

**JOINT COMMENTS OF THE CALIFORNIA WIND ENERGY ASSOCIATION
AND THE LARGE-SCALE SOLAR ASSOCIATION
ON CAISO STANDARD CAPACITY PRODUCT II ALTERNATIVE OPTIONS**

The California Wind Energy Association (CalWEA) and the Large-scale Solar Association (LSA) offer these joint comments on the proposals in the CAISO paper, “**Alternative Options for the Availability Standard and the Replacement Rule Components of the Standard Capacity Product II Initiative**” (“Proposal”), and the March 24th stakeholder conference-call discussion about the Proposal.

The Proposal is the latest version of the Resource Adequacy (RA) Standard Capacity Product (SCP) II initiative, through which the CAISO intends to propose revoking the current exemption of generation resources whose Resource Adequacy (RA) Qualifying Capacity (QC) is based on historical output (intermittent resources (wind and solar) and Combined Heat and Power (CHP)) from RA SCP availability charges and payments. The CAISO recently added to this initiative proposals to transfer responsibility for procuring replacement capacity for RA Resources on planned outages, from Load-Serving Entities (LSEs) to suppliers, for all generation types.

The Proposal contains slightly revised versions of prior CAISO proposals in two key areas:

- ***Availability metric determination for the resources in question***; and
- ***Procedures for CAISO replacement-capacity procurement***, if generators with planned outages do not procure such capacity themselves (and, in some cases, even if they do).

We offer here comments on these issues, as well as other problems with the proposed RA SCPII framework that the Proposal does not address, namely:

- ***Mismatch between the hours used*** by CAISO to determine RA SCP availability payments and charges and those used by the CPUC to determine RA Qualifying Capacity (QC);
- ***Inequities of basing availability measurements on outage reporting*** through the CAISO SLIC system; and
- ***Grandfathering issues*** with contracts executed since June 28th, 2009.

Summary of comments: The revisions in the Proposal render the resulting CAISO provisions less terrible than the prior versions. However, they are still terrible, i.e., the revisions do not address the fundamental problems with these provisions. The CAISO should do the following instead:

- **Availability determination for intermittent resources**
 - Acknowledge that application of the RA SCP availability charges and payments provisions to intermittent resources is not:
 - Needed, on top of all the other high-availability incentives that already exist; and/or
 - Workable, given the rest of the RA framework.
 - Alternatively, if the CAISO persists in applying the RA SCP availability charges and payments provisions to intermittent resources, it should apply those provisions to intermittent resources in the same manner as other resources, consistent with the CAISO’s consistency and “tradability” arguments; and

- **Replacement capacity for RA Resources on planned outage:** Abandon the unfair and unworkable proposal to impose significant additional obligations on suppliers for planned-outage replacement capacity and, instead, adopt approach proposed by SCE.
- **Grandfathering provisions:** Grandfather contracts executed before the effective date of these provisions, consistent with the CAISO’s prior RA SCP grandfathering arguments.

These comments are explained further below.

Availability determination for intermittent resources

Current situation: The current RA SCP rules require RA Resources to have available (not on forced outage), on average, capacity equal to their RA Net Qualifying Capacity (NQC), during the specified hours. The nature of the “double-counting” problem addressed in the FERC order approving RA SCP availability payments and charges stemmed from determination of the QC (basis of NQC) for intermittent resources based on their actual output in specified on-peak hours.

Production in those hours, and the resulting QC determination, reflects both the availability of “fuel” (wind or sun) and physical forced outages of production equipment.

Last proposal: The CAISO has proposed, in the current CPUC procurement proceeding (R.09-10-032, Phase I), that forced outages be excluded in determining the QC under CPUC RA counting rules. This, in and of itself, would address the double-counting problem related to forced outages referenced by FERC (though not such problems related to PPA provisions, as discussed below).

However, the CAISO then proposed an availability determination methodology that created an entirely new “double-counting” problem. While non-intermittent resource QCs are based on their maximum demonstrated capacity, intermittent-resource QCs are decreased based on their actual production during specified peak hours. The CAISO proposal would penalize them a second time for the same intermittency through a proportional decrease in their available capacity before application of the RA SCP availability payments and charges framework.

