



Stakeholder Comments Template

Resource Adequacy Enhancements – June 10, 2020 Working Group

Submitted by	Organization	Date Submitted
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The Public Advocates Office appreciates the opportunity to provide feedback on the California Independent System Operator’s (CAISO) proposal to implement an Unforced Capacity (UCAP) system, but continues to oppose a UCAP system as proposed in this initiative.¹ The CAISO has not demonstrated that the benefits of a UCAP system outweigh the complexity and expense of implementing a UCAP system, including the need to adjust the Planning Reserve Margin and other necessary changes. The CAISO has not demonstrated that the increased ratepayer costs associated with the additional RA procurement that would be necessary to meet the UCAP system’s RA requirements would yield commensurate reliability benefits. To avoid unnecessary and expensive changes to RA requirements, the Public Advocates Office recommends that the CAISO explore alternatives to UCAP or consider modifying the Resource Adequacy Availability Incentive Mechanism (RAAIM).

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

1. Production Simulation: Determining Unforced Capacity Needs and Portfolio Assessment

Please provide your organization’s feedback on the Production simulation: Determining Unforced Capacity (UCAP) needs and portfolio assessment topic as described in slides 4-15. Please explain your rationale and include examples if applicable.

¹ The CAISO seeks to implement a UCAP system to address current issues within its performance incentive mechanism and substitution capacity programs. UCAP would obviate the need for most, if not all of the aspects of those programs since it includes assumptions of outage rates and availability and would be coupled with other supplemental changes. The UCAP is essentially the same as Net Qualifying Capacity (NQC) but is discounted by forced outage rate assumptions of individual resources. Also, the CAISO currently proposes to use NQC concurrently with the UCAP system for some requirements. (CAISO, Fourth Revised Straw Proposal, March 17, 2020, p. 7.)

The Public Advocates Office has no comment on this topic at this time.

2. Transitioning to UCAP Paradigm

Please provide your organization's feedback on the transitioning to UCAP paradigm topic as described in slides 16-19. Please explain your rationale and include examples if applicable.

The Public Advocates Office has no comment on this topic at this time.

3. Unforced Capacity Evaluations

Please provide your organization's feedback on the unforced capacity evaluations topic as described in slides 20-59. Please explain your rationale and include examples if applicable.

Measuring Forced Outage Rates

Determining the historical forced outage rate of each unique resource on the CAISO grid is a key component of the UCAP calculation. At the June 10, 2020 Working Group, the CAISO proposed to determine a resource's UCAP by using existing definitions and records to count both Forced and Urgent outages.² This would allow outages to be counted using extant data from the CAISO's Outage Management System (OMS) and avoids the problems associated with a lack of holistic and detailed outage data for CAISO-connected resources.³ During the Working Group meeting, the CAISO explained that some delivery-interrupting force majeure and other events outside of a resource operator's control would decrease a resource's UCAP. The CAISO intends to develop a process to exclude certain outages that are beyond operator control, such as earthquake and fire events, but these exceptions would not include all force majeure events such as non-operation of transmission lines that prevents delivery. The CAISO also signaled its intent to review such exceptions going forward,⁴ after a UCAP system is in place, but did not discuss if this review would be backwards-looking to adjust for the historical forced outage rate of a resource.

At the Working Group, the CAISO stated that the proposed forced outage design is appropriate because UCAP is intended to determine whether a resource is producing or not, but this forced outage design does not align with UCAP's objectives to incentivize resource managers to conduct preventative maintenance to maximize deliverability.⁵ Also in a previous RA Enhancements

² CAISO Resource Adequacy Enhancements Working Group, June 10, 2020 (CAISO Presentation), pp. 24-26.

³ "The OMS system is not currently designed or easily converted to generate forced outage rates." CAISO, Resource Adequacy Enhancements Third Revised Straw Proposal, December 20, 2019 (RA-Enhancements Third Revised Straw Proposal), p. 23.

⁴ CAISO Presentation, p. 26.

⁵ "RA counting rules should incentivize and ensure procurement of the most dependable, reliable, and effective resources" and "...[t]he CAISO's intent is to incentivize preventative maintenance, before-the-

proposal, the CAISO proposed to exclude outages “considered ‘outside of management control’... from forced outage rates” and that a transmission induced outage or a force majeure event “should be considered outside of management control.”⁶

It is inappropriate to derate a resource’s UCAP due to factors beyond the resource manager’s control since a resource’s UCAP capacity is intended to reflect the quality of that resource and incentivize preventative maintenance of the resource. The CAISO should alter its proposed forced outage counting design to exclude any outage that is reasonably beyond the resource manager’s control to mitigate, such as transmission induced outages. The CAISO should also apply that counting design to the historical data used to derive the initial forced outage rate as well to data collected after implementation.

Determination of UCAP for New Resources

The CAISO is considering two approaches to calculate the UCAP of newly-developed resources.⁷ Option 1 would use a resource-class average UCAP measurement weighted year-to-year, which would be replaced by actual resource performance data over the next three years of operation.⁸ Option 2 would use the resource’s net qualifying capacity (NQC) in the first year of operation and replace those measurements with actual performance over the next three years.²

The Public Advocates Office opposes the adoption of Option 2. Option 2 would create a UCAP that begins high but decreases each year until actual performance data is fully realized. This decrease would make it difficult for a load-serving entity (LSE) to plan its annual and multi-year RA portfolio because the resource would begin with a higher value UCAP that decreases each year from the NQC to a UCAP that empirically reflects performance and rates of outage. Option 1 would utilize a value based on the UCAP of similar resources and is therefore more closely aligned to the future UCAP value of the new resource. Option 1 would reduce the uncertainty associated with the UCAP of new resources and make it easier for LSEs to plan their annual and multi-year RA portfolios.

- a. Please provide your organization’s feedback on the UCAP methodology: Seasonal availability factors topic as described in slides 27-46. Please explain your rationale and include examples if applicable.

The Public Advocates Office has no comment on this topic at this time.

fact, so that forced outages are prevented in the first instance.” RA-Enhancements Third Revised Straw Proposal, pp. 7 and 20.

⁶ CAISO Resource Adequacy Enhancements Second Revised Straw Proposal, October 3, 2019, p. 24.

⁷ CAISO Presentation, pp. 45-46.

⁸ The class average refers to the technology of generation employed by the resource (combined cycle combustion, simple cycle, etc.) CAISO Presentation, p. 45.

² CAISO Presentation, p. 46.

- b. Please provide your organization's feedback on the UCAP methodologies for non-conventional generators topic as described in slides 47-59. Please explain your rationale and include examples if applicable.

The Public Advocates Office has no comment on this topic at this time.

Additional comments

Please offer any other feedback your organization would like to provide on the Resource Adequacy Enhancements working group discussion.

The Public Advocates Office has no additional comments at this time.