

California Community Choice Association

SUBMITTED 03/27/2024, 03:00 PM

Contact

Shawn-Dai Linderman (shawndai@cal-cca.org)

1. Provide a summary of your organization's comments on the 3/13 RAMPD working group discussion:

The California Community Choice Association (CalCCA) appreciates the opportunity to comment on the March 13, 2024, Resource Adequacy Modeling and Program Design (RAMPD) Working Group (Working Group). The Working Group focused primarily on the planned outage substitution process, which was refined in 2021 in an expedited manner in response to the August 2020 load-shedding events. The refinements made in 2021 aimed to ensure planned outages can be taken as scheduled and that planned outages taken on Resource Adequacy (RA) resources are fully substituted such that the system has access to the full amount of RA capacity required to operate reliably.

Generators and the CAISO have expressed concerns with this process, specifically around the challenge generators face in finding available substitute capacity. These concerns are a function of the tight capacity market which load-serving entities (LSE) are procuring under to meet their obligations and generators are procuring under when they need to substitute an RA resource on planned outage. The California Independent System Operator Corporation (CAISO) should avoid proposals that would simply shift the obligation to provide substitute capacity from the generator LSEs simply because substitute capacity is expensive and hard to find. Instead, the CAISO should (1) seek solutions that incentivize taking planned outages at optimal times when RA requirements are not as high and substitute capacity is more readily available, and (2) allow the availability of substitute capacity to be more easily known by generators who seek it.

The Working Group also discussed revisions to the problem statements and recommended potential solutions to explore in the policy development phase. At this stage in the Working Group process, the CAISO should transition most of this initiative's scope to the policy development phase, as recommended by the CAISO. Remaining in the problem statement phase for too long risks the Working Group stalling in an endless loop of discussions around problems without getting to solutions. Ample time has been spent discussing the problems associated with problem statements 1 and 2 such that these scope items can move forward to the policy development phase. Advancing straw proposals for stakeholders to react to will move the process forward in a productive manner that allows for iterative steps toward solutions.

2. Provide your organization's feedback on the outage and substitution topic, including the discussion on background, mechanics, analysis, and planned-to-forced outage and PRR 1122. Please also provide any suggestions for analysis that you believe would help refine the problem statement, recommendations, or prioritization.

The outage and substitution topic began with a presentation on the current rules for planned and forced outages. As the CAISO notes, all planned outages on RA capacity require substitution unless they are off-peak opportunity outages or outages caused by transmission. Forced outages "have an opportunity" to submit substitute capacity to avoid Resource Adequacy Availability Incentive Mechanism (RAAIM) penalties priced at 60 percent of the Capacity Procurement Mechanism soft-offer cap. The CAISO notes that these processes can cause operational issues, including generator challenges finding substitute RA capacity which impacts their ability to take maintenance outages, and an increase in forced outages which could create reliability challenges for the CAISO.

To address these challenges, the CAISO should prioritize adopting a unforced capacity (UCAP) counting methodology. The interactions between planned outages and forced outages require a comprehensive solution that creates the proper incentives to conduct maintenance when necessary and be available when needed to support system reliability. UCAP does this by creating a meaningful disincentive to letting a resource get to the point that it requires a lot of forced outages. UCAP coupled with planned outage rules that incentivize taking

maintenance outages at the right times (when not providing RA or when the system has excess capacity) is the right approach to ensuring resource availability.

Stakeholders appear to have an interest in revising the planned outage process in addition to developing UCAP and revising the forced outage process. As it considers potential solutions to the challenges created by the planned outage process, the CAISO should take care to maintain the incentives generators have to take planned outages when it is best for system reliability. The CAISO adopted its existing planned outage rules with the following logic:

Ultimately, providing RA is a commitment to be available to the CAISO. If a resource is unable to do so, it should have an obligation to find another resource that will, or not be shown as RA in that month. If, as many stakeholders have pointed out, there is abundant capacity available during off-peak months, then finding substitute capacity should be fairly straightforward and relatively inexpensive. Similarly, the lack of available substitute capacity suggests that the resource's SC either submitted the request after other resources had submitted planned outages or that forecasted load conditions dictate that the resource is needed and should try to schedule the outage at a different time.[1]

