

**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,  
SAM'S WEST, INC. AND WALMART STORES, INC. ON RULING  
PROPOSING PROCUREMENT TARGETS**

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## TABLE OF CONTENTS

I. <b>COMMENTS</b> .....	2
<u>Question a.</u> Please comment on this proposal overall, with emphasis on the proposed procurement targets and design. ....	2
<u>Question h.</u> Comment on the options presented for ESPs and CCAs to either a) be required to procure an equivalent amount of storage projects commensurate with the load they serve or b) have their customers assessed the costs of the IOU procurement of energy storage projects through a cost allocation mechanism. ....	4
1. <b>New CAM For Energy Storage.</b> .....	5
2. <b>ESPs' Procurement Targets Should Be Flexibly Applied.</b> .....	7
3. <b>Customers Should Not Have To Pay Twice For Energy Storage -- When ESPs Are Meeting Their Own Energy Storage Procurement Targets, The IOUs' Costs Of Meeting Their Targets Must Be Recovered From Their Bundled Customers.</b> .....	10
II. <b>CONCLUSION</b> .....	11

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The Alliance for Retail Energy Markets<sup>1</sup> (“AReM”), Sam’s West, Inc. and Walmart Stores, Inc.<sup>2</sup> (jointly referred to herein as “Direct Access Parties”) submit these comments in accordance with the *Assigned Commissioner’s Ruling Proposing Storage Procurement Targets and Mechanisms and Noticing All-Party Meeting* (“Ruling”), issued on June 10, 2013 by Commissioner Carla J. Peterman, and by the direction provided by her at the All-Party Meeting held on June 25, 2013 (“All-Party Meeting”). The Ruling proposes procurement targets for load-serving entities (“LSEs”) and seeks comments on questions regarding the proposed procurement targets as well as on various procurement mechanisms applicable to the investor-owned utilities (“IOUs”). The Direct Access Parties represent both Electric Service Providers (“ESPs”), which would be subject to the proposed procurement targets, and a major direct access customer whose participation in direct access as a way to actively manage their electricity costs and use of

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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 th at of a particular member or any affiliates of its members with respect to the issues addressed herein.

<sup>2</sup> Walmart has both bundled and direct access load in California. Walmart plans to procure 7 billion kWh of renewable energy globally by December 31, 2020 (an increase of over 600 percent versus 2010) and will accelerate energy efficiency with a goal to reduce the kWh/sq. ft. energy intensity required to power its buildings around the world by 20 percent versus 2010.

renewable energy through customer choice programs is representative of many direct access customers. The Direct Access Parties are supportive of the economic deployment of innovative technologies to improve grid management. The Direct Access Parties therefore provide unique insight on reasonable and workable solutions for ESPs and direct access customers.

The Direct Access Parties provide comments in the requested format on two of the specific questions listed in the Ruling <sup>3</sup> and discussed at the All-Party Meeting. The Direct Access Parties reserve the right to address additional topics in reply based on comments filed by other parties.

## **I. COMMENTS**

### **Question a. Please comment on this proposal overall, with emphasis on the proposed procurement targets and design.**

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 and cost-effective energy storage systems to be achieved by December 31, 2015, and December 31, 2020.”<sup>4</sup> AB 2514 also required the Commission to “ensure” that the energy storage “procurement targets and policies” established are “technologically viable and cost effective.”<sup>5</sup> The Direct Access Parties remain concerned that energy storage systems have not been conclusively demonstrated to be cost-effective, as required by statute. In fact, the energy storage proceeding has affirmed that “energy storage” includes a number of different technology types at different stages of development and cost-effectiveness. At the January 14, 2013 Energy Storage Workshop, presenters described several applications of energy storage technology that have been

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<sup>3</sup> Ruling, p. 22.

<sup>4</sup> See Public Utilities Code Section 2836(a)(1).

<sup>5</sup> See Public Utilities Code Section 2836.2.

successfully deployed or tested in a pilot program, but some for electrically remote locations and others at relatively small scale.<sup>6</sup> It is far from clear that energy storage technology is “ready to go” and available at reasonable prices to LSEs and their customers.

Moreover, setting LSE procurement targets for energy storage is tantamount to picking a technological winner over other resources that become the technological losers. This picking and choosing would be more effectively and efficiently managed through competitive markets. As energy storage technologies improve, they should compete on a level-playing field to provide services to customers and the market, and should not get unnecessary, potentially costly and unsustainable subsidies for the long term.

