

**September 19, 2003**

The NEMA Lamp Section submits the following comments in response to Energy Star's request for stakeholder input on the third draft revision to the CFL program commitments and energy-efficiency criteria, dated August 26, 2003.

NEMA welcomes many of the changes made to the previous draft and believe they have improved the program criteria. As now envisioned, work on the upcoming fourth version of the program criteria will address several crucial issues that require further study and thus at this point are not ripe for inclusion in a final version 3.0. However, NEMA sees some inadequacies in the current draft that must be addressed before version 3.0 can be finalized.

Our comments are divided below into substantive issues and technical and editorial corrections.

### **Effective Date & Closure of Qualification Under Version 2.0**

NEMA noted in its May 30 comments that a January 1 effective date would also allow manufacturers to complete their "in-process" development (and subsequent introduction) of Energy Star products in the pipeline.

In lieu of requesting a further delay in the effective date of Version 3.0, NEMA respectfully requests that Energy Star refrain from placing a moratorium beginning Oct. 31 on partners' qualification of products under version 2.0 of the specification. A two-month moratorium places an unjustifiable limit in partners' introduction of new energy-savings models that qualify for recognition as Energy Star products.

NEMA acknowledges the Energy Star program's interest in a smooth administrative transition to the new criteria. However, a moratorium on introducing new Energy Star products into the marketplace, even for a short period, is counterproductive to the program's core purpose of assisting U.S. consumers to acquire and employ genuine energy-saving technologies.

To streamline the transition between Versions 2.0 and 3.0, NEMA strongly suggests that partners who have new products in the pipeline that they are submitting for qualification under version 2.0 notify Energy Star by Oct. 31 of products for which they will submit initial test reports by December 31. This will provide for an orderly transition while still allowing manufacturers to implement commitments many have already made to customers.

If the effective date is moved back from January 1, the date for closure of qualifications under version 2.0 should be moved back to correspond.

## **Correlated Color Temperature (CCT)**

NEMA cannot accept the CCT proposal included in the third draft and reiterates its recommendation that Energy Star maintain the existing standard until a new standard can be developed for version 4.0 of the criteria.

The new proposal offers no improvement over the existing specification, and it does not address the fundamental issue of color variability. DOE will recall the demonstration at the April 30 program meeting by the Lighting Research Center's Conan O'Rourke that lamps with the same color temperature can present different colors to the human eye. This issue is not solved nor even improved by the current proposal. Furthermore, the current proposal assigns descriptors to various bands of color temperature that are significantly different to those used for many years in the dominant linear fluorescent market. This has the potential for creating mass confusion among users of all categories.

Energy Star should either not enforce CCT in the interim, since there are no assessment criteria in the current specification, or add tolerances to the 2700-3000K range to acknowledge that both are nominal specifications and were not meant to be the limits for individual sample lamps. For example, tolerances could be +/- 200K on the extreme edges, or all individual sample lamps would be required to fall in the range of 2500-3200K to meet the specification, as currently required in the current Energy Star specification for Residential Lighting Fixtures.

NEMA suggests DOE expeditiously investigate how to implement already standardized and accepted color ovals. NEMA reiterates its offer to assist DOE and its contractor in developing an improved color appearance specification for version 4.0 of the criteria. Such a new specification should include color oval criteria as found in ANSI standard C78.376, as well as user-friendly color appearance descriptions. Currently, only two of the ovals do not have agreed descriptions – but this matter could be resolved in the relevant ANSI standardization committee.

## **Efficacy Testing**

NEMA reiterates its strong recommendation that Energy Star should maintain existing (version 2.0) LPW minimum requirements for version 3.0 of the criteria. As noted during the meeting on April 30th, CCT and efficacy are fundamentally linked. NEMA reiterates its offer to assist in developing improved color appearance requirements for version 4.0, which must be based on ANSI color ovals. Since improving color specifications may impact realistic minimum efficacy margins, new efficacy criteria should only be evaluated once improved color appearance requirements have been established.

In addition, in order to preserve a broad range of CCT product categories, we respectfully request Energy Star to reconsider our recommendation that lamp efficacy for all colors be determined by the average of all 10 samples measured (rather than the "average of the lesser of the lumens per watt measured in the base-up and base-down positions" suggested in the current draft). Our recommendation represents an

intermediate position between the current specification 2.0 and “the average of the lesser”, which should be considered for version 4.0 of the criteria.

### **Longevity Life Claims in Terms of Years of Service**

Noting that the current draft includes the new requirement that lifetime claims be based on normal residential use of 4 hours per day, NEMA asks Energy Star to reconsider its earlier proposal that partners’ maximum product life claims in terms of years of service should be based on usage of “no less than 3 hours per day”. This criterion has already been well established by some partners, and continuity will alleviate user confusion.

### **Full Qualification - Final Life Test Report Due Date**

The draft criteria state that final life testing data must be submitted within 30 days of completion of the test. Along the lines recommended in our May 30 comments and to reflect the practical realities associated with compiling and submitting reports, NEMA recommends DOE confer with the manufacturer and agree on a deadline for submission of test data approximately 30 business days from the date of completion of the life test.

### **Technical and Editorial Corrections**

#### ***Third Party Testing***

Location: Partner Commitments, page 1, bullet 8

Delete “third-party”. Addition of “third party” implies that a partner cannot submit data from its own NVLAP-accredited facility. On pages 6-9, NVLAP or A2LA accredited labs are required, rather than “third party” labs.

#### ***Interim Life Test***

Location: page 8, column Energy Star Requirements

An “accredited testing laboratory” is specified to provide a product failure report in the case of two sample failures. However, NVLAP and A2LA labs are not accredited for assigning causes for lamp failures. NEMA recommends this requirement be met by self-certification.

#### ***Grammatical/Typographical***

Location: Partner Commitments, page 1, bullets 5 and 6

Change “their” to “its”.

Location: page 9, footnote 9

Replace “94” with “9”.

Location: page 12, paragraph 2, line 6

Change “overwhelming” to “overwhelmingly”.

Thank you for your close consideration of these comments. We look forward to working with Energy Star to finalize Version 3.0. We are also ready to commence work on Version 4.0.

End of NEMA Comments