DOCKETED	
Docket Number:	19-BSTD-03
Project Title:	2022 Energy Code Pre-Rulemaking
TN #:	236125
Document Title:	California Solar & Storage Association Comments - on Dec 8, 2020 Workshop on 2022 Building Energy Efficiency Standards
Description:	N/A
Filer:	System
Organization:	California Solar & Storage Association
Submitter Role:	Public
Submission Date:	12/23/2020 2:59:33 PM
Docketed Date:	12/23/2020

Comment Received From: California Solar & Storage Association

Submitted On: 12/23/2020 Docket Number: 19-BSTD-03

CALSSA comments on Dec 8 2020 Workshop on 2022 Building Energy Efficiency Standards

Additional submitted attachment is included below.



December 23, 2020

Subject: 19-BSTD-03 – CALSSA's comments on December 8, 2020 Workshop on 2022 Building Standards

Dear California Energy Commissioners and staff:

Thank you for the opportunity to submit comments on the Energy Commission's pre-rule making workshop on December 8, 2020 reviewing the 2022 building energy efficiency standards. We submitted comments to the docket on the Commission's October 6 workshop covering many of the topics discussed at the December 8 workshop. Our additional comments on the December 8 workshop are below.

Commercial battery storage requirement

We support the proposal to require PV and battery storage for commercial and high-rise residential buildings. We recognize the difficulty of installing cost effective battery storage in some circumstances because VNEM, Electrictrees, and other technologies as solutions for multi-tenant battery storage are in the early stages of development or adoption.

If the Commission considers granting an exemption, we hope the scope of the exemption can be limited, such as in the following ways:

- Pertain only to the battery storage requirement, as opposed to the PV requirement.
- Pertain only to multi-tenant, multi-metered buildings.
- Pertain only to units with floor areas under a certain benchmark set by the Energy Commission based on cost-effectiveness.
- Pertain only in areas without a compliant community battery program.

We also suggest that units that receive an exemption should be eligible for envelope compliance credit if they are constructed with a battery storage system to spur technologies that enable multi-tenant energy storage among other reasons.

Ability to unenroll from community solar programs

We support the Commission's proposal to allow homes and businesses enrolled in a community solar program as a compliance path for the solar mandate to unenroll anytime if the home or business installs a compliant onsite system. Homeowners and businesses should be able to unenroll without fees or penalties, and we believe the Commission's community solar program requirements should protect homes and businesses from such charges.

PV mandate for small homes

The workshop proposed an exception to the solar mandate for homes that would otherwise require PV systems of 1.9 kWDC or smaller. While we understand the intention of the exception, we believe the proposed structure would exempt numerous homes on which many contractors could install cost effective solar.



According to the prescriptive requirement of the 2019 standards, homes as large as 1,435 square feet (in climate zone 5) would require a system smaller than 1.9kW and therefore be exempt. In climate zone 7, which includes the San Diego metropolitan area, homes as large as 1,310 square feet would be exempt. The more stringent energy efficiency requirements in the 2022 standards, which would decrease the electricity needs of homes and thus decrease the required PV system size, would increase the square footage threshold of homes that would receive the exemption. Additionally, medium-sized homes that exceed the minimum energy efficiency requirements and thus require a smaller PV system, could also qualify for an exemption.

These small and medium homes that would be exempt from the solar mandate based on a 1.9kW threshold are a significant portion of new construction. According to the U.S. Census Bureau, 8 percent of single-family homes in the western United States completed in 2019 were smaller than 1,400 square feet and 18 percent were 1,400-1,799 square feet.¹

While we recognize the difficulty of designing some very small PV systems that are cost-effective, the solar industry has a track record of installing cost-effective systems between 1.5kW and 1.9kW on existing construction. With that track record, the industry is prepared to install 1.5-1.9kW systems on new construction, which should be more cost-effective than systems on existing construction – due to cost savings in system design, permitting, logistics, and customer acquisition – especially when part of a new development.

Cost effectiveness of solar thermal

We thank the Commission for working with the industry on the role of solar thermal in the building standards. Currently, we are reviewing the Commission's analysis on the cost-effectiveness of solar thermal and will share our findings. We look forward to continuing to work together.

Thank you for consideration of our comments.

Sincerely,

Benjamin Davis

Benjamin Dain

Policy Associate

California Solar & Storage Association

¹ United States Census Bureau, *Square Feet of Floor Area in New Single-Family Houses Completed* (spreadsheet), available at https://www.census.gov/construction/chars/xls/squarefeet_cust.xls and https://www.census.gov/construction/chars.