UNITED STATES OF AMERICA
BEFORE THE FEDERAL ENERGY REGULATORY COMMISSION

Tariff Amendment to Implement the Resource Adequacy Enhancements Phase 1 Initiative – Summer 2021 Provisions.	Docket No. ER21-1551-000

MOTION TO INTERVENE AND COMMENTS OF THE CALIFORNIA ENERGY STORAGE ALLIANCE

Jin Noh
Policy Director
CALIFORNIA ENERGY STORAGE ALLIANCE
2150 Allston Way, Suite 400
Berkeley, California 94704
Telephone: (510) 665-7811
Email: cesa_regulatory@storagealliance.org

April 19, 2021

UNITED STATES OF AMERICA
BEFORE THE FEDERAL ENERGY REGULATORY COMMISSION

Tariff Amendment to Implement the Resource Adequacy Enhancements Phase 1 Initiative – Summer 2021 Provisions.	Docket No. ER21-1551-000

MOTION TO INTERVENE AND COMMENTS OF THE CALIFORNIA ENERGY STORAGE ALLIANCE

Pursuant to Rule 211 of the Federal Energy Regulatory Commission's ("Commission") Rules of Practice and Procedure, the California Energy Storage Alliance ("CESA") respectfully moves to intervene and provides comments in response to the tariff amendment filing of the California Independent System Operator ("CAISO") submitted on March 29, 2021 in Docket No. ER21-1551. CESA offers our comments here in support of the proposed revisions to implement a minimum state of charge ("MSOC") proposal for energy storage resources, conditioned on the sunset of the MSOC after a two-year period and on the development of market-oriented alternative solutions to be developed in a future CAISO initiative.

I. <u>BACKGROUND.</u>

Founded in 2009, CESA is a non-profit membership-based advocacy group committed to advancing the role of energy storage in the electric power sector through policy, education, outreach, and research. CESA's mission is to make energy storage a mainstream energy resource which accelerates the adoption of renewable energy and promotes a more efficient, reliable, affordable, and secure electric power system. As a technology-neutral group that supports all business models for deployment of energy storage resources, CESA membership includes technology manufacturers, project developers, systems integrators, consulting firms, and other clean-tech industry leaders. CESA's current membership consists of over 80 member companies. 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.

II. COMMUNICATIONS AND CORRESPONDENCE.

Address all communications and correspondence concerning this proceeding to.

Jin Noh
Policy Director
California Energy Storage Alliance
2150 Allston Way, Suite 400
Berkeley, CA 94704
Phone: (510) 665-7811
Email: cesa_regulatory@storagealliance.org

III. MOTION TO INTERVENE IN THIS PROCEEDING.

CESA's intervention in this proceeding is in the public interest, and CESA's interests will not be adequately reflected by any other party, particularly given CESA's role in energy storage and participatory access to the CAISO and California's electric marketplace. CESA was an active and engaged stakeholder in the CAISO's Resource Adequacy ("RA") Enhancements Initiative. In particular, CESA focused on minimizing the impact of the originally proposed MSOC, previously proposed and named as the minimum charge requirement ("MCR"), which would have forced energy storage resources with a day-ahead ("DA") schedule to "stay out" of the real-time ("RT") market for all prior intervals.

Throughout the initiative, CESA initially challenged the MSOC/MCR proposal as significantly limiting the responsiveness and flexibility of energy storage resources, subjecting a class of resources to a potentially discriminatory set of rules and requirements, and being preemptive without substantiation of issues identified related to energy storage resources in the CAISO market. As such, CESA advocated for any evaluation of the CAISO's RA framework to be done carefully and with a strong consideration from stakeholder input. To this end, CESA formally provided comments and collaborated with CAISO staff in an effort to ensure adopted reforms serve the purpose of maintaining grid reliability without imposing overly burdensome requirements on assets without further substantiation while developing market-based alternative solutions in the long term.

With the condition that the MSOC be established as a short-term and interim measure, CESA supports the CAISO's proposal and tariff amendments. Specifically, regarding the MSOC proposal, CESA advocated for the institution of a clear trigger condition that would ensure the MSOC is only used in cases of extraordinary need. Moreover, CESA noted the need to fairly compensate resources for the opportunity costs associated with foregoing RT revenues. Given the complexities of fulfilling this latter condition, CESA highlighted that the MSOC should be considered an interim solution which could be improved upon in subsequent stakeholder processes. This outcome and ultimate plan are seemingly reasonable given the need for some form of rarely-used exceptional dispatch tools that are more workable for energy storage and that can be used as energy storage amounts dramatically increase this year, when increasing but still occasional extreme weather conditions may present severe reliability challenges.

