

October 20, 2017

Email to: [docket@energy.ca.gov](mailto:docket@energy.ca.gov)

Original Copy to:  
California Energy Commission  
Docket Office, MS-4  
Re: Docket 17-DSTD-01  
Subject: 2019 Residential Standards  
1516 9<sup>th</sup> Street  
Sacramento, CA 95814-5512

**Re: Comments of the California Energy Storage Alliance (CESA) on the Appendix JA11, Qualifications for Battery Storage Systems, associated with 2019 Building Efficiency Residential Standards, Docket 17-BSTD-01**

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Dear Commissioners:

The California Energy Storage Alliance (“CESA”)<sup>1</sup> applauds the California Energy Commission (CEC) and its staff for considering how best to direct and structure building efficiency standards.

In this code update cycle, the roles and applications of energy storage solutions are being more broadly discussed. Energy storage can help meet state and local targets for GHG reduction, grid efficiency, and home design ratings. Energy storage can also serve as a very flexible measure to meet the CEC Building Code Energy Design Rating (“EDR”) and reduce the home Time Dependent Value (“TDV”), considering its ability to offset electricity consumption from any home at any time of day. Since building efficiency standards should afford builders with as much flexibility as possible while maintaining a tight building envelope, the role of energy storage in providing many different solutions is especially intriguing, and rules should support this flexibility.

CESA offers the following comments on Draft Appendix JA11, Qualifications for Battery Storage Systems. Generally, these comments seek to provide appropriate levels of flexibility in how best to program and use the storage device, while also avoiding any creation of rules in JA11 that would overlap with existing already structured interconnection rules:

**A. A new “Flexible Control” option should be added.**

CESA recommends an additional Flexible Control option be added:

“JA11.2.3.5 Flexible Control: To qualify for Flexible Control, the battery storage system shall be operated in a manner that increases self-consumption, responds to utility rates, responds to demand response signals, and/or other strategies that align with EDR value.”

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<sup>1</sup> CESA is a California-based 501(c)-6 non-profit with over 65 energy storage member-companies who are the leaders in the energy storage industry. CESA’s mission is make energy storage a mainstream resource that accelerates the adoption of renewable energy and promotes a cleaner, more efficient, reliable, affordable, and secure electric power system.

This added control options makes sense because the desired customer operational strategies for the battery may vary due to the specific conditions of the home, and its components. As a result, CESA recommends that operational strategies should encourage, but not require, behavior to maximize battery EDR value. Customer should be allowed to operate the battery to meet their objectives which may be comfort, solar self-consumption, Time of Use (“TOU”) etc. Operating the battery for self-consumption and bill savings will be most customers’ preference. Therefore, rates designed by utilities should be utilized to encourage battery operations to align with EDR value.

**B. Minimum performance requirements should promote competition among battery providers.**

CESA believes energy storage efficiency requirements should be structured so a large array of batteries can compete to provide services. This creates cost-savings through competition while yielding still solid energy storage performance benefits. As such, CESA recommends any minimum performance requirements be set to allow for broad and flexibility qualifications of energy storage.

Importantly, cycling efficiencies, if used, should be based on factory ratings and expected performance. This way, efficiencies are calculated for all storage on an apples to apples basis, rather than using data across a discrete time period, e.g. one month, where some storage applications may have cycled frequently while others were cycled infrequently (for good reason).

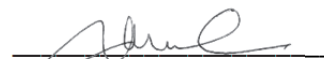
**C. Grid harmonization matters should be addressed through interconnection procedures, not through JA11.**

Interconnection rules address an array of interconnection issues that can ensure appropriate and safe operations of distributed energy resources like energy storage. These rules and related processes also include input from utility engineers to a degree where the interconnection process alone, rather than any JA11 determinants, should address grid-harmonization concerns or needs.

**Conclusion.**

CESA appreciates the consideration of energy storage solutions to support the State’s building efficiency standards. Storage will be key to the tool-kit of new buildings and of the grid in the future. CESA members stand ready to support the Commission in its efforts to understand storage and develop smart and flexible building efficiency standards.

Sincerely,



Janice Lin  
Executive Director  
California Energy Storage Alliance