August 24, 2012

Taylor Jantz-Sell
US Environmental Protection Agency
Ariel Rios Building 6202J
1200 Pennsylvania Avenue, NW
Washington, DC 20460

Dear Ms. Jantz-Sell,

PG&E advocates for increasing the quality of energy efficient lighting in the market and applauds the EPA’s efforts in creating a new quality specification for ENERGY STAR lamps. We do have some comments on the ENERGY STAR® Lamp Draft 2 Specification, released by the US Environmental Protection Agency (EPA) on July 7, 2012. In addition to the comments below, we collaborated with the Consortium for Energy Efficiency and support their comments.

Date of Specification
Please provide more clarity on when the draft will be complete so that utilities, efficiency programs, retailers, and manufacturers can plan accordingly.

Requalification Communication
Please describe the process and timing of the communications to the industry regarding the need to re-qualify products based on the updated specification.

Lumen Efficacy
PG&E recommends an increase in the efficacy currently planned for directional lamps. The average efficacy for currently qualified ENERGY STAR directional lamps is around 50 lm/W. We encourage EPA to increase the efficacy for directional lamps so that they are at least comparable to decorative lamps (45/50), but would ultimately rather see the level pushed to 50/55 lm/W.

Beam Quality
PG&E definitely supports the inclusion of the intensity distribution requirements for directional lamps. As an entity that interfaces with consumers, we are sensitive to quality differences between the incremental measure and the baseline technology/product. Thus, we agree that ENERGY STAR lamps should use standard incandescent directional lamps as the reference when assessing beam quality/intensity.

Color Temperature
PG&E recommends making the newly added 6500K color temperature for commercial grade lamps only. By maintaining this color temperature for both residential and commercial, the industry runs the risk of
creating potential customer satisfaction issues in the residential market. Most residential customers are interested in the warmer end of the CCT spectrum and might mistakenly purchase a 6500K lamp, leading to dissatisfaction with the technology.

Additionally, PG&E thinks that the 7 step MacAdam ellipses/quadrangles are sufficient for now given the state of manufacturing in the macro-economy. However, because color performance is so important to consumers, we recommend eventually reassessing the need to move to a 4 step in future specifications.

**Color Rendering**
PG&E absolutely supports adding the positive R9 requirement to the compact fluorescent specification. Color quality is one of the most commonly referenced customer concerns with CFLs. It would be interesting to see the cost implications, but the detriment to the perception (and acceptance) of CFLs is paramount.

**Run Up Time**
Run up time is another big customer perception issue with regards to CFLs. This has impacted the efficient lighting industry’s ability to transform the market, and as such, PG&E recommends tightening this standard even more than the proposal in the draft specification. The proposed run up times were observed in product samples from 2010. We would like to see covered lamps with a run up time of <45 seconds and all other CFLs with a run up time of <20 seconds. PG&E realizes that this would exclude a number of lamps on the current ENERGY STAR list, but we continue to hear market feedback regarding the relatively long run up times and think this parameter would help mitigate some of the purchase barriers for CFLs in the long run.

**Dimming**
One of the most important issues to resolve with ENERGY STAR lamps concerns their dimming capabilities. PG&E understands that it was recently announced that NEMA would not support including dimming language in the current specification. We strongly disagree with this strategy and feel that it is imperative to include language addressing the dimming issues surrounding, in particular, LED lamps. At this time, PG&E does not support CFLs that claim to dim, precisely because the industry has not adequately addressed the issues with this technology. Thus, we highly recommend that EPA, with input from appropriate stakeholders, include language that addresses the dimming issue in this specification. PG&E realizes the magnitude and complexity of the issue, and think that a solution might have to be iterative. But to omit any mention of dimming capabilities or compatibility will be a detriment to the consumer and the market as a whole. In fact, the omission of any dimming language could possibly prompt a discussion about whether or not to support LEDs with utility rebate dollars.

As part of this effort, PG&E recommends researching the cost implications and consumer preferences for various dimming levels. Without initial research to back any claims, PG&E supports a minimum dimming level of 10%. We understand that manufacturers are pushing for a 20% minimum threshold, but consumers are used to 0% dimming capabilities with incandescent lights.
Lamp Packaging

PG&E recommends requiring that the ENERGY STAR logo appear on the front of the lamp package. A corollary to this recommendation is that a minimum size for the logo will have to be specified.

Thank you again for all of your efforts in continually increasing the energy efficient lighting standards. It is no longer satisfactory to provide lamps with energy savings. Savvy consumers will continue to demand quality lamps, which also provide energy efficiency. Thus, these efforts, and increasingly stringent standards, are imperative to continue our evolution away from incandescent lights.

Sincerely,

Joey Barr
Senior Product Manager
Pacific Gas and Electric