

Resource Adequacy Enhancement Initiative: Second Revised Straw Proposal

Submitted by	Organization	Date Submitted
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System Resource Adequacy (RA)

1. Determining System RA Requirements

The CAISO describes two options to establish a minimum system unforced capacity (UCAP) requirement: top-down and bottom-up.¹ The top-down approach would use average technology specific forced outage rates to conduct a Loss of Load Expectation (LOLE) study to develop a UCAP requirement. The bottom-up approach would use resource specific forced outage rates to determine if shown RA resources can meet forecasted peak demand and ancillary services.

The Public Advocates Office supports the bottom-up approach. The degree to which forced outage rates vary depending on technology is not clear. However, if there is a wide range in the rates, relying on average forced outage rates could lead to inaccurate UCAP requirements. In contrast, the bottom-up approach would use existing studies of forecast peak demand which are developed in public stakeholder processes at the California Energy Commission. All load-serving entities (LSEs) would then show resource specific UCAP information to determine if they meet their RA requirements.

2. Forced Outage Rates Data and RA Capacity Counting

As discussed in previous comments, the Public Advocates Office supports the CAISO’s proposal to calculate forced outage rates seasonally based on three years of historic data with more weight placed on recent data.² The Public Advocates Office also supports the CAISO’s transitional proposal to require all resources seeking an UCAP value to submit three years of Generation Availability Data System (GADS) data or as many years as the resource has been operational.³ The use of resource specific outage data when available

¹ Resource Adequacy Enhancements Second Revised Straw Proposal, October 3, 2019, p. 14.

² Comments of the Public Advocates Office on the Resource Adequacy Enhancements Revised Straw Proposal (Public Advocates Office Comments), July 24, 2019, p. 2.

³ Resource Adequacy Enhancements Second Revised Straw Proposal, p. 22.

will offer more accurate UCAP valuations for the resources, and will help to incentivize upfront maintenance of resources to support a high UCAP value.⁴

The CAISO raises the concern that GADS reporting is not mandatory for resources that are less than 20 megawatts (MW) so as the number of small distributed resources increase, there will be more resources that do not have GADS data.⁵ The CAISO should provide a breakdown by technology type of the number of resources and total capacity in its market that are less than 20 MW to provide a better understanding of the extent of the issue. The CAISO proposes that the UCAP value for solar and wind resources would be based on the California Public Utilities Commission's (CPUC) Effective Load Carrying Capability (ELCC) methodology,⁶ so lack of GADS data for solar and wind resources would not be an issue. Additionally, the CAISO notes that the CPUC could expand the ELCC to address variable energy resources such as weather sensitive or variable output DR and storage technologies.⁷ A breakdown of the resources that are less than 20 MW would provide a better idea of how many of the resources would already be addressed by ELCC (wind and solar), how many could be addressed by ELCC in the future and how many would not be addressed by ELCC. If only a small number of resources or a minimal amount of capacity will lack GADS data, it may be more reasonable to simply require GADS reporting for the remaining resources rather than developing complex and costly changes to the CAISO's Outage Management System (OMS).

3. Proposed Forced Outage Rate Assessment Interval

The Public Advocates Office has no comment at this time.

4. System RA Showings and Sufficiency Testing

As discussed in previous comments, the Public Advocates Office is concerned with adoption of a portfolio deficiency test that would essentially adopt a requirement the LSEs would not be able to understand or anticipate.⁸ The test would lead to backstop procurement but would not help guide procurement or provide incentives/cost responsibility to motivate LSEs to provide more effective resources. The CAISO should adopt up-front requirements for procurement rather than an opaque test that it would use to justify backstop procurement.

5. Must Offer Obligation and Bid Insertion Modifications

⁴ This incentive is one of the primary goals of the proposal. Resource Adequacy Enhancements Second Revised Straw Proposal, p. 17.

⁵ Id., p. 21.

⁶ Id., p. 16.

⁷ Id., p. 17.

⁸ Public Advocates Office Comments, p. 3.

The CAISO proposes to prohibit system RA resources from submitting block bids or self-schedules greater than one hour in length.⁹ The CAISO should clarify if this prohibition would include non-imported resources and resources used to meet local and flexible RA. The CAISO should also consider the fact that many resources have use limitations, such as contractual terms permitting start-up only once a day to comply with emission requirements. Such resources are only available for one dispatch per day, and this proposal would effectively prevent available capacity from participating in the market for more hours of the day. Some resources, namely hydroelectric and pumped hydro, also have constraints that prevent them from running for less than one hour in length. This CAISO proposal would render such resources unable to act as RA resources, resulting in increased RA prices due to the reduced amount of available capacity eligible to provide system RA.

