BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA

Order Instituting Rulemaking to Oversee the Resource Adequacy Program, Consider Program Reforms and Refinements, and Establish Forward Resource Adequacy Procurement Obligations.	Rulemaking 21-10-002 (Filed October 7, 2021)

OPENING COMMENTS OF THE CALIFORNIA EFFICIENCY + DEMAND MANAGEMENT COUNCIL AND CPOWER ON ADMINISTRATIVE LAW JUDGE'S RULING ON CORRECTED VERSION OF CALIFORNIA ENERGY COMMISSION'S REPORT

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I. INTRODUCTION

The California Efficiency + Demand Management Council ("the Council") and CPower (collectively "the Joint Parties") appreciate this opportunity to submit its Opening Comments on the Administrative Law Judge's Ruling on Corrected Version of California Energy Commission's Report, issued in this resource adequacy ("RA") proceeding on February 24, 2023 ("February 24 Ruling"). These Opening Comments have been timely filed and served pursuant to the Commission's Rules of Practice and Procedure and the instructions contained in the February 24 Ruling.

II. SUMMARY

Attached to the February 24 Ruling is the corrected and final version of the California Energy Commission's ("CEC's") Qualifying Capacity ("QC") of Supply-Side Demand Response ("DR") Working Group Report ("Final Report"). The Joint Parties are generally supportive of the CEC's recommended DR QC counting methodology with a few key exceptions:

1. Penalty mechanism: The Joint Parties support a penalty mechanism in principle, but the CEC's recommended penalty mechanism should not be adopted. Instead, the Commission should direct the Energy Division to conduct a process to develop a more appropriate penalty mechanism that achieves a balance between incentivizing accurate DR QC values while not suppressing DR growth. Also, additional clarification is needed on how the penalty mechanism would be implemented.
2. Takeback effects: Accounting for takeback should be delayed until the rules surrounding DR in the slice-of-day framework are finalized.

3. Discounting the Planning Reserve Margin ("PRM") Adder: The Final Report does not justify discounting the PRM Adder for Supply Side DR while retaining the entire PRM Adder for Load Modifying DR, especially when the only difference between the two types of DR is how they are dispatched.

III. A NEW DR COUNTING METHODOLOGY IS NEEDED THAT WILL ENCOURAGE DR GROWTH WHILE ENSURING THAT DR CAPACITY IS ACCURATELY COUNTED

The overriding goal of this effort to develop a new DR QC counting methodology should be to encourage customer DR participation, attract market entry of DR providers while encouraging investor-owned utility ("IOU") and non-IOU load-serving entity ("LSE") DR program growth, and promote high quality, reliable DR. The Load Impact Protocols ("LIPs") and the associated LIP process promote none of these outcomes. For DR to grow, a new methodology is needed that will accurately reflect the capabilities of DR programs and resources, and be transparent in how QC value is determined, without incurring an unreasonable cost or amount of time to implement.

Since LIPs were approved in ("D.") 08-04-050, they have been used to determine the RA value of IOU DR programs. In Decision D.19-06-026, the Commission expanded application of the LIPs to third-party DR providers to determine their QC values beginning with the 2020 RA year. Since then, it has become apparent that the LIPs are highly problematic for third-party DR providers for several reasons, all of which combine to act as a significant barrier to third-party DR participation in California. These reasons are explained in detail in the Council's proposal attached to the Final Report, but the Joint Parties provide an abbreviated version here:[1]

1. It is not clear how effective the LIPs have been in accurately predicting QC values.
2. The LIP process is very time-consuming and does not align well with the RA process.
3. The LIP process is costly for DR providers and comes with no guarantee of cost recovery.
4. The need for consultants to perform the LIP analysis acts as a bottleneck.
5. The Energy Division assessment of LIP reports lacks transparency.

