

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, CPOWER,  
ENEL X NORTH AMERICA, INC. AND LEAPFROG POWER, INC.  
ON ADMINISTRATIVE LAW JUDGE'S RULING ON LOSS OF LOAD  
EXPECTATION STUDY AND SUPPLY-SIDE DEMAND RESPONSE REPORT, AND  
SETTING COMMENT SCHEDULE**

Dated: March 14, 2022

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**I. INTRODUCTION**

The California Efficiency + Demand Management Council (“the Council”)<sup>1</sup>, CPower, Enel X North America, Inc. (“Enel X”), and Leapfrog Power, Inc. (“Leap”) (collectively, the “DR Coalition”) appreciates this opportunity to submit its Opening Comments on the Administrative Law Judge’s Ruling on Loss of Load Expectation Study and Supply-Side Demand Response Report, and Setting Comment Schedule, issued in this resource adequacy (“RA”) proceeding on February 18, 2022 (“February 18 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 18 Ruling.

**II. SUMMARY**

Attached to the February 18 Ruling are the Energy Division’s Loss of Load Expectation (“LOLE”) Study (“LOLE Study”) and the California Energy Commission’s (“CEC’s”) Qualifying Capacity (“QC”) of Supply-Side Demand Response (“DR”) Working Group Interim Report (“Interim Report”). The DR Coalition provides comments on the Interim Report only.

The DR Coalition supports most of the Interim Report’s recommendations but, as discussed in greater detail below, has concerns about the basis for some of them. Generally speaking, we support Recommendations 1-3, 7, 8, and 10. We recommend a slight revision to

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<sup>1</sup> The views expressed by the California Efficiency + Demand Management Council are not necessarily those of its individual members.

Recommendation 4 to adopt the LOLE-weighted Load Impact Protocols (“LIP”) proposal outright, partially support Recommendation 9, and strongly oppose Recommendations 5 and 6.

Recommendations 5 and 6 far exceed the Supply-Side DR Working Group (“Working Group”) scope established by the Commission in Decision (“D.”) 21-06-031, Ordering Paragraph (“OP”) 11. However, the other recommendations fall within the scope of D.21-06-031, OP 11 in that they pertain to the development and testing of DR QC methodologies. The DR Coalition supports extending the CEC-led Working Group into the third quarter of 2022 in order to develop long-term DR QC methodologies and to address the other outstanding issues from OP 11. The continuation of the Working Group should begin as soon as possible so stakeholders have enough time to manage all the complexities of designing a DR counting proposal that fits within a Slice-of-Day framework.

The DR Coalition supports the principle of optionality that is proposed in the Interim Report.<sup>2</sup> Before one or more new DR QC methodologies are adopted by the Commission on a long-term basis, it is critical that they be tested and assessed. The Council’s Incentive-Based Method represents a departure from the current LIP process and requires far less time and resources. Keeping with the spirit of optionality, though the DR Coalition opposes the California Independent System Operator’s (“CAISO’s”) LIP-Informed effective load carrying capability (“ELCC”) because it will be very difficult to implement and will only increase the cost and difficulty of the DR QC process. However, because the interim proposals would be non-precedential, it is appropriate that it be approved on an interim basis. The Commission also should adopt the California Large Energy Consumers Association’s (“CLECA”) LOLE-Weighted LIP methodology as an interim methodology. It represents a “middle ground” approach in that, like the CAISO proposal, it utilizes the LIPs but rather than applying an ELCC analysis on top of the LIP profiles, it applies a weighting to the hourly QC value based on the LOLE for each hour.

Finally, the DR Coalition supports the Interim Report’s recommendation to create Interim and Long-term Working Group tracks. The effort to develop a Slice-of-Day RA framework is not yet complete, so it makes little sense to develop a long-term DR QC methodology until it becomes clearer what the new RA framework will look like.

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<sup>2</sup> Interim Report, at p. 39.

### **III. DR COALITION COMMENTS ON INTERIM REPORT AND PROCESS**

#### **A. The Interim Report’s finding on contribution to reliability has no evidentiary basis.**

The Interim Report states that an effective load carrying capability ELCC-based approach to DR QC valuation “should better reflect the contribution of demand response to reliability.”<sup>3</sup> However, it provides no explanation for why or how an ELCC-based methodology better reflects the DR contribution to reliability relative to the LIPs or the other DR QC proposals that were discussed in the Working Group. This is problematic because the Interim Report has been entered into the evidentiary record which the Commission will rely upon to inform its June decision on potential interim DR QC methodologies. Therefore, the findings and conclusions made in the Interim Report must have a sound evidentiary basis to ensure the Conclusions of Law and Findings of Fact in the Commission’s June decision are themselves properly supported. Furthermore, the Interim Report does not define “contribution to reliability”. This concept was discussed only very briefly in the Working Group where it quickly became clear that different stakeholders hold different definitions of this term. Without a definition of this concept as well as an explanation or demonstration for why the other methodologies are inferior in that regard, the Interim Report’s finding carries little weight and should be disregarded by the Commission.

#### **B. The Interim Report mischaracterizes the Council’s Incentive-Based Method proposal.**

The Interim Report neglects to include parties’ DR QC proposals and instead provides a brief overview of each as well as a link on the last page to where they can be found on the CEC’s website. This approach for entering these proposals into the record will likely lead some readers to forego reading the actual proposals and simply rely on the Interim Report overviews. This is highly problematic because the Interim Report significantly mischaracterizes the Council’s proposal in at least two instances. These mischaracterizations create confusion and risk tainting the Commission’s understanding of the Council’s proposal if the Commission ultimately cites the Interim Report statements of the Council’s proposal rather than the proposal itself. To ensure the Council’s proposal is entered into the record and to better ensure that parties and the Commission are able to read it, the DR Coalition has attached it to these opening comments as Appendix A. To correct the record, the DR Coalition identifies and corrects two key mischaracterizations from the Interim Report:

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<sup>3</sup> Interim Report, at p. 36.

**The Council’s proposal retains upfront Energy Division oversight.** The Interim Report states in reference to the Council’s proposal, “Unlike other proposals and the status quo, which require significant upfront oversight in estimating future capacity, the incentive-based approach employs incentive mechanisms – namely financial penalties for underperformance – to ensure compliance.”<sup>4</sup> This statement omits the fact that the Council’s proposal retains the role currently played by the Energy Division to act as the final arbiter over DR QC values. This was explicitly indicated in the Council’s presentation made at the CEC’s December 3, 2021 Commissioner Workshop on Supply Side Demand Response and is included in the Council’s proposal stating,

“The Energy Division assesses the DR provider’s Claimed QC values and Supporting Data. If necessary, the Energy Division follows up with the DR provider for additional documentation or clarifying questions. **This step is similar to the current step under the LIP process in which the Energy Division reviews LIP reports and requests additional information if necessary.** [emphasis added] Once the Energy Division makes a determination on the DR provider’s Awarded QC values, they post the NQC values on the current CPUC NQC List for the forward period requested by the DR provider (up to three RA years).”<sup>5</sup>

This statement in the Interim Report creates a very clear but incorrect impression that the Council’s proposal does not entail Energy Division oversight. This error in language risks undermining the Council’s proposal and should be disregarded.

**The Council’s proposal is not unique in requiring additional Energy Division resources to implement.** The Interim Report states that “there are technical and timing risks related to implementing” the Council’s proposal in the amount of time available, and that Energy Division staff have apparently indicated in conversations with CEC staff that implementing the Council’s proposal would “require new structure and processes for collecting collateral, assessing ex post performance, and collecting penalty payments.”<sup>6</sup> The DR Coalition notes that any new DR QC methodology will inevitably require some degree of effort to stand up and implement, and would argue that the Council’s proposal will require far less time of the Energy Division compared to the LIP-informed ELCC proposal. As the Interim Report acknowledged,

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<sup>4</sup> Interim Report, at p. 36.

