



Stakeholder Comments Template

Resource Adequacy Enhancement Initiative: Second Revised Straw Proposal

This template has been created for submission of stakeholder comments on the **Resource Adequacy Enhancements Initiative, Second Revised Straw Proposal** that was held on October 9, 2019. The meeting material and other information related to this initiative may be found on the initiative webpage at:

<http://www.caiso.com/informed/Pages/StakeholderProcesses/ResourceAdequacyEnhancements.aspx>

Upon completion of this template, please submit it to initiativecomments@caiso.com. Submissions are requested by close of business on October 24, 2019.

Submitted by	Organization	Date Submitted
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Please provide your organization’s comments on the following topics. When applicable, please indicate your organization’s position on the topics below (Support, Support with caveats, Oppose, or Oppose with caveats). Please provide examples and support for your positions in your responses.

California Community Choice Association (CalCCA) appreciates the opportunity to comment on the Resource Adequacy Enhancements Initiative, Second Revised Straw Proposal (“2nd Revised Straw Proposal”) discussed during the October 9, 2019 stakeholder meeting. CalCCA members support CAISO’s efforts to make significant improvements to the Resource Adequacy (RA) rules. As California continues its transition to a cleaner fleet of resources, CAISO must ensure that it has access to sufficient resources to continue to reliably operate the grid. CCAs are interested in an efficient and effective Resource Adequacy process as the entities that serve a significant and increasing share of CAISO load.

¹ California Community Choice Association represents local government Community Choice Aggregation electricity providers in California members, including Apple Valley Choice Energy, CleanPowerSF, Clean Power Alliance, East Bay Community Energy, King City Community Power, Lancaster Choice Energy, MCE, Monterey Bay Community Power, Peninsula Clean Energy, Pico Rivera Innovative Municipal Energy, Pioneer Community Energy, Rancho Mirage Energy Authority, Redwood Coast Energy Authority, San Jacinto Power, San Jose Clean Energy, Silicon Valley Clean Energy, Solana Energy Alliance, Sonoma Clean Power, Valley Clean Energy.

System Resource Adequacy

1. Determining System RA Requirements

Please provide your organization's feedback on the System RA Requirements proposal as described in the second revised straw proposal.

CalCCA supports CAISO's proposal to consider both Net Qualifying Capacity (NQC) and Unforced Capacity (UCAP) values in its RA accounting. In general, each resource would make its NQC available to CAISO, but only receive RA credit for its UCAP, reflecting adjustments for historical forced outages. Conceptually, CalCCA agrees with CAISO's proposal to set the UCAP requirement at a minimum of 106% of the forecasted 1-in-2 year peak load (i.e., forecast load plus operating reserves), plus any additional capacity needed to account for forecast error.

It will be important to have a clear analytical process to determine the amount of forecast error. Otherwise, the CAISO risks having an RA target that overstates CAISO's resource needs, leading to unnecessary costs, or having one that understates the needs, leading to reduced reliability and potential shortage costs. CalCCA supports applying a prudent planning approach to develop the forecast error margin. A simple method of considering forecast error could be to calculate the amounts of RA required to meet the one-in-five year or one-in-ten year forecasts. However, these methods do not capture the complete set of reliability issues identified by the CAISO including the post-peak energy availability. In order to capture reliability concerns beyond the peak hour in the RA analysis, the CAISO can perform a Loss of Load Expectation (LOLE) analysis that assumes 100% generation availability to identify the additional margin needed to account for forecast error and yield an LOLE of 0.1 days per year. Since UCAP will directly account for forced outages and the maintenance outage process will schedule maintenance during periods when resources are not needed, 100% availability will not result in double counting.

2. Forced Outage Rates Data and RA Capacity Counting

Please provide your organization's feedback on the Forced Outage Rates and RA Capacity Counting and Forced Outage Rate Data topics as described in the second revised straw proposal.

CalCCA supports the CAISO proposal to calculate UCAP values for all resource types that do not rely on the CPUC's Effective Load Carrying Capability (ELCC) methodology for determining Qualifying Capacity (QC) values and, for resources with ELCC values, to use the ELCC value as the UCAP value.

