

**BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA**

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.

Rulemaking 14-10-010
(Filed October 16, 2014)

CLEAN COALITION COMMENTS ON TRACK 2 ISSUES AND WORKSHOP REPORT

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I. INTRODUCTION

Pursuant to the June 1, 2016 *E-Mail Ruling Noticing Energy Division Workshop Report* (“Email Ruling”), the Clean Coalition submits the following comments on the Track 2 issues and workshop report related to flexible capacity requirements (“FCR”).

The Clean Coalition is a nonprofit organization whose mission is to accelerate the transition to renewable energy and a modern grid through technical, policy, and project development expertise. The Clean Coalition drives policy innovation to remove barriers to procurement and interconnection of distributed energy resources (“DER”)—such as local renewables, advanced inverters, demand response, and energy storage—and we establish market mechanisms that realize the full potential of integrating these solutions. The Clean Coalition also collaborates with utilities and municipalities to create near-term deployment opportunities that prove the technical and financial viability of local renewables and other DER.

II. COMMENTS

As stated in the previous comments, the Clean Coalition seeks to encourage a Resource Adequacy program that makes full use of available resources, including distributed resources, in order to avoid procuring potentially redundant capacity or unnecessary fossil fuel-based assets, and to most cost effectively support the development of renewable energy resources. To this end, the Clean Coalition offers comments on the following topic areas:

1. Recommend undoubling NQC and EFC requirements to allow additional participation by demand-side resources

2. Incorporate demand-side resources into the 2020 and 2022 projections
3. Include two-hour resources and aggregation options in any proposed revision to the MCC buckets.

1. Topic #3: Unbundling NQC and EFC Requirements

In previous comments, the Clean Coalition urged the Commission to leverage demand-side resources to reduce the need for developing new additional flexible capacity.¹ Demand-side resources can effectively reshape the demand curve and, in some cases, could enable CAISO to both reduce Flexible Capacity Requirements (“FCRs”) and more cost effectively procure flexible capacity products.

Loads are increasingly viewed as highly dispatchable, flexible resources capable of adjusting to changes in variable resource supply and market pricing. However, actual deployment of this capability is entirely dependent upon development of clear price signals, compensation mechanisms, and opportunities for market participation.

To this end, the Clean Coalition supports the Joint DR Parties proposal presented in the Track 2 workshop to unbundle Effective Flexible Capacity (“EFC”) from Net Qualifying Capacity (“NQC”). Different types of DER have EFC value but are restricted from designation as a flexible capacity resource due to their limited or non-existence NQC. By recognizing the EFC value of DER, the CPUC would allow demand-side programs to thrive in the RA marketplace and to provide cost-effective alternatives to additional generation. This would provide a means for the marketplace to identify the most cost-effective solution to address steep ramps. The Clean Coalition urges the Commission to enable demand-side tools to compete to the maximum extent possible, and unbundling EFC from NQC would be a useful step in allowing them to function as an available solution to ramping needs.

The Clean Coalition recognizes PG&E’s concerns around the unbundling proposal mentioned in the workshop, but many—if not all—of those concerns can be easily addressed. Any administrative burden or complexity that results from unbundling these resources is likely to be fully outweighed by the value of having more options to procure flexible resource adequacy capacity. Allowing DER to more fully participate in the RA marketplace has the potential to reduce the cost of flexible capacity resources, and should be fully explored.

¹ Clean Coalition Comments on Resource Adequacy Track 2 Question 1 (Feb. 5, 2016).

In addition to unbundling EFC from NQC, the Clean Coalition recommends that the Commission go further to evaluate the potential of demand-side resources to address flexible resource requirements. Managing demand curves through demand-side programs is far preferable to stimulating development of additional fossil generation capacity or curtailing renewable power generation during periods of potential over-generation. As the Commission is aware, the detailed Demand Response Potential Study Phase 1 Interim Report has already identified an additional cost effective opportunity of traditional DR program application. The forthcoming Phase 2 Report is also examining the likely much greater potential to leverage much wider and more frequent use of distributed automated DR applications. Pursuit of such applications is supported by AB 793 Energy Efficiency and Energy Management Technology Legislation, due for implementation by January 1, 2017, which requires provision of incentives to residential and small/medium business customers to acquire energy management technology for use in the customers' home or place of business. The Clean Coalition respectfully urges the Commission to consider and model these impacts in order to ensure that capacity from available renewable resources is fully utilized, including capacity from all varieties of DER and demand management.

