

**BEFORE THE PUBLIC UTILITIES COMMISSION  
OF THE STATE OF CALIFORNIA**

Order Instituting Rulemaking Pursuant to Assembly  
Bill 2514 to Consider the Adoption of Procurement  
Targets for Viable and Cost-Effective Energy  
Storage Systems

R.10-12-007  
(Filed December 16, 2010)

**COMMENTS OF THE ALLIANCE FOR RETAIL ENERGY MARKETS  
AND THE MARIN ENERGY AUTHORITY**

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**ALLIANCE FOR RETAIL ENERGY MARKETS**  
**MARIN ENERGY AUTHORITY**

February 4, 2013

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The Alliance for Retail Energy Markets<sup>1</sup> (“AREM”) and the Marin Energy Authority<sup>2</sup> (“MEA”) submit these comments in accordance with the *Administrative Law Judge’s Ruling Entering Interim Staff Report into Record and Seeking Comments* (“Ruling”), issued on January 18, 2013 by Administrative Law Judge Amy C. Yip-Kikugawa. The Ruling offered parties the opportunity to provide comments on the Interim Staff Report and respond to questions posed in Section 9.2 of the report. The Interim Staff Report<sup>3</sup> further requests that parties provide comments on the presentations and discussion at the January 14, 2013 workshop held by Energy Division staff.<sup>4</sup>

**I. INTRODUCTION**

Assembly Bill (“AB”) 2514, enacted in 2010, required the Commission “to open a proceeding to determine appropriate targets, if any, for each load-serving entity to procure viable

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<sup>1</sup> The Alliance for Retail Energy Markets is a California non -profit mutual benefit corporation formed by electric service providers that are active in the California’s direct access market. This filing represents the position of AREM, but not necessarily that of a particular member or any affiliates of its members with respect to the issues addressed herein.

<sup>2</sup> MEA is the not -for-profit public agency that administers the Marin Clean Energy community choice aggregation (“CCA”) program. MEA launched electricity service to customers in May 2010. It is the first operating CCA program in the state of California. MEA currently serves over 90,000 customers – the majority of which are residential and small commercial.

<sup>3</sup> *Energy Storage Phase 2 Staff Report* (“Interim Staff Report”), Attachment A, January 18, 2013 Ruling.

<sup>4</sup> Interim Staff Report, p. 30.

and cost-effective energy storage systems to be achieved by December 31, 2015, and December 31, 2020.”<sup>5</sup> AB 2514 goes on to require the following:

In adopting and reevaluating appropriate energy storage system procurement targets and policies pursuant to subdivision (a) of Section 2836, the commission shall do all of the following:

- (a) Consider existing operational data and results of testing and trial pilot projects from existing energy storage facilities.
- (b) Consider available information from the California Independent System Operator derived from California Independent System Operator testing and evaluation procedures.
- (c) Consider the integration of energy storage technologies with other programs, including demand-side management or other means of achieving the purposes identified in Section 2837 that will result in the most efficient use of generation resources and cost-effective energy efficient grid integration and management.
- (d) Ensure that the energy storage system procurement targets and policies that are established are technologically viable and cost effective.<sup>6</sup>

In the event any procurement targets were to be established by the Commission, AB 2514 further requires that the inclusion of energy storage in the procurement plans of the Investor Owned Utilities (“IOUs”) must:

address the acquisition and use of energy storage systems in order to achieve the following purposes:

- (a) Integrate intermittent generation from eligible renewable energy resources into the reliable operation of the transmission and distribution grid.
- (b) Allow intermittent generation from eligible renewable energy resources to operate at or near full capacity.
- (c) Reduce the need for new fossil-fuel powered peaking generation facilities by using stored electricity to meet peak demand.
- (d) Reduce purchases of electricity generation sources with higher emissions of greenhouse gases.
- (e) Eliminate or reduce transmission and distribution losses, including increased losses during periods of congestion on the grid.

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<sup>5</sup> See Public Utilities Code Section 2836(a)(1).

<sup>6</sup> See Public Utilities Code Section 2836.2.

- (f) Reduce the demand for electricity during peak periods and achieve permanent load-shifting by using thermal storage to meet air-conditioning needs.
- (g) Avoid or delay investments in transmission and distribution system upgrades.
- (h) Use energy storage systems to provide the ancillary services otherwise provided by fossil-fueled generating facilities.<sup>7</sup>

These jointly filed comments of AReM and MEA focus on demonstrating that there has yet to be an adequate determination that specific procurement targets are appropriate for load-serving entities (“LSEs”) in compliance with AB 2514.

