

# California Community Choice Association

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## Contact

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1. Process: Please Provide your organization's feedback on the RA Working Group process and any suggestions you have for improvement.

## Introduction

The California Community Choice Association (CalCCA) appreciates the opportunity to comment on the California Independent System Operator's (CAISO) RA Modeling and Program Design Discussion Paper and Working Group. The CAISO's Resource Adequacy (RA) program is ripe for reevaluation considering the changing resource mix, increased variability in supply and demand conditions, and evolving RA frameworks in California and West-wide. The apparent RA supply deficiency and resulting exorbitant RA prices also warrant consideration when evaluating enhancements to the RA program to ensure they help reduce or avoid exacerbating challenging RA market conditions.<sup>[1]</sup> With these considerations in mind, CalCCA makes the following recommendations in response to the first working group:

- The CAISO should conduct the RA Modeling and Program Design initiative (Initiative) in one branch rather than two concurrent branches given the interconnectedness of the issues likely to be taken up around RA modeling and the RA program.
- The CAISO should prioritize issues around slice-of-day (SOD) implementation, including (1) determining if the California Public Utilities Commission's (CPUC) SOD program will meet the requirements of the CAISO evaluation, (2) clarifying the resource values and requirements load serving entities (LSEs) will show and CAISO will validate, and (3) determining how it will conduct backstop once CPUC jurisdictional LSEs are subject to SOD and non-CPUC jurisdictional LSEs are not.
- CalCCA generally supports the CAISO's efforts to develop a portfolio evaluation to test system-wide RA sufficiency in the CAISO balancing authority area (BAA). Several important considerations will need to be made, however, to develop a process that fits in well with the existing RA structure and provides the CAISO with the resources needed to meet reliability planning targets in all hours.
- The CAISO should expand the scope of Problem Statement 1 to include the sufficiency of the RA fleet west-wide, not just the RA fleet in the CAISO BAA.
- The CAISO should regularly publish public reporting of aggregated year-ahead and month-ahead RA showing information so that stakeholders can better understand RA market trends.
- The CAISO should work with the CPUC to ensure credited resources' RA capacity is recognized, either through changes to the CPUC rules to have credit resources shown on supply plans or through a CAISO tariff change to support credited resources when allocating capacity procurement mechanism (CPM) costs.
- The CAISO should review its must-offer obligation (MOO) and bid insertion rules to ensure they are comprehensive, maximize the availability of the RA fleet, and properly reflect the capabilities of technologies providing RA.

- Given the shortcomings associated with resource adequacy availability incentive mechanism (RAAIM), the CAISO should evaluate other mechanisms to incent resource availability.
- The CAISO should work with the CPUC, which has scoped unforced capacity (UCAP) into its new RA proceeding, to evaluate how to incorporate UCAP into the CAISO and CPUC's RA programs. Part of this evaluation should include whether special considerations need to be made to make UCAP compatible with SOD.
- CalCCA supports the CAISO reviewing the substitution rules for planned outages.
- Within the RA portfolio analysis described in Problem Statement 1, the CAISO should do an hourly assessment to check whether the entire shown RA fleet is sufficient to meet RA needs in all hours. The CAISO should also consider how to allocate costs when backstop is performed on hourly RA needs to ensure all programs are allocated costs consistently.
- The sub-issue of extended day-ahead market (EDAM) resource sufficiency evaluation (RSE) cost causation should be included primarily within the EDAM ISO BAA Participation Rules initiative rather than within the Initiative.

### **Working Group Process**

During the Working Group, the CAISO asked stakeholders if the CAISO should conduct the working group meetings in one branch or two branches, one for modeling and one for the program. CalCCA recommends the CAISO conduct the Initiative in one branch rather than two concurrent branches given the interconnectedness of the issues likely to be taken up around RA modeling and the RA program.

Where CAISO and stakeholders would benefit from an accelerated timeline, however, is for the most time-sensitive issue, SOD implementation. The CAISO should (1) determine if the CPUC's SOD program will meet the requirements of the CAISO evaluation, and (2) clarify the resource values and requirements LSEs will show and CAISO will validate. This confirmation and clarification should happen quickly. What will very likely require more stakeholder discussion, however, is how the CAISO will conduct backstop once CPUC jurisdictional LSEs are subject to SOD and non-CPUC jurisdictional LSEs are not. Ensuring all local regulatory authorities (LRA) bring their share of RA capacity necessary to meet reliability needs in all hours will be an important consideration for this initiative, especially considering the CAISO's responsibility to administer the different RA programs adopted by each LRA.

[1] An in-depth analysis of the RA supply stack and prices can be found in CalCCA's RA Whitepaper posted here: <https://cal-cca.org/resource-adequacy/>.

