

Appliance Standards Awareness Project
Natural Resources Defense Council
Alliance to Save Energy
American Council for an Energy-Efficient Economy
Consumer Federation of America
National Consumer Law Center

May 13, 2013

Ms. Brenda Edwards
U.S. Department of Energy
Building Technologies Program
Mailstop EE-2J
1000 Independence Avenue SW
Washington, DC 20585-0121

RE: Docket Number EERE-2011-BT-STD-0006 (RIN # 1904-AC43): Preliminary Technical Support Document for General Service Fluorescent Lamps and Incandescent Reflector Lamps

Dear Ms. Edwards:

This letter constitutes the joint comments of the Appliance Standards Awareness Project (ASAP), the Natural Resources Defense Council (NRDC), the Alliance to Save Energy, the American Council for an Energy-Efficient Economy (ACEEE), the Consumer Federation of America, and the National Consumer Law Center in response to the release of the preliminary technical support document (PTSD) for general service fluorescent lamps (GSFLs) and incandescent reflector lamps (IRLs). In addition to the comments below, the undersigned would also like to inform the Department of our formal support for those comments submitted by the California Investor-Owned Utilities (California IOUs). We appreciate the opportunity to provide input to the Department on this matter.

1. EPCA requires that the Department promptly complete the mandatory review of IRL and GSFL efficiency standards

We would first like to applaud the Department's efforts in promptly initiating this second round of rulemaking for IRLs and GSFLs following the completion of the first round of rulemaking. As the Department is aware, EPCA 1992 required the Department to initiate two rounds of rulemaking for IRLs and GSFLs. Initiation of the first round of rulemaking was required by October 24, 1995, and the final rule was due by April of 1997.¹ The Department was required to initiate a second round of rulemaking in 2000, three years after finalization of the first round, and complete it by April 2002, five years after completion of the first rule.²

However, the Department failed to issue the final rule for the first round of rulemaking until July 14, 2009, which went into effect July 14, 2012.³ Because the Department failed to issue the first standard until several years after the deadline for the second standard was due, it was no longer possible for the

¹ 42 U.S.C. 6295(i)(3).

² 42 U.S.C. 6295(i)(4).

³ 74 Fed Reg. 34080 (July 14, 2009).

Department to meet the second deadline. As the Department recognizes, it must still issue a second standard as soon as possible and at a maximum within the interval contemplated by Congress when it set out the original deadlines. As noted, the original deadlines required that the Department commence the second rulemaking within three years of issuance of the first rule and to issue a final rule within five years. This means that the Department was required to commence the rulemaking by 2012 and complete it no later than 2014.

We were heartened by the Department's early initiation of the second round of rulemaking on August 31, 2011, earlier than required. The Department must continue to work expeditiously in order to ensure that the final rule is completed no later than 2014.

2. This rulemaking is of great significance to U.S. consumers and businesses regardless of LED progress

We would also like to take a moment to reiterate the importance of this rulemaking. According to the Department's *2010 U.S. Lighting Market Characterization* report, the U.S. inventory of installed IRLs was estimated to be in excess of 641 million lamps, representing almost 8% of the total installed lighting base, consuming an estimated 39 TWh annually. The same report estimated an inventory of nearly 2.4 billion GSFLs, representing 29% of the total installed base, consuming approximately 294 TWh annually. While we recognize that these numbers will likely begin to decrease over time with the increased prevalence of LED alternatives, IRLs and GSFLs will still likely command a significant portion of the lighting market for decades to come, as a perceived cheaper alternative to LEDs. Because of this, and as shown by the Department's preliminary analysis, this rulemaking offers the potential for significant, cost-effective savings for U.S. consumers and businesses and the Department should continue to place its completion as a high priority.

3. The Department must select the least efficacious lamp meeting current conservation standards as its baseline for IRLs

The Department's selection of two baseline lamps for IRLs is both troubling and confusing. The Department describes a baseline lamp as ". . . the most common, least efficacious lamp that meets existing energy conservation standards."⁴ The 2009 lamp rule requires an efficacy of 17.8 lpw for a 60W lamp. The first baseline lamp listed in the PTSD is a 60W halogen lamp with an improved reflector, 1070 lumens, 17.8 lpw, with a lifetime of 1,500 hours. The second baseline lamp is a 60W halogen infrared lamp, 1,100 lumens, 18.3 lpw, with a lifetime of 3,000 hours. The second baseline lamp does not meet the Department's description of a baseline lamp. Rather, the second baseline represents an advanced technology, is more efficacious than required by existing energy conservation standards, and has twice the rated lifetime of the first baseline lamp. The lifetime of the lamp is not only significant for utility purposes. Lifetime and efficacy are opposing metrics in IRL design. Therefore, if the lifetime of the second baseline lamp was reduced to 1,500 hours to allow for an accurate comparison to the first baseline lamp, its efficacy would be even greater than 18.3 lpw. Because the second baseline lamp is an advanced technology and fails to meet the Department's description of a baseline lamp, we ask that the Department select a single baseline lamp that does represent the least efficacious 60W PAR 38 lamp meeting the 2009 lamp rule.

