

Stakeholder Comments Template

Resource Adequacy Enhancements

This template has been created for submission of stakeholder comments on the Resource Adequacy Enhancements working group on June 10, 2020. The stakeholder call 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 **June 24, 2020**.

Submitted by	Organization	Date Submitted
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Please provide your organization's comments on the following issues and questions.

1. Production Simulation: Determining UCAP Needs and Portfolio Assessment

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

As a threshold matter, SDG&E believes the production simulation should include both shown Resource Adequacy (RA) resources and all other generation that exists or is expected to be in-service during the period of time covered by the simulation. Excluding resources that are not included in a RA showing from the analysis may significantly overstate actual reliability risks. Additionally, excluding these resources will distort the production simulation since the commitment and dispatch of shown RA resources is significantly influenced by the availability and operating cost of all other resources. SDG&E notes that other processes such as the CAISO's own Summer Assessment as well as the CPUC's IRP proceeding utilizes a portfolio with both deliverable resources and energy only resources and rely on all these resources to meet system reliability, energy sufficiency, and GHG targets. SDG&E believes the CAISO's proposed portfolio assessment should be consistent with both of those portfolio assessment metrics, otherwise it will create a system in which long-term resource planning (i.e. IRP) and short-term resource planning (i.e. RA) are inconsistent and result in significantly different measurement of reliability. SDG&E does not support the CAISO's proposal to only assess the shown RA fleet in the portfolio assessment.

SDG&E requests the CAISO to clarify in the next proposal whether the CAISO is proposing a new methodology to establish the UCAP requirement (abandoning its previous proposal of using three components, forecasted load, reserves and forecast error); or if the CAISO now wishes to include a fourth component that includes the assessment of the August 2020 RA showing to the UCAP requirement calculation.

SDG&E requests the CAISO also clarify whether it is proposing to use the results of this analysis based on a single month, August 2020, to establish the UCAP needs for all twelve months of the year, or would the CAISO perform its analysis using more historic data. SDG&E is uncertain whether August 2020 would be representative of the need for the entire year and more analysis of historical trends may be more appropriate.

SDG&E understands that the CAISO study will utilize the shown RA NQC values and then apply a resource-specific forced outage rate to analyze a Loss of Load Expectation (LOLE). SDG&E requests the CAISO clarify which LOLE level it is attempting to meet in this study.

SDG&E would like the CAISO to include in its next proposal a discussion of whether it is appropriate to establish the UCAP requirement based on an embedded resource forced outage rate and then only allowing LSEs to procure and show the UCAP value which also incorporates the forced outage rate. This appears to effectively double count the forced outage impact for LSEs and increase the LSE procurement of UCAP capacity.

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.

SDG&E does not recommend transitioning to the UCAP paradigm because it creates more problems than it solves and other less complicated solutions exist to maintain reliability. SDG&E proposed a simpler solution in its comments to the third revised straw proposal that incorporates updating the planning reserve margin and creating an outage substitution market process.

SDG&E does not support Option 1 because creates more confusion by creating a new name for an existing term which would have more impacts than just bidding requirements, such as interconnection requests, deliverability tests and outage management to name a few.

While SDG&E also does not favor Option 2, it provides a cleaner transition because of the new terminology that is created. SDG&E disagrees that this option favors neither side because LSEs are placed at a disadvantage with the creation of the new capacity attribute that is a derivative of the current NQC construct.

SDG&E does not recommend the CAISO transitioning to UCAP counting and requirements in 2023 because the CPUC has established a central procurement entity

("CPE") to procure Local RA capacity starting that year. SDG&E believes having both UCAP and CPE start in the same year will create significant administrative complexity.

SDG&E believes that the CAISO should be able to already perform the UCAP analysis without making the significant changes to its systems since the forced outage data is already available in either a monthly or seasonal basis through the CAISO's Summer Assessment analysis. As the CAISO notes on slide 23, it proposes to publish the UCAP values on an annual basis which suggests that during the year, the data will not be "refreshed".

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.

The CAISO proposes to align its outage management terminology with existing reliability coordinator outage definitions. SDG&E requests further clarification whether the CAISO will no longer define outages based on the time of submission, such as 7 days prior to the start of the outage. This was not clearly explained during the meeting. Additionally, what is the time separation between Forced, Urgent and Planned Outages? It seems that Forced Outages occur in real-time while Planned outages are any time outside of real-time? Does the term short range submittal requirements mean day-ahead bid submission requirements? Finally, does the Opportunity Outage make the nature of work short notice opportunity outage redundant?

SDG&E believes the UCAP formula should only take into consideration Forced Outages and not Urgent Outages. By definition, an urgent outage is taken in order based on good utility practice to keep the resource properly maintained to avoid a Forced outage.

- 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 CAISO proposes to develop seasonal UCAP values for resources. SDG&E would like to better understand whether the CAISO intends to align the seasons of UCAP with those developed for RAAIM. Specifically, the month of October is listed as a summer season under RAAIM, but it is not included in the proposal for UCAP.

The CAISO states that today, there are 5 Availability Assessment Hours per day which is roughly 20% of all hours. This is not the case, there are 5 Availability Assessment Hours per weekday and non-federal holidays which is roughly 13% to 15% of all hours in a month. However, the same 15% of availability assessment hours may not represent the hours of the tightest supply cushion relative to need. Essentially, the top 20% or 15% of hours may include hours at which sufficient supply exists and would not be considered as tight supply.

SDG&E proposes that the supply cushion should be measured based on the actual supply relative to a planning standard. Using the planning reserve margin, the “tight” supply cushion would occur when

$$\text{PRM} * \text{Load} > \text{Daily Shown RA (excluding wind and solar)} - \text{Daily Planned Outages} - \text{Daily Forced Outage Impacts} - \text{Net Load}$$

Under this formula, if the amount of capacity is unable to cover the PRM of hourly load, then the resource’s forced outage would impact its UCAP rating. This methodology would be an objective measure of when true tight supply conditions exist rather than one that’s based on a percentage which may include hours in which excess capacity is unnecessarily included.

- 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.

SDG&E requests the CAISO to explain why UCAP would not be applicable to other resource types such as nuclear or combined heat and power.

SDG&E is concerned that the end of hour state of charge (EOH SOC) functionality proposed in the Energy Storage Distributed Energy Resources Phase 4 (ESDER 4) initiative to allow the resource to achieve a desired state of charge by the end of an hour will have significant impact on either the resource’s UCAP value or not be used because of the potential impact to the UCAP. Under CAISO’s proposal, if the resource were to impose a minimum EOH SOC, then that SOC will be deducted from the resource’s UCAP value even if the CAISO had the full output during the hour and the CAISO did not need the resource for the next hour. Effectively, the CAISO is penalizing the energy storage resource for “self-scheduling” during the hour. Yet, the CAISO is not proposing to penalize other flexible conventional resources for similar self-scheduling after implementation of UCAP and elimination of RAIM. SDG&E recommends the CAISO to reconsider its approach of how EOH SOC would impact the resource’s UCAP value.

Additional comments

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