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IALD Energy & Sustainability Committee Response to 45 Day Language

Additional submitted attachment is included below.

To: California Energy Commission

Dockets Office, MS-4 1516 Ninth Street

Sacramento, CA 95814-5512

Date: 2 March 2018

From: Michael Lindsey

IALD Representative

Pages: 3

cc: Project: Draft T24 2019 Standards

Docket No. 17-BSTD-02

Sent via: Email

Regarding: T-24 2019 45 Day Express Language

Dear California Energy Commission,

On behalf of the IALD Energy & Sustainability Committee, I'm pleased to submit the following comments to the current T24 45 Day Express Language. Our review and comments specifically focus on lighting related items (interior, exterior, & controls) due to our expertise in that field.

Please review the items listed below organized section within the draft language.

Section 130 (C), 5 – Classification & Power of Modular Lighting Systems:

Reduce the value in 130.0 (c), 5, A, i. from 30 watts per linear foot to 8 watts per linear foot.

• The 30 watts per foot assumes the use of incandescent track fixtures, for example, a 90-watt incandescent halogen PAR38 fixture every three feet. But if you have a design that uses long lengths of track with few fixtures, you are required to account for much more power than you are actually using. To avoid this problem you can use current limiting devices but this adds complexity and cost. These current limiters have no practical purpose. They prevent someone from theoretically loading up the track with many high-wattage halogen fixtures, but realistically this isn't going to happen and the current limiters just sit there doing nothing. The world is rapidly shifting from incandescent to LED for track lighting either with new LED fixtures or replacement lamps. Right now, and certainly by the time T24 2019 goes into effect, it is highly unlikely that anyone will be installing incandescent fixtures or lamps. LED track fixtures are typically at a minimum four times more efficacious than incandescent halogen fixtures. Therefore we propose to reduce the wattage allowance to 8 watts per linear foot. This will mean that it will be much less likely that useless current limiters will need to be specified and installed. This will reduce the cost of construction because useless current limiters will no longer need to be installed to comply with code.

This value of 8 watts per linear foot was adopted and recently published in IECC-2018 (http://shop.iccsafe.org/codes/2018-international-energy-conservation-code.html)

Section 130.1 (a) Exception & 130.1 (c) Exception:

The language for continuously illuminated egress pathways in these sections are conflicting. The first lists 0.2 watts per square foot while the second lists 0.1 watts per square foot. We would support the use of 0.1 watts per square foot to limit the amount of light remaining on when buildings/spaces are unoccupied.

Section 130.3 - Sign Lighting Controls

We recognize and agree with the requirement for dimming by a minimum of 65% for all Outdoor signs ON during both Day & Night however would also extend the language to cover signs located on the interior of the building that present themselves to the exterior through glazing.

130.3,a,2,B notes that the requirement is only for signs that are illuminated during the day and evening. We have found in practice that there are many signs only on during the evening that are far too bright and need the adjustment in the field to reduce their impact and glare to surrounding neighborhoods.

Section 140.6 (a), 4, B – Additional Power for Tunable White & Warm Dim

While we appreciate the recognition of an emerging technology in Tunable White & Warm Dim lighting fixtures, we question the reasoning behind a 0.75 factor when applying against allowed LPD. Our belief is that while this technology is a valuable part of the lighting design toolkit, it should be held to the same regulation as more traditional light sources, even if it has a slightly higher input wattage compared to "static" white LED fixtures. This additional 0.75 factor seems to be driving the market toward that technology and influencing a more expensive solution to owners.

We believe this should be removed all together ensuring the most energy savings while adhering to the energy code standard.

If the language remains, note that 5000K is incorrectly noted as 500K in item ii.

Section 150 (k), 2, H

The removal of this language inhibits the ability to achieve compliance without extensive remodel. In looking at the language removal, we don't believe it to be a cost neutral removal and would end up costing homeowners money. We request that this NOT be deleted.

Section 150 (k), 2, I

This requirement feels like carry-over from past standards in which low-efficacy and high-efficacy sources were mixed. Now with all sources being high-efficacy, this added cost is not believed to render actual payback both financially and respective to energy. We request that this requirement be removed.

Section 150 (k), 2, J

The revised wording seems unnecessary and adds confusion to the requirement. We request that the original wording remain.

Page 3 of 3

Thank you for allowing our team the opportunity to be involved in this critical stage of the code making process as we look to continue leveraging our strong knowledgebase to improve code development. We appreciate our involvement thus far and look forward to our continued successful partnership.

Feel free to contact me directly should you have any questions regarding the submitted comments.

Regards,

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