<sup>5</sup> Council Proposal, Appendix A, at p. 4.

<sup>6</sup> Interim Report, at p. 37.

Energy Division is already allocating its SERVIM tool to perform ELCC analysis.<sup>7</sup> Based on the CAISO’s December 15, 2021 Working Group presentation, they estimate 6-8 weeks needed to perform the ELCC modeling.<sup>8</sup> This represents a substantial amount of time and resources that the Energy Division has already agreed to allocate to this effort, all of which are additional to the time and resources required to review several lengthy LIP reports beginning on April 1. Therefore, if the Energy Division has the resources to implement the CAISO’s methodology, it would only be fair for the Energy Division to provide the same courtesy and allocate the necessary resources to implement the Council’s methodology as well.

**C. The Commission should reject the Interim Report’s penalty structure applied to the Council’s proposal.**

The Interim Report appears to have modified the Council’s Incentive-Based Method proposal by changing the penalty structure from that of the Pacific Gas and Electric Company (“PG&E”) Capacity Bidding Program (“CBP”) to a hybrid of the Demand Response Auction Mechanism (“DRAM”) and CBP.<sup>9</sup> Though we recognize that the CEC is well within its prerogative to recommend any changes to proposals put forward by stakeholders in this process, the DR Coalition notes that the CEC’s proposal was neither proposed nor supported by the Council. Throughout the several months that the Working Group convened, CEC staff gave no indication that they would unilaterally modify party proposals, only that they would make recommendations on the proposals. The Commission should explicitly specify that the CEC should not make unilateral revisions to party proposals, only recommended changes, if it approves the Interim Report recommendation to reconvene the Working Group.

The evidentiary basis to explain why the Council’s penalty structure was modified is highly flawed. The Interim Report questioned the effectiveness of the CBP penalty structure while providing no evidence that it is ineffective at motivating good performance.<sup>10</sup> In fact, the Council ultimately chose the CBP penalty structure over the DRAM penalty structure because it is universally accepted and would ensure equity with investor-owned utility (“IOU”) DR programs. However, the Interim Report claimed that because DRAM “has seen underperformance over the course of the pilot program”, the Council’s penalty structure should

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<sup>7</sup> Interim Report, at p. 36.

<sup>8</sup> <https://efiling.energy.ca.gov/GetDocument.aspx?tn=240947&DocumentContentId=74800>, at p. 4.

<sup>9</sup> Interim Report, at p. 37.

<sup>10</sup> *Id.*, at p. 37.

be modified to adopt the higher penalty tiers of the DRAM penalty structure such that penalties apply once performance falls below 90 percent rather than 75 percent under the CBP penalty structure.<sup>11</sup> This does not address why the CBP penalty structure is apparently effective for the IOU CBP programs but would not be for third-party DR. Finally, the Interim Report does not explain why it is appropriate for third-party DR to be subject to more rigorous performance standards than IOU DR programs, especially when the same DR providers who provide third-party DR are also participating in IOU DR programs. Applying harsher penalties on third-party DR would put DR providers at a competitive disadvantage relative to IOU DR programs which would depress innovation and DR growth.

The Commission should reject the Interim Report's modification of the Council's penalty structure. The Interim Report does not make a compelling argument as to why the Council's proposal should be rejected, and the modified penalty structure would unfairly disadvantage third-party DR.

**D. Approval for continuing the Working Group should include a deadline for a working group report and Commission decision.**

The DR Coalition supports reconvening the Working Group to develop one or more long-term DR QC methodologies for implementation in the 2024 RA year, but the Commission should specify a deadline for the CEC to submit the Final Report in time for a decision before the annual LIP process begins. This is necessary to ensure DR providers have sufficient advance notice on whether they need to retain a consultant and begin work on draft evaluation plans which are due at the end of the year. Under Recommendation 9, the Interim Report states that the Commission should “[r]equest the CEC produce a final report by the fourth quarter of 2022.”

Depending on when in the fourth quarter of 2022 the report is submitted and subsequently adopted by the Commission, DR providers may face the same timeline issue that has surfaced this year (i.e., the deadline for the 2024 LIP evaluation plan could come *before* a long-term methodology is adopted for the same RA year). There must be adequate time once the CEC submits the Final Report in this proceeding for 1) parties to provide opening and reply comments, 2) the Commission to draft and issue a proposed decision, 3) parties to submit opening and reply comments on the proposed decision, and 4) the Commission to vote on the

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<sup>11</sup> Interim Report, at p. 37.

proposed decision. The DR Coalition suggests the following draft timeline but invites other parties to suggest alternatives:

- September 1: Final Report submitted to Commission
- September 12: Opening comments submitted on Final Report
- September 19: Reply comments submitted on Final Report
- October 18: Proposed decision issued
- November 17: Commission vote on proposed decision

#### **IV. DR COALITION COMMENTS ON INTERIM REPORT RECOMMENDATIONS**

##### **A. The CEC’s recommendations should reflect the Working Group principles.**

In Chapter 3, the Interim Report explains the Working Group process, which included the creation of two sub-groups - the QC Methodology Working Group and the Principles Working Group.<sup>12</sup> As characterized in the Interim Report, the Principles Working Group “sought to identify a set of principles that a qualifying capacity method should meet.”<sup>13</sup> The Principles Working Group last convened on October 25, 2021 in a joint session with the QC Methodology Working Group where party feedback on draft Working Group principles was discussed. The October 25 version of the principles are:

1. The QC methodology should be transparent and understandable.
2. The QC methodology should use best available information regarding resource capabilities, including recent historical performance and participant enrollment and composition projections.
3. The QC methodology should allow DR providers to quickly determine or update QC values.
4. The QC methodology should be consistent and compatible with the resource adequacy program.
5. The QC methodology should account for the primary factors that influence DR variability, use limitations, and availability.
6. The QC methodology should translate a DR resource’s load reduction capabilities into its reliability value.

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<sup>12</sup> Interim Report, at p. 24.

<sup>13</sup> *Id.*

7. The QC methodology should include methods to determine ex-post capacity that are internally consistent with ex-ante QC valuation.
8. The QC methodology should not present a substantial barrier to participation in the RA program.

The actual document containing the draft Principles distributed by CEC Staff in advance of the October 25 meeting is attached to these comments as Appendix B. As the party feedback in Appendix B illustrates, there was not consensus support among parties for draft Principles 5 and 7 but no parties opposed draft Principles 1-4, 6 and 8. The Interim Report should have applied the principles for which there was consensus support to its recommendations.

Unfortunately, no effort was made to finalize the Working Group principles following the October 25 meeting, presumably due to the urgency of addressing the interim 2023 RA year methodologies in the face of the approaching deadline for filing the LIP reports for the same RA year. Regardless, the Interim Report at the very least should have included the near-final principles, even if the CEC did not intend to apply them to the interim methodologies, because it reflects the work done by the Working Group. This is a critical omission because the principles reflect the priorities that a broad group of stakeholders, including IOUs, DR providers, the CAISO, and DR performance evaluators generally agreed should guide the Interim Report recommendations to the Commission. This omission also contradicts statements made in the Principles Working Group that the principles would guide their DR QC methodology recommendations.

Instead of applying the Working Group principles in assessing the QC methodology proposals, the Interim Report creates five challenges to enabling a robust DR market in California and assessed the proposals based on the extent to which they satisfied the challenges.<sup>14</sup> These challenges are:

1. Crediting of investor-owned utility demand response resources
2. Qualifying capacity methodology
3. Incentive mechanisms
4. Settlement baselines
5. Process

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<sup>14</sup> Interim Report, at p. 31.

