BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

Order Instituting Rulemaking to Integrate and Refine Procurement Policies and Consider Long-Term Procurement Plans.

Rulemaking 12-03-014 Filed March 12, 2012

COMMENTS OF THE CALIFORNIA ENERGY STORAGE ALLIANCE ON PROPOSED DECISION AUTHORIZING LONG-TERM PROCUREMENT FOR LOCAL CAPACITY REQUIREMENTS

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BEFORE THE PUBLIC UTILITIES COMMISSION

OF THE STATE OF CALIFORNIA

Order Instituting Rulemaking to Integrate and Refine Procurement Policies and Consider Long-Term Procurement Plans. Rulemaking 12-03-014 Filed March 22, 2012

COMMENTS OF THE CALIFORNIA ENERGY STORAGE ALLIANCE ON PROPOSED DECISION AUTHORIZING LONG-TERM PROCUREMENT FOR LOCAL CAPACITY REQUIREMENTS

In accordance with Rule 14.3 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 proposed *Decision Authorizing Long-Term Procurement for Local Capacity Requirements* issued by Administrative Law Judge David M. Gamson on December 21, 2012 ("Proposed Decision").

I. <u>INTRODUCTION.</u>

CESA's mission is to make energy storage a mainstream energy resource that accelerates the adoption of renewable energy technology and promotes a more efficient, reliable, affordable, and secure electric power system. CESA therefore applauds the broad policy direction envisioned by the Proposed Decision for procurement of local capacity by investor owned

¹ The California Energy Storage Alliance consists of A123 Systems, Beacon Power, Bright Energy Storage Technologies, CALMAC, Chevron Energy Solutions, Christenson Electric, Inc., Clean Energy Systems, Inc., Deeya Energy, DN Tanks, East Penn Manufacturing Co., Energy Cache, EnerVault, Flextronics, Fluidic Energy, GE Energy Storage, Green Charge Networks, Greensmith Energy Management Systems, Growing Energy Labs, HDR Engineering, Ice Energy, Innovation Core SEI, Kelvin Storage Technologies, LG Chem, LightSail Energy, NextEra Energy Resources, Panasonic, Primus Power, Prudent Energy, RedFlow Technologies, RES Americas, Saft America, Samsung SDI, Seeo, Sharp Labs of America, Silent Power, SolarCity, Stem, Sumitomo Corporation of America, SunEdison, SunVerge, 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

utilities in California. CESA's comments are supportive of the major conclusions and recommendations included in the Proposed Decision in the main regarding the local capacity requirement ("LCR"). However, CESA does not presume to either debate the policy positions or technical issues that are discussed or challenge the subject matter expertise of the Commission's Energy Division, the California Independent System Operator ("CAISO"), the California Energy Commission ("CEC"), or Southern California Edison ("SCE") related to the amount of capacity needed or the Proposed Decision's range of megawatts to be procured.

CESA's comments in this proceeding are intended to complement and buttress its support for the Commissions substantial parallel efforts presently underway to implement the intent of the California's legislature to encourage energy storage technology in enacting Assembly Bill (AB) 2514² in the Energy Storage Rulemaking (R.10-12-007).³ Accordingly, CESA reserves the right to provide further appropriate input based on ongoing developments in the Energy Storage Rulemaking and elsewhere to inform all of the Commission's substantive decisions that relate to energy storage. By the same token, CESA expresses no opinion on issues related to cost causation or cost allocation methodologies that are presently being examined generically on a stand-alone basis by the Commission in another active proceeding.⁴

² Assembly Bill (AB) 2514 (Stats. 2010, ch. 469).

³ Order Instituting Rulemaking Pursuant to Assembly Bill 2514 to Consider the Adoption of Procurement Targets for Viable and Cost-Effective Energy Storage Systems, R10-12-007, filed December 16, 2010.

⁴ Petition of the Marin Energy Authority, Alliance for Retail Energy Markets, City and County of Santa Cruz, Climate Protection Campaign, Constellation New Energy, Inc., Direct Access Customer Coalition, Direct Energy, LLC, Energy Users Forum, IGS Energy, Retail Energy Supply Association, Sam's West, Inc., Shell Energy North America (US), L.P., South San Joaquin Irrigation District, Texas Retail Energy, LLC, and Wal-Mart Stores, Inc. to Adopt, Amend, or Repeal a Regulation Pursuant to Pub. Util. Code § 1708.5, P.12-12-010, filed December 18, 2012.

II. <u>CESA SUPPORTS THE PROPOSED DECISION'S ANALYSIS AND CONCLUSIONS REGARDING LONG-TERM LOCAL CAPACITY REQUIREMENTS FOR THE LA BASIN AND THE BIG CREEK/VENTURA LOCAL AREAS.</u>

The Proposed Decision fully and fairly discusses the authoritative sources of information and recommendations by subject matter experts that were considered in analysis of the range of credible scenarios considered and system implications of the evidence in the record as a whole. CESA is therefore confident that that any specific criticism of the Proposed Decision's conclusions regarding need for LCR should best be left to other interested parties.

