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VIA EMAIL

March 2, 2012

ENERGY STAR Program
Environmental Protection Agency
Washington, DC
televisions@energystar.gov

Re: ENERGY STAR Program Requirements for Televisions, Draft 2, Version 6.0

Dear ENERGY STAR Program:

Mitsubishi Electric Visual Solutions America (MEVSA) is proud to be a leader in the effort to minimize the impact of electronics and manufacturing on our environment, and is pleased to participate in many environmental initiatives, including the ENERGY STAR® program. We have devoted significant resources to participating in the ENERGY STAR program and developing large screen televisions that are very energy-efficient (and meet ENERGY STAR qualification requirements), including one model that qualifies for the Most Efficient program in 2012.

We are pleased to continue to be a part of the ENERGY STAR program, and have the following comments on the program requirements, draft 2.

On-Mode Power Calculation

In our previous letter, we explained that a power cap tends to disfavor the most efficient television products, and that we felt it was important that the ENERGY STAR program rewarded efficiency (not power consumption).¹

In the ENERGY STAR Program Requirements for Televisions, Draft 2, Version 6.0 ("Draft 2"), the calculation for P_{ON_MAX} has been significantly changed for the better – by modifying the straight line calculation with a hard cap at 108 Watts, and including a *tanh* function, which yields a curve under which products qualify.

We commend the EPA for recognizing that a straight line calculation with a hard cap is not an appropriate calculation.

¹ Letter from Charles Davis, Director, Sales Engineering and Compliance, Mitsubishi Electric Visual Solutions America, March 2, 2012. Efficiency is not the same measurement as power consumption. Power consumption is a measure of the (electrical) power consumed by a device, either instantaneously (e.g., in Watts) or over time (e.g., in kWh per year). Efficiency is the ratio of the work produced to the power consumed. See generally "efficiency," Merriam-Webster Online Dictionary, available at <http://www.merriam-webster.com/dictionary/efficiency> (last visited Mar. 24, 2011); "efficiency," Dictionary.com Unabridged, available at <http://dictionary.reference.com/browse/efficiency> (last visited Mar. 24, 2011). MEVSA strongly believes that ENERGY STAR should promote *efficient* devices, not merely those which consume the least amount of power.

However, we must also caution that even the proposed *tanh*-based curve flattens out into a cap, which disproportionately disadvantages the most efficient television products.

Toxicity and Recyclability Requirements

Draft 2 includes a set of specific requirements which aim to limit the amount of toxic materials used in television products (see Draft 2 at lines 373-84) and require specific design choices in an attempt to ease recyclability (see Draft 2 at lines 386-91).

While environmental sensitivity and environmental stewardship are important aspects of television product lifecycles, MEVSA strongly believes that ENERGY STAR is and should be limited to encouraging *energy efficiency in operation*, and not attempt to confuse ENERGY STAR branding and messaging with a broader, diffuse “green” message.

There are regulations in place that place requirements, testing obligations and other burdens on manufacturers with respect to toxic materials, recycling and other environmentally-sensitive aspects of television products. Attempts to extend and broaden ENERGY STAR to duplicate (and, in some case, triplicate and quadruplicate existing requirements) only serve to detract from the ENERGY STAR *efficiency* message – and are therefore misguided.

User Interface

Draft 2 indicates that EPA “is considering revising [forced-menu] requirement[s] to double prompt the user anytime the television is taken out of the ‘home’ picture mode.” (see Draft 2 at lines 213-19).

The forced-menu procedure has been well-vetted and properly limited to a one-time interaction with the consumer. Once, at initial power-on, the user is queried and confirms that the set is not in a retail setting. This is a minor inconvenience to the consumer, and helps the consumer avoid unintentionally selecting an inappropriate retail setting. As a one-time, minor inconvenience, this is a useful mechanism. However, warning a user each and every time they perform an intentional action is very poor user interface design. Such user interfaces have been the subject of public ridicule.²

Furthermore, it is not our experience that anywhere near 50 percent of consumers typically change picture settings. Those consumers that do, however, typically alternate between the default ‘home’ settings and several other settings. We note that EPA suggests that such notifications be limited to when the television is “taken out of ‘home’ picture mode” (emphasis added), but this qualification does not significantly decrease the inconvenience and poor UI interactions – as most users who do change settings return to the default “home” mode frequently.

A television’s user interface is an important part of product differentiation; ENERGY STAR requirements akin to “nagging” every time a video mode is modified would require a suboptimal user interface and a poor user experience. The ENERGY STAR brand and program would suffer as a result.

Our concerns would be significantly ameliorated if this requirement is limited to the first time a television is switched out of the default “home” mode.

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² See, e.g., “Security” at <http://www.adweek.com/adfreak/get-mac-security-94121> (last visited March 1, 2012).

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Please feel free to contact me if there are any questions.

Sincerely,

Charles Davis
Director, Sales Engineering and Compliance
Mitsubishi Electric Visual Solutions America