BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA

Application of Pacific Gas and Electric Company (U 39 E) for Approval of its Demand Response Programs, Pilots and Budgets for Program Years 2023-2027	Application 22-05-002 (Filed May 2, 2022)
And Related Matters.	Application 22-05-003 Application 22-05-004

OPENING COMMENTS OF THE CALIFORNIA EFFICIENCY + DEMAND MANAGEMENT COUNCIL ON ADMINISTRATIVE LAW JUDGE RULING SEEKING PARTY COMMENT ON DEMAND RESPONSE AUCTION MECHANISM QUESTIONS AND PROVIDING UPDATED PUBLIC VERSION OF THE DEMAND RESPONSE AUCTION MECHANISM EVALUATION REPORT

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I. INTRODUCTION

The California Efficiency + Demand Management Council[1] ("the Council") respectfully submits these Opening Comments on the Administrative Law Judge Ruling Seeking Party Comment on Demand Response Auction Mechanism Questions and Providing Updated Public Version of the Demand Response Auction Mechanism Evaluation Report, issued in this proceeding on March 3, 2023 ("ALJ Ruling"). These Opening Comments are timely filed and served pursuant to the Commission's Rules of Practice and Procedure and the contained in the ALJ Ruling. Attached to the ALJ Ruling is the Nexant Demand Response Auction Mechanism Evaluation ("DRAM Report") The ALJ Ruling requests that parties submit responses to Questions 2A-2H on May 31, 2023.

II. BACKGROUND

The Council is a statewide trade association of non-utility businesses and organizations that provide energy efficiency ("EE"), demand response ("DR"), distributed energy resources ("DER") and data analytics services and products in California. Our Member companies and organizations employ many thousands of Californians throughout the state. They include EE, DR, DER, and grid services technology providers, implementation and evaluation experts,

[1] The views expressed by the California Efficiency + Demand Management Council are not necessarily those of its individual members.

energy service companies, engineering and architecture firms, contractors, financing experts, and workforce training.

III. SUMMARY OF THE COUNCIL'S POSITION

The Council appreciates this opportunity to provide its thoughts on DR Auction Mechanism ("DRAM") characteristics should the Commission choose to adopt it for the long-term. Before addressing the specific questions posed in the Ruling, the Council addresses some broader but critical issues that should be considered by the Commission.

First, it is important to acknowledge the investor-owned utilities' ("IOUs'") and DR providers' concerns about the DRAM. In broad terms, they can be generally characterized as the IOUs believing there are insufficient controls in place to ensure that DR providers are delivering on their commitments, and the DR providers believing the DRAM is overly complicated and opaque. In spite of this, the Council strongly believes there is a path by which these concerns can be addressed to the satisfaction of the IOUs, DR providers, and the Commission.

Second, the Council strongly believes that the DRAM can and should serve as a centralized procurement platform for third-party DR. The benefit of this is that the Commission could define one or more standardized DR products to meet specific needs and policy goals as they arise. For example, California continues to struggle to meet its incremental capacity procurement needs, so maintaining the current market-integrated Resource Adequacy ("RA") product for a permanent DRAM would continue to yield reliability benefits. The DRAM could also be used by the IOUs to procure other types of products or technologies as determined by the Commission; e.g., a 6:00-8:00 p.m. product, a Load Modifying DR product, or a product targeting a specific technology's capabilities such as an energy storage- or electric vehicle-based product for daily dispatch.

Third, if the Commission adopts the DRAM on a permanent basis, it should adopt a specific annual MW procurement target and/or budget that is large enough and for a sufficiently long duration to provide the market certainty needed by DR providers, especially those not currently participating in the DRAM Pilot, to participate. These amounts could be revisited by the Commission at the end of each IOU DR program budget cycle.

With those three points in mind, the Council recommends that the DRAM be transitioned from a pilot procurement program with its own set of rules and standards to a procurement mechanism used to procure larger amounts of third-party DR, that is subject to the same rules

and requirements of any other third-party DR RA resource. Under this approach, DRAM would be subject to all of the prevailing testing and availability requirements of DR resources under the prevailing RA framework, as well as the prevailing DR Qualifying Capacity ("QC") counting rules, particularly as the Commission transitions to a penalty-based counting method as outlined in its recent proposed decision in Rulemaking ("R.") 21-10-002.[2] This more rigorous approach to QC counting would eliminate the need for any DRAM-specific performance-based provisions. The benefits would be that IOU, DRAM, and other third-party DR would be subject to the same counting and penalty rules which would hopefully address the ongoing concerns of the IOUs, DR providers, and the Commission.

