CESA
CALIFORNIA ENERGY STORAGE ALLIANCE

December 26, 2011

DOCKET
11-IEP-1A
DATE Dec.26 2011
RECD. Dec.27 2011

E-mail to docket@energy.state.ca.us

Presiding Member: Robert B. Weisenmiller
Associate Member: Karen Douglas

Original copy to
California Energy Commission
Docket Office, MS-4
Re: Docket 11-IEP-1
1516 Ninth Street
Sacramento, CA 95814-5512

Re: **Comments of the California Energy Storage Alliance on Lead Commissioner Draft *2011 Integrated Energy Policy Report***
Docket No.: 11-IEP-1A

Dear Commissioner Weisenmiller and Associate Member Douglas:

The California Energy Storage Alliance ("CESA") appreciates this opportunity to comment on the Lead Commissioner Draft 2011 Integrated Energy Policy Report ("2011 IEPR Draft"). CESA has actively engaged in the Energy Commissions 2011 IEPR proceeding and respectfully submits that the time is ripe for the Energy Commission to: substantially ramp up its efforts to educate stakeholders, including other regulators, and the general public, to highlight the essential role energy storage must play in transforming the future of California's infrastructure and energy policy.[1] CESA further submits that the Energy Commission should go well beyond education, and proactively carry out the role assigned to it by the legislature to affirmatively shape and drive deployment of energy storage technologies.

I. THE ENERGY COMMISSION SHOULD CLEARLY EMPHASIZE ITS SUPPORT FOR THE TRANSFORMATIONAL ROLE OF ENERGY STORAGE IN THE 2011 IEPR.

There appears to be only one substantive reference to energy storage in the 2011 IEPR Draft:

> "Energy storage can provide a variety of integration services, but additional evaluation is needed about cost-effectiveness, appropriate targets, and specific technologies to determine which can provide the rapid response and operational flexibility needed to provide regulation and load following." (p. 39).

The Energy Commission *has* included considerably more extensive discussion of the role of energy storage in integration of renewable resources in a separate report devoted exclusively on the subject of renewable power,[2] but the sum total message of both documents is to understate the cross-cutting and pervasive societal influence that energy storage will soon have in California's future. The apparently

[1] *See, Comments of the California Energy Storage Alliance on Revised Committee Draft Scoping Order,* March 3, 2011.
[2] *2011 Renewable Power in California: Status and Issues*. California Energy Commission, December 2011, Publication No. CEC-150-2011-002LCF.

incomplete and fragmented message conveyed by the Energy Commission seems unintended, and CESA is confident that it can be readily refocused.

The Energy Commission is certainly aware that a partial list of well-understood applications of energy storage for residential, commercial, and industrial customers including the following:

- Time-of-use energy cost management:
- Demand charge management
- Demand response
- Permanent load shifting
- Onsite renewable integration
- Onsite renewable generation shifting
- Retail participation in ancillary services
- UPS replacement
- Power Quality (10 Seconds)
- Emergency backup (islanding)

There are also many utility applications, including the following:

- Electric Supply
  - Electric Energy Time Shift
  - Electric Supply Capacity
- Ancillary Services
  - Load Following
  - Frequency Regulation
  - Electric Supply Reserve Capacity
  - Voltage Support
- Grid Operations
  - Transmission Support
  - Transmission Congestion Relief
  - Reliability
  - Power Quality
- T&D Upgrade Deferral
  - Stationary
  - Transportable
- Renewable Integration (Solar and Wind)
  - Ramping
  - Firming
  - Over-generation
  - Generation shifting
  - Frequency Regulation
  - Distribution upgrade deferral due to renewables or EVs

II. THE ENERGY COMMISSION SHOULD ADVANCE ENERGY STORAGE TECHNOLOGY BY PROACTIVELY IMPLEMENTING AB 2514.[3]

On December 16, 2010 (before AB 2514 became effective on January 1, 2011), the California Public Utilities Commission ("CPUC") opened the rulemaking proceeding it was required to open by March 1, 2012.[4] In opening the rulemaking over a year before it had to the CPUC said:

> "We also open this proceeding on our own motion to initiate policy for California utilities to consider the procurement of viable and cost-effective energy storage systems. Although the Legislature has given the Commission until March 1, 2012 to open this proceeding, we see the enactment of AB 2514 as an important opportunity for this Commission to continue its rational implementation of advanced sustainable energy technologies and the integration of intermittent resources in our electricity grid." (p. 1).

