BEFORE THE PUBLIC UTILITIES COMMISSION

OF THE STATE OF CALIFORNIA

Order Instituting Rulemaking to Continue Implementation and Administration of California Renewables Portfolio Standard Program.	Rulemaking 11-05-005 (Filed May 5, 2011)

COMMENTS OF THE CALIFORNIA ENERGY STORAGE ALLIANCE ON ADMINISTRATIVE LAW JUDGE'S RULING REQUESTING COMMENTS ON STAFF PROPOSAL FOR A METHODOLOGY TO IMPLEMENT PROCUREMENT EXPENDITURE LIMITATIONS FOR THE RENEWABLES PORTFOLIO STANDARD PROGRAM

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TABLE OF CONTENTS

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The California Energy Storage Alliance ("CESA")[1] hereby submits these comments on the Administrative Law Judge's Ruling Requesting Comments on Staff Proposal for a Methodology to Implement Procurement Expenditure Limitations for Renewables portfolio Standard Program, issued July 20, 2013 ("ALJ's Ruling"). The ALJ's Ruling provided for comments to be filed by September 5, 2013. On August 21, 2013, Administrative Law Judge Anne Simon issued Administrative Law Judge's Ruling Granting in Part Request of the Large-Scale Solar Association, California Wind Energy Association and The Utility Reform Network

[1] The California Energy Storage Alliance consists of 1 Energy Systems, A123 Systems, AES Energy Storage, Alton Energy, American Vanadium, AU Optronics, Beacon Power, Bright Energy Storage, BrightSource Energy, CALMAC, Chevron Energy Solutions, Christenson Electric Inc., Clean Energy Systems Inc., CODA Energy, Deeya Energy, Demand Energy, DN Tanks, Eagle Crest Energy, East Penn Manufacturing Co., Ecoult, Energy Cache, EnerVault, FAFCO Thermal Storage Systems, FIAMM Group, FIAMM Energy Storage Solutions, Flextronics, Foresight Renewable Systems, GE Energy Storage, Green Charge Networks, Greensmith Energy Management Systems, Growing Energy Labs, Gridtential Energy, Halotechnics, Hecate Energy LLC, Hydrogenics, Ice Energy, Innovation Core SEI, Invenergy, K&L Gates LLP, KYOCERA Solar, LightSail Energy, LG Chem Ltd., NextEra Energy Resources, OCI Company Ltd., Panasonic, Paramount Energy West, Parker Hannifin, PDE Total Energy Solutions, Powertree Services, Primus Power, RedFlow Technologies, RES Americas, S&C Electric Co., 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

for Extension of Time for Comments On July 23, 2013 Administrative Law Judge's Ruling And Setting Further Schedule, that extended the due date for comments to September 26, 2013.

I. INTRODUCTION.

CESA hereby submits the following responses to only certain of the issues discussed in the ALJ's Ruling and the proposal by the Commission's Energy Division for a methodology to set procurement expenditure limitation ("PEL"), attached as Exhibits to the ALJ's Ruling ("Staff Proposal"). CESA does not comment on all issues raised within the scope of the ALJ's Ruling or the Staff Proposal, but hereby reserves the right to expand on these comments in a workshop expected to be scheduled on the Staff Proposal and any alternative proposals filed by parties, or as otherwise authorized in this proceeding by an assigned Administrative Law Judge.

In these comments, CESA responds to the following specific questions set forth the ALJ's Ruling:

> "22. How, if at all, should the PEL [Procurement Expenditure Limitations] methodology take account of new or emerging technologies or procurement requirements? (E.g., IOUs' investments in storage connected to distribution systems; or procurement necessary for local capacity requirements (see D.13-02-015).)
>
> 23. Should the PEL include a portfolio cost minimization strategy/framework? How would such a strategy be implemented as part of the PEL?
>
> 24. What is the role of "portfolio optimization" in implementing the PEL?" (ALJ's Ruling, p. 39).

The Commission must begin consideration of new and emerging technologies and energy storage procurement requirements by drawing a bright line between distribution and local capacity requirements that are within its jurisdiction, and transmission operations and system planning that are within the purview of the California Independent System Operator ("CAISO").