A. The Range of Projected Need for Local Capacity is Sufficiently Broad to Justify the Reasonableness of Amounts and Types of Energy Resources to be Procured Within the Upper and Lower Ends of the Range Authorized by the Proposed Decision.

The Proposed Decision freely acknowledges that reasonable parties will always disagree in the near term as to the best assumptions to use to project need for energy resources in the long term, and correctly observes that an evaluation of whether more or less energy resources may be needed will be taken up in the next long-term procurement proceeding that will commence in 2014. CESA concurs with the pragmatic approach espoused by the Proposed Decision: "We consider today's decision a measured first step in a longer process. If as much or more of the preferred resources we expect do materialize, there will be no need for further LCR procurement based on current assumptions. If circumstances change, there may be a need for further LCR procurement in the next long-term procurement proceeding. We are confident that today's decision is the appropriate and considered step at this time." (p. 4). CESA agrees with this perspective.

B. Any Proposal to Consider a Need for Local Capacity of Zero or Defer Any Determination of an Authorized Range of Procurement to "Wait and See" What The Future May Hold Should Be Rejected.

However well intended they may be, calls by parties to defer any determination of LCR at this time should be firmly rejected. The Proposed Decision charts exactly the right course:

"Our intent is to neither authorize over-procurement nor under-procurement. However, the procurement process is of necessity imperfect because it relies on future forecasts. One benefit of a long planning horizon is the opportunity to adjust to the inevitable changes in circumstances. We will balance the potential for lost or limited opportunities to procure certain resources with long lead times against the opportunities to reconsider circumstances in the future [Footnotes deleted]." (pp. 37-38).

CESA need not take a position on whether or not the risks over or under procurement symmetrical, although the potential consequences in terms of lost opportunity costs in "keeping the lights on" clearly are, but notes that energy storage deployment is the ideal way to mitigate the risk of significant error in either direction. There should be no need for a mathematically precise metric if full advantage is taken of the flexibility that energy storage provides. In other word procurement of sufficient energy storage eliminates the need to position the perfect as the enemy of the good in projecting and determining LCR. The record is clear that inaction is not a credible policy option.

III. CESA SUPPORTS THE PROPOSED DECISION'S ANALYSIS AND CONCLUSIONS REGARDING PROCUREMENT OF ENERGY STORAGE RESOURCES.

CESA agrees with and supports competitive market policies. Encouragement of accelerated deployment of energy storage resources will move California forward to greater energy resource portfolio diversity and increased competition from a variety of alternate solutions by reducing barriers to market entry for energy storage. The Commission should avoid picking technology winners and losers, because competition will do that much more effectively, and will be much more consistent with the Commission's competitive market policies. To achieve this goal, the Proposed Decision provides a very modest step forward to investor owned utilities overcome an ingrained negative bias against widespread deployment of energy storage technology.

A. The Requirement that SCE Must Procure at Least 50 MW of Energy Storage Resources is Well Within the Commission's Authority to Implement AB 2514.

Requiring the investor owned utilities to procure at least 50 MW of cost-effective energy storage is reasonable and entirely consistent with the Commission's need to balance important California policy goals. Moreover, it is directionally consistent with the Commissions efforts in the Energy Storage Rulemaking. AB 2514 directed the Commission to open the Energy Storage Rulemaking, and it *also* directed the Commission to not consider itself constrained by the statute. The 50 MW minimum procurement requirement is a very modest goal, consistent with the approach taken by the Commission regarding "preferred resources" that sends a critical market readiness signal to industry and puts the Commission's commitment to early and objective validation signal.

B. Authorizing the Flexibility for SCE to Procure More Than 50MW of Energy Storage Resources is also Consistent with Procurement Options Proposed by the Commission's Energy Division in the Energy Storage Rulemaking.

On January 4, 2012, the Energy Division Staff published an Interim Staff Report to the Service List in the Energy storage Rulemaking that announce the manner in which the evaluation of potential procurement targets will be pursued.⁷ Among the options to be considered are a "Portfolio Approach": "Setting aside a dynamically adjusted portion of procurement for Local Capacity Requirements (LCR) or System need determination for "preferred" resources, specifically including storage (this could also be referred to as the "portfolio" approach). This approach would need to be executed in coordination with resource authorization actions taken primarily in the LTPP proceeding. (p. 19). CESA submits that the Proposed Decision constitutes the first "measured step" in implementation of

⁵ Public Utilities Code Section 2836(a)(4) "Nothing in this section prohibits the commission's evaluation and approval of any application for funding or recovery of costs of any ongoing or new development, trialing, and testing of energy storage projects or technologies outside of the proceeding required by this chapter."

⁶ The Commission should be indifferent to whether energy storage is or is not deemed a "preferred resource" in this proceeding, and the Proposed Decision reflects this approach.

⁷ Energy Storage Phase 2 Interim Staff Report, January 4, 2013.

the Portfolio Approach" described by the Energy Division Staff. Fully recognizing that this is a novel approach that combines the existing statutory scheme described in the Proposed Decision that is in place to today with intent of the legislature in enacting AB 2514, CESA supports the direction emerging from both the Energy Storage Rulemaking and this proceeding.

