

DOCKETED	
Docket Number:	21-BSTD-01
Project Title:	2022 Energy Code Update Rulemaking
TN #:	238340
Document Title:	SCE Comments for 2022 Energy Code Changes
Description:	N/A
Filer:	System
Organization:	SCE
Submitter Role:	Public
Submission Date:	6/21/2021 1:56:38 PM
Docketed Date:	6/21/2021

*Comment Received From: Dawn Anaiscourt
Submitted On: 6/21/2021
Docket Number: 21-BSTD-01*

SCE Comments for 2022 Energy Code Changes

Additional submitted attachment is included below.

June 21, 2021

California Energy Commission
Docket Office, MS-4
Re: Docket No. 21-BSTD-01
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. 21-BSTD-01: 2022 Energy Code Update Rulemaking - Express Terms 2022
Energy Code, Title 24 Parts 1 and 6

Dear Commissioners:

On May 6, 2021, the California Energy Commission (CEC) released the proposed changes to the California Code of Regulations, Title 24, Part 1, Chapter 10 and Part 6 (2022 California Energy Code).

Southern California Edison (SCE) appreciates the opportunity to submit comments on the Express Terms 2022 Energy Code, as set forth below.

I. SCE Supports Transition to an All-Electric Energy Code for New Construction.

SCE appreciates the CEC's efforts in taking these measured, incremental steps toward the future goal of an all-electric code. As the state moves toward the 2030 decarbonization target, building electrification adoption needs to rapidly scale to achieve these ambitious energy and environmental goals. SCE looks forward to a 2025 Energy Code that will fully electrify new construction in order to accelerate efforts needed to be on a path to achieve California's 2030 decarbonization target.

SCE continues to support an all-electric code to align with the state's carbon neutrality goal that will avoid natural gas emissions and additional spending on natural gas infrastructure that may become stranded before 2045. It is important to have an all-electric code to ensure that all communities benefit from clean energy and that low-income and vulnerable communities are not disproportionately burdened by fossil-fuel emissions and stranded assets.

II. To align with the CEC’s AB3232 Building Decarbonization Assessment, the 2025 Energy Code Should Expand Retrofit Requirements to Replace Gas Appliances with Electric Alternatives in Order to Meet the State’s 2030 Targets.

On May 7, 2021, the CEC released the draft AB3232 Assessment, which provided a set of scenarios to assess the feasibility and costs of various building decarbonization strategies to reduce greenhouse gas (GHG) emissions by at least 40 percent by 2030.¹ Figure ES-6 of the draft AB3232 Assessment shows that the “aggressive electrification” scenario is needed to get close to the 2045 carbon neutrality target.² The “aggressive electrification” scenario assumes that by 2030, California will have 100% all-electric new construction, along with 90% replace-on-burnout and 70% early retirement on gas water and space heating.³

The state now has less than ten years to reach the 2030 decarbonization target. An all-electric new construction 2025 Energy Code will get us closer to the goal, but at that late stage it will not sufficiently replace gas end uses in residential and commercial buildings with efficient heat pump technologies needed to meet the state’s climate goals. In addition to all-electric new construction in the 2025 Energy Code, the expansion of retrofit requirements to install electric alternatives when replacing gas appliances in existing buildings will be necessary to meet the 40% direct emissions reduction target of 32.6 MMTCO₂e by 2030 as noted the draft AB3232 Assessment.⁴ Aggressive existing building standards need to drive toward expanding the replacement requirements to electric appliances. This will support the state’s ability to meet the direct emission reduction target.

III. The Energy Code Must Include Upstream Gas Leakage for a Consistent Evaluation.

Including upstream methane leakage from source fossil gas is necessary to show a direct and fair comparison with electricity, which includes upstream GHG emissions from generation.

It is unclear whether and how upstream gas leakage is accounted for in the 2022 Energy Code. SCE’s understanding is that GHG emissions resulting from upstream gas leakage is, to some extent, taken into account based upon the CEC’s May 20, 2020 “Time Dependent Valuation of Energy for Developing Building Efficiency Standards, 2022 Time Dependent Valuation (TDV) and Source Energy Metric Data Sources and Inputs May 2020” document, Section 3.3.4.1 Methane Leakage.⁵ However, the CEC’s responses on the May 24, 2021 hearing stated that upstream gas leakage was not considered.⁶

¹ Draft AB3232 Assessment available here - <https://efiling.energy.ca.gov/getdocument.aspx?tn=237733>

² Draft AB3232 Assessment, p. 14

³ Draft AB3232 Assessment, Table 3, pp. 49-50

⁴ Draft AB3232 Assessment, Table ES-1, p. 8

⁵ <https://efiling.energy.ca.gov/GetDocument.aspx?tn=233345&DocumentContentId=65837>

⁶ Lead Commissioner Hearings: 2022 Energy Code Day 1 - <https://www.energy.ca.gov/event/workshop/2021-05/lead-commissioner-hearings-2022-energy-code-day-1>

SCE urges the CEC to include the upstream gas leakage in the 2022 Energy Code because upstream methane leakage is substantial. Page 41 of the draft AB 3232 Assessment states that current reports indicate a methane leakage rate of 2.3%. Other reports have indicated higher leakage rates, especially for out-of-state gas deliveries, mostly from south-central US (Texas, Oklahoma, Kansas).⁷ One report has concluded that a methane leakage rate over 2% is not an effective long-term substitute for coal for reducing climate change.⁸ In addition, the leakage assumption should be consistent between the Energy Code and the AB3232 Assessment.

IV. Conclusion

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

Very truly yours,

/s/

Dawn Anaiscourt

⁷ South Coast Air Quality Management District Net Emissions Analysis Tool, Lifecycle Natural Gas Leakage Quantification Recommendation, February 20, 2018

⁸ <http://link.springer.com/article/10.1007/s10584-011-0217-3>