



## California Public Utilities Commission

March 26, 2016

### **Energy Division Proposal for Proceeding 14-10-010 Order Instituting Rulemaking to Oversee the Resource Adequacy Program, Consider Program Refinements, and Establish Annual Local and Flexible Procurement Obligations for the 2016 and 2017 Compliance Years**

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**Revised Proposal for RA Capacity Value Measurement –  
PDR/RDRR (aka – QC and EFC methodology, App. B, D.14-06-  
050)**

## Background

The load impact protocols were adopted in D.08-04-050 and are a regression analysis that the investor owned utilities (IOUs) perform each year and submit in reports on April 1<sup>st</sup> for the upcoming year, with a 10 year forecast. Resource adequacy (RA) credit related to demand response (DR) programs awarded to utilities is based on the results of the LIP analysis and reports.

With Decision (D.) 14-06-050, the Commission adopted a methodology for establishing the net qualifying capacity (QC) and effective flexible capacity (EFC) for DR resources that are bid into the CAISO energy markets. DR resources that bid into the CAISO energy markets are referred to as “supply side” DR resources. The criteria that were adopted in D.14-06-050 apply whether the supply side DR resource is a utility program bid in by a IOU, or the DR resource is a program created and bid in by a third party provider.

Staff assumes that the majority of third parties providing supply side DR resources will seek RA-eligible capacity contracts from IOUs to cover fixed costs. Rulemaking (R.) 13-09-011 required the piloting of a two-year capacity-only DR procurement process for supply side DR provided by third parties, called the Demand Response Auction Mechanism (DRAM), in order to provide a standard, transparent and competitive mechanism for providing capacity payment to third party DR providers. The DRAM contracts are standard among the three IOUs and the evaluation criteria for bids are standard among the IOUs.

Penalties exist in the CAISO market to disincent market participants from claiming capacity that is less than what the market participant can deliver. Specifically, the Resource Adequacy Availability Incentive Mechanism (RAAIM)<sup>1</sup> would charge CAISO market participants for not meeting their must-offer obligations, and uninstructed imbalance energy payments would be levied if a market participant nominates a different capacity amount than it delivers when called by the CAISO. DR resources in the CAISO market, whether bid in by the IOUs or third parties, are exposed to both types of penalty mechanisms. Finally, the CAISO settles DR resources utilizing a 10-in-10 baseline with a 20% morning of adjustment.

## Problem Statement

In the context of the DRAM, in particular, concerns have been raised that performing a load impact analysis is too expensive and burdensome a requirement, particularly for aggregations of resources that are quite small when compared to an IOU’s DR program portfolio. Parties in this proceeding and other forums have also raised the concern that the methodology that was adopted allows the Commission’s Energy Division staff to adjust the NQC or EFC for third party DR resources based on its own analysis and opinion, as is currently the case with IOU DR programs. We presume that the issues raised in the context of DRAM would apply to any RA-eligible DR resource provided by a third party that participates directly in the CAISO market, regardless of whether the resource receives a DRAM award.

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<sup>1</sup> <http://www.caiso.com/Documents/DraftFinalProposalAddendum-ReliabilityServices.pdf>

In their PHC statement filed on December 5, 2015, the Joint DR Parties recommended that third party DR providers be exempted from performing a load impact analysis on DR resources offered for the DRAM pilot, and that this exemption be addressed expeditiously within the RA docket. Draft Resolution E-4754 was subsequently published on December 17, 2015, which relies on language in the QC/EFC criteria adopted in D.14-06-050, Appendix B, which allows for program design to be used for resources for which no historical data is available. In the case of the DRAM, “program design” is interpreted to refer to contract capacity. Final Resolution E-4754 clarifies this and exempts participants in the DRAM from performing a load impact analysis for resources for which historical data do not exist. We believe that developing a record on this topic, for consideration in the June 2016 decision, is appropriate, as the IOUs will file applications for DR programs for 2018 and beyond in the fourth quarter of 2016, and we expect a significant proportion to be supply side DR resources, and expect an increasing share of DR resources to be provided by third parties outside of any IOU DR program.