⁴ U.S. Department of Energy. 2013. *Preliminary Technical Support Document for General Service Fluorescent Lamps and Incandescent Reflector Lamps* (Chapter 2 at p. 36).

4. The Department must consider the maximum technologically feasible level for IRLs and should add multiple high efficacy candidate standard levels to its analysis

We join the California IOUs in calling for more IRL candidate standard levels (CSL) in addition to the one proposed by the Department in the PTSD. EPCA requires that the Department “determine the maximum improvement in energy efficiency or maximum reduction in energy use that is technologically feasible for each type (or class) of covered product.”⁵ The Department must set the standard at the level that achieves the “maximum improvement in energy efficiency . . . that is technologically feasible and economically justified.”⁶

The Department’s selection of just one CSL falls well short of meeting EPCA’s requirement. When considering the maximum technologically feasible level, the Department’s own product certification database currently has over 25 IRLs that exceed CSL1. Furthermore, as the California IOUs reference in their comments, there are numerous commercially available IRLs that exceed CSL 1 (some by as much as 20%.) The Department must consider these more efficient IRLs. Indeed, in *Natural Resources Defense Council v. Herrington*,⁷ the DC Circuit Court vacated a DOE rulemaking for precisely this error. The Court found that the Department had failed to include in its analysis more efficient designs that were technologically feasible and therefore could not have determined the maximum feasible level.⁸

To properly identify the “maximum improvement in energy efficiency . . . that is technologically feasible,”⁹ the Department must examine those sources referenced in the California IOUs’ comments, namely, the Electric Power Research Institute (EPRI), 2Xlightdirect.com, and the Emerging Technologies Coordinating Council (ETCC). We request that the Department analyze three additional CSLs at those levels identified in the California IOUs comments.

5. The Department should eliminate its current 15% allowance for IRLs with modified spectrum lenses

In response to the Department’s framework document issued August 31, 2011,¹⁰ ASAP and six other organizations¹¹ submitted comments that, among other things, highlighted concerns regarding the 15% allowance afforded to IRLs with modified spectrum lenses. These comments made reference to a study conducted by Ecos Consulting in 2009¹² which found an average light loss of 9-11% associated with IRL modified spectrum lenses. The study also highlighted the feasibility of modified spectrum IRLs exceeding TSL5 efficacy levels in the 2009 IRL lamp rule. We continue to urge the Department to consider eliminating the 15% allowance as technology does exist to achieve high efficiency levels without the need for such an accommodation. Should the Department determine the continued need for an allowance, however, we request that it be reduced to 10%, reflecting the findings of the Ecos study. Furthermore, we request that the Department require industry to distinguish between modified spectrum lamps and standard lamps in their compliance certification submissions to the Department and that these differences be highlighted in the certified products database. We also request that the

⁵ 42 U.S.C. 6295(p)(1).

⁶ 42 U.S.C. 6295(o)(2)(A).

⁷ 768 F.2d 1355, 1391-92 (D.C. Cir. 1985).

⁸ *Id.*

⁹ 42 U.S.C. § 6295(o)(2)(A).

¹⁰ 76 Fed. Reg. 56678

¹¹ Natural Resources Defense Council, Alliance to Save Energy, American Council for an Energy-Efficient Economy, National Consumer Law Center, Northeast Energy Efficiency Partnerships and Northwest Energy Efficiency Alliance.

¹² Ecos Consulting (prepared for Pacific Gas & Electric, Natural Resources Defense Council, and the Appliance Standards Awareness Project), 2009. *Optical Losses of Modified Spectrum Lenses on Incandescent Reflector Lamps.*

database specify the product class of each lamp. Currently it is very time consuming and confusing to distinguish between the 8 product classes, making it difficult to assess the current availability and prevalence of lamps within each class.

As always, we appreciate the opportunity to comment on these matters.

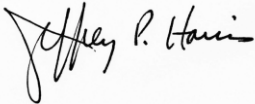
Sincerely



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