NRDC Comments on ENERGY STAR Qualified Lighting Integration Proposal

Submitted By:

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On behalf of the Natural Resources Defense Council (NRDC) and its more than 1.2 million members and e-activists we submit these comments on ENERGY STAR's Qualified Lighting Integration Proposal. In summary we are very supportive of the plan and our comments focus on two topics – dimmable products, and testing and enforcement.

Dimming

The number of screw based sockets that are connected to dimmers has been increasing. This is due in part to the trend to install dimmable recessed cans in new construction and remodels, in particular in kitchens, and due to code requirements in California where dimmers are the low cost compliance path for most rooms.

Unfortunately most CFLs on the market are not dimmable and most of the current dimmable CFLs are hard to find at retail and/or do not perform well when dimmed. Consumers frequently put a non dimmable CFL into a dimmable fixture and get frustrated by the lamp's premature failure. This could turn them off from using CFLs in non-dimmable sockets, even though the source of the problem was unique to dimmable sockets. Also many of the dimmable CFLs offer limited dimming and may hum or flicker when dimmed below a certain brightness level.

At a minimum we encourage ENERGY STAR to aggressively move to develop a test method and specification for dimmable CFLs. This is critically needed as the current ENERGY STAR spec only tests CFLs at full brightness and does not in any way assess the lamp's dimming performance or the effect dimming has on the lamp's lifetime. The goal is a simple one -- ENERGY STAR rated dimmable lamps should offer smooth, continuous dimming down to roughly 20% of full power without noticeable hum or flicker. The specification should be built around two or three of the most common types of dimmer switches current in use.

In addition, ENERGY STAR should work with the lighting industry to develop a specification for "universal dimmers" to help ensure compatibility with new dimmable LED based lamps and fixtures.

Verification Testing and Enforcement

NRDC served as the Board Chair of PEARL, the highly successful off the shelf testing program of ENERGY STAR labeled screw based CFLs. In this capacity we gained extensive experience in the processes related to nominating and procuring products, testing the samples, and reporting and distributing the data. We also serve on the technical advisory committee of DOE's Caliper testing for SSL based products.

We are encouraged by EPA and DOE's efforts to date related to off the shelf product testing and its recognition that more needs to be done. We urge ENERGY STAR to assess and modify its programs, as needed, to ensure its ongoing testing and enforcement efforts are comprehensive and transparent, and that appropriate followup action is taken for non-complying products. NRDC offers the following recommendations:

1. Written Procedures - ENERGY STAR shall develop and implement written procedures that clearly spell out how its processes will work. These publicly available documents will include: the scope of the testing, sample sizes, how products will be nominated and procured, test lab requirements, data distribution and access, and follow up actions that will be taken for non-compliant products.

2. Delisting Procedure – DOE has failed to publish a written document that clearly explains what steps will be taken by ENERGY STAR for products that fail to meet one or more of the parameters contained in its specifications. At times, products that grossly failed the testing performed by PEARL were not delisted by DOE and very little justification was provided by DOE. To ensure the rules are sufficiently stringent, known to all and consistently applied, we urge ENERGY STAR to create such a document.

3. Data Disclosure – The PEARL Board, which represented most of the utility and utility program administrators in the US and NRDC, had access to the complete testing results. This data was submitted to DOE. Under this arrangement the PEARL Board was fully aware of all non complying test results and was therefore in a position to assess the follow-up taken by DOE ENERGY STAR.

Under the new CFL testing system, the manufacturers pay for the testing and the data distribution is limited to the manufacturer whose product was tested and DOE's contractor. As we stated repeatedly during the transition from PEARL to a DOE led program, the test results **must** be publicly available. There is nothing proprietary or confidential about the data contained in the test reports – e.g. the lamp's efficiency, the

number of lamps that fail during the testing, the lamp's lumen maintenance, etc. To date, ENERGY STAR has only agreed to provide scrubbed testing trend data.

Should ENERGY STAR continue to resist full data disclosure they should at a minimum list the models tested and whether they passed or failed. For those models that failed, the results for the failing parameters should be reported. This way interested stakeholders will be aware of products that did not perform as promised and can make informed inquiries to ENERGY STAR in the event the non-complying model was not delisted. Also having access to the test results will help inform stakeholders as they develop their list of models to nominate for testing.

4. Data Sharing with Other Agencies – The verification testing data that is being generated by ENERGY STAR will also be of interest and potentially actionable by other agencies or divisions within DOE. For example, the FTC will soon issue updated lamp package labeling requirements. The DOE data will provide a useful mechanism for comparing the lamp's performance with the claims provided on the box. Should a lamp claim to be as bright as a 60W lamp but only deliver 650 lumens (instead of the required 800 lumens), then FTC can then pursue its own enforcement actions. In addition, sections of the federal EPACT legislation set minimum performance levels for certain screw based CFLs. To date, the PEARL data has not been shared by the ENERGY STAR group in DOE with the enforcement branch of DOE. Several of the products that were delisted by ENERGY STAR were likely also in violation of federal law.

5. Increased Actions to be Taken for Repeat Violators – The current DOE administered CFL verification testing program limits the number of models to be tested each year to six per manufacturer. This helps minimize each manufacturers' financial expense under this program and under most circumstances is a reasonable limit. Should a manufacturer have multiple products fail each year we think the program should require additional actions that might include: a) testing of more than 6 models at the manufacturer's expense, and b) if appropriate removing a company's ability to list products as ENERGY STAR for a specific time period. This restriction could be restricted to a certain class of products. For example, this action could be limited to the manufacturers' reflector lamps in the event their other types of products prove to be compliant.

6. Include Integral LED Lamps into the ENERGY STAR Off The Shelf Testing Program – We think its critical for ENERGY STAR to comprehensively test ENERGY STAR labeled integral LED lamps. To prevent consumers from having a bad experience with the early LED lamps and potentially turning them away from these products in the future, its important for ENERGY STAR to include these products in its testing program. This can be done by modifying the current testing program done by Caliper or by creating its own infrastructure for performing this testing.