

DOCKETED

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OVERVIEW OF SUPPORTING COST EFFECTIVENESS STUDIES

REFERENCE STUDIES:

1. Title: 2019 Cost-effectiveness Study: Low-Rise Residential New Construction
 Prepared For: Kelly Cunningham, Codes and Standards Program, Pacific Gas and Electric Company
 Prepared By: Frontier Energy, Inc., Misti Bruceri & Associates, LLC
 Last Modified: August 1, 2019

2. Title: 2019 Nonresidential New Construction Reach Code Cost Effectiveness Study
 Prepared For: Christopher Kuch, Codes and Standards Program, Southern California Edison Company
 Prepared By: TRC, EnergySoft
 Last Modified: July 25, 2019

3. Title: 2019 Mid-Rise New Construction Reach Code Cost-Effectiveness Study
 Prepared For: Kelly Cunningham, Codes and Standards Program, Pacific Gas and Electric Company
 Prepared By: Frontier Energy, Inc., Misti Bruceri & Associates, LLC, EnergySoft
 Last Modified: June 22, 2020

PROPOSED REQUIREMENTS

All newly constructed buildings shall be all-electric, defined as no natural gas or plumbing installed within the building, and that uses electricity as the source of energy for space heating, water heating, cooking, and clothes drying appliances. Some exceptions are allowed, as summarized in the table below, although electrical pre-wiring is required for any exception.

Proposed Reach Code	Building Electrification	Solar PV	Reference Study
Single and Two-Family New Construction	All-electric; Exception for Accessory Dwelling Units Exception for buildings with a planning entitlement or Development Agreement Exception if there is not an all-electric prescriptive compliance pathway, or if the building is not able to show compliance using a commercially	Not Applicable – Solar PV already prescriptively required by Energy Code.	Refer to Reference Study 1: Title: 2019 Cost-effectiveness Study: Low-Rise Residential New Construction

Att. 5a Overview of cost effectiveness studies

	available technology via the alternative calculation method.		
Multi-family Buildings	<p>All electric;</p> <p>Exception for buildings with a planning entitlement or Development Agreement</p> <p>Exception if there is not an all-electric prescriptive compliance pathway, or if the building is not able to show compliance using a commercially available technology via the alternative calculation method.</p>	<p>Solar PV on the solar zone</p> <p>Exceptions for buildings with limited solar access or vegetative roofs.</p>	<p>Refer to Reference Study 1: Title: 2019 Cost-effectiveness Study: Low-Rise Residential New Construction</p> <p>And</p> <p>Refer to Reference Study 3: 2019 Mid-Rise New Construction Reach Code Cost Effectiveness Study</p>
Commercial Buildings	<p>All electric;</p> <p>Exception for space conditioning systems serving buildings with F, H, or L occupancies.</p> <p>Exception if there is not an all-electric prescriptive compliance pathway, or if the building is not able to show compliance using a commercially available technology via the alternative calculation method.</p> <p>Exception for cooking appliances for a commercial kitchen serving the public or an employee cafeteria in a newly constructed building.</p>	<p>Solar PV on the solar zone</p> <p>Exceptions for buildings with limited solar access or vegetative roofs.</p>	<p>Refer to Reference Study 2: 2019 Nonresidential New Construction Reach Code Cost Effectiveness Study</p>