To: Michael Martin  
California Energy Commission  
Sacramento, CA

From: Larry M. Eils, Senior Director, Technical Services, NAMA  
Brian Allen, Director, Government Affairs, NAMA  
Danielle Del Carlo, Midwest Manager and Counsel

Date: October 29, 2004

Re: Docket No. 04-AAER-1  
Glass-Front Bottled Beverage Vending Machines  
Request for New Energy Consumption Category

On May 28, 2004 and August 9, 2004 the NAMA Energy Committee submitted comments to the Commission regarding glass-front bottle beverage vending machines. At this time we would like to submit further documentation regarding the need for a separate energy efficiency category for what is now called Multi-package vendors.

Request for New Energy Efficiency Level

The NAMA Energy Committee agrees that your proposed energy usage standard is suitable for the traditional solid door vending machine configured to hold zone-cooled densely stacked columns of canned/bottled product but not for the new growing family of multi-package vendors, of which glass-front vendors are a part of, that have only recently appeared in the marketplace. Therefore, the NAMA Energy Committee believes a separate energy consumption category is necessary for these multi-package vendors as in the ENERGY STAR criteria machines.

To hold all current multi-package vendors and future beverage vendors to the current ENERGY STAR level could significantly stifle innovation and growth in beverage vending. When the multi-package vendor has a glass door, which allows the consumer to see all of the varying packages and products, different price points are posted for each position. So the multi-package vender brings a plethora of products and packages at differing prices to the consumer.

Changes in Product Packaging

Beverage packaging is changing rapidly. At one time beverages were available in only glass bottles and steel/aluminum cans. With the growing acceptance of polyethylene packaging, and developments in barrier technologies and liner materials, and aseptic containers, beverages are sold in a growing variety of packages. The trend toward differing and more innovative packaging is being driven by consumer preferences. Differing beverage portion sizes, and unique package shapes follow the trend of frequent turnover in beverage product offerings. Consumers desire the same beverage options in vending as are available from convenience and petroleum outlets. Multi-package vendors bring these to the consumer.

Cooling Mechanism Differences in Machines

The energy performance of a multi-package vendor is different than a traditional closed door vendor for more reasons than just the possible addition of a glass door. Currently, in the predominant traditional solid door the cooling is forced on those cans that are about to be vended and not on those cans that are on top of the stack. With cold air concentrated on those cans at the bottom of the stack there is no need for extra
energy to cool the cans at the top of the stack. However, when it comes to multi-package vendors you cannot focus you’re cooling on just a few products; you must cool everything in the machine since you do not know which of the next products will be selected. Consequently a larger area is being cooled.

Because multi-package vendors must cool every next-to-vend product an increased airflow throughout the cabinet is necessary, requiring larger or additional evaporator fans. Also, many glass-front vendors use 1/2hp vs. 1/3hp compressors resulting in greater energy usage.

Multi-package vendors are also unique for they have the ability to offer drinks in highly different packaging configurations. The consumer is now moving away from twelve ounce cans to drinks in other package sizes, shapes and materials. Multi-package vendors offer greater merchandising opportunities through larger selections of product in a greater variety of packaging.

It also needs to be stated that traditional stacked product solid door vendors have an insulated inner door panel to seal off the interior product cabinet. Since the glass used in a multi-package vendor is not a very good insulator, glass-front vendors must rely on double or triple pane glass doors, sometimes with an inert gas between panes, to insulate the cabinet interior. With nothing separating the interior of cabinet from the glass more energy is required to cool the cabinet interior.

In the future multi-package vendors may well represent the majority of beverage vendors purchased. A vending machine manufacturer can increase the cabinet insulation in a multi-package vendor, convert to energy-efficient compressors and fan motors, T-8 bulbs, and even an efficient thermostatic expansion valve, and still not achieve the energy levels specified in your proposal. The energy requirement you propose is unachievable by a multi-package vendor.

Energy Consumption Formula Proposal

At the present time the NAMA Energy Committee has developed a formula that can be used to determine the energy efficiency of multi-package vendors. It was our plan to submit this formula to you at this time for your consideration but we are still working through some technical problems. We would appreciate it if you would allow us some additional time to resolve these issues in order to submit an energy efficiency formula all interested parties can agree on.

Therefore, based on the above information, the NAMA Energy Committee would like to propose an amendment to Appliance Efficiency Regulations (California code of Regulations, title 20, Sections 1601-1608, and Title 24, Part 6, Sections 110-111) to include a category for multi-package vendors. As we stated in our previous communications to the Commission, the vending industry is more than willing to work with the Commission staff to develop an energy consumption category for these types of machines. We look forward to hearing from you as to how we proceed to submit our formula to the Commission.
October 29, 2004

TO: Docket Unit
   California Energy Commission
   Sacramento, CA 95814

FROM: Larry Eils, Director
       Technical Services

RE: Docket No. 04-AAER-1

As we requested enclosed is one original and 11 copies of our October 29, 2004 comments pertaining to the above reference Docket Number.

We have also included 12 copies of our May 28, 2004 and August 9, 2004 comments for the Commission members since we make reference to them in our latest communication.

Encls.

Larry Eils