

**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.

Rulemaking 10-12-007
(Filed December 12, 2010)

**COMMENTS OF THE MARIN ENERGY AUTHORITY
ON JUNE 10, 2013 ASSIGNED COMMISSIONER'S RULING
PROPOSING STORAGE PROCUREMENT TARGETS AND
MECHANISMS AND NOTICING ALL-PARTY MEETING**

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TABLE OF CONTENTS

I. Introduction	1
II. Background	2
III. MEA’s Response to Specific Questions Presented within the Ruling	3
A. Please comment on this proposal overall, with emphasis on the proposed procurement targets and design.....	3
B. Comment on whether any of the projects proposed to count toward the procurement targets be excluded, or any additional projects included, and on what basis.....	6
C. Comment on how actual operational deployment should be defined for PIER- and EPIC-funded projects potentially eligible to count toward a utility’s procurement target.	6
D. Comment on how any utility’s procurement that exceeds a target in one year should be addressed and considered for future procurement targets.....	7
E. Comment on whether and to what extent utilities should be permitted flexibility in procuring among the use-case “buckets” (transmission, distribution, and customer-sited) of energy storage within one auction, and whether a minimum amount in each “bucket” must be targeted.	8
F. Comment on the appropriate “off ramps” for relief from procuring up to each target and what metrics should be used to evaluate the appropriateness of the off ramps.	8
G. Comment on how this proposal may be coordinated with Renewable Portfolio Standard procurement plans, as set out in Public Utilities Code section 2837.	9
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.	9
I. Comment on how the preliminary results of the cost-effectiveness models should be applied to the question of setting procurement targets.	10
J. Based on the preliminary results, should the utilities set a cost cap for offers to be submitted in the 2014 auction? If yes, what should the cap be and how should the auction be structured to incorporate the cap?	11
IV. Conclusion	11

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I. Introduction

Pursuant to the directions within the *Assigned Commissioner's Ruling Proposing Storage Procurement Targets and Mechanisms and Noticing All-Party Meeting* ("ACR") issued June 10, 2013 by Assigned Commissioner Peterman, the Marin Energy Authority ("MEA") provides its comments on the questions raised therein. MEA focuses its comments on how the Energy Storage ("ES") procurement targets proposed in the ACR should account for the unique aspects of Community Choice Aggregators ("CCAs"), as well as other non-Investor Owned Utility ("IOU") Load-Serving Entities ("LSEs"). Pursuant to California Public Utilities ("P.U.") Code¹ §2835 *et seq.* the Commission is charged with opening "a proceeding to determine *appropriate* targets, *if any*, for *each* load-serving entity to procure *viable* and *cost-effective* energy storage systems[.]" (*Emphasis Added.*) MEA believes the Commission ought to carefully consider the types of services offered by each LSE, along with the types of customers served by each LSE, when making this determination.

¹ All further section references herein are to the California Public Utilities Code unless stated otherwise.

II. Background

MEA is the only operational CCA within California, and currently serves customers throughout Marin County and within the City of Richmond. MEA is a not-for-profit, public agency founded to reduce Greenhouse Gas (“GHG”) emissions by providing the local communities it serves with the choice to consume electricity with a higher renewable content than the default offering provided by Pacific Gas and Electric (“PG&E”), the incumbent Investor Owned Utility (“IOU”) for MEA’s service territory. MEA supports the Legislature’s and the Commission’s efforts to increase the deployment rate of ES within California because MEA recognizes the crucial role that these technologies will play in enabling the state to reach its renewable energy deployment and GHG emissions reduction goals.² MEA intends to leverage ES technologies to better serve its customers provided that these technologies prove cost-effective.

CCAs are solely responsible for all generation procurement activities on behalf of their customers, except where other generation procurement arrangements are expressly authorized by statute.³ This responsibility includes the procurement of Resource Adequacy (“RA”) capacity resources and Ancillary Services (“AS”) on behalf of MEA customers. MEA’s customer base is comprised predominantly of residential accounts, approximately 70%. Additionally, MEA does not own any generation resources. MEA believes it is vital for the Commission to consider all of these factors when determining and implementing ES procurement targets for each of the LSEs, including CCAs.

² §2837(c), (d), and (h) all highlight ways in which ES can be leveraged to reduce GHG emissions attributable to electricity generation services.

³ §366 (a)(5).

