

**DOCKETED**

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*Comment Received From: Jim Purekal, on behalf of SunPower  
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**SunPower reply comment to CBPA**

*Additional submitted attachment is included below.*



July 7, 2021

California Energy Commission  
1516 9<sup>th</sup> Street  
Sacramento, CA 95814

Docket Number: 21-BSTSD-01

Subject: COMMENTS IN SUPPORT OF PV + STORAGE MANDATE

Dear California Energy Commissioners and staff:

SunPower applauds the Energy Commission's leadership in shaping the PV and Storage mandate proposed within the 2022 Building Energy Efficiency Standards (BEES). As you may know, SunPower is a 35-year old leading solar energy technology and services provider. We have more than 13 gigawatts of solar deployed around the world and are a leader in the U.S. residential and commercial market. We have more than 1,000 global patents and 1,300 dealers that sell our products to customers around the world. In California alone, SunPower products have been installed in over 84,000 residential units and 2,900 commercial enterprises – public entities and businesses alike. We also work with over 370 statewide dealers with more than 11,000 employees across the state.

We appreciate the Commission's drive to require solar and storage in commercial buildings, and the push to ensure that energy storage systems and electrification technologies can be easily added to homes in the future. We are also grateful for the opportunity to address some of the outlying concerns that may distract the Commission's efforts.

First, there is a belief that the battery storage requirement for non-residential buildings is too far ahead of its timeframe in the face of current supply shortages. While we recognize that some commercial customers face a supply shortage for batteries today, we should remember that the mandate will not go into effect until 2023 and that battery manufacturing capacity is expanding. We expect the supply constraints of 2021 to be significantly mitigated by 2023, in time to face the growth in demand. SunPower sees significant investment from our manufacturer and integrator partners in building more battery factories and more manufacturing capability. In addition, SunPower has lined up long-term supply to fulfill our 2022 and 2023 customer needs.

Second, there is an assertion that PV and battery storage do not necessarily work together unless you have an off-grid building that needs to rely on PV for standard power. The point can be easily refuted as SunPower has installed or is in the process of installing 51 energy storage systems paired with PV systems for commercial customers in California, and none of them are being installed at off-grid buildings. Just to name one example, SunPower is currently installing a 5.5 MW PV rooftop coupled with a 1.5 MW / 6 MWH energy storage system located in Bakersfield, CA and interconnected to Pacific Gas & Electric. The system is forecasted to deliver over \$440K in bill savings and reduce the impact of green-house gas (GHG) emissions by more than 178,000 kg CO<sub>2</sub> – all in the first year of operation. In another use case, SunPower has installed a 2.5 MW PV carport with a 2 MW / 4 MWH storage system in Santa Clara under an interconnection with Silicon Valley Power. The combined system reduces the customer's load during high price hours and reduces Silicon Valley Power's power procurement costs.

Finally, to the point that virtual net metering (VNEM) projects will only be available through expensive third-party solutions upon implementation of the code updates, it should be known that VNEM is widely available throughout the state in all three investor-owned utility service areas and several of the larger municipal service areas. The VNEM projects are cost effective with low barriers to entry and should not pose a problem for energy generation.

In response to the CEC mandate under Title 24 for multifamily properties to have significant solar PV systems sized to their overall expected load. SunPower is also deploying solar in multifamily residential communities both for rent and for sale, allowing this traditionally underserved segment of the market to receive the benefits of clean energy and meet code compliance as cost-effectively as possible. SunPower is currently building 1.5 mW of multifamily solar in several communities in the Bay Area, providing an expected \$497k in savings to renters and multifamily homeowners. We are under contract to build a further 1.4 mW in communities distributed around the state for both market-rate and affordable developers, with a further 8.8 mW of multifamily residential communities in the development pipeline. These communities rely on VNEM to minimize their construction and administrative costs, allowing them to perform one interconnection to benefit potentially hundreds of meters, rather than hundreds of individual interconnections. Renters, especially affordable renters, who have historically been left out of solar benefits, would see the savings in their costs of living decimated if VNEM were restricted or discontinued.

SunPower acknowledges that the ongoing transition to an environment free of fossil fuels and reduced GHG emissions will not be easy. But, in a year already oppressed with record high temperatures, the state can no longer wait for the day when energy adaptation will unfold on its own accord. The California Energy Commission is taking the right steps to ensure the state is moving toward its renewable energy goals. SunPower is proud to be working with the Commission in this effort, especially when we consider the alternative.

Respectfully submitted,

/S/

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