



Stakeholder Comments Template

Resource Adequacy Enhancements

This template has been created for submission of stakeholder comments on the Resource Adequacy Enhancements fifth revised straw proposal that was published on July 7, 2020. The proposal, stakeholder meeting presentation, and other information related to this initiative may be found on the initiative webpage at:

<http://www.caiso.com/StakeholderProcesses/Resource-Adequacy-Enhancements>

Upon completion of this template, please submit it to initiativecomments@caiso.com. Submissions are requested by close of business on **August 7, 2020**.

Submitted by	Organization	Date Submitted
Evelyn Kahl, (415) 254-5454	California Community Choice Association ¹	August 7, 2020

Please provide your organization's overall position on the RA Enhancements fifth revised straw proposal:

- Support
- Support w/ caveats
- Oppose
- Oppose w/ caveats
- No position

Please provide your organization's comments on the following issues and questions.

1. System Resource Adequacy

Please provide your organization's feedback on the System Resource Adequacy topic as described in section 4.1. Please explain your rationale and include examples if applicable.

¹ California Community Choice Association represents local government Community Choice Aggregation electricity providers in California members, including Apple Valley Choice Energy, Baldwin Park Resident Owned Utility District, CleanPowerSF, Clean Power Alliance, Desert Community Energy, East Bay Community Energy, , Lancaster Choice Energy, MCE, Monterey Bay Community Power, Peninsula Clean Energy, Pico Rivera Innovative Municipal Energy, Pioneer Community Energy, Pomona Choice Energy, Rancho Mirage Energy Authority, Redwood Coast Energy Authority, San Diego Community Power, San Jacinto Power, San José Clean Energy, Silicon Valley Clean Energy, Solana Energy Alliance, Sonoma Clean Power, Valley Clean Energy, and Western Community Energy.

- a. Please provide your organization's feedback on the Determining System RA Requirements topic as described in section 4.1.1. Please explain your rationale and include examples if applicable.

While CalCCA appreciates the CAISO's efforts to conduct an assessment of actual June RA showings using stochastic production simulation, we do not believe analysis of a single month will be sufficient for setting UCAP requirements. CalCCA continues to believe that additional analysis and discussions with LRAs and LSEs will be necessary to better inform the determination of the appropriate UCAP requirements. We look forward to reviewing the supplemental information in mid-August and to discussions about the need for additional analysis.

- b. Please provide your organization's feedback on the Unforced Capacity Evaluations topic as described in section 4.1.2. Please explain your rationale and include examples if applicable.

CalCCA continues to support the annual development of monthly NQC and UCAP values for each resource, based on the seasonal UCAP factors that are derived from historical forced outage and urgent outage data consistent with RC procedure RC0630, with planned outages and opportunity outages not being incorporated into the UCAP calculations.

- i. Please provide your organization's feedback on whether the ISO should establish a dead band around a resource's UCAP value given the associated benefits and burdens, as described in section 4.1.2. Please explain your rationale and include examples if applicable.

CalCCA does not support establishing a dead band around a resource's UCAP value given the benefits and challenges identified. We agree with the CAISO that this approach would add complexity and likely result in an increase the system RA requirements allocated to LSEs. Further, the introduction of a deadband would weaken the incentive for generators to avoid forced outages.

- ii. Please provide your organization's feedback on Option 1 and Option 2 for calculating UCAP for new resources without three full years of operating history, as described in section 4.1.2. Please explain your rationale and include examples if applicable.

For resources for which resource-specific data is not yet available, CalCCA continues to support Option 1, using class average data (presumably weighted average) to substitute for the resource specific data until such data is available. We believe that Option 2 places too much weight on a single year's performance.

- iii. Please provide your organization's feedback on the ISO's approach to use the historical availability during the RAIM hours for years prior to 2019 and the historical availability during the 20% tightest supply cushion hours in years 2019 and beyond for hydro resources, as described in section 4.1.2. Please explain whether this approach is necessary or preferred to the standard UCAP calculation to reflect hydro availability.

