

May 21, 2021

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 ENERGY STAR® Version 3.0 Commercial Ovens Draft 1 Specification, released by the Environmental Protection Agency (EPA) on March 31, 2021.

CEE is the binational organization of energy efficiency program administrators. Historically, the CEE Board of Directors determined to build a single brand for efficiency and elected to create standing for the ENERGY STAR® Program rather than advancing the name recognition of CEE or other endeavors that existed at that time. The ENERGY STAR® Program adopted specifications supported by CEE and program administrators, providing the confidence that utility ratepayer programs needed to invest in incentives in association with ENERGY STAR®. This was a conscious investment and contribution of equity and the sanctioned obligations of utility members that include responsibility for delivering safe, reliable, and affordable service. Today, the staff and membership of the Consortium continue to perform diligence relative to the ENERGY STAR brand promise and associated performance specifications, given the very serious obligations entrusted to US and Canadian utilities as well as others sanctioned with advancement of voluntary market transformation efforts.

CEE members are responsible for ratepayer-funded efficiency programs in 38 US states, the District of Columbia, and four Canadian provinces. In 2018, CEE members directed approximately 68% percent of the \$8.9 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 Supports EPA Efforts to Revise Criteria to Enable the Continued Recognition of Top Performing Products**

ENERGY STAR and CEE specifications have consistently defined what constitutes highly efficient commercial convection ovens since 2009 and 2011, respectively. The *CEE<sup>SM</sup> Commercial Kitchens Initiative* was instituted in 2006 to advance the efficiency of cooking, refrigeration, and sanitation equipment. The CEE Commercial Convection Ovens Specification was adopted into the Initiative in 2011 and most recently revised in 2015. The ENERGY STAR Version 2.2 Commercial Ovens Specification convection oven criteria are aligned with CEE Tier 1. The CEE specification, member programs, and ENERGY STAR, work in concert to advance the market for high efficiency commercial ovens.

In 2019, at least 70 CEE members offered program support for products covered by the ENERGY STAR® Version 2.2 Commercial Ovens Specification, and the majority referenced the ENERGY STAR specification as basis for that program support. The most recent ENERGY STAR Unit Shipment Summary Report indicates that approximately 51% of units shipped in the United States in 2019 were certified to the current specification. We agree with EPA that this is a high level of overall ENERGY STAR market share and support EPA efforts to revise the specification performance criteria for existing categories to recognize approximately the top 25% of the market and continue to deliver meaningful energy savings over conventional models. EPA is proposing revisions to the criteria for full- and half-sized combination ovens and full-sized convection ovens to continue recognizing the most efficient ovens in the market. CEE comments on individual categories are provided below.

## **Align Proposed Electric Convection Oven Criteria with CEE Tier 2 to Reward Manufacturers that Sought to Achieve CEE Tier 2 and Reinforce the Complementary Relationship Between ENERGY STAR and CEE Multitier Performance Specifications**

CEE revised its Commercial Convection Oven Specification in 2014 to meet CEE member needs for a specification that identifies high efficiency convection ovens tested to the

most current energy performance standard and drive the market to develop and adopt this higher efficiency equipment. The revision was driven in part by a 2012 update to the ASTM test method including changes to account for energy absorbed by pans during testing and to enable testing of additional oven sizes loaded to maximum capacity. The CEE revision was timed to influence manufacturers who were redesigning models prior to retesting them. Tier 2 performance levels were defined to support those programs that wish to incent an even higher level of efficiency to capture additional savings and to provide an incentive for manufacturers to develop products that go beyond Tier 1 product performance.

The ENERGY STAR Version 3 Draft 1 criteria for full sized, electric and gas convection ovens are very similar to CEE Tier 2. Table 1 below compares the two specifications and percent of models in the EPA dataset that meet the Draft 1 criteria. The Draft 1 criteria for Electric, Half Size ovens, which are equivalent to CEE Tier 1, remain unchanged from the current Version 2.2. For Electric, Full Size Convections Ovens, the cooking efficiency differs by 1%, and the idle energy limit by 0.2 kW. For Gas, Full Size Ovens, the cooking efficiency criterion differs by 2% from CEE Tier 2 while the proposed Idle Energy Limit is 500 Btu/h lower.

