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)

CALIFORNIA INDEPENDENT SYSTEM OPERATOR CORPORATION REPLY COMMENTS ON TRACK 3.A PROPOSALS

Roger E. Collanton
General Counsel
Anthony Ivancovich
Deputy General Counsel
Anna A. McKenna
Assistant General Counsel
Jordan Pinjuv
Senior Counsel
California Independent System Operator Corporation
250 Outcropping Way
Folsom California 95630
Tel.: (916) 351-4429
jpinjuv@caiso.com

Date: September 18, 2020

Table of Contents

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)

CALIFORNIA INDEPENDENT SYSTEM OPERATOR CORPORATION REPLY COMMENTS ON TRACK 3.A PROPOSALS

I. Introduction

The California Independent System Operator Corporation (CAISO) submits comments in response to The California Efficiency + Demand Management Council (Council) Opening Comments submitted on the Track 3.A Proposals, submitted in this resource adequacy (RA) proceeding on September 11, 2020.

II. Discussion

A. Development of "Market-Informed" Load Modifying Demand Response

In opening comments on Track 3.A Proposals, the Council recommended the Commission develop "market-informed" load-modifying resources (LMR). The CAISO supports the evolution and development of LMR informed by market signals, including net peak load and ramping needs.

The Council stated that Commission Decision (D.)14-03-026 defined LMR demand response as "resources that reshape or reduce the net load curve" and suggests the Commission expand this definition to "include exporting DERs that are not market-integrated or only partially market-integrated (*i.e.* act as Proxy Demand Resources ("PDR") for non-exported energy and an LMR for any exported energy)."[1] The CAISO clarifies in this reply that, per D.14-03-026 (Bifurcation Decision), demand response can be either an LMR or a supply-side resource, but it

[1] *Opening Comments of the California Efficiency + Demand Management Council on Resource Adequacy Track 3A Proposals*, R.19-11-009, September 11, 2020, p. 2 (Council Opening Comments).

cannot be a combination of both.[2] These issues were previously and thoroughly vetted in the Commission's demand response proceeding.[3] The Commission should reject any proposals that violate its established decision on demand response bifurcation principles. LMRs are embedded into the California Energy Commission's demand forecast and reduce the load serving entities' resource adequacy requirements, whereas supply-side demand response resources are integrated into the CAISO market and are dispatchable where and when needed by the CAISO. Additionally, supply-side demand response dispatches are reconstituted (added back into the load) by the California Energy Commission so that the forecasts are not skewed by the actions of supply-side demand response.

Load modifying resources cannot receive a qualifying capacity (QC) value in addition to reducing resource adequacy requirements as this would lead to double counting. Creating a third type of demand response that receives a QC value but is not integrated into the CAISO market would erode the tenets of the resource adequacy program, which must ensure that resource adequacy capacity resources are available to the CAISO when and where needed. LMRs do not meet this standard, as they do not have must offer obligations or substitution obligations consistent all other supply-side resource adequacy resources nor do they provide the CAISO the ability to optimize and dispatch the underlying resource. The Commission must not provide a resource adequacy QC value for resources that are not integrated into, and dispatchable by, the CAISO.

B. Development of Load-Shifting Demand Response Identified in the DR Potential Study

The Council stated that the types of load modifying resources "can also be expanded to include load-shifting DR/DERs to ensure that the impacts on RA requirements of the 'shift,' 'shape,' and 'shimmy' products that were identified in the DR Potential Study are properly considered."[4]

To address load-shifting demand response, the CAISO will implement its the PDR-Load Shift Resource (PDR-LSR) model by fall 2020, providing such resources the opportunity to bid

---

[2] Bifurcation Decision, D.14-03-026, April 4, 2014, p. 28.
[3] *Order Issuing Rulemaking to Enhance the Role of Demand Response in Meeting the State's Resource Planning Needs and Operational Requirements*, R.13-09-011.
[4] Council Opening Comments, p. 2.

and be dispatched for both load consumption (charging) and load curtailment (discharging). This new model is available for PDRs that specifically include behind-the-meter energy storage resources. Because the PDR-LSR model relies on the presence of a storage resource, load that is shifted can be quantified more readily and validated as incremental to the typical load modifying use. This model is appropriate for market-integrated demand response resources that receive a QC value for the curtailment of load as a supply side resource for resource adequacy purposes. When determining demand response load modifying capabilities, the valuation should similarly require a baseline methodology to establish typical use for the resource and that typical use's impact to the load forecast. Otherwise, its response, already embedded in the load forecast, would be double counted. Any load modifying QC value should be incremental to its typical load modifying use.