We are concerned that, if third party DR providers are required to perform a load impact analysis, the interplay between CAISO settlement and load impact analysis may be tricky to manage if there is a conflict. For example, what if the capacity that is demonstrated in the market differs from that assumed in a LIP analysis? Which number should count towards an IOU’s RA obligation – the estimated capacity, or the capacity proven via dispatch and settlement? This would also likely mean that, in the case of a capacity contract, that the IOU is paying for a different capacity amount than is reflected in its RA showing.

## **Proposed Approach**

Staff had originally proposed to eliminate the requirement that a load impact analysis be performed for DR resources provided by third parties. Staff’s rationale was that the capacity delivered by these parties is arguably held to a higher standard than IOU DR programs, due to current and likely future provisions in capacity contracts. IOUs do not face the risk of these penalties, nor is their DR resource portfolio funded based on the capacity that was actually delivered after the fact.

In lieu of load impact analysis, IOUs and Commission staff would rely on contracted capacity for year-ahead RA showing, and actual deliveries or test event in any given month, to establish QC and EFC of the resource, and to assign related RA credit to the applicable utility. The combination of CAISO market requirements, CAISO settlement, provisions in DR contracts with IOUs and charges in the CAISO market, would all serve to ensure that the resource is indeed delivering its claimed capacity and create a strong disincentive to overestimate that capacity. This would be true for both new and existing resources. Staff pointed to several provisions of the pro forma agreement for the DRAM as illustrative of the types of provisions and requirements that we expect to provide a reasonable assurance that third party DR providers will only contract for that capacity which they can reasonably deliver.

In staff’s original proposal, we asked the following questions of parties.

- 1) We propose to only eliminate the load impact analysis for third party DR providers. Would doing so create any actual disadvantages or advantages for utility DR programs or third party DR programs? Describe these in detail and use illustrative examples where and if possible.

- 2) If we were to amend this proposal to remove the requirement that IOUs conduct a load impact analysis for their supply-side DR programs, what mechanisms are in place or could easily be put into place to ensure sufficient oversight of DR program capacity and delivery from IOUs?
- 3) Are the contract provisions referenced in this proposal sufficient to disincent over-claiming of capacity or other related gaming? Are more required? If so, what are those?
- 4) Are any other tweaks necessary to the QC/EFC criteria that were adopted in D.14-06-050 to simplify the calculation of supply side DR capacity? Note that we refer only to tweaks. Staff sees no need to revisit the methodology in its entirety, given that it was developed in an open, public process.

## **Brief Synopsis – Responses from Parties**

- All parties, to varying degrees of specificity, agree with staff's position that using the load impact analysis for capacity demonstration of supply side DR resources is problematic.
- PG&E, SolarCity, CLECA, SDG&E and SCE argue that the RA value of DR resources integrated into the CAISO market by third party providers and IOUs should be the comparable or the same.
- SCE, PG&E, the Joint DR Parties and SDG&E point out the DRAM is a pilot in its infancy, and is not yet tested in the market.
- SCE points out that the CAISO's RAAIM combined with the load impact analysis could result in double-penalizing supply side DR resources.
- The Joint DR Parties and SCE recommend a limited capacity based exemption, of 500 megawatts (MWs) and 200 MWs, respectively, for the DRAM to allow for the learning necessary from actual experience on which to base final policy.
- The Joint DR Parties oppose requiring a test event or actual dispatch in each month to demonstrate monthly available capacity, as proposed in the staff proposal, and argue that the combination of DRAM pro forma contract provisions and CAISO market incentive are sufficient.
- AReM supports, and Calpine does not oppose, Energy Division's proposal.
- CLECA contends that the RA measurement for third party and IOU DR resources should be comparable, and proposes using documentation of IOU bidding of its DR resources into the CAISO market as comparable to contract capacity for third parties. Staff finds this proposal interesting for future consideration.
- ORA supports staff's proposal to eliminate load impact analysis for third party supply-side DR, but only after evaluating the performance of third party DR providers in the CAISO market and with an examination of CAISO and contract penalties. Further, ORA supports eliminating the requirement to perform load impact analysis for all DR providers, if the utility shareholders bear the risk of any underperformance penalties.
- SolarCity recommends also extending any exemption from performing a load impact analysis to storage resources.
- Several recommendations are out of scope for this proposal, and even this proceeding. SDG&E makes a proposal for allocation of RA credit related to third party resources. SDG&E and PG&E propose to simplify the load impact analysis.