Table 1. Comparison of ENERGY STAR Version 3 Draft 1 to CEE Convection Oven Specification Performance Criteria

Performance Tier	CEE Tier 1	CEE Tier 2	ENERGY STAR V3 Draft 1	
			Criteria	% of Models Qualifying
<b>Electric, Half Size</b>				
Cooking Energy Efficiency	≥ 71%	≥ 75%	≥ 71%	Not Provided
Idle Energy Rate	≤ 1.0 kW	≤ 0.9kW	≤ 1.0 kW	
<b>Electric, Full Size</b>				
Cooking Energy Efficiency	≥ 71%	≥ 76%	≥ 75%	26%
Idle Energy Rate	≤ 1.60 kW	≤ 1.40 kW	≤ 1.2 kW	
<b>Gas, Full Size</b>				
Cooking Energy Efficiency	≥ 46%	≥ 52%	≥ 50%	23%
Idle Energy Rate	≤ 12,000 Btu/h	≤ 10,000 Btu/h	≤ 9,500 Btu/h	

CEE staff analyzed which models in the ENERGY STAR Version 3.0 Commercial Ovens Draft 1 Data Packet would meet CEE Tier 2 criteria. Aligning the proposed criteria with CEE Tier 2 in the Electric, Full Size category would increase the number of qualifying

models from 12 (26% pass rate) to 19 (38% pass rate) and allow one additional manufacturer to have qualifying models.

A CEE Tier 2 provides an efficiency target for manufacturers to design to that, ideally, would become Tier 1 once the existing Tier 1 no longer provides adequate market differentiation from the baseline. If the Tier 2 does not become Tier 1 it could be perceived as “moving the goalpost” on manufacturers and undermine the effectiveness of a multitier CEE specification. If ENERGY STAR adopts the Draft 1 Convection Oven criteria for full sized electric convection ovens, the minor differences from CEE Tier 2 could cause market confusion. CEE requests that EPA modify the proposed criteria for full sized electric convection ovens to align with CEE Tier 2 to reward manufacturers that sought to achieve CEE Tier 2 efficiency levels in their product design and reinforce the complementary relationship between ENERGY STAR and CEE multitier performance specifications.

## Consider Modifying Proposed Gas Convection Oven Criteria to Increase Customer Choice and Ensure a Sufficient Selection of Models and Manufacturers

The Commercial Kitchens Committee is concerned that the proposed criteria for gas convection ovens would overly limit the availability of ENERGY STAR qualified equipment that would be available to customers. The dataset includes 13 models (a 23% pass rate) that meet the Draft 1 criteria for Gas, Full Size convection ovens. In this category, we do not recommend alignment with CEE Tier 2 at this time as that would reduce the number qualifying models from 13 to 8 (a pass rate of 14%). As the dataset is masked, we reviewed the California Energy Wise QPL to assess the impact on the number of brands and original equipment manufacturers (OEMs) that would have qualifying products. This review found that the number of brands (OEMs) with qualifying models would be reduced from 20 (13) to 5 (4). The Committee is concerned with the impact this would have on customer choice and requests that EPA evaluate whether the proposed criteria could be lowered to allow for inclusion of additional commercial oven manufacturers while continuing to provide cost effective energy savings.

## CEE Agrees that Combination Ovens Should Meet More Stringent Convection Mode Efficiency Requirements than Convection Ovens

Since combination ovens (combis) were added to the scope of the ENERGY STAR Commercial Ovens Specification in Version 2, they have been required to meet more stringent convection mode cooking efficiency criteria and idle energy limits than

convection ovens. The Version 3 Draft 1 proposal maintains this practice. It is appropriate for combis to have more stringent convection mode cooking efficiency and idle energy limits than convection ovens because each type of oven provides different amenities and serves different customer needs. The customer's choice of oven type, combi or convection, is typically driven by their menu and production needs. Customers are typically selecting among combis or among convection models, not comparing across oven types. Combis are built with much better envelopes and insulation than convection ovens and therefore should be more efficient. Combis typically cost two to three times that of comparable convection ovens. Requiring convection ovens to be as efficient as top performing combination ovens would not serve customers that want an efficient convection oven and do not need the additional cooking modes of much higher priced combi ovens.