## **II. COMMENTS**

### **A. Procurement Targets Are Inappropriate.**

The introductory section provides clear marching orders for the Commission with respect to energy storage. Compliance with those marching orders will ensure that specific energy storage targets will be adopted only if and when such resources are demonstrated to produce benefits that are commensurate with other supply-side resources. Most importantly, as noted in the Interim Staff Report, AB 2514 also clearly permits the Commission to determine that “no target level is appropriate.”<sup>8</sup>

While the energy storage proceeding to date has been informative, it has also affirmed that “energy storage” includes a number of different technology types at different stages of development and cost effectiveness. In the January 14th workshop, presenters described several applications of energy storage technology that have been successfully deployed or tested in a pilot program, but some for electrically remote locations (*i.e.*, Alaska and Hawaii) and others, relatively small scale.<sup>9</sup> In addition, the CAISO outlined its technology-neutral approach and

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<sup>7</sup> See Public Utilities Code Section 2837.

<sup>8</sup> Interim Staff Report, p. 19.

<sup>9</sup> January 14, 2013 workshop presentations by Jack Ellis, AES Energy Storage and San Diego Gas & Electric Company.

made clear that energy storage resources are free to participate in its energy and ancillary services markets, but must meet all of applicable tariff requirements.<sup>10</sup> The Interim Staff Report and Energy Division Staff's presentation at the January 14th workshop confirmed that determining cost-effectiveness of energy storage technologies is a significant challenge that is far from completed.<sup>11</sup> In the views of AReM and MEA, the record in this proceeding does not demonstrate, as required by AB 2514, that LSE procurement targets are appropriate at this time.<sup>12</sup>

AReM and MEA note that the IOUs concur that energy storage procurement targets are inappropriate. As outlined in the IOUs' presentations at the January 14th workshop:

- Procurement targets should only be adopted as a last resort if (1) regulatory barriers cannot be resolved, (2) unfair competitive markets cannot be reformed, or (3) utility procurement rules cannot be made neutral.<sup>13</sup>
- It is inappropriate, premature and difficult to establish a proper and cost-effective deployment level; the Commission should avoid burdening customers with the cost of uneconomic storage installed simply to meet a mandate.<sup>14</sup>
- Procurement should be technologically neutral, where all technologies compete on an equal footing.<sup>15</sup>
- Special treatment for storage must clearly articulate the regulatory or market failure, and why that failure cannot be resolved; without such justification, special treatment for storage constitutes a ratepayer-funded subsidy to the developer.<sup>16</sup>

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<sup>10</sup> January 14, 2013 workshop presentation by CAISO.

<sup>11</sup> Interim Staff Report, pp. 19 and 21.

<sup>12</sup> AReM notes that P.U. Code § 2836 (a) (3) requires the Commission to reevaluate its determinations every three years.

<sup>13</sup> Presentation of Southern California Edison Company, January 14, 2013, slide 8.

<sup>14</sup> Presentation of San Diego Gas & Electric Company, January 14, 2013, slide 3.

<sup>15</sup> Presentation of Pacific Gas and Electric Company, January 14, 2013, slide 4.

Interest in energy storage devices by retail end-use customers, including the many large commercial and industrial customers enrolled in direct access, as well as the many residential and small commercial customers enrolled in CCAs, will play an important role in the market for the technology – a point noted by San Diego Gas & Electric Company at the January 14th workshop.<sup>17</sup> Electric service providers (“ESPs”) are in the business of meeting their direct access customers’ needs. CCAs provide cities and towns with the choice to purchase generation services for their residents and businesses from an alternative supplier to the default IOU and are able to tailor their generation products to better meet customer needs and local priorities. Both ESPs and CCAs plan to work closely with their customers exploring energy storage systems to enhance their energy management options. For example, MEA is already working with several of its customers interested in implementing energy storage systems. AReM and MEA believe that the energy storage market will grow and expand naturally – without procurement targets – as those technologies are increasingly able to meet reliability and operational needs, and as they become economically feasible and efficient.

**B. Most of the Proposed Procurement Options Are Either Problematic or Require More Work.**

The Interim Staff Report requests comments<sup>18</sup> on the four “Procurement Options” identified by Staff:

1. Procurement targets based on a fixed percentage of each LSE’s load as a MW amount or requiring procurement of a specific energy storage application;
2. Pilots or market tests focused on a specific application or end use to develop tools for cost-effectiveness analysis;

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<sup>16</sup> Presentation of Southern California Edison Company, January 14, 2013, slide 11.

<sup>17</sup> Presentation of San Diego Gas & Electric Company, January 14, 2013, slide 3.

<sup>18</sup> Interim Staff Report, Section 9.2, p. 30.

3. Portfolio approach to be implemented through the Long-Term Procurement Plans (“LTPP”) proceeding, in which a “dynamically-adjusted” portion of Local or System RA needs would be set aside for procurement of “preferred resources, ” including energy storage; and
4. No procurement target.<sup>19</sup>

For the reasons discussed above, AReM and MEA urge the Commission to recognize that establishing any procurement target at this time would be premature and inconsistent with the requirements of AB 2514.

