



May 19, 2006

Richard Karney  
ENERGY STAR Program Manager  
US Department of Energy  
1000 Independence Avenue SW  
EE2J  
Washington, DC 20585

Dear Rich:

I would like to thank the Department of Energy (DOE) for the opportunity to submit comments on the proposed changes to the ENERGY STAR CFL criteria. The following comments are submitted by CEE in response to the third draft of the criteria. They were developed by the CEE Lighting Committee (Committee) and are supported by the organizations listed below.

### **NEW ISSUES FROM DRAFT 3**

#### **1) Proposed Scope Expansion**

In response to the proposed scope expansion to include integrally-ballasted CFLs using the GU-24 base, CEE would like to offer the following comments.

Firstly, the Environmental Protection Agency (EPA) recently stated its intention to cover integrally-ballasted GU-24 products and just this week released a draft specification for stakeholders to consider. CEE strongly believes that if separate specifications from DOE and EPA move forward, this will cause market confusion that will undermine the growth of this product type. As such, we request additional time to fully consider both proposals before commenting on which approach we believe will be best for development of this product category. We recommend that DOE provide an additional two weeks for stakeholders to comment on this particular issue.

During these two weeks, we recommend DOE consider comments on the other aspects of the criteria that are unrelated to including products with the GU-24 base. CEE does not want this issue to slow down the timeline for the entire criteria revision process; we only desire adequate time to fully consider this new information from EPA before providing specific comments to both agencies.

Lastly, for ENERGY STAR to achieve its desired impact it is critical that there is consistency across the managing agencies and we encourage the agencies to work cooperatively to determine how to achieve this mission.

#### **2) Efficacy**

Previous CEE comments have stressed the need for high efficacy levels and we continue to urge DOE to increase efficacy for bare lamps to those originally proposed in Draft 1. CEE believes

that the levels contained in the first draft were appropriate and achievable and requests that DOE share its reasons and underlying analysis for decreasing them.

We understand and support the rationale behind the creation of a separate product category for specialty lamps, though we recommend DOE revisit the proposed efficacy for the highest wattage category. Based on activity in CEE member programs, we recommend that the efficacy be increased to 60 LPW for this subcategory of specialty lamps.

CEE also encourages DOE to consider which efficacy levels need to be met by products that cross categories, e.g. CFLs that are both dimming and covered. DOE should consider the hierarchy of qualification in these cases so that if the levels diverge in the future, manufacturers have clear guidance on the targets they need to meet.

### **3) Third Party Testing**

We would like to thank DOE for its ongoing commitment to develop a third-party testing program for ENERGY STAR-qualified CFLs. CEE believes that program will play an important role in demonstrating to all stakeholders that ENERGY STAR-qualified products meet consumer expectations in terms of performance and longevity. Overall, we support the modifications proposed in the third draft of the criteria. A few remaining proposed clarifications to the current language are provided below.

We recommend a clarification be added regarding the number of nominations that a member of the Nominations Committee may make during a given testing cycle. The current draft language states that an individual may nominate up to two models per manufacturer per cycle. We believe clarification is needed regarding whether there is an upper limit in the total number of nominations as well. For example, could a member of this Committee nominate two CFLs for every manufacturer that has qualified products?

We recommend that the above guidance, along with other details regarding the third-party testing program that may not be appropriate to include in the criteria itself, be included in a stand-alone companion document. Details about an auditing program, such as the one CEE recommended DOE develop in its previous comments, could also be included in this document.

CEE would like to thank DOE for modifying Draft 3 language to allow trend data to be available to all stakeholders. We applaud DOE for removing mention of a \$2,500 fee for this information and recommend two clarifications. First, we ask DOE to include more specific language such as, “trend data reports will be available at no cost” to the criteria to ensure that there is no confusion on this point. Second, with regard to timing, we suggest that language specifying that the reports will be available after every testing cycle be added to the criteria.

