

**BEFORE THE PUBLIC UTILITIES COMMISSION  
OF THE STATE OF CALIFORNIA**

Order Instituting Rulemaking to Continue  
Implementation and Administration, and  
Consider Further Development, of California  
Renewables Portfolio Standard Program.

Rulemaking 18-07-003  
(Filed July 12, 2018)

**REPLY COMMENTS OF THE  
CALIFORNIA WIND ENERGY ASSOCIATION  
ON QUESTIONS IN ASSIGNED COMMISSIONER AND  
ASSIGNED ADMINISTRATIVE LAW JUDGE'S RULING IDENTIFYING ISSUES AND  
SCHEDULE OF REVIEW FOR 2018 RENEWABLES PORTFOLIO STANDARD  
PROCUREMENT PLANS**

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***On behalf of the California Wind  
Energy Association***

October 5, 2018

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**I. INTRODUCTION AND SUMMARY**

In accordance with Ordering Paragraph 7 of the Assigned Commissioner and Assigned Administrative Law Judge’s (“ALJ’s”) Ruling Identifying Issues and Schedule of Review for the 2018 Renewables Portfolio Standard (“RPS”) Procurement Plans, dated June 21, 2018, (“Ruling”) as modified by the email Ruling of ALJ Mason, issued July 9, 2018, and as further modified by the email Ruling of ALJ Mason, issued September 13, 2018, the California Wind Energy Association (“CalWEA”) submits these reply comments to the September 21, 2018, opening comments filed in response to the questions posed in the Ruling.

In these reply comments, CalWEA supports the joint comments of Pacific Gas and Electric Company, Southern California Edison Company, and San Diego Gas & Electric Company (“Joint IOUs”) on the questions posed in the Ruling related to proposed RPS projects that are paired with energy storage. Specifically, CalWEA agrees with the Joint IOUs that:

- Stand-alone storage is likely to have greater value<sup>1</sup> than storage paired with generation projects; and

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<sup>1</sup> However, stand-alone storage may also have greater costs due to current tax credit eligibility criteria.

- If TODs are maintained, solicitations that allow for paired storage should be evaluated on the presumption that the seller will operate the storage to maximize the seller’s revenues based on the applicable power purchase agreement (“PPA”) terms.

Further, as the Joint IOUs suggest, the Commission should conduct oversight of all load-serving entities (“LSEs”), including community choice aggregators (“CCAs”) and electric service providers (“ESPs”) to ensure that storage is procured and operated consistently with what each LSE assumed in its Integrated Resource Plan (“IRP”).

We address each of these issues below.

## II. COMMENTS

The Ruling posed several questions related to the consideration of energy storage in RPS solicitations, bidding evaluations and power purchase agreements. In concurrence with the opening comments of the Joint IOUs, CalWEA provides the following responses that relate to these issues.

### A. Stand-Alone Storage Is Likely to Have Greater Value Than Storage Paired with Generation Projects

The Joint IOUs appropriately highlighted numerous reasons why stand-alone storage may provide greater value to customers than storage that is co-located with RPS generation (“paired storage”).<sup>2</sup> Primarily, these reasons are that paired storage comes with operational constraints and does not maximize the locational benefits that stand-alone storage can provide:

- **Operational constraints:** Paired storage facilities that benefit from federal tax credits must charge the storage facility from the co-located renewable energy project, rather than from the grid, which severely limits the operation of the storage and the potential benefits it may provide.<sup>3</sup> Additionally, in a rapidly evolving and unpredictable market, time-of-delivery factors will not reflect grid needs over the lifetime of the PPA and therefore alignment of the seller’s and the grid’s benefits cannot be assured under typical intermittent renewable resource PPA terms.

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<sup>2</sup> Joint IOUs at p. 2.

<sup>3</sup> Joint IOUs at p. 10-11.

- ***Locational deficiencies:*** Paired storage facilities are unlikely to be optimally sited where they can address local capacity deficiencies and provide the greatest local reliability benefits.<sup>4</sup>

Therefore, there should be no presumption, particularly absent further consideration, that paired storage projects should be preferred in RPS solicitations.