This particular effort by the Commission to collect feedback will hopefully provide some clarity with regard to how DRAM should evolve. However, additional discussion is likely needed, especially with regard to specific RQMD performance requirements. The Commission may want to adopt some initial principles for how it would like the DRAM to evolve and then finalize the details through another round of comments and reply comments, perhaps supplemented by a workshop.

As a final point, the Commission should consider how a permanent DRAM could someday be merged with the California Energy Commission's ("CEC") Demand Side Grid Support ("DSGS") Program. The DSGS Program contains some elements that align with the DRAM to a certain extent and, if the CEC intends for the DSGS program to be offered for an extended period of time, it may be practical to consider how the DRAM could be folded into it. The Council now responds to the specific Ruling questions below.

IV. THE COUNCIL'S RESPONSES TO QUESTIONS 2A-2H

2a. RQMD. What standards should be established for the completeness, accuracy, and timeliness of Revenue Quality Meter Data (RQMD) deliveries, and what incentives and/or penalties should be associated?

The Council greatly appreciates the Commission's consideration of this issue. A great deal of effort has been made in the past by the DR community to highlight the importance of reliable IOU delivery of RQMD, most recently through the RQMD Working Group, but unfortunately no resolution has been achieved. To ensure a complete record and to assist the

[2] Proposed Decision Adopting Local Capacity Obligations for 2024-2026, Flexible Capacity Obligations for 2024, and Program Refinements issued on May 25, 2023 in R.21-10-002 (RA).

Commission on this issue, the Council encourages the Commission to review the materials that were submitted as part of the RQMD Working Group.

It is incontrovertible that missing or delayed data harms DR providers and their customers. Data represents the lifeblood of DR providers' operations and is one of the major touchpoints with their customers. Without data, a DR provider cannot operate either as a market-participating entity or provide a service for its customers. Missing or delayed data imposes costs on DR providers when they have to chase down missing data or develop solutions to overcome missing data; also, missing or delayed data prevent calculation of customer performance which impacts invoicing, harms customer satisfaction, potentially degrades resources, risks California Independent System Operator ("CAISO") penalties and makes supply plan creation more difficult.

This issue has been contentious over the years, as there appears to be a disconnect between DR providers and the IOUs over the prevalence of late, incomplete, and inaccurate RQMD as well as the extent to which they represent a problem to DR providers and their customers. This debate has become counterproductive because stakeholders tend to become bogged down in minutiae which tends to distract from the more important need for universal standards for, as this question frames it, the completeness, accuracy, and timeliness of RQMD. Regardless of the IOUs' respective track records in delivering these RQMD, they all appear to have different definitions of what constitutes success. This is problematic because DR providers are subject to identical requirements with regard to DRAM invoicing and CAISO market participation. Therefore, there is a clear need for *consistent* standards across all IOUs because DR providers are subject to *consistent* obligations that hinge on their possession of complete, timely, and accurate RQMD.

One of the biggest symptoms of IOU RQMD delivery challenges is that the IOUs have disparate timelines and processes for providing RQMD, with varying degrees of success. The Commission should adopt consistent and binding performance standards applicable across all of the IOUs in the context of their roles as Meter Data Management Agent ("MDMA"), with a firm deadline for compliance, and direct them to submit Tier 3 advice letters or applications for any incremental budget needed to make the necessary investments to meet this standard. There are at least two fundamental questions that should be answered: 1) what are the set of metrics to measure MDMA service? and 2) what are the reasonable threshold levels to set for these metrics

above which the MDMA service is deemed "acceptable"? As a starting point for discussion, the Council supports establishing standards for the following MDMA functionality:

- Click-through solution uptime
- Click-through solution load time
- Time to deliver the initial customer data set
- Data elements provided
- Time to deliver the full customer data set
- Time to deliver ongoing interval meter data
- Time to deliver RQMD
- Time to resolve data issues submitted via the data issue template
- API requests
- Data accuracy

The Council believes a minimum 99 percent performance standard for all of these functionalities is reasonable and is generally consistent with other industries' standards. If the IOUs do not meet this requirement within a time frame designated by the Commission, they should be subject to penalties, with the Commission retaining its prerogative to waive them under conditions outside of the IOU's control (e.g., supply chain issues, etc.).

To be clear, it is the Council's preference *not* to expose the IOUs to potential penalties but the reality is that IOU shortcomings in delivering RQMD has imposed and continues to impose a significant incremental cost to DR providers that would not exist if not for IOU RQMD delivery issues. This unnecessary cost has driven DR providers' sense of urgency over the years to address this issue and IOU penalties may unfortunately be necessary to ensure that any Commission-approved standards are met.

