BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA

Application of Pacific Gas and Electric Company (U39E) for Approval of Demand Response Programs, Pilots and Budgets for Program Years 2018-2022.	Application 17-01-012 (Filed January 17, 2017)
And Related Matters.	Application 17-01-018 Application 17-01-019

COMMENTS OF THE CALIFORNIA ENERGY STORAGE ALLIANCE ON THE PROPOSED DECISION REFINING THE DEMAND RESPONSE AUCTION MECHANISM

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December 5, 2019

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In accordance with the Rules of Practice and Procedure of the California Public Utilities Commission ("Commission") and pursuant to Ordering Paragraph ("OP") 14 of Decision ("D.") 19-07-009, the California Energy Storage Alliance ("CESA") hereby submits these comments to the *Proposed Decision Refining the Demand Response Auction Mechanism* ("PD"), issued by Administrative Law Judge ("ALJ") Kelly A. Hymes on November 15, 2019.

I. INTRODUCTION.

CESA generally supports continued refinements to the Demand Response Auction Mechanism ("DRAM") in order to address the issues highlighted in the DRAM Evaluation Report, especially around the performance of DRAM resources. To these ends, the PD proposes to adopt several 'Step 2' refinements. Most notably, the PD proposes a substantial change to set energy requirements for DRAM resources by affirming that DRAM is a mechanism to procure capacity and energy, consistent with Decision ("D.") 19-10-021. The PD also cited the Capacity Bidding Program ("CBP") that have specific trigger prices and all-source local capacity requirements

("LCR") solicitations with locked-in marginal cost of energy dispatch where DR resources are subject to energy market participation in justifying the change to add an energy requirement to DRAM resources. Since the DRAM is a carve-out, not a traditional procurement mechanism, the PD justified its proposed decision to add stricter requirements.

However, CESA has concerns with adding energy requirements to DRAM resources at this time considering the DRAM is also a pilot, as affirmed in the PD, and given the potential for the energy requirements to lead to uneconomic dispatch. Instead, CESA continues to advocate for the 'Step 1' changes from D.19-07-009 to take effect and assess whether those changes address some or many of the concerns expressed in the DRAM Evaluation Report. Additionally, CESA has some suggestions or requested clarifications regarding other aspects of the PD around its determinations for cost-effectiveness approaches, qualitative criteria, and contract reassignments. Otherwise, CESA is generally supportive of many of the other changes included in the PD, including around the proposed decision to not replace the August bid cap price, utilize milestones instead of bid fees, affirm firewall requirements for confidential and market-sensitive data, allow for sub-contracting but not contract partitioning, and clarify the informal dispute resolution process.

In our comments below, CESA details our responses to the PD and our suggested recommendations as follows:

- Energy requirements should not be adopted at this time in order to assess the results and outcomes of Step 1 refinements while further discussing alternative approaches.
- Energy requirements could lead to unintended impacts where DRAM resources may be forced to uneconomically dispatch to meet this requirement.
- Cost-effectiveness assessments should use least-cost best-fit evaluation guidelines without the factor parameters.

- Qualitative bid evaluation criteria should advance key objectives of the DRAM but should eliminate the criterion related to automated demand response.

II. ENERGY REQUIREMENTS SHOULD NOT BE ADOPTED AT THIS TIME IN ORDER TO ASSESS THE RESULTS AND OUTCOMES OF STEP 1 REFINEMENTS WHILE FURTHER DISCUSSING ALTERNATIVE APPROACHES.

In previous comments, CESA has expressed our concerns around adopting too many substantive changes at once, especially as the 'Step 1' changes from D.19-07-009 have yet to take effect and could turn out to address some or many of the concerns expressed in the DRAM Evaluation Report. With more frequent testing and dispatch requirements to validate demonstrated capacity ("DC") and the more stringent penalties for sub-par DC, demand response providers ("DRPs") will have sufficient incentive to have their DRAM resources perform with greater reliability or to structure their portfolios in advance of the auction solicitation to ensure certain performance levels while avoiding penalties. In the PD, the Commission reminds stakeholders that the DRAM is a pilot mechanism and seeks to adopt refinements that help it to assess the Commission's determination around the permanence and sustainable structure of the DRAM. However, with Step 2 refinements such as with this new energy requirement taking effect before the results of the impact of Step 1 refinements on DRAM resource performance, CESA has concerns that the PD may be adopting measures that are premature and could lead to unintended impacts (as discussed later), and would make it difficult to assess the appropriate solutions for the DRAM to get the desired performance from these resources. It may turn out that the Step 1 refinements in addition to some of the Step 2 refinements for qualitative bid evaluation criteria to be sufficient to address performance and reliability concerns identified in the DRAM Evaluation Report.

Furthermore, CESA observes that the Commission has included the issue of energy requirements of Resource Adequacy ("RA") resources in the new RA proceeding (R.19-11-009), where it may be more appropriate to discuss the "broader RA structure to address energy attributes or hourly capacity requirements."[1] Even as the PD cites D.19-10-021 as justification for adding energy requirements, CESA notes that the circumstances of that decision may be different and, to a degree, contentious from the perspective of several stakeholders, as evidenced by the multiple Applications for Rehearing ("AFR") and conflicting analysis submitted by parties.

Instead, CESA recommends that the energy requirements be considered at a later time (*e.g.*, 2021 or later auction) in order to afford the time and opportunity to assess the impacts of the Step 1 refinements and to consider alternative mechanisms, such as voluntary bid parameters, which have certain advantages in provide greater assurances and certainty of energy delivery when resources are contracted to these parameters, while maintaining the role of the California Independent System Operator ("CAISO") in optimizing the energy dispatch of resources in the market based on their marginal costs. Such a solution is more economically efficient and ensures that the resources procured through the DRAM have the desired attributes. Resources submitting this bid parameter would self-impose a bid cap that they can assure will still cover their marginal costs. CESA understands that this alternative approach would take some time to develop and implement, but we find it to be a more effective means to achieve the Commission's desired outcomes.

