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

May 17, 2013

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


Dear Ms. Edwards:

This letter constitutes the comments of the Appliance Standards Awareness Project (ASAP), Alliance to Save Energy, American Council for an Energy-Efficient Economy (ACEEE), Natural Resources Defense Council (NRDC), and National Consumer Law Center (NCLC) on the interim technical support document (TSD) for high-intensity discharge lamps. 78 Fed. Reg. 13566 (February 28, 2013). We appreciate the opportunity to provide input to the Department.

We support the comments submitted by the California IOUs. Below we provide comments on three issues related to the analyses.

**DOE must assume the lowest-cost replacement option in evaluating incremental costs.** In the interim TSD, DOE assumes that in the standards case, a customer must always replace the entire fixture in response to any of the three triggering events (fixture, ballast, and lamp events). As the California IOU comments explain, customers would often have two options in the standards case that do not involve replacing the entire fixture. First, the California IOU comments provide examples of high-efficacy retrofit metal halide lamps from multiple manufacturers that can be used with existing probe-start ballasts. Second, the California IOU comments also provide examples of lamp/ballast retrofit kits from multiple manufacturers that can be installed in existing fixtures.

The analyses of potential standard levels must be based on the lowest-cost replacement option, which at least in many cases may not be replacement of the entire fixture but rather a lamp or lamp/ballast replacement. Some customers may not choose the lowest-cost option in a standards case. However, this additional cost relative to the lowest-cost option cannot be attributed to the standard since customers would be able to select the lower-cost option.
DOE must appropriately account for costs incurred in both the base case and the standards case. In the interim TSD, DOE uses an analysis period for the LCC analysis that is equal to the remaining life of the existing fixture. As explained in the California IOU comments, this approach fails to account for the fact that the purchase of a new fixture in the standards case delays the purchase of a replacement fixture that would have been needed at the end of the existing fixture’s useful life. Similarly, the purchase of a new ballast in the standards case delays the purchase of a replacement ballast that would have been needed at a later point in time in the base case. We urge DOE to reconsider the approach used for the economic analysis to better capture the true incremental cost of potential standard levels. The California IOU comments provide a specific recommendation for calculating incremental costs, taking into account costs incurred in the base case that are not incurred in the standards case.

We urge DOE to resolve apparent discrepancies between the LCC and NPV results. There are several instances where DOE’s analysis shows large positive LCC savings and negative NPV values for certain representative lamp types and candidate standard levels. The table below illustrates four such examples.

<table>
<thead>
<tr>
<th>Representative Lamp Type</th>
<th>CSL</th>
<th>Baseline Lamp</th>
<th>LCC Savings</th>
<th>NPV ($billion)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Fixture Event</td>
<td>Ballast Event</td>
</tr>
<tr>
<td>250W MV</td>
<td>3</td>
<td>MV 250W</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Probe MH 175W</td>
<td>--</td>
<td>$621</td>
</tr>
<tr>
<td>400W MV</td>
<td>2</td>
<td>MV 400W</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>MV 250W</td>
<td>--</td>
<td>$666</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Probe MH 250W</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>1000W MH Probe</td>
<td>2</td>
<td>Probe MH 1000W</td>
<td>$1,700</td>
<td>$393</td>
</tr>
<tr>
<td></td>
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</tr>
</tbody>
</table>

In each of the four instances in the table above, the LCC savings are positive for all three triggering events (where applicable)—the fixture event, ballast event, and lamp event. For example, for CSL 2 for the 1000W MH Probe representative lamp type, the LCC savings are $1,700, $393, and $262 for the fixture event, ballast event, and lamp event, respectively, and yet the NPV is shown to be negative at both the 7% and 3% discount rates. We are unclear as to why the NPV values would be negative in cases where the LCC savings are large and positive. We urge DOE to resolve what appear to be discrepancies between the LCC and NPV analyses.

Thank you for considering these comments.

Sincerely,

Joanna Mauer
Technical Advocacy Coordinator
Appliance Standards Awareness Project
Lowell Ungar
Director of Policy
Alliance to Save Energy

Jennifer Amann
Director, Buildings Program
American Council for an Energy-Efficient Economy

Charles Harak, Esq.
National Consumer Law Center
(On behalf of its low-income clients)

Meg Waltner
Manager, Building Energy Policy
Natural Resources Defense Council