III. MEA's Response to Specific Questions Presented within the Ruling

The following sections are in direct response to the questions posed within the ACR:

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

1. *Appropriate data and metrics are lacking for determining what ES is cost effective*

MEA believes the time is not yet ripe for the Commission to assign targets for ES procurement. Due to the continuing lack of data relating to performance and cost-effectiveness on *all* identified 'use cases' for ES, any procurement targets established at this time would result in "storage for storage's sake" requirements, rather than storage procurement goals based in cost-effective, performance-based facts. Furthermore, the Commission-led dialog on ES has focused predominantly on the IOU perspective, with little attention given to the specific circumstances of other LSEs.⁴ The legislature clearly intended for the Commission to establish ES procurement targets for "viable and cost-effective" technologies⁵, and there simply isn't enough data available to-date to make appropriate determinations for which use cases of ES should be acted upon.

2. *A reverse auction mechanism is inappropriate at this time*

Additionally, MEA questions whether the suggested "reverse auction" mechanism would be an appropriate procurement mechanism for all types of LSEs. The reverse auction proposed within the ACR is modeled on the Renewable Auction Mechanism ("RAM"), an IOU-only renewable electricity procurement focused reverse auction. In the case of this proceeding, the Commission must determine appropriate ES procurement targets for "each LSE". Furthermore, as cited in the ACR, ES provides numerous types of benefits, including forms of RA and AS,

⁴ For example, to date the Commission sponsored cost-effectiveness studies conducted by KEMA and EPRI have not addressed residential customer-side ES, nor generation-coupled ES use cases. MEA believes these two use cases are clearly the most relevant and actionable for CCAs.

⁵ §2836(a) and §2836.6 clearly state that all procurement of energy storage systems shall be cost effective.

that are not easily weighed against each other, as would be necessary when comparing bids within a reverse auction. Until further data has been gathered to inform metrics for quantifying and comparing the numerous types of benefits provided by ES, a reverse auction approach is inappropriate.

3. The Commission should consider alternative mechanisms such as the EE approach

In the interim time where additional data needs to be collected to support the development of ES metrics, MEA proposes the Commission employ an ES procurement mechanism similar to that used for Energy Efficiency. By pooling ratepayer funds and allowing all LSEs to apply to administer funds for specific projects, each LSE would engage in procuring ES while reporting back to the Commission the relevant data points needed to establish metrics and cost-effectiveness evaluations for all ES use cases. The data collected through this period of Commission-facilitated ES deployment would then inform specific objectives and implementation targets for each LSE for the remainder of the period provided by statute.⁶ Any such procurement targets should be tailored to services provided by the LSE as well as the customer-base served by the LSE. In other words, for MEA these procurement targets should relate only to generation procurement services and any customer-side requirements should focus on MEA's largest customer group, residential.

4. The proposed use of CAM and socializing of ES procurement costs is inappropriate

The ACR presents CCAs with two options for meeting their ES procurement obligations: a) pay for a share of IOU-led procurement of ES through the Cost Allocation Mechanism ("CAM"), and/or b) procure ES commensurate with their load share. MEA finds issue with both

⁶ §2836(a)(1) directs the Commission to determine ES procurement targets to be achieved by December 31, 2015 and December 31, 2020.

options as presented. First and foremost, any ES procurement targets assigned to a CCA must be relevant to the generation-only services that the CCA provides. Additionally, such procurement targets must account for the types of customers this CCA serves. Requiring a CCA procure, or subsidize through CAM, distribution-level ES is entirely inappropriate because CCAs do not provide distribution services to their customers. Similarly, it would be inappropriate to require a CCA that predominantly serves residential customers to procure a certain megawatt (“MW”) value of customer-side ES, if this target could only be cost-effectively met through installations at very large-scale energy user sites. Lastly, MEA believes the Commission should handle any ES procurement targets similarly to the Renewable Portfolio Standard (“RPS”), where each LSE is exclusively responsible for meeting its own procurement obligations.

Additionally, to the extent the Commission assigns an ES procurement target to a CCA, the CCA should be allowed to comply with this target purely through its own means.⁷⁸ The Commission should not resort to socializing of IOU-specific procurement target costs and benefits through something akin to the Cost Allocation Mechanism (“CAM”) as a means for meeting CCA ES procurement obligations. Pursuant to statute, the Commission is obligated to maximize CCAs’ abilities to procure on their own behalves to meet their customer’s needs.⁹ Furthermore, statute only enables the Commission to utilize the CAM to meet system or local reliability needs.¹⁰ Utilization of CAM for the allocation of non-RA benefits is simply

⁷ §366.2(a)(5): A community choice aggregator shall be solely responsible for all generation procurement activities on behalf of the community choice aggregator’s customers, except where other generation procurement arrangements are expressly authorized by statute.