CalCCA believes that using the top 20% of the tightest supply cushion hours for each season is much more likely to provide a reasonable representation of each resource's availability. We continue to request, however, that the CAISO provide more information about the impact of applying the proposed methodology to existing resources using actual historical data than was presented for the three example resources. That is, CalCCA would like CAISO to present information about the number of resources and MW that fall into different ranges of UCAP values for each season (e.g., 100-98%, 97.99-96%, etc.). We also request that the resource-specific UCAP calculations be provided to the Scheduling Coordinator for each resource. We understand that it took a CAISO staff person three days to perform the calculation for just three resources. However, it is unreasonable for CAISO to place a similar burden on market participants, especially given there will likely be a significant learning curve for performing the calculation. It would be much more efficient for the CAISO to complete this than to rely on each resource owner. The historical forced outage rates will have a direct impact on the amount of RA capacity that will need to be procured by LSEs. LSEs and LRAs thus have an interest in understanding how the forced outage rates of the overall pool of resources might affect the UCAP values. It is impossible for any single LSE to make this calculation – only the CAISO can do so. Thus, we reiterate our request that CAISO perform the calculation to fully inform this stakeholder process.

- iv. Please provide your organization's feedback on the modifications for UCAP counting rules for storage resources as described in section 4.1.2. Please explain your rationale and include examples if applicable.

CalCCA appreciates CAISO's clarification at the end of Section 4.1.7 that storage resources that maintain a minimum state of charge through the CAISO-required minimum charge requirement will not have their RA capacity values reduced. We are concerned, however, that the outages and state of charge examples on pages 30-32 imply that once a storage resource is fully charged or fully discharged in the RTM, even if it were perfectly following its DAM charge/discharge schedule, it would be penalized for no longer being available to be charged and could be penalized for no longer being available to be discharged. It is not reasonable to penalize a storage resource for responding to CAISO instructions; storage resources that have been optimized by the CAISO in its markets should not be treated as having forced outages due to being fully charged or fully discharged. CAISO should clarify that the UCAP will only be

derated based on resource unavailability due to forced outages and EOH SOC limitations.

- c. Please provide your organization's feedback on the System RA Showing and Sufficiency Testing topic as described in section 4.1.3. Please explain your rationale and include examples if applicable.

As noted in its response to Question 1.a., CalCCA believes analysis, that uses historical information beyond just the June RA showings for stakeholders, is needed to understand the impact of the UCAP requirements. This information will also be useful for evaluating CAISO's approach to Sufficiency Testing.

- d. Please provide your organization's feedback on the Must Offer Obligation and Bid Insertion Modifications topic as described in section 4.1.4. Please explain your rationale and include examples if applicable.

CalCCA has no comment on this aspect of the proposal at this time.

- i. Please provide your organization's feedback on generally defining variations to the must offer obligations and bid insertion into the day-ahead market based on resources type, as described in Table 12 in section 4.1.4. Please explain your rationale and include examples if applicable.
- e. Please provide your organization's feedback on the Planned Outage Process Enhancements topic as described in section 4.1.5. Please explain your rationale and include examples if applicable.

CalCCA strongly supports proposed Option 1 to include a planned outage reserve margin for the off-peak months to cover CAISO's reasonable expectation for RA resource planned outages. This approach is superior to the current Planned Outage Substitution Obligation (POSO) process because it reduces the risk of previously-approved planned outages being cancelled, removes incentives for resource owners to withhold capacity from the bilateral capacity market and eliminates the need to price in the risk of obtaining replacement capacity for planned maintenance outages. Thus, we urge CAISO to replace the current POSO process with the Option 1 planned outage margin approach. CalCCA echoes CAISO's observation that the approach to determining the planned outage reserve margin should balance LSE costs with providing reasonable opportunities for resources to undertake needed maintenance. The CAISO will need to provide adequate headroom to accommodate the required planned outages without unreasonably increasing costs to LSEs by setting the planned outage reserve margin unnecessarily high. Further analysis and discussions are needed to develop appropriate planned outage reserve margins.

CalCCA also seeks confirmation that no substitute capacity will be allowed or required for planned outages. While this is stated on pages 53 and 55, there appears to be some

holdover language from previous versions of the straw proposal on page 57 that suggests substitute capacity could be provided for denied planned outage requests.

- f. Please provide your organization's feedback on the RA Import Requirements topic as described in section 4.1.6. Please explain your rationale and include examples if applicable.
- i. Please provide your organization's feedback on the issue of whether firm transmission service on the last line of interest to the CAISO BAA will ensure reliability and is feasible, or whether the CAISO should require point-to-point, source to sink firm transmission service as originally proposed, as described in section 4.1.6 page 68. Please explain your rationale and include examples if applicable.