After considering party comments, staff continues to see no need to revisit the QC/EFC methodology adopted in D.14-06-050 in its entirety, given that it was developed in an open, public process. Staff

continues to see merit in simplifying the capacity calculation for DR resources that are bid into the CAISO market by third party DR providers.

If load impact analysis continues to be used to establish the capacity value of IOU DR programs, but not those of third parties, we are not convinced that there would be a meaningful competitive disadvantage to utilities. That said, we appreciate that there is currently no meaningful data from third party participation in the CAISO markets on which to base a permanent exemption.

Recommendations of several parties to simplify the load impact analysis are noted, yet are out of scope in this proceeding. Should parties wish to raise these issues in the appropriate forum, we recommend they do so in the appropriate docket – R.13-09-011 or its successor. Staff continues to see merit in simplifying the capacity demonstration for DR resources that are bid into the CAISO market by third party DR providers.

We agree with the logic behind proposals of SCE and the Joint DR Parties to grant a limited term exemption from performing a load impact analysis in order to receive RA credit, for third parties participating in DRAM, or otherwise directly participating in CAISO markets. Southern California Edison and the Joint DR Parties recommend a capacity based exemption of 200 MWs and 500 MWs, respectively. We decline to propose a capacity-based exemption here, for concern that doing so may prejudice future determinations of the size of any capacity incentive program for third parties, be it the DRAM or some other mechanism, should the Commission choose to continue such a mechanism beyond current pilots. The appropriate place to make any determination about the size and elements of such programs is in the DR proceeding, Rulemaking (R.) 13-09-011 or its successor. Instead, we propose a limited term exemption through the close of the 2019 RA compliance year. Effectively, this means that the policy would be re-examined in the year 2019, and any changes effective in the 2020 compliance year. To be clear, this limited term exemption does not apply to programs that are administered and/or scheduled into the market by IOUs – for example, Capacity Bidding Program or the Aggregator Managed Portfolio program.

We propose this specific point in time because, at the time that proposals are drafted for consideration for the 2020 compliance year, we anticipate the following information to be available: the full and final settlement data from both the 2016 and 2017 DRAM pilots, as well as sufficient time to analyze the data, make appropriate inquiries with the appropriate parties, and draw reasonable conclusions about this policy going forward. We also expect to have at least preliminary data from 2018, as well as data from supply side DR programs that are administered by IOUs.

As with the original proposal, in removing the requirement to perform a load impact analysis for third-party DR resources, the utilities and Commission staff would rely on contracted capacity for year-ahead RA showing, and actual deliveries or test event in any given month, to establish QC and EFC of the resource, and to assign related RA credit to the applicable utility. The combination of CAISO market requirements, CAISO settlement, provisions in DR contracts with IOUs and charges in the CAISO market, would all serve to ensure that the resource is indeed delivering its claimed capacity and create a strong disincentive to overestimate that capacity. This would be true for both new and existing resources.

Regarding provisions of capacity contracts, we continue to look to several provisions of the pro forma agreement for the DRAM, as approved in Resolution E-4728, and posted on each IOU's website. These provisions include:

- Monthly capacity demonstration via an actual market dispatch or test event – Section 1.6
- Capacity payment only made on actual delivery or test in any given month – Section 4.1
- Indemnification provisions in Section 11.1

Note that staff does not intend to suggest that the exact pilot DRAM contract approved in E-4728 must be the standard in all years going forward for third party DR contracts. We mention it here as illustrative of the types of provisions and requirements that we expect to provide a reasonable assurance that third party DR providers will only contract for that capacity which they can reasonably deliver. We appreciate that, if the Commission chooses to continue the DRAM program or any other capacity incentive program for third parties, that these contract provisions must be revisited outside of this proceeding.

We have re-reviewed the QC/EFC criteria and clarify here that these criteria do not apply to storage resources, whether behind the meter or in front of the meter, and so we do not specify storage resources in this proposal. The extent to which a storage, or any other, behind the meter resource is coupled with, and appears to the market as demand response, then any rules specific to demand response apply.