CalCCA appreciates the CAISO's efforts to attempt to analyze historical forced outage data so that parties may better understand how a UCAP approach might be applied.

Based on the discussion during the stakeholder meeting, it appears that the available forced outage data potentially overstates the level of forced outages, since it is reported on a daily basis. That is, all outages appear to be treated as lasting an entire day. Given the critical role that forced outage rates play in determining each resource's UCAP, and the collective impact on the reliability of the RA fleet, it is extremely important to ensure that the forced outage rates are accurate.

Given the potential challenges for collecting forced outage data, CalCCA suggests the CAISO consider an alternative approach for determining forced outages. In place of generator Generating Availability Data System (GADS) data, CAISO could use historical energy and capacity Bids or Self-Schedules. The implied forced outage rate would be determined by adding approved maintenance outage capacity to the Bid/Self-Scheduled capacity and then subtracting the total from the product of the generator's NQC x 8760 hours. This approach could simplify the data collection, since CAISO would be able to use Bid data, supplemented by approved outage data, to make the calculation, and would not need to process the multifaceted forced outage data. Any reduction in output not part of an approved maintenance outage would be treated as a forced outage for purposes of calculating UCAP. The UCAP amounts would thus represent capacity that is actually available to CAISO, after taking into consideration approved maintenance outages. For new resources or resources for which appropriate Bid or Self-Schedule data is not available proxy values could be used for an appropriate transition period until actual values are developed.

CalCCA supports using resource-specific forced outage rates and incorporating a weighting method that places more weight on the most recent year's performance and less weight on more historic periods in determining a resource's UCAP values. The CAISO's initial proposal to use 50% weight for the most recent annual forced outage rate, 30% weight on the second annual forced outage rate period, and 20% weight on the third annual forced outage rate period appears to be reasonable. Given the possibility that historical forced outage data may not accurately reflect actual forced outages under the proposed UCAP approach, CalCCA recommends that CAISO consider putting more weight on the early year data once that data begins to reflect actual forced outages under the UCAP approach (e.g., 70/20/10 after one year of data has been collected, 60/30/10 after two years' data has been collected, then 50/30/20 thereafter).

3. Proposed Forced Outage Rate Assessment Interval

Please provide your organization's feedback on the Proposed Forced Outage Rate Assessment Interval topic as described in the second revised straw proposal.

CalCCA notes that CAISO's data presented suggests that forced outages do not appear to vary based on the season or based on relatively high levels of load. Thus, it may not be warranted to differentiate forced outages by season or by time of use.

Instead, CAISO should consider applying a single forced outage rate for each resource for an entire year, unless further analysis indicates seasonal variation.

4. System RA Showings and Sufficiency Testing

Please provide your organization's feedback on the System RA Showings and Sufficiency Testing proposal as described in the second revised straw proposal.

CalCCA is generally supportive of CAISO's proposal to conduct both an individual deficiency test of LSE shown UCAP and a portfolio deficiency test that models all LSEs' shown UCAP (either as random draws simulating forced outages based on individual resource forced outage rates, or scaled generation and load using UCAP values, if CAISO is unable to perform stochastic simulations due to time constraints). CalCCA is concerned, however, that the proposed portfolio deficiency test might not be transparent nor provide the appropriate signals for LSEs to act to minimize the potential for CAISO backstop procurement. CalCCA urges CAISO to explore ways to provide as much information to market participants as far in advance as possible to anticipate potential deficiencies in time to act to avoid such deficiencies. For example, rather than wait until CAISO has visibility for 100% of the RA resources needed to meet the target UCAP requirement, CAISO could run an indicative annual assessment that derates the system loads and available transmission to match the amount of UCAP known at the time of the study (e.g., 90%); this analysis could be similar to the approach used in the CRR Allocation process. CalCCA also encourages CAISO to extend the analysis beyond a single year by supplementing known committed RA resources, such as those shown or acquired by the proposed RA-Central Procurement Entity, with an assumption that the other RA resources from the prompt year would be made available for subsequent years, with adjustments for known retirements. This could provide a useful indication of potential future year deficiencies, particularly for local resources and for resources needed to meet deficiencies in hours other than the system peak hour.