CalCCA remains concerned about the potential for the firm transmission requirement to enable the exercise of market power by parties that hold rights to firm transmission and have resources needed to meet CAISO RA requirements. Under the OATT paradigm, there is no test for potential market power because any unused firm transmission is required to be released prior to real-time. Requiring firm transmission prior to real-time, without ensuring parties holding firm transmission rights are unable to exercise market power, could result in significant cost increases to California LSEs, without a commensurate increase in reliability. Unless and until CAISO evaluates the potential for exercise of market power and has appropriate mitigation measures in place, CAISO should not require day-ahead demonstration of firm transmission for Import RA.

In addition to our concerns about market power, CalCCA believes that requiring firm transmission is unnecessary to ensure reliability. If, however, CAISO must move forward with this requirement, firm transmission on the last line of interest is preferred. As parties have noted, there often are multiple transmission paths available on the northern portion of the BPA system, for example, but only a single or few options for the last line to the CAISO. If resources have been contracted for RA and committed to CAISO there should be many options for them to obtain the necessary transmission to make the resources available to the CAISO markets. During the periods when CAISO appears to be most concerned about having insufficient resources to support deliveries to CAISO load, unless there have been significant derates to intertie capability, there will either be available firm transmission or there will be energy already scheduled on the transmission. In either case, CAISO will be able to use the energy to serve CAISO load. If there have been significant derates, both firm and non-firm transmission will be cut and the remaining transmission is likely to be fully utilized. CalCCA's view is that the key element for ensuring reliability is requiring resource-specific RA resources (including aggregations). CAISO's Maximum Import Capability process serves the purpose of putting limitations on the amount of imports without the need to impose additional firm transmission requirements.

- ii. Please provide your organization's feedback on other BAA's systems bordering the CAISO and whether such a "last line of interest" proposal is feasible and would effectively support RA import capacity dependability and deliverability, as described in section 4.1.6 page 68. Please explain your rationale and include examples if applicable.

Please see response to 1.f.i.

- iii. Please provide your organization's feedback on whether a non-compliance penalty or other enforcement actions are necessary if delivery is not made under firm transmission service, as described in section 4.1.6 page 69. Please explain your rationale and include examples if applicable.

CalCCA does not believe that dire consequences will occur if entities do not obtain firm transmission for RA resources prior to real-time. If such a requirement were to be adopted however, existing Tariff authority allows CAISO to take action against bad actors. For these reasons, CalCCA does not believe it is necessary to develop compliance penalties or additional enforcement actions if delivery is not made using firm transmission service.

- iv. Please provide your organization's feedback on how to convey the last line of interest, as described in section 4.1.6 page 69. Please explain your rationale and include examples if applicable.

CalCCA has no comment on this aspect of the proposal at his time.

- v. Please provide your organization's feedback on the options proposed in section 4.1.6 and any other potential mechanisms that would best ensure RA imports are dependable and deliverable if the CAISO were to adopt, as an alternative, a "last line of interest" firm transmission service requirement. Please explain your rationale and include examples if applicable.

As noted in its response to 1.f.i., CalCCA believes that the critical factor for ensuring RA imports are dependable and deliverable is to require Import RA to be resource-specific (including a specified aggregation or portfolio of resources in a single external BAA, or if the RA import supplier is a BAA, the BAA's pool of resources). CAISO's MIC process places significant restrictions on the amount of RA imports that can be counted, and CalCCA does not believe that transmission availability will be the factor that would result in RA imports not being made available to CAISO during the periods when those resources are needed to serve CAISO load.

- g. Please provide your organization's feedback on the Operationalizing Storage Resources topic as described in section 4.1.7. Please explain your rationale and include examples if applicable.

CalCCA continues to be concerned about CAISO's inability to optimize storage resources in the real-time market. The examples in Tables 14 and 15 of the 5th Revised Straw Proposal illustrate the inefficiencies that will be created by this failure. For example, Table 15 shows that 50 MWh of available bid-in storage energy that otherwise would have cleared the RTM for HE18 is blocked by the 80 MWh minimum charge requirement and then none of the energy that was being preserved by the minimum charge requirement clears any of the subsequent intervals. This outcome will result in increased costs for consumers and increased risks for generators. The minimum charge requirement is a poor substitute for a better optimized realtime market solution with a longer time horizon to avoid the suboptimal result illustrated by Table 15.

CalCCA encourages CAISO to redouble its efforts to identify a better real time solution. If it is not feasible to have a longer RTD time horizon than 65 minutes, CAISO should consider one or two reruns of the DAM prior to the beginning of each day and/or prior to the start of the daily storage charging hours. The results of the DAM rerun(s) would have the benefit of much better informed load and VER forecasts, additional information regarding generation and transmission outages, and more up-to-date storage state of charge information from the RTM. The DAM rerun could then be used to set minimum charge requirements that would be better aligned with RTM conditions for the remainder of the RTM intervals.