2b. Auto DR Incentive. According to D. 18-11-029 (p. 48), "Customers of the Auction Pilot, being a demand response pilot, are considered eligible to receive Auto Demand Response control incentives. Control incentive policies for a permanent auction mechanism will be considered and determined following the completion of the Auction Pilot evaluation." Should DRAM customers continue to be eligible for Auto DR control incentives?

Third-party DR provider customers should have the same access to Smart Controllable Thermostat ("SCT"), Automated DR ("Auto DR") and technology incentives as IOU DR customers. Access to technology that is funded *by* all ratepayers should be available *to* all

ratepayers as long as they are participating in a DR program that provides RA capacity or equivalent (in the case of Load Modifying DR), or otherwise meets a Commission policy goal.

In addition, as attested to by Pacific Gas and Electric Company ("PG&E") and Southern California Edison Company ("SCE"), technology incentive eligibility can drive long-term DR participation by customers. PG&E states regarding the impact on DR participation when receiving an Auto DR incentive, "that 84 percent of accounts do remain in a DR program for three years and 60 percent stay enrolled for five or more years."[3] Similarly, SCE states,

> Energy Solutions found that once an account is enrolled in a DR program after receiving an Auto-DR incentive, they tend to remain enrolled for at least three years, and almost 60% of accounts stayed in DR for five or more years after incentive payment. These results show that the Auto-DR Incentive Program is a strong driver of sustained engagement with DR programs and that most customers that receive the incentive do become ongoing DR participants.[4]

These are powerful statements that, when considered in the context of overall technology incentive eligibility, clearly point to the benefits of opening technology incentive programs to all third-party DR that supports grid reliability, including RA capacity, and Load Modifying DR that can reliably reduce demand.

2c. QC Method. For the 2025 Resource Adequacy (RA) year and beyond, should DRAM resources be required to use the long-term Qualifying Capacity (QC) methodology for supply-side DR resources that may be adopted by the Commission in the RA proceeding for the 24-hour slice framework?

If extended, the DRAM should be subject to the same QC counting rules as IOU DR and other third-party DR RA contracts. This is not meant to imply that the Council fully supports the current DR Load Impact Protocols ("LIPs"), nor does it imply the Council will support the final DR QC methodology, but consistency in QC counting across all IOU and third-party DR is a critical element of the Council's vision of the DRAM becoming a pure third-party DR procurement platform.

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[3] Pacific Gas and Electric Company Demand Response Programs, Pilots, and Budgets 2024-2027 Full Proposal Prepared Testimony, submitted in this proceeding on May 2, 2022 (Exhibit ("Ex.") PG&E-2), at p. 4-9, lines 1-3.

[4] Southern California Edison Company's (U 338-E) Testimony in Support of its Application for Approval of 2023-2027 Demand Response Programs: Exhibit 3 – SCE's 2023-2027 Proposed Demand Response Programs by Category, submitted in this proceeding on May 2, 2022 (Ex. SCE-03), at p. 59, line 17 through p. 60, line 2.

2d. Solicitation. Should past performance of DR resources of Demand Response Providers (DRPs) be incorporated as a bid selection criterion in IOUs' solicitation process? If so, what performance metrics should be used, how should the historic performance data be obtained by the IOU, and how should the performance metric data be factored into the IOU's bid selection process?

No. The May 25, 2023 Phase 3 proposed decision in R.21-10-002 appears to indicate that the DR QC methodology that is ultimately approved in the RA proceeding will likely include a penalty mechanism for under-performance that will incentivize DR providers to perform in a manner consistent with their contract requirements. If the Commission subjects the DRAM to these same counting rules, retaining past performance as a bid selection criterion would amount to a second penalty mechanism. Furthermore, determination of what would be an appropriate methodology for reflecting past performance in future auctions would add more complexity to the DRAM which would be inconsistent with the Council's recommendation of greater simplicity in the DRAM.

2e. Aggregation Size. RA filings by DR providers indicate that there are many DR resources (each identified by CAISO with a unique Resource ID) with QC values that are less than 1 Megawatt (MW) Experience suggests that there is significant administrative and IT overhead and expense (born by the utility and Commission staff, funded by the ratepayer) associated with the handling of a large number of Resource IDs operated by a DR provider within a sub-Load Aggregation Point (SLAP). Should the QC of DRAM resource be subject to an aggregation standard or minimum size requirement established by the Commission? If so, what should the requirement be (e.g., only one Resource ID per unique combination of SLAP/DRP/program, or minimum QC of 1 MW per Resource ID)?

