American Council for an Energy-Efficient Economy
WASHINGTON, DC

April 16, 2007

Mr. Hampton Newsome
Federal Trade Commission
Office of the Secretary
Room H-135 (Annex A)
600 Pennsylvania Avenue, NW
Washington, DC 20580

RE: Appliance Labeling Rule Amendments, R511994

Dear Mr. Newsome:

The American Council for an Energy-Efficient Economy (ACEEE)[1] appreciates the opportunity to provide further comment to the FTC in the ongoing rulemaking on the Commission's appliance labeling program. ACEEE is a nonprofit organization dedicated to advancing energy efficiency as a means of promoting both economic prosperity and environmental protection. ACEEE fulfills its mission by conducting in-depth technical and policy assessments; advising policymakers and program managers; working collaboratively with businesses, public interest groups, and other organizations; publishing books, conference proceedings, and reports; organizing conferences and workshops; and educating consumers and businesses. ACEEE was involved in the legislation establishing federal efficiency standards, and has been active in all significant rulemakings since then.

We have reviewed FTC's research on the label as well as the proposed rule outlined in the February 13, 2007 Federal Register Notice. Based on this review, we offer the following comments.

ACEEE is keenly interested in seeing the labeling program evolve to be as effective as possible in meeting its goals of providing motivating and comprehensible information to consumers and aiding them in purchasing energy-efficient products. We have conducted extensive research on the effectiveness of the EnergyGuide label and followed the development and implementation of labeling programs around the world. Based on these efforts, ACEEE believes there are opportunities to improve the effectiveness of the EnergyGuide label. Our specific comments on the proposed amendments to the appliance labeling rule are discussed below.

Label Format

ACEEE is disappointed in the FTC decision to stick with a continuous label design.
An extensive body of research conducted in the U.S. and many other countries, as well as years of practical experience implementing labeling programs in dozens of countries, demonstrates that categorical labels rate well in terms of consumer comprehension, appeal, and motivating ability. Research conducted by the FTC confirms these results—the categorical stars-based label tested

[1] Please note that ACEEE was misidentified in the February 13, 2007 Federal Register Notice as the American Council for an Energy-Efficient Environment.

well for these attributes. Indeed, the categorical label outperformed other label designs. We acknowledge that a categorical labeling program requires more effort to develop and implement, however we believe the initial investment of time would yield a more effective program in the long run. We also believe that the many interested stakeholders could work together to develop a categorical EnergyGuide label that coordinates well with the ENERGY STAR label.

If the FTC moves forward with its decision to proceed with modifications to the continuous label format, there are other elements of the label design that can help maximize the continuous label's effectiveness. First, we strongly approve of efforts to more clearly group and label informational elements within the label. Including information and related text labels together in the same color against the same background within delineated boxes is widely considered best practice for appliance labeling. Second, we agree that the annual kWh consumption number and operating cost estimate should be displayed prominently on the label, however we do not support the proposal to change operating cost to the primary comparative metric (see discussion below).

Comparative Metric

A label using operating cost estimates as the primary comparative metric is likely to increase consumer confusion and reduce the effectiveness of the labeling program. The stated goals of the program are to inform consumers about the energy consumption of appliances on the market and to aid them in considering energy efficiency when purchasing a new appliance. Estimates of annual energy consumption reported on the label require a set of assumptions regarding typical appliance usage and operating conditions. To derive estimated annual operating costs requires use of national average energy costs, yet energy costs vary widely across the country (differences of more than a factor of three from the lowest to highest costs for electricity in 2005). Many consumers may find the range of operating costs displayed on the label to be unrealistic and unreasonable based on their experience and discount the label altogether.

No other labeling program in use today uses operating cost as the comparative metric due to difficulties relating to regional variations in energy costs and the potential for consumer confusion[2]. As noted in the Federal Register notice, Canada considered using operating cost as the primary metric but declined to do so because of these same issues.

It is no surprise that consumers were able to provide the correct answers to comprehension questions regarding the operating cost labels during the FTC label research, however this does not tell us much about their ability to relate the reported cost values to the specific circumstances of their own appliance purchase or how relevant and believable they would find the information when shopping for appliances. Respondents were not asked to perform these tasks. Furthermore, international research on appliance labels and U.S. research on vehicle labeling[3] among other studies have demonstrated that consumers stated preferences for label information disclosures and their perceptions of the easiest formats to understand often do not correspond to the information and formats that have the highest levels of comprehension in practice.

---

[2] Egan, C. and P. Waide. 2005. "A multi-country comparative evaluation of labeling research." *ECEEE 2005 Summer Study – What Works and Who Delivers?* pp.811-822.

