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Ms. Jackalyne Pfannenstiel
Chairman and Presiding Member, Efficiency Committee

Mr. Arthur Rosenfeld
Commissioner and Associate Member, Efficiency Committee

California Energy Commission
Buildings and Appliances Office
1516 Ninth Street, MS-25
Sacramento, CA 95814-5512

DOCKET	
09-AAER-1C	
DATE	<u>JAN 15 2009</u>
RECD.	<u>NOV 16 2009</u>

SUBJECT: THE LCD TV ASSOCIATION SUPPORTS THE TIER 1 AND TIER 2 TELEVISION ENERGY STANDARDS PROPOSED BY THE CALIFORNIA ENERGY COMMISSION

RE: 2008 RULEMAKING ON APPLIANCE EFFICIENCY REGULATIONS; DOCKET NO. 07-AAER-3-C; TELEVISIONS

Dear Ms. Pfannenstiel and Mr. Rosenfeld:

The McLaughlin Consulting Group, a display market and technology consulting team, endorses the two-tiered television energy standards contained within the December 2008 CEC Staff Draft Report. We believe that the display industry can and will respond to the leadership position that California is taking in promoting the most energy efficient televisions.

Based on our research and modeling of the light efficiency and costs of LCDs, we believe that the industry is already on a fast track to dramatically improve power efficiency while continuing to sustain a decade of cost down and price reduction. This innovation is occurring for both LCD and plasma flat-panel technologies, as was evidenced at the 2009 Consumer Electronics Show in Las Vegas where virtually all the major TV manufacturers were prominently showcasing energy efficient TVs. Many of these manufactures showed side-by-side comparisons of their new TVs compared with previous years' models and the latest versions show up to a 50 percent reduction in power consumption.

The proposed California standard will encourage innovation by providing momentum for companies to adopt currently available energy efficiency technologies and to also justify investments in various emerging technologies. Currently available technologies allow TVs to meet the Tier 2 levels today and emerging technologies will allow TVs to significantly exceed Tier 2 levels. Again, we believe that the power efficiency gains can be delivered while sustaining the historical cost down trends of 10% cost reduction annually. Given the typical price structuring within the industry, the average

Californian should continue to see price reductions for compliant TVs each year as they have seen in the past for non-compliant TVs. In addition, they will benefit from energy cost savings, thus making the proposed standard extremely cost-effective for the state of California.

During the past several years, the MCG team has completed in depth performance and cost analysis of many of the key materials and components used in LCD backlights. Our studies and modeling of the polarization recycling films, brightness enhancement films, diffusers, and backlight architectures predict continuous improvement in performance as well as substantial cost reductions due to increased competition and production efficiencies.

We also see sustained improvements in LCDTV lamps. Again both optical quality improvements and cost down are predicted for the industry standard CCFL technology. Further new lamp technologies are on the horizon including the HCFL and LED. The combination of LED technology and local dimming offer substantial image quality improvement as well as improved energy efficiency, but at an increase in cost and price when compared to the CCFL conventional technology. It is especially important here that the CEC efforts on increasing energy awareness could accelerate consumer acceptance and expansion of this exciting innovation. Should utility incentives be offered for these new technologies, consumer acceptance would grow even faster

The trend toward energy standards however does require leadership and we applaud California's effort to lead. The creation of a worldwide standard is critical to manufacturers to simplify and standardize their products and achieve low cost through mass production. Today, too many "standards" are being independently developed, causing market confusion and potentially increasing TV manufacturers cost. The leadership of California in achieving a worldwide standard will be appealing to the TV supply chain.

Given these factors and the fact that TVs today can meet the proposed standards, we would also support earlier effective dates than those presented in the CEC staff report. We think the Tier 1 and Tier 2 effective dates could be moved to July 1, 2010 and July 1, 2011, respectfully. We also encourage the Commission to finalize the TV rulemaking and publish standards as early as possible in 2009.

Please do not hesitate to contact me with your questions.

Sincerely,

Charles W. McLaughlin
President.