Interest in energy storage devices by retail end-use customers, particularly the many large commercial and industrial customers enrolled in direct access, will play an important role in driving the market for the technology – a point noted by San Diego Gas & Electric Company at the January 14th workshop.<sup>7</sup> ESPs – whose success depends on their ability to provide service to their customers – are in the business of meeting their direct access customers’ needs by providing a range of energy options and energy management tools. Direct Access Parties 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.

Nevertheless, if the Commission decides to move forward with assignment of specific energy storage procurement targets for LSEs, the Direct Access Parties urge both caution and flexibility, as discussed in more detail below.

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<sup>6</sup> January 14, 2013 Energy Storage Workshop presentations by Jack Ellis, AES Energy Storage and San Diego Gas & Electric Company.

<sup>7</sup> Presentation of San Diego Gas & Electric Company, January 14, 2013, Energy Storage Workshop, slide 3.

In addition, the Commission should clarify what it means to set “targets” that are not considered to be “requirements or mandates,” as noted in the Ruling.<sup>8</sup> Except for suggesting that the IOUs could, under certain conditions, be relieved from meeting a portion of their procurement targets,<sup>9</sup> the Ruling provides no further discussion on whether the targets will be accompanied by enforceable compliance requirements that the LSEs must meet or not. The Direct Access Parties recommend that the proposal be expanded to provide clarification on this point.

**Question h. Comment on the options presented for ESPs and CCAs to either a) be required to procure an equivalent amount of storage projects commensurate with the load they serve or b) have their customers assessed the costs of the IOU procurement of energy storage projects through a cost allocation mechanism.**

If energy storage procurement targets are established for ESPs, the Commission must establish appropriate flexible procurement mechanisms that both address the needs of the ESPs, which operate in a highly competitive environment unlike the monopoly world of the IOUs, and reflect the Commission’s limited regulatory authority over ESPs.<sup>10</sup> Thus, the Direct Access Parties appreciate Commissioner Peterman’s recognition that the imposition of any target on ESPs requires separate consideration.<sup>11</sup> That said, the Direct Access Parties strongly oppose any Commission-directed procurement by the IOUs on behalf of ESPs, and the imposition of new non-bypassable charges through the Cost Allocation Mechanism (“CAM”) for direct access customers. Thus, as discussed in more detail below, if the Commission adopts energy storage procurement targets for ESPs, the Direct Access Parties support the option by which ESPs will

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<sup>8</sup> Ruling, p. 7.

<sup>9</sup> Ruling, p. 19.

<sup>10</sup> Public Utilities Code Section 394 (f) prohibits the Commission from regulating the rates or terms or conditions of service offered by ESPs.

<sup>11</sup> Ruling, p. 15.

procure to meet a “commensurate” target and oppose the option of having the utilities procure on behalf of ESPs and assessing the costs of that procurement on the ESPs’ customers. The Direct Access Parties also provide specific recommendations with respect to how the ESPs’ targets could be set and flexibly applied.

### 1. No New CAM For Energy Storage.

As noted above, the Ruling offers an option for ESPs by which the IOUs would procure energy storage on their behalf and the ESPs would “pay their share of energy storage procurement costs to utilities through the Cost Allocation Mechanism.”<sup>12</sup> Several clarifications are required. First, ESPs do not pay CAM charges for the IOUs’ procurement, their customers do. Second, IOU procurement of energy storage on behalf of the ESPs may not be a permitted use of the CAM pursuant to statute, which limits CAM to projects “that the commission authorizes, in the situation of a contract with a third party, or orders, in the situation of utility-owned generation, an electrical corporation to obtain generation resources that the commission determines are *needed to meet* system or local area *reliability needs*” (emphasis added).<sup>13</sup> Energy storage targets, for the purpose of advancing new technologies, do not seem to the Direct Access Parties to meet these requirements, making the application of CAM challengeable.

In addition, AB 2514 includes no provision for procurement by the IOUs *on behalf of* other LSEs. Instead, the statute is quite clear that the Commission is to establish “appropriate targets, if any, for *each load-serving entity to procure* viable and cost-effective energy storage systems (emphasis added).”<sup>14</sup> Thus, the Legislature intended that, if the Commission determines

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<sup>12</sup> *Ibid.*

<sup>13</sup> See Public Utilities Code Section 365.1 (c) (2) (A)

<sup>14</sup> Public Utilities Code Section 2836(a)(1).

that the technology is “viable and cost effective,” procurement targets are to be established for each of the LSEs.

