



Acuity Brands Lighting, Inc.  
One Lithonia Way  
Conyers, GA 30012  
770-922-9000  
AcuityBrands.com

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Submitted via email: [docket@energy.ca.gov](mailto:docket@energy.ca.gov)

Mr. Andrew McAllister  
Commissioner  
California Energy Commission  
1516 Ninth Street  
Sacramento, California 95814

Docket No.15-BSTD-01

California Energy Commission

**DOCKETED**

**15-BSTD-01**

**TN 75928**

**JUN 09 2015**

**Proposed Revisions to the California Building Energy Efficiency Standards California Code of Regulations, Title 24, Part 6 and Appendices; 15-Day Language**

Dear Commissioner McAllister,

Acuity Brands appreciates the opportunity to provide comments regarding the Title 24 Building Energy Code. Acuity Brands has a long history of working with the Commission and contractors to promote the adoption of the state building code to promote high efficiency lighting installations.

Acuity Brands is the leading manufacturer of luminaries and lighting controls in North America. We operate facilities throughout California under the Peerless, Hydrel, Lighting Control & Design and Sunoptics product brands. In addition, our western region manufacturing and distribution center is located in Ontario, CA. The California building code has a direct impact on our investment of nearly 400 California based employees.

Please contact Cheryl or Tanya to discuss our comments in more detail.

Cheryl English  
VP, Government & Industry Relations  
770-860-2660  
[Cheryl.English@AcuityBrands.com](mailto:Cheryl.English@AcuityBrands.com)

Tanya Hernandez  
Manager, Energy & Environmental Standards  
770-860-2793  
[Tanya.Hernandez@AcuityBrands.com](mailto:Tanya.Hernandez@AcuityBrands.com)

## 1) Section 150.0k Residential Lighting

In our March 29, 2015 letter, we posed questions about the analysis performed to evaluate the cost effectiveness of the proposed residential code. While the data used to evaluate the cost of JA8 compliant products has relied on the existing California Appliance Database, there has not been any data provided to determine if the product listings sufficiently represent integrated LED luminaires since many these type of products were not required to meet the 2013 JA8 requirements. It is questionable whether the products used in the 2016 cost analysis actually meet all proposed requirements in 2016 JA8, including the new color metrics (Duv, CCT, R9), dimming, flicker and start time requirements. Despite our previous requests to disclose this data, we have not seen any information to validate the cost effectiveness of the JA8 requirements for integrated LED luminaires. It is our opinion that the Commission has failed to meet the cost effectiveness requirement for the 2016 code proposal.

We are anxious to support a more aggressive code to help California achieve the necessary energy reductions for residential applications. However, there are a number of quality attributes that have not been validated relative to consumer preference. These requirements potentially increase costs for attributes that residential owners do not value. Studies show that price is the highest consumer preference in lighting, and the cost increases associated with JA8 attributes could impede the market penetration of integrated LED luminaires.

***We repeat our request that the CEC provide the details of the cost analysis comparing a 2013 code compliant residence to a 2016 code compliant residence. The 2013 baseline should include a percentage of luminaires with integrated LEDs that were not classified as high efficacy. Likewise the 2016 code compliant residence should include a percentage of luminaires with integrated LEDs that meet the JA8 requirements including the various color thresholds, dimming, flicker and start time. An analysis based on this condition is likely to result in dramatically different results for the cost effectiveness of the 2016 code requirements.***

## 2) Joint Appendix 8 (JA8)

Although the term “inseparable SSL luminaires” was introduced prior to the 15-day language, its use which was minimal in the Code is now problematic in the 15-day language. The definition of inseparable SSL luminaires indicates that the product must feature solid state lighting components such as LEDs and driver components which cannot be easily removed or replaced by the end user, thus requiring replacement of the entire luminaire. This infers that a luminaire that employs screws and connectors in order to replace LEDs and/or the driver would not be classified as an inseparable SSL luminaire.

- A. Table 150.0.A exempts inseparable SSL luminaires that are installed outdoors or contain colored light sources that are installed to provide decorative lighting from JA8 criteria. We believe that separable SSL luminaires that are installed with the same features (outdoor and colored light sources) would also be exempted, but this is not explicitly stated.
- B. Section JA8.1 states “if a light source is inseparable from the luminaire the entire luminaire shall meet the requirements.” The term “inseparable” has not been defined and will likely be linked to the “inseparable SSL luminaire” definition, leaving it unclear if separable luminaires, i.e. luminaire employing connectors and screws to replace LEDs and/or drivers, have to meet the requirements of JA8.

***We request that the CEC abandon the inseparable SSL luminaire language since the requirements apply to luminaires with integral LEDs regardless of separability. This will provide clarity and reduce the likelihood of misinterpretation that may be leveraged as a loophole.***

### **3) Section 141.0 – Lighting Alterations**

Entire luminaire alterations – The allowance for a 30% lower rated power at full light output for luminaire alterations that do not include adding, removing, or replacing walls or ceilings along with a redesign of the lighting system should be based on the maximum rated power of the luminaire alteration, not necessarily what is installed. Also, it is unclear how this allowance will be enforced since an inspector won't know what was previously installed and would be forced to rely on someone with a vested interest in getting inspection approval to confirm the power reduction.

Luminaire component modification – Because an additional option has been included to allow compliance by reducing the installed power, it is appropriate to maintain the 2013 threshold of code compliance when 40 or more existing luminaires are modified to ensure aggressive energy reductions.

***We request that the CEC:***

- 1. Revise the luminaire alterations requirement to base the power reduction on the maximum rated power of the altered luminaires in accordance with section 130.0(c), and***
- 2. Maintain the threshold of 40 or more existing luminaires for code compliance***
- 3. Require an inspection prior to modification or alteration in addition to the final inspection to confirm the maximum rated power of the existing and modified luminaires to ensure code compliance.***

At previous Commission workshops, it has been suggested that these 2016 code revisions become effective immediately upon adoption. We strongly discourage this action by the Commission. It is not reasonable to require industry and building stakeholders to prepare and react to the code changes without the standard implementation timing and it would be inappropriate for the Commission to carve out specific sections for early effective dates. This action will cause significant confusion for the industry and inspectors, and will create a financial hardship on businesses who have invested in training, compliance and product technologies to support the code and the energy goals of California. We are concerned that this confusion will lead to ineffective inspections and non-compliance.

***We recommend that the CEC maintain an effective date for lighting alterations that is consistent with the rest of the code to avoid the potential for confusion in the industry and among the inspection community.***