

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

Order Instituting Rulemaking to
Oversee the Resource Adequacy
Program, Consider Program Reforms
and Refinements, and Establish
Forward Resource Adequacy
Procurement Obligations.

Rulemaking 21-10-002
(Filed October 7, 2021)

**COMMENTS OF THE CALIFORNIA ENERGY STORAGE ALLIANCE ON
THE PROPOSED DECISION ON PHASE 2 OF THE RESOURCE ADEQUACY
REFORM TRACK**

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In accordance with the Rules of Practice and Procedure of the California Public Utilities Commission (“Commission”), the California Energy Storage Alliance (“CESA”) hereby submits these comments on the *Proposed Decision on Phase 2 of the Resource Adequacy Reform Track* (“Proposed Decision” or “PD”) issued by Administrative Law Judges (“ALJ”) Debbie Chiv and Shannon O’Rourke on March 3, 2023.

I. INTRODUCTION.

CESA appreciates the opportunity to provide comments on the momentous PD issued by the Commission. As the result of almost two years of engagement between the Commission’s staff and parties, the PD offers a vision for a Resource Adequacy (“RA”) structure compatible with a rapidly decarbonizing electric grid. The slice-of-day (“SOD”) framework that stakeholders have developed through the workstream process will be better equipped than today’s RA structure to account for the contributions of intermittent variable energy resources (“VERs”), energy storage assets of different durations, and other energy- or use-limited assets. Moreover, the SOD approach will allow for a more granular establishment of capacity requirements, minimizing cost for ratepayers.

While the efforts of Commission staff and all parties involved must be commended and recognized, there are still areas where further development and clarification would aid the PD. From CESA’s perspective, these primarily relate to: (1) the representation of storage technologies in the Master Resource Database (“MRD”) and the load-serving entity (“LSE”) showing tool; (2)

the relationship between energy storage and energy-only (“EO”) VERs for the purposes of charging sufficiency verification; and (3) the role of deliverability in the context of charging sufficiency verification. With this in mind, CESA’s comments can be summarized as follows:

- Any inclusion of temporal charging constraints to the charging sufficiency verification element of the LSE showing tool is unnecessary and contrary to the RA framework.
- The Commission must clarify that an EO VER paired with a storage asset may count towards the storage’s charging sufficiency requirement regardless of whether the storage component can charge from the grid or not.
- The Commission should amend the PD to include consideration of allowing EO VERs to count towards the charging sufficiency requirement for standalone storage.
 - If the Commission moves forward with requiring full capacity deliverability status (“FCDS”) for resources to meet the charging sufficiency verification, the Commission should consider instituting an initial system-wide test prior to requiring sufficiency to be determined at the LSE level.
- The Commission should require that parties undertake a series of workshops to develop a multi-day storage counting methodology and address multi-day reliability event concerns.

II. ANY INCLUSION OF TEMPORAL CHARGING CONSTRAINTS TO THE CHARGING SUFFICIENCY VERIFICATION ELEMENT OF THE LSE SHOWING TOOL IS UNNECESSARY AND CONTRARY TO THE RA FRAMEWORK.

In the section discussing the LSE Showing Tool, the Commission notes that parties have collaborated with Southern California Edison (“SCE”) in the development of a tool for all LSEs to submit their monthly, 24-hour showings. While the Commission recognizes the appropriateness of SCE’s tool, it notes that Clean Power Alliance (“CPA”) presented an alternative tool that incorporates a temporal charging and minimum power output (“Pmin”) component with the goal of ensuring an LSE’s excess energy needed to charge any storage resource would match the

resource's actual charging parameters, among other changes.¹ In light of CPA's proposal, the Commission authorizes Energy Division ("ED") to incorporate CPA's energy storage logic into SCE's LSE Showing Tool, to the extent possible.

CESA does not support CPA's proposed alternative and requests the Commission reconsider its incorporation. CPA's proposal places an unnecessary burden in a showing tool intended to serve as an accounting check, not a daily dispatch schedule. While CESA understands the arguments in favor of incorporating some form of charging sufficiency verification to the RA Program given the accelerating procurement and deployment of energy storage resources, we, as do many other parties, consider that SCE's tool already includes the logic needed for those purposes. Moreover, it is essential to understand that the RA Program serves the purpose of ensuring that the CAISO will have sufficient capacity to depend on when serving load, whereas the CAISO's day-ahead and real-time markets will optimize the energy dispatch of RA capacity resources. These processes, the CAISO's markets, which are much more detailed and complex than any of the tools discussed in the Workstream Report, should continue to be the key determinants of when and how RA-providing resources will participate in the provision of energy and ancillary services ("AS"). In this context, the LSE Showing Tool, while more sophisticated than the current showing materials, is intended to be a simplification of a single LSE's portfolio, not a fully comprehensive dispatch schedule that ignores the benefits of participating in an organized market such as the CAISO. Thus, the Commission should reject any inclusion of temporal charging constraints to the charging sufficiency verification element of the LSE showing tool.