Due to the significant flaws in the LIPs and LIP process, the Joint Parties recommend against adopting any LIP-based DR counting proposal that does not address these issues,

[1] See *California Efficiency + Demand Management Council Incentive-Based Method DR Counting Proposal*, September 27, 2022, at pp. 1-3 which can be found at pages 132-134 of the Final Report.

especially the proposals put forth by Demand Side Analytics ("DSA") and the California Large Energy Consumers Association ("CLECA").[2] If the Commission is intent on retaining the LIPs in some form, the Joint Parties recommend the Commission adopt OhmConnect's "Simplified LIPs" proposal because it at least reduces the complexity and resources needed to apply them.[3]

The Joint Parties believe that most future DR growth will occur primarily through third parties because they have a commercial interest in growing their portfolios whereas IOUs do not have this same motivation. To attract this third-party DR, a streamlined DR QC methodology is needed that better suits the more dynamic nature and associated business needs of DR providers while also accurately estimating DR QC values for IOUs and DR providers. Specifically, the new methodology should:

1. Reflect IOU/LSE and DR provider assessments of their capabilities based on the most recent enrollment and per-customer load impact data to deliver the accurate QC values .
2. Minimize the time required to receive a QC value from the Energy Division to better enable DR providers to participate in IOU and LSE solicitations.
3. Be as transparent as possible to ensure that DR providers understand the reasoning behind Energy Division assessments of their QC values.
4. Minimize the cost to DR providers and ratepayers to participate in the RA market.
5. Eliminate the need for outside consultants which can act as a barrier when several IOUs and DR providers are simultaneously developing their load impact evaluations.
6. Reduce the Energy Division's administrative workload to determine DR QC values.

IV. THE JOINT PARTIES' RESPONSES TO COMMISSION QUESTIONS

a. Please provide comments on the CEC Report, including the CEC's recommended methodology. Parties may also provide comments on the other stakeholder proposals included with the CEC Report.

i. Comments on the CEC Methodology

The Joint Parties greatly appreciate the CEC's recognition of the severe burden created by the LIPs; it is critical that a new DR counting methodology eliminate the significant barriers to DR provider entry into the RA market. The Joint Parties support, or can live with, almost all the elements of the CEC's proposed method because it takes a similar approach as that proposed

[2] Final Report, at pp. 76-85 (CLECA Proposal) and 87-119 (DSA Proposal)
[3] *Id*., at pp. 121-131 (OhmConnect Proposal).

by the Council in its own Incentive-Based Proposal. The Joint Parties especially agree with the Final Report's statement that "CEC staff does not recommend specifying a minimum number of hours or prescriptive window of hours (i.e., availability assessment hours) to be shown for RA."[4] Under a Slice of Day framework, DR should be allowed to provide capacity for any number of slices at any time of the day, as long as it can reliably deliver in those hours. However, one element of the CEC's method in particular will likely be highly detrimental to DR and needs to be addressed: the point at which penalties should be applied. To a significant extent, the potential success of the CEC's method hinges on whether the penalty structure can strike a balance between ensuring realistic QC valuations for DR programs and resources while not being so heavy-handed that it discourages DR participation.

The Commission should adopt a penalty structure in principle and establish a process for developing its details, including the penalty threshold and how the penalty mechanism would be applied. Because the new DR QC counting methodology would not take effect until 2025, the Commission has until the last quarter of 2023 for such a process to be carried out. With this said, the Joint Parties provide comments on the specific recommendations contained in the Working Group Report:

1. Apply a consistent QC framework and methodology across DR resources: The Joint Parties strongly support this recommendation because it applies the same DR QC counting methodology to IOU programs, third-party RA contracts, and Demand Response Auction Mechanism ("DRAM") contracts. All DR providers, whether they are LSEs (including IOUs) or third-party providers, should be subject to the same risks and requirements to ensure a level playing field. However, the Joint Parties anticipate that the IOUs, in an effort to avoid being subject to penalties, may attempt to transition their DR programs to Load Modifying DR. Third parties do not currently have this option, so the IOUs will have an advantage in that they will be able to avoid the risk associated with being subject to performance penalties. If the Commission allows the IOUs to de-integrate their DR programs, DR providers should have that same option in their contracts.
2. Adopt an incentive-based approach: The Joint Parties agree that the current LIP process is unsustainable and strongly supports an incentive-based approach in concept because

[4] Final Report Attachment, at p. 7.

there is no mechanism currently in place in California to ensure that Supply Side DR is delivering on their RA value (as RA supply or a credit). However, it is important that the penalty provide a reasonable incentive for good performance without placing so much risk that it deters participation in DR market.

