

*American Council for an Energy-Efficient Economy  
1001 Connecticut Ave., Suite 801  
Washington, DC 20036  
202-429-8873 (voice), 202-429-2248 (fax), www.aceee.org*

Nov. 7, 2002

Rachel Schmeltz  
U.S. Environmental Protection Agency  
1200 Pennsylvania Ave. NW  
Washington, DC 20460

Dear Rachel,

I am writing to provide a few comments from ACEEE on the first draft of the Energy Star specification for vending machines. In general, we believe that the draft is reasonable, and hope that with a little “tweaking”, it can be finalized in the next few months. Our sense from talking with beverage companies and vending machine manufacturers are that they too can largely accept the spec in its current form. There are refinements they would like, but even in the current form the spec is likely to be acceptable.

In the paragraphs below we comment on a few specific issues with regard to the draft specification.

Definitions: We agree with the general comments at the meeting about cleaning up some of the definitions. We also support including milk and glass-door machines. If these machines can meet the Energy Star specification, they should be eligible for the label and not excluded. If the market share of these products grows, then EPA should consider development separate equations for these product classes.

Labeling: We support the consensus at the recent Atlanta meeting – that the Energy Star mark should be treated in the same fashion as the UL label (on a visible permanent nameplate or label, but placement on the side is acceptable).

Energy equation: From our review of the data and discussions with manufacturers, the current proposed equation (45% below CSA) is fine. This level can be met by current products of one manufacturer and the other two manufacturers expect to have complying models in the first half of 2003. If additional test data becomes available soon, this equation could be “tweaked”, but the current equation is close enough that EPA should not wait too long for additional data.

Low-power mode: There was a lot of discussion in Atlanta about the low-power mode requirements. Based on discussions at the meeting and separately, we think that manufacturers could accept requirements in terms of lighting and refrigeration controls that “lock-in” the capabilities of current new machines. Our understanding is that current machines from all three manufacturers can meet these requirements (two manufacturers include these controls as

standard equipment, one as an option). At the meeting, five options for addressing controls were discussed. We tend to support option #4 as described in the meeting minutes (prescribed parameters) because it is straight-forward and also provides clear guidance. The options to establish performance requirements (capability to reduce energy use by x% or x Watts) will require additional testing which could be a burden. Also, if the option is not further specified, the low-power savings could be achieved by mechanisms that few sites would use, thereby achieving little energy savings. The options to either do nothing or to require unspecified low-power capabilities would also likely result in little energy savings. Assuming that a low-power mode is included, milk machines should be exempted from any refrigeration-related requirements.

Specification for existing equipment: This issue is probably the most difficult one facing an Energy Star vending machine program. On the one hand, it may be difficult to cost-effectively retrofit many existing machines to bring them in compliance with the specification. On the other hand, to set a weaker standard for existing machines could devalue the Energy Star label, with implications extending beyond vending machines. Given these concerns, and based on our understanding of the data and technologies involved, we recommend that EPA use the same specification for existing machines as for new machines, but that EPA develop approaches to make it relatively easy to certify an improved existing machine.

We support keeping the same specification because we believe it is workable, will save more energy than with a weaker specification, and will not devalue the Energy Star brand. Underlying these views is our opinion, based on data we have examined, that such a specification can be met by many existing machines. Under the ASHRAE test procedure, a Vending Miser or equivalent control can be hard-wired to an existing machine, and since the machine is tested without any vending activity, this control will bring many existing machines into compliance with the draft specification (yes, the current test procedure may overvalue the benefits of this control, but in order to address existing equipment, we are willing to overlook this problem). There are of course other ways to retrofit existing machines to reduce their energy use, but the Vending Miser control effectively puts an upper bound on the cost of acceptable retrofits. We recommend that EPA allow beverage companies to test and certify retrofit packages for specific models of existing machines, and once a package has been so-certified, it may be applied to all existing machines of that specific model without further testing. We also suggest that a simple computer program be developed to take test data on base models of existing machines and calculate energy savings from different retrofits. We are open to using these calculations in lieu of testing for existing machines, in order to make it easier for existing machines to participate in the program. Through approaches such as this, it should be possible to bring many existing machines into compliance with the same Energy Star spec as for new machines.

Schedule: We recommend that EPA review the comments on the current draft, analyze any new performance data that becomes available by Christmas, and issue a revised draft specification in January 2003. We hope this specification can be finalized around March of 2003. We recommend an effective date of July 1, 2003, as from our discussions with manufacturers, all three major manufacturers should have complying machines on the market by then.

Please let me know if you have any questions about these comments. We think an Energy Star

vending machine program can deliver substantial energy savings and that only limited work is needed to move to a final specification. We look forward to assisting you in this process and to promoting the new Energy Star vending machine specification once the program is launched.

Sincerely,

Steven Nadel  
Executive Director