The DR Coalition takes no issue with the substance of these challenges but most of them were discussed only superficially by the Working Group, and never in the context of developing a list of challenges against which the CEC would assess the QC methodology proposals. CEC staff never informed Working Group stakeholders that they were developing these challenges nor that they would be assessing the proposals based on how they meet these challenges. This was inappropriate, especially when the Principles Working Group had already produced a well-vetted list of principles that CEC staff stated would be used to guide its recommendations. In making its decision on the interim methodologies, the Commission should utilize the well-vetted Working Group principles rather than the challenges identified in the Interim Report because parties never had an opportunity to discuss these challenges or submit written feedback.

**B. The Commission should consider the needs of the DR community when considering DR QC methodologies.**

The overriding goal of this effort to develop new DR QC methodologies should be to develop one or more methodologies that works well for both third-party DR providers, IOUs, and participating customers while ensuring that DR programs and resources are delivering the amount of capacity commensurate with their QC values. The current version of the DR LIPs act as a barrier to third-party DR growth because they lack transparency, are very time-consuming, and bear a large cost to the DR provider with no guarantee of cost-recovery - all without necessarily demonstrating greater accuracy than other approaches. For third-party DR to grow, a new approach is needed that will accurately reflect the capabilities of each IOU and DR provider, be transparent in how a DR portfolio QC value is determined, not incur an excessive cost to participate, and require significantly less time to implement. The DR Coalition observes that two of the three DR QC methodologies recommended in the Interim Report retain the LIP process and by so doing, would retain all of the associated shortcomings.

The current LIPs were developed for IOU DR programs which tend to be larger and more static than third-party DR providers' portfolios primarily due to generally stable or more predictable participation levels. In D.19-06-026, the Commission directed that third-party DR providers use the LIPs to determine their QC values beginning with the 2020 RA year. Since then, it has become very apparent that the LIPs are highly problematic for DR providers for several reasons that collectively present a significant barrier to third-party DR participation in California:

- 1. The accuracy of the LIPs is questionable for more dynamic portfolios.** Unlike IOU programs, DR provider portfolios can significantly change from one year to the next because they have a financial interest in sizing their portfolios to meet market commitments and take advantage of market opportunities. Because of the uncertainty inherent in executing contracts and enrolling customers, third-party portfolios may differ widely from year to year, both in size and customer composition. This variability undermines the accuracy of LIP-based QC values because of the two-year lag between the data used for LIP analysis and QC determination, and the RA delivery year. For example, the LIP process that kicked off in December 2021 will use data from the 2021 RA year to derive QC values for the 2023 RA delivery year. Under a majority of circumstances, it is difficult to argue that such old data is relevant to forecasting future performance.
- 2. The LIP process is very time-consuming and discriminates against DR providers' ability to participate in resource solicitations.** The first stage of the LIP process typically begins in October when DR providers secure an outside consultant to develop the LIP report. Once that has occurred, a four-to-five month process to develop the LIP report begins and culminates in a final report that each IOU and DR provider submit on April 1 of each year. In the second stage, the final LIP reports are assessed by the Energy Division over the following five-to-six months to determine the QC values of these DR programs by September. During this time, DR providers must be available to respond to Energy Division questions regarding their LIP reports and must prepare for an annual workshop where IOUs and DR providers present their LIP reports. From start to finish, this process takes up to a year. The Energy Division assigns preliminary RA requirements to IOUs and load-serving entities ("LSEs") in June, so DR providers are unable to participate in early LSE solicitations because they do not receive their QC values until September. This is anti-competitive because it favors "steel in the ground" resources whose QC values are generally fixed.
- 3. The LIP process is costly with no guarantee of cost recovery for third parties.** The LIP process typically involves the use of specialized consultants to perform extensive analysis and reporting. This is very costly (typically more than \$100,000), even for comparatively small portfolios because there is typically a floor to the cost, regardless of

the portfolio size. This cost increases based on the number of customers and DR events to be analyzed. IOUs are guaranteed recovery of these costs through their ratepayer-funded DR program budgets, but DR providers do not have that luxury, which creates a clear competitive advantage for IOU DR programs versus third-party DR. Such a significant investment with no promise of cost recovery discourages some DR providers from participating in the LIP process.

- 4. The need for consultants to perform the LIP analysis acts as a bottleneck.** Most DR providers do not have internal staff that are able to perform LIP evaluations, and hiring an independent evaluator is considered a best practice. There are a limited number of consultants who are able to perform the analysis needed for a LIP report. Due to the intensive nature of this work, many consultants are limited in the number of LIP reports they can develop. This leads to DR providers chasing a limited number of consultants which can lead to some being frozen out of the LIP process and consequently unable to sell their capacity.
- 5. The Energy Division assessment of LIP reports lacks transparency.** Once IOUs and DR providers submit their LIP reports on April 1, the Energy Division then determines whether to approve the QC that is claimed in each LIP report or to discount it. To the extent that a discount is applied, it is never clear to the DR provider what the exact reasons were for the discount. For example, the Energy Division can discount a DR provider's QC based on the per-customer load impact, enrollment forecast, both, or something else entirely. The Energy Division simply provides the approved QC value with no explanation as to any discrepancies between the LIP report ex ante values and the approved QC. To the Energy Division's credit, it has developed its *Guide to CPUC's Load Impact Protocols (LIP) Process* to provide information on best practices for LIP reports, but it contains no information on the LIP report review process and provides no assurance to DR providers that any differences between the values in their LIP reports and the final QC will ultimately be explained. This is a significant inefficiency in the DR market because DR providers find it difficult to know exactly what they must do to receive the best QC value they are capable of delivering.

It seems clear that future DR growth will occur primarily through third parties, so a more-streamlined DR QC methodology is needed that better suits the more dynamic nature and business needs of DR providers. In many ways, the shortcomings of the current LIPs represent the opposite of what the new DR QC methodology should look like. Specifically, the new methodology should:

- 1. Reflect DR provider assessments of their capabilities based on the most current information possible.** DR QC values will be most accurate if they are based on a DR provider's current customer and enabling technology mix, rather than from one to two years in the past.
- 2. Minimize the time required to receive a QC value from the Energy Division.** A shorter process will open the door to DR provider participation in more IOU and LSE solicitations.
- 3. Be as transparent as possible.** It is critical that DR providers understand the reasoning behind Energy Division assessments of their QC values; otherwise, they cannot design an optimal portfolio.
- 4. Minimize the cost to DR providers.** For an efficient market, the cost of entry must be as low as possible to reduce financial risks, attract DR providers, and ensure efficient pricing.
- 5. Avoid or minimize the need for DR providers to retain outside consultants.** A DR QC methodology should not be so complicated that DR providers cannot perform their own QC assessments without retaining an outside specialist.
- 6. Reduce the Energy Division workload to determine DR QC values.** This is an important issue of the efficient allocation of limited Energy Division resources. The sheer volume of the LIP reports creates a substantial burden on the Energy Division staff who must assess them over several months. This time can be better spent addressing important policy issues.

Whatever DR QC methods the Commission approves, they should satisfy these principles because they need to be workable for DR providers who will ultimately need to work with them. The State is in the process of adding substantial amounts of new capacity through the Emergency Reliability proceeding and reducing one of the biggest barriers to DR will ensure that more clean resources are procured.

### **C. Comments on the three interim proposals.**

The Interim Report recommends the Commission adopt the CAISO's LIP-informed ELCC proposal and the Council's Incentive-based Proposal for 2023, with CLECA's on LOLE-weighted LIP proposal as a back-up option should either the CAISO's or Council's proposals prove unworkable. Before addressing the recommendations, the DR Coalition addresses each proposal individually.

#### **1. Incentive-Based Method.**

The Council's Incentive-Based Method, attached to these opening comments as Appendix A, utilizes a widely-accepted approach to counting the QC value of DR resources in which the DR provider provides the QC value of its portfolio along with supporting documentation to the market operator who then makes a final QC value determination. The approach, which is currently used by the PJM Interconnection, ISO-New England, and the New York Independent System Operator, is augmented with a penalty mechanism to encourage DR providers to be as accurate as possible in how they develop their QC values.

