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 Procurement Obligations.	R.11-10-023 Filed October 20, 2011

COMMENTS OF THE CALIFORNIA ENERGY STORAGE ALLIANCE ON ASSIGNED ADMINISTRATIVE LAW JUDGE'S RULING AND ENERGY DIVISION PROPOSALS

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In accordance with the provisions of the Rules of Practice and Procedure of the California Public Utilities Commission ("Commission"), the California Energy Storage Alliance ("CESA")[1] hereby submits these comments on the Assigned Administrative law Judge's Ruling and Attached Energy Division Proposals ("Proposals"), issued by Administrative Law Judge David M. Gamson on February 4, 2014 ("ALJ's Ruling").

I. INTRODUCTION

CESA generally supports the Proposals.[2] CESA appreciates the Commission Staff's understanding reflected in the Proposals that charging contributes to Effective Flexible Capacity ("EFC"), and encourages the Commission and its Staff to work with the Staff of the California Independent System Operator's ("CAISO") to allow dispatchable load to count toward the "Standard Flexible Capacity Product" proposed in the Flexible Resource Adequacy Criteria and Must Offer Obligation ("FRACMOO").[3] CESA also appreciates the recognition in the Proposals that the EFC can exceed the Qualifying Capacity ("QC"). CESA urges the Commission to

[1] 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

[2] *See*, *RA Implementation Staff Proposals*, January 16, 2014.

[3] *See, Final Revised Straw Proposal*, February 7, 2014.

confirm this approach as well in the proposed Standard Flexible Capacity Product proposed in the CAISO's proposed FRAC-MOO.[4]

Regardless of the duration of discharge required for EFC, the true pMax and pMin of a resource may exceed the RA-eligible pMax. To avoid confusion, CESA recommends that the RA-eligible pMax and pMin be labeled for their respective buckets, perhaps with a nomenclature such as "pMaxRA, pMaxEFC."

II. THE COMMISSION MUST BE CLEAR AS TO HOW OPERATION AND DISCHARGE ARE DISTINQUISHED IN ADDING FLEXIBLE CAPACITY TO THE EXISTING RESOURCE ADEQUACY LEXICON.

CESA appreciates the efforts reflected in the Proposals to accommodate aggregated resources. However, the bundling of widely different resources – as allowed now in the Proposal's EFC methodology – is problematic in practice. For instance, consider a three-hour, high use limited demand response ("DR") product bundled with a fast response, highly dispatchable energy storage resource, similar to that described in the proposed EFC methodology. It appears as though the EFC of the energy storage resource could be limited by the use limitations of the DR product. Additionally, the contribution of each resource to the final ELCC/EFC rating would still be unclear. CESA therefore recommends a simpler aggregation methodology allowing only aggregation of operationally comparable resources, and providing a fair and reasonable rating system for the EFC and QC of the aggregated resource.

CESA supports the approach expressed in the Proposals that, "Energy Division should continue ongoing efforts to develop probabilistic modeling and calculation methodologies for energy storage and demand response, with additional staff white papers and one or more workshops in spring 2014. Energy Division should also consider publishing provisional QC and

[4] *Id*, p 41.

EFC values calculated through probabilistic methods, in parallel to the official QC and EFC values calculated according to the methodology for 2015 recommended above." Of course, resource adequacy ("RA") currently is based on a four-hour operation requirement. However, flexibility has different requirements, and the Commission has not, and should not, limit EFC to four hours. CESA recommends that the EFC methodology for energy storage should be 1.5 hours at full discharge, to align with the currently proposed 1.5 hours of sustained charge proposed by the Commission. This 1.5 hours of discharge satisfied the needs identified by the CAISO for Flexible Capacity, namely: Regulation, Load Following, and Ramping from 0 to pMax over three hours. A resource with 1.5 MWh of energy for each MW of capacity could satisfy flexible services for three hours or more, and should be counted in full for purposes of EFC. In order to align with the current proposed FRAC-MOO), CESA also recommends that the EFC methodology for energy storage selecting the Regulation Energy Management ("REM") option under Category 3 of the FRAC-MOO should be based on its REM capacity. This EFC could be applied to REM resources totally, up to the maximum amount allowed for in Category 3 of the FRAC-MOO.

III. ENERGY STORAGE RESOURCES THAT CAN OPERATE FOR A SPECIFIC DURATION NEED NOT PROVIDE FULL MAXIMUM OUTPUT FOR THE ENTIRE PERIOD OF TIME.

The current discharge duration standard, the "four-hour requirement" required by the Commission regarding operation, as opposed to discharge, is very clear: "A generating resource should not be eligible to satisfy resource adequacy requirements unless it is able to operate for 4 hours per day for three consecutive days and the unit satisfies a minimum aggregate number of hours per month based on the number of hours that loads in the control area exceed 90% of peak

demand in that month."[5] The four-hour operating requirement was developed by a working group consensus process:

> "Generally, it was agreed that for the summer months, the Commission's two-part test is adequate and appropriate. Both the three-day-by-four-hour rule and the hours-above-90%-of- peak rule are appropriate for the kinds of load shapes seen in the summer months. In effect, that rule means that energy-limited resources must be stacked to be able to meet a minimum of 60 hours of operation during August, with smaller numbers in the surrounding summer months."[6]

The discharge duration for the "three-hour requirement" in the Joint Parties' Proposal[7] was a negotiated solution when it was worked out by the parties at that time. The CAISO supported separate products. However, the three-hour requirement was supposed to be interim only through 2017, until a longer term RA decision could be issued by the Commission that would address the flexible capacity needs.

IV. CONCLUSION.

CESA appreciates the opportunity to submit these comments on the ALJ's Ruling and the Proposals, and looks forward to continuing to work with the Commission and stakeholders in this proceeding.

Respectfully submitted,

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[5] *Decision Adopting Local Procurement Obligations for 2012 and Further Refining the Resource Adequacy Program*, D.11-06-022, June 23, 2011, p. 53.

[6] *Resource Adequacy Phase 2 Workshop Report*, June 10, 2005, p. 90.

[7] *See*, Resource Adequacy and Flexible Capacity Procurement Joint Parties' Proposal, October 29, 2012