To this effect, the Commission should eliminate Finding of Fact ("FOF") 5, and should modify Conclusion of Law ("COL") 3 as follows:

~~"3. SCE's LSE Showing Tool approach is reasonable and should be adopted, with the modification that CPA's energy sufficiency charge mechanism should be incorporated into SCE's approach, to the extent possible."~~²

¹ PD at 15.

² PD at 86.

Similarly, the Commission should modify Ordering Paragraph (“OP”) 3 as follows:

“3. Southern California Edison’s (SCE) load-serving entity (LSE) Showing Tool approach is adopted. ~~Energy Division is authorized to implement Clean Power Alliance’s energy storage sufficiency logic into SCE’s LSE Showing Tool approach, to the extent possible.~~ Energy Division is directed to publish a draft LSE Showing Tool on the Commission’s website and solicit informal party comments.”³

III. THE COMMISSION MUST CLARIFY THAT AN EO VER PAIRED WITH A STORAGE ASSET MAY COUNT TOWARDS THE STORAGE’S CHARGING SUFFICIENCY REQUIREMENT REGARDLESS OF WHETHER THE STORAGE COMPONENT CAN CHARGE FROM THE GRID OR NOT.

In the section regarding hybrid and co-located resources (also referred to herein as “paired” resources), the Commission notes that numerous parties support allowing EO resources to count towards the storage charging sufficiency requirement if the EO resource is charging on-site storage. The Commission agrees with parties that this is reasonable because on-site generation does not rely on the transmission system to deliver charging capacity to the co-located storage resource.⁴ Consequently, the PD determines that paired resources will be characterized on the MRD as either charging exclusively on-site or allowing grid charging. An EO resource may count towards the storage charging sufficiency requirement if the EO resource charges exclusively on-site storage.⁵

CESA believes that the PD’s intent is aligned with the comments offered by CESA and parties such as SCE and Pacific Gas & Electric (“PG&E”) in the Workstream Report and thereafter; nevertheless, we are concerned that the language lacks sufficient clarity. In prior comments CESA proposed that, regardless of whether a paired resource charges from the grid or

³ PD at 88.

⁴ PD at 38.

⁵ *Ibid.*

not, the deliverability of the VER component (or lack thereof) should not pose a limitation to comply with the internal sufficiency check. In other words, if the VER component is not deliverable, it may support the energy storage for the internal charging sufficiency verification, but it may not provide any additional RA value, regardless of whether the paired asset as a whole can charge from the grid or not. The Commission should clearly affirm that, for all paired resources, the deliverability status of the VER component is irrelevant for the purposes of supplying/charging the storage component. This clarification is urgent given the fact that a significant share of paired resources have successfully integrated energy storage assets by reallocating deliverability from a VER asset to an energy storage asset. Moreover, this is reasonable given the fact that, regardless of whether the storage component can charge from the grid or not, the ability of the VER component to provide energy to the storage component both bolsters the reliability of the storage component and is irrespective of the ability of the VER component to inject power to the broader CAISO system. Finally, this is aligned with the comments made by the Public Advocates Office (“Cal Advocates”) and echoed by CESA, PG&E, and the California Community Choice Association (“CalCCA”), arguing that that the SOD approach should recognize that renewable resources paired with a storage resource that has full deliverability status should not be required to have FCDS.

To adequately recognize this, the Commission should modify FOF 11, COL 6, and OP 7 as follows:

“11. EO resources can count towards the storage charging sufficiency requirement if the EO resource is charging on-site storage **regardless of whether the storage asset is able to charge from the grid** because on-site generation does not rely on the transmission system to deliver charging capacity to the co-located storage resource.”⁶

“6. An EO resource should be eligible to count towards the storage charging sufficiency requirement if the EO resource is charging on-site storage **regardless of whether the storage asset is able to charge from the grid.**”⁷

⁶ PD at 83.

⁷ PD at 86.

“7. Hybrid resources will be characterized on the Master Resource Database (MRD) as either charging exclusively on-site or allowing grid charging. An energy-only (EO) resource is eligible to count towards the storage charging sufficiency requirement if the EO resource is charging exclusively on-site storage, ***regardless of whether the storage asset is able to charge from the grid.*** The charging capacity of the renewable resource will be capped at the amount that can be used to charge the on-site storage and the storage will be capped at the interconnection limit. Hybrid components will be shown as separate assets on the MRD and load-serving entities’ showings, and the total of the components must not exceed the interconnection amount in any hour.”⁸

IV. THE COMMISSION SHOULD AMEND THE PD TO INCLUDE CONSIDERATION OF ALLOWING EO VERS TO COUNT TOWARDS THE CHARGING SUFFICIENCY REQUIREMENT FOR STANDALONE STORAGE.

