

**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 IN RESPONSE TO
ADMINISTRATIVE LAW JUDGE'S RULING RESETTING SCHEDULE
FOR COMMENTS ON PHASE 2 RESOURCE ADEQUACY ISSUES
AND SCHEDULING A PREHEARING CONFERENCE**

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**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
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**COMMENTS OF THE
CALIFORNIA ENERGY STORAGE ALLIANCE IN RESPONSE TO
ADMINISTRATIVE LAW JUDGE’S RULING RESETTING SCHEDULE
FOR COMMENTS ON PHASE 2 RESOURCE ADEQUACY ISSUES
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The California Energy Storage Alliance (“CESA”)¹ hereby submits these comments in response to the *Administrative Law Judge’s Ruling Resetting Schedule for Comments on Phase 2 Resource Adequacy Issues and Scheduling a Prehearing Conference*, issued on March 11, 2013 (“ALJ’s Ruling”) in accordance with the Rules of Practice and Procedure of the California Public Utilities Commission (“Commission”).

I. PROCEDURAL CONTEXT AND BACKGROUND.

In June 2012, the Commission issued a decision stating its intent to develop a new flexible RA capacity framework by the end of 2012 for implementation in the 2014 RA compliance year.² The California Independent System Operator’s (“CAISO’s”) staff and the

¹ The California Energy Storage Alliance consists of A123 Systems, Alton Energy, AU Optronics, Beacon Power, CALMAC, Chevron Energy Solutions, Christenson Electric Inc., Clean Energy Systems Inc., CODA Energy, Deeya Energy, DN Tanks, East Penn Manufacturing Co., Energy Cache, EnerVault, FAFCO Thermal Storage Systems, Flextronics, Foresight Renewable Systems, Greensmith Energy Management Systems, Growing Energy Labs, Gridtential Energy, Halotechnics, Hecate Energy LLC, Hydrogenics, Ice Energy, Innovation Core SEI, Invenergy, KYOCERA Solar, LG Chem, LightSail Energy, NextEra Energy Resources, Panasonic, Powertree, Primus Power, RedFlow Technologies, RES Americas, Saft America, Samsung SDI, Sharp Labs of America, Silent Power, SolarCity, Stem, Sovereign Energy Storage LLC, Sumitomo Corporation of America, TAS Energy, UniEnergy Technologies, and Xtreme Power. 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 *Decision Adopting Local Procurement Obligations for 2013 and Further Refining the Resource Adequacy Program*, D.12-06-025, issued June 21, 2012.

investor owned utilities (“IOUs”) then developed a “Joint Parties Proposal” that potentially could: (a) be implemented by the 2014 RA compliance year; (b) minimize added complexity and modifications to the current RA program; (c) start the process of adding flexibility to the forward procurement process, and (d) allow a more comprehensive solution to be developed and implemented for RA compliance years beyond 2014.³ Along with refinements related to distribute generation deliverability and other issues, the Joint Parties Proposal was published to the service list for comment in this proceeding by the Commission in December 2012.⁴

Later in December 2012, CAISO staff issued a “Straw Proposal”, stating that the CAISO planned to sponsor a phased stakeholder process to implement flexible capacity obligations. The first phase of the process would focus on: (a) default provisions for local reliability authorities that may not have flexible capacity procurement obligations; and (b) creating CAISO backstop procurement authority to procure flexible capacity resources when a load serving entity (“LSE”) is deficient in meeting its flexible capacity procurement obligation.⁵

The CAISO’s Straw Proposal contemplated a second phase that would address: (a) development of performance obligations for flexible capacity resources, including CAISO market must-offer obligations; (b) backstop procurement compensation for resources procured to mitigate deficiencies in meeting flexible capacity resource obligations; and (c) revisions to the CAISO’s standard capacity product tariff provisions to apply to flexible RA capacity resources.

Comments that addressed the Joint Parties’ Proposal, the CAISO’s Straw Proposal, and an alternative proposal developed by the Commission’s Energy Division staff were filed by parties on December 26, 2012, but no reply comments were filed. Instead, a workshop was held

³ *Resource Adequacy and Flexible Capacity Procurement Joint Parties Proposal*, October 29, 2012.

