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AHRI Comments to CA Title 24-2022 Proposed Metrics

See attached comment letter.

Additional submitted attachment is included below.
November 30, 2019

California Energy Commission
Docket Unit, MS-4
Re: Docket No. 17-BSTD-01
1516 Ninth Street
Sacramento, California 95814-5512

Re: AHRI Comments – Title 24-2022 Pre-Rulemaking October 17, 2019 Staff Workshop – Code Compliance Metrics [Docket No. 19-BSTD-03]

Dear CEC Staff:

These comments are submitted in response to the California Energy Commission (CEC) Staff Workshop on the 2022 Code Compliance Metrics held on October 17, 2019. The CEC Staff Workshop included an update to the California Building Energy Code Compliance (CBECC) weather files, life cycle costing, the update to the 2022 Time Dependent Valuation (TDV) of energy, alternative metrics considered, and the results of research into potential alternative metrics in California’s Building Energy Efficiency Standards (Title 24, Part 6).

The Air-Conditioning, Heating and Refrigeration Institute (AHRI) represents over 315 air-conditioning, heating, and refrigeration equipment manufacturers. In North America, the annual output of the HVACR and water heating industry is worth more than $44 billion. In the United States, the industry supports 1.3 million jobs and $256 billion in economic activity annually. AHRI’s members are continuously working to review and design new higher efficiency equipment that improves consumer comfort, without compromising consumer choice, product quality, or safety. In fact, AHRI members offer the most technologically advanced and efficient HVACR and water heating equipment available anywhere in the world. AHRI and its members support the reduction of greenhouse gas (GHG) emissions and will continue to collaborate with stakeholders to work toward that goal.

AHRI has members that manufacture residential and commercial equipment that use electricity, as well as natural gas, propane, and oil. AHRI encourages market-based approaches to electrification, however, AHRI does not support electric-only policies. AHRI defines these policies as those designed to accelerate market transformation of the space and water heating space from combustion appliances to electric alternatives. Generally, the electric alternatives include financial incentives for “fuel switching” and
building policies that encourage the use of electric appliances, while preserving the flexibility to use fossil fuel-powered equipment when it is more practical and economically beneficial to do so.

On the other hand, electric-only policies prevent the use of fossil fuels for space- and/or water-heating building end uses. This can include a prohibition on the construction or expansion of fossil fuel distribution infrastructure, or a ban on the sale of combustion appliances. To avoid this situation, CEC should retain natural gas as an option in the 2022 Title 24 Code, including as a baseline.

The October 17, 2019, material presented was not enough for AHRI to provide a robust technical response. The materials demonstrate significant development in the proposed new metrics. However, a technical document outlining the specifics and impact has not been published to date. There are many new acronyms introduced in the presentation material, but many are not described, and it is impossible to deduce the meaning of these abbreviations.

AHRI urges CEC to immediately publish a report on the proposed new metrics and provide at least 60-days for the public to review and provide comments to the docket. This is imperative to properly analyze if CEC is meeting requirements to evaluate stated criterion for the new metric to meet. For example, it cannot be discerned if federal preemption issues have been considered without a full examination of technical material. HVAC equipment and water heaters are Energy Policy and Conservation Act (EPCA) covered products. State and local regulation of the energy efficiency or energy use of EPCA-covered consumer or residential appliances, including regulations contained in building codes, are preempted by EPCA, with three exceptions: (1) regulations that have been granted a waiver of federal preemption by the U.S. Department of Energy (DOE); (2) government procurement regulations; and (3) performance-based residential building codes that satisfy specific EPCA criteria.

As California has not been granted a waiver from DOE and Title 24 expressly covers non-government buildings, this proposal requires scrutiny to confirm it does not require the installation of EPCA-covered products that have efficiencies greater than the federal minimum requirements. AHRI urges CEC to publish technical materials and models regarding this measure for the public to review.

The EPCA exception from federal preemption for performance-based building codes expressly applies only to building codes for “new construction” and not for “equipment replacement.” EPCA does not define “new construction,” however, in an equipment replacement situation, energy-use trade-offs between building systems and other building features (such as wall insulation and window U-factors) are impractical. It is unclear from the presentation materials if the new metrics are to be applied more

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1 42 U.S.C. § 6297(c)
2 42. U.S.C. § 6297(f)(3)
broadly than to residential “new construction.”

Unlike the federal preemption provisions respecting federally-covered residential products, no exception is made for performance-based building codes or even for government procurement regulations.\(^3\) There is only one exception from federal preemption: A state or local building code for new construction may contain standards for federally-covered commercial HVAC/water heating equipment that meet, but not exceed, the minimum energy efficiency requirements specified in the latest amended ASHRAE Standard 90.1. Provided that the standards do not take effect in advance of the effective date of the amended requirements prescribed in ASHRAE Standard 90.1. Again, a full technical report is required to confirm the proposed new metrics do not violate federal preemption for commercial products. CEC also needs to confirm the proposed metrics are only applicable to “new construction.”

Another mandate of CEC is to investigate the impact of proposals on low income housing. This aspect is not covered in the October 17, 2019 presentation materials. AHRI urges CEC to investigate reasons why consumers are not consciously electrifying their households. For example, some consumers are not converting to heat pump water heaters for their domestic hot water needs and rather, are insistent of maintaining gas fired appliances. AHRI contends that high upfront costs including upgrades to electrical panels may be a significant contributing factor. Additionally, consumers are impacted by a shortage of skilled tradespeople capable of effectively installing or maintaining these products. As such, consumers can be adversely impacted by higher costs or longer lead time projects. All aspects of conversion from gas-fired water heaters to electric heat pump options should be covered in CEC’s analysis and presented to the public for review.

AHRI requests that CEC extend the deadline for comments until at least 60 days after the technical report on metrics and any accompanying analysis has been published.

AHRI appreciates the opportunity to provide these comments. If you have any questions regarding this submission, please do not hesitate to contact me.

Sincerely,

Laura Petrillo-Groh, PE
Lead Regulatory Advisor, Cooling Technology
Direct: (703) 600-0335
Email: LPetrillo-Groh@ahrinet.org

\(^3\) A standard prescribed or established under section 6313(a) of this title shall, beginning on the effective date of such standard, supersede any State or local regulation concerning the energy efficiency or energy use of a product for which a standard is prescribed or established pursuant to this section.