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Coalition for Community Solar Access' Comments on the California Energy Commission's Senate Bill 100 Demand Scenarios

Additional submitted attachment is included below.



August 21, 2024

California Energy Commission Docket Office, MS-4 Re: Docket No. 23-SB-100 1516 Ninth Street Sacramento, CA 95814-5512 docket@energy.ca.gov

Re: Coalition for Community Solar Access' Comments on the California Energy Commission's Senate Bill 100 Demand Scenarios Staff Webinar

Dear Commissioners:

The Coalition for Community Solar Access (CCSA) appreciates the opportunity to submit these comments in response to the August 7, 2024, Senate Bill 100 Demand Scenarios Staff Webinar.

CCSA is a national trade association representing more than 120 community solar companies, businesses, and nonprofits working to expand customer choice and access to solar for all American households and businesses through community solar. We work with customers, utilities, local stakeholders, and policymakers to develop and implement policies and best practices to ensure highly successful community solar programs championing the energy customer. CCSA is striving to build the electric grid of the future where every American consumer has the freedom to choose clean, locally generated energy to power their lives.

As presented, the California Energy Commission (CEC) will be utilizing the demand flexibility (D-Flex) tool to examine the extent to which distributed energy resources (DERs) can reduce or shift load to lower the cost and infrastructure buildout needed to meet Senate Bill (SB) 100 goals. It appears that current efforts focus on building electrification, electric vehicles (EV), and behind-the-meter (BTM) storage as the sources of demand flexibility that can be leveraged in the modeling efforts. However, this approach overlooks a significant amount of DER resource potential by not including front-of-the-meter (FTM) distribution connected energy storage as a source of flexible demand.

The 2021 SB 100 report found that "SB 100 is technically achievable through multiple pathways."¹ One pathway under consideration is a "DER Focus" scenario, which consists of "higher levels of local resources, including distributed energy and community solar."² DERs, and distributed FTM energy storage resources specifically, are a critical element of California's clean energy transition. One of the greatest capabilities of DERs is the ability to generate energy locally, closer to end users than larger, utility-scale generators. This can reduce demand for costly, large-scale utility infrastructure, such as high-voltage transmission lines.³ DERs also reduce line losses experienced due to the transmission of power across large distances. These benefits accrue in the location where the generation and storage resources are situated as the power flows to the nearest load, and they are realized by the system as a whole regardless of the geographic relationship between generation and subscriber.

Distribution-connected FTM energy storage resources can consistently reshape and reduce load and as such, provide a tangible reduction in procurement of supply-side resources, resulting in lower costs to California's energy customers. CCSA recommends that distribution-connected FTM energy storage resources be included as a resource that can provide demand flexibility and, therefore should be included as such in the modeling efforts-both in the Policy Scenario and especially in the High DER/DF Policy Scenario.

In May 2023, the California Public Utilities Commission (CPUC) issued its *Energy Storage Procurement Study* detailing the benefits of distribution-connected energy storage resources.⁴ The CPUC Study finds that distribution-connected energy storage can meet the growing needs for community resilience solutions, serve as distributed solutions to natural gas-fired peaker replacements in order to avoid or reduce transmission upgrades for otherwise cost-effective resource solutions, has a unique ability to produce value streams both to the transmission system and distribution system, and these smaller distributed resources can produce high ratepayer value.⁵ The chart below, taken from the CPUC's *Energy Storage Procurement Study*, shows that distribution-connected, 3rd party-owned batteries provide the highest net ratepayer benefits of any battery type.⁶

¹ See, SB 100 Kickoff Workshop presentation slides, at 2. Available at:

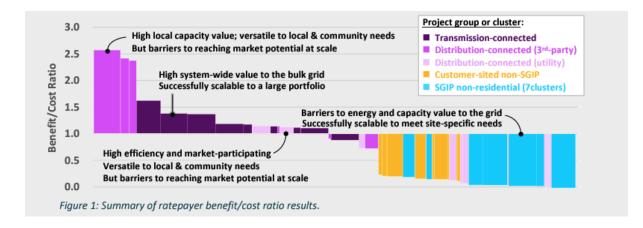
https://efiling.energy.ca.gov/GetDocument.aspx?tn=251718&DocumentContentId=86699. (August 22, 2023) ² *Id.*, at 9.

 ³ See, Gridworks and Gridlab, *The Role of Distributed Energy Resources in Today's Grid Transition*.
(2018). Available at: <u>https://gridlab.org/wp-content/uploads/2022/10/GridLab_RoleOfDER_online.pdf</u>.
⁴ See, CPUC, *Energy Storage Procurement Study*. (May 2023). Available at:

https://www.cpuc.ca.gov/-/media/cpuc-website/divisions/energy-division/documents/energy-storage/2023-05-31_lu men_energy-storage-procurement-study-report.pdf.

⁵ CPUC, *Scaling Up and Crossing Bounds: Energy Storage in California*, at 3. (May 2024) Available at: https://www.cpuc.ca.gov/-/media/cpuc-website/divisions/energy-division/documents/energy-storage/2024-05-01_lu men_scaling-up-and-crossing-bounds-reportfinal.pdf

⁶ CPUC, Energy Storage Procurement Study, at 2. (May 2023).



A follow-up study, *Scaling Up and Crossing Bounds: Energy Storage in California*, was released by the CPUC on May 1, 2024.⁷ The updated study reaffirms and builds on the CPUC's 2023 study and determines that "targeting a set of critical and essential facilities in a community with distribution-connected resource solutions placed electrically closer to customers reduces the amount of distribution grid hardening needed for outage mitigation, while still offering broad community-level benefits. It can also reduce investment costs due to economies of scale and resources-sharing with load diversity across individual sites."⁸ The CPUC study also determined that "energy storage resources, especially ones paired with PV, are also helping with renewable integration by reducing curtailments."⁹ A key conclusion of the CPUC study is that distribution-connected energy storage resources have the potential to provide benefits at a larger scale, and they have the unique ability to provide services to the distribution system and directly to customers and their communities.¹⁰

These CPUC studies demonstrate that distribution-connected FTM energy storage resources provide real, tangible benefits to the energy grid and to ratepayers. It is vital that the CEC modeling efforts include distribution-connected FTM energy storage as a resource that can provide demand flexibility.

Additionally, CCSA concurs with SEIA's analysis and the resultant impact of the policy changes initiated at the California Public Utilities Commission (CPUC) that will significantly impact the deployment of BTM DERs. These policy changes and the corresponding likely decrease in BTM DERs further underscore the need to include distribution-connected FTM energy storage as a resource that can provide demand flexibility.

⁷ See, CPUC, Scaling Up and Crossing Bounds: Energy Storage in California. (May 2024).

⁸ Id., at 7.

⁹ *Id*., at 6.

¹⁰ *Id.*, at 12.

California Energy Commission, Docket No. 23-SB-100 Comments by CCSA

CCSA thanks the CEC for consideration of these comments.

Respectfully submitted,

<u>/s/Matthew Deal</u> Senior Policy Director, Regulatory CCSA <u>mdeal@communitysolaraccess.org</u>