In numerous Commission proceedings, ESPs and direct access customers have opposed the extensive imposition of CAM that has occurred since the statute was passed, all without any clarity or guidance on what criteria are to be used to define the type of reliability investments by the IOUs that are eligible for CAM. The Ruling’s presumption that CAM could be used to recover the costs of IOU energy storage procurement is another example of the rampant use of CAM, and is unsupportable in this context. CAM charges impose unmanageable costs on customers, due to the unpredictable timing and quantity of a “capacity benefit” that is allocated to ESPs in return for their customers’ payments. In short, CAM is the antithesis of being able to manage energy portfolios that meet the needs and preferences of ESPs’ customers. The Commission has already approved more than 10,000 MW of CAM contracts for generation resources, equivalent to 21% of the CAISO system peak in 2012, and represents an enormous drag on the competitive retail market.<sup>15</sup> Put simply, adding to the existing CAM burden to support relatively untested energy storage technologies cannot be justified.

Direct Access Parties believe that there would be significant administrative difficulties associated with the option approach. Specifically, it remains unclear to the Direct Access Parties how an ESP option to elect CAM in lieu of meeting an energy storage procurement target would actually work, given that ESP load migrates from one supplier to another, and at times, back to the utility service. Whether these administrative issues can be adequately addressed needs to be further evaluated, in the event the CAM option approach moves forward.

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<sup>15</sup> *Track III Comments of the Alliance for Retail Energy Markets and the Direct Access Customer Coalition*, R.12-03-014, April 26, 2013, pp. 19-20.



## 2. ESPs' Procurement Targets Should Be Flexibly Applied.

ESPs have consistently met their share of obligations imposed by statute or Commission policy, most notably Resource Adequacy (“RA”) and Renewable Portfolio Standards (“RPS”) requirements. If the Commission adopts specific procurement targets for energy storage (noting again that Direct Access Parties believe that such adoption is not advisable at this point), ESPs should be expected to meet their share of the targets as well, provided the Commission adopts rules with adequate flexibility. The Ruling provides no details on the proposed procurement target for ESPs, except to note that it should be procured “commensurate with their load share.”<sup>16</sup> To assist in the Commission’s deliberations, the Direct Access Parties propose the following recommended guidelines to apply to energy storage procurement by the ESPs:

- a. Proposed Calculation of ESPs’ Procurement Target – The “commensurate” target for ESPs should be set as a load-ratio share of the IOUs’ overall target based on coincident peak load. The coincident peak load, established by Staff at the California Energy Commission (“CEC”), is used to assign RA obligations and CAM-related RA capacity and should be used for this purpose as well. Moreover, because direct access load is capped by state law<sup>17</sup> and will not increase unless legislation is passed to expand the market, the ESPs’ percentage share of the coincident peak load will decline over time. The ESPs’ share of the coincident peak load for 2020 is expected to be 8.2 percent,

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<sup>16</sup> Ruling, p. 15.

<sup>17</sup> Senate Bill 695, Stats 2009, Ch 337.

according to Staff at the CEC.<sup>18</sup> When applied to the IOUs' total procurement target of 1,325 MW as of 2020 proposed in the Ruling,<sup>19</sup> the procurement target by 2020 for all ESPs combined would be 109 MW. Each ESP's individual target would be calculated using that ESP's peak load-ratio share measured at the time of the coincident peak. The Direct Access Parties recommend that the Commission request CEC Staff to calculate the applicable load-ratio share for each of the ESPs to set the applicable energy storage procurement target. Allocating the target to individual ESPs will require flexibility as well, because of the potential for load migration. Whether the aggregate ESP obligation should be set up front, with an individual ESP's ultimate obligation based on that ESP's load-ratio share as of the 2020 compliance date, or whether there are other allocation mechanisms that should be employed requires further discussion and evaluation.

- b. Apply Target Statewide With Procurement To Be Met Anytime Through 2020  
– Most ESPs operate statewide in all of the IOUs' service areas. To meet the procurement target, ESPs will be working closely with their customers to identify which customers can best fit energy storage into their energy portfolios. Imposing restrictions on where ESPs can procure energy storage, such as setting targets by IOU service area, would be inefficient and could lead to less cost-effective deployment of energy storage facilities. In addition,

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<sup>18</sup> Provided by Lynn Marshall, California Energy Commission, who based the calculations on the reference forecast used for 2014 RA the current adopted CEC forecast for 2012-2022 (California Energy Demand Forecast 2012-2022, available at: [http://www.energy.ca.gov/2012\\_energypolicy/documents/index.html#EnergyDemandForecast](http://www.energy.ca.gov/2012_energypolicy/documents/index.html#EnergyDemandForecast)) and the ESPs' load-ratio shares from the 2014 RA coincident peak forecasts

<sup>19</sup> Ruling, p. 8.

the process of identifying customer sites that can cost-effectively implement energy storage on their premises will take time and effort, such that specifying yearly increments to be met may be counter-productive. Instead, an ESP's target should apply statewide and should be expected to be met by the end of 2020 without specifying yearly increments.

