

March 2, 2023

Ms. Tanja Crk
US Environmental Protection Agency
Ariel Rios Building 6202J
1200 Pennsylvania Avenue, NW
Washington, DC 20460

Dear Ms. Crk:

The Consortium for Energy Efficiency (CEE) respectfully submits the following comments in response to the ENERGY STAR® Version 1.0 Residential Electric Cooking Products Draft 1 Specification, released by the Environmental Protection Agency (EPA) on December 16, 2022.

CEE is the binational organization of energy efficiency program administrators and a staunch supporter of the ENERGY STAR Program. CEE members are responsible for ratepayer-funded efficiency programs in 38 US states, the District of Columbia, and four Canadian provinces. In 2020, CEE members directed over 63% of the \$8.5 billion in energy efficiency and demand response program expenditures in the two countries. These comments are offered in support of the local activities CEE members carry out to actively leverage the ENERGY STAR brand. CEE consensus comments are offered in the spirit of strengthening ENERGY STAR, so it may continue to serve as the national marketing platform for energy efficiency.

CEE highly values the role ENERGY STAR plays in differentiating energy efficient products and services that the CEE membership supports locally throughout the US and Canada. We appreciate the opportunity to provide these comments.

CEE Appreciates EPA's Efforts to Establish an ENERGY STAR Specification for Residential Electric Cooking Products

EPA cites momentum around the expansion of electric cooking products, which are now present in 60% of US homes, as the impetus for launching the ENERGY STAR Version 1.0 Residential Electric Cooking Products Draft 1 Specification. With many federal, state, and local directives driving ambitious decarbonization targets, electric cooking products are one potential solution to help reduce greenhouse gas emissions. Further, the Inflation Reduction Act of 2022 provides substantial funding and support for efficient home electrification; with this influx of federal investment over the next decade, the prevalence of residential electrical cooking products in US homes is anticipated to grow accordingly.

CEE appreciates EPA's efforts to develop an ENERGY STAR specification for highly efficient residential electric cooking products that provide incremental energy savings above baseline electric products on the market today. We acknowledge the technological innovation in this product category, notably the market introduction of residential induction cooking products, which work by heating the cookware rather than the cooktop, thus reducing potential safety risks to consumers and allowing for more precise temperature control. At least ten CEE members currently promote induction cooking in their programs as of 2022, and others consider this to be a potential category for program inclusion in the future. CEE advocates a technology neutral approach that allows any solution to qualify based on a performance threshold, and therefore acknowledges EPA's intent to set an Integrated Annual Energy Consumption (IAEC) level that is inclusive of top performing equipment regardless of technology. Based on the Draft 1 specification [dataset](#), however, CEE seeks a better understanding of how an EPA specification would effectively differentiate performance in this space and how various heating element types compare from an efficiency as well as consumer experience perspective. We have identified some of these questions and factors below.

We note that the current specification encompasses qualifying models of multiple heat element configurations, however some members who are promoting electric cooktops are exclusively incentivizing induction cooktop models. Should the final specification result in differentiation that is inclusive of induction cooktops as well as electric resistance or open coil, there may be an opportunity to provide consumer education as to what constitutes a high performance electric cooktop product. Similarly, should the final specification result in a subset of induction cooktop models *not* qualifying, the market could benefit from elaboration on what to look for when considering the purchase of electric cooktop products.

Considerations for Finalizing the ENERGY STAR® Residential Electric Cooking Products Specification

Data on Anticipated Savings and Payback is Crucial to CEE Members' Program Planning

While EPA acknowledges the limited nature of the Draft 1 specification dataset, the CEE Appliances Committee seeks a better understanding of the potential energy savings and payback periods associated with the proposed criteria. Numerous CEE member program administrators anticipate relatively low savings from these qualifying electric cooking products, rendering potential programs nonviable under current cost effectiveness requirements. In terms of energy efficiency savings, the data indicates that the most efficient model is 16% more efficient than the least efficient model. Assuming the least efficient model is an approximate estimate for baseline, this does not represent a very significant incremental improvement for even the best model available on the market. For programs to understand the anticipated average savings that they can expect from incentivizing an ENERGY STAR electric cooktop, members would appreciate a greater analysis of anticipated savings and payback period.