No. There are many operational reasons for why DR providers are restricted in how many customers they can aggregate under a single Resource ID, creating a technical need to sometimes use resource aggregations that are smaller than 1 MW. Many of these operational reasons are especially salient for new DR providers and aggregators of residential DERs, two types of DR providers that DRAM is specifically focused on engaging. These include:

- The need to aggregate assets based on customer segment, load type, and dispatch profiles (e.g., HVAC vs. EV chargers) in order to have accurate baselines, as load shapes for different customer profiles can vary significantly.
- The need to aggregate assets by partner; i.e., to include only meters from Partner A in an aggregation so that they are not impacted by meters from Partner B.

- The importance of being able to maintain a Resource ID when some meters leave the program, as it is not always possible to move the remaining meters to other Resource IDs.
- The flexibility to create sub-1 MW Resource IDs is critical when a DR provider does not have a sufficient number of customers aggregated within a given sub-Load Aggregation Point ("sub-LAP"); this is especially a risk for new DR providers as well as residential aggregators.[5]

To the Council's knowledge, no estimates have been provided as to the incremental administrative and IT costs imposed upon the IOUs and Commission staff from handling a comparatively larger number of Resource IDs, so the Council questions the extent to which this presents a cost barrier to the Commission and the IOUs. Furthermore, the Commission should also consider whether adopting a minimum size requirement would be fair to DR providers in light of the higher costs this would impose on them and, just as importantly, on their customers through consequently lower compensation.

Finally, if the Commission were to adopt a 1.0 MW Resource ID floor for DRAM resources, the Council questions how much of an impact this would actually have in terms of reducing the number of Resource IDs. No estimates have been presented by the Commission or any party, so it is not clear any benefits would accrue from this policy change.

2f. Capacity Invoicing. The Commission adopted a requirement that a third-party DRP must complete a test each quarter in which all its resources within the same SLAP are dispatched concurrently.7 The same decisions exempted 2023 and 2024 DRAM resources from this test requirement. Going forward, should the Demonstrated Capacity (DC) invoicing requirements for DRAM resources be aligned with the test requirement for other third-party DR resources, such that during a test or market dispatch used for DC invoicing, a DRAM seller would be required to dispatch all its resources within the same SLAP concurrently?

Yes. In theory, the DRAM should be subject to the same rules and requirements of other DR programs and resources. However, the Council is concerned that the Commission has yet to address the question of how third-party DR resources can graduate to less frequent testing, on the order of IOU DR program testing requirements. DRAM's performance requirements are already

[5] Southern California Edison Company's (U 338-E) Supplemental Testimony In Support Of Its Application for Approval Of Its 2023-2027 Demand Response Programs, submitted in this proceeding on March 3, 2023 (Ex. SCE-10), at p. 6 which cites the problem of stranded DR capacity when resources are too small in a particular sub-LAP to be bid into the CAISO market.

stricter than testing requirements in other regions (which generally only require 1-2 test events per year), and DRAM's requirement that at least 50 percent of the months in a delivery period be invoiced based on Demonstrated Capacity ("DC") is much more rigorous than other peer DR programs. Unnecessarily frequent testing will demotivate customers to participate in DRAM, because perfect performance currently does not lead to less frequent testing. DR participants should be able to see a clear pathway to less frequent testing when they perform well.

In addition, this particular testing requirement is not consistent with actual market operations. DR providers do not regularly dispatch all resources within the same sub-LAP concurrently during market awards, meaning that this test would not actually evaluate how resources normally perform. Given the above-mentioned concerns about frequent testing requirements and the marginal benefit this specific test would likely provide, the Council would recommend against implementing it.

2g. Capacity Invoicing. D.19-07-009 required that beginning with 2020 DRAM deliveries, DC invoices must be based on either market dispatches or capacity test events in at least 50 percent of the contracted months, with one month being August. However, this means that the months with DC invoices based on tests or market dispatches may not align with the RA availability requirement. To achieve better alignment, should the Commission require that all DC invoices be based on tests or market dispatches during the RA availability months (i.e., disallow invoices based on Must-Offer Obligation bids)? Are there other factors that justify elimination of invoices based on Must-Offer Obligation?

