

DOCKETED

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Comments of the BayREN re Draft 2019 Building Energy Efficiency Standards

Additional submitted attachment is included below.

October 20, 2017

Commissioner Andrew McAllister
Energy Commission Staff
California Energy Commission
Dockets Office MS-4
1516 Ninth Street
Sacramento, CA 95814-5512
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Re: Docket No. 17-BSTD-01

Dear Commissioner McAllister and Energy Commission Staff,

The San Francisco Bay Area Regional Energy Network (BayREN) appreciates the opportunity to comment on the California Energy Commission (CEC)'s Staff Workshop on the Draft 2019 Building Energy Efficiency Standards on October 4 and 5, 2017. The BayREN is a regional program of the Association of Bay Area Governments (ABAG) and the Metropolitan Transportation Commission (MTC) and is composed of public agencies in the nine-county Bay Area. It designs and implements effective energy savings programs, and draws on the expertise, experience, and proven track record of Bay Area local governments to develop and administer successful regional and local climate, resource, and sustainability programs. The BayREN provides the regional infrastructure needed for efficient delivery of energy efficiency programs throughout the Bay Area. Our specific comments are as follows.

Part 1 Section 10; 10-106 Locally Adopted Energy Standards

Express terms referenced: 10-106 (a)2. "Local governmental agencies may adopt and enforce energy standards ... provided ... The Energy Commission finds that the standards will not permit buildings to be designed to consume less energy than permitted by Title 24, Part 6"

Comment: Revised terms appear incorrect. BayREN requests correction so local agencies can pursue local standards that require buildings use less energy than permitted by Title 24.

Proposed revision: The Energy Commission finds that the *proposed energy* standards will ~~not permit~~ *require* buildings to be designed to consume less energy than permitted by Title 24, Part 6.

Part 1 Section 10; 10-115 Community Shared Solar or Battery Storage Systems

Express terms referenced: 10-115(a). Currently this section references “onsite solar electric generation system and/or battery storage system that is otherwise required by Section 150.1(b)2”.

Comment: In the draft express terms, Section 150.1(b)2 establishes performance standards for additions and alterations for existing buildings. BayREN requests clarifying language be added to 10-115(a) indicating that these Community Shared Systems are intended to offset requirements for new construction.

Express terms referenced: 10-115(a); 10-115(b); 10-115(c). 10-115(a) states a “community shared system... may be approved by the Commission” while 10-115(b) states “Any entity may apply to the Commission for approval to administer a community shared” system. 10-115(c) states shared “systems, which demonstrate to the Commission’s satisfaction that all of the requirements specified in Section 10-115 will be met, shall be approved”

Comment: While BayREN understands that CEC Siting Division must approve solar systems greater than 50MW, the inclusion of language in Title 24 Part 6 that entities “may” apply to the Commission for approval to install Community Shared Systems and the Commission “may” approve these systems creates confusion for the permitting authority of the local jurisdictions. Because local AHJs are the responsible authority for approving onsite systems, BayREN proposes that local AHJ should also be the responsible party to approve the Community Shared System provided the system meets applicable codes and does not otherwise require individual CEC approval. Requiring additional approval by the CEC would raise transaction costs and extend development timeline by 6+ months (provided requirements for public posting by the CEC, staff review, calendaring as an agenda item, and decision at a business meeting apply).

Express terms reference: 10-115(a)1. “The community shared solar electric generation system and/or community shared battery storage system shall be installed and available for enforcement agency site inspection, no later than the point in time the enforcement agency must physically verify compliance of the building, which would otherwise be required to have an onsite solar electric generation and/or battery storage system.”

Comment: This adds an inspection site beyond those sites of the building projects being offset. AHJs may need time to integrate this requirement into permitting costs and field inspection schedules.

Express terms references: 10-115(a)2. “The community shared solar electric generation system and/or community shared battery storage system shall be demonstrated to provide the same or better energy performance equal to the partial or total offset of the energy performance of the onsite solar electric generation and/or battery storage system that would otherwise have been required for the building.”

Comment: This will require AHJs to compare the Community Share System performance to that of potentially hundreds of individual systems and require permit applicants to provide both sets of documentation. The Commission needs to provide, or require the compliance software to provide, a simple, streamlined, and consistent way for this comparison to be made and documented.