Only then can the Commission address cost containment of RPS-related interconnection costs, and related least-cost-best fit ("LCBF") RPS integration costs. As stated in the Amended Scoping Memo.[2]

> "Some of the issues in this proceeding (e.g., procurement expenditure limitation and revisions to LCBF methodology) are related to work in other proceedings, especially the LTPP proceeding (R.12-03-014) and the resource adequacy proceeding (R.11-10-023). While the OIR makes clear that this proceeding will not duplicate work in other proceedings, work to date suggests that there may be benefits associated with harmonizing RPS procurement authorization, RPS procurement expenditure limitations, and RPS LCBF methodology with LTPP portfolio design and system need authorization." (Amended Scoping Memo, 8).

Consistent with the guidance in the Amended Scoping Memo, and the ALJ's Ruling,[3] interconnection costs and integration benefits should be explicit inputs to the PEL framework discussed in the Staff Proposal. The Commission can use the data to tie the results directly to findings in the interrelated Long Term Procurement ("LTPP") and Resource Adequacy ("RA") proceedings as required by Public Utilities (P.U.) Code Section 399.15(c) and (d).[4] The relationship between LTPP and RPS is of course interactive because cost containment data tracks in both directions. Similarly, the Staff Proposal and the ALJ's Ruling call for interconnection-

[2] *Amended Scoping Memo and Ruling of Assigned Commissioner*, issued September 12, 2012.

[3] "In preparing their comments, parties should keep in mind general guiding principles for development of a procurement expenditure limitation. Such a limitation should: . . . Facilitate coordination and consistency between the RPS and the Commission's long-term procurement planning proceeding (LTPP). . . " (ALJ's Ruling, p. 7).

[4] "These sections mandate that: (c) The Commission shall establish a limitation for each electrical corporation on the procurement expenditures for all eligible renewable energy resources used to comply with the renewables portfolio standard. In establishing this limitation, the commission shall rely on the following: (1) The most recent renewable energy procurement plan. (2) Procurement expenditures that approximate the expected cost of building, owning, and operating eligible renewable energy resources." (ALJ's Ruling, p. 8).

related and transmission planning information about a utility's PELs to be considered in the development of RPS portfolios within the LTPP for purposes of RPS cost containment.[5]

II. THE COMMISSION SHOULD CLARIFY ITS JURISDICTION AND SUPPORT THE CAISO'S EFFORTS TO STREAMLINE ALL OF ITS INTERCONNECTION PROCESSES RELATED TO RPS-ELIGIBLE RESOURCES.

RPS-eligible projects, including those with energy storage systems, may be located at multiple points on the grid and provide a variety of grid-related products and services. Many of these services are subject to the Commission's jurisdiction, while others are under the jurisdiction of the California Independent System Operator ("CAISO"). The Commission-approved Electric Tariff Rule 21 ("Rule 21"), applicable to all of the utilities that are subject to the Commission's jurisdiction governs RPS-eligible generation resources that either provide net energy metering under the Commission's net energy metering ("NEM") program or export energy to the distribution grid operate under the Commission's jurisdiction, while other generation resources interconnected to the grid are under the jurisdiction of the CAISO. In order to facilitate cost-effective integration and operation of RPS-eligible projects, the Commission should better clarify its jurisdiction over projects that seek interconnection at the distribution level under each utility's Wholesale Distribution Access Tariff ("WDAT"). Clarification of how Rule 21 and WDAT should interact in the interconnection review and approval processes should be made as soon as possible. As these changes are being made, the Commission should also support and, where possible, collaborate with the CAISO to streamline all other processes related

[5]"One of the tasks within the Commission's LTPP proceeding is the development of "RPS Portfolios," which reflect a list of generating facilities and generic resources needed for California load serving entities to meet California's 33% RPS goal, under various scenarios. The purpose of developing RPS Portfolios is to better coordinate the State's resource planning and transmission planning efforts and to ensure that the transmission planning process includes a needs analysis necessary for the transmission permitting phase." (ALJ's Ruling, Footnote 9, p. 23).

to interconnection and integration of RPS-eligible projects, as well as counting distributed RPS-eligible resources for RA counting purposes.[6]

III. THE COMMISSION SHOULD SIMPLIFY ALL INTERCONNECTION RULES AND TARIFFS APPLICABLE TO ENERGY STORAGE FOR RPS-ELIGIBLE FACILITIES THAT ARE WITHIN THE COMMISSION'S JURISDICTION.