Nevertheless, should the Commission consider adoption of Option 1 -- LSE procurement targets -- considerable additional effort is required to structure both the target and the associated compliance requirements. AReM and MEA envision an effort similar to that undertaken by the Commission when RA requirements were first imposed on LSEs in 2005, which took many months and lengthy workshops to complete. For example, if the Commission intends to impose a MW procurement target, the required tasks include: (1) defining how targets will be calculated for each LSE or type of LSE and whether they will change over time; (2) specifying the LSEs’ compliance requirements, including each LSE’s time frame for meeting the target; and (3) if deemed applicable, the Commission’s enforcement mechanism. There is nothing currently in the record to address these key considerations. Moreover, the Commission must also establish appropriate flexible procurement mechanisms that address the needs of the ESPs and CCAs, both of whom operate in a highly competitive environment unlike the monopoly world of the IOUs. Furthermore, implementation of any energy storage procurement targets must also comply with recent statutory modifications introduced by Senate Bill (“SB”) 790 with regard to a CCA’s right

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<sup>19</sup> Interim Staff Report, p. 19; January 14, 2013 presentation of Energy Division Staff, slide 8.

to control its own procurement obligations (Public Utilities Code Section 366.2 (a)(5)) and the need for the Commission to maximize a CCA's ability to directly administer its own procurement obligations (Public Utilities Code Section 380 (b)(4)).

Options 2 and 3 are also problematic. Option 3 directs procurement by the IOUs through the LTPP, which would raise the specter of whether the costs for such procurement would accrue solely to bundled customers or would be imposed on all customers through transmission/distribution rates, the Cost Allocation Mechanism ("CAM) or another new non-bypassable charge ("NBC") imposed on retail choice customers. <sup>20</sup> AReM and MEA strongly oppose any expansion of NBCs and note that AB 2514 includes no provision for procurement by the IOUs *on behalf of* other LSEs. Furthermore, any procurement by the IOU on behalf of a CCA would clearly violate Public Utilities Code Sections 366.2 (a)(5) and 380 (b)(4).

On the other hand, Option 2 would impose a specific procurement type, *i.e.* a pilot or "market test," on LSEs to "develop tools for cost-effectiveness analysis." Procurement to develop tools for cost-effectiveness does not seem to comply with AB 2514, which requires that the procurement targets must be for energy storage systems that are "viable and cost-effective."<sup>21</sup> In addition, any such procurement requirement imposed on ESPs would also seem to run afoul of Public Utilities Code Section 394 (f), which prohibits the Commission from regulating the rates or terms or conditions of service offered by ESPs. Likewise, any such procurement requirements for pilot or market test programs imposed on CCAs would clearly violate Public Utilities Code Sections 366.2 (a)(5) and 380 (b)(4). Moreover, if the Commission were to impose Option 2 only on the IOUs, the same issues arise as with Option 3, namely compliance with AB 2514 and the expansion of NBCs.

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<sup>20</sup> The non-bypassable charge could take the form of the CAM, added costs to distribution rates or an entirely new NBC created for energy storage.

<sup>21</sup> Public Utilities Code § 2836 (a) (1).



As another alternative, the California Energy Storage Alliance (“CESA”) has suggested that the Commission establish “goals” for procurement of energy storage systems and lauded the success of the Renewable Portfolio Standard (“RPS”) model.<sup>22</sup> AReM and MEA note that the RPS “model” is actually a mandated procurement target, not a “goal.” Also, CESA states a preference for Options 2 and 3,<sup>23</sup> which seem primarily directed at IOU procurement. As discussed above, AReM and MEA strongly oppose any Commission-directed procurement by the IOUs that results in additional or new NBCs for direct access and CCA customers, and fear that loosely defined “goals” would leave unanswered all of the issues raised above, except on an *ad hoc*, unorganized basis, creating market uncertainty and confusion.

### III. CONCLUSION

AReM and MEA agree with the IOUs that procurement targets for energy storage systems are not appropriate at this time and have outlined where such targets would be inconsistent with the requirements of AB 2514. However, if the Commission intends to establish such targets, considerable additional process is required to define a commercially reasonable target and flexible compliance rules. Finally, AReM and MEA strongly oppose procurement options that would direct IOU procurement of energy storage systems on behalf of other LSEs and the associated expansion of additional or new NBCs to direct access and CCA customers.

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<sup>22</sup> Presentation by CESA, January 14, 2013 workshop.

<sup>23</sup> Presentation by CESA, January 14, 2013 workshop, slide 21.

Respectfully submitted,

A handwritten signature in black ink that reads "Sue Mara". The signature is fluid and cursive, with the first letters of "Sue" and "Mara" being capitalized and prominent.

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