

BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA

Order Instituting Rulemaking to Oversee the
Resource Adequacy Program, Consider
Program Refinements, and Establish Forward
Resource Adequacy Procurement Obligations.

Rulemaking 19-11-009
(Filed November 7, 2019)

**JOINT TRACK 4 PROPOSAL OF THE CALIFORNIA EFFICIENCY + DEMAND
MANAGEMENT COUNCIL, CPOWER, LEAPFROG POWER, INC. AND
OHMCONNECT, INC.**

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The California Efficiency + Demand Management Council,¹ CPower, Leapfrog Power, Inc. and OhmConnect, Inc. (collective “the Joint Parties”) respectfully submits their Track 4 Proposal in Rulemaking (R.) 19-11-009 (Resource Adequacy (“RA”). The Joint Parties’ Track 4 Proposal is filed and served pursuant to the Rules of Practice and Procedure of the California Public Utilities Commission (“CPUC” or “Commission”) and the Assigned Commissioner’s Amended Track 3B and 4 Scoping Memo and Ruling, dated December 11, 2020 (“Amended Scoping Memo”).

**I.
INTRODUCTION**

The Amended Scoping Memo in Section 3.1 sets forth the issues that will be considered as Track 4 of this proceeding. These issues include: (1) adoption of the 2022-2024 Local Capacity Requirements (“LCR”), (2) adoption of the 2022 Flexible Capacity Requirements (“FCR”), (3) adoption of 2022 System RA requirements, and (4) other refinements to the resource adequacy (“RA”) program, including capacity values for behind-the-meter (“BTM”) hybrid storage/solar resources, the Demand Response Supply Side Working Group Report on Load Impact Protocol (“LIP”) and Qualifying Capacity (“QC”) recommendations, and other time-sensitive issues identified by Energy Division or by parties in proposals.² The Council provides proposed changes to how the LIPs are applied for developing third-party QC values and a revised QC Update Threshold.

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

² Amended Scoping Memo, at pp. 6-8.

II. PROPOSAL FOR APPLICATION OF LIPS TO THIRD-PARTY DR PROVIDERS

Since the Commission affirmed the applicability of the Demand Response (“DR”) LIPs to third-party DR in Decision (“D.”) 19-06-026, it has become apparent that the LIPs are a significant barrier to third-party DR providers (DRPs) to participate in the RA market. There are few consultants with the knowledge and experience to perform the load impact evaluations which leads to higher costs and real difficulties in securing assistance because many DRPs are simultaneously competing for these consultants to meet the Energy Division’s annual submission deadline.

One potential way to mitigate these problems is to streamline the LIPs so that evaluations are easier to perform while ensuring they remain sufficiently robust for the Energy Division to perform an informed assessment of each DRP’s DR portfolio. In theory, less complex and voluminous load impact evaluations should allow consultants to perform more evaluations at a lower cost which would ideally reduce DRP barriers to RA market participation. At the November 10, 2020 Supply Side Working Group (“SSWG”), convened pursuant to D.20-06-031, the Council presented several proposed revisions to how the LIPs are applied when used for determining the QC value of third-party DR.³ At the working group, parties and the Energy Division provided feedback on these proposals, which is summarized below. The Council is open to additional feedback and the thoughts of other parties, including Energy Division Staff who assess the DRPs’ load impact evaluations.

A. Protocol 8 (ex post)

This protocol describes the day types and level of aggregation for which load impacts are to be reported. Specifically, it requires ex post impacts to be provided for “each day on which an event was called” and the “average event day” across the evaluation period (typically, over a year).

Proposals:

- **Report Average Event Day by Month Rather than by Year:** The average event day impact over the course of a year, while interesting, does not lend itself to the calculation of ex ante impacts for the purposes of QC because QC values are assigned on a monthly

³ Decision 20-06-031, at Ordering Paragraph 16.

basis. Moreover, for weather-sensitive or other seasonal resources, a yearly average event day may not be very instructive. For these reasons, the requirement to calculate ex post impacts (both per customer and in aggregate) for the average event day should be performed by month rather than by year. While providing average event-day impacts on a monthly basis is not specified in the LIPs, DRPs have been including them in their load impact evaluations.

