

## DOCKETED

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*Comment Received From: Cheryl English*

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**Acuity Brands recommendations for enforcement measures**

*Additional submitted attachment is included below.*

March 15, 2016

Docket No.16-BSTD-02

Submitted via efilng: <https://efiling.energy.ca.gov/EComment/EComment.aspx?docketnumber=16-BSTD-02>

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

### **2016 Nonresidential Lighting Alteration Enforcement**

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.

Please contact me to discuss our comments in more detail.

A handwritten signature in black ink that reads 'Cheryl R English'.

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Acuity Brands provided multiple comments during the rulemaking process related to the revisions for lighting alternations. We expressed concerns with enforcement of the reduced wattage compliance option for lighting alterations and provided specific recommendations regarding enforcement in our July 29, 2015 comments (Docket No.15-BSTD-01).

In order for this new compliance option to deliver expected energy savings, the installation must be inspected prior to the alterations and again after the alterations by an independent individual qualified to validate that the power reduction meets the threshold required in section 141.0.

We question if it is feasible for building inspectors to be able to assume this additional demand for pre- and post-inspections. Furthermore, building inspectors may not have the expertise to accurately assess the power for the existing installation since the power is not marked on the equipment or may not be representative of the components installed prior to the lighting alteration.

Self-inspection or self-certification by the building owner or any individual performing services for the building owner creates a conflict of interest in accurately describing the pre- and post-installation power for the lighting. Therefore the requirements for inspection and enforcement must be conducted by an independent and qualified individual. Furthermore, the evaluation of the pre- and post- installation power must be specifically defined by the Commission in order to prevent gaming and to ensure that the state achieves the intended energy reductions.

We recommend the following requirements in the Title 24 enforcement specific to lighting alternations:

- 1) Onsite inspection prior to the lighting alternation and after the alteration is complete should be conducted by an independent and qualified individual to determine the lighting power. The current code requires certified acceptance testers who have invested in lighting training and have the knowledge base to conduct this type of inspection. The inspector must not be associated with design, installation, equipment supply or other services associated with the project they are inspecting.
- 2) Two inspections should be required - prior to the alteration and upon completion of the alteration.
  - a. The pre-alternation inspection should determine the existing installed power for the lighting. This will require identification of the lamp and ballast (or other lighting electrical components) that result in the actual power used for the existing lighting. If this inspection is based on the maximum rated wattage capable of the luminaire, the power reduction will be overstated and the final installation may not achieve the required reduction stipulated by the Commission to meet the code requirements.
  - b. The post-alternation inspection should determine the power based on the maximum rated wattage in accordance with section 130.0(c). This will ensure that the lighting components, such as a lamp, cannot be replaced with a higher wattage component after the inspection or with future maintenance. This prevents a future backsliding of energy use and is also consistent with the requirements for determining final installation compliance for new construction under the scope of Title 24.
- 3) The certified acceptance tester should provide a signed certification validating:
  - a. the pre-alternation in-person inspection, date and installed lighting wattage
  - b. the post-alternation in-person inspection, date and maximum rated lighting wattage
  - c. the power reduction achieved (dividing the post-alternation maximum rated wattage to the pre-alternation installed wattage) and that the reduction meets the mandatory 35% or 50% threshold based on the type of occupancy
  - d. that the acceptance tester certifies that he/she is not associated with the design or installation of the lighting system for which the inspection is being conducted.