CalCCA opposes the proposed LSE RA showing incentive, in which CAISO would charge short LSEs a penalty and distribute collected proceeds to long LSEs. We are concerned that such penalties could distort the bilateral RA markets, particularly in cases where suppliers have market power. Parties that fail to meet their RA requirements will be at risk of being allocated CAISO backstop procurement costs resulting from their deficiencies, in addition to being exposed to potential high energy market prices. CalCCA also notes that if the RA-CPE proposal supported by CalCCA is implemented, all of the CPUC jurisdictional LSE RA requirements would be met on a three year forward basis by individual LSEs and the RA-CPE without any penalty structure.

5. Must Offer Obligation and Bid Insertion Modifications

Please provide your organization's feedback on the Must Offer Obligation and Bid Insertion Modifications proposal as described in the second revised straw proposal.

CalCCA supports setting Must Offer Obligations (MOO) at NQC (rather than UCAP). Doing so appropriately makes the full capacity of the resource available to CAISO, except during outages.

CalCCA supports 24 by 7 MOO into the Day-Ahead Market for most resources and removal of blanket 24 by 7 real-time MOO, since CAISO's proposed imbalance reserves will cover real-time uncertainties. While some parties at the meeting raised concerns about relieving resources capable of real-time operations from the RT MOO, CalCCA notes that requiring all RA resources to be dispatchable in real-time creates costs that ultimately are borne by consumers. For example, if an RA resource that isn't committed in the Day-Ahead Market is required to bid into the real-time market (RTM,) the operator of the resource will need to ensure appropriate staff are available to respond to RTM dispatch instructions. But the imbalance reserve requirement proposed in the Day Ahead Market Enhancements Initiative should provide CAISO access to sufficient RT dispatchable resources to operate the grid reliably and efficiently. The imbalance reserve requirement can be adjusted as necessary to ensure that CAISO has access to sufficient resources in the RTM.

6. Planned Outage Process Enhancements

Please provide your organization's feedback on the Planned Outage Process Enhancements proposal as described in the second revised straw proposal.

CalCCA supports CAISO's proposed modifications to the planned outage process, but has some concerns about potentially providing incentives for resource owners to withhold capacity to cover maintenance outages that may not be approved by CAISO. Providing generators the opportunity to self-provide resources for maintenance outages appears to create inefficiencies and may contribute to the exercise of market power. It is less efficient for resource owners to individually hold back capacity to cover potentially-denied maintenance outages, than to rely on the collective resources to cover these outages. CAISO presented analysis demonstrating very little replacement capacity has been provided to address RA Forced Outages. CalCCA believes this information suggests that rather than allowing or requiring resource substitution for maintenance outages, if CAISO's analysis shows it can reliably serve load with the remaining available resources, then the requested outage should be allowed. Maintenance outages that are not approved would be treated as forced outages, which will affect future UCAP values. If necessary, CAISO could use its CPM authority to obtain capacity to cover resources on outage.

CalCCA supports minimizing the frequency of cancelling previously-approved maintenance outages, since this leads to increased costs that ultimately are borne by consumers.

7. RA Imports Provisions

Please provide your organization's feedback on the RA Imports Provisions proposal as described in the second revised straw proposal.

CalCCA notes that the recent CPUC decision on import RA (D.19.10.021) may force the CAISO to reconsider how it proposes to deal with import RA. Having two different rules within the CAISO for which RA imports can count will likely create problems. CalCCA prefers the CAISO's proposed solutions to those that were included in the CPUC decision and has filed a Application for Rehearing and a Petition for Stay in that docket. CalCCA supports CAISO's proposal to require specification of the Source Balancing Authority Area (BAA) for all RA imports on monthly showings. This approach will address potential double counting issues and ensure that the RA resource is supported by the exporting BAA.

CalCCA supports the proposed requirement that LSEs (and resource SCs) provide documentation to reflect unspecified imports being used to meet RA requirements have physical capacity with operating reserves behind them and firm transmission. Documentation can be contract language or an attestation from the import provider that confirms the RA import is supported by physical capacity and operating reserves..