## **UNRESOLVED ISSUES FROM PREVIOUS DRAFTS**

### **4) Shipment Data**

As DOE is well aware, shipment data of qualified CFLs continues to be of paramount importance to efficiency programs. While state/province level data is desirable, until it is available DOE should ensure that accurate, timely national-level (US and Canada) data are both

collected and made publicly available to enable stakeholders to gauge the success of their efforts to promote this product category.

CEE urges DOE to communicate to all stakeholders the current status of its data collection efforts along with its projection on when national-level data will be available.

#### **5) Intent of Criteria**

As voiced at the stakeholder meeting and in previous comments, CEE believes that products meeting the ENERGY STAR CFL criteria should be the most efficient, best performing products on the market. This distinction is particularly important given the new federal standard for CFLs, which is based on the 2001 ENERGY STAR specification.

As a first step in the development of a long-term strategy for the product category, CEE again urges DOE to develop a vision statement for the ENERGY STAR CFL program that discusses the direction of the program. This document would provide a basis for some larger changes to the program that may be necessary as it develops over time, and would notify industry and efficiency programs of DOE's future plans.

#### **6) Average Rated Lifetime**

CEE members who administer efficiency programs and are familiar with new entries to market have stated that more and more "long-life" ENERGY STAR-qualified CFLs are being brought to market.

In previous comments, we recommended that DOE review the qualifying product information submitted by manufacturers and determine what percentage of products have an average rated lifetime of greater than 8,000 hours. We reiterate this request, as this data point will help DOE to determine at what point it will consider instituting an increase in rated lifetime. CEE believes that an increase in the average rated lifetime requirements would benefit the program by providing more value to the consumer.

#### **7) Early Failures**

As indicated in previous comments, CEE is concerned with the number of burnouts that occur in ENERGY STAR-qualified CFLs before full rated lifetime is achieved.

While no independent test data is available for *full* rated lifetime, the Program for the Analysis and Evaluation of Residential Lighting (PEARL) has tested products up to 40% of rated life and has found that 34% of products tested had one or more failure. In addition, 12.8% of products had two or more failures, and 6.4% of products had three or more failures. Based on this data, CEE urges DOE to track early failures as part of its third party testing protocol and require that this data be reported in the summary report.

#### **8) Smoking CFLs**

CEE continues to urge DOE to take steps to reduce the number of "smoking CFLs." Specifically, we ask DOE to contact the Canadian Standards Association (CSA) to discuss their research on the scope of the problem. CSA is logging incidents that involve smoking CFLs, and can provide valuable information to DOE on the size and severity of the problem. CEE continues to urge

DOE to act to prevent consumer perception that CFLs are catching fire in their homes. Lighting program managers at BC Hydro, Northeast Utilities, Tacoma Power, and Seattle City Light, among others have seen multiple problems arise as a result of this issue.

It is our understanding that over-current protection can be used to prevent CFLs from smoking upon catastrophic failure. CEE urges DOE to further investigate the technical cause of the problem and incorporate such measures that will prevent CFLs from smoking upon failure within the criteria. Additionally, we ask that DOE consider whether this issue could be addressed by the third-party testing program being incorporated within the specification. We believe that third-party testing could be a vehicle for conducting post-mortem tests on failed products that have exhibited this problem, and encourage DOE to add this topic to the list of discussion items for the Technical and Research Committee to cover.

