

DOCKETED

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Comment Received From: Rafael Reyes
Submitted On: 9/29/2021
Docket Number: 20-DECARB-01

Simplified compliance for new technologies

September 28, 2021

Re: 20-DECARB-01 " Peninsula Clean Energy Authority Comments on the Building Initiative for Low-Emissions Development Program " Preliminary Program Design

These comments are submitted by Peninsula Clean Energy Authority (PCE), San Mateo County's official electricity provider, generating clean and affordable power and making significant reinvestments back into the community. PCE appreciates the opportunity to provide feedback to the California Energy Commission (CEC) on 20-DECARB-01, which will inform the design of the BUILD program which will provide incentives for low-carbon new construction.

In these comments, PCE recommends that the CEC:

1. Should not require emerging technologies to be fully incorporated into CBECC for participation in BUILD
2. Provide a streamlined compliance pathway using field performance data which is not dependent on the CBECC software

Background

Peninsula Clean Energy has an aggressive decarbonization plan and a newly adopted goal of supporting comprehensive decarbonization by 2035. Current Peninsula Clean Energy programs include:

- Technical assistance for all-electric new construction reach codes which has already led to the adoption of nearly half of the reach codes in the state in our service territory and that of our partner Silicon Valley Clean Energy;
- Technical assistance for developers and designers for all-electric construction (allelectricdesign.com);
- Heat pump water upgrade incentives;
- A low-income turnkey program; and
- Emerging technology pilots including advanced thermal storage-based systems.

Time is of the essence and the BUILD program is an important opportunity to incorporate leading design approaches for electrification to deliver both zero-carbon design and lower costs. However, as proposed the BUILD program will preclude promising new technologies.

Specifically, the Preliminary Program Design for BUILD released 9/15/2021 requires new technologies to either be incorporated in the software or go through the compliance



Serving the San Mateo County Community

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Time is of the essence and the BUILD program is an important opportunity to incorporate leading design approaches for electrification to deliver both zero-carbon design and lower costs. However, as proposed the BUILD program will preclude promising new technologies.

Specifically, the Preliminary Program Design for BUILD released 9/15/2021 requires new technologies to either be incorporated in the software or go through the compliance option process. Both pathways require field validation for at least a year, and then incorporation into the software, testing, approval, and release. This process will realistically take at least two years, by which time the BUILD funding will most likely be exhausted. This process would effectively prevent the participation of new technologies in the BUILD program.

The proposed exclusive reliance on existing performance evaluation processes and sources of information to determine eligible technologies would be another barrier to participation for new technologies that don't have a standard evaluation process, such as combined hydronic heat pump

systems that provide both space- and water-heating with thermal storage. **These systems are especially promising in their potential to both lower installation costs by reducing components and electrical requirements as well as lowering operating costs.** This includes systems such as:

- Combination space and water heating systems which use a single heat pump and thermal storage: Harvest Thermal, Mitsubishi Ecodan, and Chiltrix combo system
- Stow Energy which provides space heating and cooling with thermal storage.

New technologies such as these are essential to meeting California's climate goals, and decarbonization programs must be designed to allow and expedite emerging technologies into the market.

These technologies have the potential to be game changers in California's ability to decarbonize its building stock significantly lowering the upfront and operational costs of electrification by optimizing load flexibility.

For these technologies, the BUILD program should allow eligibility for systems that have a minimum of 9 months of third-party audited field performance data, including winter, demonstrating qualifying performance. While 12 months of data is helpful and the predominant standard, 9 months with winter provides a solid view of system performance. Integration into CBECC is a burdensome delay that likely would result in the exclusion of important technology options.

The California Energy Commission has provided compliance pathways without CBECC software updates as an interim option on important solutions such as central heat pump water systems in multi-family settings. This would allow them to participate in the program without further delay and the CBECC software update can proceed in parallel.

If you have any questions regarding these comments, please do not hesitate to contact me at rreyes@peninsulacleanenergy.com and (650) 260-0087.

Sincerely,

/s/

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