A. Interconnection Agreements Should Not Be Required At All For Non-Exporting Energy Storage Systems.

Non-exporting applications of storage systems are no different than any other energy-conserving device or appliance, so they should not be required to go through any interconnection process, including Rule 21. Non-exporting RPS-eligible generation resources coupled with energy storage systems are by definition co-located with load-bearing resources and customers, and therefore do not require any further physical interconnection. Accordingly, such RPS-eligible resources that are either integrated into or coupled with energy storage resources should not be required to go through any additional interconnection processes, including application for interconnection agreements under Rule 21.

B. Addition Of Storage To A Generation Facility Should Not Limit The Capability Of An Otherwise RPS-Eligible Facility To Be Net-Metered.

Energy storage resources do not change the fundamental nature of RPS-eligible generating facilities as renewable resources, so the addition of energy storage resources should not limit their RPS-eligible generating facilities' eligibility for existing or potential RPS-related programs and tariffs, including NEM. Energy storage resources co-located with RPS-eligible

[6] The CAISO also echoed this point in submitting comments in connection with the Federal Energy Regulatory Commission's July 17, 2012 technical conference involving a review of small generator interconnection agreements and procedures: "The Commission [FERC] should coordinate any proposed rulemaking in this proceeding with the CPUC's Rule 21 interconnection proceeding. As the Commission [FERC] is aware, a settlement is currently pending in CPUC Rulemaking 11-09-011 that would provide for refinements to the Rule 21 interconnection process. The settlement proposes changes to Rule 21 that overlap with issues the Commission is considering in this proceeding, including screens for developers to take advantage of a fast track interconnection process." (CAISO Comments, p. 5).

generation facilities have been found by the California Energy Commission ("CEC") to be an addition or enhancement to a renewable generation facility. Such energy storage may be charged from either the grid or from the renewable generation facility and as such, additional metering may be necessary to ensure that only energy generated by the renewable generation facility is credited under a NEM program. However, the ability of an energy storage facility to be charged from either the grid or from a renewable generation facility does not render the facility, inclusive of both the renewable generation and energy storage system, ineligible for participation in NEM. CESA thus recommends that the Commission clarify that the addition of energy storage to an RPS-eligible generation facility should not limit the capability of that facility to participate in NEM and to receive NEM credit for the renewable energy generated by the facility and exported to the grid.

C. Net Metering Of RPS-Eligible Facilities Should Be Explicitly Accommodated Under Both Rule 21 And Wholesale Distribution Access Tariff Processes.

All net-metered RPS-eligible facilities interconnected at the distribution level should enjoy the same benefits regardless of whether or not they are paired with energy storage. WDAT generators and generators interconnecting under the CAISO's Generator Interconnection Process ("GIP") need considerably greater clarity on the pertaining rules and tariffs applicable to net energy metering. Only coordinated evaluation mechanisms and clear market signals will ensure a competitive market for RPS-eligible resources that integrate, or are paired with, energy storage technology.

D. Interconnection Requirements Should Be Eliminated For All Net-Zero Interconnection Requests.

CESA recommends that the Commission adopt the concept of Net-Zero Interconnection Service ("NZ Interconnection Service") of the type currently in effect in the Midwest Independent System Operator's ("MISO's") balancing area. This would allow new

interconnection customers to connect generation capacity to the transmission system at the same point of interconnection (same station, same voltage) as an existing commercially operating generating facility without requiring interconnection agreements. As a result, this could allow an increase of gross generating capacity at the point of interconnection of the generation facility using energy storage without altering the net generation output at the point of interconnection to greater than the existing facility's capacity.[7]

E. Net-Zero Interconnection Requests Should Be Processed Independent Of Any Cluster-Type Interconnection Study Process.

Interconnection feasibility studies are, of course, designed to determine whether the distribution or transmission systems can accommodate the interconnection requested and whether a generation resource, with or without energy storage, can move directly to the next phase of the interconnection study process. Since NZ Interconnections have no impacts beyond the point of interconnection, they should be treated on a separate very fast track review process.

IV. UTILITIES SHOULD TAKE INTO FULL ACCOUNT OF ALL OF THE BENEFITS OF ENERGY STORAGE IN THE PROCUREMENT PROCESSES FOR RPS-ELIGIBLE GENERATION FACILITIES.