C. Hard Trigger Development for Load Modifying Demand Response

The Council highlighted that the LMDR valuation working group

> centered around the use of "hard triggers" which could be based on [CAISO] market indicators such as CAISO market price, load forecast, day-ahead forecasted ramp, etc. With hard triggers, participating resources would be required to dispatch with no discretion by the resource provider so as to provide certainty to the Commission and CAISO that the resources were providing the committed capacity and operational value under the optimal circumstances.[5]

Although the CAISO supports the development of LMRs that shape load in response to market-informed hard triggers, any proposal must maintain the principles adopted in the Bifurcation Decision. In the Commission proceeding leading up to its Bifurcation Decision, parties argued for further differentiated treatment between load modifying, CAISO integrated supply-side demand response, and a third category of "event-based programs not integrated into the wholesale market" that would still qualify as a resource adequacy capacity resource. This three-part differentiation was termed "trifurcation" and would have inappropriately allowed demand response to count as resource adequacy without requiring its integration into the CAISO market. The Commission rejected this "trifurcation" approach in its Bifurcation Decision and instead concluded that "these possibilities should not distract from the core conclusion of this

[5] . Council Opening Comments, p. 2.

decision: programs that can be integrated [into the CAISO markets], should be."[6]

D. Load Modification Impacts on Resource Adequacy Requirements

The Council stated:

> another potential opportunity for behind-the-meter ("BTM") DERs to provide RA value as LMRs would be to simply treat them as pure load modifiers, similar to how critical peak pricing and time-of-use programs are treated today. In other words, it would be reflected in the California Energy Commission's annual load forecast and, like the hard trigger proposal, could be valued using the DR Load Impact Protocols. This process, which currently includes reconstituting the prior year's load for each investor-owned utility ("IOU") service area based on the dispatch of LMR DR, already exists and can easily be applied to third-party LMRs.[7]

The CAISO supports treating demand response as an LMR that reduces the basis for setting resource adequacy requirements, thereby avoiding resource adequacy capacity requirements. This avoidance of resource adequacy capacity requirements is borne out ultimately in the reduction of peak demand year-over-year. It is analogous to how energy efficiency has favorably bent the year-over-year demand curve by reducing California's per capita energy use. Load modifying demand response can play a similar role by reducing the peak capacity needs of the system year after year by reducing those peak demands below what they would have been but for demand response's load modifying actions. In this way, load modifying demand response avoids resource adequacy capacity needs.

III. Conclusion

The CAISO appreciates the Council's recognition of the need to continually improve the load modifying program and understands the desire to reintroduce the discussion of hard triggers for load modifying demand response programs, given the established bifurcation principles are maintained. The CAISO supports further development of load modifying demand response, recognizing not all demand response is suited for market integration and supply-side resource participation. As an alternative, hard triggers should be developed to prompt the modification of load to meet net peak load and net peak ramping needs. The CAISO supports the development of this type of dispatchable load modifying resource, with the caveat that it demonstrates, like other

---

[6] *Decision Addressing the Valuation of Load Modifying Demand Response and Demand Response Cost-Effectiveness Protocols*, D.15-11-042, November 15, 2015, p. 17

[7] Council Opening Comments, p. 3

load modifying programs, a reduction in resource adequacy obligations.

Respectfully submitted,

By*: /s/ Jordan Pinjuv*
Roger E. Collanton
General Counsel
Anthony Ivancovich
Deputy General Counsel
Anna A. McKenna
Assistant General Counsel
Jordan Pinjuv
Senior Counsel
California Independent System
Operator Corporation
250 Outcropping Way
Folsom California 95630
Tel.: (916) 351-4429
jpinjuv@caiso.com

Date: September 18, 2020