



Together We Can Change
National Markets

June 24, 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). The comments and recommendations below represent the consensus position of the CEE Residential HVAC Committee. Organizations listed at the end of this letter have also opted to acknowledge their individual support of the comments.

Comments and Recommendations

The Committee strongly urges EPA to adopt 14 SEER/12 EER/8.5 HSPF for split systems, which will maximize the energy, peak demand, and air pollution benefits of ENERGY STAR. ENERGY STAR should continue to serve as a significant differentiator in the market by standing for products that demonstrate superior energy efficiency. Establishing the EER requirement at 12 will help ensure the continued success of the brand, and is of particular importance to the Committee.

12 EER will increase the ENERGY STAR value proposition

- EER is considered the best metric for assessing energy efficiency in terms of kWh savings in hot/dry climates such as those on the West Coast and in the Southwest. These areas are experiencing some of the highest rates of development and provide a large energy savings opportunity. A 2004 study prepared for NRDC found that increasing the EER for one air conditioner from 11 to 11.6 would result in 236 annual kWh savings in Phoenix, 176 kWh annual savings in Las Vegas, and 140 kWh annual savings in Sacramento. While the Committee is not aware of studies documenting the incremental savings of increasing EER from 11.5 to 12, this change will clearly lead to additional energy savings and decreased air pollution.
- High-EER equipment reduces peak demand, decreasing the need to build additional power plants and ultimately lowers consumer costs. Some members of the Committee report that EER 12 would provide twice as much demand savings as EER 11.5. In many cases, demand savings provide at least half the savings benefit value in avoided cost dollars.
- In the Northeast, demand savings account for nearly all of the value to be gained from high efficiency equipment. Central air conditioning is becoming much more common in residences in northern climates. A high percentage of new homes in northern states are built with it and large numbers of existing homes are being retrofitted.

- With no federal minimum standard for EER, the potential energy savings and peak demand reduction of moving to 12 EER is likely more significant than a 1 point incremental improvement for SEER.

12 EER will not compromise program participation

Efficiency program rebate data clearly demonstrate that 14 SEER/12 EER/8.5 HSPF equipment is currently available, has been produced by a large number of major manufacturers, and can be successfully promoted in many parts of the country (see Appendix 1).

- More than 300 OEM air conditioning systems qualify for CEE Tier 2, including models at all capacities. More than 25,000 total air conditioning systems, representing 15% of available equipment that will meet the 13 SEER standard, currently qualify for CEE Tier 2.
- More than 2000 heat pump systems meet the CEE Tier 2. The Committee acknowledges a very small number of 5-ton systems qualify.
- All major manufacturers produce air conditioners that meet the CEE Tier 2 including equipment with capacities greater than 48,000 Btu/h.
- All major manufacturers produce heat pumps that meet the CEE Tier 2, four of which supply equipment with capacities greater than 48,000 Btu/h.
- In New Jersey, New York, California, and Rhode Island CEE Tier 2 represents the highest percentage of program activity—programs in these states are issuing more incentives for 12 EER equipment than 11 EER equipment!

An 11.5 EER requirement brings little benefit and jeopardizes program promotion

- The Committee appreciates EPA's and ARI's willingness to share the analysis of available products used to inform this proposal. However, the Committee believes that in the absence of market penetration data, efficiency program rebate data and the number of manufacturers producing qualifying equipment are the best indicators of what efficiency levels can sustain adequate program participation. Further, the model availability analysis does not appear to support the lower EER requirement proposed by EPA. For split system air conditioners, there are large numbers of models for each size classification except in the very smallest and the very largest categories. In these categories, a downward change to 11.5 EER does not significantly raise the number of models available.
- By unnecessarily reducing the EER requirement to 11.5 (the metric widely recognized as most relevant in assessing peak demand implications) EPA is reducing a key basis for justifying program investments as the demand component is relatively more valuable to many programs than energy savings. Due to a strong regulatory push in many states to ensure system reliability by reducing peak demand, and the almost universal recognition of EER as the key energy efficiency metric in hot/dry climates, the amount of marketing and incentive dollars for ENERGY STAR-labeled equipment may diminish if ENERGY STAR adopts an EER requirement of 11.5 for split systems.
- If EPA's intention is to increase model availability, the CEE Committee recognizes that decreasing the HSPF requirement from 8.5 to 8.2 would have a more significant impact on the number of qualifying products than lowering EER to 11.5.



The Committee supports EPA’s proposal to create a separate label for Quality Installation provided the program is available for promotion by January 2007.

The Committee continues to stress the importance of a quality installation to system performance, but recognizes the ENERGY STAR equipment program may not be the venue for addressing it. Creating a separate ENERGY STAR Quality Installation program will allow efficiency program administrators to use the ENERGY STAR brand to promote the importance of a quality installation on both standard-efficiency and high-efficiency equipment. Further, the Committee recognizes that development of an installation specification which is supported by key stakeholders requires additional time. The Committee requests that EPA commit to establishing an ENERGY STAR Quality Installation Program in time for the 2007 cooling season.

The Committee supports the proposal to allow manufacturers to continue labeling equipment.

The EPA proposal will shore up the resource base to promote the brand, and will likely result in the continued support of a critical ally in efforts to promote energy-saving HVAC systems. The Committee supports EPA’s proposal to 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. Potentially, this language could reference the “Installed to ENERGY STAR Guidelines” program in 2007. In the interim, the proposed language appears satisfactory. While the committee has some reservations about the existence of a stand-alone ENERGY STAR equipment program, it believes the required disclaimer language stressing the need to get a quality installation combined with the quality assurance provided by many efficiency programs will help maintain brand integrity.

The Committee supports EPA’s proposed definition for “Matched Assembly” and suggests the language be tightened as indicated below to ensure the requirement is explicit.

A matched assembly is a model combination that is listed in the ARI Directory of Certified Equipment and in which both the condenser unit and evaporator coil are installed simultaneously. A matched assembly ~~should~~ *shall* also include the air handler, furnace, or other component that is used to determine the rating according to ARI 210/240.

Gas/electric Packaged Units

The Committee discussed whether this equipment, which is currently eligible for ENERGY STAR qualification, should continue to be included in the program given no requirement for heating performance exists. The Committee did not develop a consensus comment on this issue, primarily because these systems are currently not an important component of most CEE member programs and the issue was not previously on the radar of the Committee. The Committee is aware these units are important to some member programs



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Supporting Organizations

Cape Light Compact
California Energy Commission (CEC)
Long Island Power Authority (LIPA)
Massachusetts Cool Smart with ENERGY STAR Program
National Grid USA (Massachusetts Electric, Nantucket Electric, Narragansett Electric)
New Jersey Office of Clean Energy
Northeast Energy Efficiency Partnership (NEEP)
Northwest Energy Efficiency Alliance
NSTAR
New York State Energy Research and Development Authority (NYSERDA)
Pacific Gas and Electric (PG&E)
PacifiCorp
Sacramento Municipal Utility District (SMUD)
San Diego Gas and Electric (SDG&E)
Southwest Energy Efficiency Project (SWEEP)
TXU Electric Delivery
Unitil
Northeast Utilities/Western Massachusetts Electric