

California Efficiency + Demand Management Council (Council), CPower, Leapfrog Power, and OhmConnect, Inc., Recurve (DR Coalition) Comments on Capacity Shortfall Penalty Proposals

Supply Side DR Qualifying Capacity Working Group

September 15, 2023

I. Introduction

The DR Coalition appreciates this opportunity to comment on the California Energy Commission (CEC) Staff and Demand Side Analytics (DSA) Capacity Shortfall Penalty (CSP) proposals in the Supply Side DR Qualifying Capacity (QC) Working Group (Working Group). As explained in greater detail below, the DR Coalition supports a CSP mechanism that is identical to the one proposed by DSA, but with a 15% performance buffer rather than its proposed 0% performance buffer.

II. Recommended Guiding Principles

The DR Coalition recommends the following principles to help frame CEC and Energy Division Staff (Staff) consideration of CSP proposals:

- **100% precision in estimating QC values is not realistic.** By all accounts, it is virtually impossible to achieve 100% accuracy in QC estimation. As a CPUC-recognized variable energy resource, DR performance will inevitably vary on any given day based on a multitude of factors including weather and participant consumption patterns that vary with time-of-day, day-of-week, month, and season. Imposing penalties on any performance level below 100% of QC values is inconsistent with this variable nature, and would virtually guarantee that penalties are constantly applied.
- **The purpose of the CSP mechanism should not be to punish but to motivate realistic commitments.** Staff should resist the temptation to adopt an overly punitive CSP because it could risk discouraging participation by incumbent and potential participants, DR providers, and even IOUs. A balanced approach is critical to ensure that IOUs and DR providers experience a sufficiently robust financial consequence for excessive inaccuracies in their QC assessments without inserting so much risk that participating in the DR market is deemed financially infeasible. The DR Coalition acknowledges that

what constitutes a “balanced approach” is subjective, but, as described below, a reasonable guideline should be that financial consequences never exceed the value of the QC in question (i.e., DR providers should never be required to pay “out of pocket” penalties).

- **Simplicity and transparency are key.** A simple CSP mechanism is critical to ensuring transparency for DR participants and providers to ensure easy risk assessment and avoid gaming. Conversely, an overly complicated mechanism introduces the risk of unforeseen gaming opportunities if all potential scenarios are not fully considered.
- **The rigor of the CSP mechanism should be balanced with the rigor of the Bid Normalized Load Impact (BNLI) mechanism.** The structure and rigor of the CSP should be viewed in the context of how the BNLI is applied. More specifically, if the BNLI mechanism leaves a comparatively large margin for error (e.g., allowing IOUs and DR providers to use a DR resource’s or program’s single best event of a month or season to determine the BNLI), then the CSP mechanism should leave a comparatively smaller margin for error (i.e., applying penalties closer to 100% performance), and vice versa.

III. Comments on CSP Proposals

a. Performance Buffer

The DR Coalition supports the use of a performance “buffer” that allows for some degree of performance variability relative to the DR QC value. The CEC proposes a 5.4% buffer such that penalties kick in below 94.6% performance, the intent being to be consistent with the CAISO’s Resource Adequacy Availability Incentive Mechanism (RAAIM). DSA proposes no buffer; i.e., penalties kick in for any performance below 100% of the QC value.

The DR Coalition believes the CEC buffer is insufficient to accurately reflect DR variability. As has been noted elsewhere in this proceeding, the incentive-based QC methodology explicitly exempts DR from RAAIM penalties out of recognition that it is a variable resource. It is then similarly inappropriate to hold DR to the same performance threshold as the non-variable resources that are subject to the RAAIM. As noted above, DR performance can vary based on a multitude of factors, including factors that are not within the participant’s control, justifying the need for a less restrictive performance threshold than is established in the RAAIM.

A more appropriate approach to identifying a penalty threshold would also compare against the penalty structures in other DR programs, such as the IOUs' Capacity Bidding Programs (CBP). This program does not apply penalties until performance falls below 75% of nominated capacity, which better reflects the inherent variability in DR dispatches. Based on these reference points, the DR Coalition recommends a 15% buffer rather than the CEC's proposed 5.4% buffer. This is an approximate mid-point between the CBP buffer and the RAAIM threshold.

b. Shape of Curve

The DR Coalition agrees with the CEC and DSA with regard to the shape of CSP curve in that once it departs from the performance curve (represented by the gray dotted line in the September 8 working group presentation), it should proceed in a straight, downward-sloping diagonal line to the X-axis, representing a 0% payment for performance. This is a simple approach that, counter to the Council's proposal, does not lead to a sudden "drop-off" in compensation which could create distortions in the market by motivating IOUs and DR providers to perform at 50.1%. A straight, downward-sloping diagonal CSP curve from the performance curve would apply a consistent marginal penalty until the X-axis is intersected.

c. Intersection with X-Axis

As stated above, the point at which the CSP curve intersects the X-axis represents the percentage performance at which a DR provider would receive no compensation. The DR Coalition supports the DSA recommendation that this point of intersection occur at 50% performance. This would result in a CSP curve slope that would lead to DR provider revenue loss at a faster rate than a pro rata payment (i.e., a penalty). For both DR providers and IOUs, this would represent the largest allowable penalty. A 50% intersection point is admittedly arbitrary but it reflects a general position that less than 50% delivery indicates a significant problem with the IOU's or DR provider's ability to deliver on its commitments.

At this point of intersection, the CSP curve should follow the X-axis, thereby forgoing any penalties greater than the value of the QC capacity. This is necessary to avoid rendering the CSP mechanism as overly punitive while avoiding unnecessary complications that could be created by the process of levying penalties that exceed the value of the DR capacity. For example, if penalties were able to exceed the contract value, this would impose a significant upfront

financial requirement on DR providers that would otherwise be more productively dedicated to ensuring they can deliver on their contractual commitments. Furthermore, an overly punitive CSP mechanism would certainly discourage DR participation by customers and DR providers if the potential reward of DR participation is less than the potential penalty. The DR Coalition respectfully urges Staff to carefully consider the potential implications of excessive penalties as it moves forward.

d. Clarifying Questions

In addition to the above comments, the DR Coalition would appreciate if more clarity could be provided on the frequency with which the CSP is applied, and how it interacts with test events. Specifically:

- Will the CSP be applied solely to performance as determined by the BNLI? Or will it be applied to quarterly tests as well?
- If it is just applied to the BNLI, will it be evaluated and applied to the BNLI of each event in the month? Or would it be applied just once a month? If the latter, would it be applied to:
 - The average BNLI in that month?
 - The BNLI from the event with the highest net system load?
 - Another arrangement?
- If applied to test events, can DR providers and IOUs conduct multiple tests and decide which one the CSP will be applied to?

IV. Conclusion

The DR Coalition appreciates the opportunity to submit comments on the CSP mechanism and looks forward to continuing this working group process.