- **Allow Reporting of All Event Data or Monthly Averages in Ex Post Table**

Generators: Some DRPs have a large number of events in a given month which can make using the ex post table generators highly unwieldy. DRPs should have the option of inputting monthly average ex post values in the table generators.

Working Group Outcome: No parties objected to either proposal.

B. Protocol 5 (ex post)/Protocol 19 (ex ante)

These counterpart protocols (the first for ex post impacts and the second for ex ante impacts) require that average mean change in energy use per year be reported all participants and for the sum of all participants on a DR resource for the year over which the evaluation is conducted.

Proposal: Protocols 5 and 19 should be removed in their entirety for load impact evaluations performed solely for determining the QC value of third-party DR. Annual averages are not necessary for the assignment of QC – these are always monthly values – and are not indicative of highly seasonal resources.

Working Group Outcome: No parties objected to this proposal.

C. Protocol 22

This protocol specifies the analyses required for each day type using California Independent System Operator (“CAISO”) and investor-owned utility (“IOU”) 1-in-2 and 1-in-10 weather conditions.

Proposal: Only the “monthly system peak day” calculated under IOU 1-in-2 weather conditions is needed to estimate the QC value for RA purposes, so this should be the only scenario required by the protocol. Calculating the “average weekday” and the “typical event day” under 1-in-2 weather conditions and calculating anything under 1-in-10 weather conditions is not relevant to estimating the RA QC value of a DR resource and therefore represents unnecessary costs to the DRP to produce and describe. While the 1-in-10 scenario is used by the

CAISO in its local capacity technical studies, the CAISO does not use the outputs of the load impact evaluations in its own studies. Therefore, requiring DRPs to produce these scenarios is not directly useful to the CAISO.

Working Group Outcome: No parties objected to this proposal.

D. Protocol 26

This protocol specifies the format and content of the load impact evaluation reports. One requirement of this protocol is that “a comparison of impact estimates derived from the analysis and those previously obtained in other studies and those previously used for reporting of impacts toward resource goals, and a detailed explanation of any significant differences in the new impacts and those previously found or used.”

Proposal: This protocol should be eliminated because prior studies may not always be relevant. For example, studies using a methodology different from the LIPs would be like comparing apples to oranges. Even prior-year reports using the LIPs will often not be useful if a DRP’s portfolio changes significantly from one year to the next in terms of number and/or type of customers, enabling technologies, and customer location. Furthermore, DRPs that are new to the California market will have no prior-year studies.

Working Group Outcome: Parties agreed to retain this protocol because the Commission and other agencies sometimes rely on prior studies as a comparison. Year-over-year variations in the reporting can be explained by the DRP.

E. Define the Value of Three-Year Forecast in Load Impact Evaluations

IOUs have traditionally forecasted ex ante impacts a decade ahead. This has been valuable because load impact evaluations of IOU DR programs are used for long-term resource planning. DRPs have thus far been asked to project impacts for three years into the future to match the three-year forward procurement requirement of Local RA. Although DRPs included ex ante impacts through 2023 in their reports, the Energy Division only approved QC for 2021. Therefore, it is currently unclear what value three-year forward projections serve in third-party load impact evaluations.

Proposal: Energy Division (“ED”) should clarify the forward forecast requirements and how these requirements interplay with the final approved QC. If a DRP is required to provide impacts three years’ forward, it should ostensibly receive QC for three years based on ED assessment of the DRP forecasts. However, if ED determines that a DRP should only receive

QC values for the following RA compliance year, the purpose of three-year forecasts becomes unclear. In this case, developing and describing these forecasts is an unnecessary cost to the DRP and the forecast requirement should be reduced to one year ahead only.

Working Group Outcome: Energy Division agreed to look into whether it could clarify the conditions that would require the three-year ex ante impacts.