**B. Solicitations Allowing for Paired Storage Should Be Evaluated on the Presumption that the Seller Will Operate the Storage to Maximize the Seller’s Revenues Based on the Applicable PPA Terms**

The Joint IOUs suggest that, while their current RPS contracts “are designed to procure non-dispatchable resources,”<sup>5</sup> the current least-cost, best-fit (“LCBF”) methodology can capture any benefits of RPS paired with storage (including value components for energy, RA, Flexible RA, and ancillary services) and does not need to be revised.<sup>6</sup> (Further, CalWEA notes that PG&E, and perhaps the other IOUs, allowed paired storage projects to participate in its most recent RPS solicitation protocol as a dispatchable or non-dispatchable project.<sup>7</sup>) The Joint IOUs go on to state, however, that “the LCBF methodologies would need to be properly applied to account for the costs and benefits [of a paired storage facility] ... consistent with how the resource will be operated and dispatched under the PPA.” The Joint IOUs note that “a co-located storage resource that is controlled by the Seller to maximize contract revenues under an RPS contract with TOD factors will not provide the system benefits that a fully dispatchable resource with a must-offer obligation to the CAISO can provide.”

Thus, though not explicitly stated, the Joint IOUs suggest that their current LCBF methodologies are designed to presume that proposed co-located storage would be operated to maximize contract revenues based on the applicable PPA terms, rather than to maximize benefits to the grid. CalWEA supports this implicit suggestion, and urges the Commission to ensure that

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<sup>4</sup> Joint IOUs at p. 11.

<sup>5</sup> Joint IOUs at p. 3.

<sup>6</sup> Joint IOUs at p. 5.

<sup>7</sup> See PG&E’s 2014 RPS solicitation protocol at p.24-25. The Joint IOUs state that major contract modifications would be necessary to enable a paired storage project to operate as a dispatchable project (Joint IOUs at pp. 4-5); it may be, therefore, that dispatchable paired storage projects have yet to be bid, or successfully bid, to PG&E.

paired storage is evaluated in this way, presuming TOD factors are included in the PPA.<sup>8</sup> In addition, the Commission should encourage the Joint IOUs to develop PPA terms that would incentivize the seller to operate co-located storage in ways that maximize grid benefits. As the Joint IOUs point out, this may require modifications to their pro forma RPS PPAs.<sup>9</sup>

**C. The Commission Should Conduct Oversight of All Load-Serving Entities to Ensure that Procured Storage Is Operated Consistently with What Each LSE Assumed in Its Integrated Resource Plan**

The above discussion of paired storage projects raises important questions regarding the degree to which storage that is planned for and procured by an LSE will benefit the operation of the electric system. Procured storage may provide greater or lesser system benefits, as follows:

1. Storage may be operated to provide maximum system value;
2. Storage may be operated to maximize benefits to an individual LSE; or
3. Storage may be operated to maximize the seller's revenues.

The Commission should ensure that storage, including paired storage, procured by all LSEs is properly evaluated -- i.e., evaluated consistently with how that storage will be operated, and should ensure that it is actually operated in that manner. This is particularly important for CCAs and ESPs, which are conducting most procurement at present. Otherwise, the Commission's Preferred System Plan (the amalgamation of the individual plans of the LSEs) may not, in practice, meet the statutory IRP goals of minimizing total ratepayer costs and ensuring a reliable grid.

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<sup>8</sup> CalWEA addresses whether TOD factors should be maintained as part of LCBF analysis and PPAs in a parallel filing in this docket, CalWEA Comments on Staff Proposal on Effective Load Carrying Capability, Time of Delivery Factors, and Project Viability (October 5, 2018).

<sup>9</sup> Joint IOUs at pp. 4-5.

Respectfully submitted,

/s/ Nancy Rader

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***On behalf of the California Wind Energy  
Association***

October 5, 2018

## VERIFICATION

I, Nancy Rader, am the Executive Director of the California Wind Energy Association. I am authorized to make this Verification on its behalf. I declare under penalty of perjury that the statements in the foregoing copy of “Reply Comments of the California Wind Energy Association on Questions in Assigned Commissioner and Assigned Administrative Law Judge’s Ruling Identifying Issues and Schedule of Review for 2018 Renewables Portfolio Standard Procurement Plans” are true of my own knowledge, except as to the matters which are therein stated on information and belief, and as to those matters I believe them to be true. I declare under penalty of perjury that the foregoing is true and correct.

Executed on October 5, 2018, at Berkeley, California.

*/s/ Nancy Rader* \_\_\_\_\_  
Nancy Rader  
Executive Director  
California Wind Energy Association