

DOCKETED

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Soraa comments on NOPA - Docket # 15-AAER-6

Additional submitted attachment is included below.



Docket Unit
California Energy Commission
Docket No. 15-AAER-6
1516 9th Street, MS-4
Sacramento, CA 95814

Fremont, January 20th, 2015

SUBJECT: Comments to the Notice of Proposed Action on “PROPOSED AMENDMENTS TO APPLIANCE EFFICIENCY REGULATIONS” (Docket # 15-AAER-06)

Dear Sir, Dear Madam,

It is with great appreciation for the California Energy Commission’s efforts to increase the adoption of efficient lighting technologies, that we offer our comments to the Notice of Proposed Action on “PROPOSED AMENDMENTS TO APPLIANCE EFFICIENCY REGULATIONS”.

Yours sincerely,

Aurelien David
Sr. Principal Scientist

Comments on 15-day language

On 12/7/2015, Soraa commented to the CEC that its efficiency targets were too aggressive for implementation in some high-quality directional products. In its 15-day language modifications, the CEC has made the following proposal:

- (1) The effective date for Tier 1 General service lamps is delayed by one year, with slightly higher performance requirements
- (2) The effective date for Tier 2 General service lamps is delayed by 6 months
- (3) No change on the MR16 (small-diameter) spec

Soraa would like to make the following comments about the 15-day language.

(1) Delaying the Tier 1 date by one year is a reasonable change. Achieving the required performance is more realistic within a two-year timeframe than with a one-year timeframe.

(2) The performance requirements of Tier 2 are too high, regardless of the timeframe. As we showed in our previous comment, no existing directional lamp meets them. These requirements are achievable for non-directional lamps; however they are very challenging for directional lamps, and may force manufacturers to compromise on crucial aspects of product quality.

(3) The MR16 performance requirements are inconsistent with the general-purpose lamp, and they are too demanding for high-CRI MR16 lamps:

	Small diameter	General service
Ra=82	80 lm/W	93.4 lm/W
Ra=95	70 lm/W	68 lm/W

For low CRI, small-diameter lamps benefit from a 15% lower efficiency limit, which makes sense since they are intrinsically less efficient. However for high-CRI, the spec is actually *more stringent* for MR16s than other lamps. The small-diameter and Tier 1 specifications have the same effective date, and it makes no sense to require a higher performance for small-diameter products. The current CEC proposal significantly reduces the incentive to design high-CRI MR16 products, even though there is a strong market call for such products

Proposal

Soraa urges the CEC to revisit its efficiency limits, in order to not ban the highest-quality products from the California market. Soraa would like to propose the following:

- (1) Keep the proposed timing and requirements for General service Tier 1

(2) For General service Tier 2, distinguish between directional and non-directional products. Maintain the proposed efficiency for non-directional lamps, reduce the proposed efficiency by 10% for directional lamps, to be consistent with the fundamentally lower efficiency of directional products.

(3) For MR16 lamps, keep the efficiency for low CRI products. Reduce the minimum efficiency for high-CRI (Ra=95) to 60lm/W, to be consistent with the fundamental CRI derating recognized in other lamps.