources, addressing the replacement rule and making minor clarifications to the existing tariff language.

3.1. Extending Standard Capacity Product to the Temporarily Exempt Resources

Based on a data sample from 2009, approximately 12 percent of RA capacity from generating units is exempted from the 2010 availability standards based on their resource type.⁴ The intention of this proposal is not to change the current SCP rules provided in the Tariff, but to standardize the existing rules for all RA resources to the extent possible.

3.2. Replacement Rule

In the December 4th Issue Paper for SCP II, the topic of the replacement rule was discussed as being out of scope for this initiative. However due to the stakeholder comments on the issue as well as discussion in other forums, including the CPUC SCP workshop on December 14 and stakeholder proposals for the scope of Phase 1 of the RA rulemaking proceeding for 2011

³ *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, p4. .

⁴ This estimate was performed using generation RA resources only. It excluded imports, which if included would have made the percentage smaller. Demand Response RA resources were also not available for this calculation.

(Docket No. R.09-10-032), the ISO has reconsidered that approach and decided to include the topic in the scope of the SCP II initiative.

In its proposal to the CPUC in Docket No. R.09-10-032 filed on January 11, the ISO stated that it does not oppose the CPUC eliminating the replacement rule if its elimination does not adversely impact reliability in the ISO balancing authority area. To that end, the ISO proposes to work collaboratively with the CPUC to transition the treatment of planned outages for RA purposes from the replacement rule to another approach which will maintain sufficient capacity to serve load and reliably operate the grid.

3.3. Clarifications to Existing SCP Tariff Provisions

There are two areas in Section 40 of the tariff related to SCP that require minor clarification. . Neither of the changes affect the SCP design; instead they further elucidate the rules that are currently in place. First, in Section 40.9.4.2 a clarification is made to the language regarding the types of outages that affect an RA resources availability to remove the words “non-ambient de-rate” which is a subset of the term “forced outage” instead of an additional outage state. Second, in Section 40.9.6.3 the tariff language is being changed to indicate that excess non-availability funds will be allocated to metered CAISO Demand. These are discussed in detail in the Section 4.3 below

3.4. Not in Scope

The following considerations are not within the scope of this initiative:

Modification of SCP Availability Metric for Non-Resource Specific System Resources that Provide RA Capacity - This issue was added to last month’s SCP II straw proposal because the ISO intended to implement, coincident with or prior to implementation of the SCP II provisions, functionality to insert generated bids for non-resource specific system resources that provide RA capacity and fail to fully bid that capacity into the day-ahead market. The rules and procedures for such generated bids are being developed in a separate stakeholder process addressing this issue, “Bids and Outage Reporting for Non-Resource Specific Resource Adequacy Resources.”⁵ Once the generated bid provisions are implemented, it will be appropriate to update the methodology for measuring SCP availability for these resources. The schedule for the generated bid initiative has been delayed, however, and as a result it is necessary to defer the associated changes to the SCP availability metric, take this effort out of scope for SCP II and instead address it within the generated bid stakeholder process.

Implementation issues associated with SCP – Technical issues related to the 2010 implementation of SCP are outside the scope of this stakeholder process.

Unit Substitution – Some stakeholders have expressed concerns to the ISO about their inability to substitute resources in the event that their local RA units have a forced outage, due to a lack of local non-RA resources available for substitution. It is important to understand that unit substitution is not a requirement under the ISO tariff; rather, it is an option that is available if the RA supplier is able to utilize it. In addition, it is the ISO’s understanding that in some instances this issue arises due to RA reporting requirements imposed by the CPUC, rather than

⁵ For more information on this initiative, please see the Generated Bids and Outage Reporting for Non-Resource Specific RA Resources web page at: <http://www.caiso.com/2488/2488b47711c30.html>.

to SCP provisions. The ISO accordingly suggests that for those instances the issue be addressed with the CPUC. For these reasons the SCP II initiative will not consider any modifications to the unit substitution provisions as approved in the June 26 Order.

Demand Response – As mentioned above, FERC accepted the ISO's proposal to temporarily exempt demand response resources from the availability standards because of current efforts underway to enhance these products. The following products fall under the demand response category.