Since the planned outage substitution rules were adopted, it has become clear that there is no longer an abundance of capacity, which has created challenges for LSEs procuring for their RA obligations and for generators procuring for substitute capacity. The CAISO's logic for adopting its planned outage substitution requirements remains sound under these conditions. If capacity conditions dictate that the resource should schedule its outage at a different time, it should do so when there is sufficient excess RA capacity to find substitute capacity or refrain from selling RA in the month(s) it performs planned maintenance.

[1] <https://www.caiso.com/InitiativeDocuments/ResourceAdequacyEnhancements-Phase1FinalProposal.pdf> at 12-13.

3. Provide your organization's feedback on the DMM presentation on planned-to-forced outages:

The CAISO and Department of Market Monitoring's (DMM) presentations on planned-to-forced outages highlight yet another reason for the CAISO to move to a UCAP counting methodology to account for forced outages. The RAAIM provides insufficient disincentive for generators to submit denied planned outages as forced outages. While planned outages almost always require substitution, forced outages do not. RAAIM was intended to incentivize forced outage substitution, but under current RA prices, it is largely ineffective. Because the RAAIM price is so low, if a resource goes from planned to forced, there is little to no incentive for a resource to submit substitute capacity. UCAP would create the right incentives to take planned outages to conduct maintenance in the first place so generators can avoid forced outages entirely to ensure their UCAP value remains high.

DMM's presentation on planned-to-forced outages also highlights the need for enhancements to the outage definitions. As stated by DMM, the current definition of Forced Outage focuses on the timing of submission and does not convey information about the urgency of necessary repairs. CalCCA agrees with DMM's recommendation to enhance outage reporting to allow for an indication of outages that are immediately necessary versus those that are not. Consistent with the Sixth Revised Proposal[1] in the Resource Adequacy Enhancements initiative, the CAISO should consider adjusting the CAISO's outage definitions to align with those used by the CAISO in its Reliability Coordinator function. The definitions include, in addition to planned and forced outages, urgent outages and opportunity outages.

- **Urgent Outage** - Facility/equipment that is known to be operable, yet carries an increased risk of a Forced outage occurring. Facility/equipment remains in service until personnel, equipment, and/or system conditions allow the outage to occur.
- **Opportunity Outage** – A Facility/equipment outage that can be taken due to a change in system conditions, weather, or availability of field personnel. Opportunity outages did not meet the short-range window requirements

Under a UCAP methodology, forced and urgent outages would impact a resource's UCAP value, while planned and opportunity outages would not.

[1] <https://www.caiso.com/InitiativeDocuments/DraftFinalProposal-SixthRevisedStrawProposal-ResourceAdequacyEnhancements.pdf>.

4. Provide your organization's feedback on the panel discussion on outage and substitution and performance availability incentives:

CalCCA appreciates the creative solutions put forth by the panelists to move the discussion on the planned outage process forward. When evaluating potential solutions, the CAISO and stakeholders should focus on those that provide the right incentives for resources to conduct planned maintenance when they are not providing RA capacity or when substitute capacity is readily available, like during the shoulder months when RA requirements are much lower. The CAISO and stakeholders should avoid solutions that simply shift the substitution obligation from the generator to the LSE, as such proposals do not create the right incentives for maintenance to be conducted in a manner that best benefits system reliability. For these reasons, the CAISO should not adopt Middle River Power LLC's suggestions two (move from a monthly to an annual RA program) and four (include planned outages in the PRM).