⁴ *Phase 2 Scoping Memo and Ruling of Assigned Commissioner and Administrative Law Judge*, issued December 6, 2012.

⁵ *Flexible Resource Adequacy and Must-Offer Obligation, Market and Infrastructure Policy Straw Proposal*, December 13, 2012.

on January 23, 2013, to consider competing flexible RA capacity procurement proposals sponsored by the staffs of the CAISO and the Commission's Energy Division. Topics discussed at the January 23rd workshop, along with updated related to the Straw Proposal and a revised version of the Energy Division Staff Flexible Capacity Procurement Revised Proposal attached to the ALJ's Ruling are addressed in these comments.⁶

II. INTRODUCTION.

CESA advocates for a framework to be established by the Commission to determine how flexible RA capacity procurement obligations should be met by LSEs, that would explicitly address and incorporate preferred resources and all forms of limited resources, which includes all forms of energy storage resources. The Commission should issue a Phase 2 decision in June 2013 that: (a) sets the 2014 RA capacity procurement process in motion *without any substantive revisions*, and (b) determines a scope and schedule through the end of 2013 to revise the RA program to include a flexible RA capacity procurement program that allows for the full non-discriminatory participation of preferred resources and energy storage resources.

In its expected June 2013 decision, the Commission should find that the current Energy Division and Joint Party flexible RA capacity procurement proposals should be completely rejected because they both unreasonably discriminate against participation by preferred resources and energy storage resources. The Commission should state its intention to adopt a flexible RA capacity procurement mechanism that fully integrates preferred resources and energy storage resources before the end of 2013.

⁶ The subject of deliverability of distributed generation ("DG") for purposes of net qualifying capacity ("NQC") is another major aspect of this proceeding, but CESA reserves the right to separately address NQC for DG in possible reply comments and elsewhere in this and other proceedings at the Commission and stakeholder processes at the CAISO in the near future.

Before the end of 2013 the Commission should adopt a category of flexible RA capacity, in collaboration with the CAISO, that specifically takes into full consideration all of the flexible capabilities of energy storage resources. This should allow energy storage resources to provide additional energy-related products and ancillary services from standalone energy storage systems as well as energy storage resources integrated with both preferred resources and fossil generating resources.⁷

As discussed below, CESA also continues to advocate for adoption of a multi-year contracting mechanism for procurement of flexible RA capacity that includes energy storage resources.⁸ CESA likewise advocates in this proceeding, as it has in the Commission's Long Term Procurement Planning ("LTPP") proceeding, for adoption of an NQC value for energy storage resources with less than one-hour capacity by which they can be allocated MWs of flexible RA capacity corresponding to their sustained discharge over 15 minute intervals.⁹

III. THE COMMISSION SHOULD ESTABLISH A RESOURCE ADEQUACY FRAMEWORK TO DETERMINE HOW FLEXIBLE PROCUREMENT OBLIGATIONS CAN BE MET BY LOAD SERVING ENTITIES IN FUTURE COMPLIANCE YEARS BEFORE THE END OF 2013.

The Scoping Memo for Phase 2 of this proceeding directed parties to work towards defining "flexibility" for procurement of flexible RA capacity, and to develop implementation details for incorporating flexible capacity in the 2014 RA program. It is apparent that this important policy objective cannot be achieved before June 2013, but the Commission should

⁷ Energy storage is capable of providing energy, capacity, and ancillary services simultaneously or sequentially, and should therefore not be arbitrarily limited to providing flexible RA capacity to the exclusion of other energy related products and ancillary services, either expressly or as an unintended consequence of Commission policies established in this and other Commission proceedings. *See, Comments of the California Energy Storage Alliance on Proposed Decision Adopting Long-Term Procurement Obligations for 2013 and Further Refining the Resource Adequacy Program*, filed June 11, 2012.

⁸ *Id.*

⁹ *See, Reply Comments of the California Energy Storage Alliance on Administrative Law Judge's Ruling Seeking Comment on Workshop Topics*, filed October 23, 2012, in R.12-03-014.

nonetheless promptly proceed with development of the new RA framework that virtually all stakeholders agree is necessary.