Retail Programs – This category includes

- Emergency Triggered Demand Response
- Price Responsive Demand Response

There are several challenges in applying availability charges and payments to these types of resources which the ISO and CPUC must resolve. The most significant challenge is integrating into the ISO markets and systems the vast majority of demand response that participates in retail demand response programs. These retail demand response programs, although considered RA resources, exist outside of the ISO market and, therefore, the ISO has no ability to directly monitor the performance and, therefore, availability of these resources. The second challenge is how the demand response resources are treated under the CPUC's resource RA program. Currently, the "performance" and resource adequacy counting of demand response resources enrolled in retail demand response programs is not determined on a resource basis, but on a program basis through the application of a CPUC approved Load Impact Protocol (*D.08-04-050, April 24, 2008*). The Load Impact Protocol determines the net qualifying capacity of a retail demand response program which is "taken off the top" of the system RA obligation. This "off the top" megawatt quantity translates into a resource adequacy counting credit that reduces the resource adequacy requirement of CPUC jurisdictional load-serving entities. Furthermore, the net qualifying capacity associated with retail demand response programs and claimed as a credit by CPUC jurisdictional load-serving entities is multiplied by 115% to reflect the demand response program's reduction in load translating into an additional reduction in the system RA obligation. Thus, there are two non-trivial technical and policy challenges to overcome in determining how SCP availability and payments will apply to retail demand response programs, that is 1) the integration of retail demand response programs into ISO markets and systems and 2) how retail demand response programs are essentially treated as a special type of RA resource that is "taken off the top," reducing the RA requirement of CPUC jurisdictional load-serving entities.

Apart from these challenges, emergency triggered demand response resources are a unique type of the retail demand response programs whose design and use are being addressed through Phase 3 of the CPUC demand response proceeding (R.07-01-041).

Wholesale Products:

- Participating Load
- Proxy Demand Resources

The ISO offers wholesale demand response products, specifically the participating load product and the proxy demand resource product that is scheduled to be implemented May 1, 2010. Both of these products are designed to fully integrate demand response resources into the ISO markets and systems, comparable to a generator. Tracking performance of these resources is straightforward because the ISO settles these demand response resources participating in the wholesale market based on their performance. However, a challenge exists in determining the

availability of wholesale demand response resources based on outage reporting information. At this time, outage reporting is not required for demand response resources, nor has the ISO established the rules or considered potential modifications to its outage reporting system to accommodate such a requirement.

Ultimately, all RA resources should be measured and accountable for providing the capacity that is their obligation, however it is not clear that measuring non-availability through forced outages and temperature non-ambient de-rates is the correct method to account for demand response participation. In fact, in some scenarios, a forced outage for a DR resource could actually lessen the capacity requirement for the control area and therefore it would be the wrong incentive to penalize this type of event, e.g. where the demand response resource is actually “off-line” and not consuming energy. For these reasons and taking into consideration (1) the ongoing PUC proceedings with regard to DR and (2) the additional system implementation considerations that may be required to include DR in this proposal, the ISO proposes to defer this issue to a separate market design/stakeholder process to determine the best method for measuring whether a demand response resource is meeting its RA obligation with implementation targeted for 2012 rather than 2011.

4. Draft Final Proposal

4.1. Resources Whose Qualifying Capacity Value is Determined by Historical Output from the CPUC or a Local Regulatory Authority

The following resources are temporarily exempt from the applicability of non-availability charges and payments due to the method used to calculate their qualifying capacity:

- Solar
- Wind
- Non-dispatchable biomass resources, non-dispatchable geothermal resources, and non-dispatchable cogeneration resources

4.1.1. Definition of Deferred ResourceTypes

Section 40.9.2 of the Tariff⁶ 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.

The FERC Order accepted this exemption, but offered the following guidance:

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

⁶ Section 40 of the tariff which pertains to Resource Adequacy can be found at: <http://www.caiso.com/2471/24719720e850.pdf>

determining their amount of qualifying capacity. Under the existing CPUC market rules, resources whose qualifying capacity is determined by historical output are penalized for poor performance through a reduction of their qualifying capacity. Therefore, it would be a harsh result to apply the same availability standards, which are designed to penalize poor performance, to resources already subject to qualifying capacity adjustments. We find that doing so could potentially result in penalizing such resources twice for the same outage or de-rate. As long as this counting feature of the market continues, we find the proposed exemption to be permissible and not unduly discriminatory.

57. We also accept the CAISO's proposal to temporarily exempt demand response resources due to on-going efforts to enhance the manner in which demand response resources participate in the CAISO's markets. We acknowledge the CAISO stakeholder initiatives and CPUC proceedings to enhance the manner in which demand response resources participate in the CAISO's markets, and therefore we are not inclined to take any action in the instant proceeding that might disrupt these current processes or delay the filing of proposed demand response enhancements with the Commission. Accordingly, we find the CAISO's proposal to temporarily exempt demand response resources is supported and not unduly discriminatory.

