

March 9<sup>th</sup>, 2007

California Energy Commission (CEC)  
1516 9<sup>th</sup> Street  
Sacramento, CA 95814-5512

Subject: Proposed 2008 California Building Energy Efficiency Standards Changes

Gentlemen,

After reviewing the proposed changes that were uploaded onto the CEC website February 21, 2007, the following are items that I would like to have addressed:

Table 146-D Relative System Efficiency (RSE) For Dimmable Electronic Ballasts

- When will this table be complete? There is a note stating that it is incomplete, and will be updated after this workshop.
- There seems to be a problem getting several manufacturers (Osram-Sylvania, Advance, Lutron) for multi-lamp ballasts to meet minimum T8 RSE. The values are much more liberal for T5 than T8. Will these values be adjusted after February 26?

Table 146-F Complete Building Method Lighting Power Density Values (Watts/Ft<sup>2</sup>)

- The values for Office Buildings seem too low. A value of 0.8 watts/ft<sup>2</sup> would not allow for a uniform design. Application would only seem to work in an office with no walls. Seems too ambitious for spaces with personal offices, conference rooms, break rooms, restrooms, etc. Would like to see the value increased to a more realistic number.

Section 132 (c) (2)

- A uniform design can only be achieved in square parking lot. In awkward site layouts, ie curved and areas where poles must be mounted around the perimeter, this would not work.
- If alternate switching is to be added into the standard, a legal disclaimer must be issued to all building owners and facilities engineers, warning them that switching certain exterior luminaires off could bring illuminance levels below minimum local jurisdiction light levels, and would release engineer of any legal liability due to accident, injury, or crime.

Section 147 Requirements For Outdoor Lighting

- Needs to address areas where a public utility restricts the design on the project. There is no security multiplier for these instances.
- Would like to ADA lifts addressed. Currently ramps are exempt but not lifts. Would like to either see an exemption or security multiplier.

- Would like to see an allowance for lighting behind exterior mechanical parapets. Currently, no allowance is set aside for it. Mechanical parapets are obtrusive to incoming light, as they conceal mechanical equipment mounted on a roof. Lighting in this application would not operate unless an authorized person would be working on the roof. Possibly use of timer switch for control.

Section 147 (d) Determining Illuminated Use Area

- I notice that illuminated area was changed from six to ten. I cannot see how this is reasonable in areas where there is a structure, change in elevation, or curve in the site that would overlap the areas, due to adding another luminaire to compensate the design.

Section 147 (e) (1) (B) *The total perimeter shall not include portions of planter and landscaped areas that are less than or equal to ten feet wide in the shorter dimensions and are enclosed by hardscape on at least three sides.*

- If this planters or landscaped areas are along a portion of a building, can the building be considered a portion of the hardscape?

Respectfully Submitted,

**ECOM Engineering, Inc.**

A handwritten signature in black ink, appearing to read 'Miguel A. Castellanos', with a long horizontal flourish extending to the right.

Miguel A. Castellanos, EIT, LC  
Engineer

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