IV. <u>CESA SUPPORTS THE PROPOSED DECISION'S ANALYSIS AND CONCLUSIONS REGARDING THE LOCAL CAPACITY REQUIREMENT PROCUREMENT PROCESS.</u>

A. SCE Should be Required to Assess and Implement All Ways to Procure Cost-Effective and Available Energy Storage Resources to Reduce LCR Needs.

CESA has consistently advocated for SCE's version of a "portfolio approach in this proceeding and continues to do so. The Commission should enable all of California's investorowned utilities to utilize a "portfolio approach" to procurement that allows them to procure energy resources that provide one specific service to the grid, such as frequency regulation, if that resource provides an overall system benefit. The California legislature has found and declared that: (a) Energy storage systems can help integrate increased amounts of renewable energy resources into the electrical transmission and distribution grid in a manner that minimizes emissions of greenhouse gases; (b) Energy storage systems can optimize the use of the significant additional amounts of variable, intermittent, and off peak electrical generation from wind and solar energy that will be entering the California power mix on an accelerated basis; (c) Expanded use of energy storage systems can reduce costs to ratepayers by avoiding or deferring the need for new fossil fuel-powered peaking power plants and avoiding or deferring distribution and transmission system upgrades and expansion of the grid; (d) Expanded use of energy storage systems will reduce the use of electricity generated from fossil fuels to meet peak load requirements on days with high electricity demand and can avoid or reduce the use of electricity generated by high carbon-emitting electrical generating facilities during those high electricity demand periods, which will have substantial co-benefits from reduced emissions of criteria pollutants; (e) Use of energy storage systems to provide the ancillary services otherwise provided by fossil-fueled generating facilities will reduce emissions of carbon dioxide and criteria pollutants.⁸

Additionally, the Federal Energy Regulatory Commission ("FERC") has found that utilization of energy storage resources can reduce the total amount of regulation service that needs to be procured to reliably manage the grid, provide the grid operator increased flexibility to deal with system imbalances and variability, and reduce overall emissions, thus providing cost, reliability and environmental benefits for ratepayers. A study requested by the California Energy Commission ("CEC") found that a 30-50 MW fast-response storage device could provide as much or more regulation capability than a 100 MW combustion turbine. Using energy storage to provide ancillary services also frees up traditional generation resources to provide energy to the system.

Using a portfolio approach will enable a more efficient, cost-effective, and clean system that maintains enough capacity, produces enough energy, and secures sufficient ancillary services to meet California's policy goals and electric demand and reliability requirements. CESA urges the Commission to encourage SCE to use a broad portfolio of resources, with potentially a variety of energy storage technologies, to meet its local capacity needs.

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⁸ AB 2514, Section 1.

⁹ See, e.g., Frequency Regulation Compensation in the Organized Wholesale Power Markets, Order No. 755, 137 FERC ¶ 61,064 (2011).

¹⁰ Research Evaluation of Wind Generation, Solar Generation, and Storage Impact on the California Grid, Study by KEMA, Inc., done for California Energy Commission funded via the Public Interest Energy Research Program (PIER), June, 2010, at p. 6.

B. SCE Should Procure Cost-Effective and Available Energy Storage Resources in Preference to Fossil-Fueled Generation Resources With Comparable Performance Characteristics.

CESA certainly agrees with the Proposed Decisions statement of the general policy principle that fossil-fuel energy resources should be the least favored of available energy resource options: "The record shows that there may be a significant amount of energy storage capacity and/or demand reduction from demand response resources in the next several years which are not included in any ISO model. We have determined that a significant amount of these resources may be available to meet or reduce LCR needs by 2021, even beyond the projections in the ISO models. We recognize there may be barriers to integration of these resources, including technical issues regarding whether such resources can meet ISO LCR criteria. At the same time, the prospect of additional resources to meet or reduce LCR needs provides an opportunity to further our Energy Action Plan through additional procurement of resources other than conventional gas-fired generation." (p. 79). CESA is very pleased to note that the Proposed Decision includes a list of evaluation elements that should be included in any competitive procurement, and should include in particular "(j) An assessment of projected greenhouse gas emissions as part of the cost/benefit analysis." (p. 88).

C. SCE Should be Authorized to Fill any "Gap" Between its Current Distributed Generation Authority and 1,519 MW of Distributed Generation With Energy Storage Resources.

In discussing distributed generation, The Proposed Decision neglects in a single instance to specifically refer to energy storage as on a par with preferred resources, as it does everywhere else that reference is made to emphasis on resources shat should be preferred before recourse to procurement of traditional generation resources.¹¹ CESA interprets from the context and the

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¹¹ p. 76.

language of the Proposed Decision taken at a whole that this omission is simply a drafting oversight.

V. <u>CONCLUSION.</u>

CESA appreciates the opportunity to provide these comments for the Commission's consideration.

Respectfully submitted,

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CALIFORNIA ENERGY STORAGE ALLIANCE

January 14, 2013