Express terms referenced: 10-115(a)3. “The community shared solar electric generation system and/or community shared battery storage system shall provide energy saving benefits directly to the building that would otherwise have been required to have an un-offset onsite solar electric generation system and/or battery storage system. ... The energy savings benefits allocated to the building shall be in the form of dedicated power, utility energy reduction credits, or payments for energy bill reductions...”

Comment: The language provides a portion of the flexibility that would be reasonable. Since these provisions are new, they should allow necessary flexibility, such as use of Community Choice Aggregation authority to aggregate demand and supply of photovoltaic generation – including via feed in tariff or other contractual and programmatic options that are consistent with applicable law. As CCAs serve electricity to an increasing number of Californians, these provisions should be compatible with allowing the CCA to provide “community solar” benefit.

Furthermore, it appears the allocation of the energy savings benefits as required by 10-115(a)3 could limit implementation of Community Shared Systems, given that current NEMV tariffs require the receiving building be on the same service delivery point and use of a separate microgrid to deliver the energy savings benefits to the dedicated buildings could classify the operators/owners of the Community Shared System as a utility. Considering this, proposed express terms should be clarified to ensure any Community Shared System can be a viable alternative to a required on-site system.

Proposed revision to partially address comment above: “...dedicated power, utility energy reduction credits, ~~or~~ payments for energy bill reductions, *or equivalent*...”

Express terms referenced: 10-115(a)4. “The community shared ... system shall be designed and installed to provide the energy savings benefits to the dedicated building specified in Section 10-115(a)3 for a useful life of no less than twenty years.”

Comment: Both solar and battery storage systems necessarily have components that have EULs shorter than 20 years (updates to Subchapter 1 Section 100.1(b) specifically define a solar electric system to include inverters).

Proposed revision: “provide the energy savings benefits to the dedicated building specified in Section 10-115(a)3 ~~for a useful life of no less than twenty years. and provide durability over 20 years that is equivalent to onsite installation.~~”

Section 150.0; 150.0(k) Residential Lighting

Express terms referenced: 150.0(k)1 Removal of requirement for installed lamps to be labeled JA8.

Comment: While AHJs have had limited time to utilize 2016 T24 requirements that lamps be labeled J8, this requirement provided a simple way to verify compliant lamps in the field. Removing this requirement will reintroduce greater complexity to field inspections and have a negative effect on compliance.

Section 150.1(b); 150.1(c)8; and 150.2(b)1H - Domestic Hot Water Heating Systems

Express terms referenced: 150.1(b); 150.1(c)8; and 150.2(b)1H generally

Comment: BayREN supports the proposal to add a prescriptive compliance path for electric heat pump water heaters for low-rise residential new construction and alterations. However, we encourage the CEC to also add a performance path for electric heat pump water heaters for low-rise residential new construction and alterations. Exception 1 to Section 150.1(c)8Aiii is a reasonable model: The CEC should allow performance modeling to use an electric baseline for domestic hot water if the proposed water heater meets the requirements of NEEA Advanced Water Heater Specification Tier 3; if an electric water heater is proposed that does not meet NEEA Tier 3, then the baseline for performance-based compliance should remain natural gas or propane. This approach would provide all projects the opportunity to comply utilizing a system that is not above federal standards (propane or natural gas tankless) and provide straightforward options for compliance for all low-rise residential projects proposing efficient electric water heaters.

Express terms referenced: 150.1(c)8.B generally

Comment: Add a compliance path for an electric heat pump water heater even for central systems in low rise residential buildings. As written, proposed language seems to require a gas boiler to be installed, even in instances where a sewage-sourced heat pump, ground-source heat pump system, or built-up air-source heat pump array (including EF 5.0 units) could serve the domestic hot water load.

Section 150.2; 150.2(b)1H Water Heating System

Express terms referenced: 150.2(b)1.H.iii.c “If no natural gas is connected to the existing water heater location, an electric water heater.”

Comment: Per the proposed updates, does this mean a replacement electric water heater can installed in a new location (i.e., going from a tanked gas water heater in the garage to an electric heat pump in a utility closet)? Clarity should be added to this section to confirm how iii.c aligns with iii.b and the Tier 3 NEEA exception following Section 150.2(b)1Hii.

We appreciate the opportunity to provide this input, and thank the CEC for its careful consideration of BayREN's comments.

Respectfully Submitted,

A handwritten signature in black ink, appearing to read "Gerald L. Lahr". The signature is fluid and cursive, written over a light gray rectangular background.

Gerald L. Lahr
Assistant Director – Energy Programs