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AHRI Comments June 15, 2020 Joint Agency Workshop on the Building Initiative for Low-Emissions Development (BUILD) Program

See attached.

Additional submitted attachment is included below.

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June 29, 2020

Jordan Scavo
California Energy Commission
Docket Unit, MS-4
Docket No. 20-DECARB-01
1516 Ninth Street
Sacramento, CA 95814-5512

Re: AHRI Comments June 15, 2020 Joint Agency Workshop on the Building Initiative for Low-Emissions Development (BUILD) Program, Docket 20-DECARB-01

Dear Mr. Scavo,

This letter is submitted in response to the California Energy Commission (CEC) and the California Public Utilities Commission (CPUC) joint workshop on the Building Initiative for Low-Emissions Development (BUILD) Program, held on June 15, 2020.

AHRI represents 332 air-conditioning, heating, and refrigeration equipment manufacturers. AHRI member company's manufacturer the large majority, at least 90%, of all central air conditioners and heat pumps that are sold and installed in the U.S.

For more than a decade, AHRI has been working around the world to support regulations to reduce consumption and production of hydrofluorocarbons (HFCs). These comments reflect two chief concerns: (1) The adoption of a reasonable heating seasonal performance metric compliant with DOE's new CAC/HP efficiency metric, effective January 1, 2023; and (2) Joint Appendix JA13 has not been finalized and adopted into Title 24, therefore stakeholders need another opportunity to comment on it's use in the BUILD program after adoption by CEC, and prior to finalization of the BUILD program.

Space Conditioning

AHRI appreciates CPUC modifying the implementation dates of the incentive program to align with the transition to low GWP refrigerants for stationary air conditioning equipment with CARB's current proposal and with new energy efficiency requirements developed by the U.S. Department of Energy that will be effective January 1, 2023.

The DOE-required test procedure and efficiency metric for central air conditioners and heat pumps (CAC/HP) will change significantly on January 1, 2023. The shift to the new test

procedure—located at 10 CFR part 430 Subpart B Appendix M1 —is colloquially known in the industry as the "M1 Transition;" the new metrics will change from the existing "SEER" to "SEER2"; "EER" to "EER2"; and "HSPF" to "HSPF2." The M1 test procedure is more stringent than the existing test procedure, therefore efficiency represented in SEER2 are numerically lower than the efficiency for the same product represented in SEER. AHRI urges CEC and CPUC to adopt a heating seasonal performance metric compliant with Appendix M1.

AHRI is concerned with the heating performance proposed during the June 15, 2020 stakeholder workshop. An HSPF of 10 will dramatically narrow qualifying products so that only the top-of-the-line products would meet the specification. Despite the axiom that model listings do not correlate to sales volume, AHRI notes that there are only three percent of models listed in the AHRI Directory have an HSPF ≥ 10, and it is doubtful that these products account for significant sales volume. In January 2016 the DOE issued a Direct Final Rule that provided its analysis of the central air conditioner and heat pump market and determined that an HSPF of 9.9 would be max-tech efficiency for split system heat pumps. Single-package heat pumps were analyzed to have a max tech HSPF of 8.2.[1] Conversely, adopting the levels proposed by AHRI will ensure a program that recognizes energy-saving products as intended by the BUILD program.

AHRI recommends CEC and CPUC select efficiency levels reflective of the top 25 percent of models available on the market when the specification goes into effect. Based on AHRI's data review, we recommend setting the following levels:

Package HP		
SEER (EER2)	HSPF (HSPF2)	EER (EER2)
15.0 (14.3)	8.2 (7.0)	12.0 (11.0)

HP		
SEER (SEER2)	HSPF (HSFP2)	EER (EER2)
16.0 (15.2)	9.0 (7.8)	13.0 (12.0)

AHRI anticipates that fewer than 20 percent of the market will meet the above proposal as of January 1, 2023; however, there will still be robust manufacturer participation. AHRI suggests CEC consider adopting more reasonable performance requirements that consumers can afford.

The 2019 California Building Standards Codes (CBC) and not currently enabled to permit low-GWP refrigerants. The CBC must adopt consensus safety standards – UL 60335-2-40 Edition 3 and ASHRAE 15 (2019 Edition) – to enable the use of the new low-GWP refrigerants. The 2022 CBC, the next available pathway for the industry to ensure safety standard adoption, will be effective on January 1, 2023. There is no guarantee that the 2022 CBC will permit the use of refrigerants below the 750 GWP threshold except as approved by AHJs, and there would be very few projects that will be eligible for incentives prior to building codes adopting the relevant safety standards. AHRI recommends that the BUILD Program include provisions to allow for the use of higher efficiency heat pumps using refrigerants above 750 GWP Until the

[1] 82 FR 1802. Table III-1. https://www.federalregister.gov/documents/2017/01/06/2016-29992/energy-conservation-program-energy-conservation-standards-for-residential-central-air-conditioners

safety standards – UL 60335-2-40 Edition 3 and ASHRAE 15 (2019 Edition) – are adopted into the CBC.

Water Heating

AHRI supports the incorporation by reference of draft Joint Appendix 13. JA13 is an important document drafted by experts. Both water heater manufacturers and energy efficiency advocates worked collectively to generate the specifications in JA13. The CEC is in the final stages of adopting Joint Appendix 13 in its Title 24 docket. However, the procedure posture of the document raises some minor concerns about timing—because JA13 is not final, its incorporation by reference by the BUILD program does not guarantee that CEC and BUILD will adopt identical specifications. Manufacturers, efficiency, and government stakeholders alike benefit from a consistent approach across efficiency-incentive and regulatory regimes. We encourage both the BUILD program and the CEC to adopt JA13 as docketed on June 22nd without deviation not only because the substance is supported by multiple interested stakeholder groups—but because it is vital that a single set of specifications be required across CA HPWH programs. Multiple specifications for HPWHs will increase product design cost and decrease participation in incentive programs, ultimately undermining their benefits. We appreciate the proposal as written, and we encourage the BUILD program to work with CEC to ensure that the JA13 is adopted and implemented uniformly. We anticipate that JA13 will be adopted by the Commission on July 8th, but if the BUILD program or CEC amends JA13 in any manner, stakeholders request an additional opportunity for comment so that we can weigh in on the costs and impacts of such changes.

In addition, the CPUC is currently developing an incentive program for water heating under the scope of Self-Generation Incentive Program (SGIP). Many heat pump water heater manufacturers have been participating in a working group to recommend a program structure to the CPUC. AHRI urges CEC and CPUC to coordinate the BUILD program with the SGIP program for HPWHs. The CEC and CPUC must ensure that a differing set of program rules is not established for heat pump water heating incentive programs in CA. A patchwork of programs will make implementation much more complex for distributors, retailers, installers, and manufacturers. Disharmonized requirements will certainly hinder market transformation. The SGIP program is under development, so AHRI encourages close coordination of heat pump water heater requirements.

We appreciate the opportunity to provide these comments and again request the opportunity to comment on a revised BUILD Implementation proposal. If you have any questions regarding this submission, please do not hesitate to contact me.

Sincerely,

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