3. Adopt the capacity shortfall penalty incentive mechanism with forced outage adder: The Joint Parties strongly oppose the CEC's recommended penalty mechanism because it demands virtually perfect performance from DR resources once adjusted for weather dependency. As the Joint Parties understand it, penalties equal to twice the shortfall would be applied for any performance less than 100%. This would be slightly offset by the 5.8 percent forced outage adder. This percent penalty threshold is excessive and, to the Joint Parties' knowledge, goes beyond any broad-based DR-related penalty threshold that has existed in California. The CEC has characterized this mechanism as "the most viable and capable of delivering high performance to support reliability."[5] However, no apparent consideration was given by CEC staff during the Working Group discussions of how realistic it is to expect DR resources to be so precise, nor was consideration given to the chilling effect of such a harsh penalty structure on customer and DR provider participation. Though the CEC's proposal to use an ex post weather normalization regression would enable a more accurate comparison of ex post performance to ex ante values, it does not account for the normal day-to-day variability that is associated with customer load, which is recognized by the Commission's designation of DR as a variable resource in D.21-06-029.

   It is clear that the Working Group was unable to devote a sufficient amount of time to discussing penalty options. As the Joint Parties highlighted above, the Commission should forego adopting a specific penalty structure and direct the Energy Division to conduct a process to design an appropriate structure in time to be deployed in 2025.

4. Adopt the ex ante capability profile and ex post regression approach proposed by CEC staff: The Joint Parties support this recommendation on the condition that the capability profile and ex post regression are simple enough so as to avoid the need for DR providers possessing a reasonable degree of sophistication to retain consultants. Also, how these two analyses are produced should not be subject to feedback by any parties other than the

[5] Final Report, at p. 47.

Energy Division (or the CEC in its role of assisting the Energy Division with reviewing them), contrary to the current process which allows the IOUs and any other interested party opposing third-party DR to delegitimize it by critiquing DR providers' draft evaluation plans and draft load impact evaluations developed by independent consultants.

5. Require resources to show takeback: The Joint Parties understand the importance of spillover effects in resource planning and operations, but there has not been sufficient vetting of proposals nor clarity on calculations within the context of the Slice of Day ("SoD") RA paradigm. Accounting for takeback should be delayed until the rules surrounding DR in the SoD framework are finalized.

   It is premature to include takeback in a new DR counting method because 1) it introduces unnecessary complications to a new methodology, and 2) there are many outstanding questions on how takeback would be accounted for that are dependent on the final rules governing DR within the SoD framework. Specifically, the hourly nature of the SoD framework greatly complicates how spillover effects would be accounted for. Estimating spillover effects is relatively straightforward under the current peak-day RA framework in which DR QC values are based on forecast performance within a fixed, five-hour window. This could change dramatically under the SoD framework, especially if DR resources are allowed to provide RA capacity for varying numbers of hourly slices throughout the 24-slice "worst day". More specifically, a DR resource may have a different magnitude of spillover effect depending on how many slices it is serving. For example, a DR resource that can provide 10 MW of RA capacity for six consecutive hourly slices may have 2 MW of increased load in the hour immediately preceding and following a six-hour dispatch to reflect pre-cooling and snapback. However, if the same resource is only contracted for two consecutive hourly slices, the spillover effects may be lower than 2 MW because less pre-cooling and snapback would occur. Using the same scenario, if the 10 MW DR resource can deliver its capacity any time within a 12-hour period, the spillover effects may be different depending on the time of day the resource is contracted to be available. For example, less pre-cooling and snapback are needed in the late morning when it tends to be cooler compared to the late afternoon when temperatures tend to peak. Scenarios such as these need to be explicitly addressed before the question of takeback effects can be considered in the DR QC counting methodology.

