



NRDC Follow-up Comments on 7/1/6/08 CEC TV Standards Hearing

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On behalf of the Natural Resources Defense Council (NRDC) and its more than 1 million members and e-activists, we provide these supplemental written comments in reference to the CEC's rulemaking to establish minimum energy performance standards for new televisions sold in California. Our comments are in two parts: a) summary of NRDC position, and b) responses to claims made by the Consumer Electronics Association (CEA) on behalf of its members.

Overview of NRDC's Position

NRDC Experience - NRDC performed the initial comprehensive research on TV energy use back in 2005 and has actively participated in key policy forums including the recent EPA ENERGY STAR specification setting process, and the establishment of the new test method for measuring the power consumption of today's new TVs in active mode. This provides us with an in-depth knowledge of the TV market and the energy savings that can be achieved by a shift to more energy efficient models.

Overall TV Energy Use - With typical power draws ranging from 100 to 400W+ for the very large plasma TVs on the market today, TVs represent one of the biggest power consuming appliances in the home. Many models on the market today consume more energy each year than a new refrigerator and NRDC research estimates annual TV energy use at approximately 1% of all national electricity use. Unlike many other residential appliances with much lower overall energy use, TV energy use is essentially unregulated at the state or federal level¹. To put national TV energy use into perspective, it is equal to the amount of energy consumed by all of the servers installed in US data centers and server farms that run the internet (e.g., email, search, ecommerce, etc.).

¹ California standards for TVs do cover standby power. On mode energy represents roughly 85% or more of the TVs annual energy use and is not currently regulated by California or by the DOE.

NRDC Support for Two Tiered Standard - During the hearing NRDC expressed its strong support for a two-tiered standard for new TVs sold in California. The standard would be performance based (power use per area, W/in²) and technology-neutral. We provided input to the proposal made by PG&E and are very comfortable with the levels proposed. With minor changes to the settings and set-up menus, there will be a wide range of models that can easily achieve the proposed Tier 1 standard in the very near future. We believe PG&E's consultant, Energy Solutions, provided very compelling evidence justifying a more stringent Tier 2 standard based upon the efficiency gains of 30 to 50% savings that will be achieved by numerous new LCD and plasma models entering the market in 2009.

Once the proposed standard is in full effect and the statewide stock of TVs has turned over, PG&E's consultant estimates that California will receive statewide demand savings of approximately 600 MW. **This is equal to the power generated by a large new power plant.** To put this savings into perspective, the 2008 Title 24 upgrade to California's building code will yield first year savings of 129 MW. The 600 MW savings is also 10 times greater than the amount of new solar PV systems that were installed on existing buildings under the state's multi-million dollar rebate program during the first half of 2008.

Based on the speed of cost effective efficiency gains that the TV industry is achieving, we proposed during the hearing earlier effective dates than those proposed by PG&E. (NRDC proposed dates: Tier 1 – 11/1/2009, and Tier 2 – 11/1/2011). Given the various state mandates to pursue cost effective energy and carbon savings and the magnitude of the savings involved, we believe it is incumbent upon CEC staff to review in depth the time line necessary for a smooth yet timely transition to these standards. Based on the publicly available information presented by Energy Solutions and the testimony by Panasonic, we believe a smooth transition towards Tier 2 levels is achievable within the next 3 to 3 ½ years.

Settings Matter – Much of the conversation at the hearing focused on the TV settings and how they impact consumer energy use. Historically TVs have been shipped with extremely bright levels to ensure the displayed models perform well in the brightly lit retail spaces and that they are as bright or brighter than the competing models also on display. This has resulted in consumers receiving and viewing TVs with out of the box settings that are inappropriately high for home use and cause increased energy use of 10 to 30% or more. The IEC test method and Energy Star specifications were intended to shift the industry away from shipping their TVs in “retail mode” and move towards fixed menus. Given the impact the settings have on user energy use, in particular for plasma models where this impact is more pronounced, we encourage the CEC to review this language carefully and ensure this issue is properly addressed in its standard. We need to make sure that savings we achieve are real and not just those on paper.

NRDC Response to Selected Points Made by CEA

1. *Just do test and list, and work with us on consumer education.*

NRDC fully supports efforts to require public access to a product's energy use and is in favor of a test and list requirement as suggested by CEA. This is an encouraging development as the CEA previously refused to provide model name or number data to ENERGY STAR when it developed its database earlier this year.

Public data access is however only one element of effective policy. Test and list does **not** by itself remove the less efficient models from the market. The CEC is very familiar with the numerous market failures that exist that result in consumers' ongoing purchase of inefficient models despite their higher life cycle cost, and has a long and successful history of establishing efficiency standards to address this issue for a wide range of products.

During the hearing CEA eloquently praised the ENERGY STAR program and the benefits of the new specification for TVs.² ENERGY STAR is a voluntary program and is meant to identify the top 25% of the market when their spec is set. ENERGY STAR does not attempt to directly address the bottom 75% of the market however. While we expect to see ongoing innovation and efficiency improvements, without a mandatory standard, one can not be assured that inefficient models will not continue to remain on the market and result in lost energy and carbon savings for the State of California.

