

Re: Docket No. 15-BSTD-01 March 23, 2015 California Energy Commission
DOCKETED
15-BSTD-01
TN # 75508
MAR 24 2015

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Dear California Energy Commissioner:

We would like to take this opportunity to comment on the California Energy Commission's Proposed Revisions to the California Building Energy Efficiency Standards California Code of Regulations, Title 24.

We believe the Commission should require light sources in JA8 to be dimmable to a lower level than 10%. We support the 3% value that was proposed during the 45-day language hearing. 3% dimming is feasible with today's technology, for all form factors, and at comparable and equivalent pricing. Though many products currently do not provide this level of dimming, this is because it has not been demanded of them. If the Commission pushes the market in this direction, the 1.75 years between now and the effective date is plenty of time for the industry to respond. If the CEC deems 3% is too low, 5% would also be a significant improvement over 10%. Please consider the following.

If dimming is to be part of energy efficiency standards, we need to provide quality dimming for consumers. Otherwise, the adoption of energy efficient LED lights will face resistance due to consumers' frustration from poor user experience. In more mature LED markets like Japan, consumers and manufacturers are demanding high-quality dimming for their LED lamps. This includes flicker free dimming to 1%. LED driver IC makers such as Jade Sky Technologies are working hard to meet such demand. As such, the CEC should focus on setting the standards for the future, as we already have economical technologies allowing LED lamps to have incandescent-like dimming quality down to 0.1%.

We also support the Commission's proposal to require reduced flicker operation, and we support the CEC's proposed test procedure in JA10. Reduced flicker, especially flicker at low frequencies, is an important performance metric to ensure positive consumer experience with LED lighting, and yet there is no industry standard test procedure. We have reviewed the test method proposed in JA10 and believe it is easy to understand and reasonable. Requiring the measurement of flicker at full power and at various dimmed states, and the submission of raw flicker data into a CEC tool to identify flicker at different frequencies would all be extremely valuable for the industry.

Thank you again for this opportunity to provide comment.

Sincerely,

Rebecca Liao

CFO

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