

**DOCKETED**

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*Comment Received From: Dawn Anaiscourt  
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**SCE Comments for 2022 Energy Code Workshop**

*Additional submitted attachment is included below.*

October 20, 2020

California Energy Commission  
Docket Office, MS-4  
Re: Docket No. 19-BSTD-03  
1516 Ninth Street  
Sacramento, CA 95814-5512  
docket@energy.ca.gov

Re: Southern California Edison Company's Comments on the California Energy Commission Docket No. 19-BSTD-03: Staff Workshop - 2022 Energy Code Pre-Rulemaking - Proposed 2022 Energy Code Solar Photovoltaic and Electrification

Dear Commissioners:

On October 6, 2020, the California Energy Commission (CEC) conducted part one of two workshops to present and discuss proposed changes related to solar photovoltaic requirements and electrification for the 2022 update of the California Building Energy Efficiency Standards (Energy Code). The workshop included staff presentations on proposed updates to Part 6 of the 2022 Energy Code and Part 11 of the California Green Building Code to encourage greater use of electric heat pump technologies for low-rise residential buildings, high-rise residential buildings, and selected nonresidential building categories. The workshop also included staff presentations on proposed updates to require photovoltaic systems and batteries in high-rise residential and selected nonresidential building categories and proposed updates pertaining to photovoltaic systems and batteries to address identified implementation issues.

Southern California Edison (SCE) appreciates the opportunity to submit comments on the workshop, as set forth below.

**I. SCE supports an all-electric energy code for new construction.**

SCE's Pathway 2045<sup>1</sup> sets out a plan for achieving the State's goal of carbon neutrality by 2045 through decarbonization across all sectors of the economy, including electrifying 70 percent of California's buildings. The Department of Energy estimates that buildings constructed or renovated between now and 2035 will represent 75 percent of the total U.S. building stock.<sup>2</sup> The Energy Code will affect California's building stock as it continues to grow through 2045. Aligning the Energy Code with the State's carbon neutrality goal will avoid locking in natural gas emissions and avoid costly spending on natural gas infrastructure that may become stranded before 2045.

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<sup>1</sup> Pathway 2045, available at <https://www.edison.com/home/our-perspective/pathway-2045.html>.

<sup>2</sup> <https://www.energycodes.gov/about/why-building-energy-codes>. "It is estimated that by 2035, 75% of the building stock in the U. S. will be new or renovated."

SCE supports the CEC moving quickly to an all-electric code where feasible. One way to encourage all-electric buildings is by providing builders with more options and compliance credits for electrification without sacrificing efficiency, as discussed in Section II below. Prioritizing cost-effective all-electric code packages can deliver higher greenhouse gas (GHG) reduction benefits. The statewide 2019 Low-Rise Residential New Construction Cost-Effectiveness Study indicates that code compliant all-electric homes result in significantly lower GHG emissions and lower lifetime costs than mixed fuel homes.<sup>3</sup> Moving to residential all-electric buildings in code makes financial sense for consumers and supports the State's climate objectives. All-electric new building construction costs are further reduced by eliminating the cost of the gas infrastructure. Operating costs and GHG emissions of all-electric buildings can be further reduced with the installation of solar and energy storage systems.

Customers also benefit from the efficiency of electric technologies that can lower consumption and bills compared to gas combustion end-uses. All-electric new construction is one of the most promising near-term opportunities for consumer cost savings and GHG reduction, according to a 2019 Energy and Environmental Economics study.<sup>4</sup> Air-source heat pumps and heat pump water heaters are three to five times more energy-efficient than their natural gas counterparts.

If an all-electric energy code cannot be reached, SCE recommends that the CEC expand its electric readiness requirements to also include electrical infrastructure to support future electric clothes dryers and induction cooking.

## **II. SCE supports CEC's proposed compliance credit for all-electric new construction while maintaining building envelope efficiency.**

During the workshop, the CEC proposed potential compliance credit for heat pump clothes dryers, induction cooking, battery storage, and other electric technologies. SCE supports compliance credits that provide builders more options to build all-electric buildings, but the CEC should place guidelines on the rules so that there can be no compliance credit tradeoffs with building envelope efficiency.

SCE also supports proposed solar photovoltaic (PV) requirements on multi-family (both low- and high-rise), office, retail and warehouse, education facilities, and mixed-use building types. The proposed cost-effective requirements align with California's decarbonization efforts and allow grid harmonization by realizing the demand-flexibility (or load flexibility) when PV systems are combined with batteries. Again, SCE recommends that the CEC carefully consider these requirements in order to avoid tradeoffs with required energy efficiency measures, such as the building envelope.

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<sup>3</sup> [2019 Residential New Construction Cost Effectiveness Study](http://www.localenergycodes.com), accessed at [www.localenergycodes.com](http://www.localenergycodes.com).

<sup>4</sup> [Residential Building Electrification](#). Energy and Environmental Economics. (2019)

### **III. Conclusion**

SCE thanks the CEC for consideration of the above comments and looks forward to continuing its partnership with stakeholders to develop the 2022 Energy Code. Please contact me at (415) 929-5518 with questions or concerns. I am available to discuss these matters further at your convenience.

Very truly yours,

/s/

Dawn Anaiscourt