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Abigail Daken U.S. Environmental Protection Agency Energy Star HVAC Program Washington, DC 20460

Submitted via: LCHVAC@energystar.gov

Re: Comments for Energy Star Light Commercial HVAC Draft 2 Version 3.0

Lennox International Inc. (Lennox) hereby submits comments on the EPA Energy Star Light Commercial HVAC Draft 2, Version 3.0.

Lennox is a leading provider of climate control solutions for the heating, air conditioning, and refrigeration equipment markets. Lennox is a publiclytraded company and has thousands of employees, and manufactures equipment subject to the Energy Star Light Commercial HVAC program. Lennox appreciates the opportunity to work with EPA to develop reasonable, practical energy efficiency programs as part of EPA's Energy Star program.

In the HVAC market, there are many different programs which impact the sales of commercial air conditioning systems – Energy Star, Consortium for Energy Efficiency (CEE – Tier 1 & Tier 2), DOE minimum efficiency regulations, ASHRAE 90.1 2013 and IECC 2015 building code standards. All of these have their own unique requirements. The net result of these multiple programs is that they dilute the effectiveness of each program. Additionally, it adds to the burden on manufacturers and will ultimately drive up the cost to consumers.

We appreciate the time the team from the EPA Energy Star Program has spent in re-evaluating the efficiency levels of Draft 1, Version 3.0 – and recommending, in Draft 2, the adoption of the CEE Tier levels of efficiency.

Lennox agrees with, and strongly supports the proposals identified in Draft 2 of the Energy Star Program, Version 3.0 and recommends adopting:

> > CEE Tier 2 levels of efficiency for Unitary Air Conditioners and Gas/Electric units between 65,000 btuh and 240,000 btuh.

- The DOE Test procedure for LC HVAC 10 CFR Part 431 Subpart F §431.96, and,
- > The ability to choose between two options of sampling:
 - Products selected for testing per DOE sampling requirements in 10 CFR Part 429, Subpart B §429.43.
 - A single sample is selected and tested (same process as Energy Star Version 2.2)

In reviewing the EPA Energy Star 3.0, Draft 2 sections on Light Commercial Heat Pumps and Light Commercial VRF Multi-Split Systems, we are concerned with the proposal as written.

As we review the high temperature coefficient of performance (COP @ 47^{0} F), we noted that the COP was stated as 3.3 COP 47^{0} F for cooling capacities at or above 135,000 btuh. We would recommend that EPA Energy Star adopt 3.2 at COP 47^{0} F for this category. This would allow the COP at 47F to be aligned with CEE.

Lennox recommends for the Light Commercial VRF Multi-Split Systems that Energy Star reduce the number of qualifying components to IEER and COP47⁰F and adopt the CEE Tier 1 levels of efficiencies for this category. Having 4 different qualifying components greatly reduces the possibility for meeting the Energy Star requirements for a reasonable quantity of capacities.

We strongly encourage EPA to adopt, with the minor recommended adjustments, the proposal for Energy Star Version 3.0, Draft 2.

Thank you for your consideration and support.

Sincerely,

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Mike Ray Leader, Regulatory Affairs and Utility Programs Lennox Commercial