2. Problem Statements: Please share your organization's feedback on the draft RA Working Group's problem statements and/or provide your draft problem statements. What data analysis would help inform the WG's understanding of the problem statement?

#### **Problem Statement 1: Overall System Reliability Information**

The CAISO indicates there is a need for additional consistent, transparent, and timely information on the sufficiency of the RA fleet in the CAISO BAA. CalCCA agrees with this need and offers the following observations and recommendations:

- CalCCA generally supports the CAISO’s efforts to develop a portfolio evaluation to test system-wide RA sufficiency in the CAISO BAA. Several important considerations will need to be made, however, to develop a process that fits in well with the existing RA structure and provides the CAISO with the resources needed to meet reliability planning targets in all hours. These considerations include:
  - The structure of the portfolio evaluation (e.g., deterministic, stochastic);
  - When and how often to perform the portfolio evaluation (e.g., prior to RA showings, after RA showings, annually, monthly, etc.);
  - How far out the assessment will study (e.g., the next RA compliance period, multiple compliance periods, etc.);
  - What assumptions need to be made; and
  - What steps the CAISO would take when an insufficiency is identified?

Importantly, a portfolio evaluation must be transparent and provide the right signals for LSEs to minimize the potential for CAISO backstop procurement. This working group should 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 the CAISO has visibility for 100 percent of the shown RA resources needed to meet the year-ahead or month-ahead requirement, the CAISO could run a forward annual assessment that makes assumptions about system resources and loads known at the time of the study to inform LSE procurement. The CAISO could then rerun the study with the shown RA fleet to confirm sufficiency based on procurement and showings that occurred.

- The CAISO should expand the scope of this problem statement to include the sufficiency of the RA fleet west-wide, not just in the CAISO BAA. The CAISO depends on imports to meet RA requirements. The Western Resource Adequacy Program (WRAP) will soon have its own binding requirements its participants must meet with internal or external supply. The CAISO and RA market participants would benefit from an understanding of where RA supply is dedicated both internally and externally. As a starting point, the CAISO could coordinate with the WRAP to determine what data can be shared regarding the availability of California RA supply, the availability of RA supply in the broader west, and where such supply is dedicated.
- The CAISO should regularly publish public reporting of aggregated year-ahead and month-ahead RA showing information so that stakeholders can better understand RA market trends like (a) trends in the categories of resources (e.g., imports, storage) used for compliance and (b) the extent of California RA-eligible resources being used for non-RA purposes (e.g., exports, substitution, etc.). CalCCA greatly appreciated the CAISO publishing the Historical Year-Ahead RA Aggregate Data,[\[1\]](#) and found it extremely valuable in informing the use of RA imports since the California Public Utilities Commission’s (CPUC) import RA rule changes were adopted. The CAISO should continue to regularly post this data for year-ahead and month-ahead RA showings.
- On the working group call, the CAISO indicated that its desired visibility into non-RA supply includes resources contracted for another use and therefore unavailable to provide incremental reliability, like resources providing substitution, and “credited” resources that are not shown on supply plans, like certain demand response resources.

CalCCA supports efforts to gain more visibility into credited resources, particularly because the CAISO cannot consider credited resources when allocating CPM costs, a problem that revealed itself after the CAISO's August 2023 CPM. The CAISO should work with the CPUC to ensure credited resources' RA capacity is recognized, either through changes to the CPUC rules to have credit resources shown on supply plans or through a CAISO tariff change to support credited resources when allocating CPM costs.

## **Problem Statement 2: Requirements for RA Capacity and Program Tools**

The CAISO's current requirements and tools have not been updated recently. CalCCA agrees that now is a good time to revisit them to ensure they (1) incent RA supply to be available when and where needed, (2) result in efficient procurement and investment decisions, and (3) function effectively for the CAISO and market participants.

The CAISO should consider the following recommendations for the five sub-issues the CAISO identified within this problem statement:

1. **The current requirements for RA capacity:** The CAISO should review its MOO and bid insertion rules to ensure they are comprehensive, maximize the availability of the RA fleet, and properly reflect the capabilities of technologies providing RA.
2. **The Resource Adequacy Availability Incentive Mechanism (RAAIM):** RAAIM is designed to incent RA resources to maximize their availability, minimize outages, and provide substitute capacity when outages occur. It is a self-funded mechanism that charges resources that are not available during the availability assessment hours (AAH) and pays resources that are available during the AAHs. Past CAISO analysis shows that RAAIM is ineffective at incenting substitute capacity to replace RA capacity on outage.<sup>[2]</sup> Several reasons could contribute to RAAIM's ineffectiveness including but not limited to sellers incorporating the risk of RAAIM charges into capacity pricing, scheduling coordinators' payments and charges balancing each other out, or too many resources or outage types receiving RAAIM exemptions. Additionally, RA prices are reflecting the current RA market scarcity. The CPUC's 2023-2024 RA market price benchmark is \$14.37 per kilowatt (kW) -month and the potential RAAIM payment is \$3.79 per kW-month (or 60 percent of the \$6.31 per kW-month CPM soft offer cap). It is, therefore, logical to assume sellers would rather sell substitute capacity as RA than use it to avoid RAAIM charges. Given these shortcomings, the CAISO should evaluate other mechanisms to incent resource availability, such as the UCAP counting methodology described below.
3. **Lack of tools to incentivize performance:** Given the shortcomings of RAAIM identified above, the CAISO should evaluate alternative methods for incentivizing resource availability, such as UCAP counting rules. UCAP counting rules incorporate historical forced outage rates into the RA value of resources, rather than incorporating average forced outage impacts into the planning reserve margin, like California does today. Including forced outages in the counting rules creates incentives for generators to conduct planned maintenance to prevent unplanned, forced outages. It also informs the market of generators' historical availability so that entities can procure resources that are most reliable. The CAISO should work with the CPUC, which has scoped UCAP into its new RA proceeding, to evaluate how to incorporate UCAP into the CAISO and CPUC's RA programs. Part of this evaluation should include whether special considerations need to be made to make UCAP compatible with SOD. Whether or not a UCAP methodology

needs to be specifically tailored to SOD can be informed by evaluating how forced outage trends vary by hour.

4. **Rules for substitution and planned outages:** CalCCA supports the CAISO reviewing the substitution rules for planned outages. Today, the CAISO requires all planned outages to come with substitute capacity. This can result in holding excess RA capacity from the market to cover potential upcoming planned outages and resources including a risk premium to cover any potential costs of substitute capacity. A future planned outage process that allows RA resources to reliably take planned outages without having to provide substitution in all cases could reduce the practice of holding back RA capacity and reduce RA costs.
- **The need for a comprehensive review of the CPUC's Slice-of-Day reform and the translatability and transactability of WRAP:** CalCCA supports this sub-issue. As described in prompt #1 above, the CAISO should prioritize issues around SOD implementation, including:
  - Determining if the CPUC's SOD program will meet the requirements of the CAISO evaluation;
  - Clarifying the resource values and requirements LSEs will show and CAISO will validate, and;
  - Determining how it will conduct backstop once CPUC jurisdictional LSEs are subject to SOD and non-CPUC jurisdictional LSEs are not.

CalCCA also supports the CAISO exploring how to ensure the CAISO RA program is compatible with WRAP. First steps to accomplishing this should include (1) an assessment of the structure and rules of both programs to understand similarities and differences, and (2) a determination of what data can be shared between program administrators and publicly regarding the availability of California RA supply, the availability of RA supply in the WRAP and broader west, and where such supply is dedicated.

### **Problem Statement 3: LRA RA Responsibility and Cost Allocation**

The CAISO indicates that stakeholders have expressed a need for a transparent and common framework for evaluating reserve margins and counting rules and understanding of an LRA RA program's contribution to overall system reliability. CalCCA agrees with this need and offers the following recommendations on this problem statement:

- As the CAISO points out, LRAs have their own definitions, methods of measurement, and planning standards for their RA programs. Assuming the CAISO and non-CPUC LRAs do not shift to a SOD RA program like the CPUC has, the CAISO needs some other way to determine whether each of the different RA programs results in an RA fleet that is available when and where needed to meet reliability needs in all hours, not just the single hour the CAISO currently checks for compliance. Within the RA portfolio analysis described in Problem Statement #1, the CAISO should do an hourly assessment to check whether the entire shown RA fleet is sufficient to meet RA needs in all hours. The CAISO should also consider how to allocate costs when backstop is performed on hourly RA needs to ensure all LSEs are allocated costs consistently. For example, if the CAISO identifies a deficiency in a subset of hours caused by a subset of

LSEs, those LSEs should be allocated the costs of any backstop procurement resolving the deficiency. In sum, if the CAISO makes no changes in response to SOD, the CAISO risks missing reliability issues in the 23 hours the CAISO will not assess for RA compliance. The CAISO should avoid this risk by performing an hourly assessment of the RA fleet's ability to meet hourly RA needs and allocate backstop costs in a manner that reflects each LSE's contribution to the hourly need.

The sub-issue of EDAM RSE Cost Causation should be included primarily within the EDAM ISO BAA Participation Rules initiative rather than within the Initiative. The causes of EDAM RSE failures are not solely attributable to LSE RA deficiencies, so it makes more sense to include this topic in an initiative with a broader focus than solely RA. Additionally, opportunities to cure EDAM RSE failures will likely differ from those used to cure RA deficiencies given the differences in the timeframe for identifying and curing RA deficiencies in the year-ahead and month-ahead and the timeframe for identifying and curing EDAM RSE failures in the days prior to the trade date.