6. Require DR providers to submit capability profiles and "slice-of-day" table to summarize QC values: The Joint Parties support this recommendation because it will not add significant cost or effort to the QC process, and because reasonably sophisticated DR providers will be able to generate these profiles and associated tables without hiring consultants. It would also conform with the expected requirements under the slice-of-day framework.
7. Reduce reporting requirements for QC determination: The Joint Parties strongly support this recommendation. However, the Commission should seek to reassess what information is really needed after a few years to minimize the reporting burden on IOUs, LSEs, and DR providers. The Joint Parties respectfully caution the Commission to resist the urge to add on "nice to have" reporting requirements because they impose a financial and time burden and would reproduce some of the same problems that currently exist with the LIPs.
8. Plan to produce final QC numbers by June 1 preceding the RA compliance year: The Joint Parties strongly support this recommendation. A June 1 due date for final QC numbers will help ensure that DR providers will have an equal opportunity to participate in LSE RA solicitations. In addition, this will better inform LSEs of their respective DR RA allocations from IOU DR programs in their year-ahead RA procurement processes.
9. Adopt streamlined QC approval criteria: The Joint Parties support this recommendation because it would reduce the administrative burden imposed on Energy Division staff to assess proposed QC values while providing another motivation (on top of a potential penalty) to submit realistic QC values. However, it may be prudent to adopt a more conservative threshold for an increase from the prior year's demonstrated capacity because 25 percent is a significant change. The Joint Parties would instead recommend a ten percent increase as the cutoff for warranting a waiver. These thresholds could be revisited periodically to ensure they are not undermining the integrity of the DR QC counting process.
10. The Commission should implement the proposed penalty mechanism and the CAISO should exempt DR from the RA Availability Incentive Mechanism ("RAAIM"): The Joint Parties support both elements of this recommendation. The Commission is clearly the best-positioned entity to implement the penalty mechanism because it has ultimate

jurisdiction over capacity values in general and is responsible for managing the DR QC counting process for DR programs and resources. Also, the presence of a capacity-based penalty system for DR would eliminate the need for the RAAIM; otherwise, it would be unfair to subject DR providers (IOUs are exempt from the RAAIM as long as their DR programs remain off their supply plans) to multiple RA penalty structures, especially when conventional resources are not subject to dual penalties.

11. Phase-in the incentive-based approach over time: The Joint Parties support this recommendation because the transition to an entirely new QC counting regime will entail a learning curve for all entities involved, including Energy Division staff. If the Commission adopts the CEC's proposed penalty mechanism or something similarly harsh, it should be phased in over a two-year period, rather than over one year, to allow time for evaluating its feasibility and impact on DR participation.
12. Require DR providers to use the same baseline for settlement and ex post evaluation unless an alternative is more accurate but unable to be used for settlement: The Joint Parties support this recommendation to avoid potential "cherry picking" of baselines.
13. Adopt bid normalization for load impacts in ex post capacity valuation: The Joint Parties support this recommendation because it avoids forcing DR resources to bid below their opportunity costs to ensure a full market dispatch. It also allows capacity valuation to make use of a larger data set by promoting more dispatches. Including a minimum dispatch ratio threshold relative to the amount bid is appropriate to avoid gaming.
14. Reduce the threshold required for midyear QC update: The Joint Parties support this change to the current rules to qualify for a mid-cycle update because it would better allow smaller DR providers (including new entrants) for whom a 10 MW change constitutes far more than 20% of their portfolio.
15. Eliminate the components of the PRM adder associated with operating reserves and load forecast error: The Joint Parties do not support this recommendation. Discounting the PRM Adder for Supply Side DR while retaining the entire PRM Adder for Load Modifying DR is unsupported in the Final Report, especially when the only difference between the two types of DR is how they are dispatched. The Joint Parties refer the

Commission to February 24 Joint Parties' comments on the same Energy Division proposal.[6]

16. Convert the forced outage adder to a multiplier applied in the capacity shortfall penalty: The Joint Parties prefer that the entire PRM Adder continue to be applied but, if the Commission chooses to go down this path, then the Joint Parties would support applying the forced outage adder as a multiplier to the effective capacity for the purposes of calculating any potential penalties.
17. Maintain the distribution loss factor adder in QC values: The Joint arties supports this recommendation because it reflects the current CAISO practice of grossing up Settlement Quality Meter Data ("SQMD") for avoided distribution level losses.
18. Update transmission loss factors and include the adder as a credit: The Joint Parties support this recommendation because, though it may not reflect current CAISO practice to gross up SQMD for avoided transmission losses, these losses do occur just as they do at the distribution level. The Joint Parties refer the Commission to February 24 Joint Parties' comments on the Energy Division proposal to eliminate the Transmission Loss Factor.[7]

ii. Comments on Other Proposals

CLECA Proposal: The CLECA proposal is a method for applying the current LIPs to the 24-slice RA framework. Though CLECA's proposal would conform the LIPs to the 24-slice framework, the Joint Parties oppose this proposal as anything other than a solution for the SoD 2024 Test Year due to the extensive arguments made above against retention of the LIPs. Continued use of the LIPs without significant simplification that addresses the Joint Parties' concerns expressed above would simply perpetuate the same broken DR counting regime that has plagued the DR market.

