

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

Order Instituting Rulemaking Regarding
Building Decarbonization.

Rulemaking 19-01-011
(Filed January 31, 2019)

**COMMENTS OF THE CALIFORNIA ENERGY STORAGE ALLIANCE
TO THE ADMINISTRATIVE LAW JUDGE'S RULING SEEKING COMMENT ON
STAFF PROPOSAL FOR BUILDING DECARBONIZATION PILOTS**

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In accordance with Rules of Practice and Procedure of the California Public Utilities Commission (“Commission”), the California Energy Storage Alliance (“CESA”) hereby submits these comments to the *Administrative Law Judge’s Ruling Seeking Comment on Staff Proposal for Building Decarbonization Pilots*, issued by Administrative Law Judge (“ALJ”) Colin Rizzo on July 16, 2019.

I. INTRODUCTION.

Electrifying and optimizing building energy consumption, which is responsible for a quarter of California’s greenhouse gas (“GHG”) emissions,¹ represents a major opportunity for California to reduce a significant portion of GHG emissions to reach the state’s decarbonization goals. Given the limited amount of funding authorized for the Building Initiative for Low-Emissions Development (“BUILD”) Program and the Technology and Equipment for Clean Heating (“TECH”) Program, the Senate Bill (“SB”) 1477 pilots should focus on how the building decarbonization technology market can scale based on lessons learned. CESA broadly supports the Commission’s Staff Proposal as attached in the Ruling and presented at the July 30, 2019

¹ Ruling Attachment A (Staff Proposal) at p. 5.

workshop, such as around the proposal for BUILD Program to focus on scalability, leverage other programs where possible, and flexibly allow amendments to program design.²

CESA focuses our comments here on the need to further explore and value the GHG performance-based compliance pathway for battery storage, thermal storage, and controlled water heater technologies given that the GHG emissions reduction impact of these resources will largely hinge on how they are operated. Additionally, similar to what was proposed in the BUILD Program,³ some additional consideration of low-income households should be incorporated into the TECH Program design given that the intent in SB 1477 for the TECH Programs was to “give consideration to technologies that have the greatest potential to reduce GHG emissions in California and that improve the health and safety of, and energy affordability for, low-income households.”⁴ Such changes could come in the form of carve-outs, higher incentive rates, and/or qualitative criteria in assess grant or prize awardees, as proposed in the Staff Proposal.

II. PERFORMANCE-BASED COMPLIANCE PATHWAYS SHOULD BE EXPLORED FOR CONTROLLABLE STORAGE TECHNOLOGIES.

The Staff Proposal focuses on the decarbonization benefits of fuel switching and recognizes that GHG emissions from electricity use fluctuates through different hours of the day.⁵ Furthermore, with the GHG baseline proposed as being based on a mixed-fuel home from the 2019 Building Energy Efficiency Standards, battery storage and thermal storage resources are deemed as eligible technologies for BUILD ‘kicker’ incentives for their ability to support beyond-code

² *Ibid* at pp. 27 and 31.

³ *Ibid* at p. 7.

⁴ SB 1477 Section 922(b).

https://leginfo.legislature.ca.gov/faces/billTextClient.xhtml?bill_id=201720180SB1477

⁵ Ruling Attachment A (Staff Proposal) at pp. 22 and 54.

GHG emission reductions.⁶ However, given that a “robust but limited set of prescriptive incentives” for storage technologies are proposed, CESA seeks greater clarity on how incentives for storage technologies will be calculated and whether it would only involve prescriptive compliance pathways as outlined in Joint Appendix (“JA”) 12 (*i.e.*, capacity and roundtrip efficiency requirements, four control strategies) or involve/allow for a more performance-based pathway for a storage resource to be operated to get credit for achieving GHG emission reductions below a prescriptive compliance pathway.

For the purposes of these pilots, CESA sees significant potential to go beyond the more prescriptive JA 12 compliance pathways and thus recommends that performance pathways be explored where smartly dispatched battery/thermal storage resources can take service under dynamic time-varying rates and/or provide grid services to deliver even greater verifiable GHG emission reductions. With a performance-based pathway, CESA sees potential for a wider range of battery and thermal storage technologies, including for different energy durations, being eligible for beyond-code GHG reductions. Additionally, since a performance-based methodology is not currently recognized for thermal storage resources in the 2019 Building Energy Efficiency Standards,⁷ the role and value of thermal storage in these pilots will be recognized and incentivized through a performance-based approach and evaluation methodology. Finally, CESA strongly supports the consideration of electric water heaters installed with demand management capability to, in effect, provide grid-connected and dispatchable storage capacity. Similar to battery and thermal storage technologies, performance-based pathways should also be explored for electric

⁶ *Ibid* at pp. 33 and 35.

⁷ As CESA understands it, Title 24 previously recognized the electric grid and GHG impact of thermal storage performance through the CEC’s previous EnergyPro and MICROPAS software tools.

water heaters with smart controls to ensure that beyond-code GHG emission reductions are achieved and potentially awarded with higher incentive rates.

CESA understands that the scope of this Ruling and Staff Proposal is on the BUILD and TECH Program pilots at this time. Over the course of this proceeding, as the Commission develops a longer-term framework for building decarbonization, CESA recommends that the Commission explore how building technologies can be incentivized to operate in ways to increase or maximize GHG emission reductions. While fully supportive of the GHG-reducing benefits of fuel switching, additional GHG emission reductions can be achieved by shaping the operation of electric end-use technologies such as storage resources, which CESA views as one of the important goals of this proceeding.

III. CONCLUSION

CESA appreciates the opportunity to submit these comments to the Ruling and to the Staff Proposal. We look forward to further collaborating with the Commission, CEC, and stakeholders in this proceeding.

Respectfully submitted,



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