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[1] <http://www.caiso.com/Documents/HistoricalYearAheadResourceAdequacyAggregateData.xlsx>.

[2] CAISO RA Enhancements Fifth Revised Straw Proposal (July 7, 2020), at Appendix 8.3.

3. Principles: Provide your organization's feedback on the draft principles and/or provide your organization's recommendations for RA principles.

CalCCA supports the six principles proposed by CAISO for the RA program: Reliable, Efficient/Cost-Effective, Implementable, Durable, Adaptable, and Transparent. Proposed policy solutions should be developed with the goal of maximizing adherence to these principles. The CAISO and stakeholders will likely find, however, that most solutions will meet some of the guiding principles but not others (e.g., a proposed policy solution could be implementable but not durable, another could be reliable and adaptable but not cost-effective and efficient, etc.). The challenge during the policy development phase will be how to balance all of these guiding principles that may be at times contradictory to one another.

4. RA goals: Provide your organization's feedback on the draft RA goals and/or provide your organization's suggestions for RA goals.

CalCCA supports the draft RA goals and offers the following comments:

**RA Goal 1: The CAISO's established modeling and visibility enable an overall reliable system**

Reliability is the central tenet of the RA program. CalCCA supports the CAISO establishing modeling that ensures that the RA program results in an RA fleet that



meets planning targets and a CAISO system that is reliable in all hours. The CAISO's modeling process, assumptions, and results should be transparent so that LSEs can plan in a manner that meets reliability targets and minimizes the need for CAISO backstop.

### **RA Goal 2: Procurement and trading is efficient, cost-effective, fungible, and affordable**

CalCCA's RA stack analysis shows that the RA supply stack is insufficient for all LSEs to comply with their RA requirements regardless of their best efforts and willingness to pay exorbitant prices.<sup>[1]</sup> As basic economics would predict, these conditions are ripe to produce exorbitant prices, making reliably serving California's electricity customers more expensive. Between September 2019 and September 2021, the weighted average price for September RA increased by over 100 percent from \$4.08/kW-month to \$8.62/kW-month,<sup>[2]</sup> and continued to rise as the CPUC's 2023-2024 RA market price benchmark is \$14.37 per kW-month.<sup>[3]</sup> The lack of sufficient capacity available to meet RA needs is clearly driving up costs for California electricity customers. The only durable solution is to bring new resources online, yet new resources continue to face supply chain, interconnection, and permitting challenges. Until those challenges are met holistically, RA supply will remain tight, and prices paid by consumers will remain high. For these reasons, CalCCA supports this goal and recommends the CAISO design policies with this near-term reality in mind and refrain from pursuing proposals that will increase costs without providing any incremental reliability benefit. Policies that make the RA program as transparent and transactable as possible will aid in promoting near-term affordability.

### **RA Goal 3: The RA program is implementable, adaptable, and compatible with different programs**

CalCCA supports this goal and recommends the CAISO add "durable" to this list. A durable RA program that will meet the CAISO's reliability objectives for many years to come is key to providing market participants with the regulatory certainty needed to make longer-term planning decisions.

When evaluating the RA program's compatibility with different programs, this evaluation should include California's multiple LRA programs, the WRAP, and state's strategic reliability reserves which will provide contingency resources beyond what is planned for RA purposes.

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[1] An in-depth analysis of the RA supply stack and prices can be found in CalCCA's RA Whitepaper posted here: [https://cal-cca.org/wp-content/uploads/2023/09/CalCCA-Stack-Analysis-2023-2026-updated-9\\_15\\_23.pdf](https://cal-cca.org/wp-content/uploads/2023/09/CalCCA-Stack-Analysis-2023-2026-updated-9_15_23.pdf).

[2] CPUC 2021 Resource Adequacy Report, at 29: [https://www.cpuc.ca.gov/-/media/cpucwebsite/divisions/energy-division/documents/resource-adequacy-homepage/2021\\_ra\\_report\\_040523.pdf](https://www.cpuc.ca.gov/-/media/cpucwebsite/divisions/energy-division/documents/resource-adequacy-homepage/2021_ra_report_040523.pdf).

[3] Calculation of the Market Price Benchmarks for the Power Charge Indifference Adjustment Forecast and True Up (Oct. 2, 2023).

5. Presenting: Is your organization interested in presenting its experience or area of expertise at a future working group? If yes, what problem statement will your presentation address or support? Please include any additional comments.

CalCCA has no additional comments at this time.

6. Please provide any additional comments.

CalCCA has no additional comments at this time.