No. The Council reiterates that DRAM requirements should be no different than those of other third-party DR and IOU DR programs. Forcing customers to curtail load when they are not needed will only result in lower participation, so the Commission should avoid dispatches under conditions when they provide little-to-no benefit, especially when IOU and other third-party DR would be treated differently than DRAM resources. The IOUs, Joint DR Parties, and California Large Energy Consumers Association (CLECA) have explained in their recent testimony the negative impacts on enrollments of over-dispatching customers, so there is clear evidence that this is a risk.[6] Should the Commission require DRAM participants to be dispatched when they

[6] Ex. PG&E-2, at p. 3-6; Ex. SCE-03, at pp. 37-38; Prepared Direct Testimony of E Bradford Mantz – Chapter 1B on Behalf of San Diego Gas & Electric Company, submitted in this proceeding on May 2, 2022 (Ex. SDGE-1B), at pp. EBM-16 to EBM-17; Phase 2 Opening Testimony of Joint Demand Response Parties, submitted in this proceeding on April 21, 2023 (Ex. JDRP-01), at p. 9; and Direct Testimony of Sam Harper on behalf of California Large Energy Consumers Association, submitted in this proceeding on April 21, 2023 (Ex. CLECA-01), at p. 8.

are not needed simply for the sake of doing so, this will likely further harm enrollments. This will also drive DR customers away from third-party DR and toward IOU DR programs, contrary to any principles of competitive parity and contrary to the Commission's own stated preference for third-party DR.

2h. Capacity Invoicing. Currently, DRAM sellers are allowed to use the maximum hourly load reduction from any test or market dispatch during the showing month for their DC invoicing, regardless of the duration of the test or market dispatch.

i. Should DRAM sellers be required to use the average hourly load reduction from a test or market dispatch instead? If so, should there be a minimum duration requirement (e.g., four consecutive hours)?

DRAM Sellers should be subject to the same prevailing rules and standards as IOU and other third-party DR with regard to DC invoicing, including testing requirements. The Council reiterates that this does not necessarily constitute endorsement of the current or potential new DR QC methodology, but consistency is needed. Currently, there are no rules governing DC for non-DRAM third-party DR, but there are some outlined in the CEC's proposed DR QC methodology. Until it or some form of it is approved, the Commission should retain the existing DRAM DC rules for market dispatches.

The question of whether to use the average or maximum hourly load reduction may be less relevant in the near future because the Slice-of-Day ("SoD") regime is expected to be implemented in 2025. Once this occurs, it would seem logical for DR performance to be considered on an hour-by-hour basis in order to be consistent with how RA values will be counted under SoD. Until then, the Commission could apply the prevailing rules governing testing and apply them to economic dispatches as well.

With regard to the minimum duration requirement, the current testing rules require that performance be averaged out over a four-hour test event. However, if the DR provider is economically dispatched through the CAISO market, then the dispatch duration should suffice for determining performance, even if it is less than four hours, because that dispatch indicates a clear need for the DR resource as determined by the CAISO market. Requiring DR providers to bill based on a four-hour minimum duration dispatch would also underestimate their contribution when the grid is under the highest stress, which does not always neatly fit into a four-hour timeframe. For example, while a period of grid stress could occur from 5:00-10:00 p.m., the

peak stress might be concentrated from 6:00-8:00 p.m. DR resources with shorter dispatch durations (e.g., smart HVAC equipment) could offer significant load reductions during the most intense two-hour period of grid stress. However, if they are obligated to be evaluated over a four-hour dispatch window, their opportunity cost would likely rise, which would be reflected in their market bids.

As an example, over the past four years, there were three instances in the CAISO's day-ahead market when prices exceeded $200/MWh for four consecutive hours. However, there were thirty instances when prices surpassed $200/MWh for one or two hours. If using day-ahead prices as an indicator of grid stress, this shows that there are several occasions when a two-hour resource could offer significant value to the grid without the need for a full four-hour dispatch. The CEC has acknowledged the importance of shorter-duration resources in its revised DSGS System Guidelines, which included explicit compensation levels for energy storage resources with dispatch durations under four hours.[7]

If dispatch duration is important to the Commission, when multiple economic dispatches occur within a given month, the longest duration dispatch could be used for DC invoicing.

ii. Alternatively, should DRAM sellers be required to use the average or minimum hourly load reduction across all dispatches (test or market) during the entire showing month when calculating DC to be invoiced for that month?

The Council would oppose this change for the same reasons described above. In addition, implementing such a system would discourage regular participation of DR in the market, particularly if DRAM Sellers were obligated to issue invoices based on the minimum hourly load reduction achieved across all dispatches. If this were the case, DRAM Sellers would have an incentive to dispatch as infrequently as possible. Even if an average hourly load reduction were used to calculate DC, it would still diminish the motivation for frequent dispatches, as it would reduce the potential for additional dispatches to meaningfully increase a DR provider's DC.

V. CONCLUSION

The Council appreciates the opportunity to respond to Questions 2A-2H from the ALJ Ruling.

[7] Draft *Demand Side Grid Support Program Guidelines, Second Edition*, April 21, 2023, at pp. 16-18.

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Respectfully submitted,

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