

COMMENTS OF THE CALIFORNIA ENERGY STORAGE ALLIANCE:

FRACMOO Phase 2,

July 22, 2015 Working Group

Submitted by	Company	Date Submitted
Alex J Morris 510.665.7811 x110 amorris@storagealliance.org	California Energy Storage Alliance	August 5, 2015

The California Energy Storage Alliance (CESA)¹ offers these comments on the California Independent System Operator’s (CAISO) Flexible Resource Adequacy Capacity and Must Offer Obligations (FRACMOO) Phase 2 Working Group meeting and materials held on July 22, 2015.

CESA appreciates the CAISO’s use of a Working Group as a means to consider new ideas and believes that new ideas regarding flexible capacity product designs should be considered. CESA believes the current proposal holds merit and looks forward to further discussions. A key CESA priority is to ensure that energy storage solutions and other resources have appropriate and fair avenues for competing in both capacity markets and in CAISO spot energy markets. Another priority, in line with California’s clean energy goals, is to consider alternatives to curtailment of renewables, where appropriate.

1. CAISO correctly identified a need for flexible capacity solutions for both upward ramping and for over-generation and p-min burden operating challenges.

As indicated in the CPUC’s Long-Term Procurement Plan (LTPP) Proceeding, the Flexible Capacity Requirements Study, other planning exercise, market performance data, and in other forums, a growing body of evidence and modeling indicates a need for flexible capacity solutions. CESA appreciates and supports the CAISO’s role in illustrating how the grid is changing and what the forward grid’s needs appear to be.

2. The CAISO is correct to pursue capacity solutions to its established flexibility concerns rather than to plan to use reliability tools and or anticipate spot market solutions.

In place of an approach that involves both capacity and spot market solutions to flexible capacity needs, CESA recognizes that some parties may recommend only to pursue spot

¹ 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>)

market solutions to flexibility needs or, alternatively, for the CAISO to plan to bypass market structures by using its backstop capabilities. CESA finds neither of these paths to be reasonable at this juncture. Capacity structures exist for a reason in California, and CESA believes a balanced approach of using both a capacity approach as well as the Day-Ahead and Real-Time spot markets to ensure reliability is prudent. Reliance solely on backstops, meanwhile, indicates the product portfolio is likely inadequate, and that the capacity markets are inappropriately (under) valuing certain capabilities. Efficient markets should reflect and value desired capabilities.

3. The Flexible, Inflexible, and Allowance (FI&A) Capacity products warrant further consideration.

CESA supports the CAISO's preliminary structure to refine capacity product definitions in ways that address current or likely challenges in the operation of the Grid, including the growing flexibility needs, the "p-min burden", and over-generation-related concerns. CESA strongly encourages further collaboration with the CPUC as these discussions progress.

Given the CAISO's anticipated needs, the proposed FI&A structure seems to tactically address concerns while allowing appropriately fungible and defined products. For instance, numerous resources could compete to provide Inflexible capacity, given that the MOOs and capabilities for this product can likely be provided by numerous market participants. Flexible capacity, meanwhile, has already worked as a capacity market structure. Lastly, Allowance capacity could be provided through VER curtailment, storage charging, and other dispatchable loads. Thus all three categories will likely foster technology neutral competition, in turn yielding competitive and efficient pricing. In sum, a reliable, cost-efficient, and scalable approach seem plausible from this design.

CESA of course recognizes that the FI&A structure needs further discussion and development, and looks forward to vetting this idea further with the CAISO, the CPUC, and stakeholders. Further development should include consideration of MOOs, counting criteria, and other factors.

4. The MOO for Allowances needs definition and discussion.

CESA expects Allowances to have different MOOs than those of existing capacity products. CAISO data on the expected periods of p-min burdens and over-generation should inform the MOOs. The feasibility of an Allowance MOO to work for both nighttime over-generation and for mid-day over-generation may create needs for product capability "buckets", similar to the structure developed and used for the current Flexible RA MOO.

5. Flexible and Allowance capacity, as proposed in the FI&A, should initially use three-hour dispatch windows for 'counting'.

Determinations of the ramping period involve trade-offs. Existing capacity ramping definitions using three-hour ramps have been successfully adopted, and CESA believes this ramp-window should serve as the logical starting point for future enhancements to address flexible capacity needs. Capacity counting rules can have material effects on project valuation, and CESA recommends the CAISO and the CPUC minimize changes to counting rules, within reason and where appropriate.

The CAISO's preliminary definitions for FI&A capacities also seem like workable starting points for product definitions. Flexibility definitions should reflect the CAISO's needs, e.g. two starts per day, but CESA also recognizes that the CAISO and CPUC may wish to consider buckets within each capacity category.

6. CAISO modeling on its operating challenges should be shared.

If appropriate and available, CESA requests the CAISO share further information, particularly modeling results, regarding its operating challenges and potential solutions. Information provided by the CAISO to date has been informative, but further information, e.g. modeling regarding storage solutions, may also be useful.

To the extent that further definition of the CAISO's flexibility, p-min burden, and over-generation challenges require significant additional review by stakeholders, CESA suggests the CAISO consider "parallel path" stakeholder meetings solely on this topic. By separating the "problem definition and discussion" work from the "solution development" work, efficiencies in the stakeholder process may be gained.