# DOCKETED

| | |
|---|---|
| **Docket Number:** | 16-BSTD-01 |
| **Project Title:** | 2013 Compliance Option for Nonresidential Lighting Alterations |
| **TN #:** | 211036 |
| **Document Title:** | Stan Walerczyk Comments: On CEC Title 24 Meeting - Why 35%/50% Rule is Unfair |
| **Description:** | N/A |
| **Filer:** | System |
| **Organization:** | Stan Walerczyk |
| **Submitter Role:** | Public |
| **Submission Date:** | 4/13/2016 4:02:10 PM |
| **Docketed Date:** | 4/13/2016 |

*Comment Received From: Stan Walerczyk*
*Submitted On: 4/13/2016*
*Docket Number: 16-BSTD-01*

## On CEC Title 24 Meeting - Why 35%/50% Rule is Unfair

*Additional submitted attachment is included below.*

**From:** Energy - Public Adviser's Office
**Sent:** Wednesday, April 13, 2016 11:13 AM
**To:** Strait, Peter@Energy
**Subject:** FW: April 13, 2016 CEC Title 24 meeting - why 35%/50% rule is unfair

---

**From:** Stan Walerczyk [mailto:stan@lightingwizards.com]
**Sent:** Tuesday, April 12, 2016 4:59 PM
**To:** Energy - Public Adviser's Office
**Subject:** April 13, 2016 CEC Title 24 meeting - why 35%/50% rule is unfair

Mr. Strait

Since my previous email and attachments did not include specific information why the 35%/50% rule is unfair, here it is.

The 35%/50% rule, because blesses end-customers, who have kept junky lighting and penalizes end-customers, who have done good lighting retrofits in the past and want to do re-retrofits now. They usually cannot save 50% wattage without reducing light levels. So why should they have to do deal with the extra Title 24 requirements and costs?

I have two good sized end-customers, who I specified the lighting 8 – 10 years ago and they did retrofits with 1 or 2 3100 lumen 5000K 32W F32T8 lamps, high performance electronic ballasts and either reflectors or just one lamp in each reflective cove of the fixture and sometimes a high performance lens. Others probably did something similar that way or with 28W or 25W F32T8s lamps. Initial LPW out of the fixture, including fixture and lens efficiency and heat losses are often 80 – 90. For LED products to save at least 50% of the wattage and provide equivalent light, they would have to double the efficiency with 160 – 180 LPW out of the fixture. And since high performance fluorescent lamps only lose about 8% of initial lumens at end of rated life and most LED products lose 30% at end of rated life, LED systems should probably provide at least 180 – 200 LPW initially, so there is sufficient light when they get old. As you probably know, currently the most efficient LED troffers and troffer kits are 130 - 140 LPW and they are often more expensive because of extra LEDs being underdriven, and most of them are only 100 – 120 LPW. Even the DLC draft is only calling for minimum 130 LPW for premium grade. I would be okay with 35% or even 40% wattage reductions, because that can be done now.

Stan

***Stan Walerczyk, HCLP, CLEP***
***Principal of Lighting Wizards***
***Vice Chair of Human Centric Lighting Society***
***P.O. Box 532634***
***Kihei, HI 96753***
***808-344-9685***
***stan@lightingwizards.com***
***www.lightingwizards.com***
***http://humancentriclighting.org/***

*When I am in Hawaii, unless an emergency, call no earlier than*
*daylight savings: 10AM Pacific, 11AM Mountain, 12PM Central, 1PM Eastern*
*standard time: 9AM Pacific, 10AM Mountain, 11AM Central, 12PM Eastern*