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November 23, 2015

Ms. Taylor Jantz-Sell, ENERGY STAR Lighting Program Manager
Environmental Protection Agency
1200 Penn. Ave NW 6202J
Washington, DC 20460

Subject: ENERGY STAR® Lamps version 2.0

Dear Ms. Jantz-Sell,

On behalf of Natural Resources Canada (NRCan), the Government of Canada's signatory as an International Partner with the EPA's ENERGY STAR program, I would like to offer final feedback on recent stakeholder consultations for the development of the ENERGY STAR 2.0 lamp specification. Natural Resources Canada facilitates almost \$1B of annual utility DSM spending, largely based on ENERGY STAR criteria, to over 35 million consumers annually, via partners covering over 95% of Canada's population.

Canada's ENERGY STAR program is aligned with that of the EPA in almost every respect – from specification development and product category adoption, to qualified product lists, to common (or identical) messaging to consumers. Currently Canada shares the same specifications for all but heat recovery ventilators and building shell products. Canada collaborates with EPA on specification development and program enforcement, and amplifies program messages north of our shared border. This alignment and close collaboration benefits both Canadian and US partners in a number of ways:

- Cross-border manufacturing and retail partners enjoy reduced administrative burden in the way of product testing and development, marketing and training, and product shipments to North America;
- Canadian utilities in particular have a "one stop shop" to find certified product model information;
- Monitoring and enforcing compliance is more efficient; and
- Joint messaging has created common levels of awareness, trust and integrity on both sides of the border.

This close alignment also means that major program decisions made or directions taken have a very palpable impact on Canada's ENERGY STAR program.

It is in this vein that I would like to formally share with you Canada's input, particularly with regard to presentations and statements made at recent webinars held by EPA on the lamp specification. NRCan's views have been discussed and agreed to by a majority of Canadian utilities.

Thank you for the opportunity to submit our comments, and should you have any questions, please feel free to contact Dianna Miller, Chief, ENERGY STAR at dianna.miller@nrcan.gc.ca.

Regards,

(original signed by)

Debbie Scharf, Director, Equipment Division
Office of Energy Efficiency
Natural Resources Canada

Canada 

Natural Resources Canada Comments:

Overall, NRCan is supportive of various proposed changes in the proposed technical specification. We are particularly supportive of increased efficacy, collecting data on more accurate metrics to measure color rendering, and a balance between metrics measured and the ability to innovate. We share a similar concern with EPA that poorer quality LED products are taking a worrisome share of the marketplace and we support EPA's drive to allow manufacturers the ability to innovate to produce a lower cost product with the quality ENERGY STAR has been known to guarantee for consumers.

There is one area in particular where NRCan is in disagreement with the proposal:

Power Factor: While NRCan understands in principle that Power Factor may not yet be an issue for the average consumer, it is important to remember that there *are* some utilities charging residential and small business consumers for this already (in our most populous province of Ontario, for example) and with smart meters, it is only a matter of time before many, if not all do. While a lighting product here or there may not make a significant difference, several may push residential or small business consumers over thresholds set by utilities, after which charges occur. Given the proliferation of consumer electronics in homes (which are also influencers) and the projected increase in efficient lighting products, it is reasonable to expect that power factor will become a concern for average consumers.

Power factor is very much a concern for Canadian utilities. Simplistically, power factor and total harmonic distortion must remain above a minimum level in order to ensure that individual lamp components (particularly drivers) are of sufficient quality to not have a detrimental effect on utilities who both generate and distribute electrical energy. I would be happy to share much more specific and technical information from Canadian utility partners to support this statement at your request.

As a result, it is NRCan's assertion that power factor should be 0.7 or higher for all products. This is not only in the interest of consumer protection; but also to reduce unintended and potentially harmful costs to, and demand on, the grid.

There are two areas where NRCan would like to caution EPA:

Omnidirectionality: Without enough information about the trade-off (potential manufacturing cost gains versus consumer impact) it is difficult to support the revised definition of omnidirectionality as proposed. It is important to consider consumers in every aspect of a specification, as their experience on each individual level will determine how successful a broad scale adoption initiative will be. It is equally important, as mentioned below, to ensure that manufacturers who invest greatly in reaching the requirements of a specification are not disadvantaged by relaxing those requirements at a future date, to the reward or advantage of those who did not or could not meet those requirements originally. To this end, NRCan will simply state a general concern about the lowering of omnidirectional requirements in order to reduce costs of product to consumers.

Hours: Reducing lifetime to less than 25,000 hours, in NRCan's view, could have a negative impact on consumer confidence and stifle (or significantly slow) innovation. Canadian utilities have informed NRCan that they have invested, over the years, significant resources in marketing ENERGY STAR certified LEDs by pointing out their lifetime benefits. There are great concerns a reduction would significantly reduce ENERGY STAR's credibility, and therefore that of efficiency programs who use it. Should news outlets, consumer advocacy groups, publications such as Consumer Reports, or other "watchdog" organizations decry this change, without appropriate context, it would not be unreasonable for consumers to feel the brand as a whole has regressed. In addition, manufacturers who have invested significant resources into developing products to meet the 20,000 hour requirement would see their efforts eroded by others who have not. They would also be required to

develop a “substandard” product (that is engineered to a lower hour requirement and to be less expensive) in order to be competitive with the other “substandard” products on the market.

NRCan is concerned that this could lead, in the future, to manufacturers of lighting or other product categories interpreting this as a lack of commitment of the brand to supporting innovation in a sustained manner; i.e.: they would be less inclined to invest significantly in stretch specifications if they believe that the brand may retract them and reward those other manufacturers who did not make the investment.