The Incentive-Based Method represents a significantly different approach compared to the LIPs. The LIPs utilize rigorous regression-based up-front analyses to estimate QC values but often lack a direct connection to DR provider capabilities. Therefore, any perceived precision of LIP-based QC values, is based on the belief that this methodology is somehow able to accurately predict future key inputs that directly impact DR QC values such as DR provider enrollment levels, penetration levels of enabling technologies, and other innovations that could improve DR customer participation and performance. In reality, LIP-based analyses cannot accurately predict these inputs which are subject to DR provider efforts and individual customer decisions and cannot be influenced by the regression analyses themselves. DR providers are best positioned to assess how they translate into the amount of capacity they can responsibly sell. However, to ensure that DR providers are realistic in their estimates, a mechanism is needed to ensure that contracted capacity is delivered. The Council proposes to eliminate the use of LIP-based up-front analyses to estimate QC values and replace it with a DR provider responsibility to assess the QC value of their portfolios, with continued Energy Division oversight over final QC value, while being subject to an after-the-fact penalty structure to ensure that contracted capacity is delivered.

In response to direction provided in the February 18 Ruling on the technical and timeline implementation feasibility, the Council’s proposal is far simpler and easier than the current LIP process, the LIP-informed ELCC proposal, and the LOLE-weighted LIP proposal. It would also allow DR providers to update their QC values on a quarterly basis (if necessary) because the Energy Division would not be burdened with hundreds of pages of LIP reports and hours of ELCC analyses. This flexibility is essential to DR providers trying to participate in LSE solicitations throughout the year because they will need to have accurate and current QC values for their DR portfolios. The Interim Report notes that Energy Division staff have indicated that new processes would be required for collecting collateral, assessing ex post performance, and collecting penalty payments.<sup>15</sup> The DR Coalition acknowledges this but notes that assessing ex post performance would be very simple because it would require the DR provider to submit a reporting template in a process similar to that currently used by the IOUs for DRAM reporting. The process for managing collateral should not be particularly resource-intensive once it is set up, nor should the process of deducting penalty payments as necessary.

This quarterly cycle approach could place a burden on Energy Division staff year-round, to the extent DR providers perform quarterly updates, but the process is highly streamlined so the DR Coalition believes that the burden will be far lower than compared to the current LIP process, LOLE-weighted LIP, and LIP-informed ELCC methods.

## **2. LIP-Informed ELCC Proposal.**

The LIP-informed ELCC proposal retains the LIP process and adds an overlaid ELCC analysis which further discounts the DR QC value. The Council, Enel X, and Leap already addressed the January 21 version of this proposal in their February 14 Phase 2 Opening Comments and refers to them here and highlights some key elements in response to the version cited in the Interim Report.<sup>16</sup> Just as in the January 21 of the LIP-Informed ELCC proposal, the DR Coalition is concerned about the absence of sufficient detail to know exactly what is being proposed. Furthermore, there are at least two different versions of the proposal – the one linked in the Interim Report and the other was submitted by the CAISO on January 21 – so it is unclear exactly which one the Commission is being asked to consider. Finally, the proposal will only exacerbate the current dysfunctional LIP process.

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<sup>15</sup> Interim Report, at p. 37.

<sup>16</sup> Opening Comments of The California Efficiency + Demand Management Council, Enel X North America, Inc., and Leapfrog Power, Inc. on Phase 2 Proposals, submitted on February 14, 2022, at pp. 3-6.

It is critical that the proposal be detailed and consistent, so the Commission and parties are aware of what is actually being proposed. At a minimum, the proposal should add these key elements:

- 1. Process Timeline:** The current LIP process would have to be modified to accommodate the additional layer of ELCC analysis while ensuring that IOUs and DR providers receive their QC values from the Energy Division within a reasonable timeframe. The rough timeline provided in the CAISO's February 4 presentation indicated six to eight more weeks would be needed to than the current LIP process requires. Based on the Energy Division's recent difficulties in delivering DR QC values on a timely basis, it is virtually certain that this added time will cause further delays in the delivery of DR QC values. The Energy Division provides DR QC values in September, so this would likely push this into mid-to-late October. It is essential that any DR QC methodology can be implemented on a timely basis to ensure that LSEs will know their allocation of IOU DR capacity and that DR providers will be able to participate in LSE solicitations in time for the October 31 year-ahead RA filing deadline.
- 2. Comparison of ELCC-based method vs. LIP-based method:** As a quantitatively-based method, there should be an analytical demonstration that this method is superior to the current LIP-based method to justify its adoption. Without a comparative quantitative analysis, there is no evidence to prove that the CAISO's method is any better than the current one. For example, it is possible that this ELCC method would undercount QC values by an equal or greater amount than the CAISO believes LIP-based QC values are currently overcounted, or the ELCC-based QC values could be greater than the LIP-based values in some instances and below them in others. This sort of inconsistency was observed in the CAISO's July 1, 2021 ELCC-based LIP analysis where, for example, the ELCC-based QC values for PG&E's CBP ranged from 0 percent to 462 percent of LIP-based QC values.<sup>17</sup> If the Commission adopts this methodology, it should only be done on an interim basis with any extension beyond the 2023 RA year subject to a clear demonstration of its accuracy and, as stated above, its suitability for use by DR providers.

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<sup>17</sup> California Independent System Operator Corporation, Pacific Gas and Electric Company, Southern California Edison Company, and San Diego Gas & Electric Company Compliance Filing Regarding Refreshed Effective Load Carrying Capability Study Results, at Attachment B.

The current LIP process is highly dysfunctional and does not work well for third-party DR providers. Because it retains the LIP process, a long-term ELCC-based proposal would not only retain its flaws but would exacerbate them by adding a second layer of analysis that would require additional time and budget from DR providers. According to the CAISO's December 15, 2021 Working Group presentation, the Energy Division would need to establish a weather template in December 2021-January 2022.<sup>18</sup> Then the Energy Division or IOUs/DR providers would need to create 8760 hourly LIP profiles by May 2. Creating hourly LIP profiles based on weather profiles developed by the Energy Division would cost an additional ten to twenty thousand dollars for DR providers. This may not be particularly impactful on the IOUs because they are guaranteed cost recovery for the added cost and DR is not a source of revenue as it is for third parties, but it will only worsen what is already a significant barrier to third-party DR. Future DR growth will likely occur primarily through third parties, so a more-streamlined DR QC methodology is needed that better suits the more dynamic nature of third-party DR portfolios. The CAISO should seek options to streamline its methodology and reduce the costs that it would impose. One potential step would be to create a centralized, open-access model, similar to E3's Avoided Cost of Capacity model. This would greatly reduce the cost and time required to perform the QC assessment process and improve transparency by allowing IOUs and DR providers to test the sensitivity of various inputs to tailor their DR portfolios in such a way as to maximize their value.

### **3. LOLE-Weighted LIP.**

The LOLE-Weighted LIP proposal would apply hourly LOLE weights to the hourly LIP values in an effort to address the CAISO preference for a QC methodology that will consider the reliability contribution of DR and how its value changes with variations DR quantities. This methodology would do nothing to address the DR Coalition's concerns about the LIP process, but it fortunately does not exacerbate these problems either. It provides a far more transparent and simple approach to addressing the CAISO's principles. The Commission should adopt it also as one of the three interim methodologies for use by IOUs and DR providers.

#### **D. Interim Report Recommendations.**

The Interim Report makes 11 recommendations – eight for the 2023 RA year and three for the 2024 RA year and thereafter. The DR Coalition addresses each individually below but

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<sup>18</sup> <https://efiling.energy.ca.gov/GetDocument.aspx?tn=240949&DocumentContentId=74798>

notes that several of them exceed the scope of the Working Group as directed by the Commission and/or conflict with recent Commission decision.