IV. <u>COMMENTS</u>.

A. CESA supports the MSOC proposal as an interim, short-term measure until permanent, market-oriented alternative solutions are developed to manage energy storage resources for reliability.

The CAISO's acknowledgement and incorporation of stakeholder feedback has been fundamental to minimize market disruptions and provide the CAISO with added assurances of delivering grid reliability. In this context, it is worth recognizing the diligent labor of CAISO staff in incorporating recommendations made by members of the Market Surveillance Committee ("MSC"), CESA, and other stakeholders with regards to the MSOC proposal. The CAISO process allowed for ample stakeholder input and staff worked to find a viable market-design solution that honors both the need for non-discriminatory markets and for CAISO operators to also have rarely used reliability-dispatch tools.

In the Final Proposal, the CAISO clearly states that the MSOC proposal would be a temporary solution implemented solely to minimize reliability risks while the CAISO works with stakeholders to identify a permanent, market-oriented solution. The CAISO has committed to developing such market-based permanent solutions through a new Energy Storage Enhancements ("ESE") Initiative, scheduled to launch in Q2 2021. Furthermore, the CAISO has revised the MSOC proposal substantially since the initial inception of the MSOC/MCR proposal in the RA Enhancements Initiative, adopting a trigger condition that is well-equipped to solely apply the restriction in the days of most critical need, based on the residual unit commitment ("RUC") process. Together, CESA appreciates and supports the changes made to the MSOC proposal to minimize the number of days that the state-of-charge restriction would apply. Moreover, the ISO amended the proposal to also minimize the number of RT intervals the MSOC would affect.

Given these modifications, as well as the CAISO's commitment to revise and/or replace the MSOC proposal through the upcoming ESE Initiative, CESA supports the proposed MSOC in the present tariff filing. CESA understands the CAISO's need to ensure the reliable operation of its grid. The modifications the CAISO has included to this proposal minimize the negative externalities of the MSOC proposal. That being said, it is fundamental to view this requirement as interim, as it fails to address fundamental issues related to the optimization and operationalization of energy storage within CAISO markets. CESA believes this type of interim solution is reasonable given the pace of change in the CAISO's fleet and the need for workable interim solutions for operators in rare instances in the near term.

B. The Commission should conditionally approve the proposed tariff amendments upon continued analysis of the need for the MSOC and the development of alternative solutions in line with market and non-discriminatory principles.

In order to minimize the impacts of the MSOC, the CAISO should study MSOC use during Summer 2021 to automate a process that would drop MSOC restrictions if RT conditions allow it. To this end, the CAISO should run sufficiency tests on a regular basis throughout the day to determine if MSOC is still needed, not limiting itself to a single test after the DA schedules are determined. As such, CESA recommends that the CAISO collect and analyze MSOC data from Summer 2021 to ensure the automation of this process is feasible by Summer 2022, ahead of the permanent sunset of this provision.

With regards to the modifications needed in advance of the sunset of the MSOC, CESA recommends a revision of the following market elements as they relate to energy storage operationalization:

- **Multi-interval optimization ("MIO") tool:** Currently, the MIO software's operation can lead to undesired discharge in intervals prior to the evening peak since it does not link real-time dispatch ("RTD") instructions directly to the binding interval. Revising this tool could enable the RT market to dispatch energy storage in a way that obviates the need for the MSOC.
- **Bid-cost recovery ("BCR"):** Today, the BCR mechanism does not properly

address the losses incurred by non-generator resources ("NGRs") when following CAISO dispatch. This, paired with the previously noted deficiencies of the MIO tool, exacerbates the financial risks of suboptimal dispatch instructions for NGRs. A revision of the BCR, paired with improvements to the MIO, thus could enable the ISO to rely on dispatch instructions and exceptional dispatch ("ED") to operate the storage fleet while properly compensating assets.

- **Energy shifting product:** The CAISO should consider the creation of a DA product designed to compensate storage specifically for shifting renewable energy into the evening hours. This product should capture the opportunity costs storage resources would undertake by limiting themselves to energy shifting. CESA has urged the CAISO to consider this topic in the upcoming ESE Initiative.

V. CONCLUSION.

CESA appreciates the Commission's considerations of these comments and looks forward to further collaborating with the CAISO and the Commission.

Respectfully submitted,

Jin Noh
Policy Director
CALIFORNIA ENERGY STORAGE ALLIANCE

April 19, 2021

<u>CERTIFICATE OF SERVICE</u>

I hereby certify that I have this day served a copy of ***Motion to Intervene and Comments of the California Energy Storage Alliance*** on the official service list in the proceeding ER21-1551-000, in accordance with the requirements of Rule 2010 of the Commission's Rules of Practice and Procedure.

Executed on April 19, 2021 in Berkeley, California.

Jin Noh