



SUB ZERO GROUP, INC.

4717 Hammersley Road, Madison, WI 53711

P: 800.532.7820 P: 608.271.2233 F: 608.270.3362

June 8, 2016

The Honorable Ed Whitefield
Sub-Committee Chairman Energy and Power Sub-Committee
House Energy and Commerce Committee
Rayburn House Office Building
Washington, D.C. 20515

The Honorable Bobby Rush
Sub-Committee Ranking Member House Energy and Power Sub-Committee
House Energy and Commerce Committee
Rayburn House Office Building
Washington, D.C. 20515

Re: DOE's NOPR for Energy Conservation Standards for Residential Conventional Ovens,
Docket Number EE-2014-BT-STD-0005, RIN 1904-AD15

Gentlemen:

Sub*Zero Corporation is pleased that the Sub-Committee is holding this very valuable hearing on the current regulatory climate. We realize your hearing has to do with the overall regulatory process; however, I wanted to summarize our business concerns and state some of the specific reasons for why the above reference regulation, as written today, would have a profoundly negative impact our business and all of those in our industry that serve this niche market. Sub-Zero is a third generation family owned business which manufactures all of its products at unionized plants in Arizona and Wisconsin.

In the end we have one defining question: **why would the Department of Energy choose to ignore the fact that there are fundamental differences in design and materials between "conventional" and "high performance/professional grade" cooking appliances?** The niche market we serve demands high performance, maximum utility and long term reliability. Many of those demands are best delivered by using designs, higher grade (and/or mass) materials along with pre-heat algorithms that impede the ability to deliver conventional equivalency in the area of energy efficiency. We firmly believe that we deserve a separate product category to allow us to continue serving a distinctively different market than what is expected from a "conventional" product. Forcing companies like us to make design and material changes to comply with the DOE's regulation would blur the lines between distinctively different markets; thereby, dramatically changing the competitive landscape.



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Corporate Summary:

It is our hope that the Department would reconsider its position and establish a separate set of standards for high performance ovens (and gas cooktops if and when they become regulated). The current language used in the proposed rule imposes serious challenges for a small American niche manufacturing company like Sub Zero/Wolf. Sub-Zero has a unique story to tell. In an age when too many manufacturing jobs have been sent overseas by large, faceless corporations, Sub-Zero continues to be a family-owned company with operations exclusively in Wisconsin and Arizona.

Over the past 70 years, Sub-Zero has developed a niche market with its product line of customized built-in refrigerators, freezers and wine storage products. They took that same mindset and business strategy into cooking in the year 2000 when they launched the Wolf brand. Since that time, they have been producing high performance cooking products, which includes Ranges and Wall Ovens. Along that journey, they have a tradition of working with the DOE closely to define reasonable and practical energy efficiency standards that take into account its unique product line, which is predicated upon meeting their market's expectations for high-end performance and superior quality and reliability. In short, they have always looked to comply with regulations without jeopardizing their ability to remain separate from the conventional appliance products.

The Department's labeling of all cooking products as, "conventional", forces a small family owned manufacturer like Sub-Zero/Wolf to abandon its distinct line of ranges and ovens, which creates a significant disparity in the competitive landscape. The proposed regulation does not properly consider the differences in design and materials between conventional and high performance/professional grade appliances. Sub-Zero/Wolf's business is exclusively tied to a market that expects well-engineered and long lasting products; whereas, many of the mass market manufacturers, many of whom produce their products outside of the United States, serve a very price sensitive market that accepts lower grade materials and design.

We have significant concerns about the Department's goal of establishing a final rule by the end of this year without assurance that manufacturer's like Sub-Zero/Wolf will not be negatively impacted. We share the Department's concerns about responsible use of energy, but such regulations must be reasonable and preserve, not threaten, American jobs.



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Points we have already made via comments:

The DOE currently plans to broad-brush all products into product classes labeled “conventional”. This is particularly puzzling since DOE analyzed our comments in 2006 and 2008, as well as those submitted by other manufacturers and AHAM, and concurred that high performance products provide a distinct utility to a customer segment. The stakeholders agreed at that time that the current test procedures are just not set up to evaluate high-performance products, and the relatively small size of the market, lack of data and very limited potential energy savings negate the value of further analysis. Lumping all ovens and gas cooktops into single product classes ignores design differences and the significant positive utility provided to a viable subset of consumers by high performance products.

We also note that DOE admitted during the July 14, 2015 meeting that evaluating changes in cooking performance were not part of the analysis DOE conducted for this rulemaking when evaluating candidate improved efficiency design options in any of the ovens tested, conventional or high-performance.

Design features employed by Wolf that impact efficiency levels of *ovens* (some of these features are employed by other “professional grade” manufacturers):

- Heavier gauge materials which extend product life, and enhance product quality, cooking functionality and durability.
- Configurations that allow for up to six rack baking capability with full extension, heavy gauge oven racks to support large loads and provide enhanced safety and ergonomic benefit.
- Full oven height dual convection blowers to optimize cooking air flow.
- Hidden bake elements that enhance customer safety, cleanability and heat distribution for better cooking performance.
- Controls and software to maximize the long term reliability of oven cavity porcelain, when employing a hidden bake element.
- Cooling fans for the Electronic Printed Circuit Boards that provide precise oven control and touch screen user interface for cooking modes and other features.



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Specific design features employed by Wolf (and most “professional grade” manufacturers) that impact efficiency levels of high performance *gas cooktops* include:

- Gas burner design attributes such as safety, performance, and efficiency are systemic; meaning, a change to one attribute significantly affects the others.
- There are many elements within a system attribute that must be taken into consideration, such as: mass of grates, diameter of gas burner, distance from burner to utensil surface, open area for primary and secondary air for combustion and exhaust of combustion by-products.
- High BTU burners with large diameters provide quicker heat up times allowing consumers to use large cooking vessels and maintain better heat distribution in the cooking utensil. This benefit is not reflected in the test procedure.
- The Performance attribute includes much more than speed-to-boil time. The high performance cooking consumer expects superior performance in controllability of the flame, specifically in the area of simmer heat for foods such as chocolate and sauces. Providing excellent simmer performance while also achieving fast speed-to-boil times is a design challenge and both requirements are impacted greatly by balancing safety and efficiency standards.
- The burner spacing between grate and vessel must be greater for high input burners in an effort to meet critical performance and safety requirements; specifically heat distribution and reduction of carbon monoxide.
- Reducing burner spacing between burner flame and testing vessel can increase efficiency; however, flame impingement/contact with the grate and vessel causes flame quenching (cooling), which directly leads to an increase in carbon monoxide levels and combustion by-products.
- Heavy cast iron grates supply better heat distribution to utensils while also providing superior strength to support large loads; furthermore, the heavier mass grates retain more heat once the burner is turned down to simmer or shut off. Although this fact is not captured by the test procedure, it does favorably influence the overall cooking efficiency. The heavier cast iron grates also provide the necessary longevity that is expected in this type of equipment by our customers.
- High performance cooking products incorporate heavier gauge (more mass) materials overall to support heavier cooking utensils and to meet or exceed customer expectations for performance, utility and overall product longevity.

Yours truly,

Christopher M. Jessup
Corporate Compliance Manager