**1. Adopt the LIP-informed ELCC proposed by PG&E and the CAISO for the IOUs.**

The Council, Enel X, and Leap expressed their strong concerns about this proposal in the February 14 Opening Comments and the DR Coalition again reiterates these concerns herein.<sup>19</sup> Despite these concerns, and in the spirit of optionality, it may be useful for the Commission to adopt it for the purpose of testing accuracy and ease of implementation. However, for the Commission to approve it for long-term use, it must prove itself to be accurate and usable without imposing an unreasonable cost on DR providers.

**2. Adopt the incentive-based approach proposed by the Council for third-party providers.**

The Commission should adopt this proposal because it reflects an industry-accepted approach and would be a significant departure from the current LIP process. Because of this, the DR Coalition understands that the Commission might be hesitant to adopt it on a permanent basis, so adopting it on an interim basis would be practical in order to allow its testing and assessment. Unfortunately, it is possible that only a limited number of DR providers will use it because many will have made the investment to go through the LIP process by the time the Commission issues a decision on this issue.

**3. Allow optionality between the LIP-based status quo and the above interim methodologies.**

The DR Coalition supports the principle of optionality that IOUs and DR providers be allowed to choose which DR QC methodology they want to use. Before one or more new DR QC methodologies are adopted by the Commission and implemented to potentially replace the LIPs, it is critical that they be tested and assessed to ensure that they are superior to the LIPs. To that end, third-party DR providers that choose to do so, should be permitted to test the ELCC approach (in a study format and with no bearing on 2023 QC values). It is critical that third-parties who did not partake in the CAISO's E3 study on LIP-Informed ELCC, see this method "in practice" if it is ever to be considered as a permanent option.

**4. Adopt the LOLP-weighted LIP proposal as a backup to both the LIP-informed ELCC option and the incentive-based approach option.** The DR Coalition

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<sup>19</sup> Opening Comments of The California Efficiency + Demand Management Council, Enel X North America, Inc., and Leapfrog Power, Inc. on Phase 2 Proposals, submitted on February 14, 2022.

recommends that CLECA's LOLE-weighted LIP proposal be adopted as an interim methodology as well. It represents a "middle ground" approach in that, like the CAISO proposal, it utilizes the LIPs but rather than applying an ELCC analysis on top of the LIP profiles, it applies a weighting to the hourly QC value based on the LOLE for each hour.

**5. Request that the CAISO grant an exemption to the resource adequacy availability incentive mechanism for LIP-informed ELCC.** The Commission is certainly free to make this request to the CAISO, but the CAISO does not currently have the authority to grant it. Therefore, the Commission should reject this recommendation. Since the CAISO Board of Governors approved the Resource Adequacy Availability Incentive Mechanism ("RAAIM") Exemption Option for Variable Demand Response Resources stakeholder initiative on July 15, 2021, the CAISO curiously has not submitted its revised tariff language to the FERC that, if approved, would grant the CAISO the authority to exempt DR resources from the RAAIM. Without this fundamentally critical step completed, the Commission should not give something to the CAISO without having full assurance that the CAISO can reciprocate. Even if or when the CAISO submits this tariff language, there is no guarantee that one or more parties would not challenge this tariff language at the FERC on the basis that, by specifying what type of DR QC methodology would be needed to qualify for RAAIM exemption, the CAISO would exceed its authority under California statute that the Commission has sole jurisdiction over resource RA values. Furthermore, it is not clear how much longer the RAAIM will be in existence. Should the CAISO adopt the Unforced Capacity ("UCAP") proposal under its Resource Adequacy Enhancements Phase 2 stakeholder initiative and the Commission approve it as well, then the RAAIM would be eliminated because UCAP would address the availability constraints of resources in a different way.

**6. Direct IOUs to move their demand response portfolios onto supply plans.** This recommendation should be rejected because it exceeds the scope of the Working Group, contradicts the Commission's own directive on this matter, and was not discussed during the Working Group. In D.21-06-029, OP 10, the Commission clearly set conditions that must be met for it to direct the IOUs to place their DR programs in their Supply Plans stating:

After the Commission confirms that the California Independent System Operator (CAISO) permits demand response (DR) resources to bid variably in its markets and implements a Federal Energy Regulatory Commission-approved exemption to the Resource Adequacy Availability Incentive Mechanism penalty for DR resources, each investor-owned utility will be directed to move its DR portfolios onto CAISO Supply Plans.”<sup>20</sup>

To put it very simply, this condition has not been met and the unsupported findings in the Interim Report do not support the Commission’s reversal of its determination.

The Interim Report states, “CEC staff finds the argument credible that supply-side demand response resources should be considered part of the supply stack and treated accordingly” because “CEC staff believes moving all demand response resources onto supply plans will provide the California ISO with greater visibility and control over these resources in support of electric reliability.”<sup>21</sup> Though the CEC is free to make this statement, it is supported only by their “belief” because the Working Group never discussed this issue in any detail. It is not clear how the Interim Report can make this claim in the absence of any stakeholder discussion. Certainly, this recommendation provides no evidence that would justify overturning the Findings of Fact and Conclusions of Law in D.21-06-029 that led the Commission to lay out this sequence of dependencies. Nor does this statement take into account the credits third-party DR resources receive for the Planning Reserve Margin (“PRM”) and Transmission Loss Factor (“TLF”) gross-ups, two issues that the Working Group has been tasked with but has yet to address. If the CEC had wanted to include this issue within its scope, it should have at least addressed in formal discussions within the Working Group and allowed parties to provide written comments on the issue. In light of the above, the Commission should reject this recommendation.

- 7. Consider LIP-informed ELCC and incentive-based approaches as non-precedent setting recommendations.** The DR Coalition fully supports this explicit recommendation in order to eliminate the potential for regulatory inertia. The future of these two proposals, as well as the LOLE-weighted LIP proposal, should be based on the

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<sup>20</sup> D.21-06-029, at OP 10.

<sup>21</sup> Interim Report, p. 31.

evidence of the burden they impose on stakeholders and the Energy Division, their cost, and their accuracy.

- 8. Extend the CEC supply-side DR Working Group beyond February 2022.** The DR Coalition supports the Interim Report recommendation to create Interim and Long-term tracks. The effort to develop a Slice-of-Day RA framework is not yet complete, so it makes little sense to develop a long-term DR QC methodology until it becomes clear exactly what the new RA framework looks like.
- 9. Expand the scope of the supply-side demand response working group to address the five challenges identified in the CEC working group process.** The DR Coalition strongly opposes this recommendation for all but two of these issues. The original purpose of the Working Group was to examine several issues from a technical, not a policy, standpoint. The Working Group has functioned reasonably well as a technical forum, but it is unclear to what extent the CEC is subject to the same evidentiary requirements in its recommendations that the Commission is subject to when issuing final decisions. Policy-related issues like DR crediting and the role of performance incentives should only be addressed through a Commission-led process with a robust evidentiary requirement.

From a process standpoint, the two policy issues require a greater evidentiary basis than technical issues; unfortunately, the Working Group has no process in place to ensure a sufficiently robust evidentiary record. As the DR Coalition has highlighted in a few instances in these opening comments, several findings in the Interim Report lack supporting evidence, so without a significant modification of the Working Group format and process, it would be ineffective at addressing policy issues in an effective manner. The Commission's approach in which parties are allowed to provide comments and reply comments on proposals followed by an opportunity to provide comments and reply comments on a proposed decision, plus the requirement for Findings of Fact and Conclusions of Law is far more robust than the Working Group process. The Commission should address DR crediting and the role of performance incentives through an appropriate proceeding.