CalCCA supports not requiring Imports to submit real-time bids, since that would require that transmission capacity be set-aside that otherwise could be made available to import lower cost resources. This would have a negative impact on market efficiency.

CalCCA strongly supports the proposed separate process to address MIC provisions necessary to address recently identified 2021 RA year capacity shortfall and potential adoption of the multi-year RA framework proposed in the RA Central Procurement Entity settlement pending before the CPUC.

Flexible Resource Adequacy

8. Identifying Flexible Capacity Needs and Requirements

Please provide your organization's feedback on the Identifying Flexible Capacity Needs and Requirements topic as described in the second revised straw proposal.

CalCCA agrees with the CAISO's proposal to simplify the flexible capacity requirements and as discussed below in response to #9

9. Setting Flexible RA Requirements

Please provide your organization's feedback on the Setting Flexible RA Requirements topic as described in the second revised straw proposal.

CalCCA supports CAISO's proposal to set the Flexible ramping requirement based on uncertainty between Day-Ahead Market and RTM, instead of based on three-hour net load ramp. CAISO should ensure, however, that it will have access to sufficient resources day ahead to meet the net load ramping needs. Assuming that this is the case, the CAISO can focus the flexible requirement on identifying the resources that are required to address the uncertainty between the DAM and RTM.

10. Establishing Flexible RA Counting Rules: Effective Flexible Capacity Values and Eligibility

Please provide your organization's feedback on the Establishing Flexible RA Counting Rules: Effective Flexible Capacity Values and Eligibility topic as described in the second revised straw proposal.

CalCCA supports CAISO's proposal to simplify the flexible counting criteria, and to recognize that imports are an important source of flexible capacity and should be eligible. CAISO must, however, recognize that the recent CPUC decision on imported RA effectively removes non-resource specific import RA from providing any flexibility since it must be self scheduled into the CAISO. CAISO's proposed, high level eligibility criteria appear to be reasonable:

- Either be a non-use limited resource or a use-limited resource with a use limitation CAISO can model in its energy market or through an opportunity cost adder
- Not be a Conditionally Available Resource
- Be dispatchable in at least 15 minute increments (including imports)
- Not be a regulation energy management resource

CalCCA agrees with CAISO that flexible counting rules for solar should address the unique characteristics of these resources. CAISO should identify the amounts of solar flexibility that can be available and utilized for the periods when these resources are expected to be available. CalCCA looks forward to working with CAISO and other stakeholders to develop appropriate solar flexible counting rules.

CalCCA supports CAISO's proposal to count non-generating resources' (NGR) Effective Flexible Capacity (EFC) based on the resource's ability to provide generation (positive and negative) over a fifteen minute period. This allows NGR resources to potentially receive EFC values that include their full charge and discharge ranges.

11. Flexible RA Allocations, Showings, and Sufficiency Tests

Please provide your organization's feedback on the Flexible RA Allocations, Showings, and Sufficiency Tests topic as described in the second revised straw proposal.

CalCCA opposes allocation of the flexible requirement based on each LRAs' proportional share of peak load, and MWs of wind and solar. CAISO instead should identify the contribution to the uncertainty between DAM and RTM of each of load, wind and solar. It should then allocate the requirement based on each LRA's share of load, wind and solar. This approach will better align cost allocation with cost causation.

12. Flexible RA Must Offer Obligation Modifications

Please provide your organization's feedback on the Flexible RA Must Offer Obligation Modifications topic as described in the second revised straw proposal.

No comments at this time.

Local Resource Adequacy

13. UCAP for Local RA

Please provide your organization's feedback on the UCAP for Local RA topic as described in the second revised straw proposal.

CalCCA supports Option 1: Convert LCRs into UCAP after the study process. CalCCA agrees that CAISO should continue to determine the need using NQC, but then state the requirement in terms of equivalent UCAP amounts (e.g., if the local need is 1000 MW and the weighted average forced outage rate of the resources CAISO identified when setting the need is 10%, the equivalent UCAP requirement would be 900 MW). This should result in the same resources (and associated NQC) as would be determined using the current LCR technical study approach.

Additional comments

Please offer any other feedback your organization would like to provide on the RA Enhancements Initiative.