F. Include Avoided T&D Losses in the QC Values Approved through the LIP Process

The RA value of DR outside of the DRAM is the NQC, as determined by the LIPs, adjusted for avoided transmission and distribution (“T&D”) losses (through the Distribution Loss Factor (“DLF”)) and the Planning Reserve Margin (“PRM”). The NQC values of DRP resources is provided on the Commission’s NQC List and is used in the Supply Plans submitted by the DRP/LSE or their scheduling coordinator.⁴

Currently, the DLF and PRM adjustments for a third-party DR resource are added to the CAISO’s Customer Interface for Resource Adequacy (“CIRA”) by the Energy Division as credits against the contracting LSE’s RA requirement. However, in a recent proposed change to its Reliability Requirements Business Practice Manual BPM (“PRR 1280”), the CAISO proposed to eliminate the use of RA credits that do not net to a zero change to overall RA requirements.⁵ Because the DLF/PRM credits do not meet that criterion, the CAISO would no longer allow them to be counted toward an LSE’s obligation.

The CAISO could then undertake backstop procurement through the Capacity Procurement Mechanism (“CPM”) and, despite meeting its RA procurement obligation under Commission rules, the LSE purchasing DR RA capacity would appear under-procured and allocated a portion of the CPM costs. The CAISO’s proposed BPM change would effectively create a dual system in which the RA value of DR is different for the Commission and the CAISO, a paradigm that is confusing, inefficient, and once again imposes unnecessary regulatory hurdles to DR resources. Pursuant to the CAISO’s Executive Appeals Committee decision on PRR 1280, the CAISO will delay its implementation until August 1, 2021 pending the development of a solution in the Commission’s RA proceeding.⁶

⁴ Commission NQC lists can be found here: <https://www.cpuc.ca.gov/General.aspx?id=6311>.

⁵ PRR 1280 can be found at: <https://bpmcm.caiso.com/Pages/ViewPRR.aspx?PRRID=1281&IsDlg=0>.

⁶ The decision can be found at: <http://www.caiso.com/Documents/ExecutiveAppealsCommitteeDecision-PRR1280-Dec092020.pdf>.

Proposal: To address the differing valuation of DR at the Commission and the CAISO, at least in part, the QC values approved by the Energy Division through the LIP process should explicitly include the DLF adjustment which reflects the avoided T&D losses associated with DR participation. This means that the third-party DR capacity included in Supply Plans and bid into the CAISO market would have a higher NQC value in the Commission’s NQC list compared to what it otherwise would have. Recognition of a DR resource’s avoided T&D losses is already reflected in the CAISO energy market settlement process. CAISO measurement and settlement occurs at the point of interface with the CAISO grid (i.e., on the high-voltage system) and the customer meter data DRPs receive from the IOUs is measured at the end-customer’s location (i.e., on the low-voltage distribution system), after losses have been incurred. Because of this, the CAISO requires that DRPs convert Revenue Quality Meter Data (“RQMD”) to Settlement Quality Meter Data (“SQMD”), which includes grossing up for avoided line losses, when they submit performance data for CAISO settlement. Therefore, it makes sense that the NQC should reflect what a DR resource can deliver to the point of grid interface, not to the end user’s location, and this includes the T&D loss factor.

Working Group Outcome: No party objected to this proposal but the Energy Division suggested that parties discuss how the CAISO trues up the RQMD to reflect the avoided T&D losses to calculate the SQMD. In response to this direction, the Council notes that pursuant to Section 10.7.3.1 of the CAISO tariff and Operating Procedure 5750, market participants must provide the CAISO with a Settlement Quality Meter Data Plan. For DRPs, this plan must include a procedure for accounting for estimated T&D losses during an DR resource dispatch.⁷ Energy Division also noted that the DLF and PRM adders are not a part of the LIP process, as they are not directed by the LIPs or the decision adoption them, D.08-04-050.