**10. Continue collaboration with CEC staff on qualifying capacity counting**

**implementation in the long term.** The DR Coalition has no objections to the CEC staff collaborating on the implementation of the long-term DR QC process. Their help would be especially necessary if the Commission ultimately adopted a long-term DR QC methodology that is as burdensome as the current LIPs or more so. The DR Coalition welcomes any steps the Commission can make to improve the speed and reliability of the DR QC process.

**V. CONCLUSION**

The DR Coalition appreciates the opportunity to provide these Opening Comments.

Dated: March 14, 2022

Respectfully submitted,

/s/ GREG WIKLER

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**Appendix A – California Efficiency + Demand Management Council  
Incentive-based DR QC Proposal**



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January  
24, 2022

## **California Efficiency + Demand Management Council Interim DR Qualifying Capacity Methodology Proposal**

### **Introduction**

The California Efficiency + Demand Management Council (“Council”) provides its demand response (“DR”) Qualifying Capacity (“QC”) methodology proposal (“Council Proposal”) for inclusion in the California Energy Commission’s (“CEC”) Supply Side DR QC working group interim report. This proposal is meant to be considered by the California Public Utilities Commission (“CPUC”) as an interim DR QC method in Rulemaking (“R.”) 21-10-002. In this context, the Council defines “interim” as the time between now and CPUC deployment of the new Slice-of-Day framework, which the Council expects to be adopted in June 2022 in R.21-10-002. If adopted as an interim method, the Council recommends that the experience and lessons learned will inform its viability as a potential long-term DR QC method under a Slice-of-Day framework.

### **Problem Statement**

The overriding goal of the CEC-led Supply-Side DR QC working group should be to develop one or more DR QC methodologies that works well for both third-party DR providers and investor-owned utilities (“IOUs”) while ensuring that DR programs and resources are delivering value commensurate with their QC values. The current DR Load Impact Protocols (“LIPs”) act as a barrier to third-party DR growth because they lack transparency, are very time-consuming, and bear a large cost to the DR provider with no guarantee of cost-recovery - all without necessarily demonstrating greater accuracy than other approaches. For third-party DR to grow, a new approach is needed that will accurately reflect the capabilities of each DR provider, be transparent in how a DR portfolio QC value is determined, incur a reasonable cost, and require significantly less time to implement.

The current LIPs were developed for IOU DR programs which tend to be larger and more static than third-party DR providers’ portfolios primarily due to generally stable or more predictable participation levels. In CPUC Decision (“D.”) 19-06-026, the CPUC directed that third-party DR providers use the LIPs to determine their QC values beginning with the 2020 RA year.<sup>22</sup> Since then, it has become very apparent that the LIPs are highly problematic for DR providers for several reasons which has created a significant barrier to third-party DR participation in California:

1. The accuracy of the LIPs is questionable for more dynamic portfolios. Unlike IOU programs, DR provider portfolios can significantly change from one year to the next because they have a financial interest in sizing their portfolios to meet market

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<sup>22</sup> D.19-06-026, at Ordering Paragraph 18.

commitments and take advantage of market opportunities. Because of the uncertainty inherent in executing contracts and enrolling customers, portfolios may differ widely from year to year, both in size and customer composition. In addition, the extended timeframe of the LIP process leads to performance data being used from up to two years prior to the Resource Adequacy (“RA”) delivery year. There is a two-year lag between the data used for LIP analysis and QC determination, and the RA delivery year. For example, the LIP process that kicked off in December 2021 will use data from the 2021 RA year to derive QC values for the 2023 RA delivery year. Under a majority of circumstances, it is difficult to argue that performance data that old is relevant to forecasting performance.

2. The LIP process is very time-consuming and limits participation in solicitations. The LIPs entail a four-month process beginning in December that culminates in a final report for each IOU and DR provider due on April 1 of each year. The final LIP reports are then assessed by the CPUC Energy Division over the following five months to determine the QC values of these DR programs in September. During this time, DR providers must be available to respond to Energy Division questions regarding their LIP reports; in addition, they must prepare for an annual workshop where IOUs and DR providers present their LIP reports. From start to finish, this process takes approximately ten months to determine QC values. This places a significant burden on Energy Division staff, given the voluminous nature of some LIP reports. In addition, because the Energy Division assigns preliminary RA requirements to IOUs and LSEs in June, DR providers are unable to participate in early LSE solicitations because they do not receive their NQC values until September. This is anti-competitive because it favors “steel in the ground” resources whose NQC values are generally fixed.
3. The LIP process is costly with no guarantee of cost recovery for third parties. The LIP process requires extensive analysis and reporting which requires the use of specialized consultants. This is very costly (typically more than \$100,000), especially for comparatively small portfolios because there is typically a floor to the cost, regardless of the portfolio size. This cost increases based on the number of customers and events. IOUs are guaranteed recovery of these costs through their DR program budgets but DR providers do not have that luxury which creates a clear competitive advantage for IOU DR programs versus third-party DR. Such a significant investment with no promise of cost recovery discourages some DR providers from participating in the LIP process.
4. The need for consultants to perform the LIP analysis acts as a bottleneck. There are a limited number of consultants who are able to perform the LIP analysis and, due to the intensive nature of this work, many consultants are limited in the number of LIP analyses they can perform. This leads to many IOUs and DR providers chasing a limited number of consultants which can lead to DR providers being frozen out of the LIP process and therefore unable to sell their capacity.

5. The Energy Division assessment of LIP reports lacks transparency. Once IOUs and DRPs submit their LIP reports on April 1, the Energy Division then determines whether to approve the NQC that is claimed in each LIP report or to discount it. To the extent that a discount is applied, it is usually unclear to the DR provider what the exact reasons were for the discount. For example, the Energy Division can discount a DR provider's NQC based on the per-customer load impact, enrollment forecast, or both. However, the Energy Division will not always explain the approved per-customer load impact and enrollment; instead, it will simply provide the approved NQC value with no explanation as to the underlying causes. To the Energy Division's credit, it has developed its *Guide to CPUC's Load Impact Protocols (LIP) Process* to provide information on best practices for LIP reports, but additional transparency around the final QC determination is necessary.

The Council believes that future DR growth will occur primarily through third parties, so a more-streamlined DR QC methodology is needed that better suits the more dynamic nature and business needs of DR providers. In many ways, the shortcomings of the LIPs represent the opposite of what the new DR QC methodology should look like. Specifically, the new methodology should:

1. Reflect DR provider assessments of their capabilities based on the most current information possible. The LIP process utilizes data from up to two years prior to the RA delivery year which rarely reflect current and expected DR portfolios.
2. Minimize the time required to receive a NQC value from the Energy Division. This will ensure higher quality information is used in the NQC valuation process, better enabling DR providers to participate in near-term IOU and LSE solicitations.
3. Be as transparent as possible. It is critical that DR providers understand the reasoning behind Energy Division assessments of their NQC values.
4. Minimize the cost to DR providers. Such a significant cost can be a barrier to entry in the DR market, especially to new entrants, because cost recovery is not guaranteed as it is for the IOUs.
5. Avoid or minimize the need for outside consultants. As stated above, this creates a bottleneck in the QC valuation process and can leave DR providers without a consultant and therefore unable to receive a QC value, thus preventing them from selling their RA capacity.
6. Reduce the Energy Division workload to determine DR QC values. This is a critical issue from the perspective of allocating limited Energy Division resources. The sheer volume of the April 1 LIP reports creates a substantial burden on the Energy Division staff who must assess them over five months. This time can be better spent on important policy issues.

## **The Council Proposal Addresses a Majority of the CEC Supply-Side DR QC Methodology Principles and Should Be Adopted as An Interim Methodology**

At the CEC’s December 3 workshop in its Integrated Energy Policy Report (“IEPR”) proceeding, the Council presented its “PJM/NYISO” method as a potential option as an interim solution. The PJM/NYISO is so named because it mimics the approach used by the eastern capacity markets in which each DR provider proposes its QC values to the market operator. The market operator performs an assessment on the inputs to the QC values and makes a determination on the amount of capacity each DR provider is authorized to sell in the next capacity auction.