CalCCA seeks clarification that CAISO intends for the DAM optimization to ensure that individual storage resource charge/discharge schedules will be feasible. That is, absent a beginning of day state of charge specified by the resource scheduler greater than zero, the resource's charging energy (including energy to cover roundtrip storage losses) will be equal to the resource's discharging energy. If there is a beginning of day charge specified greater than zero, that energy plus the scheduled charging energy (including energy to cover roundtrip storage losses) will be equal to the resource's discharging energy. If the above conditions will not be met, please explain how the CAISO will be able to protect itself from the reliability risks created by having infeasible DAM results that fail to position storage resources to be charged during the lowest priced hours and discharged during the highest priced hours. Please also explain how storage resource owners will be able to protect themselves from the DAM vs. RTM price risks that would result from the infeasible DAM optimization.

2. Flexible Resource Adequacy

Please provide your organization's feedback on the Flexible Resource Adequacy topic as described in section 4.2. Please explain your rationale and include examples if applicable.

CalCCA supports deferring significant modifications to CAISO's flexible RA capacity proposal pending related developments in the Day-Ahead Market Enhancements initiative.

3. Local Resource Adequacy

Please provide your organization's feedback on the Local Resource Adequacy topic as described in section 4.3. Please explain your rationale and include examples if applicable.

- a. Please provide your organization's feedback on the UCAP in Local RA Studies topic as described in section 4.3.1. Please explain your rationale and include examples if applicable.

CalCCA supports CAISO's proposal to continue to run the local capacity technical studies using NQC values and to include a translation table from NQC to UCAP at the level of the LSE compliance requirement by TAC area. Given the local capacity technical study timing issues and the need to avoid complications from including estimated NQC and estimated UCAP from resources that are not yet built, CalCCA recognizes the need to use data from the previous year's NQC/UCAP list for resources already in-service.

4. Backstop Capacity Procurement Provisions

Please provide your organization's feedback on the Backstop Capacity Procurement Provisions topic as described in section 4.4. Please explain your rationale and include examples if applicable.

Please provide your organization's feedback on the Capacity Procurement Mechanism Modifications topic as described in section 4.4.2. Please explain your rationale and include examples if applicable.

CalCCA supports CAISO's proposal to modify its existing CPM authority to procure additional capacity in the following scenarios: (1) system UCAP deficiencies through the RA process; (2) inability to serve load in the portfolio analysis test; and (3) an identified need to procure local RA after a local area or sub-area fails to meet the energy sufficiency test.

- a. Please provide your organization's feedback on the Making UCAP Designations topic as described in section 4.4.3. Please explain your rationale and include examples if applicable.

CalCCA has no comment on this aspect of the proposal at his time.

- b. Please provide your organization's feedback on the Reliability Must-Run Modifications topic as described in section 4.4.4. Please explain your rationale and include examples if applicable.

CalCCA has no comment on this aspect of the proposal at his time.

- i. Please provide your organization's feedback on an appropriate availability incentive design to apply to RMR resources after the removal of the RAAIM tool, as described in section 4.4.4. Please explain your rationale and include examples if applicable.

- c. Please provide your organization's feedback on the UCAP Deficiency Tool topic as described in section 4.4.5. Please explain your rationale and include examples if applicable.

CalCCA has no comment on this aspect of the proposal at his time.

5. Please provide your organization's feedback on the implementation plan, including the proposed phases, the order these policies must roll out, and the feasibility of the proposed implementation schedule, as described in section 5. Please explain your rationale and include examples if applicable.

CalCCA has no comment on this aspect of the proposal at his time.

6. Please provide your organization's feedback on the proposed decisional classification for this initiative as described in section 6. Please explain your rationale and include examples if applicable.

CalCCA supports CAISO's plan to seek approval only from the CAISO Board for this initiative. As CAISO notes, "this initiative falls outside the scope of the EIM Governing Body's advisory role because the initiative does not propose changes to either real-time market rules or rules that govern all CAISO markets. This initiative is focused on the CAISO's RA planning, procurement, and performance obligations. This process applies only to LSEs serving load in CAISO's BAA and the resources procured to serve that load, and does not apply to LSEs outside CAISO's BAA."

Additional comments

Please offer any other feedback your organization would like to provide on the Resource Adequacy Enhancements fifth revised straw proposal.