58. To be clear, we find the CAISO's proposal to exempt these resources to be just and reasonable and not unduly discriminatory because these issues are being addressed in ongoing CAISO and CPUC proceedings and the exemptions are, therefore, temporary. To that end, we direct the CAISO to work with stakeholders, the CPUC, and local regulatory authorities to determine when the proposed exemptions should ultimately sunset, and the CAISO and stakeholders should diligently work toward a sunset in a timely manner. In this regard, we direct the CAISO to post a biannual status report relating to the application of availability standards to all resource adequacy resources on its internet web site. The CAISO should post the first such report within 45 days of the date of this order.⁷ The reports will serve as a means for the Commission and market participants to monitor the progress of these efforts to sunset the exemptions and as the basis for the market participants and the Commission to determine if the efforts to sunset the exemptions are unreasonably delayed.

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 be penalized for the same outage (or de-rate) twice.

⁷ The First Biannual Status Report of California Independent System Operator Corporation Regarding the Application of SCP Availability Standards to All Resource Adequacy Resources, dated August 10, 2009 can be found at: <http://www.caiso.com/2406/2406865640280.pdf> .

4.1.2. Proposal for Deferred Resource Types

In its proposal on Phase 1 of the CPUC rulemaking proceeding on RA matters for 2011,⁸ the ISO suggested changes to the CPUC RA counting rules that would resolve the potential double counting issue for resources whose Qualifying Capacity (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 de-rate 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.⁹ 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.

In compliance with the FERC 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.¹⁰ 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. All resources over 10 MW are required to

⁸ *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>

⁹ *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

¹⁰ 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.

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 de-rates. 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,¹¹ 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 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.¹² 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.

Example of SCP availability calculation

Resource information

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

Example 1 – 20 MW De-rate

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 De-rate

¹¹ These types of resources include wind, solar, non-dispatchable cogeneration, non-dispatchable biomass and non-dispatchable geothermal facilities.

¹² 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.

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.

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. All RA capacity under a resource specific supply contract that was signed or submitted to the applicable regulatory authority prior to June 28, 2009 is eligible for grandfathering as described in the tariff.

4.2. Elimination of the CPUC's "Replacement Rule"

In response to the expectation that the CPUC will eliminate the replacement rule that applies to its jurisdictional load-serving entities, the ISO's draft final proposal to address planned outages of RA resources is to implement a replacement obligation on suppliers of RA capacity in the ISO tariff. Under this proposal, when an RA resource intends to take a planned outage that will last longer than a week in a particular month, the supplier will, in addition to applicable outage coordination requirements, be required to indicate the details of the intended outage in its supply plan submitted to the ISO and put a request into SLIC for a planned outage. The supplier will also be required to specify in the supply plan, the non-RA resource that will be available to replace the RA capacity. The designated non-RA resource would then be treated as an RA resource in the ISO markets for the period of the original resource's outage and will be subject to RA requirements including the must offer obligation and the SCP availability standards.

For a local RA resource requesting a planned outage, the supplier must make a best effort to replace the resource with a non-RA resource in the same local area. If the SC for the supplier is unable to obtain local capacity in the same local area, a resource elsewhere within the ISO area must be offered. If the ISO finds that it requires ICPM capacity in a local area during the time the RA resource is out of service, a local RA resource that provided replacement RA capacity in the same local area will not be responsible for any of the ICPM costs. In contrast, a local RA resource that provided replacement capacity outside that local area will be allocated a share of the ICPM cost in proportion to that RA resource's share of the total RA capacity in the local area that was out of service at the time of the ICPM designation.

In the event that an RA resource approved for a planned outage fails to provide any replacement capacity in its supply plan, then ICPM capacity will be procured to cover the deficiency and the costs will be allocated to the SC of the resource.

4.3. 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 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.”

The phrase “*Forced Outages, non-ambient de-rates, or temperature-related ambient de-rates*” 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 de-rates.*”

- 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 Demand¹³ that is 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.

5. Schedule of Key Dates

February 19 – Post Draft Final Proposal

February 26 – Stakeholder conference call to discuss Draft Final Proposal

March 2 – Stakeholder comments due on Draft Final Proposal

March 25, 26 – Board of Governors meeting

¹³ 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.