

KYLE PITSOR

Vice President, Government Relations

December 2, 2008

Commissioner Jackalyne Pfannenstiel
Commissioner Arthur Rosenfeld
Docket Number # 08-AAER
California Energy Commission
1516 Ninth Street, MS-4
Sacramento, CA 95814-5512

DOCKET

08-AAER-1B

DATE DEC 02 2008

RECD. DEC 02 2008

SUBJECT: Docket Number # 08-AAER

Dear Commissioners Pfannenstiel and Rosenfeld:

The National Electrical Manufacturers Association (NEMA) appreciates the opportunity to comment on the California Energy Commission's (CEC) 15-Day language for the 2008 Title 20 Rulemaking. NEMA, which represents over 450 companies that manufacture products used in the generation, transmission and distribution, control and end-use electricity, strongly supports sound energy efficiency regulation.

We are pleased to have worked with the CEC since the early stages of the rule making process; however, many substantive changes were made throughout this rulemaking, creating confusion and difficulty during the comment periods. Our comments below relate specifically to portions of the 15-Day language that had not been previously proposed or discussed prior to its issuance.

Specifically, NEMA seeks the following changes to the 15-Day language.

Clarification for Section to 1605.3 Section (2)(B)(4):

Replace the current language with the following editorial insertions into the final regulation:

(B)Metal halide luminaires shall meet one of the following compliance options:

4. A minimum ballast efficiency of 88 per cent, a permanent, pre-printed factory installed label on the luminaire indicating the relamping rated wattage. The relamping rated wattage shall be within only one of the four wattage bins listed below in subsection (i) through (iv) and shall not be rated for any lamp wattage outside of that wattage bin, and the luminaire shall be equipped

with a ballast able to operate lamps within only one of the following four wattage bins and the ballast shall not be labeled or listed or rated to operate lamp wattages outside of that wattage bin.

- i. 150-160 watts; or
- ii. 200-215 watts; or
- iii. 290-335 watts; or
- iv. 336-500 watts, provided that when a ballast is able to operate 336 to 500 watt lamps, the luminaire shall be prepackaged and sold together with at least one lamp per socket, having a minimum mean lamp efficacy of 80 lumens per watt based on published mean lumens and rated lamp power (watts).

Rationale for the editorial clarification:

The ballast cannot *prevent* operation of a non-binned wattage since that would take special circuit designs and is not practical. The ballast can only be labeled and listed and rated such that operating lamps outside the binning ranges are not permitted by the manufacture and listing NRTL (such as UL).

Insert the following derating factors for 336-500 watt lamps into the final regulations via a footnote that links to *Section 1605.3 Section (2)(B)(4)(iv)*:

- a. 6% for Type-O lamps
- b. 6% for coated lamps
- c. 15% for non-vertical position lamps.

Rationale for these Derating Factors

Only a few clear, vertical position Type-E lamps have a published mean 80 LPW rating, NEMA requests that the final regulations acknowledge a need to provide for several lamp types that serve to provide necessary functionality for some important end-use applications.

Type-O MH lamps provide both performance and safety benefits. Both the National Electrical Code (2005) and Underwriters Laboratories (effective 2010) require that only Type-O lamps be used in open luminaires. Open luminaires offer advantages in higher light output (no lens, less dirt) and can reduce the number of luminaires in an application. However, the containment envelope that surrounds the arc tube reduces the light output of this type of lamp by 6% relative to the Type-E lamp.

Though less popular, both the coated bulb and the off-vertical orientation of MH lamps are in widespread use today and offer performance advantages to the consumer for special applications. The coated lamp reduces downward offending glare and the off-vertical lamp operation provides for a more compact luminaire with reduced upward glare, especially in outdoor applications where light pollution is a concern. Once again, there are derating factors caused by limitations of the technologies of bulb coatings (6%) and off-vertical arc tube thermal profiles and metal halide vapor pressures (15%).

The following suggested definitions apply to the above listed lamp types and are currently not included in the 15-day language. We suggest that these definitions will provide clarity to the suggested footnotes and should be included for completeness:

Type-E Metal Halide Lamp- A metal halide lamp that does not employ an optically transmissive envelope that surrounds the arc tube and is not intended to prevent the ejection of arc tube particles from the lamp in the event of an arc tube rupture.

Type-O Metal Halide Lamp- A metal halide lamp that employs an optically transmissive envelope that surrounds the arc tube and is intended to prevent the ejection of arc tube particles from the lamp in the event of an arc tube rupture.

Coated Metal Halide Lamp- A metal halide lamp that employs an optically transmissive coating on the lamp outer envelope that is intended to perform as an integral light diffuser, to mitigate glare, and/or to modify the color properties of the lamp.

As always, NEMA appreciates the attentiveness and cooperation of the CEC. Should you have any questions concerning our comments, please feel free to contact Dain Hansen at (703) 841-3200.

Sincerely,

Kyle Pitsor

A handwritten signature in black ink that reads "Kyle Pitsor". The signature is written in a cursive, flowing style.

Vice President,
NEMA Government Relations