[3] Egan and Waide 2005 and J. Amann, T. Langer and J. Kliesch. 2007. *Environmental Performance Labels for Vehicles: Context and Findings of Market Research for the U.S. Environmental Protection Agency.* ACEEE Report T071. March.

We do recognize that consumers are interested in the estimated annual operating cost of appliances in the market and suggest that FTC retain the current system of providing comparative data using the primary metric of energy consumption with a second disclosure of estimated operating cost.

ACEEE supports the decision to set a consistent timeframe for revision of the range of comparability if the FTC provides more explicit parameters for exceptions to the schedule. The FTC proposes to allow exceptions to the schedule for "dramatic market changes." Whether the primary metric for comparison is energy use, operating costs, or energy efficiency rating, such changes could include changes in the federal standard, introduction of a new technologies driving substantial improvement in product energy performance, sustained changes in energy costs, large spikes in energy prices, etc.

Multi-Year Cost Information

ACEEE strongly recommends that the FTC continue to provide energy use and operating cost information on an annual basis. The use of multi-year operating cost information will not serve consumers well. Deriving multi-year estimates of energy costs requires yet another set of assumptions, thereby introducing additional opportunities for consumer confusion and skepticism about the label. In addition, use of multi-year costs will require additional explanatory language on the label. Research conducted by ACEEE and many others shows that consumers are less likely to read and/or believe labels with extensive text, too many technical details, or multiple levels of assumptions.

Refrigerator Categories

ACEEE reiterates its support for combined refrigerator labels allowing consumers to compare the energy consumption of competing models. Adding text to the label indicating that size, door configuration and other features affect energy use does not allow consumers to readily compare the energy performance of competing refrigerator models. The FTC label research underscores consumers' lack of knowledge on this issue. By eliminating subcategories, the FTC could improve the effectiveness of the label and better meet the original intention of the labeling program.

HVAC Equipment

To better meet the objectives of the labeling program, ACEEE would like to see enhancements to the labeling program for HVAC equipment. These enhancements would provide consumers with comparative information at the time of purchase, allow for permanent marking of equipment efficiency, and provide data on efficiency specific to the system as installed. Specifically:

- The rated capacity of the equipment should be added to all EnergyGuide labels or permanent labels for all HVAC equipment. Capacity is at least as important for HVAC equipment as for refrigerators.
- If capacity information is added to the label, for furnaces and boilers it should be based on equipment *output*, not *input* (today's basis). A smaller input condensing furnace or boiler has the same output as a larger non-condensing unit; the present situation causes some confusion in sizing.

- Given the minimum standards requiring SEER 13 central air conditioners and heat pumps, achieving the certified performance level *requires* matched condensing unit and evaporator.[4] It often also requires a matching furnace or air handler. At minimum, there must be an evaporator label that designates *via* a table the capacity or other performance parameters required if the system is to provide the certified performance promised by the condenser label. It is well established in California, where there have been extensive inspections, that far too often mismatch of condensing unit and evaporator has led to significant performance degradation.
- Consumers should be given comparative information on the matched system they are considering for purchase and other comparable systems available on the market as a mandatory disclosure at the time of purchase. In many cases, this would require the sales technician to supply this information in the form of product literature or other material as part of the bid.

Televisions

ACEEE urges the FTC to establish a definite timeframe and process for consideration of an expansion of the EnergyGuide labeling program to televisions. The international test procedure should be completed in the very near future with adoption by DOE expected soon thereafter. Once DOE adopts the test procedure, manufacturers can begin to provide data to FTC for use in establishing range of comparability for a labeling program.

Consumer Education and Awareness Campaign

ACEEE reiterates the importance of a high-visibility education and awareness campaign to help consumers recognize and use the EnergyGuide label. Consumer education has been a critical component of other public information programs and can help leverage the time and resources invested in program design and implementation to maximize program effectiveness. The campaign could educate consumers on appliance energy consumption, where to look for the EnergyGuide when purchasing appliances, and how to read and interpret the information presented in the EnergyGuide label.

Thank you again for the opportunity to and comment on the ongoing rulemaking regarding the appliance labeling program. We look forward to continuing to work with the FTC and other stakeholders throughout the process.

Sincerely,

Jennifer Thorne Amann
Senior Associate

[4] The "expansion valve," which meters refrigerant to the evaporator, is typically sold as a component of the evaporator assembly. In general, SEER 13 and higher condensing units require adaptive expansion valves, such as the "TXV." In contrast, most older evaporators used "short orifice" or "capillary tube" expansion devices. Installing a new condensing unit with the old, undersized evaporator will degrade performance and is likely to substantially shorten compressor life. In general, it is strongly discouraged by manufacturers.