G. Redaction Requirements for Load Impact Evaluation Reports

Several DRPs have been dissuaded from entering this market due to the public nature of load impact evaluations. It is important to note that the LIPs were developed for the purpose of long-term resource planning and determining the cost-effectiveness of regulated monopoly IOU DR programs. That environment has fundamentally changed with the proliferation of both third-

⁷ Operating Procedure 5750 can be found at <http://www.caiso.com/Documents/5750.pdf> and the template for the Settlement Quality Meter Data Plan can be found at http://www.caiso.com/Documents/PerformanceMethodologyForm-MeterGeneratorOutputWithCustomer_Load_Baseline.docx.

party DRPs as well as non-IOU LSEs. In this new environment, DRPs are engaged in competitive activity with one another, so disclosure of market-sensitive information could cause harm to a DRP's competitive position. The public versions of the load impact evaluations submitted in 2020 varied widely in their level of redactions. While some DRPs did not use redactions, others heavily redacted large portions of their evaluations. At this time, there does not appear to be a uniform understanding regarding the data that can and cannot be redacted in a DRP's load impact evaluation.

Proposal: Parties should discuss and agree on the data that may be redacted in the public load impact evaluation reports. At minimum, enrollments, device counts, and all impacts should be redacted at the Sub-Load Aggregation Point ("Sub-LAP")-level and Local Capacity Area ("LCA")-level, but made public at the Transmission Access Charge ("TAC")-area level. Energy Division will always receive full and unredacted versions of each report detailing values at the Sub-LAP level; consequently, this level of redaction will not impact their ability to perform a QC assessment.

Working Group Outcome: Parties agreed that, for the public version of their filings, DRPs should report results at the LCA level, but more granular data may be redacted.

III.

THE JOINT PARTIES' PROPOSAL ON A REVISED QC UPDATE THRESHOLD

In Decision 20-06-031, the Commission authorized the ED to coordinate the SSWG to define the details of a biannual QC update process and to re-evaluate the adopted QC Update Threshold, which is the greater of +/-20% or 10 MW, with a SSWG proposal to be submitted into Track 4 of this RA proceeding.⁸ The SSWG was not convened but the Council puts forth an initial proposal for consideration.⁹

Problem Statement: The current threshold is prohibitively large and may result in few, if any, DRPs actually utilizing the update process. This will limit the ability of DRPs to bring forth new capacity on an intra-year basis. The effect is particularly acute for smaller DRPs. Using an example of a DRP with 40 MW of QC, 20% of the portfolio would equate to 40 MW x 20% = 8 MW. Because the 10 MW criterion is larger than the 20% criterion in this instance, the

⁸ Decision 20-06-031, at Ordering Paragraph 16.

⁹ It is the Council's understanding that adoption of the biannual QC update process is a ministerial issue for the Energy Division to approve but a revised QC Update Threshold must be approved by the Commission.

DRP would be required to have grown its portfolio by 10 MW or, in this instance, 25% (10 MW / 40 MW = 25%). Similarly, for a DRP with only 20 MW of QC, the minimum required intra-year growth would be 50%. This disadvantages smaller DRPs relative to DRPs with larger portfolios and creates a barrier for new market entrants to revise their QC values.

Moreover, the adopted threshold is particularly burdensome for DRPs with primarily residential customers. For these DRPs, achieving 10 MW or more of additional capacity would require enrolling tens of thousands of additional customers *beyond* the growth forecast. This too creates an unnecessary barrier to intra-year residential DRP growth and likely renders the QC update unusable.

Proposal: As a starting point, the Joint Parties propose to reduce the QC Update Threshold to the greater of +10% or 5 MW. This threshold would go further in allowing DRPs with smaller portfolios and residential customers to make use of the update while not unduly burdening Energy Division with relatively insignificant changes. Alternatively, the Commission should remove the 10 MW criterion and simply establish a percentage threshold that would trigger a QC update. We propose 10% as a starting point.

IV. CONCLUSION

The Joint Parties recommend the Commission adopt the proposals as described above.

Respectfully submitted,

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