⁸ §380(h)(5): “The commission shall determine and authorize the most efficient and equitable means for [...] ensuring that community choice aggregators can determine the generation resources used to serve their customers.”

⁹ §380(a)(4): states that in developing resource adequacy requirements, the Commission shall: (4) Maximize the ability of community choice aggregators to determine the generation resources used to serve their customers.

¹⁰ §Section 365.1(c)(2)(B)

inappropriate. The proposal for ES procurement targets put forth in the ACR lacks the necessary consideration of CCA-specific statutory requirements.

B. Comment on whether any of the projects proposed to count toward the procurement targets be excluded, or any additional projects included, and on what basis.

As noted above, MEA does not support targets at this time. Once the objectives of the storage program are set, all storage meeting those objectives should count towards future targets. However, the Commission will need to evaluate who benefits from those projects and to what functional “bucket” and what entity’s “account” they should count towards. For example, it appears that a differentiated approach to targets would eventually be more appropriate for ES – such as through the creation of a distribution “bucket,” a generation “bucket” and others – and the approved projects should be allocated to those buckets. Such already existing projects would be grandfathered and count against the overall “buckets.”

To the extent the project is paid for through socialized costs, such projects should count toward the targets generally (and offset against the overall target) but not benefit a specific entity’s account. However, if projects were funded by an entity, those projects would count toward that entity’s targets.

C. Comment on how actual operational deployment should be defined for PIER- and EPIC-funded projects potentially eligible to count toward a utility’s procurement target.

MEA reminds the Commission that both PIER and EPIC funds are collected from the general ratepayer -base. As such, programs funded by either the PIER or EPIC must be implemented in a competitively neutral manner such that all ratepayers benefit. Additionally, both programs are focused on funding technologies still present in the Research, Development,

and Demonstration (“RD&D”) phase.¹¹ As already stated in the AC R, “the purpose of the proposed procurement targets is *distinct from a research, development, and demonstration (RD&D)-oriented purpose* of promoting new technologies.” (at 5.) MEA supports the Commission’s intent to focus these procurement targets on commercially viable ES technologies; however due to the RD&D nature of PIER and EPIC, such programs are not likely to be successful in bridging the gap to deployment.¹²

If PIER - and EPIC -funded projects are going to somehow count towards a utility’s procurement targets, they must also count towards all other LSEs’ procurement targets as where applicable. As stated prior, both PIER and EPIC funds are collected from all ratepayers and thus benefits resulting from these funds must benefit all ratepayers, regardless of whether these benefits are realized during the RD&D phase or thereafter through meeting the proposed ES procurement target. One way to attribute PIER - and EPIC-funded projects towards all LSEs’ ES procurement targets might be to lessen the overall ES procurement targets proportionately to the benefits already provided by PIER- and EPIC-funded ES.

D. Comment on how any utility’s procurement that exceeds a target in one year should be addressed and considered for future procurement targets.

MEA believes that for all LSEs any excess procurement made by the LSE to meet an interim target should be rolled over into future years such that no LSEs are punished for early action on meeting their ES targets.

¹¹ “The California Energy Commission manages public interest energy research for electric and natural gas research programs including the Public Interest Energy Research (PIER) Program. PIER supports energy-related research, development, and demonstration for research not adequately provided by competitive and regulated markets.” Public Interest Energy Research 2012 Annual Report at ii (Abstract), available at:

<http://www.energy.ca.gov/2013publications/CEC-500-2013-013/CEC-500-2013-013-CMF.pdf>

¹² As noted above, MEA recommends utilizing the EE approach, which has been successful in deploying energy efficiency statewide.

E. Comment on whether and to what extent utilities should be permitted flexibility in procuring among the use-case “buckets” (transmission, distribution, and customer-sited) of energy storage within one auction, and whether a minimum amount in each “bucket” must be targeted.

While MEA supports the concept of flexibility among procurement use -case “buckets”, the Commission must realize that all use -cases are not applicable to all LSEs. In the case of CCAs, MEA believes that only one of the three use -cases would be even remotely applicable to CCA: customer-sited ES. As stated this use-case would also have to consider the customer types served by the LSE. While certain buckets might provide generation -related benefits, such as Transmission-level bulk energy storage, MEA, as a generation service provider, is not in the position to procure ES in this use -case. MEA believes the Commission should consider the possibility of flexibility between use -case “buckets” with caution. To the extent a LSE has no flexibility because only one use -case is applicable, this LSE should at the very least be granted a cost-effectiveness “off ramp”, as discussed in the next section, because this LSE will not be able to shift its procurement obligations to a more cost-effective alternative use-case.