6. Planned Outage Process Enhancements

The Public Advocates Office has no comment at this time.

7. RA Imports Provisions

The CAISO should revise its proposal to clarify the discussion of resource specific, as opposed to non-resource specific, import RA because it is unclear which aspects of the proposal would apply to resource specific versus non-resource specific import RA. For example, does the CAISO propose to apply UCAP valuation for import RA that is resource specific? Or would such resources simply need to meet the same requirements as non-resource specific import RA?

Additionally, the CPUC recently issued a decision requiring non-resource specific RA imports to self-schedule into the CAISO markets consistent with the timeframe established in the governing contracts.¹⁰ The CAISO should clarify how this decision would affect its proposed non-resource specific import RA requirements. The CAISO also stated that it would back down schedules for import RA as necessary¹¹ but it's not clear how such actions would be consistent with the CPUC's requirements for import RA. In particular, CPUC Decision (D.) 19-10-021 affirms that,¹²

Qualifying capacity for import contracts is the contract amount, provided the contract: (1) is an Import Energy Product with operating reserves, (2) cannot be curtailed for economic reasons, and (3a) is delivered on transmission that cannot be curtailed in operating hours for economic reasons or bumped by higher priority transmission or (3b) specifies firm delivery point (i.e., not seller's choice).

⁹ Resource Adequacy Enhancements Second Revised Straw Proposal, p. 38.

¹⁰ Decision (D.) 19-10-021, p. 21.

¹¹ October 9, 2019 Stakeholder Meeting.

¹² D.19-10-021, p. 21

The CAISO should explain whether its proposed non-resource specific import RA requirements are consistent with the CPUC's requirement that non-resource specific RA imports self-schedule into the CAISO markets. If the CAISO's proposed requirements are inconsistent with the CPUC's requirements, the CAISO should revise its proposal to harmonize it with the CPUC's requirements.

Flexible Resource Adequacy

8. Identifying Flexible Capacity Needs and Requirements

The Public Advocates Office has no comment at this time.

9. Setting Flexible RA Requirements

The Public Advocates Office has no comment at this time.

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

The CAISO states that it will allow imports to provide flexible RA capacity.¹³ However, with D.19-10-021, non-resource specific import RA would not be dispatchable in at least 15-minute increments. The CAISO should clarify that non-resource specific imports would not be able to provide flexible RA capacity in its proposal.

The CAISO also states that with its proposal, there is a risk resources can receive commitments that change from the day-ahead to real-time markets, potentially rendering the resource unable to meet its day-ahead commitment.¹⁴ The CAISO seeks input on how, or if, flexible RA capacity eligibility criteria should address these concerns. The proposal describes a failure of the market to recognize the limitations and capabilities of a resource to dispatch the resource properly. The CAISO should address how the market fails to consider such use limitations; and whether it is feasible for resource owners to report this type of use limitation or for the market to recognize it.

11. Flexible RA Allocations, Showings, and Sufficiency Tests

The CAISO is proposing a 100% showing of the flexible capacity requirement in the year ahead timeframe, rather than the existing 90% showing requirement.¹⁵ The CAISO should first provide an estimate of the size of its proposed flexible RA requirement compared to the available capacity that would be able to provide flexible RA under its proposed criteria. If there is a large surplus of such resources compared to the

¹³ Resource Adequacy Enhancements Second Revised Straw Proposal, p. 59.

¹⁴ Id., p. 60.

¹⁵ Id., p. 62.

requirement, it would be more reasonable to retain the current 90% showing requirement to provide LSEs with more flexibility in procurement planning to minimize ratepayer costs.

12. Flexible RA Must Offer Obligation Modifications

The Public Advocates Office has no comment at this time.

Local Resource Adequacy

13. UCAP for Local RA

The CAISO proposes two options for utilizing UCAP for local RA:

- 1) Run existing studies and convert local capacity requirements into a UCAP equivalent value, or
- 2) Determine the local capacity requirements using resource UCAP values in the study process.

The Public Advocates Office prefers Option 1. Option 1 would not require changes to the current local capacity technical study and, therefore, would retain consistency with existing longer-term planning in the Transmission Planning Process (TPP). In contrast, Option 2 would require changes to the existing studies without a demonstrable benefit compared to Option 1, because Option 1 would also account for more realistic expectations of resource outages. Option 2 would disconnect short-term local RA procurement from the CAISO's longer-term planning in the TPP, which could lead to increased procurement and ratepayer costs with no clear benefit.