During the Workstreams, CESA and other parties raised some concerns regarding the interpretation that any and all resources that could contribute to meet the charging sufficiency verification of standalone storage resources must have FCDS. Parties representing the renewable industry as well as CESA noted that this interpretation may run afoul with both assumptions ingrained in the IRP’s Planning Track, and the guidance provided in the Mid-Term Reliability (“MTR”) Procurement Decision (“D.”), 21-06-035.

In this context, CESA urged the Commission to consider allowing EO VERs to count towards the charging sufficiency requirement for standalone storage. CESA noted that this is reasonable since EO standalone VERs, while not subject to must-offer obligation (“MOO”) and substitution rules related to RA, have every incentive to try to inject power to broader grid whenever they can, essentially making themselves available in the totality of the hours in which they generate electricity. EO VERs are incented to charge the batteries during off-peak hours. This effectively reduces the energy cost for storage charging, thus providing significant ratepayer value. Moreover, while EO standalone VERs are not subject to substitution obligations, neither are RA-providing VERs. In this context, allowing EO standalone VERs to satisfy the charging sufficiency

⁸ PD at 89.

verification for standalone energy storage introduces little risk and recognizes the ratepayer benefits of having an abundant renewable energy portfolio.

In the comments and replies relative to the Workstream Report, CESA also noted that if the Commission moves forward with requiring FCDS for resources to meet the charging sufficiency verification, the Commission should, *ad minimum*, institute an initial system-wide test prior to requiring sufficiency to be determined at the LSE level. The idea behind this test is to ensure that the artificial siloing of the LSE-by-LSE tests do not result in undue failure of said tests.

These aforementioned concerns, as well as the proposals to either allow EO VERs to count for the purposes of charging sufficiency verification or to include an initial system-wide test, while developed further in the Workstream report and the comments and replies submitted by CESA, are not discussed or considered in detail within the PD. CESA urges the Commission to properly address these points as they offer meaningful ways to further reliability while balancing the realities of project and transmission development in the interest of ratepayers.

V. THE COMMISSION SHOULD REQUIRE THAT PARTIES UNDERTAKE A SERIES OF WORKSHOPS TO DEVELOP A MULTI-DAY STORAGE COUNTING METHODOLOGY AND ADDRESS MULTI-DAY RELIABILITY EVENT CONCERNS.

In the section discussing multi-day storage, the Commission notes that numerous parties have suggested that a multi-day storage counting methodology is not ready for adoption and called for additional discussion of the topic. CESA agrees with the Commission's determination to allocate additional time to this topic. However, in order to ensure that this topic is prioritized, and that timely progress is made towards a non-discriminatory and implementable solution, CESA urges the Commission to explicitly require that parties convene to discuss outstanding issues.

D.21-07-014 orders that, among the topics discussed in the subsequent SOD implementation workshops, parties should address multi-day reliability event concerns.⁹ While these issues were addressed in brief in the subsequent workshops, they were not considered in

⁹ D.21-07-014, OP 1.

depth, nor were any solutions developed. This work remains critical to ensuring grid reliability and to the durability and success of the SOD framework. As such, CESA urges the Commission to require that parties continue to develop solutions to address multi-day reliability risks within the RA framework.

To this effect, the Commission should add two FOFs.

- “Ensuring that Long Duration Energy Storage resources, including Multi-day Storage, are properly valued across the SOD framework is critical to the durability and success of the SOD framework.”
- “Addressing multi-day reliability risks posed by extreme weather events and multi-day renewable generation lulls is critical to the durability and success of the SOD framework.”

In addition, the Commission should add the following COL.

“Parties should undertake a series of workshops to address outstanding implementation issues, including the development of a counting methodology for multi-day storage resources and amendments to the SOD framework to address multi-day reliability risks.”

Similarly, the Commission should add an OP ordering additional workshops.

“Parties shall undertake a minimum of four workshops over the next approximately nine months, during which they shall develop 1) an implementable, non-discriminatory counting methodology for multi-day storage resources and 2) amendments to the SOD framework to address multi-day reliability risks. At the conclusion of the workshops, an identified party or parties shall submit a Workshop Report providing proposed solutions to these issues and identifying consensus and non-consensus issues. The Workshop Report shall be filed and served in the Resource Adequacy proceeding by February 1, 2024.”

VI. **CONCLUSION.**

CESA appreciates the opportunity to submit these comments on the PD and looks forward to working with the Commission and stakeholders in this proceeding.

Respectfully submitted,

A handwritten signature in black ink, appearing to read 'Jin Noh', written in a cursive style.

Jin Noh
Policy Director
CALIFORNIA ENERGY STORAGE ALLIANCE

Date: March 23, 2023