



November 16, 2020

CAISO Board of Governors:

Ashutosh Bhagwat
Severin Borenstein
Angelina Galiteva
Mary Leslie
David Olsen

Dear CAISO Board of Governors,

The American Wind Energy Association (AWEA) is a national trade association representing a broad range of entities with a common interest in encouraging the expansion and utilization of land-based and offshore wind energy resources in the United States. AWEA's more than 1,000 member companies include wind turbine manufacturers, component suppliers, project developers, project owners and operators, financiers, researchers, utilities, marketers, customers, and others. AWEA-California is a project of AWEA representing companies that develop, own, and operate utility-scale wind, solar, storage, offshore wind, and transmission assets. AWEA-California is focused on driving immediate and sustained development of new utility-scale renewable energy to propel California toward a carbon-free electric future.

AWEA writes in support of the Hybrid Phase 2 proposal that will be put forward for your consideration this week, but also urges CAISO staff to work with stakeholders to address remaining issues and provide certainty to the marketplace for these new resources. With continued and increasing participation of storage/mixed-fuel resources in the market, CAISO must continue to evaluate the incentives provided by the rules surrounding each participation model, and seek consistency and – where possible – simplicity in the approach.

Under the current proposal, it appears that **only** the Hybrid participation model will be capable of preventing unwanted grid charging. The prevention of grid-charging is necessary for storage resources to fully capture Investment Tax Credit (ITC) benefits. We, therefore, believe that further improvements to the Co-Located participation model should be explored through the Hybrid Evolution stakeholder process that will be undertaken in 2021 and recognize that initiative should also explore enhancements to the Hybrid participation model. Additionally, given the likely preference for the Hybrid participation model by resource owners and off-takers we urge CAISO staff to make a commitment to the equitable treatment of Hybrid resources in the RA Enhancements initiative. We look forward to continuing to work with CAISO staff, management, and the Board on these important issues.

Over the course of the stakeholder process, CAISO has made several improvements to both the Co-Located and Hybrid resource participation models. Specifically, AWEA appreciates the inclusion of additional flexibility for Co-Located storage, which will allow these resources to deviate from Dispatch Instructions in certain intervals to reduce unnecessary renewable energy curtailment. AWEA also appreciates the elimination of the confusing and problematic use of outage cards as a tool of



communication of Hybrid’s capabilities based on state of charge and ambient conditions. These improvements will provide benefits to owners, operators, and off-takers of these resources, in addition to providing overall benefits to the CAISO grid.

AWEA looks forward to further consideration of improvements to both the Co-Located and Hybrid participation model. Specifically, in the Hybrid Evolution initiative, slated to occur in 2021, we look forward to exploring modifications that may help resources better utilize the Co-Located participation model. Notably, AWEA would like to see an ability for Co-Located Storage to deviate from Dispatch Instruction in additional, limited circumstances: by allowing Co-Located storage to charge less than its Dispatch Instruction, when the Co-Located Variable Energy Resource (VER) is generating less than anticipated. While we recognize that CAISO has operational concerns with this type of deviation, we believe with additional experience those concerns will be addressed. Additionally, AWEA hopes that CAISO will eliminate the prohibition on Co-Located storage providing Ancillary Services in an hour when using the Dispatch Instruction flexibility that prevent unnecessary renewable energy curtailments. Other stakeholders have provided examples of how storage resources can maintain Ancillary Service provision when utilizing this flexibility.

AWEA also urges the CAISO to consider consistency across its own initiatives as well as initiatives of the State. For example, in a related initiative (RA Enhancements) the CAISO should move away from previous proposals to calculate the UCAP value of Hybrid Resources in a substantially different way than Co-Located resources.

We recognize the need to move quickly in approving provisions for Hybrid resource participation in CAISO and support the CAISOs Board’s approval of the Phase 2 Hybrid proposal made by CAISO management. However, we believe there are improvements that can and should be made to the Co-Located participation model and we look forward to working with CAISO on those improvements as part of the 2021 Hybrid Evolution initiative. Additionally, given that the nature of the proposal from CAISO will likely drive most mixed-fuel resources that are relying on the ITC for the associated storage component toward the Hybrid participation model, we highlight the importance of ensuring equitable RA treatment for Hybrid resources. We look forward to working with CAISO staff to ensure that equitable treatment is part of the RA Enhancements proposal that is currently under development.

We therefore urge the CAISO Board of Governors to approve this proposal and request CAISO staff work with stakeholders to address the remaining issues in the upcoming year.

Sincerely,

A handwritten signature in black ink, appearing to read 'Danielle'.

Danielle Osborn Mills
Director, AWEA-California
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