For example, a 100 MW non-intermittent RA Resource with a 90 MW NQC and a 10 MW de-rate would have 100% SCP availability, because 100% of the 90 MW NQC is available. However, that same resource, if intermittent (e.g., solar), would be treated as only having 81 MW (90%) available, because CAISO would apply the 90 MW/100 MW ratio to the 90 MW of available capacity.

The QC of the intermittent resource already reflects its intermittency, through the initial reduction of QC from 100 MW (which would be its QC were it a non-intermittent resource) to 90 MW. The CAISO proposal would also de-rate the available real-time capacity – effectively, a second penalty for the same intermittency.

Penalizing intermittent resources twice for being intermittent would accomplish that objective, but it would not be just or reasonable. To make it so, the CAISO would have to propose, not only removing forced outages from the intermittent-resource QC calculation, but also removing decreases to resource QC due to real-time output variations – i.e., changing the entire QC determination methodology, which the CAISO has most certainly not proposing here.

Revisions in the Proposal: The Proposal addresses this problem somewhat by reducing the availability derate for intermittent-resource availability determination (second intermittency penalty) if real-time energy production in the RA SCP measurement hours exceeds the proportional-derate capacity number from the last version. The SCP availability metric in a given hour would be the greater of the proportionally derated capacity number, as described above, or the actual hourly real-time production for that unit.

CalWEA and LSA position: The Proposal is somewhat better than the prior version. However:

- ***It still penalizes intermittent resources twice for being intermittent***, just like the last version, though only slightly less;
- ***It does not address the other problems discussed below***, related to the hours it is applied and the SLIC outage-reporting basis; and
- ***It would create yet another problem*** – accounting for reductions in real-time plant output due to CAISO scheduling or dispatch instructions. The CAISO could itself direct intermittent resources to produce below their available generation levels, because of:
 - **Forward or real-time transmission or operating constraints**; and/or
 - **Exercise of economic bids.** While economic bids are not now allowed on PIRP schedules:
 - An intermittent resource can still offer an economic bid if it is scheduling at a different level than the PIRP forecast, since that decision can be made by the plant operator and/or the Scheduling Coordinator on an hourly basis; and
 - Economic bids:
 - Can be offered in Day Ahead market scheduling; and
 - Are likely to be allowed in the future on PIRP schedules. The CAISO plans an initiative later this year to increase market participation of intermittent resources, and one idea already on the table is allowing intermittent resources to offer economic bids on PIRP schedules.

Thus, the CAISO would have to layer on yet another rule here – excluding the impacts of intermittent-resource output reductions due to its own scheduling or real-time dispatches – in order to rationalize any availability measurement based on real-time energy output. (As noted below, additional adjustments would have to be made to account for recently implemented different CAISO outage-reporting rules for intermittent resources.)

These problems, and the new fixes that will be needed to address them, illustrate the continuing difficulties of applying the RA SCP availability framework to intermittent resources. The CAISO should “call it a day” here and stop such contortions in pursuit of an unnecessary initiative.

Problems not addressed in the Proposal: CalWEA and the LSA identified the problems below in our last comments; the Proposal does mention or address them. Addressing them would require even more fixes and exceptions to the updated framework in the Proposal.

- **Hours the CAISO would use for availability calculations:** As noted by CDWR on a February 26th conference call, the hours used by the CAISO to determine RA SCP availability payments and charges differ from those used by the CPUC to determine RA QC.

Determination of RA QC and availability payment/charges, for resources where both are determined by performance, are both supposed to be based on the hours when the CAISO needs the capacity the most. However, these hours are not the same. It simply makes no sense for:

- The CAISO to penalize a resource for lack of availability, or pay it for superior availability, during hours that the CPUC doesn’t deem significant for RA QC determination purposes; or
- The CPUC to determine QC based on resource performance in hours that the CAISO deems RA Resource availability to be relatively less important.

If RA SCP availability payments/charges are imposed on intermittent resources, CAISO must work with the CPUC to make the applicable hours consistent with those used for CPUC QC determination or, failing that, at least explain the rationale behind the difference.

- **SLIC outage reporting as basis for availability calculations:** CAISO recently implemented new intermittent-resource outage-reporting rules requiring submission of forced outages as small as 1 MW through SLIC, within 60 minutes of detection by the generator. Non-intermittent resources need only report forced outages exceeding the greater of 10 MW or 5% of maximum capacity (Pmax).