The Energy Commission is well aware of the critical role it is required to fulfill in implementation of AB 2514, and it must act now if it is to exercise needed leadership in marshaling the efforts of California's local publicly owned utilities.[5] Local publicly owned electric utilities serving end use customers must, on or before March 1, 2012, initiate a process to determine appropriate targets, if any, to procure viable and cost-effective energy storage systems to be achieved by December 31, 2016, and December 31, 2021. The Energy Commission must, in reviewing the plans and reports submitted by public electric utilities, consider the integration of technologically viable and cost effective energy storage technologies with other programs, including demand side management, and other means that will result in the most efficient use of electricity generation and load management resources.

III. THE ENERGY COMMISSION SHOULD AGGRESSIVELY ADVANCE ENERGY STORAGE BY USING THE AUTHORITY IT HAS UNDER THE WARREN-ALQUIST ACT.

The Energy Commission has yet to scratch the surface of the statutory authority it has had for many years under the Warren-Alquist Act to promote deployment of energy storage. The Legislature recognized the critical role of energy storage when it passed the Warren-Alquist Act in 1976, creating the Energy Commission. At that time, the Legislature directed the Energy Commission to "adopt a program of electrical load management [that] shall consider. . . *End use storage systems* which store energy during off-peak periods for use during peak periods." (Public Resources Code Section 25403.5). In fact built the role for storage into the statute's various definitions of eligible renewables (including Public Resources Code Sections 26500, 25619, 25620, 25647), as well as important sections of the Government Code and the Public Utilities Code, and explicitly instructed the Energy Commission to pursue "projects that have the potential to enhance the reliability, peaking power, and *storage capabilities* of renewable energy." (Public Resources Code Section 25620.1).

In its 2007 IEPR proceeding, the Energy Commission acknowledges the breadth of its authority and spoke directly to energy storage as a load management technique as follows:

---

[3] Assembly Bill 2514(Skinner,) Statutes, 2010 – Chapter 469.

[4] R.10-12-007.*Order Instituting Rulemaking Pursuant to Assembly Bill 2514 to Consider the Adoption of Procurement Targets for Viable and Cost-Effective Energy Storage Systems, issued*, December 16, 2010.

[5] *See, CESA 's Comments on the IEPR Committee's Scoping Memo*, December 17, 2010.

> "Public Resources Code § 25403.5 gives the Energy Commission the authority to adopt electricity load management standards for each utility service area. The statute identifies several techniques that the Energy Commission must consider, but it does not limit the Commission's authority to the techniques identified. These techniques include: 1. Adjustments in rate structure to encourage use of electrical energy at off-peak hours or to encourage control of daily electrical load. Compliance with those adjustments in rate structure shall be subject to the approval of the Public Utilities Commission in a proceeding to change rates or service. 2. End use storage systems that store energy during off-peak periods for use during peak periods." (pp. 2-3).[6]

The 2007 IEPR recognized the importance of load management standards and recommended that the Energy Commission institute a formal process to pursue the adoption of load management standards in 2008. (p. 1). In fact, the Energy Commission *did* open a formal rulemaking proceeding to exercise its sweeping authority to set load management standards.[7] Unfortunately, Rulemaking 2008-DR-01 has been inactive since 2008. CESA submits that the Energy Commission should return to where it left off with that inexplicably dormant proceeding.

IV. CONCLUSION.

CESA looks forward to continuing to work with the Energy Commission and stakeholders in this important proceeding.

Respectfully,

Janice Lin
Cofounder and Executive Director, California Energy Storage Alliance

cc: Suzanne Korosec, CEC, Assistant Director for Policy Development,
via e-mail: skorosec@energy.state.ca.us

[6] *See, Notice of Joint Committee Workshop on California's Demand Response and the Load Management,* April 5, 2007, *see also Notice of Committee Workshop on Demand Response and the Energy Commission's Load Management Authority,* May 25, 2007.
[7] *Informational and Rulemaking Proceeding on Demand Response Rates, Equipment, and Protocols*, Docket Number 2008-DR-01, Order Number 08-010210, January 2, 2008.