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## CALSSA comments on Aug 24 2023 Energy Code workshop

Additional submitted attachment is included below.



September 7, 2023

Subject: Comments on Docket 22-BSTD-01 – Proposed 2025 Energy Code Heat Pump Baselines and Photovoltaic System Requirements

Dear California Energy Commissioners and staff:

Thank you for the opportunity to provide public comment on the Energy Commission's proposed requirements for energy storage systems (ESS) in the 2025 Energy Code as shared in the staff workshop on August 24, 2023. ESS are a crucial component of the Energy Code as they are one of the most effective tools to reduce a property's greenhouse gas emissions, especially in the late afternoon and evening.

We support the requirement for ESS in single family homes to revert to high cycling 72 hours after the property owner sets the ESS to a high backup reserve. We also support basing the envelope compliance credit on the portion of the ESS allotted for cycling. The conversations between the industry and Commission staff have been productive, and we appreciate this progress.

We have concerns about the Commission's proposal to derate the self-utilization credit to account for reserve capacity in emergency situations and do not think this would be a prudent direction for the following reasons.

First, while PSPS have been common in some regions, we should not assume PSPS will persist with the same frequency and duration into the future. To reduce PSPS, utilities are hardening the grid, distributed PV and batteries are continuing to proliferate (to create a less centralized and susceptible grid), new communities are burying wires, and the state is investing in new models such as virtual power plants and microgrids that allow communities to maintain power.¹ Derating the compliance credit assumes that utilities continue to subject communities to PSPS.

Second, ESS are set to prepare for PSPS (i.e., charging or storing energy when they would otherwise be cycling) for only a small percentage of the year. Homes experience PSPS approximately 0.006 percent of the year, on average.<sup>2</sup> Derating the compliance credit to account for such a small occurrence is not necessary.

<sup>&</sup>lt;sup>1</sup> PG&E's Public Safety Power Shutoff report from August 2021 states: "We are also working year-round and nonstop to make our system safer and more resilient. As part of our Community Wildfire Safety Program, we are continuing to upgrade the electric grid to reduce wildfire risks and keep electricity on for more communities. This includes hardening power lines and installing sectionalizing devices and microgrids." Source: <a href="https://www.pge.com/pge\_global/common/pdfs/safety/emergency-preparedness/natural-disaster/wildfires/Public-Safety-Power-Shutoff-Policies-and-Procedures.pdf">https://www.pge.com/pge\_global/common/pdfs/safety/emergency-preparedness/natural-disaster/wildfires/Public-Safety-Power-Shutoff-Policies-and-Procedures.pdf</a>. From 2019 to 2021, the number of PSPS declined. Source: <a href="https://cleantechnica.com/2022/02/06/california-utilities-shutting-off-power-for-fewer-people-but-too-many-still-in-the-dark/">https://cleantechnica.com/2022/02/06/california-utilities-shutting-off-power-for-fewer-people-but-too-many-still-in-the-dark/</a>. Additionally, PG&E did not have any PSPS in 2022. Source: <a href="https://www.pge.com/en/US/residential/outages/public-safety-power-shuttoff/psps-reports.page">https://www.pge.com/en/US/residential/outages/public-safety-power-shuttoff/psps-reports.page</a>.

<sup>2</sup> The tally for number of hours every residential PG&E, SCE, and SDG&E customer experienced PSPS in 2021

<sup>&</sup>lt;sup>2</sup> The tally for number of hours every residential PG&E, SCE, and SDG&E customer experienced PSPS in 2021 and 2022 was 10.7 million hours. Source: <a href="https://www.cpuc.ca.gov/consumer-support/psps/utility-company-psps-reports-post-event-and-post-season">https://www.cpuc.ca.gov/consumer-support/psps/utility-company-psps-reports-post-event-and-post-season</a>. PG&E, SCE, and SDG&E have approximately 10.6 million residential



Third, PSPS are inconsistent across the state. While some regions are subject to multiple lengthy PSPS, other areas are rarely subject to PSPS. While we are concerned with the ramifications of reducing the compliance credit in areas with frequent PSPS, we are especially concerned with the repercussions of reducing the compliance credit in areas with infrequent PSPS.

Fourth, derating the compliance credit would effectively penalize and discourage ESS because of events controlled by utilities. Utility negligence should not cause residential ESS to receive reduced compliance credit.

Fifth, while a home will only receive compliance credit for the portion of the capacity that must cycle, many homes will cycle additional available capacity of their ESS above the minimum they are required to cycled. This additional cycling across the state will likely exceed the forgone cycling in the event of a localized PSPS. NEM-3 creates strong signals for ESS to cycle, and we look forward to continued discussions with Commission staff on the modeling of NEM-3 systems.

Sixth, derating the compliance credit because the ESS are used for back-up during PSPS could result in an increase in GHG emissions. If the CEC were to derate the compliance credit, builders would likely forgo adding ESS to some homes that would otherwise be built with ESS. These homes may turn to generators during PSPS, which produce high GHG emissions.

We thank the Commission staff for working with the solar and storage industry to craft the optimal requirements for ESS in the 2025 building standards, and we look forward to the continued cooperation.

Sincerely,

Benjamin Davis Policy Associate

California Solar & Storage Association

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electric customer accounts, totaling 92.9 billion hours. 10.7 million divided 92.9 billion divided by 2 (to produce an annual number) equals 0.006 percent.