

**COMMENTS OF THE CALIFORNIA ENERGY STORAGE ALLIANCE:**

**Reactive Power Requirements and Financial Compensation, Straw Proposal**

Submitted by	Company	Date Submitted
Alex J Morris 510.665.7811 x110 <a href="mailto:amorris@storagealliance.org">amorris@storagealliance.org</a>	California Energy Storage Alliance	October 27, 2015

The California Energy Storage Alliance (CESA)<sup>1</sup> offers these comments on the Reactive Power Requirements and Financial Compensation Revised Straw Proposal.<sup>2</sup> These comments build on previous CESA comments.

**1. CESA supports the new Reactive Power Exceptional Dispatch capability to ensure resources are held whole for costs provided in service of CAISO Reliability.**

The CAISO properly acknowledges that certain resources may, at times, be called on to provide Reactive Power when otherwise ‘out of the money’ and not awarded in the CAISO’s dispatch. In these cases, the resource still needs recovery for costs. CESA supports the CAISO’s commitment to enable recovery of these costs.

Typically, these costs include fuel and other operational costs. Fuel costs can be gleaned through indexes, bids, and other sources. For energy storage, mitigated or default bid costs will need to consider both the costs of power used for charging, as well as efficiency losses.

The CAISO should detail its bid-cost recovery structure for energy storage resources, particularly how it will calculate ‘spent fuel costs’. This calculation will need efficiency loss considerations, additional non-metered costs that could result when delivering reactive power, and also assumptions about fuel costs. For instance, if an energy storage device was charged partly with cheap power and partly with expensive power, should the deemed fuel costs be derived from the expensive power or the cheap power? Or an average? These accounting issues, e.g. LIFO or FIFO, should be governed by market design principles and should always ensure reasonable cost-recovery.

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<sup>1</sup> 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>)

<sup>2</sup> “[Reactive Power Requirements and Financial Compensation Revised Straw Proposal](#)”, CAISO, Oct 8, 2015

Lastly, CESA recommends the CAISO include energy storage system EDs on the bulleted list of candidates for the new ED category on page 13 of the proposal.

**2. CESA appreciates the CAISO’s considerations of market solutions, and agrees with the CAISO that a standards-based approach make sense for Reactive Power needs at this time.**

The CAISO’s primary functions are to ensure reliability through competitive market outcomes that, for the most part, provide the suite of ‘products and services’ needed by the CAISO to operate the grid. The CAISO must also play a role in planning the transmission grid, setting participation rules, and establishing requirements of grid and or market participants. Generally, CESA expects the CAISO to adhere to market principles to ensure efficiency in the total cost of its feasible market solutions. To this end, the CAISO should in theory opt for designs that promote competition and that seek the least expensive solutions. A standards-based approach, by contrast, requires a capability of parties regardless of cost, and can be less efficient. In some cases, particularly where the establishment of a market is infeasible, *e.g.* due to market power concerns, limited competition, or other comparable reasons, the standards-based approach becomes more necessary.

CESA appreciates the CAISO’s consideration and diligence around the feasibility of market solutions. Based on the CAISO’s assessment of the characteristics of reactive power, CESA agrees that a market-based solution at this time is not workable, and that a standards-based approach must be used. For other market products, the CAISO should also continue to seek market-solutions first.

**3. Further consideration of capability payments may support market efficiency and ensure fair cost-recovery.**

CESA continues to assess the efficiency and reasonableness of the CAISO’s proposed approach to capability payments. To ensure resources recover the costs of providing standardized Reactive Power capabilities, the CAISO proposes to deem these costs as embedded in capacity contracts, *e.g.* a PPA. For to-be-developed resources not yet in the queue and with capacity contracts, this cost-recovery approach seems workable. CESA will continue, however, to consider the effects of this approach on resources without capacity contracts.