A. Greenhouse Gas Reduction, T&D Upgrade Deferral, Frequency Regulation, Peak Load Shifting, Spinning And Non-Spinning Reserves Should All Be Considered In Such Processes.

Public Utilities ("P.U.) Code Section 399.14 requires utilities to select RPS-eligible projects in procurement based on the value to the utility and its ratepayers. The law also requires the Commission to consider estimates of indirect costs associated with the project, including new transmission investments and ongoing utility expenses resulting from integrating and operating renewable energy resources. CESA urges the Commission to explore a much-needed expansion

[7] This would be comparable to MISO's BAA – http://www.ferc.gov/EventCalendar/Files/20120330170713-ER12-309-000.pdf

of these considerations to include new benefits that RPS- eligible resources integrated or paired with energy storage can solve as well as (if not better than) competing fossil fuel resources. As discussed in the Commission's energy storage rulemaking proceeding[8], energy storage assets can play an important role in grid resiliency as well as facilitating the state's greenhouse gas ("GHG") emission mitigation efforts. These and all other identified services should be fully accounted for at each step of the Commission's RPS procurement processes.

B. LCBF Analysis Specific To Treatment Of Storage Should Be Addressed In Detail By The CPUC In This Proceeding As Soon As Possible.

CESA recognizes that LCBF reform is within the scope of the Commission's RPS program revisions this year. CESA will need to, and certainly will, work closely with the Commission, and the Commission's staff in that context because current LCBF analysis omits a number benefits that energy storage will bring to create additional value from existing RPS-eligible generation capacity. This topic should also be addressed proactively in the workshop to be scheduled as the next step in the cost containment focused stage of this proceeding.

C. Value Creation And Cost Minimization Strategies Should Be Implemented On A Portfolio Basis.

As an extension of LCBF analysis, this proceeding should produce a new cost containment-focused methodology for evaluating RPS-eligible resources in the context of a demand, supply, and load portfolio. This would require utilities to determine how new RPS-eligible generation may affect their entire portfolio in the context of case-by-case review of specific RPS-eligible projects. LCBF analysis should therefore have two levels. First LCBF analysis should have a project-specific analysis with an extended scope to include GHG emissions, T&D deferral, and other benefits of energy storage as discussed above. Second, from a portfolio perspective, the Commission should support utilities' efforts to integrate updated

[8] R.10-12-007.

evaluation tools and encourage stochastic modeling to support RPS, LTPP, and RA program goals.

V. COUNTING OF RPS-ELIGIBLE FACILITIES SHOULD BE ADDRESSED IN THIS PROCEEDING IN PARALLEL WITH THE RESOURCE ADEQUACY PROCEEDING.

As pointed out in the Proposed Decision in Phase II of the energy storage rulemaking proceeding, energy storage resources integrated or paired with RPS-eligible facilities enable and greatly enhance deliverability and dispatchability of energy from those facilities.[9] Deliverability is a significant benefit provided by various forms of energy storage both on a project-specific and on a portfolio basis, as discussed above. CESA thus recommends that the Commission work collaboratively with the CAISO to explicitly account for energy storage in assignment of RA deliverability status to RPS-eligible facilities, and appropriately value their deliverability capabilities.

VI. CONCLUSION.

CESA thanks the Commission for its consideration of these comments.

Respectfully submitted,

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September 26, 2013

[9] "As part of the evaluation of the various use-case scenarios, Phase 2 would take into account related activities in other Commission proceedings, including Resource Adequacy (RA), Long-Term Procurement Planning (LTPP), and the Renewables Portfolio Standard (RPS) Program,3 so that there was a consistent and coordinated overall policy with respect to procurement of storage and how it is counted for resource adequacy purposes." (*Proposed Decision Adopting Energy Storage Framework and Design Program*, issued September 3, 2013, p. 4).

VERIFICATION

I, Don Liddell, am counsel for the California Energy Storage Alliance, and am authorized to make this Verification on its behalf. I declare under penalty of perjury that the statements in the foregoing copy of Comments of the California Energy Storage Alliance on Administrative Law Judge's Ruling, filed in R.11-05-005, are true of my own knowledge, except as to matters which are therein stated on information or belief, and as to those matters I believe them to be true.

Executed on September 26, 2013 at San Diego, California.

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