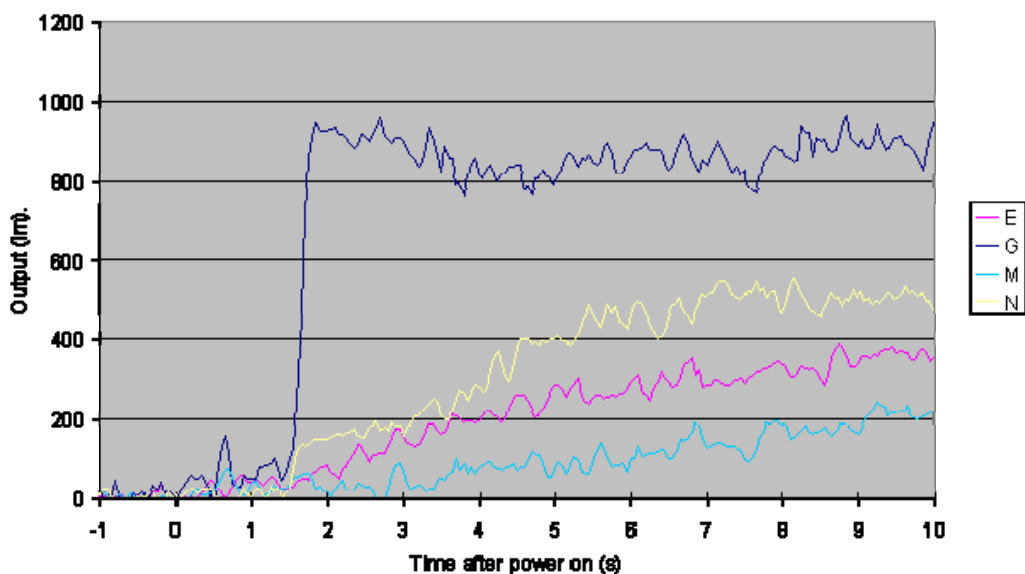
### 9) Testing Issues - Treatment of Failures

Based on questions raised at the stakeholder meeting, CEE recommends that DOE clarify in writing how failures are to be treated in testing. For example, if samples fail during testing it is unclear whether the sample size should be reduced and an average calculated based on the remaining number of functioning lamps or if the average should be calculated with the failures included as zeros. We believe that, in order to reflect true performance of the product, any failures should be included in the calculation as zeros.

### 10) Testing Issues - Definition of Starting Time

It has come to CEE's attention that there is some uncertainty among testing labs as to the definition of "full start" within the test for starting time. Testing labs do not have a definition of full start to use in their testing of starting time and are uncertain when to "stop the clock." We have provided a chart of slow start CFLs for DOE's reference, and suggest that the Department consider defining this metric to alleviate confusion. We recommend 15% or 20% of full light output as a starting point in the discussion about an appropriate definition.

Light Output of Slow-Starting Lamps, Source: BC Hydro Testing



### **11) Testing Issues - Dimming**

As noted at the stakeholder meeting and in previous CEE comments, there is currently no definition of dimming performance that CFLs must meet in order to be advertised as “dimming CFLs.” We recommend that DOE rectify this by beginning development of a test procedure to verify the dimming claims of ENERGY STAR CFLs. Pacific Northwest National Laboratory, which has received several dimming entries in Phase II of its R-Lamp Technology Procurement, may be a useful resource in this regard.

Once a test procedure is established, DOE should specify that “dimming CFLs” must be able to dim down to a set percentage of full light output when used with a standard two-wire dimmer, unless otherwise noted on packaging. DOE should also provide guidelines to assist manufacturers to communicate whether there is a need for a conditioning period to achieve dimming.

Again, I thank the Department of Energy for the opportunity to provide comment on the third draft of the ENERGY STAR CFL criteria. Please contact CEE Senior Program Manager Rebecca Foster at (617) 589-3949 ext. 207 with any questions about these comments.

Sincerely,



Marc Hoffman  
Executive Director

### **Supporting Organizations**

Cape Light Compact  
Efficiency Vermont  
National Grid  
New York State Energy Research and Development Authority  
Northeast Energy Efficiency Partnerships  
Northwest Energy Efficiency Alliance  
NSTAR Electric  
Pacific Gas & Electric  
Sacramento Municipal Utility District  
San Diego Gas & Electric  
Southern California Edison  
Tacoma Power  
Wisconsin Division of Energy