F. Comment on the appropriate “off ramps” for relief from procuring up to each target and what metrics should be used to evaluate the appropriateness of the off ramps.

MEA believes that “off -ramps” relating to cost -effectiveness must be provided to all LSEs obligated with ES procurement targets. As stated prior, cost -effectiveness is a central consideration for the applicability of these procurement targets.¹³ The Commission should not obligate LSEs to procure ES that is not cost effective.

¹³ As cited before, §2836(a) and §2836.6 clearly state that all procurement of energy storage systems shall be cost effective.

G. Comment on how this proposal may be coordinated with Renewable Portfolio Standard procurement plans, as set out in Public Utilities Code section 2837.

ES provides a wide range of benefits. Some, but not all of these benefits relate to the integration of renewable electricity resources. An additional layer of complexity is added when one considers where these renewable resources and ES are located (e.g. customer-sited, distributed generation, or transmission-level). Until there is greater clarity surrounding ES, RPS and ES should not be conflated. The Commission should pay more specific attention to ES and once the ES market is better established, it may make sense at that time to merge the LSE-related portions of ES and the RPS proceeding (which also applies to all LSEs). Remaining non-LSE ES may need to be addressed separately.

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.

Please refer above to the comments under section A for MEA's CAM specific concerns. With that said, MEA has substantial issues with the CAM methodology, and believes it absolutely should not apply to ES procurement. As previously mentioned, CAM is intended to socialize the costs and benefits attributable to IOU-procured capacity that has been procured to meet a demonstrated local or system reliability need. There is already a need for greater clarity for the applicability of CAM, which is currently being considered in Track 3 of the Long-Term Procurement Planning ("LTPP") proceeding. Whether, CAM could legally be applied to ES contracts hasn't even been raised as a question in the LTPP. Any such efforts to leverage CAM in this proceeding must coordinate with the LTPP and RA proceedings as well.

If CAM were to be applied to ES, then the socialization of costs and benefits should only apply to the capacity related benefits conferred by each specific instance of ES. When CAM is

applied to bundled energy procurement, the value of energy bundled with the capacity must be backed out. Similarly, for CAM to apply to ES procurement the value of all non -capacity benefits must be backed out to yield the capacity only cost of the ES project. For this to be viable the Commission would have to reconsider the entire CAM methodology, which is established by statute, and assign standard values to each of the other non -capacity attributes tied to ES. MEA believes this approach of applying CAM to ES procurement is inappropriate, legally questionable, and extremely complex. To meet its October 1, 2013 deadline, the Commission would be wise to steer clear of the CAM quagmire.

I. Comment on how the preliminary results of the cost-effectiveness models should be applied to the question of setting procurement targets.

While the cost -effectiveness models presented in KEMA and EPRI's reports are an exemplary start at attempting to quantify the numerous benefits attributable to ES technologies, MEA finds these studies extremely lacking. This is because these studies only explore certain limited use-cases for ES. All of these use-cases are irrelevant to CCAs. These cost-effectiveness studies don't explore generation-coupled or residential customer-sited ES, which are the two use-cases applicable to CCAs. Further cost-effectiveness modeling needs to be conducted on all use-cases prior to the Commission determining whether any ES procurement targets are "viable and cost-effective."

What-is-more, it is one thing to have cost effectiveness in theory, and another to have cost-effectiveness in practice. Models can only so accurately predict the true cost -effectiveness realized by installed ES operations. Simply stated, storage is simply in too early a stage for these tools to be reasonably used. As stated prior these models should be further developed in concert with efforts to gather actual cost -effectiveness data. The Commission should only set firm ES

procurement targets once a robust accumulation of actual cost-effectiveness data, along with thorough modeling of all use-cases, has been established.

J. Based on the preliminary results, should the utilities set a cost cap for offers to be submitted in the 2014 auction? If yes, what should the cap be and how should the auction be structured to incorporate the cap?

To the extent the Commission goes down the path proposed in the ACR Ruling, MEA believes that a cost cap for offers in the 2014 auction would be inappropriate. Such a cap would create artificial influences that would inhibit communication of true costs within the ES market. If the Commission chooses to go forward with the reverse auction mechanism, the first auction should be used to take a full analysis of all of the ES market.

IV. Conclusion

MEA thanks Assigned Commissioner Peterman and Assigned Administrative Law Judge Yip-Kikugawa for the opportunity to provide the above comments on the *Assigned Commissioner's Ruling Proposing Storage Procurement Targets and Mechanisms and Noticing All-Party Meeting*.

Respectfully submitted,

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