#### CEE Requests EPA Consider Modifying Criteria to Qualify Additional Models in the Medium and Large Size Ranges While Maintaining a Selection of Boiler Models

CEE is generally supportive of the draft 1 combi oven criteria for electric combination ovens 5-40 pan capacity; 3-4 pan capacity and 2/3-size; and gas combination ovens 5-40 pan capacity that recognize the most energy-efficient 30%, 31%, and 24% of models available in the market, respectively. While overall, these pass rates are appropriate for ENERGY STAR, we are concerned with the limited availability of models in the medium size range (15 to 28 pans), and large size range (over 28 pans), and especially with respect to gas models. Limiting oven pan capacities available will not motivate end users to purchase a different sized combination oven that is at a higher efficiency. We request that EPA consider whether the proposed criteria could be revised to qualify additional models in the medium and large size ranges while still providing cost-effective energy savings.

The CEE Commercial Kitchens Committee discussion with the ENERGY STAR staff on April 28<sup>th</sup> confirmed that a selection of combi boiler models would be able to meet the steam-mode cooking efficiency criteria based on the proposed equation. It is important that boiler models be able to qualify as they provide unique amenity through a boiler system outside of the cooking chamber that produces the steam to be injected into the chamber for steam cooking. This contrasts with "boiler-less" combis that generate steam by spraying water onto a hot surface and circulate the steam through the cooking chamber using a fan system. Establishments like supermarkets that have a chicken program (selling whole cooked chickens) prefer boiler models because they result in moister meat and higher production (less shrinkage). As EPA considers modifications to the proposed combi criteria in response to comments received on Draft 1, CEE requests that EPA remains mindful to ensure a selection of boiler models would qualify.

## **CEE Supports EPA Consideration of Expanding the Scope to the Identified Categories in Recognition of Increased Market Popularity and Energy Savings Potential**

CEE supports EPA's consideration of expanding the scope to additional combination oven size categories in recognition of the increased market popularity of these equipment categories and their associated energy savings potential. EPA proposes to expand the scope to include large electric combination ovens ( $\leq 40$  pans), small electric combination ovens ( $\geq 3$  pans), small gas combination ovens ( $\geq 5$  pans), and electric 2/3-size combination ovens (with a pan capacity  $\geq 3$  and  $\leq 5$ ). EPA proposes to create a new subcategory that combines (bin) Electric Combination Ovens 3-4 Pan Capacity and 2/3-size with 3-5 pan capacity, "based on similar performance, size, and production capacities..." and because it "allowed greater consumer choice in pan size and manufacturer brands rather than aggregating these models with the 5-40 pan capacity models." CEE supports the proposed binning of Electric Combination Ovens 3-4 Pan Capacity and 2/3-size with 3-5 pan capacity and agrees with EPA's rationale.

## **CEE Support the Addition of Preheat Time and Energy Use Data Reporting Requirements**

Assuming the necessary data review and quality control will be performed by the ENERGY STAR Program to ensure data accuracy, CEE supports the proposed inclusion of new reporting requirements for preheat time and energy use for all oven types within scope to provide customers with a more complete energy profile when selecting ENERGY STAR commercial ovens. We understand that preheat time and energy use data are already collected during the relevant test procedures, so the proposed requirements should not impose a burden on manufacturers. However, additional reporting requirements increase the quality control workload for the Program. Consumers expect ENERGY STAR to ensure the accuracy of data in the Product Finder.

CEE would once again like to thank the EPA for the opportunity to comment in response to the ENERGY STAR® Version 3.0 Commercial Ovens Draft 1 Specification. Please contact CEE Program Manager Bjorn Jensen at 617-337-9280 with any questions about these comments.

Sincerely,

A handwritten signature in blue ink, appearing to read "Ed Wisniewski". The signature is fluid and cursive, with the first name "Ed" being particularly prominent.

Ed Wisniewski  
Executive Director