September 30, 2010

Ms. Abigail Daken  
U.S. Environmental Protection Agency  
ENERGY STAR HVAC Program  
Re: ENERGY STAR® Product Specification for Furnaces  
Eligibility Criteria Version 3.0: Draft 1

Dear Ms. Daken:

Carrier Corporation is pleased to submit these comments regarding ENERGY STAR® Product Specification for Furnaces Eligibility Criteria Version 3.0: Draft 1. Carrier is the world’s largest provider of heating, air conditioning and refrigeration systems and a United Technologies company.

First, regarding the scope of the program, we believe a clearer distinction must be made for included products. The term “residential” is most commonly defined as furnaces with firing rates at or below 225,000 BTUH and which are not noted for commercial installation only. There are categories of weatherized furnaces which are approved for both residential and commercial installations; ambiguity arises when excluding products based solely on the term “commercial.” We recommend defining scope as “non-weatherized furnaces with inputs at or below 225,000 BTUH which are approved for residential installation.”

EPA proposes to incorporate AECR, defined in draft CSA standard C823, as an Energy Star criterion. The CSA C823 subcommittee has issued a draft standard for public review and comment. However, this subcommittee, on which Carrier participates, continues to receive substantive change feedback. As currently drafted, we believe C823 may be excessively complicated and confusing for consumer utility. Carrier, and our industry trade association AHRI, have recommended to DOE that an alternate metric, ‘e,’ be used which represents a much simpler yet effective comparison of blower efficiency. If EPA ultimately elects not to adopt ‘e’ and instead moves forward with AECR, we urge EPA to closely monitor the readiness and accurate forecasted release date of C823 when establishing the effective date for new Energy Star criteria. Manufacturers will require six to 12 months to secure instrumentation and develop procedures to measure AECR for their products and adapt to the new reporting requirements once C823 is finalized. Consequently, EPA may need to delay the effective date for the AECR requirement beyond the effective date for the new AFUE level.
Cabinet air leakage is an additional proposed criterion for Energy Star furnaces. EPA cites the recently released ASHRAE standard 193-2010 as the vehicle for leakage measurement methodology. Given the recent nature of the test methodology and limited market and code official experience in validating compliance, we urge EPA to also monitor the readiness of this item when establishing the effective date for new Energy Star criteria. Like AECR above, manufacturers will require six to 12 months to develop adequate instrumentation and test capability to accurately measure compliance to this new standard. Consequently, EPA may also need to delay the effective date for the cabinet air leakage requirement beyond the effective date for the new AFUE level.

In this version 3.0 draft, EPA proposes furnace Energy Star AFUE criteria based on the HDD regions established in the draft consensus furnace efficiency rulemaking. While Carrier supports the AFUE levels proposed, it is not clear how appliance labeling will be implemented to distinguish regional compliance. In fact, DOE has not determined the role of labeling, if any, for compliance with regional standards should they be prescribed. Upon finalizing any rule with regional standards, DOE is required to commence a separate rulemaking to consider enforcement provisions and the role, if any, of labeling. We urge EPA to harmonize with DOE on the methodology and approach to any regional labeling requirements. In any event, EPA should be aware that consumers are not familiar with the HDD metric and whether their state falls within the US North or US South region. In collaboration with DOE, we urge EPA to find an approach for educating and informing consumers about the new regions in a manner that does not lead to increasing the size of the label on the appliance itself. Further, item 10a, ”Region,” in the draft EPA Energy Star specification should not be shown as a Performance attribute; the same furnace model which may meet and be identified as Energy Star-compliant in the US South will be also be sold in other regions. Because manufacturers do not offer region-specific condensing furnace models, the EPA consumer education campaign and labeling requirements must be adequate so as to avoid creating a shipping logistics burden on manufacturers of region-specific models.

Lastly, we believe warranty status (section 4) is inappropriate as an Energy Star criteria. Warranty programs are a product commerce attribute that should remain in the venue between manufacturer and customer.

Carrier is a market leader in the manufacture of high efficiency, environmentally sensitive HVAC solutions and firmly supports initiatives which foster greater appliance efficiency. However, collectively considering the comments outlined above, we urge that EPA carefully consider the readiness of each of the proposed new furnace Energy Star selection criteria in establishing a final effect date.

Thank you for considering our views.

Sincerely,

John M. Mandyck