

CALIFORNIA ENERGY COMMISSION
Attention: Docket No. 15-BSTD-01
Dockets Office
1516 Ninth Street, MS-4
Sacramento, CA 95814-5512

California Energy Commission

DOCKETED

15-BSTD-01

TN # 75279

MAR 02 2015

Re: 2016 Building Standards Update; 14-BSTD-01 Rulemaking Comments

To Whom It May Concern,

On behalf of Ecology Action, I respectfully submit the following comments concerning the 45 Day Language of California's 2016 Building Energy Efficiency Standards (Title 24 Part 6).

Ecology Action is a 45 year old California-based nonprofit specializing in designing and delivering energy efficiency programs across the state. In the past decade, Ecology Action has implemented over \$84 million in energy efficiency contracts, specifically targeting Small and Medium Business (SMB) commercial customers and is widely recognized as one of the State's preeminent SMB retrofit leaders. Over the past five years alone, Ecology Action's lighting programs have delivered more than 166 GWh of energy savings to California utility ratepayers. Our comments here specifically address the latest version of the proposed 2016 45 Day Language dealing with indoor lighting system Alterations and Modifications.

The 2013 update to Title 24 put in place significantly increased standards for lighting retrofits, essentially treating them much more like new construction. The most significant of these changes were the addition of complicated and expensive multilevel lighting and additional controls requirements in most situations, combined with significant commissioning and permitting costs. For these projects, the new requirements have more than doubled job costs with little if any corresponding increase in energy savings or utility rebate.

These changes have severely and negatively impacted the lighting retrofit industry, and resulted in a tremendous shift in the market away from Code-triggering jobs. The effects of this shift include sharply reduced savings delivered by utility programs, a return to "cherry picking", illogical retrofit specification, stranded energy savings and an artificial shrinkage of overall market potential. Lighting retrofit contractors and maintenance firms that have been in business for decades are cutting staff or closing their doors entirely. Distributors have seen a precipitous decline in their sales of retrofit equipment, and even large ESCOs have shut down or left the California market altogether. **The dire seriousness of current conditions in the lighting retrofit market imposed by the 2013 Code cannot be overemphasized.**

In this context, Ecology Action is gratified that the proposed 2016 45 Day Language is addressing the most problematic aspects of the 2013 Code. As the CEC notes in its 2016 Statement of Purpose, the proposed changes “...addresses concerns that the cost of compliance for luminaire modifications was underestimated in the 2013 regulations...” **Even if no further improvements are made to the 45 Day Language beyond those proposed herein, it would represent such a vast improvement over the 2013 Code that it would singlehandedly save the lighting retrofit industry in California, prevent the loss of hundreds or potentially thousands of good-paying jobs, and save millions of kWh that are currently stranded by the unintended consequences of the 2013 Code.**

The 45 Day Language has already changed from the version published on February 4, 2015. Ecology Action has provided feedback to CEC staff and consultants on that updated language, and our comments here address that updated “straw man” version. We will provide more specific and in-depth suggestions in our next round of comments, but for now we feel it is crucial that the two proposed Exceptions below remain largely intact as the language is refined over the next several weeks. **We propose deleting the text shown below in strikethrough**, as 1) setting an arbitrary percentage is not necessary to accomplish the intended purpose because retrofitters will achieve significantly lower wattage without that extra provision, and 2) it may have the unintentional effect of discouraging certain LED upgrades based on available product wattage differentials.

EXCEPTION 2 to Section 141.0(b)2I. Replacement of luminaires where the new luminaires have ~~at least 20 percent~~ lower power consumption compared to the original luminaires.

EXCEPTION 2 to Section 141.0(b)2J. Replacement of luminaire components where the modified luminaires have ~~at least 20 percent~~ lower power consumption compared to the original luminaires.

Given that the focus of energy efficient lighting retrofit projects is the installation of new luminaires and modifications to luminaires resulting in lower power consumption, these and related provisions in the 45 Day Language remove the most onerous Code-imposed market barriers and help allow energy efficiency providers and programs to once again comprehensively address commercial lighting retrofit projects of all sizes.

Finally, we strongly oppose the most recent proposed change to Wiring Alterations in Section 141.0(b)2K. **As with the Physician’s Code, the Energy Code should seek to “First, do no harm.”** Invoking Multilevel and Automatic Daylighting provisions merely for simple wiring alterations is highly counterproductive and will achieve the opposite of its intended effect. Retrofitters will simply avoid

potential jobs with the need for these types of wiring alterations, rather than turn them into unsellable proposals due to the unsupportable and unwanted cost of adding multilevel and daylighting to the project. We also suggest that Exception 1 to Section 141.0(b)2J should be retained for clarity. **Ecology Action recommends deleting the text shown below in strikethrough and adding the underlined text back in:**

K. Wiring Alterations. For each enclosed space, the following wiring alterations serving permanently installed lighting shall not cause the lighting power allowance in Section 140.6 to be exceeded and shall meet the applicable requirements in Sections 130.1(a), ~~(b), and (c), and (d):~~

- i. Adding a circuit feeding luminaires;
- ii. Replacing, modifying, or relocating wiring between a switch or panelboard and luminaires; or
- iii. Replacing lighting control panels, panelboards, or branch circuit wiring.

EXCEPTION 1 to Section 141.0(b)2J. Modifications strictly limited to the addition of lighting controls.

In summary, the draft language incorporating the changes suggested above, while not perfect, would correct most of the serious oversights in the Lighting Alterations section of the current Code, and will resuscitate the lighting retrofit market that has all but stopped in response to the cost and complexity of implementing the current regulations. In addition to achieving dramatically greater energy savings, these outcomes will yield huge benefits to ratepayers, contractors, manufacturers and distributors, energy service companies, program implementers, and utilities across California.

Thank you for taking the time to carefully consider these critically important issues.

Respectfully,

Gene Thomas

Senior Energy Analyst

Ecology Action

gthomas@ecoact.org