[1] *Order Instituting Rulemaking* issued on November 13, 2019 in R.19-11-009 at 5. http://docs.cpuc.ca.gov/PublishedDocs/Published/G000/M319/K527/319527428.PDF

III. **ENERGY REQUIREMENTS COULD LEAD TO UNINTENDED IMPACTS WHERE DRAM RESOURCES MAY BE FORCED TO UNECONOMICALLY DISPATCH TO MEET THIS REQUIREMENT**.

As it stands today, and unless the Commission adopts broader structural changes to the RA Program in R.19-11-009, CESA believes that RA resources are required provide capacity by meeting their must-offer obligations and submitting bids into the CAISO market while the actual optimization of dispatch is done by the CAISO based on energy bids submitted into its day-ahead and real-time markets that reflect a resource's marginal costs. CESA has concerns that an energy requirements would force certain DRAM resources to be uneconomically bid and dispatched (*i.e.*, bid below marginal costs) if forced to meet an arbitrary energy delivery requirement, especially if the market conditions do not provide the price signals. In the case of energy storage, similar types of uneconomic 'cycling' requirements have led to unintended outcomes (*e.g.*, Self-Generation Incentive Program ["SGIP"]) despite not having the economic signals aligned with desired behavior (*e.g.*, misaligned rates) and insufficient price differentials in the wholesale market have led to energy storage resources not being utilized for energy arbitrage because the market signals did not cover their marginal costs for cycling. With such energy requirements in place, DRAM resources could be forced to uneconomically bid into the market, irrespective of their marginal costs, to fulfill this administrative requirement. As identified in the Commission staff's analysis of historical prices with peak hours, peak pricing occurred at times between 1-4 pm,[2] which highlights how economic signals do not always align to ensure prescribed levels of energy dispatch.[3] As

[2] The Commission produced data analysis of how net load peak conditions did not correlate as strongly as expected with day-ahead market prices (R = 0.46), which explains the lack of scheduling and dispatch of DRAM resources operating under previous 12pm to 6pm availability assessment hours ("AAHs") when solar generation is high and LMPs are consequently low.

[3] Understandably, this analysis was done on historical hours and prices may be more aligned with peak capacity needs, but it highlights how setting prescriptive operational requirements can have unintended outcomes even as a resource was rationally following the economic signals at the time.

such, CESA does not recommend energy requirements at this time and instead advocates for alternative mechanisms to be considered in the meantime.

However, if the PD moves to adopt energy requirements, CESA recommends that the Commission consider an exemption process for DRAM resources that bid their marginal costs in accordance with their must-offer obligations but were not scheduled and dispatched in the market to meet their energy requirements due to market conditions. The Commission should not be directing RA resources to have to bid below their marginal costs, so an exemption should be granted for DRAM resources that can demonstrate marginal cost bidding, subject to confidentiality and firewall provisions, depending on the entity that monitors and implements the exemption process. The Commission, or an independent third-party entity, should assume this role. Furthermore, if the PD moves to adopt the energy requirement, CESA recommends that the delivery period not be focused on the months of May and October, as the provision of Flexible RA capacity, for example, may drive DRAM resources to be dispatched during shoulder months to provide ramping needs.

IV. COST EFFECTIVENESS ASSESSMENTS SHOULD USE LEAST-COST BEST-FIT EVALUATION GUIDELINES WITHOUT THE FACTOR PARAMETERS.

CESA agrees with the PD's determination that DRAM is a procurement mechanism, not a program, and should thus use least-cost, best-fit evaluation guidelines. However, the PD adds that parameters based on factors used in demand response ("DR") cost-effectiveness protocols as best ensuring cost effectiveness while providing a level playing field, even as the mechanism is exempt from the cost-effectiveness requirement due to it being in the pilot phase. While the PD said that this factor information will be used for informational purposes only at this time, DRAM participants are unable to submit this factor information without knowing this avoided cost information, which the investor-owned utilities ("IOUs") have not disclosed publicly. Unless this information is provided, DRAM participants will be unable to submit this information at the solicitation stage. Furthermore, this factor information should use long-term avoided RA values, whereas CESA understands that the IOUs use short-term avoided cost values in the evaluation criteria. The Commission has affirmed the use of long-term avoided costs in previous decisions.

V. QUALITATIVE BID EVALUATION CRITERIA ADVANCE KEY OBJECTIVES OF THE DRAM BUT SHOULD ELIMINATE THE CRITERION RELATED TO AUTOMATED DEMAND RESPONSE.

CESA is generally supportive of the qualitative criteria proposed in the PD along with the proposed cost adjustments if DRAM bidders meet the specific criteria, especially as it is structured to reward 'good actors' and penalize 'bad actors' in line with the DRAM's goals. However, CESA recommends that the criterion providing a 10% cost reduction to bidders using "technology enabling automated dispatch (OpenADR) of at least 80% of the IOU's highest monthly offered capacity" to be eliminated due to the DRAM being an economic program that is intended to set market-based triggers as opposed to automatic ones using automated demand response ("ADR") controls. Other DRAM structures are in place around DC performance to ensure resources are able to respond to real-time signals, which ensures that resources, even without ADR controls, should be incentivized to perform like 'automated' resources.

VI. CONCLUSION.

CESA appreciates the opportunity to submit these comments on the PD and look forward to working with the Commission and stakeholders in this proceeding.

Respectfully submitted,

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Date: December 5, 2019