CAISO proposes to apply the RA SCP availability payments/charges provisions based on SLIC outage reports, as it does currently for non-intermittent resources. However, the new, more-granular intermittent-resource outage reporting requirements would subject those resources to availability penalties, or reduce their availability payments, compared to other resources.

More-stringent outage reporting for intermittent resources may be justified in the interest of increasing intermittent-resource output forecast accuracy. However, those resources should not be punished for complying with these requirements. Instead, any application of RA SCP availability payments and charges to intermittent resources should exclude reported outages below the reportable threshold for non-intermittent resources.

(Lack of) need for action: The CAISO has failed, in prior or current proposals in this area, to address the fundamental “double-counting” problem for intermittent resources, which is not likely to change in the near future: the PPA provisions that already accomplish the same purpose as the proposed RA SCP framework, in a much more direct and effective manner, i.e.:

- **Energy-only payments**, i.e., these resources are paid only for the energy they actually produce, with no capacity payments whatsoever; and
- **Minimum performance guarantees**, which penalize them even further if their production is below a specified minimum level in the contract.

CAISO has enough to do without co-opting market mechanisms that are already addressing the issue. Moreover, the CAISO proposals only make any sense with: (1) contracts with significant capacity payments; and (2) QCs based on demonstrated maximum output instead of actual output.

That simply is not the starting point for intermittent resources. The problems the CAISO is encountering in trying to rationalize application of the RA SCP availability charges/payments to these resources directly from the different means of measuring their QC, which in turn resulted from CAISO advocacy of exactly those differences.

Thus, the CAISO has been faced with the need to try and alter those provisions to apply them here, but each new fix has spawned its own problems, and (as noted above) the Proposal still does not address either the main problem with the concept or the other remaining or new problems.

Unit-substitution obligations for generators on planned outages

Current unit-substitution requirements: The current RA SCP provisions include:

- **An RA supplier option** to substitute an “electrically equivalent” non-RA unit for an RA unit on forced outage, in order to: (1) keep RA capacity available to the CAISO during forced outages, to aid reliability; and (2) prevent the supplier from incurring SCP availability charges.
- **An LSE requirement** to specify substitute capacity in months when RA Resources will be on planned outages for more than a minimum time period.

Last CAISO proposal: The Proposal significantly expands the above supplier forced-outage option, to require such substitution during planned outages longer than that minimum duration. This proposal is intended to keep RA capacity available to the CAISO during such planned outages, assuming that: (1) the CPUC will eliminate the “replacement rule” that now requires LSEs to provide this replacement capacity; and, thus (2) the CAISO must provide that capacity through amendment of its tariff.

If RA suppliers do not provide this replacement capacity:

- ***The suppliers would be in violation of this tariff obligation;***
- ***The CAISO would procure replacement capacity*** through the Interim Capacity Procurement Mechanism (ICPM), if the planned outage was expected to be longer than the current allowed duration; and
- ***The CAISO would charge the delinquent supplier*** the \$41/kW-year replacement capacity cost.

SCE alternative

- ***Estimate in advance the additional RA capacity needed*** to cover planned outages each month, based on historical information;
- ***Translate this capacity into a percentage of expected peak demand*** each month; and
- ***Add this adder to the required RA procurement target*** for LSEs each month.

SCE offered this alternative out of concern that suppliers will perceive the additional obligation proposed by the CAISO as a significant risk and monetize it in their bid/offer prices to LSEs. SCE believes it will be more cost-effective, and reduce the need for additional CAISO ICPM procurement, to simply meet this additional need through the RA forward procurement process.

This mechanism is very similar to the manner in which forced outages are included in the current Planning Reserve Margin (PRM) (RA Target) today. However, unlike forced outages, which could occur at any time, the planned-outage adder could differ by month, because:

- Planned outages are typically taken in non-peak months; and
- Much RA capacity is procured to meet peak-month demands and is not needed to meet loads in non-peak months, i.e., there is some additional RA margin in non-peak months that could be used to cover planned outages in those months.

SCE proposed to implement this new RA procurement requirement through either: (1) Phase II of the current CPUC procurement proceeding, for the 2011 RA contracting year; or (2) next year’s procurement proceeding, for the 2012 RA contracting year.

Revisions in the Proposal: The Proposal would alter the prior version slightly to incorporate one element of the SCE proposal – an assessment of the need for ICPM backup-capacity procurement, rather than an automatic assumption that this procurement would be needed.

