



Together We Can Change
National Markets

April 8, 2005

Rachel Schmeltz
ENERGY STAR Product Manager
Environmental Protection Agency
Ariel Rios Building, SW, MS 6202J
1200 Pennsylvania Avenue, NW
Washington, DC 20460

Dear Ms. Schmeltz:

The CEE Residential HVAC Committee (Committee) appreciates the opportunity to provide input on the proposal to revise the ENERGY STAR Central Air Conditioner and Air Source Heat Pump Specification (Specification) and thanks EPA for granting an extension to the comment period. The comments and recommendations contained in this letter are supported by the organizations listed at the end of the letter.

The Committee strongly supports EPA's decision to maintain an ENERGY STAR specification for central air conditioners and air-source heat pumps that will differentiate in-field performance. In addition, the Committee believes that "nameplate" efficiency requirements (SEER, EER, and HSPF) and installation requirements are critical for achieving worthwhile energy savings and peak demand reduction on a large scale.

Comments and Recommendations

The Committee supports the proposed equipment performance requirements for SEER, EER, and HSPF. The Committee applauds EPA's commitment to enable efficiency program administrators to reduce both kWh and peak demand through their HVAC programs and believes that the continued promotion of high efficiency equipment will benefit consumers—especially if proper steps to ensure a quality installation are instituted. The Committee believes that the proposed performance requirements appropriately differentiate the most-efficient products available as they represent a significant level of energy and demand savings.

The Committee strongly urges EPA to create a two-part label for HVAC equipment that allows HVAC manufacturers to continue labeling equipment in the factory and using the ENERGY STAR brand in their marketing materials. This label should be implemented when installation requirements become part of the specification on January 1, 2007 as currently proposed by EPA. The current EPA proposal risks a reduction in the resource base to promote the brand, and the loss of a critical ally in efforts to promote energy-saving HVAC systems. The undersigned believe a two-part labeling scheme that conveys the importance to consumers of both high-efficiency equipment and a quality installation is both desirable and achievable. As envisioned, the label affixed to equipment in the factory (and used in manufacturer marketing materials) would convey that the equipment meets the performance requirements of the ENERGY STAR specification. Possible language for this label includes: "ENERGY STAR Qualified", "ENERGY STAR Manufactured," "ENERGY STAR Eligible," "ENERGY STAR Capable," or "ENERGY STAR



Ready.” We believe EPA should allow manufacturers to continue using the ENERGY STAR logo in their marketing materials when specific language stating the importance of a quality installation accompanies that logo. For consumers to benefit, this language must be consistent with the requirements of the ENERGY STAR specification but remain simple, clear, and concise.

A second label with language such as “ENERGY STAR Installed” would be affixed (or presented to consumers in the form of a certificate) only when the installation is verified to have met all the requirements of the ENERGY STAR specification.

This approach will encourage manufacturers to continue their strong involvement in the ENERGY STAR program while providing a platform to educate consumers on the necessity to have the equipment installed according to EPA’s quality installation requirements.

The definition for “matched assembly of split systems” should be made explicit within the specification. The Committee recommends that EPA tighten this definition to ensure that consumers receive matched indoor and outdoor components in retrofit cases. In addition, the Committee understands that there are some system combinations on the CEE Directory of ARI-Verified Equipment that require retrofit of the furnace and/or furnace fan in order to meet the proposed equipment specification level. Though these systems may make up a small portion of all qualifying systems, specific language is needed in the ENERGY STAR specification to address this instance. Therefore, the Committee recommends that the “matched assembly” definition should encompass not only the condenser and evaporator coil, but also the air handler, furnace, expansion device, and time delay when included in the ARI rating. The Committee strongly recommends that EPA require all systems (OEM and those employing a 3rd-party coil) be certified by ARI to be eligible for the program.

