



CUSTOM  
ELECTRONIC  
DESIGN &  
INSTALLATION  
ASSOCIATION

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The Honorable Karen Douglas, Chair  
Energy Efficiency Committee  
CALIFORNIA ENERGY COMMISSION  
Docket #09-AAER-1C  
Docket Unit  
1516 Ninth Street, Mail Station 4  
Sacramento, CA 95814-5504

**Re: Docket #09-AAER-1C**  
**CEDIA's comments on California Energy Commission's proposed**  
**television energy efficiency standards**

On behalf of the Custom Electronic Design & Installation Association (CEDIA), thank you for allowing us the opportunity to provide written comments regarding the California Energy Commission's (CEC) proposed regulations on television energy efficiency standards.

CEDIA is the professional trade association of companies that specialize in planning and installing electronic systems for the home. These systems include home networking, home automation and communication systems, media rooms, single or multi-room entertainment systems, and integrated whole-house subsystems providing lighting control, security, and heating, ventilation & air conditioning (HVAC) systems.

CEDIA members include residential electronic systems contractors, manufacturers, industry-related professionals, professional services, distributors, and sales representatives and currently include 450 member companies and tens of thousands of professionals who work in the residential electronic systems industry in California. 285 of CEDIA's California-based members are electronic systems contractors (ESCs), many of which are independent retailers and installers representing a vital part of small business in California.

Both electronic systems contractors and manufacturers are working to make more energy-efficient products available and are working with customers to integrate and install energy-efficient products and solutions in the home.

CEDIA believes the CEC's proposed mandated energy standards on televisions will have devastating economic consequences including lost sales and jobs in the State of California, and have a significant impact on the residential electronic systems industry. With continued stakeholder collaboration, CEDIA believes an effective energy-saving plan can be implemented to move the marketplace toward the CEC's energy goals without the high risks and consequences associated with a strict mandate on a television's energy efficiency.

## **Impact on the Residential Electronic Systems Industry**

Most CEDIA members are small, independent electronics specialists with a strong entrepreneurial spirit. These companies are referred to as electronic systems contractors, which install and integrate technology in the home. The flat-panel display is a vitally important part of an ESC's revenue structure and is often the entry point for consumers into this market. The sale of flat-panel displays allows our members to also work with their customers to suggest complementary products and services and integrate these flat-panel displays throughout the home with supporting systems, including lighting control, occupancy and motion sensors, automated window treatments, HVAC control and energy management. To further illustrate how electronic systems contractors continue to involve energy-efficient practices in their work, many CEDIA members have also begun installing solar panels to help with a home's energy management.

The CEC's proposal attempts to recognize the importance of large flat-panel displays to the electronic systems contractor by providing a temporary exemption for flat-panel displays 58 inches and larger. While it is true that these large displays are used in some custom home theater applications, electronic systems contractors also sell numerous flat-panel displays smaller than 58 inches. The temporary exemption misses the mark by failing to recognize this fact, and Phase II of the rulemaking may remove this exemption. Therefore, both the current and future proposed regulations will directly and significantly impact electronic systems contractors' business models.

CEDIA strongly believes the CEC's proposal would seriously restrict the business model under which electronic systems contractors operate. According to the *2008 CEDIA Benchmarking Survey*, distributed audio and home theater / media rooms are the primary sources of revenue for ESCs, representing 52% of gross revenues in the 2007 fiscal year.

As the centerpiece of a home theater, the installation of flat-panel televisions is a significant business opportunity in our members' business models. By restricting the flat-panel display product mix in the State of California, the Commission would not only limit consumer choice, but also place California-based retailers at a competitive disadvantage to other retailers in surrounding states and nationally. In the age of the Internet, consumers continue to research and acquire the flat-panel displays they desire through e-commerce or retail. This economic reality affects the business model of all retailers regardless of size. This consumer desire and motivation will not change even if a state mandate is imposed.

The flat-panel display is a vitally important product offering for electronic systems contractors. It is the entry point for an electronic systems contractor to engage with a customer and begin the conversation, which leads to other opportunities to offer additional energy-efficient solutions in the home. Without a mandate, our members are working daily to meet their customers' desire for their homes to become more energy-efficient. Some of these energy-efficient services electronic systems contractors offer are:

### **Video Calibration**

Video calibration refers to the process of adjusting and aligning the technical parameters of video equipment to conform to standard specifications. Electronic systems contractors

adjust these parameters from the high-consumption factory settings to more efficient settings appropriate for home viewing:

### **Lighting Controls**

Automated lighting control is gaining in popularity because it not only provides safety and convenience for homeowners, but aides energy efficiency. Because it is key to the home environment, lighting control is now a central application in most of the new solutions for home automation and energy management. An electronic systems contractor can automate the homeowner's lights to turn on and off based on occupancy, usage, availability of natural light, and other key factors.

Dimming is an important part of lighting control and another great way to save energy. Dimming candescent light bulbs by just 10%, while hardly noticeable to the human eye, can reduce energy consumption by 10% and double the life of the bulbs. The life of bulbs, outdoor bulbs in particular, can be dramatically increased by a gradual ramp-up instead of the sudden surge of a light switch. Extending the life of light bulbs means fewer bulbs being produced and fewer being thrown away.

### **Automated Window Treatments**

Automated window treatments and an astronomical clock sensor can add tremendously to the ability of a house to regulate the amount of energy used. Window treatments can be used in conjunction with the HVAC system to block out the sun in the heat of the summer, or allow its warming effects in the winter. Opening and closing window treatments can dramatically reduce the work that the homeowner's climate control systems have to do.

By controlling window shades, drapery tracks, and skylight shades, homeowners can reduce glare and solar heat gain, which reduces cooling costs. Window shades also provide the benefit of protecting the furniture and carpet from damaging UV rays.

Daylight sensors control the lights and shades in the home by taking advantage of the available sunlight. The sensors balance the amount of electric light and daylight, saving energy and maintaining a constant level of light in the room. This concept is known as daylight harvesting.

### **HVAC Controls**

HVAC controls are another programmable technology that can help increase energy efficiency while also enabling homeowners to enjoy their home environments more.

Electronic systems contractors can program the homeowner's thermostat to adjust based on occupancy schedules. Remote access can also allow the homeowner to adjust heating or air conditioning in anticipation of a change in schedule.

Electronic systems contractors work to integrate technology that fits a homeowner's lifestyle and also allows them to be more energy-efficient. Home automation helps tie all these technologies together and helps give people control of their home and conserve resources. Electronic systems contractors have seen an uptick in consumer demand for energy efficient solutions in light of the recent national focus on environmental

awareness. CEDIA believes this trend will continue, and that it provides a responsible alternative to mandatory energy limits on the flat-panel displays sold. The flat-panel display begins the conversation, which leads to other opportunities for electronic systems contractors to offer additional energy-efficient solutions in the home.

## **Conclusion**

CEDIA supports manufacturer and retailer participation in energy efficiency programs such as the EPA's ENERGY STAR program and our members' continued work toward energy efficiency and savings solutions. CEDIA continues to work with its members through the association's Green Task Force and Technology Council to help research processes and procedures for developing energy-efficient products for consumers.

CEDIA urges the California Energy Commission to recognize and further support the programs already in place, such as ENERGY STAR, which are very successfully encouraging energy efficiency in televisions and do not have dire economic consequences.

On behalf of CEDIA, thank you for the opportunity to submit additional comments. CEDIA looks forward to working with the California Energy Commission, staff, and other industry stakeholders on this important issue to the State of California and the residential electronic systems industry. Thank you for your time and consideration.

Respectfully submitted,



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