

Middle River Power LLC (“MRP”) provides these comments on the CAISO’s June 10, 2021 *Resource Adequacy Availability Assessment Mechanism (RAAIM) Exemption Option For Variable-Output Demand Response Valued Under an Effective Load Carrying Capability (ELCC) or Similar Methodology* (“DR RAAIM Exemption Proposal”, or “Proposal”).

As a precursor to the Proposal, the CAISO proposes that the CAISO establish Resource Adequacy (“RA”) Qualifying Capacity (“QC”) values for Demand Response (“DR”) through Effective Load Carrying Capability (“ELCC”) analysis, or similar analysis that assesses DR’s (1) contribution to reliability across the year or seasons as a variable-output resource, and (2) interactive effects with other similarly situated resources.¹

Following this, the CAISO would seek an exemption from RAAIM penalties for DR whose QC values are set using ELCC or similar analysis.

MRP does not object to the CAISO (or, more recently, the CPUC²) classifying DR as a variable output resource. This is appropriate, given that DR’s ability to “provide RA service” (i.e., reduce its power consumption) can vary based on weather, day of the week, or other factors. Classifying DR as a variable resource properly recognizes that DR cannot provide the same amount of demand reduction across every hour of every day.

MRP is not yet convinced that using ELCC analysis to set DR QC values is appropriate. ELCC values reflect the amount of incremental load that a resource can reliably serve over a period, but ELCC values do not represent the amount of load that can be reliably served *at a given point in time*. The CAISO and several hundred thousand California electric customers experienced this reality the hard way in August 2020, when solar resources that had been assigned ELCC-based QC values could not produce power at those QC values across the net load peak hours. (To be fair, this is more a criticism of an RA paradigm that assigns QC values that apply to all hours across a month than a criticism of ELCC analysis; nevertheless, moving from one capacity valuation methodology that produces a single monthly capacity value to another capacity valuation methodology that also produces a single monthly capacity value does not fully address this problem.) Assigning single monthly QC values derived from ELCC analysis or any other methodology might not be as problematic if those values conservatively reflected an QC value that the RA resource was likely to meet or exceed in all hours. But that is currently not how wind and solar QC values are set using ELCC analysis, and MRP is concerned that also setting DR values also through ELCC analysis will perpetuate or exacerbate, not ameliorate, these concerns.

¹ Proposal at page 2.

² May 21, 2021 proposed *Decision Adopting Local Capacity Obligations for 2022-2024, Flexible Capacity Obligations for 2022, and Refinements to the Resource Adequacy Program* at page 30.

Similarly, MRP is not yet convinced that the CAISO's proposal to add DR to the pool of resources that count towards meeting RA requirements but are not subject to RAAIM penalties and incentives is reasonable.

Historically, some resources were exempted from RAAIM because their net qualifying capacity ("NQC") values were calculated based on their historical performance. As the argument was made, assessing RAAIM penalties for those resources' actual availability performance would result in a double penalty as the resource's NQC value for the following year would be adjusted based, in part, on its availability performance in the preceding year(s), plus the resource could incur financial RAAIM penalties based on its availability performance.

Currently DR resources are not shown on RA plans. The rationale offered for not showing DR resources on RA plans is that they would be subject to RAAIM penalties if they were shown on RA plans but could not offer or achieve the amount of load reduction for which they count towards RA requirements in all hours. While this is a good argument for assigning DR resources rational QC values, it is not a viable argument for exempting DR resources from requirements with which other RA resources must comply. Not putting DR resources on RA plans until they are exempt from RAAIM undermines the RA and RAAIM programs and is discriminatory. It undermines the RAAIM and RA programs by insulating from performance penalties (which the CAISO has previously argued are essential to preserve the integrity of the RA program) resources that count towards meeting RA requirements. And it is discriminatory for an obvious reason – because it treats resources providing the same product (RA capacity) very differently.

So, while assigning DR resources ELCC-based QC values will result in more rational QC values for DR, and therefore decrease RAAIM penalties for non-availability, MRP is not yet persuaded that ELCC-based QC values will still properly account for DR's reliability contributions in all hours, nor is MRP persuaded that continuing to exclude DR resources from RA plans until they are exempt from RAAIM is a reasonable approach that promotes reliability.

MRP notes that the CAISO also seems to believe that ELCC-based DR QC values will still be too generous in some hours. The CAISO states on page 9 of the proposal (emphasis added): "*An ELCC or similar methodology takes into account the variable and availability-limited nature of DR, resulting in a QC value that is adjusted to account for this variability. Therefore, **such DR resources are not expected to bid their designated QC RA value all hours the resource is available, but only what the resource's load curtailment capability is in that hour.***" (9) In other words, given that the CAISO would not expect the DR resource to offer at its QC value in all hours, it seems clear that the DR resource's ELCC-based QC value *still* overstates the DR resource's contribution to reliability in some hours.

While MRP does not yet support moving to a UCAP paradigm – primarily because it believes that the current bilateral RA market lacks the tools for generators to be able to reasonably manage their UCAP-driven quantity risk (such as the incremental auctions implemented in other centralized capacity markets) MRP understands the benefits that a system like UCAP, which adjusts QC based on historical performance, might bring to assigning rational QC values to DR. But assigning DR a QC

value that it cannot achieve in all hours, but then also not subjecting that resource to either financial penalties or capacity value adjustment for non-performance, is not reasonable.

Finally, with regards to the proposed RAAIM exemption, MRP also finds RAAIM exemptions for things beyond a resource's control to be inequitable and discriminatory if they do not apply similarly to all RA resources. If CAISO proposes that an RA resource's performance should be exempt from RAAIM penalties because of certain factors, including weather, or customer availability or demand level, that are beyond that resource's Scheduling Coordinator's control, then MRP believes that similar exemptions be provided to all RA resources, such as thermal generators, for certain things that are outside their control.³

In sum, MRP does not yet believe the CAISO has yet found the right balance. By the CAISO's own admission, the ELCC-based DR QC values, while more rational than those established by the Load Impact Protocols, are still likely to be overstated in some hours. Assigning RA resources capacity values that will be overstated in some hours and then exempting those resources from RAAIM penalties does not benefit reliability.

³ Ambient derates due to temperature and lack of fuel due to pipeline outages are all outside the control of the generator. Section 9.3.3 of the CAISO's Business Practice Manual for Reliability Requirements (version 59, page 119), however, indicates that ambient due to temperature and ambient due to fuel insufficiency outages/derates are subject to RAAIM penalties.