- c. ESPs Should Be Free To Procure Any Type Of Energy Storage System – The Ruling designates specific IOU targets for “Transmission, Distribution, and Customer” sited energy storage systems.<sup>20</sup> Although possible, it is unlikely that ESPs could deploy Transmission or Distribution system sited energy storage. Instead, ESPs will generally rely, to a significant extent, on their customers' sites to provide locations for such systems and to utilize the systems as part of their energy management options. Thus, ESPs should be free to identify the most workable and cost-effective systems and not be bound by siting constraints. An ESP's procurement may be concentrated in the “Customer” category, but there is no reason to preclude deployment of storage systems in the Transmission or Distribution categories, if such deployment is feasible and cost-effective.
- d. Energy Storage Projects Already Deployed Or Planned By Customers Should Count Toward The ESP's Procurement Target – The Ruling provides that certain IOU energy storage projects already approved by the Commission will “count” toward meeting the applicable IOU's procurement target.<sup>21</sup> The same rule should apply to the ESPs. If an ESP's customer has already deployed or

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<sup>20</sup> Ruling, p. 8.

<sup>21</sup> Ruling, pp. 9-10.

is planning to deploy energy storage systems, those projects should count toward meeting the ESP's procurement target.

- e. Off-Ramps Should Also Apply To ESP Procurement Targets – The Ruling proposes that an IOU would be “relieved from a declining percentage of its procurement target” with a showing that the costs are unreasonable, a lack of a competitive number of bids or other showings.<sup>22</sup> Similar “off-ramps” must also apply to the ESPs. For example, it is unknown whether the market for these resources will develop and be competitive, or whether prices will remain so far above alternatives to storage that such investments are not viable. If an ESP is unable to procure cost-effective energy storage systems to meet its customer's needs, that ESP should have the option to provide a showing to the Commission that it is unable to meet its designated energy procurement target despite its best efforts and to request relief from the Commission.

**3. Customers Should Not Have To Pay Twice For Energy Storage -- When ESPs Are Meeting Their Own Energy Storage Procurement Targets, The IOUs' Costs Of Meeting Their Targets Must Be Recovered From Their Bundled Customers.**

To the extent that any ESP is responsible for meeting its own energy storage procurement target, its customers should be exempt from paying any charges – CAM-related or stranded costs – associated with IOUs' procurement to meet their targets. Each LSE has a designated target and must recover the costs from its own customers.

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<sup>22</sup> Ruling, p. 19.

The IOUs have, to date, been allowed to socialize the costs of their energy storage projects to the customers of *all* LSEs.<sup>23</sup> If energy storage procurement targets are assigned directly to ESPs, this practice must be discontinued because it leads to a situation where ESPs' customers pay twice for meeting the Commission's energy procurement targets – once to the ESP that is providing the service they want, and a second time for the IOU procurement that they do not want – a blatantly unfair approach that competitively *advantages* the IOUs to the detriment of the retail choice market.

The fact that ESPs and IOUs will likely site their storage projects differently – with the IOUs' targets met more predominantly through transmission and distribution system sited facilities – is immaterial. Each LSE has its own target to meet and the target is the measure, not the type of the system procured.

## II. CONCLUSION

The Direct Access Parties remain concerned that the time is not yet right to assign energy storage procurement targets to LSEs. However, if the Commission determines that such targets are appropriate, the Direct Access Parties oppose the option to allow ESPs to elect IOU procurement on their behalf. Instead, the Direct Access Parties believe that the targets should be assigned to all LSEs, and sufficient procurement flexibility offered to ESPs to allow them to meet their share of the requirement. Specific flexibility proposals are discussed herein. In addition, if ESPs meet their own procurement targets working in concert with their customers, their customers should not then be saddled with any obligation to pay any of the cost incurred by IOUs to meet their procurement targets; all the IOUs' costs should be recovered from their

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<sup>23</sup> See, Ruling, pp. 9-10, which lists the IOUs' energy storage projects already approved by the Commission. To the extent the Commission has already approved cost recovery for these projects, those costs have been socialized to all customers.

bundled customers. If the IOUs are permitted to socialize those costs either through CAM or stranded cost recovery, the IOUs will enjoy a competitive advantage and direct access customers will unfairly pay twice for meeting the Commission's energy procurement targets. The Direct Access Parties look forward to working with the Commission to consider the issues and proposals provided above.

Respectfully submitted,



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