However, suppliers would still be responsible for submitting replacement capacity, or paying for any CAISO ICPM procurement of replacement capacity if they do not do so. The Proposal does not address the main provision of the SCE alternative - identification of the likely amount of substitute capacity needed to cover planned outages and advance LSE procurement of that additional capacity.

CalWEA and LSA position: The Proposal makes the supplier obligation slightly less onerous, because the CAISO would not replace generation capacity on forced outage unless its assessment indicates a need for such procurement. However:

- **The Proposal does not appear to be workable, as written.** Suppliers must know in advance whether they need to procure replacement capacity; otherwise, they could contract and pay for that capacity unnecessarily. Moreover, the Proposal does not address the situation where some replacement capacity is needed, but not as much as the total planned outages, i.e., when there must be some allocation of replacement responsibility.
- **The Proposal does not address the basic unfairness and inefficiency of transferring the capacity-replacement requirements for planned outages from LSEs to suppliers.** As we have noted before:
 - **LSEs are in a much better position to determine whether replacement capacity is needed,** because they will know in advance whether their own positions are “long” on RA capacity in a given month or not. Suppliers have no such knowledge.
 - **LSEs typically have many sources of replacement capacity,** including annual RFOs, unsolicited offers, and their own owned capacity. Suppliers have no organized market where they might acquire such capacity.
 - **LSEs have considerable knowledge of the market value of RA capacity,** since they have many contracts and access to price information from all of them. Suppliers only know the terms of their own contracts and have no ready source of price discovery, since LSE contracts are confidential.
 - **LSEs can generally pass reasonable costs of replacement capacity on to their customers.** Suppliers with already-executed contracts have no way to recover any resulting costs. New suppliers would have to factor this open-ended risk into their price offers, as SCE believes, and it will also greatly complicate plant financing (including that for Transition Cluster projects racing to begin construction by year-end to qualify for federal stimulus funding).

The Proposal remains far inferior to the SCE alternative, which offers a much more sensible way to address the CAISO’s need to maintain RA capacity levels during planned outages. As noted above, LSEs have many more tools to meet these needs than suppliers; moreover, SCE’s proposal is most consistent with the premise of the entire RA program – that advance planning and procurement is the most effective and cost-effective way to ensure that RA capacity is provided to the CAISO when and where it is needed.

Grandfathering issues

Current grandfathering provisions: The current RA SCP availability payments and charges provisions exempt all contracts with RA Resources executed before June 28th, 2009. The CAISO’s justification for that exemption was prevention of double penalties for forced outages, since Power Purchase Agreements (PPAs) to that point generally already contained availability incentives and penalties, so imposing the RA SCP rules in this area would be duplicative.

Current CAISO proposal: The CAISO would use the same grandfathering date for imposing SCP availability payments and charges on intermittent resources. CAISO’s rationale is that parties were aware of the terms and conditions of the RA SCP framework, as well as the temporary nature of the exemption as of this date.

CalWEA and LSA position: It was not clear until recently how long the exemption would last, or what changes would be made to eliminate the double-counting problem.

Thus, the argument that contracting parties “should have known” and adjusted contracts accordingly is not really plausible. In fact, PPAs with intermittent resources executed since June of 2009 have continued to be written with exactly the same provisions as before – straight dollar-per-MWh payments for both energy and capacity, and guaranteed minimum production levels (with penalties for not meeting those production levels); other contracts include specific mechanical availability incentives that clearly duplicate the RA SCP availability charges and payments.

The Proposal does not address at all the lack of advance knowledge about the significant supplier obligations in the new CAISO replacement-capacity proposal. There is no way that any party could have known about that before it appeared in this proceeding.

Moreover, absent significant modifications, it will come as no surprise to the CAISO that its proposals in these areas will be strongly contested at FERC and may be modified or rejected. Thus, even now the final provisions cannot be known.

In all fairness:

- Intermittent RA Resources with PPAs executed or under negotiation (e.g., shortlisted through an RFO) before the effective date of any provisions adopted in this proceeding should continue to be exempt from SCP availability payments and charges;
- Intermittent resources with PPAs that have energy-only payments should continue to be exempt from SCP availability payments and charges;
- All suppliers with PPAs executed or under negotiation before the effective date of any provisions adopted in this proceeding should be exempt from the proposed SCP capacity-replacement obligations for planned outages.