CESA strongly disagrees with the notion of deferring consideration of energy storage resource in the RA program to an indeterminate future date, as proposed at Section 1.10 of the Joint Proposal

“. . . , the Joint Parties believe that providing flexible capacity should be technology neutral. Therefore, flexible capacity capabilities of resources like distributed generation, demand response, and storage should ultimately count towards an LSE’s flexible capacity procurement obligation. However, In order to expedite the implementation of flexible capacity procurement obligations, the Joint Parties believe more time and consideration are needed to design a flexible capacity counting convention applicable to preferred resources. As such, the Joint Parties recommend that preferred resources use the counting convention proposed in Sections 5.2, 5.3.3.1, and 5.3.3.3, above. If preferred resources can provide flexible capacity consistent with the counting conventions in this interim flexible capacity proposal, then they should be eligible to count toward an LSE’s flexible capacity procurement obligation. To the extent necessary, the Joint Parties recommend the Commission explore this issue and develop a record on the flexible capacity counting conventions of preferred resources in a subsequent RA proceeding.” (p. 24).

This recommendation, while supportive of developing a counting convention applicable to preferred resources and storage in the future, recommends an open-ended deferral of the subject and fails to acknowledge the unique capabilities of energy storage resources – the most flexible resources available.

CESA likewise strongly disagrees with the Energy Division Staff Revised Proposal attached to the ALJ’s Ruling that “sufficient resources without use limitation should provide plenty of head room for LSE’s to meet their flexible obligations”:¹⁰

“Staff does not have a recommendation for other use-limited resources at this time, while recognizing that there are different ways a resource can be use-limited. For example, hydro resources have limits on available energy, while peakers may have limited starts. Staff supports further discussion through

¹⁰ *Energy Division Flexible Capacity Procurement Revised Proposal*, March 2013.

workshops and comments to explore this rule in the 2014 annual RA proceeding and through Phase II of the “Flexible Resource Adequacy and Must-Offer Obligation” initiative at the ISO. There is time to develop rules regarding how use-limited resources can be more economically dispatched while abiding by their use limitations. It is believed that sufficient flexible resources without use limitations should provide plenty of head room for LSEs to meet their flexible obligations.” (p. 6).

Certainly the Energy Division staff may be right for 2014, but beyond 2014 the need for additional flexible resources such as energy storage should be closely evaluated as part of the Commission’s near term efforts to establish an RA framework for determining how flexible capacity procurement obligations can be met by LSEs.

Regrettably, the Energy Division and Joint Parties’ Flexible RA capacity procurement proposals both unreasonably discriminate against participation of preferred resources and energy storage resources. To remedy this fatal policy flaw, the Commission should issue a decision in June 2013 that: (a) sets the 2014 RA compliance process in motion without any revisions, and (b) determines a scope and schedule through the end of this year to revise the RA program to develop a flexible RA capacity procurement program that allows for the full participation of preferred resources and energy storage resources.

IV. THE COMMISSION SHOULD ADDRESS MULTI-YEAR CONTRACTING FOR FLEXIBLE RESOURCE ADEQUACY CAPACITY PROVIDED BY ENERGY STORAGE BEFORE THE END OF 2013.

As abundantly evidenced by the recent En Banc hearing held by the Commission and the CAISO, there is *now* a broad stakeholder consensus that a contracting mechanism for multi-year for flexible RA capacity must be developed as soon as possible.¹¹ CESA is on record in this and other Commission proceedings as advocating for multi-year or long-term (*i.e.*, 10 years or greater) contracting for flexible RA capacity provided by energy storage resources.

¹¹ *Long Term Resource Adequacy Summit*, February 26, 2013.

CESA fundamentally agrees with the motion regarding multi-year procurement that Pacific Gas and Electric Company (“PG&E”) filed concurrently in this proceeding and in the LTPP proceeding in September 2012.¹² In its motion, PG&E persuasively argued:

“There appears to be an emerging consensus among the parties that participate in the various procurement-related proceedings at the Commission that the current, one year forward resource adequacy program should be improved in at least two respects. First, it should take into account the need for some level of resource “flexibility” in order for the system to be operated reliably. . . Second, the current, one-year forward resource adequacy procurement requirement applicable to all load serving entities should be extended to a multi-year timeframe. The Commission has recognized the importance of both issues, and is currently considering both of them. Flexibility is being addressed in this proceeding, and the multi-year procurement requirement is currently slated to be addressed in Track 3 of the LTPP. PG&E requests that the two issues be considered together, in this [RA] proceeding where efforts are already underway to address flexibility. The two topics are too closely related to be artificially separated.” (pp. 2-3).

