



Submit comment on Issue paper

Initiative: Day-ahead sufficiency

1. Please provide a summary of your organization's comments on the Day-Ahead Sufficiency issue paper and December 18, 2023 stakeholder call discussion: *

The Council appreciates this opportunity to comment on the CAISO Day-Ahead Sufficiency issue paper. These comments solely address Chapter 2: Accounting for Reliability Demand Response Resources. As Resource Adequacy (RA) resources, the CAISO should account for Reliability Demand Response Resources (RDRRs) in the RSE; otherwise, the CAISO would be at risk for RSE deficiency penalties despite having no actual shortage of RA capacity. The Council suggests that RDRRs reduce the RSE when an EEA Watch (or greater) is in effect or when the CAISO anticipates that an EEA event could be called for the following day.

2. Provide your organization's comments on Chapter 1: advisory RSE results and complementary information. Please include your organization's perspective on the three ideas presented on slide 13 of the stakeholder call presentation: *

The Council reserves comment.

3. Provide your organization's comments on Chapter 2: accounting for reliability demand response resources (RDRRs). If your organization recommends trying to account for unoffered RDRRs in the day-ahead RSE, please include ideas on how this might be done and how the RSE adjustment should be reflected in the integrated forward market and residual unit commitment (RUC) process: *

As an initial point, Reliability Demand Response Resources (RDRRs), which are the CAISO demand response (DR) market product for the IOUs' emergency DR programs, Base Interruptible Program (BIP) and Agricultural Pumping – Interruptible (AP-I), are rightfully counted as Resource Adequacy (RA) capacity because they meet the CPUC's criteria to be counted as such. As RA resources, they should also be accounted for in some way in the RSE. Choosing not to account for RDRRs in the RSE would unnecessarily put the CAISO BAA at risk of financial penalties for an RSE deficiency despite having no actual shortage of RA capacity.

Furthermore, the CAISO has already committed to accounting for RDRRs in the RSE in its Extended Day Ahead Market (EDAM) Final Proposal, which states:

The proposal would allow EDAM BAAs to represent load modification programs, or supply types that can only be utilized during real time emergencies, through a demand forecast adjustment similar to that used in the WEIM; these modifications will be utilized in both the EDAM RSE and the RUC process. [footnote removed] The demand forecast adjustment represents an expectation and a commitment the EDAM BAA will utilize these programs in real time if forecasted conditions materialize; effectively these programs becomes a part of

the an EDAM BAA's day-ahead plan. The market operator will review load modifications made to the EDAM RSE requirement against demand response utilization in the real-time to ensure this functionality is not being used to pass the EDAM RSE erroneously. If this functionality is being misused, the market operator will consider limitations to this functionality and potential load bidding rules in the IFM. The objective of this is to prevent an entity from manipulating the EDAM RSE requirements for purposes of passing the test and avoiding the potential surcharge, while procuring excess supply in the EDAM to avoid using the demand response programs.

The existing rules regarding use of the ISO's reliability demand response resource (RDRR) limits these resources' ability to participate in the day-ahead market. If advisory EDAM RSE results indicate a potential inability for the ISO BAA to meet its next day obligations, the ISO could modify its forecast in the extended day-ahead market and the RUC. This will result in the market not procuring energy, imbalance reserves, or reliability capacity up to its full, unmodified, day-ahead forecast, but it would allow the ISO BAA to pass the EDAM RSE and fully participate in the day-ahead market. The ISO BAA would then have RDRR bids enabled into the real-time market for the same intervals ensuring the supply is available for the real-time market's optimal use. (EDAM Final Proposal, at pp. 69-70)

The question, therefore, is to determine the most appropriate way for RDRRs to be accounted for in the RSE when they are primarily only activated under emergency conditions.

