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October 7, 2021

Mr. James Kwon
ENERGY STAR for Consumer Electronics
U.S. Environmental Protection Agency
William Jefferson Clinton Building
1200 Pennsylvania Avenue, NW
Washington, DC 20460

Topic: ENERGY STAR[®] Television Specification Version 9.0 Limited Topic Proposal

Dear Mr. Kwon:

This letter comprises the comments of the Pacific Gas and Electric Company (PG&E), San Diego Gas and Electric (SDG&E), and Southern California Edison (SCE) in response to the United States (U.S.) Environmental Protection Agency (EPA) ENERGY STAR[®] Television Specification Version 9.0 Limited Topic Proposal (LTP).

The signatories of this letter, collectively referred to herein as the California Investor-Owned Utilities (CA IOUs), represent some of the largest utility companies in the Western U.S., serving over 32 million customers. As energy companies, we understand the potential of appliance efficiency standards to cut costs and reduce consumption while maintaining or increasing consumer utility of products. We have a responsibility to our customers to advocate for standards that accurately reflect the climate and conditions of our respective service areas, so to maximize these positive effects.

We appreciate the opportunity to provide the following comments in response to this LTP. We applaud and support EPA’s proposal to clarify and update the definition of High Contrast Ratio (HCR) display, as well as to reduce the HCR adjustment factor.

1. The CA IOUs support EPA’s proposal to clarify and update the definition of “HCR display” and suggest a modification of the proposed definition.

As EPA stated in the LTP “TVs with individual pixel control are especially efficient in an HDR picture setting when compared to LCD TVs because they achieve a black color by turning off a pixel rather than using a filter.” We agree that the ability to control individual pixels is the key technology advance in HCR-capable TVs. Therefore, we recommend that the definition of an “HCR display” includes this feature in the definition as follows: “A display where each pixel can control its brightness independently and emit no light when displaying a pure black color.”

2. The CA IOUs applaud EPA’s proposal to lower the HCR Adjustment Factor to allow qualification of the very top-performing HCR-capable TVs.

We conducted tests on two 65-inch OLED TVs based on the latest CTA-2037-C “Determination of Television Set Power Consumption”. The “Average On-Mode Power,” the “Average Limit of On-Mode Power,” and the ratio between them are listed below.

Table 1: CA IOU Test Results based on CTA-2037-C

Model	TV1	TV2
Average On-Mode Power (Watt) ¹	125.1	146.2
Average Limit of On-Mode Power (Watt) ²	105.7	119.8
Ratio of Average Limit of On-Mode Power to Average On-Mode Power	1.18	1.22

Source: CA IOU test results

Table 1 demonstrates that the ratio of “Average On-Mode Power” to “Average Limit of On-Mode Power” (or HCR Adjustment Factor) for these two TVs is 1.18 and 1.22 respectively. In this LTP, ENERGY STAR proposes an HCR Adjustment Factor of 1.12. Since the HCR Adjustment Factor for both of these TVs is greater than 1.12, neither of these two OLED TVs would qualify for an ENERGY STAR rating under the LTP.

We anticipate that the higher stringency of the HCR Adjustment Factor proposed by ENERGY STAR will encourage advances in efficiency for HCR-capable TVs. Therefore, we support the HCR Adjustment Factor of 1.12 proposed in the LTP.

In conclusion, we would like to reiterate our support of EPA’s proposals outlined in this LTP for televisions. We thank EPA for the opportunity to be involved in this process and encourage EPA to consider the recommendations outlined in this letter.

Sincerely,



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Pacific Gas and Electric Company



Karen Klepack
Senior Manager, Building Electrification and
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Kate Zeng
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¹ Based on Equation 4 specified in [ENERGY STAR TV V9.0 Draft 2](#)

² Based on Equation 5 and Table 1 specified in [ENERGY STAR TV V9.0 Draft 2](#)