

January 13, 2006

Federal Trade Commission
Office of the Secretary
Room H-135 (Annex O)
600 Pennsylvania Avenue, NW
Washington, DC 20580

Re: Energy Labeling, Project No. R511994

To Whom It May Concern,

As one of the primary investigators in this line of research, interviewing consumers about their comprehension of the Energy Guide label and other energy consumption information, I am submitting comments to the appliance labeling rule (Energy Labeling, Project No. R511994). I believe it is my experience in understanding energy consumption and energy consumption displays that informs this discussion of energy labeling more broadly.

A. Effectiveness of Labeling Program

1. The ACEEE research cited in the notice of the proposed rule is the most comprehensive work that has been conducted on energy labeling programs in the United States. Indeed, the multi-method research design of the ACEEE study exceeds the power of any research study conducted worldwide. While it does not estimate the costs associated with the current labeling program it provides information that substantiates the clear benefit as a labeling program. The Energy Guide label provides comparison information of multiple manufacturers that consumers value at a cost that is much lower than comparable nationwide information campaigns would entail.
2. The effectiveness should be measured in multiple ways. First, the effectiveness should be determined by the ability of the consumer to comprehend and act upon information about energy consumption and cost provided by the label. Second, the label is effective if it conveys to the consumer not only the energy consumption of the labeled product, but also what comparable products use. Third, the label is effective if it allows consumers to make accurate conclusions across product categories. Consumers should be able to use the same process to evaluate energy labels and therefore the labels should be consistent across products. Fourth, the label is effective if it convinces and encourages consumers to purchase higher energy-efficient products. Fifth, the label is effective if it is universally applied. Finally, the label is effective if it encourages manufacturers to produce more energy efficient products. Examples of labeling in other countries suggest manufacturers produce higher efficiency products when categorical labeling systems are implemented.
3. The current Energy Guide label is reasonably effective in providing consumers with information about the annual operating cost associated with a particular

- product, but is less effective in conveying the energy efficiency of a particular product for two reasons. One reason is that consumers generally regard any labeled product as energy efficient. To a degree this is true as appliance standards have eliminated extremely inefficient products from the market. However, consumers are often not aware of the full range of efficiencies among products. The second reason is the comparison graphic on the label is poorly understood and doesn't provide customers with a complete picture of the labeled product's efficiency relative to other products. The net benefit of the current label is positive because consumers do glean cost information and can make choices based on that information. This net benefit could be sufficiently increased if consumers were given better comparative information about consumption relative to other products.
4. Research suggests that the current label does in some cases encourage customers to choose higher efficiency products. This most often occurs when consumers make comparisons using annual operating costs between two options. However, there are two significant problems that limit the current label's effectiveness. The first problem is the inconsistency of directionality in the comparison graphic. When higher efficiencies are to the right on one label and to the left on another, consumers often misinterpret efficiency information. Second, the division of some products, notably refrigerators, into multiple product comparison groups causes confusion when consumers see changing consumption scales in what they regard as similar products. For example, consumers are often puzzled by the idea that a 600 KW/year side-by-side refrigerator would appear in the high efficiency portion of the graphic while a 550K KW/year top-mount refrigerator would appear in the lowest efficiency portion of the graphic.
 5. The Energy Star program has complemented the Energy Guide label by partially correcting the flaw in the current label's design that makes it difficult for consumers to gain information about comparative energy consumption, i.e. the comparison of the labeled product to the energy consumption of similar products. The Energy Star logo has allowed consumers to identify products in the top 25th percentile of energy consumption. If the Energy Guide label had been entirely effective the Energy Star logo would be redundant.
 6. Yes, changes to the current label, particularly changes that make clear to the consumer the comparative consumption of the product in relation to similar products would enhance the Energy Guide label's effectiveness.
 7. There are only two reasonable options – a switch to categorical labeling or improved continuous labeling. Fundamentally, the most effective change FTC can make to the Energy Guide label would be to convert it from its current continuous scale to a categorical scale label system. At a minimum, simple modifications to the current continuous label must be made. These modifications include a standard for the directionality of the comparison graphic, enhancement of the comparison graphic to make clearer the notion of the product's position in range of similar products energy consumption, reduction of the number of product comparison groups, and other enhancements as described in ACEEE's 2002 report. Categorical labeling is clearly the best choice for improving consumer comprehension and encouraging energy efficiency.

8. As mentioned above, categorical labeling would be the best option for FTC to select. It would yield clear benefits to consumers through easier comprehension and would be more effective at meeting program goals of improving energy efficiency. While there would be implementation costs associated with developing a new system of categories; the ongoing production costs of a categorical label would be similar to that of the current label and might reduce implementation cost by reducing the frequency of updates necessary to the label. The improved performance of the label is well worth the transition costs necessary to implement it.
9. I excuse myself from comment as I was heavily involved in the research design of this product.
10. A categorical label would significantly improve energy efficiency by increasing consumer comprehension of a product's performance relative to other products. It would also make it easier to implement public purpose programs, indirectly improving energy efficiency through nationwide market transformation. Finally, categorical labeling would likely encourage manufacturers to produce more efficient products in order to claim the highest ranking among products. Consumers have consistently been able to differentiate categorical energy rating from other measures of product quality, e.g. – reliability or innovation.
11. Establishing the criteria to implement a categorical rating system will require significant technical analysis. FTC should convene a technical advisory panel that can assist it in creating technically valid, consumer appropriate categories for product ranking. Once the process has been formulated by the advisory panel, implementation of the process to categorize any particular product should be straightforward. FTC will therefore not be making judgment about specific products, rather implementing a standard procedure for determining energy efficiency for all products.
12. Please see above.
13. An Energy Guide label based on a categorical ranking system using stars would complement the Energy Star program. Research done by ACEEE suggests that an Energy Guide star label would enhance the Energy Star program. No consumer comprehension issues were found when consumers were shown a categorical stars system combine with an Energy Star logo.
14. As stated earlier, the preferred alternative for the FTC should be a categorical labeling system. In a categorical labeling system, there would be no need to consider changes to the current exemption for the Energy Star logo. If the FTC chooses to not to create a categorical labeling system, the Energy Star logo clearly should be moved from current placement. The current placement of the logo reduces comparability bar. In fact, the current placement of the Energy Star logo implies products with high energy consumption receive the logo. Field tests suggest placement in a dedicated corner of the label would be most effective.
15. There are clear improvements that can be made to the current label, but a categorical label provides significant improvement over an enhanced version of the current labeling system. Implementation experience worldwide suggested that categorical systems are most effective in providing energy consumption information to consumers and improving energy efficiency.

Thank you for the opportunity to comment on this proposed rule.

Sincerely,
Christopher T. Payne