



NRDC Comments on Version 4.0 of the ENERGY STAR CFL Specification

Noah D. Horowitz, Sr. Scientist
nhorowitz@nrdc.org

Natural Resources Defense Council
October 5, 2005

NRDC appreciates the opportunity to provide follow-up comments on DOE's draft specification (version 4.0) for compact fluorescent lamps. Overall we are very pleased with the proposed revisions to the specification and want to specifically express our support for the specification improvements that include: a) making participation in the third party testing program mandatory ("pay to play"), b) the increased efficacy levels, c) faster lamp run up times, and d) attempts to provide more consistent lamp colors through the use of McAdam ellipses.

Below are our additional comments/clarifications based on the discussions held at the DOE stakeholder meeting on September 20th.

1. Do not eliminate the opportunity to retest a specific model more than once within the 36 month cycle.

During the September 20th meeting, some stakeholders wanted to prevent repeat testing of a lamp during the 36 month cycle. While we also share the mindset of leveraging the finite testing resources that are available and prevent unnecessary product retesting, we think it is essential to leave the door open for retesting a product that might have passed the testing in a recent round of QA testing.

We envision a scenario where a product's quality could have changed dramatically over a period of time. This could be due to changing production factories, unknowingly switching to inferior components, etc. If the utility program administrators, retailers, etc are encountering complaints about a particular product, it should be allowed to be nominated for retesting.

As a compromise, we are open to adding some language that would prevent a specific model from being nominated from the random nomination process during the 36 month cycle.

2. Commit to adding a mercury limit to the specification

NRDC and many other stakeholders recognize the need to address the mercury content in CFLs. We believe a two pronged approach is necessary: a) reduce the amount of mercury contained in the lamps, and b) establish a lamp collection and environmentally sound recycling system. In the absence of action on this issue, ill advised policies will likely be enacted locally that might “penalize” CFLs, even though they are net mercury savers compared to incandescent lamps, which cause higher electricity consumption and mercury emissions from power plants.

We disagree with the comments made at the meeting that it is inappropriate to include mercury in the ENERGY STAR spec. Given the direct linkage between mercury levels and product performance, we think ENERGY STAR is exactly the place where these discussion and decisions should be made. Otherwise, other bodies may set the limits, without sufficient consideration of the performance implications.

Assuming DOE and others can reach consensus on a reliable test method for measuring the mercury content in CFLs, we urge DOE to commit to adding a maximum allowable mercury limit for CFLs to its specification prior to the next spec revision process.

We would like to see a timetable with key deadlines added to the spec that will lead to future mercury limits. Dates would include: a) reach consensus on test method, b) manufacturers report the mercury content of their lamps to DOE, c) DOE establish mercury limits, and d) establish an effective date for the mercury limit. The later 3 milestones could be set x months from the date when a test method is selected.

We are committed to working with NEMA and other interested parties outside of the ENERGY STAR specification process to address the end of life recycling issues.

3. Oppose NEMA’s suggestion to eliminate 1,000 hour lumen maintenance test requirement

We believe the 1,000 hour lumen maintenance testing requirement must remain in the QA testing program. If a product’s lumen maintenance drops to below 80% of initial lumens within the first 1,000 hours, we believe DOE should initiate delisting efforts, rather than waiting several more months for the 40% of life lumen maintenance data. This provides DOE and the utility program sponsors the ability to more quickly address non-complying products and limit the number of consumers who will buy non-complying models. This becomes an even bigger issue with the trend toward models being sold with lamp lives of 10,000 plus hours or greater.

4. Expand the scope of the CFL spec to other lamp bases and technologies. Work with EPA to develop a spec for the new GU-24 base lamps.

NRDC believes that the intent of the DOE specification should be expanded to cover a wider range of energy efficient lamps and that lamps that use other technologies (i.e.

LEDs) or base types should not be excluded from the program. We encourage DOE to think about repositioning its specification in the future from a CFL spec to a broader performance based specification that is intended for energy efficient lamps in general.

We also recognize that additional time might be needed to revise the specification or underlying test methods for various technologies. As a first priority, we urge DOE to work with EPA to add “integral” self ballasted pin based lamps to the ENERGY STAR labeling program, in particular those with the GU-24 base that EPA and the efficiency community are likely to promote heavily in the next few years.

To the extent that the “universal” self ballasted pin based lamps develop significant market share, there needs to be a specification and labeling program to ensure that the lamps that go into the ENERGY STAR labeled fixtures are highly efficient and perform well. Otherwise we could move to a world where consumers have no way of identifying the better performing pin-based efficient lamps and if they have a bad experience their dissatisfaction could easily spread to screw based CFLs. This scenario would be terribly unfortunate given the great strides made and hundreds of millions of utility dollars invested to improve and assure the quality of ENERGY STAR labeled screw based CFLs.

5. Create and publish a written delisting protocol. Also add to the specification the requirement for DOE to conduct an annual independent audit of the QA testing program.

For the proposed QA testing program to function in a transparent and effective manner, we again urge DOE to draft a written protocol that specifically lays out the criteria DOE will use to determine if a product is delisted and how it will review delisting appeals that it receives. We also support the PEARL sponsor’s recommendations to add to the spec a requirement for DOE to conduct and publish the results of an annual independent audit of the QA testing program. The audit would randomly select a handful of test results and appeals, and assess if DOE and its administrator followed the delisting protocol and determine if products were appropriately delisted or not.

As the PEARL Board is relinquishing its right to the hard testing data, they believe the above steps will provide them with sufficient confidence that the system is working. We concur. If funding for the annual audit is an issue, I have informally contacted the current PEARL Board and they are willing to fund the costs associated with this type of audit.