AIR-CONDITIONING, HEATING, & REFRIGERATION INSTITUTE
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2111 Wilson Boulevard Suite 500 Arlington VA 22201-3001 USA
Phone 703 524 8800 | Fax 703 562 1942
www.ahrinet.org

May 16, 2014

Ms. Abigail Daken
U.S. Environmental Protection Agency (EPA)
ENERGY STAR HVAC Program

Re: AHRI Comments on Draft 1 Version 5.0 ENERGY STAR Central Air Conditioner and Air-Source Heat Pump (CAC/ASHP) specification

Dear Ms. Daken,

The Air-Conditioning, Heating, and Refrigeration Institute (AHRI) is the trade association representing manufacturers of air-conditioning, heating and commercial refrigeration equipment. Over 300 members strong, AHRI is an internationally recognized advocate for the industry, and certifies the performance of many of the products manufactured by our members. In North America, the annual output of the HVACR industry is worth more than $20 billion. In the United States alone, our members employ approximately 130,000 people, and support some 800,000 dealers, contractors, and technicians. AHRI's central air conditioner and air-source heat pump member companies account for nearly 100 percent of the residential CAC/ASHP products sold in North America.

We are not in favor of a regional ENERGY STAR specification for CAC/ASHP products. Instead, EPA should adopt a national approach for such products. We have the following specific comments on Draft 1 Version 5.0:

- Regional Specification and Performance Criteria – EPA should abandon the idea of creating a regional specification and instead adopt a national approach. We believe that complying with varying levels in the regional ENERGY STAR specification and the federal regional standards would be onerous for manufacturers. The varying ENERGY STAR and federal regional efficiency levels would lead to consumer confusion. Manufacturers typically offer a variety of higher efficiency products that meet the ENERGY STAR and Consortium for Energy Efficiency (CEE) tier levels. On many occasions, such products are specifically designed to meet these key threshold levels.

  If EPA chooses to proceed with a regional approach, there could be a significant increase in the quantity of threshold levels when both ENERGY STAR and CEE tier levels are considered. Manufacturers would be faced with designing new product families to optimize products at these increased segment thresholds, or spreading products over these thresholds, resulting in sub-optimized performance-to-value relationships. Either of these approaches could result in an increased cost of the product to the consumer due to reduced volume or sub-optimum designs to meet these thresholds. EPA's proposed regional approach would result in multiple thresholds across the EPA and CEE specifications, thereby inhibiting manufacturers from participating in all tiers due to inconsistencies and compelling them to drop out of the program. Additionally, the proposed regional approach would lead to confusion among consumers and within the distribution supply chain. For instance, the consumer would need an

understanding of the regions relative to his or her location in order to be certain that a given product is actually ENERGY STAR qualified. Compounding the issues of manufacturer burden and consumer confusion are complications associated with labeling and enforcement.

Although we understand that a regional requirement would make the specification more palatable for the U.S. North region, the drawbacks associated with regional requirements far outweigh the assumed benefits. As indicated in Table 1, we propose that EPA adopt national levels above the U.S. Department of Energy's (DOE) regional energy conservation standards, consolidate levels for CACs and ASHPs, and adjust the HSPF metric to market levels.

Table 1: Energy-Efficiency Criteria for Qualified Residential ASHPs and Central Air Conditioners

	EPA Proposed Level			AHRI's Proposed National Requirements			Comment
Product Type	**SEER**	**EER**	**HSPF**	***SEER***	***EER***	***HSPF***	
CAC Split Systems - South Region	**≥ 15.5**	**≥ 13**	**N/A**	***≥ 15.0***	***≥ 12.5***	***N/A***	**Harmonized with current CEE Tier 2**
CAC Split Systems - North Region	**≥ 14.5**	**≥ 12**	**N/A**				**Harmonized with current CEE Tier 2**
ASHP Split Systems - National	**≥ 15.5**	**≥ 12.5**	**≥ 8.6**			***≥ 8.5***	**Harmonized with current CEE Tier 2**
CAC Single Package Equipment - National	**≥ 15.5**	**≥ 12.5**	**N/A**	***≥ 15.0***	***≥ 12.0***	***N/A***	
ASHP Single Package Equipment - National	**≥ 14.5**	**≥ 12**	**≥ 8.3**			***≥ 8.2***	

