

**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 2019 and 2020
Compliance Years.

Rulemaking 17-09-020
(Filed September 28, 2017)

**REPLY COMMENTS OF THE CALIFORNIA ENERGY STORAGE ALLIANCE
ON THE PROPOSED DECISION ADOPTING LOCAL CAPACITY OBLIGATIONS
FOR 2020-2022, ADOPTING FLEXIBLE CAPACITY OBLIGATIONS FOR 2020, AND
REFINING THE RESOURCE ADEQUACY PROGRAM**

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June 18, 2019

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In accordance with the Rules of Practice and Procedure of the California Public Utilities Commission (“Commission”), the California Energy Storage Alliance (“CESA”)¹ hereby submits these reply comments to the *Proposed Decision Adopting Local Capacity Obligations for 2020-2022, Adopting Flexible Capacity Obligations for 2020, and Refining the Resource Adequacy Program* (“PD”), filed by Administrative Law Judges (“ALJ”) Debbie Chiv on May 24, 2019.

¹ 174 Power Global, 8minutenergy Renewables, Able Grid Energy Solutions, Advanced Microgrid Solutions, Aggreko, Alligant Scientific, LLC, AltaGas Services, Amber Kinetics, Ameresco, American Honda Motor Company, Inc., Avangrid Renewables, Axiom Exergy, Better Energies, Boston Energy Trading & Marketing, Brenmiller Energy, Bright Energy Storage Technologies, Brookfield Renewables, Carbon Solutions Group, Clean Energy Associates, ConEd Battery Development, Customized Energy Solutions, Dimension Renewable Energy, Doosan GridTech, Eagle Crest Energy Company, East Penn Manufacturing Company, EDF Renewable Energy, eMotorWerks, Inc., Enel X North America, Energport, Energy Vault, Engie Storage, E.ON Climate & Renewables North America, esVolta, Fluence, Form Energy, General Electric Company, Greensmith Energy, Gridwiz Inc., Hecate Grid LLC, Highview Power, Ingersoll Rand, Innovation Core SEI, Inc. (A Sumitomo Electric Company), Lendlease Energy Development, LG Chem Power, Inc., Lockheed Martin Advanced Energy Storage LLC, LS Energy Solutions, LS Power Development, LLC, Magnum CAES, Malta Inc, NantEnergy, National Grid, NEC Energy Solutions, Inc., NextEra Energy Resources, NEXTracker, NGK Insulators, Ltd., Nuvve, Pattern Energy, Pintail Power, Plus Power, Primus Power, PolyJoule, Quidnet Energy, PXiSE Energy, Range Energy Storage Systems, Recurrent Energy, RES Americas, SNC-Lavalin, Soltage, Southwest Generation, Stem, STOREME, Inc., Sunrun, Swell Energy, Tenaska, Inc., Tesla, True North Venture Partners, Viridity Energy, VRB Energy, WattTime, and Wellhead Electric. The views expressed in these Comments are those of CESA, and do not necessarily reflect the views of all of the individual CESA member companies. (<http://storagealliance.org>).

I. INTRODUCTION.

CESA continues to urge the Commission to focus on developing capacity counting methodologies for “plus-storage” resources to support the state’s environmental and clean energy goals through the Resource Adequacy (“RA”) Program. Many parties commented on the need to better study and understand the interaction of resources on the grid as well as the operational profile and capabilities of energy storage resources. CESA agrees and recommends that the Commission urgently focus on studying and developing appropriate qualifying capacity (“QC”) and effective load carrying capacity (“ELCC”) values for combined resources that are increasingly being developed and deployed on the grid. Below, CESA responds to select points made by other parties.

II. THE ELCC METHODOLOGY SHOULD REFLECT AND APPROXIMATE PROJECT-SPECIFIC OPERATIONAL CAPABILITIES AND RELIABILITY IMPACTS.

The California Independent System Operator (“CAISO”) recommended that the Commission recognize the operational capabilities of different energy storage technologies and how they interact with and complement other resources (*e.g.*, solar production) to understand how storage resources align with operational needs. Importantly, the CAISO recommended that the Commission’s modeling not assume homogeneity of energy storage technologies and instead capture key differences between them, just as the Commission differentiates between different types of thermal resources.² Other parties made similar observations around the potential over-simplification on how energy storage is assumed to operate on the grid relative to other resources.³

CESA agrees that the current indiscriminate ‘peanut buttering’ of the ELCC diversity benefits of existing energy storage resources to all solar resources is an over-simplification and

² CAISO’s comments at pp. 6-8.

³ See, for example, NRG’s comments at p. 4 and GPI’s comments at p. 3.

unreasonable, especially for resources that have invested in pairing their variable energy resources (“VERs”) with energy storage. Rather than taking this approach to model the ELCC diversity benefits at a portfolio level and creating a mechanism to allocate these excess ELCC values to any one or multiple resource classes, CESA believes that the Commission must move toward project-specific ELCC calculation approach such that resources that have invested in the resources (*e.g.*, paired storage) that provide the diversity benefit directly receive the benefit. Such an approach is more equitable and sends an economic signal to developers and load-serving entities (“LSEs”) to bring to market the appropriate resources and configurations, including the different resource combinations and storage technology types that the CAISO mentions in its opening comments. By calculating the capacity contributions of different resource types and combinations, for example, the value of load following versus load shifting will be better captured and will provide the appropriate economic signals for the development and procurement of resources to reliably operate the grid.

CESA suggested procedural next steps in our opening comments to the PD and stresses that the Commission prioritize the development of ELCC methodologies and calculators for combined resources in technical working groups and workshops. As part of this continued effort to refine its ELCC methodology, CESA supports the CAISO’s recommendation that the Commission should “seek to diversify the storage fleet and explore technologies that can cost-effectively cycle as necessary to provide the diversity and renewable integration benefits needed.”⁴

⁴ CAISO’s comments at p. 8.

III. THE CURRENT NET QUALIFYING CAPACITY METHOD SHOULD BE AFFIRMED FOR STANDALONE ENERGY STORAGE RESOURCES.

Pacific Gas and Electric Company (“PG&E”) and Southern California Edison Company (“SCE”) commented on the potential of overstating the capacity of energy storage resources in light of the Commission Energy Division’s ELCC diversity study. PG&E specifically stated that storage capacity value may be overstated in the months in which the ELCC value of energy storage is less than 100%, while SCE noted that the allocation of the ELCC diversity benefits of storage yet still giving storage the full net qualifying capacity (“NQC”) value for storage would similarly overstate capacity on the grid.⁵

CESA recommends the Commission affirm that standalone storage resources with four hours of energy discharge qualify for their full NQC value, and that ELCC-backed ‘counts’ are not being contemplated for energy storage resources. The ELCC methodology applies for VERs and should only apply to energy storage resources when paired with and operated in conjunction with co-located VERs. CESA would strongly oppose changes or reductions in the RA ‘count’ for energy storage. That said, discussions of how energy storage can affect the ELCCs of VERs would be appropriate for consideration in the RA proceeding.

⁵ PG&E’s comments at p. 3 and SCE’s comments at p. 5.

IV. CONCLUSION.

CESA appreciates the opportunity to submit these reply comments to the PD and looks forward to working with the Commission and stakeholders in this proceeding.

Respectfully submitted,

A handwritten signature in blue ink, appearing to read "Alex J. Morris".

Alex J. Morris
Vice President, Policy & Operations
CALIFORNIA ENERGY STORAGE ALLIANCE

Date: June 18, 2019