In addition, CalCCA is concerned that options two and four would further exacerbate challenges LSEs face procuring capacity in an already tight RA market. Under option two, LSEs would potentially lose access to hydro and imports, two important sources of RA capacity that typically make themselves available between the year-ahead and month-ahead showings once their availability is better known. Under an annual RA program, suppliers may be less willing to sell capacity that they are not yet certain will be available because it would put them at risk of needing to find substitute capacity. Allowing suppliers to sell RA capacity between the year-ahead and month-ahead allows them to offer more supply to LSEs than they would have been able to before they had certainty about their availability for the summer months. Increasing the Planning Reserve Margin (PRM) to account for planned outages, removes the incentive for generators to take planned outages at times that minimize the impact on system reliability. Instead, it would create a generic buffer that adds additional demand to an RA capacity market that is already scarce. This is the same problem that generators state they face (lack of substitute capacity) that would simply be shifted from the entity that can control the timing of a planned outage, the generator, to an entity that cannot, the LSE. Finally, moving to an annual RA program or adjusting the PRM to account for planned outages is not a decision the CAISO can unilaterally make. They would require collaboration and agreement by the Local Regulatory Authorities (LRA) who administer RA programs across the CAISO balancing authority.

The CAISO could further explore Middle River Power LLC's suggestions one and three. These options retain the responsibility for the generator to find substitute capacity when it takes a planned outage while providing RA, while enhancing the ability for generators to find and secure substitute capacity. CalCCA would also be open to further discussing the suggestion put forth by the City of Anaheim, subject to additional detail and clarification. As CalCCA understands the suggestion, it would allow LSEs to voluntarily show excess RA so that some of their RA resources could take planned outages without substitution as long as the rest of their RA resources fully cover their requirement.

5. Provide your organization's comments on Problem Statement 2: Applicable Sub-Issues: Planned Outage Substitution: Current rules requiring substitute capacity for all planned outages on RA capacity were designed assuming there was excess capacity available at commercially reasonable prices and may require revisiting. As a result, today planned outages often cannot find substitution which risks the health of the resource if this results in potential delays in performing maintenance. In addition, current substitution rules for planned outages may be overly burdensome.

Do you agree that the problem statement/sub-issue is ready to move forward to policy development? If not, please describe why the problem statement is incomplete or inaccurate, and if applicable your suggested edits and additional information and analysis required to move forward. (Note: In the policy develop phase for all the

items included in these questions, CAISO staff recognizes that additional analysis and refinement of the problem statements/recommendations/goals will likely take place.)

CalCCA agrees with the CAISO's proposed path forward, in which the following topics would move on to the policy development phase:

- Modeling
- Default PRM
- Default Counting
- Exploration of UCAP
- Availability and Incentive Mechanisms
- Outage and Substitution
- Tangential Extended Day-Ahead Market (EDAM) Resource Sufficiency Evaluation (RSE) Issues

The following topics would remain in the working group phase:

- Backstop
- Requirements for RA Capacity (e.g., energy sufficiency, Flex RA)
- Continued Interoperability: Slice-of-Day/Western Resource Adequacy Program

This path forward advances issues that have received significant stakeholder discussion. Stakeholders have a good understanding of the issues at this point and can provide productive feedback to straw proposals put forth by the CAISO. While CalCCA may disagree with some specific framings of the problem statements (e.g., the framing of the planned outage process as overly burdensome) and potential recommendations outlined by the CAISO (e.g., addressing outages up front in the PRM), CalCCA generally agrees that the CAISO has captured the major challenges with its RA program design.

6. Provide your organization's comments on the recommendations for Problem Statement 2: Applicable Sub-Issues: Planned Outage Substitution: Through a stakeholder policy development process the ISO should consider the following options as a part of a holistic solution to outage and substitution issues: 1) Address outages up front (PRM, Resource counting (e.g., UCAP)), 2) Replace RASC with a pool of RA resources for substitution, and 3) Portfolio assessment with backstop.

Do you agree that the recommendation is ready to move forward to policy development? If not, please describe why the recommendation is incomplete or inaccurate, and provide your suggested edits and additional information and analysis required to move forward.

See response to question 5.