CESA could just as readily support addressing multi-year procurement in the LTPP proceeding, but the point is that the docket chosen is unimportant, provided that the Commission conveys a sense of urgency in addressing the subject of multi-year contracting for flexible RA capacity to stakeholders.

V. **THE COMMISSION SHOULD CONSIDER ADOPTING A NET QUALIFYING CAPACITY VALUE FOR ENERGY STORAGE RESOURCES WITH LESS THAN ONE-HOUR CAPACITY.**

California Public Utilities Code Section 2836.4(a) (a key provision of AB 2514) provides, “An energy storage system may be used to meet the resource adequacy requirements established for a load-serving entity pursuant to Section 380 if it meets applicable standards.” The “applicable standards referred to in the statute should obviously include NQC. Of course, he

¹² *Motion of Pacific Gas and Electric Company to Move the Multi-Year Procurement Requirement Issue From the Long-Term Procurement proceeding to the Resource Adequacy Proceeding*, filed September 20, 2012.

Commission currently considers energy storage to have an NQC value at least equivalent to demand response (“DR”) resources:¹³

“. . . we point out that the existing QC counting methodology² differentiates in general between three classes of resources in setting QC – dispatchable resources, non-dispatchable resources, and wind/solar resources. Storage is not called out specifically, but depending on whether it was dispatchable or non-dispatchable, storage would count towards RA obligations under the existing QC methodology.” (p. 23).

In its Post-Workshop Comments filed in the LTPP proceeding,¹⁴ SCE proposed an interim approach for establishing an NQC value for energy storage: “For purposes of establishing NQC values for LCR procurement analysis for energy storage devices (which currently do not have an established NQC), SCE recommends the a set of operating parameters for energy storage resources as an interim measure.¹⁵ In SCE’s view, applying these criteria would allow energy storage to be evaluated in local capacity requirement (“LCR”) solicitations comparable to conventional generation resources.

In Reply Comments,¹⁶ CESA disagreed with SCE that energy storage with less than one-hour of capacity should not have NQC valuation where CESA suggested: “A more appropriate NQC value for energy storage with less than one hour capacity would be to use the capacity formula that the CAISO applies under its Regulation Energy Management (“REM”) market for frequency regulation, in which energy storage resources with less than one hour of capacity are

¹³ *Decision Adopting Local Procurement Obligations for 2013 and Further Refining the Resource Adequacy Program*, D.12-06-025, issued June 21, 2012.

¹⁴ *Comments of Southern California Edison on the Joint LTPP/Storage Workshop, held September 7, 2012*, filed October 5, 2012.

¹⁵ “Energy storage devices with one hour or greater capacity should receive an NQC equal to their maximum sustainable rate of output. For RA purposes, qualifying energy devices should be subject to the maximum cumulative capacity buckets, which restrict how much energy-limited capacity can be used to meet RA requirements. In order to count for LCR purposes, an energy storage device should have a minimum of three to eight hours of capacity (specific value to be determined in consultation with the CAISO), so it can provide LCR support for the peak load of a likely event. Energy storage devices with less than one hour of capacity should not have an NQC, since their primary value is in ancillary service markets and/or as frequency response resources.” (SCE Comments, pp. 15-16).

¹⁶ *See, footnote number 8, infra.*

allocated MWs of capacity corresponding to their sustained output over 15 minutes” (p. 9). CESA submits that the NQC discussion needs to be part of the Commission’s consideration of flexible RA capacity, ramping, and the move from hourly to 15-minute scheduling that is well under way at the CAISO and nationally.¹⁷

VI. CONCLUSION.

CESA appreciates the opportunity to submit these comments on the ALJ’s Ruling, and looks forward to working with the Commission and stakeholders in Phase 2 of this proceeding.

Respectfully submitted,



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¹⁷ The CAISO’s is currently engaged in a stakeholder process devoted to implementation of the Federal Energy Regulatory Commission’s Order No. 764 removing intra-hourly transmission scheduling barriers to integration of variable energy resources.