AHRI's proposal within Table 1 would: a). simplify the efficiency levels to improve avoid confusion at the consumer and distributor/contractor level; b). eliminate labeling and enforcement complications that would stem from regional requirements; and c). reduce complexity across incentive programs. We would also like to note that the reason we are proposing some of the EER levels within Table 1 is that products in the higher capacity ranges (specifically in the single package category) would find it very challenging to achieve the proposed EPA levels.

- Labeling – As an EPA-recognized certification body, AHRI can help manufacturers meet EPA's proposed labeling requirement. AHRI is capable of furnishing the ENERGY STAR mark within the corresponding AHRI certificate of product ratings for each qualifying combination. Manufacturers who are involved in AHRI's certification programs should not be subject to any additional labeling requirements.

- Implementation of final specification – EPA should note that on April 24, 2014, the D.C. Circuit Court of Appeals issued an Order granting the unanimous motion of the parties to the American Public Gas Association (APGA) vs. DOE litigation. One of the steps that DOE committed was to issue an enforcement policy statement providing an 18 month period within which DOE will not seek civil penalties for violations of the regional standards regarding distribution in commerce (including sales by retailers and installation) of 13 SEER central air conditioners in the South or Southwest region if they were manufactured prior to January 1, 2015. EPA should also note that DOE has not yet issued a final rule regarding the enforcement of regional standards.

> Given the uncertainties associated with the issuance of a DOE enforcement standard for the January 1, 2015 energy conservation standards, and the DOE allowance of an 18-month sell through period for products manufactured prior to January 1, 2015, we believe that it would be appropriate for EPA to postpone the implementation date of its final CAC/ASHP specification until after 2015.

Earlier this year, EPA took major steps to more closely align its certification requirements for the ENERGY STAR program with the requirements associated with AHRI's certification program. While these are significant steps, we recommend further dialogue to harmonize the requirements of the EPA ENERGY STAR program with those associated with the AHRI certification programs, so that the regulatory burden on manufacturers is minimal.

In August 2013, we had mentioned to you that the effect of the considerable burden being placed on manufacturers by the ENERGY STAR verification testing requirements is clearly evident from a comparison of the AHRI and the CEE directories. Although several models were capable of qualifying as ENERGY STAR models, manufacturers choose not to label those models as ENERGY STAR due to the immense compliance burden. In the case of split system air conditioners, manufacturers listed only 5.7% of the total available models (i.e., products that meet the efficiency levels within the EPA specification) as ENERGY STAR units on the CEE directory whereas for split system heat pumps, the number dropped to 4.2%. Of the total available models that meet the efficiency levels within the EPA specification, 25% single package air conditioners, 36% single package heat pumps, 8.3% of variable-speed mini-split and multi-split air conditioners, and 24.4% of variable-speed mini-split and multi-split heat pumps were listed as ENERGY STAR units on the CEE directory.

Recent statics continue to demonstrate that manufacturers are still facing issues related to compliance burden. As of May 2014, the CEE directory indicates that manufacturer participation has continued to decline to less than 5% of the total available models. From this information, it is clear that the CAC/ASHP manufacturers continue to have concerns in terms of benefit versus burden of the ENERGY STAR program, and that continued actions are required to solidify the program within the HVAC industry. We understand that the effect of EPA's recent changes may require additional time to fully determine the beneficial impact of the changes, but the continued minimal level of manufacturer participation indicates that further fundamental changes are required.

AHRI appreciates the opportunity to provide these comments. If you have any questions regarding this submission, please do not hesitate to contact Karim Amrane at kamrane@ahrinet.org.

Sincerely,

Aniruddh Roy
Engineering Manager, Regulatory Affairs
Air-Conditioning, Heating, and Refrigeration Institute
2111 Wilson Boulevard, Suite 500

Arlington, VA 22201-3001, USA
703-600-0383 Phone
703-562-1942 Fax
aroy@ahrinet.org