7. Provide your organization's comments on the edits to Problem Statement 1: • Updating the CAISO's Default Planning Reserve Margin: The CAISO's default PRM is outdated and has not kept pace with changes in the RA landscape resource mix and reliability needs. • Updating the CAISO's Default Counting Rules: The CAISO's default counting rules have not kept pace with changes in the RA resource mix and reliability needs.

Do you agree that the problem statement/sub-issue is ready to move forward? If not, please describe why the problem statement is incomplete or inaccurate, and if applicable your suggested edits and additional information and analysis required to move forward.

See response to question 5.

8. Provide your organization's comments on the recommendations for Problem Statement 1: Updating the CAISO's Default Planning Reserve Margin: The ISO's default PRM and default counting rules should meet a 0.1 LOLE at the ISO BAA level

Do you agree that the recommendation is ready to move forward? If not, please describe why the recommendation is incomplete or inaccurate, and provide your suggested edits and additional information and analysis required to move forward.

See response to question 5.

- 9. Provide your organization's comments on the edits to Problem Statement 2: Applicable Sub-Issues: Availability and Performance Incentives: In light of a tight RA market, high RA prices, and market incentives -- the current CAISO mechanism for incentivizing capacity to be available, the Resource Adequacy Availability Incentive Mechanism (RAAIM), may be: insufficient and incentivize less reliable generation to be contracted, discourage showing of all RA resources, not reflect/incentivize real time performance/availability and/or actions to increase availability particularly during critical periods. Additionally, it creates operational backstop challenges for the ISO resulting in reliability risks.**

Do you agree that the problem statement/sub-issue is ready to move forward? If not, please describe why the problem statement is incomplete or inaccurate, and if applicable your suggested edits and additional information and analysis required to move forward.

See response to question 5.

- 10. Provide your organization's comments on the recommendations for Problem Statement 2: Applicable Sub-Issues: Availability and Performance Incentives: RAAIM should be assessed to see if it is meeting its intended objectives, if its objectives should be revisited, or if a new mechanism is needed to incent availability and/or performance. The need for either RAAIM reform or RAAIM elimination as well as any exploration of a new availability and performance mechanism should be done in concert/consideration of any counting rule changes to encourage all RA-eligible resources to be shown.**

Do you agree that the recommendation is ready to move forward? If not, please describe why the recommendation is incomplete or inaccurate, and provide your suggested edits and additional information and analysis required to move forward.

See response to question 5.

- 11. Provide your organization's comments on the edits to Problem Statement 2: Applicable Sub-Issues: Resource Accreditation: Current PRMs and counting rules may not accurately reflect forced outage rates or performance and availability which has the potential to result in a less efficient system. In light of changing regulatory structures at the CPUC (including the scoping of UCAP), the ISO has an opportunity to partner with the CPUC, other LRAs and stakeholders to create a more effective counting design and eliminate/redefine availability and performance incentives.**

See response to question 5.

- 12. Provide your organization's comments on the recommendations for Problem Statement 2: Applicable Sub-Issues: Resource Accreditation: • The ISO should prioritize data transparency and reporting on forced outage rates and resource availability required to calculate PRMs and resource accreditation. • The ISO should explore an updated default PRM and counting to reflect reliability needs and resource contribution to reliability in coordination with the CPUC, CEC, other LRAS and stakeholders (see edits to PS 1) • The**

ISO should explore a UCAP mechanism to reflect resource availability, in collaboration with the CPUC and with other LRAs, seeking alignment between all resources and LRAs within the ISO BAA. • The ISO should explore resource counting or tariff changes that directly measures/limits accreditation (e.g. ambient derates).

Do you agree that the recommendation is ready to move forward? If not, please describe why the recommendation is incomplete or inaccurate, and provide your suggested edits and additional information and analysis required to move forward.

See response to question 5.

13. Please provide your organizations recommendation of grouping and/or sequencing of the issues identified above.

Planned and forced outages, the PRM, and counting rules are all interrelated. The CAISO should therefore group these issues to maintain a cohesive solution.

14. Please provide any additional comments not captured above.

CalCCA has no additional comments at this time.