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Ann Bailey
Director, ENERGY STAR Product Labeling
United States Environmental Protection Agency
Washington, DC 20460

Submitted via: mostefficient@energystar.gov

**Re: ENERGY STAR 2015 Most Efficient:
Proposed Criteria - Central Air Conditioners and Heat Pumps
Proposed Criteria - Furnaces**

Lennox International Inc. (Lennox) hereby submits comments on the proposed *ENERGY STAR Most Efficient Proposed Recognition Criteria for Central Air Conditioners and Air-Source Heat Pumps* and the *ENERGY STAR Most Efficient Proposed Recognition Criteria for Furnaces* published on August 4, 2014 (hereafter, the “Proposed Criteria”).

Lennox is a leading provider of climate control solutions for heating, air conditioning, and refrigeration markets. Lennox is a publicly-traded company that has thousands of employees, and it manufactures equipment addressed by the Proposed Criteria. Lennox is also a member of the Air-Conditioning, Heating and Refrigeration Institute (AHRI), which has worked extensively with EPA and DOE to develop reasonable, practical energy efficiency regulations and programs.

Lennox offers the following general comments regarding the ENERGY STAR program and the Proposed Criteria. Below that, Lennox provides responses to specific items raised by EPA and identified by topic.

A. General Comments on the Current ENERGY STAR Program.

Lennox has reviewed the ENERGY STAR Most Efficient 2015 criteria and supports most aspects of the proposal with one key exception. Lennox believes the addition of Static Pressure to the System Status and Messaging Capabilities is not appropriate at this time and recommends that EPA remove from the 2015 requirements.

Lennox also attended the stakeholder webinar meeting held by EPA on September 4, 2014 regarding the Proposed Criteria. Before commenting in detail on the specifics of the Proposed Criteria, Lennox believes some general comments in regard to the ENERGY STAR program and its Most Efficient program are appropriate.

1. Status of the ENERGY STAR Program.

While the Proposed Criteria are focused on the ENERGY STAR Most Efficient program, Lennox continues to be concerned with the overall status of the EPA ENERGY STAR program.

Prior to 2010, the ENERGY STAR program worked seamlessly with the AHRI certification program. However, in 2010 EPA made significant changes to the ENERGY STAR requirements for CAC/ASHP and furnace products, which resulted in a dramatically increased burden to manufacturers. The result of these changes has been a dramatic and continuing decline in the level of participation in the ENERGY STAR program by CAC/ASHP manufacturers.

EPA recently published letter of February 28, 2014 responded to AHRI regarding approaches to the ENERGY STAR certification and verification of eligible products. The February 2014 letter announced impactful steps to more closely align the AHRI certification program and EPA's requirements for ENERGY STAR. Lennox supports these actions as significant steps in reforming the ENERGY STAR program. But as ENERGY STAR participation continues at very low levels within the Industry, Lennox recommends further reform to the ENERGY STAR program to match the test requirements of the current AHRI program.

2. ENERGY STAR Most Efficient and CEE Advanced Tier.

Lennox agrees with the general concepts of the ENERGY STAR Most Efficient program and supports the need for leading-edge, energy-efficient products. Lennox's support for EPA's Most Efficient objectives can be seen in our focus on innovative products that are among the industry leaders in energy efficiency.

Lennox believes the current combined ENERGY STAR and CEE Tier systems are unnecessarily complex with too many threshold levels. This fractures the market into subcategories that add a significant burden to HVAC manufacturers and inhibit product innovation. Lennox understands that EPA and CEE have worked diligently to coordinate efforts between ENERGY STAR Most Efficient and CEE Tier 3 but wants to emphasize the need to continue this effort across all ENERGY STAR and CEE Tier levels.

Both the ENERGY STAR and CEE programs can, and should, be relevant to promoting improved energy efficiency, and properly-aligned performance requirements are necessary to achieve this goal.

3. ENERGY STAR Most Efficient Timing.

Lennox understands that the ENERGY STAR Most Efficient must be updated on a regular basis to insure that the products qualified are positioned at the leading edge of the Market. In general the performance specifications are positioned relative to the capabilities of

products in the market but when additional requirements such as commissioning, messaging and diagnostic capabilities are added to the performance requirements manufacturers need time to understand the requirement and to develop products to meet the requirements. Given the current EPA cycle of releasing proposed requirements for the following year in the late summer and finalizing these requirements in the 4th quarter does not provide manufacturers' sufficient development or lead time to meet these requirements regardless of how meaningful the requirement may be to the product. Lennox would suggest that the EPA change the current practice to give advance notice of intended changes 12 – 18 months prior to the intended date of implementation.

B. Specific Proposed Criteria Issues.

In addition to the above general points, Lennox also offers comments on the specific issues raised by EPA.

1. Central Air Conditioner and Heat Pump Recognition Criteria – Item 2 Performance Metrics

Lennox agrees with the proposed quantitative performance levels outlined, which represent no change to the current performance levels for this product category.

2. Furnace Recognition Criteria – Item 2 Performance Metrics.

Lennox agrees with the proposed quantitative performance levels outlined, which represent no change to the current performance levels for this product category.

3. Central Air Conditioner and Heat Pump Recognition Criteria, Furnace Recognition Criteria – Item 3 -- Product must have system status and messaging capability.

In prior comments, Lennox has expressed concern over adding prescriptive system communication requirements. Furthermore, prescriptive communication requirements delay development of innovative communication capabilities with greatly enhanced benefits within the industry to meet short-term program requirements. As communication capabilities, protocols, and standards are very much an evolving area for HVAC products, Lennox recommends that the Most Efficient program let the industry further develop technologies that best meet the market needs and not impose overly prescriptive requirements that increase product cost and stifle innovation.

- Lennox can support the system status and communication requirements outlined in items, A, C and D of the Proposed Criteria.
- ***Lennox does not support the addition of item B, Static Pressure to the ENERGY STAR Most Efficient requirements.***

Currently products that are capable of providing a signal indicating the system Static Pressure are not widely available in the industry. The inclusion of a Static Pressure signal to ENERGY STAR Most Efficient has the potential to exclude products that **are the leading efficiency performing products in the industry** for all the product categories involved. Lennox believes that this is not in alignment with the intent of the Most Efficient program.

In addition, the Static Pressure capability provided may be of limited value in today's market conditions. Normally, duct design and component selection, including blower fan size and filter options, are completed prior to the installation. This design determines the air flow and static pressure at which the system will operate to efficiently provide the proper amount of air to all zones of the house to meet the cooling and heating loads of each zone. Providing a signal from the blower fan that indicates static pressure after the installation may not correlate to the design static pressure and could confuse the installer or code official resulting in unintended consequences that impact the homeowner. These may include compromises in efficiency, comfort, additional cost and other inconveniences that may negatively impact the end consumer.

While Lennox understands EPA's goal in adding the Static Pressure requirement we believe further evaluation and development within the Industry is needed to assure it achieves the intended results.

In conclusion, Lennox wants to emphasize the addition of Static Pressure to the System Status and Messaging Capabilities is not appropriate at this time and recommends that EPA remove this requirement from the 2015 Proposed Criteria.

EPA should also thoroughly review and reform the current ENERGY STAR program to ease the burden to manufacturers and increase participation. Additionally, Lennox recommends a harmonized approach to ENERGY STAR Most Efficient that is coordinated with the CEE Advanced Tier.

Lennox appreciates the opportunity to comment on the Proposed Criteria and looks forward to continued dialogue regarding the ENERGY STAR programs.

Sincerely,

A handwritten signature in black ink that reads "David Winningham". The signature is written in a cursive, flowing style.

David Winningham
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