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<b>Project Title:</b>	2022 Energy Code Update Rulemaking
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<b>Document Title:</b>	A O Smith Corporation's Comments on Title 24 2022 Energy Code 45-Day Express Terms
<b>Description:</b>	N/A
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*Comment Received From: A. O. Smith  
Submitted On: 6/21/2021  
Docket Number: 21-BSTD-01*

## **A. O. Smith Corporation's Comments on Title 24 2022 Energy Code 45-Day Express Terms**

Dear Commissioners:

A. O. Smith (A. O. Smith) appreciates the opportunity to submit comments on the California Energy Commission (Commission) Draft 2022 Energy Code 45-Day Express Terms (Docket 21-BTSD-02).

Sincerely,

Joshua C. Greene  
Vice President, Government, and Industry Affairs  
A. O. Smith Corporation  
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*Additional submitted attachment is included below.*



June 21, 2021

California Energy Commission  
Dockets Office, MS-4  
1516 Ninth Street  
Sacramento, CA 95814

**Re: A. O. Smith Corporation's Comments on Title 24 2022 Energy Code 45-Day Express Terms**

**Docket: 21-BSTD-02**

Dear Commissioners:

A. O. Smith ("A. O. Smith") appreciates the opportunity to submit comments on the California Energy Commission ("Commission") Draft 2022 Energy Code 45-Day Express Terms (Docket 21-BTSD-02).

#### *Overview*

In general, A. O. Smith is supportive of the Commission's 45-Day Express Terms proposal and appreciates the extensive work the Commission has done to both update its initial proposal, as well as incorporate the feedback and recommendations from stakeholders. A. O. Smith recognizes the key role that heat pump technology, and specifically heat pump water heaters (HPWHs) will play in achieving two important policy goals in the State of California – reducing the carbon footprint of residential and non-residential buildings and helping to manage the integration of increasing amounts of renewable energy given HPWHs unique ability to shift load and serve as thermal energy storage devices.

Moreover, and consistent with the Commission's view, A. O. Smith similarly believes that as the State transitions to the increasing use of heat pump technology in its built environment, the marketplace will, among other things, need time to adjust; customer and builder acceptance will need to accelerate; flexibility in the form of limited exceptions for dual-fuel buildings should be maintained; and consistent incentives for the continued adoption and utilization of heat pump technology will need to be maintained over time to provide business certainty to all stakeholders.

#### *Electric Ready*

A. O. Smith is supportive of the Commission's proposal regarding prescriptive electric-ready requirements for single-family and multifamily buildings per Section 150.0(n) specifically as it relates to HPWHs. As stakeholders recognize – and consistent with a stepwise pragmatic building decarbonization pathway – constructing buildings to be electric-ready reduces costs over time as compared to more costly retrofit applications.

## *Heat Pump Water Heaters*

A. O. Smith is supportive the Commission’s proposal to utilize HPWHs in the baseline for both the prescriptive and performance pathways for low-rise residential, high-rise multifamily and selected nonresidential occupancies with the following recommendations:

Section 150.1(c)8 - the Commission should extend the HPWH baseline to Climate Zone 10 (CZ10) as proposed in its 15-Day Language and as presented by the Commission at its May 24, 2021 workshop as well as clarify if a point-of-use instantaneous electric water heater can be used for dwelling units with 1 bedroom or less.

Multi-family all-electric baseline – consistent with its comments to the Commission regarding an all-electric multifamily compliance pathway for domestic hot water heating<sup>1</sup> A. O. Smith recommends that the Commission ensure any compliance measures adopted in the 2022 code pertaining to multifamily hot water generation continue to allow manufacturers the flexibility to innovate and design heat pump water heaters in a variety of ways to meet any proposed code requirement.

## *Service Water Heating Systems*

A. O. Smith is supportive of the Commission’s proposal regarding Service Water Heating Systems as outlined for Sections 140.4(k)8, 140.5(c), including the new requirement for school buildings less than 25,000 square feet. A. O. Smith would, however, recommend that the Commission allow flexibility on design requirements for HPWH systems to be utilized in those applications. A. O. Smith also commends the Commission for including a mandatory design requirement providing 120°F or less return water to boilers, which will allow condensing boilers to operate more efficiently and conserve energy. Lastly, A. O. Smith would recommend the following change for commercial boilers:

Section 160.4 – consistent with the exceptions in Sections 120.6 and 120.9 respectively that reference “combustion efficiency” rather than “thermal efficiency”, Section 160.4(e) should be amended to read:

**(e) Commercial Boilers**

**EXCEPTION to Section 160.4(e)3: Boilers with steady state full-load ~~thermal combustion~~ efficiency 90 percent or higher.**

## *Conclusion*

A. O. Smith appreciates the Commission’s leadership on the 2022 code update and looks forward to continued dialogue and collaboration with the Commission as it strives to reach the state’s decarbonization goals and increase the market for HPWHs in new construction. Please feel free to contact me if you have questions.

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<sup>1</sup> See generally, A. O. Smith comments to 2022 California Energy Code All-Electric Multifamily Compliance Pathway (2022-MF-AEP-D) and Multifamily Domestic Hot Water (2022-NR-DWHR-D), June 26, 2020; and Title 24 Final CASE Team Report Pertaining to Multi-Family All-Electric for Central Heat Pump Water Heaters, Docket: 19-BSTD-09, December 23, 2020.

Sincerely,

A handwritten signature in black ink, appearing to read "Joshua C. Greene". The signature is fluid and cursive, with a long horizontal stroke at the end.

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