



**EDISON ELECTRIC  
INSTITUTE**

May 30, 2008

Ms. Brenda Edwards-Jones  
U.S. Department of Energy  
Building Technologies Program  
Mailstop EE-2J  
1000 Independence Avenue, N.W.  
Washington, DC 20585-0121

RE: Notice of Proposed Rulemaking, Packaged Terminal Air Conditioner and  
Packaged Terminal Heat Pump Energy Conservation Standards  
Docket No. EE-2007-BT-STD-0012

Dear Ms. Edward-Jones:

The Edison Electric Institute (EEI) appreciates the opportunity to submit comments regarding the Department's Notice of Proposed Rulemaking (NOPR) of Energy Conservation Standards for Commercial Packaged Terminal Air Conditioners (PTAC) and Packaged Terminal Heat Pumps (PTHP) which was published at 73 Fed. Reg. 18858 (April 7, 2008) and the workshop which was held on May 1, 2008.

EEI is the association of the U.S. shareholder-owned electric companies, international affiliates and industry associates worldwide. Our U.S. members serve over 97 percent of all customers served by the shareholder-owned segment of the industry. They service 71% of all ultimate customers in the United States. Many of our members are combination electric/gas companies, and provide efficiency services for both fuel types.

These comments will state our views on the NOPR document and respond to specific issues on which the Department has sought comment.

EEI believes that energy efficiency has a very important role in our Nation's energy strategy. Our Board of Directors approved an EEI Energy Efficiency Initiative. We believe new and advanced technologies and controls provide

important new tools to implement efficiency measures and achieve energy savings.

We are pleased that DOE is moving forward with this appliance rulemaking in a timely manner. The manufacturers of PTAC and PTHP units will be directly affected by the HCFC refrigerant phase-out that begins on January 1, 2010. Finalizing this rule in 2008 or 2009 should help manufacturers with their planning.

### **General Comments / Technical Comments on the NOPR**

1) The new standards will save energy, based on the information in the NOPR document. In addition, they will help to reduce summer peak demand for utilities, since EER values are increased for all of the classes of products shown.

2) In terms of modifications, EEI suggests that DOE try to follow the ASHRAE 90.1-1999 standards for setting EER values of PTAC and PTHP units that have the same cooling capacity. For example, standard size 7,000 to 15,000 Btu/h PTAC units under the ASHRAE 90.1-1999 values have an EER requirement of:

$$12.5 - (0.213 * \text{Cooling Capacity in kBtu/h}),$$

while standard size 7,000 to 15,000 Btu/h PTHP units have an EER requirement of:

$$12.3 - (0.213 * \text{Cooling Capacity in kBtu/h}).$$

Other products have a similar 0.2 or 0.1 reduction in EER requirements for heat pumps as compared to air conditioning units.

Under the DOE proposed rule, the EER requirements for PTHP units are consistently higher (by 0.4 or 0.6) than their same capacity PTAC counterparts. While there may be economic justification for this result, market distortions and fuel switching could result from this proposed standard, especially if the cost of PTHP units rises much faster than the cost of PTAC units.

Under other trial standard levels, the EER values for similarly sized PTAC's and PTHP's are the same (TSL 3, 5, and 6). DOE may want to review these TSL's when deciding the final efficiency levels, or use the ASHRAE approach to increase efficiency and lower initial costs and minimize market distortions.

3) In terms of the environmental analysis, the NOPR discusses the impact of federal legislation (1990 Clean Air Act and Amendments, Clean Air Interstate

Rule, Clean Air Mercury Rule), but it does not project the impact of future legislation.

In terms of electric power generation emissions for CO<sub>2</sub>, SO<sub>2</sub>, Mercury, and NO<sub>x</sub>, DOE should account for the rise in renewable portfolio standards and the possibility of an upcoming CO<sub>2</sub> cap and trade program, which would reduce the amount of CO<sub>2</sub> produced per kWh generated.

Federal legislation has reduced the amount of NO<sub>x</sub>, Mercury, and SO<sub>2</sub> emissions over the past 36 years. According to the DOE Energy Information Administration's *Electric Power Annual 2006* and *2007*, total electric industry SO<sub>2</sub> emissions in 1993 were 14,472 thousand metric tons. Total NO<sub>x</sub> emissions in 1993 were 7,801 thousand metric tons. By 2006, those numbers had dropped significantly, to 9,524 metric tons of SO<sub>2</sub> (a 34.2% reduction) and 3,799 thousand metric tons of NO<sub>x</sub> (a 51.3% reduction). This occurred while total US electric generation, according to the *EI Statistical Yearbook*, rose from 3.197 Trillion kWh to 4.065 Trillion kWh (a 27.15% increase). NO<sub>x</sub> and SO<sub>2</sub> emissions will continue to decline in the future, and DOE should account for this trend in the analysis.

## **Conclusion**

EEI believes that DOE has done a thorough and admirable job with the NOPR document and workshop. EEI hopes that DOE will consider our suggestions for the upcoming final rule.

EEI sincerely appreciates the opportunity to submit these comments.

Respectfully submitted,

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cc: Rick Tempchin, EEI  
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