CEE recognizes that there may be potential benefits of electric cooktops beyond energy efficiency, primarily greenhouse gas emission reductions. To the extent that EPA is seeking to drive carbon reduction efforts in developing this specification, CEE seeks additional information regarding quantification of those potential opportunities. Several members currently promoting electric cooktop products are doing so for portfolio objectives beyond strict kWh opportunities; having greater insight into measuring these benefits from EPA's research would be helpful in their ability to assess the product across multiple impacts beyond energy savings.

We request that EPA provide anticipated energy and cost savings, greenhouse gas emissions reductions, and payback period analyses in future drafts of this specification in order for our membership to inform the viability of prospective incentive programs as well for consumers to affirm the value and benefit of ENERGY STAR products recognized.

Additional Test Data and Analysis is Needed Before Finalizing the Specification

The ENERGY STAR Residential Electric Cooking Products dataset provided with the Draft 1 specification includes 28 models, comprised of 14 induction models, 12 electric resistance

models, and two coil models. Of these tested models, roughly 64% of induction cooktops and 25% of electric resistance cooktops met the proposed IAEC level of ≤ 190 kWh/year for standalone and combined electric cooking products. Of the two coil models tested, one model met the proposed efficiency criteria. Given that EPA's goal for establishing this specification is to "highlight the most efficient electric models, including induction, electric resistance, and coil, on the market," CEE is concerned that the small sample size of test models, particularly coil models, may not be representative of the larger market of products and may not provide a sufficient basis from which to establish a new ENERGY STAR specification. We note that the [ENERGY STAR 2021-2022 Emerging Technology Award for Residential Induction Cooking Tops](#) QPL includes 12 induction models with an IAEC of ≤ 125 kWh/year. Unless the IAEC is in some way different than the one used in this specification development, CEE is concerned that the proposed IAEC level of ≤ 190 kWh/year may not be stringent enough for an ENERGY STAR specification that aims to be reflective of the top 25% of models available on the market when the specification goes into effect.

We encourage EPA to collect additional test data and perform a separate analysis before asserting the appropriate performance levels and finalizing the specification. Specifically, CEE would like to see more coil models included in the test dataset as well as additional data regarding how the specification baseline was determined and how representative this level is of current market conditions.

CEE members also request additional information regarding the total number of models across product types that would qualify for the proposed criteria as well as the number of manufacturers represented, an essential prerequisite to effectively deploying programs. In order to better understand the current baseline as well as relative availability relative to the proposed Draft 1 specification levels, it is important to have a comprehensive overview of the present landscape of all electric product cooktop equipment in the market and how the ENERGY STAR label would differentiate models.

CEE Encourages EPA to Support Consumer Education Efforts for This New Product Category

Different cooktop options afford customers various amenities, and these factors are important considerations when homeowners are assessing which product to invest in. We note that the nonenergy related aspects across electric cooktop technologies vary, and it is important for the ENERGY STAR label to consider performance attributes as they pertain to consumer amenity. As EPA looks to support market evolution and raise awareness of high efficiency residential electric cooking products, CEE encourages EPA to play an active role in supporting the education of consumers about electric cooking (e.g.,

proper equipment uses, sound levels) as well as ensuring that the ENERGY STAR requirements are designed to minimize any compromise to amenity. Recognizing models that deliver on both energy efficiency and performance through the ENERGY STAR label will help signal these product attributes to consumers as they look to replace or upgrade their existing cooking equipment.

CEE would once again like to thank EPA for the opportunity to comment on the ENERGY STAR Version 1.0 Residential Electric Cooking Products Draft 1 Specification. Please contact CEE Program Assistant Erik March at emarch@cee1.org or 978-896-8028 with any questions about these comments.

Sincerely,

A handwritten signature in black ink, appearing to read "John Taylor". The signature is written in a cursive, flowing style.

John Taylor
Executive Director