The PJM/NYISO method is highly suitable as an interim method because it addresses almost all of the six needs listed above and can be easily implemented for the 2023 RA Year.

### **Premise of the Council Proposal**

The Council Proposal would utilize a significantly different approach compared to the LIPs that would be more effective in ensuring the delivery of contracted capacity than the LIPs while reflecting the actual capabilities of each DR provider. The LIPs utilize rigorous regression-based up-front analyses to estimate QC values but often lack a direct connection between DR provider capabilities as well as a process to ensure that they are actually delivering consistent with contractual commitments. Therefore, any perceived precision of LIP-based QC values is based on the belief that the associated regression models that are used to perform these analyses are somehow able to accurately predict future key inputs that directly impact DR QC values such as DR provider enrollment levels, penetration levels of enabling technologies, and other innovations that could improve DR customer participation and performance. In reality, LIP-based analyses cannot accurately predict these inputs which are subject to DR provider efforts and individual customer decisions, and cannot be influenced by the regression analyses themselves. DR providers are best positioned to know these inputs and can best assess how they translate into the amount of capacity they can responsibly sell. However, to ensure that DR providers are realistic in their estimates, a mechanism is needed to ensure that contracted capacity is delivered. The Council proposes to eliminate the use of LIP-based up-front analyses to estimate QC values, and replace it with a DR provider responsibility to assess the QC value of their portfolios, with continued Energy Division oversight over final QC value, while being subject to an after-the-fact penalty structure to ensure that contracted capacity is delivered.

### **Methodology Process**

The Council Proposal involves the following primary steps:

- 1. DR Provider Analysis:** As frequently as on a quarterly basis, the DR provider performs its own internal analysis using its choice of analytical tools to calculate its Claimed QC (i.e., the amount of QC the DR provider forecasts that it can provide) for each month of a given period based on the prevailing CPUC RA framework and DR availability requirements.

Claimed QC values must be made at the System-level and, optionally, at the Local Capacity Area (“LCA”)-level, for up to three years in advance to allow DR providers to participate in multi-year LSE solicitations. LCA-level Claimed QC values are only required if the DR provider intends to sell Local RA. The current one-year limitation on DR NQC values poses a risk to DR providers when selling their capacity farther than one year in advance because it is unclear what their QC value will be in the future under the current LIP process.

The DR provider then provides its Claimed QC values and specified Supporting Data to the CPUC Energy Division for review and assessment, just as is currently done in the LIP process. The Supporting Data consist of:

- a. Current and projected number of Service Accounts
- b. Customer class, size, and technology type, if applicable
- c. Projected aggregated load (aggregated capacity in the case of behind-the-meter (“BTM”) energy storage)
- d. Projected % of load impact or reduction (projected % of capacity delivered for energy storage)
- e. Nature of load being aggregated
- f. Dispatch method
- g. Historical performance data

2. **Energy Division Assessment:** The Energy Division assesses the DR provider’s Claimed QC values and Supporting Data. If necessary, the Energy Division follows up with the DR provider for additional documentation or clarifying questions. This step is similar to the current step under the LIP process in which the Energy Division reviews LIP reports and requests additional information if necessary. Once the Energy Division makes a determination on the DR provider’s Awarded QC values, they post the NQC values on the current CPUC NQC List for the forward period requested by the DR provider (up to three RA years).
3. **Contracting DR Capacity & Collateral Requirement:** Once a DR provider receives its NQC value, it is free to sell its capacity as Resource Adequacy. To ensure that DR providers will be able to deliver the capacity it contracts out (Contracted QC), each will be required to provide a \$2,500/MW-year collateral payment to the Energy Division to be held in escrow based on the amount of NQC they have contracted out. To be clear, the Collateral Requirement would not apply to Awarded QC because a DR provider should not be required to provide collateral on capacity it has not sold. In the future, those DR providers with a strong track record of reliable capacity deliveries could potentially be subject to lower or no collateral payments. Payment of the Collateral Requirement would be due two months prior to the beginning of the contract delivery period. A DR provider can notify the Energy Division at any time if its Collateral Requirement should be reduced to reflect less capacity under contract.
4. **Performance Assessment:** On an annual basis, for each RA contract, DR providers would submit to the Energy Division a completed Demonstrated Capacity template and associated invoices for each RA contract that compares the amount of capacity delivered against the Monthly Supply Plan QC for each RA contract for each month. As Contract Quantities are grossed up by the Planning Reserve Margin and Transmission Loss Factors, comparing performance against Supply Plan values ensures accurate evaluation of load impacts net of the gross ups. For months for which the local IOU has provided less than 95% of Revenue Quality Meter Data (“RQMD”), the DR provider will be exempt from providing

Demonstrated Capacity data. Demonstrated Capacity reflects CAISO market performance based on the following delivery types during the prevailing Availability Assessment Hours: 1) full economic dispatch, 2) full dispatch test event, or, 3) when there is no full economic dispatch or test event, CAISO market bids during the applicable Must Offer Obligation (“MOO”) hours. This approach directly aligns CAISO market settlement with capacity performance because DR providers will be required to bid consistent with their Monthly Supply Plan QC. The following Demonstrated Capacity guidelines would apply:

- a. Each resource within a contract may provide a different ratio of full economic dispatches and market bids, but the prevailing RA testing rules for DR resources must be observed. For example, a DR provider has a Monthly Supply Plan of 4 MW of RA capacity using two 2-MW resources in different sub-Load Aggregation Points (“subLAP”). Resource 1 may meet its Demonstrated Capacity requirements using full economic dispatches and test events (i.e., it is dispatched in each month), whereas Resource 2 may meet its Demonstrated Capacity requirements using only test events and market bids.
- b. To count toward Demonstrated Capacity, a test event must be for the full resource amount, subject to the prevailing CPUC DR testing rules. The Demonstrated Capacity value of a test event is the average output during the entire test event.
- c. The current order of Demonstrated Capacity is as follows: 1) if there is a full market dispatch of a resource in a month, the results must be used for Demonstrated Capacity; 2) if there is a test of a resource in a month, the results must be used for Demonstrated Capacity; and 3) only if there is no dispatch or test of a resource in a month can the bidding detail for a resource under the MOO be used for Demonstrated Capacity.
- d. Customer location movement between resources within a month is prohibited, except under the following circumstances:
  - i. Newly enrolled customers can be added to a resource.
  - ii. A customer who exits the Auction Mechanism may be dropped from a resource.
  - iii. If the above changes make a resource trigger the CAISO’s 10 MW telemetry requirement, or have it drop below the minimum Proxy Demand Response size of 100 kw resources, resources may be split or combined mid-month to continue to meet CAISO market requirements.
- e. The DR provider must avoid any potential double counting of customer performance associated with service account movement permitted by the exemptions when invoicing Demonstrated Capacity. In order to mitigate double counting of customer performance, all customers not having been dispatched through an economic dispatch must be tested within the same month.
- f. The baseline method used for energy settlement at the CAISO must be the same as the baseline method used to invoice Demonstrated Capacity.

**5. Penalty Assessment (if necessary):** Penalty assessments are assessed on an annual basis by the Energy Division based on the Demonstrated Capacity information provided during the

performance assessment described above. The Energy Division will assess monthly performance for each individual contract. The Council proposes that the Pacific Gas and Electric Company (“PG&E”) Capacity Bidding Program (“CBP”) penalty structure be used to ensure equitability with IOU DR programs.