2. *Incremental Cost*

There was some confusion during the hearing regarding incremental cost. The concept of near zero cost made by Energy Solutions and NRDC was in reference to the cost of changing the settings and set up menu as a means for many models to achieve compliance with the Tier 1 specification.

Some of the manufacturer's press releases and trade press concerning the next generation of efficient TVs referred to equivalent or lower cost. We feel obligated to point out that CEC standards are based on cost effectiveness, which means that a standard can be set provided the incremental costs, if any, are offset by an equivalent amount of energy savings over the life of the product. For the mid sized TVs, the Tier 2 standard that was proposed would yield savings of roughly 100 W or more. Using conservative assumptions, this translates to more than \$20/yr in electricity savings, and more than \$200 over a ten year period. Even if CEA provides accurate data to demonstrate that TVs made to meet the standard would cost more, this by no means prevents CEC from setting TV efficiency standards. The incremental costs must be greater than the value of the energy saved by the consumer.

² NRDC is also a big proponent of the ENERGY STAR program and has worked with utilities to develop programs to promote models that meet and exceed ENERGY STAR.

3. *Unsubstantiated claims that consumers will not be able to buy the TVs they want in California and that the State of CA will as a result lose millions of dollars in tax revenue.*

CEA alleged in their testimony that California will lose millions of dollars in tax revenue due to the CEC's passage of efficiency standards for TVs. This is an outrageous and completely unsubstantiated claim. All the leading TV makers and panel producers have shared publicly via displays at recent trade shows and in promotional information on their websites their plans to introduce in the near future dramatically more efficient LCD, plasma and rear projection TVs, the three categories which dominate the market. Consumers will be able to choose from a wide range of models that meet the standards supported by the leading CA utilities and NRDC.

CEA claims that consumers will instead buy their TVs out of state primarily thru the internet. While consumers do indeed do a lot of pre-shopping on the internet, they are not likely to buy a big screen TV on the internet due to the desire to see the actual TV picture before purchasing it and the high shipping costs they will incur due to the products bulk and weight. CEA also neglected to mention the benefits that more efficient TVs would bring to California's citizens – lower operating costs without any sacrifice in TV performance, quieter TVs due to the reduced heat generation from more efficient TVs and the resulting lower fan noise, and the extremely cost effective carbon savings California would achieve.

4. *Unsubstantiated claims about consumers not being able to buy what they want and that the standard will stifle innovation and the availability of feature rich products.*

The CEA has a long history of using scare tactics rather than facts as the foundation for their opposition to mandatory efficiency standards. We urge the CEC to go back to the recent proceedings for external power supplies and for digital TV adapters (DTA). Throughout those hearings we heard allegations that the standard would drive prices up, that it would be difficult to meet the proposed levels, and that in some cases consumers wouldn't be able to find the products they want. Nothing of the sort has happened.

We are unaware of any features that the proposed TV standards would eliminate. If they exist, the CEA needs to be more specific and state what feature would be lost and how much extra energy such a feature would warrant. At that point a negotiation based on facts could occur and mutually acceptable outcomes such as “adders” could be developed to provide the additional amount of power that might be warranted.

During the DTA proceeding, the CEC initially set a standard of 8W on and 1W standby. We repeatedly heard how these levels were outright unachievable, that they would result in dramatic price increases, stifling of innovation and worse yet blank TV screens for many Californians. We urge the CEC to view the press release (http://www.nab.org/AM/Template.cfm?Section=digital_broadcasting&TEMPLATE=/CM/ContentDisplay.cfm&CONTENTID=6231) from CEA that includes joint statements from their CEO, which includes the alarmist statement:

“This regulation would likely raise the cost and limit the availability of these products, potentially leaving millions of Californians on the wrong side of the digital divide.”

The US transition to digital only broadcasts will occur in mid February 2009. A little less than a year before the spike for such convertor boxes is due to occur, there are already dozens of qualifying models on the EPA website that meet and in many cases exceed these efficiency levels. The models being sold today at major retailers like Radio Shack and Wal-Mart are available at the \$60 price point which is the same price all parties assumed for the inefficient or “base case.” Despite the warnings from CEA, we are seeing no incremental cost for the more efficient models, and no lack of product availability. In fact, 10 or more models have achieved dramatically lower levels: 6W or less in on mode, and .7W or less in standby.

CLOSING

We believe the CEC has been presented with a very compelling opportunity for dramatic energy savings and a sound proposal to achieve them. We urge the CEC to move affirmatively in setting a two-tiered efficiency standard for new TVs and for future discussions to shift towards the details of what levels and dates to set. We also believe the responsibility is squarely on the industry to provide more detailed information as to expected incremental costs, product introduction timelines, and to demonstrate why the proposed standard levels can not be achieved.