Pursuant to CPUC Decision 23-06-029, the CAISO may activate RDRRs under an EEA Watch which is typically triggered when the Residual Unit Commitment (RUC) process indicates that one or more hours in the day-ahead may be energy deficient, but can also be triggered in the day-of if a sudden onset event occurs.¹ When there is no CAISO emergency in effect, RDRRs are not needed to reduce the RSE because other Resource Adequacy resources should be sufficient to meet the RSE. However, when an EEA Watch (or greater) is in effect or when the CAISO anticipates that an EEA event could be called for the following day, the CAISO should reduce the RSE by the available amount of RDRR. The CAISO can exceptionally dispatch RDRRs once they are activated, so even if the real-time CAISO market does not reach \$950/MWh, they can still be utilized.

Should there be any concern that RDRRs would be counted in the RSE only part of the time, it should be noted that not every other RA resource will be needed to meet the RSE when load forecasts are lower than normal. Alternatively, the CAISO could reduce the RSE with RDRRs during all hours when these resources are available but there would be no guarantee that the necessary EEA event would occur to activate them.

The CAISO has requested feedback on four specific details. The Council attempts to address some of them here:

The ISO BAA will need information each morning to calculate the quantity of available RDRR capacity that has not voluntarily submitted a day-ahead offer as of 9 a.m.

The CAISO could perform this calculation by subtracting the amount of energy during which there is a day-ahead offer (perhaps averaged across the hours bid) from the amount of credited RDRR capacity for the same hours.

¹ Operating Procedure 4410, Section 3.6.1.

The ISO would like to confirm that RDRR scheduling coordinators, when voluntarily submitting day-ahead offers, will continue to do so before 9 a.m. This will prevent RDRR capacity from being inadvertently double-counted as both RSE supply and a reduction to the RSE obligation.

To the Council's knowledge, only IOUs are RDRR scheduling coordinators.

The ISO would like to discuss how energy limits to RDRR capacity (i.e., max run times) should be reflected in the RSE adjustment. More specifically, if the ISO BAA at 9 a.m. expects upward RSE shortfalls in multiple intervals, for which intervals should the RSE be reduced?

Referring to the PG&E tariff for its Base Interruptible Program as an example, events are limited to six hours each day, capped at 10 events per calendar month. As an initial proposal, the Council suggests that the CAISO have some flexibility in how it applies the six hours of RDRR availability in the RSE in order to maximize the benefits in conjunction with other resources. For instance, if there are shortfalls in multiple intervals of a day, the optimal allocation of the six hours may be to center them around the largest shortfall if the six-hour availability cannot straddle both intervals. Otherwise, if the two intervals are short enough and are close enough in the day, then it may be optimal to overlay the RDRR availability over both. Even then, the CAISO's hands should not be tied in the event that unforeseen circumstances dictate that the RSE adjustment should be applied in a different manner.

Another factor the CAISO may need to consider is how the IOUs apply the RA credit associated with their RDRRs under the Slice-of-Day framework. Using the PG&E BIP example above, it's likely that the RA credit will be applied during the Availability Assessment Hours (AAH) in order to compliance with CPUC RA availability requirements for DR resources. This does not necessarily prevent the CAISO from counting RDRRs outside of the AAH because the BIP is available throughout the day, but if the hourly slices of credited RA will play a role in the CAISO's consideration of the broader issue of accounting for RDRRs in the RSE, this may be a factor.

The ISO would like to discuss the implications of any RSE reductions on the residual unit commitment (RUC) process. More specifically, the ISO would like to discuss whether it should reduce its RUC procurement target by an amount equal to the RSE reduction quantity.

As explained above, the RUC is needed to identify when an EEA event is warranted, so it would not be appropriate to reduce the CAISO Forecast of CAISO Demand by the amount of available RDRR because doing so would risk suppressing the calling of these events which could, in turn, have detrimental reliability impacts.

4. Provide your organization's comments on Chapter 3: accounting for strategic reliability reserve (SRR) resources. If your organization recommends trying to account for short-start SRRs in the day-ahead RSE, please include ideas on how this might be done and how the RSE adjustment should be reflected in the integrated forward market and residual unit commitment (RUC) process: *

The Council reserves comment.

5. Provide your organization's comments on Chapter 5: incentives for tagging day-ahead imports. More specifically, please comment on whether additional tagging incentives, beyond the ability to re-supply, are needed for the CAISO BAA on EDAM Day 1: *

The Council reserves comment.

6. Additional comments:

N/A