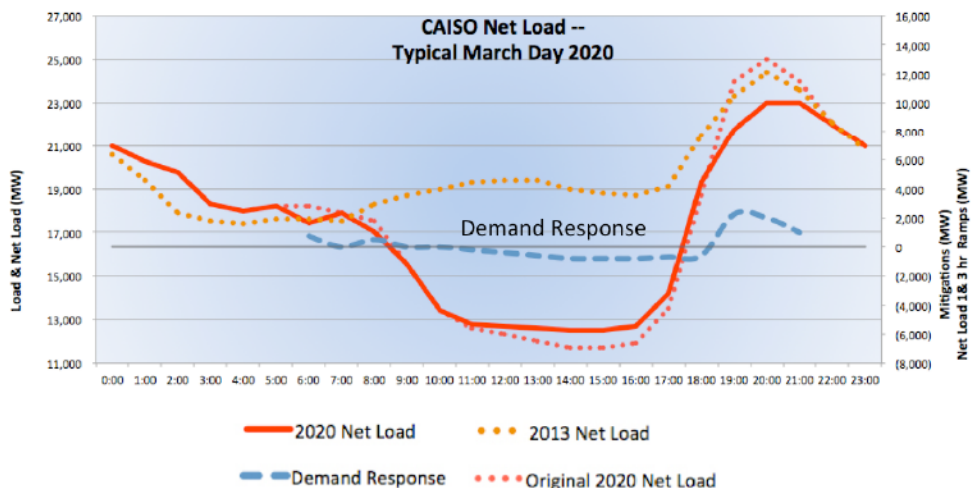
2. *Topic #4: How do we know what grid needs will be in 2020, 2022?*

The Clean Coalition recognizes Doug Davie's conclusion that over-generation problems are approaching sooner than previously projected, which underscores the importance of allowing demand-side programs to participate in the RA marketplace to the maximum extent possible. As mentioned in the Clean Coalition's earlier comments,² loads are increasingly capable of offering themselves as highly dispatchable flexible resources capable of adjusting to changes in variable resource supply and market pricing—either increasing or decreasing load in any given time period. However actual deployment of this capability is entirely dependent upon development of clear price signals, compensation mechanisms, and opportunities for market participation. If demand-side programs are fully incorporated into the marketplace, the duck curve in Mr. Davie's presentation could be substantially flattened.

The steep ramp afternoon and evening ramp from 5pm to 8pm is the primary reason that flexible capacity products are needed. However, demand-side load management programs, ranging from time-of-use ("TOU") pricing signals to demand response contracts, can largely

² *Id.*

flatten the load curve. Widespread TOU application is targeted for 2019, and opportunities exist to accelerate adoption prior to that date, and to educate customers to integrate TOU rates into their consumption patterns for maximum individual and broader social benefit.



It is critical that the Commission compare the cost of meeting needs through an ISO marketplace for flexible capacity products against the cost of shifting demand during periods of expected ramping through the use of demand-side programs. In fully evaluating the relative cost effectiveness of alternative resources and programs, the ISO should consider the indirect costs and impact of each resource category, including the acceleration or deferral of demand for additional transmission capacity and contribution toward achieving the state’s GHG and air quality emission reduction goals, which can partly be achieved by making maximum use of available renewable resources.

3. *Topic 5: Revision of the MCC “Buckets,” Proposals for a 2 hour MCC “Bucket”*

To the extent that the Commission is developing a new proposal on the Maximum Cumulative Contribution (“MCC”) bucket structure, the Clean Coalition wants to ensure that demand response programs be included in the proposal. This at least requires that: 1) resources producing for two hours be included, and 2) that resources be allowed to aggregate to meet longer duration needs. Two-hour capacity products can meet a significant portion of the capacity credit (as highlighted in the E3 presentation on the valuation of short-duration capacity products), and therefore can play an important role in meeting flexible capacity requirements. The Commission can increase this ability by allowing resources to continue to aggregate and provide value. The Clean Coalition, therefore, encourages any proposal from the Commission to include these two elements.

III. CONCLUSION

The Clean Coalition respectfully urges the Commission to ensure that demand-side programs are incorporated into the development of the flexible capacity requirements in order to find cost-effective solutions to ramping challenges. The Clean Coalition appreciates the opportunity to comment and looks forward to working with the Commission and other parties to further improve the Resource Adequacy program.

Respectfully submitted,

/s/ Katherine Ramsey _____

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