<b>PG&amp;E CBP Penalty Structure</b>	
<b>Contracted QC vs. DC Value</b>	<b>Penalty</b>
105% - 75% of Monthly Supply Plan QC	None
<75% to >=60% of Monthly Supply Plan QC	50% of DC
<60% to 0% of Monthly Supply Plan QC	(60%-Hourly Delivered Capacity Ratio of DC)

If the average monthly performance for an RA contract is above 75%, DR providers will receive 100% of their Collateral Requirement associated with that specific contract.<sup>23</sup> If the average monthly performance is between 60%-75%, DR provider will lose 50% of their Collateral Requirement. If the average monthly performance is below 60%, DR providers will lose 100% of their Collateral Requirement. Any loss of a DR provider’s Collateral Requirement due to poor performance would be provided by the Energy Division to the contracting LSE. Any loss of a DR provider’s Collateral Requirement would need to be replenished as necessary based on its contracted capacity for the following year.

**QC Process Timeline**

- Quarter 1 Cycle
  - December 1: Updated Claimed QC for up to 3 years beginning in Q2 due to Energy Division
  - January 1: Updated Awarded QC issued by Energy Division
  - February 1: Updated Contracted QC due to Energy Division; incremental Collateral Requirement due, if required
  - February 15 (est.): Month-Ahead Supply Plans due for April
- Quarter 2 Cycle
  - March 1: Updated Claimed QC for up to 3 years beginning in Q3 due to Energy Division
  - April 1: Updated Awarded QC issued by Energy Division
  - May 1: Updated Contracted QC due to Energy Division; incremental Collateral Requirement due, if required

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<sup>23</sup> Penalties would be assessed for each individual contract. For example, a DR provider has two RA contracts – Contract One is for 10 MW and Contract Two is for 5 MW. The DR provider would put up \$25,000 for Contract One and \$12,500 for Contract Two for a total collateral of \$37,500. If the DR provider performs, on average, at 70% for Contract One and at 95% for Contract Two, they will receive back 50% of the collateral associated with Contract One and 100% of the collateral associated with Contract Two, for a total of \$25,000.

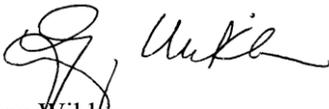
- May 15 (est.): Month-Ahead Supply Plans due for July
- Quarter 3 Cycle
  - June 1: Updated Claimed QC for period for up to 3 years beginning in Q4 due to Energy Division
  - July 1: Updated Awarded QC issued by Energy Division
  - August 1: Updated Contracted QC due to Energy Division; incremental Collateral Requirement due, if required
  - August 15 (est.): Month-Ahead Supply Plans due for October
- Quarter 4 Cycle
  - September 1: Updated Claimed QC for up to 3 years beginning in Q1 due to Energy Division
  - October 1: Updated Awarded QC issued by Energy Division
  - November 1: Updated Contracted QC due to Energy Division; incremental Collateral Requirement due, if required
  - November 15 (est.): Month-Ahead Supply Plans due for January
- Annual Demonstrated Capacity Assessment
  - January 15: Prior-year Demonstrated Capacity templates and associated invoices due to Energy Division
  - February 15: Energy Division notifies DR providers if they incurred penalty payments, including whether the penalty exceeds Collateral Requirement
  - March 15: Energy Division transfers DR provider penalty payments, as necessary, to contracting LSEs.

## Conclusion

The Council Proposal addresses the key requirements in a new DR QC methodology. Specifically, it 1) better reflects actual DR provider capabilities rather than relying on a series of regression analyses using historical data to determine what it can provide, 2) significantly reduces the timeline for QC value determination, 3) may improve the transparency of the Energy Division assessment, 4) minimizes the cost to DR providers because they will not be required to retain a consultant, and 5) reduces Energy Division workload. In addition, this method ensures that capacity deliveries are directly measured against CAISO market performance, and maintains the Energy Division’s role as an “emergency brake” to ensure that DR providers’ claimed QC values are realistic.

If you have any questions, feel free to reach out to me by email at [gwikler@cedmc.org](mailto:gwikler@cedmc.org) or by phone at 925-286-1710.

Sincerely,



Greg Wikler  
 Executive Director  
 California Efficiency + Demand Management Council

**Appendix B – October 25, 2021 CEC Staff Compilation of Draft  
Principles with Party Feedback**

# Written stakeholder comments on the principles

In a 10/12/2021 email to working group participants, CEC staff requested written stakeholder comments on the proposed principles. Since that time CEC staff received written comments from the CAISO and CEDMC. To enable stakeholders to review these comments, CEC staff have combined them here into one document.

**1. The QC methodology should be transparent and understandable.**

[no comments received]

**2. The QC methodology should use best available information regarding resource capabilities, including recent historical performance and participant enrollment and composition projections.**

[no comments received]

**3. The QC methodology should allow DR providers to quickly determine or update QC values.**

[no comments received]

**4. The QC methodology should be consistent and compatible with the resource adequacy program.**

[no comments received]

**5. The QC methodology should account for the primary factors that influence DR variability, use limitations, and availability.**

[CAISO comments: The CAISO opposes this principle as written. The CAISO finds that principle #5 as written is unclear and that the phrase “...account for the primary factors that influence...” is an unnecessary and confusing abstraction. The CAISO emphasizes that the principle must ensure the QC methodology captures that DR is a use-limited, availability-limited, and variable resource and that should be considered in its valuation. The CAISO supports this language instead: “The QC methodology should account for the use-limited, availability-limited, and variable-output nature of DR.”]

**6. The QC methodology should translate a DR resource’s load reduction capabilities into its reliability value.**

[no comments received]

**7. The QC methodology should include methods to determine ex-post capacity that are internally consistent with ex-ante QC valuation.**

[CAISO comments: The CAISO opposes this principle as written. The CAISO emphasizes that the determination of a DR resource’s capability is distinct from its QC valuation; rather, a resource’s capability is an input into its QC valuation. This distinction is reflected in the separation of the components “Ex ante Resource Capability Profile” and “Ex ante Qualifying Capacity” in the

*Stakeholder Comment Template: Methodology Minimum Components* document sent to stakeholders by the CEC. Accordingly, principle #7 should reflect this distinction and specify that it is the capability profile determination that should be compatible with ex-post delivery assessment methods. The CAISO notes that both the capability profile and ex-post assessment measure a MW load impact whereas the QC valuation measures contribution to reliability and is therefore not a direct comparison. The CAISO supports consistency between the capability profiles and performance of DR resources. The CAISO believes that the revised language better reflects that consistency and will still result in an internally compatible methodology given that the capability profile is a direct input in the QC valuation. The CAISO proposes this language: “The QC methodology should include methods to determine a measurement of delivery (ex-post capacity) that are compatible with the determination of capability (ex-ante) used in QC valuation.”]

[CEDMC comments: Recommends that Principle #7 be removed because it is overly prescriptive. However, if it is retained, CEDMC recommends this language instead: “The QC methodology should include a process to assess the accuracy of ex ante QC values relative to ex post performance.”]

**8. The QC methodology should not present a substantial barrier to participation in the RA program.**

[no comments received]

### Additional comments:

[CAISO comments: The CAISO is concerned that only one of the remaining principles speaks to the value of reliability. The CAISO reiterates that reliability is at the core of the CPUC’s request and the CAISO believes it is an imperative to include reliability as a foundational principle to developing QC values that will allow for the CAISO to effectively operate the grid. The CAISO proposes the working group adopt the principle, “The QC methodology should reflect the evolving needs of the grid – by capturing the interactive and saturation effects of increased variable as well as use- and availability-limited resources.” As explained in the CAISO’s 10/1 comments,<sup>24</sup> DR does not operate in isolation and accordingly should not be modeled without interactive effects in planning. This principle is critical to reliability as it ensures consideration of saturation effects on the reliability contribution of DR resources as variable supply and demand are increasingly interconnected to the system.]

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<sup>24</sup> TN # 240023 in CEC Docket 21-DR-01.