

SHARP[®] LABORATORIES OF AMERICA

Via e-mail:
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April 6, 2011

United States Environmental Protection Agency
Office of Air and Radiation
Washington, D.C. 20460

Subject: **"Most Efficient" or "Top Tier" Program Proposal for Televisions**

COMMENTS OF SHARP LABS OF AMERICA

SHARP is an enthusiastic ENERGY STAR Partner and is committed to building high-efficiency, low energy-use products that enable our customers to minimize their environmental impact. The ENERGY STAR program continues to be the most effective approach for SHARP to communicate the low power consumption of our products to retailers and consumers.

On March 16th, EPA released a draft of the proposed requirements for eligibility for recognition in the "Most Efficient" program.

SHARP is concerned about the proposed requirements for the following reasons:

"Most Efficient" should reward efficiency

SHARP applauds EPA's intended goal of rewarding the "Most Efficient" products. However, the proposed 80-watt cap is inconsistent with the program title of "Most Efficient". A 70-inch television that consumes only 80-watts would be roughly twice as efficient as a 50-inch, 80-watt TV.

In terms of area-per-watt a 50-inch, 80-watt TV would have an efficiency of 13.4 square-inches-per-watt while a 70-inch, 108-watt TV would have an efficiency of 19.4 square-inches-per-watt. Clearly, the 70-inch, 108-watt TV is the more efficient of the two TVs - in fact 45% more efficient, yet the 50-inch TV would qualify as "Most Efficient" while the more efficient 70-inch TV would not.

The “Most Efficient” program should benefit all consumers

Consumers generally shop for a television with a given location in mind along with a given budget. These factors set the size target for the consumer. After the size range decision is made, the consumer shops for picture quality, industrial design, brand name, features, the particular model cost, and energy efficiency.

A consumer who shops for a large display is unlikely to find any “Most Efficient” models available while consumers shopping for mid-sized TVs are likely to find many “Most Efficient” models to choose from. This situation is unlikely to change the consumer's size target. It only makes it less likely that the consumer will give energy efficiency as much weight when shopping in the large TV category.

EPA should incentivize efficiency in all size categories

In general, TV manufacturers put their most advanced technologies - which are often the most efficient technologies - into their largest model televisions. EPA should ensure that these large televisions can feasibly gain the “Most Efficient” designation. If the designation is unattainable or too far out of reach, manufacturers may fall back to the goals of the standard Energy Star program rather than reach for the “Most Efficient” status.

EPA should not set a fixed size goal for televisions

Both Energy Star 5.3 and the proposed “Most Efficient” program have energy caps that start at 50-inches. This implies that televisions over 50-inches in size are "bad" or "undesirable".

In the days when some large TVs consumed 500-watts and more, one could justify having negative feelings for large televisions. However, times have changed. SHARP makes multiple 60-inch models that consume less than 108-watts and qualify for Energy Star 5.3. With less than the consumption of two 60 W incandescent light bulbs, such a TV can entertain and inform while bringing the family together. Such a purchase generally lasts for over a decade. In terms of enjoyment-per-watt, large TVs deliver more than ever and should not be treated as gas guzzlers or irresponsible devices.

As prices of large displays fall, they will become more and more mainstream. And with the high efficiency that large TVs can deliver, it is important that EPA recognize the “Most Efficient” models in this size range fairly.

SHARP applauds the proposed program for the following reasons:

There are alternatives to a size-based energy cap

SHARP understands that EPA does not want to reward more and more power consumption as sizes grow; however, we recommend an alternative to the current approach. SHARP recommends a "soft landing" rather than a hard cutoff. In particular, SHARP recommends

$$P_{\max} = (0.073 * A) + 2.0 \text{ (W)}; \text{ where } A \leq 1068$$

$$P_{\max} = (0.04 * A) + 37.2 \text{ (W)}; \text{ where } 1068 < A \leq 1770$$

$$P_{\max} = 108 \text{ (W)}; \text{ where } A > 1770;$$

Note that 1770 sq. in. is roughly the area of a 64-inch TV.

This approach would make it progressively more difficult to qualify as TVs get larger, but the size threshold moves beyond 50-inches.

Note that as of this time there are no TVs larger than 60-inch or larger that qualify for Energy Star 5.3, let alone meet the new "Most Efficient" requirements.

Conclusion

SHARP believes that the "Most Efficient" program should truly reward efficiency, rather than set a consumption limit. This would allow promotion of the highest efficiency televisions to potential buyers of all screen sizes and would reward manufacturers for implementing their most advanced and efficient technologies. Today, it is possible for even the largest televisions to be responsible, energy efficient purchases.

SHARP has proposed an alternative solution that provides a "soft landing" for larger models. We hope that EPA strongly considers this solution, rather than designing a program with a hard cutoff.

Respectfully submitted,

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