DSA Proposal: The DSA proposal builds on top of the existing LIPs by developing a time-temperature matrix for weather-sensitive resources that quantifies the relationship between demand reductions, temperature conditions, hour of the day, event start times, and hours into an event. The output of this matrix is an hourly load impact for 24 hourly slices for each month. Again, the Joint Parties strongly oppose DSA's proposal because it preserves the LIPs, and adds

[6] Opening Comments of the California Efficiency + Demand Management Council, CPower, and OhmConnect, Inc. on Implementation Track Phase 3 Proposals, at pp. 6-8.
[7] *Id*.

even more complexity, cost, and less transparency than the current LIPs. Finally, DSA's proposal is simply not clear in how exactly it would work with each specific LIP.

The Joint Parties note that the concept of one or more time-temperature matrices is an interesting one because, if applied to a simpler DR, non-LIP-based counting methodology that meets the six key requirements presented in the discussion on its own DR counting proposal, could create a more standardized approach to calculating the load impacts of weather-sensitive DR. In such an instance, as DSA suggests, a single, neutral entity could develop the matrices. However, to minimize entry costs to DR providers (a key requirement from the Joint Parties' perspective), the DSA proposal would have to eliminate the need to retain an outside consultant. Another potential benefit of a standardized set of time-temperature matrices is that it would presumably give the Energy Division (or other entity reviewing load impact evaluations) the confidence that IOUs and DR providers are using an acceptable methodology.

OhmConnect Proposal: OhmConnect proposes a version of the LIPs that has been streamlined to eliminate any elements that are not needed for the estimating DR QC values. OhmConnect's proposal addresses some of the Joint Parties' concerns somewhat, namely by minimizing the time required to receive a QC value from the Energy Division, reducing the Energy Division administrative workload by delivering a less voluminous load impact evaluation, and minimizing the cost to DR providers and ratepayers by reducing the complexity of the load impact analyses. The Joint Parties would support this proposal as a fallback or interim option but only if the Commission prefers not to adopt a completely new DR counting methodology. The Joint Parties see this as a potential "Plan B" that can stand on its own, or as an overlay with the CLECA proposal or possibly as an overlay with the DSA proposal.

b. Should the Commission determine that further analysis or refinement is required for any proposal, what process should be used for this further analysis or refinement, and what timeline should be considered?

As explained above, the Joint Parties generally support the CEC proposal but additional work is needed, especially with regard to the penalty structure and takeback effects. If the Commission chooses to adopt the CEC's methodology, it should initiate a process to flesh out these elements and also to determine the process for applying the entire methodology. This could be a relatively simple process in which the ALJ could issue a ruling requesting comments and any related analysis on that specific question. A workshop could also be scheduled where parties could present proposals. This could all be done following the Commission's usual June

RA decision because the LIP process is already currently underway for the 2024 RA Delivery Year. Draft LIP evaluation plans for the 2025 RA Year are due at the end of 2023, so if the Commission could issue a decision by October 2023 on all outstanding issues, that would signal early enough to IOUs and DR providers that the LIPs would not be in effect.

The Commission should devote no more effort toward fleshing out the DSA and CLECA proposals. As discussed above, they would perpetuate (and, in the case of the DSA proposal, exacerbate) the shortcomings of the LIPs and the LIP process. However, if the Commission chooses to adopt an interim DR counting process, the OhmConnect proposal should be considered because it would narrowly apply the LIPs solely for the purpose of informing QC values.

V. CONCLUSION

The Joint Parties appreciate the opportunity to provide these Opening Comments.

Dated: March 1, 2023

Respectfully submitted,

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