The specification should more precisely articulate what attributes of an installation must be verified and how. While the Committee supports a specification that is flexible enough to enable sufficient participation in the program, additional specificity is necessary to ensure a credible and successful program. This specificity is currently lacking with regard to the installation attributes that must be addressed. The Committee is currently working with ACCA, HVAC contractors, ARI, and HVAC manufacturers to discuss such details, and encourages EPA to adopt any consensus items that emerge from this work.

In addition, the Committee strongly encourages EPA to provide additional guidance for potential program sponsors regarding the “verification program plan.” Components that must be included in these plans, as well as the criteria that will EPA will use to approve or reject these plans, should be made explicit within the specification or within a supporting document. Further, the Committee recommends that all approved verification program plans be posted on the ENERGY STAR website so that interested parties may view successful program applications.

The Committee recommends that EPA evaluate, as soon as possible, the merits of adding installation requirements similar to those included in the CAC/ASHP specification to the ENERGY STAR Specification for Residential Furnaces. The Committee recognizes there are distinct ENERGY STAR programs for furnaces and central air conditioners. However, to the extent that combined heating and cooling systems are installed, the Committee believes EPA should review the furnace specification to ensure it is compatible with the CAC/ASHP specification.



Because the CEE Gas and HVAC Committees have not yet considered appropriate installation requirements for the gas furnace program, we will reserve specific comments for when that specification is open for revision. Similar efforts should be made to ensure that the final installation requirements will extend to all residential equipment (single phase), even when installed in a commercial application.

The Committee supports EPA's decision to address system sizing in the ENERGY STAR specification because of its importance to system performance, energy consumption, and peak demand reduction. In its specification proposal, EPA requested information on how proper system sizing could be verified. It is the Committee's understanding that system sizing is verifiable using ACCA/ANSI Manual J and other computerized heat load programs that are based on the Manual J or current ASHRAE data.

The Committee recommends that EPA commit to revisiting the specification by 2008 to determine if the market is capable of supporting a duct performance requirement. Leaky ducts, especially in unconditioned space, are often the leading cause of inefficient system performance. If ENERGY STAR is to stand for energy efficient HVAC systems, then ducts will need to be encompassed in the specification. However, the Committee recognizes that instituting a duct performance requirement within the specification before 2008 may not be practical given the lack of a specification that is supported by all stakeholders, an accepted Combustion Area Zone testing protocol to ensure duct sealing doesn't lead to depressurization of the combustion zone, and the small number of contractors who currently are trained and possess the necessary tools to measure duct performance. The Committee believes that ENERGY STAR can help build the infrastructure for delivering high-performing ducts now by continuing to educate stakeholders on the importance of sealed ducts to system performance.

The Committee recommends that EPA make explicit in the specification equipment manufactured before the proposed ENERGY STAR effective date (January 23, 2006) that meets today's ENERGY STAR requirements shall not be represented as "ENERGY STAR" after July 23rd, 2006. This 6-month transition period will allow the supply side a reasonable amount of time to sell remaining inventory that may have been labeled ENERGY STAR, and will also acknowledge that some 13/12 SEER equipment with preexisting ENERGY STAR labels will still be available in the market in 2006. This approach would be consistent with how ENERGY STAR transitioned to a new federal standard for clothes washers in 2004. This approach will also provide efficiency program administrators additional options for their equipment incentive programs in 2006. Most importantly this will state explicitly that today's ENERGY STAR equipment may not be represented as such after a set date.



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Supporting Organizations

Alliance to Save Energy
Cape Light Compact
Connecticut Light and Power
Efficiency Vermont
Midwest Energy Efficiency Alliance
National Grid USA (Mass Electric, Nantucket Electric, Narragansett Electric)
New York State Energy Research and Development Authority
Northeast Energy Efficiency Partnership
NSTAR
Office of Clean Energy of the New Jersey Board of Public Utilities
Oregon Energy Trust
Pacific Gas & Electric
PacifiCorp
Sacramento Municipal Utility District
San Diego Gas and Electric
Southern California Gas Company
Tacoma Power Energy Services
TXU Electric Delivery
Unitil
Western Massachusetts Electric Company