



April 6, 2011

Ms. Ann Bailey  
U.S. Environmental Protection Agency (EPA)  
ENERGY STAR Product Labeling

Re: AHRI Comments on EPA's Proposed Pilot ENERGY STAR Program for Top Tier Products

Dear Ms. Bailey,

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. We have the following comments on EPA's recently proposed pilot ENERGY STAR program for top tier products:

1. With regards to the furnace eligibility, the criteria specifies natural gas, propane and oil as the included fossil fuels but states that oil furnaces are not eligible for the most efficient recognition in 2011. EPA should address this discrepancy in its criteria for residential furnaces.
2. The AHRI directory reveals that only 0.21 % of the furnace listings currently meet the minimum AFUE requirement of 98%, and none of the listings include information on whether the furnaces are enabled to communicate digitally with an appropriate thermostat or other control. Furthermore, the output heating capacities associated for these furnaces are limited to 85,000 Btu/h, 107,000 Btu/h, and 116,000 Btu/h only. We feel that the proposed top tier requirement for furnaces severely impacts product availability for residential applications outside of the range of capacities mentioned above. We strongly believe that the criteria will lead to the installation of either oversized or undersized units and contradicts the goals of the ENERGY STAR program.
3. The AHRI directory reveals that only 0.001 % of split air conditioners, 0.014 % of split heat pumps, 0.00007% of packaged air conditioners and 0.005% of packaged heat pumps meet EPA's proposed top tier requirements and none of the listings include information on whether the units can communicate digitally with

an appropriate thermostat or other control. As with residential furnaces, the proposed top tier requirement for these products severely impacts product availability and will inevitably lead to the installation of either oversized or undersized units. For example, per the AHRI directory the maximum cooling capacity for a split air conditioner or split heat pump that meets EPA's criteria is 35,000 Btu/h. Such units would not be appropriate for a residence that requires a cooling capacity of 65,000 Btu/h.

4. EPA's most efficient recognition criteria excludes units that are rated for more than 65,000 Btu/h of cooling, and although this criteria may be appropriate for residential single-phase central air conditioners and heat pumps, the criteria is not appropriate for single-phase geothermal heat pumps. We feel that the reasons provided by EPA in its cover letter to not include all qualifying residential geothermal heat pumps are not justified. EPA's letter fails to explain the scope of the target audience and why larger residential products that meet the top tier efficiency criteria (specifically single-phase geothermal heat pumps) do not qualify as top tier products. Since the goal of the top tier program is to recognize products that are most efficient in the marketplace, we see no reason as to why EPA should make a distinction based on product size for residential applications and recommend that EPA amend the top tier criteria to recognize geothermal heat pumps up to less than 135,000 Btu/h.
5. The recognition criteria states a requirement that products must be enabled to communicate digitally with an appropriate thermostat or other control, with the ability to send commissioning information such as model number and diagnostic information. The requirement for communication is very broad and non-definitive. EPA should clarify this requirement further.

AHRI does not support the pilot top tier program for residential furnaces, central air conditioners and heat pumps, and geothermal heat pumps as currently proposed. We believe that the program has serious flaws and, if implemented the program would not help EPA achieve the stated objectives. We recommend that EPA reconsider the criteria to ensure adequate product offerings to consumers for all residential applications. Although we appreciate the opportunity to provide these comments, we recommend that EPA convene an industry stakeholder meeting to discuss various aspects of the whole home approach, the feasibility and approach to top tier products, and to determine the best applicability of the ENERGY STAR program to residential central air conditioners, residential central heat pumps, and furnaces given the complexity of regional federal standards. If you have any questions or wish to discuss this further, please do not hesitate to call me at (703) 600-0383.

Sincerely,



Aniruddh Roy  
Regulatory Engineer