

## **CODES AND STANDARDS ENHANCEMENT INITIATIVE (CASE)**

# **California Investor Owned Utilities (IOUs) Comments on Revised 15 Day Nonresidential Lighting Retrofit Requirements for 2016 Title 24 Standards**

Nonresidential Lighting Retrofits

## **2016 CALIFORNIA BUILDING ENERGY EFFICIENCY STANDARDS**

November 9, 2015

Docket #:15-BSTD-01 2016 Building Standards Update

Adoption of the Revised 15-Day Lighting Retrofit Language for the 2016 Energy Efficiency Building Standards

California Energy Commission

**DOCKETED**

**15-BSTD-01**

TN # 76332

NOV 09 2015

This comment letter was prepared by the California Statewide Codes and Standards Enhancement (CASE) Program that is funded, in part, by California utility customers under the auspices of the California Public Utilities Commission.

The California Investor Owned Utilities (IOUs) understand the concerns of the lighting retrofit industry about the applicability of the California Energy Commission's (CEC's) current lighting efficiency codes to retrofit work. Since the IOUs are authorized by the California Public Utilities Commission to operate both demand side management codes and standards advocacy and incentive programs, they are also in a unique position to analyze the impacts of changes to the code that might be made to accommodate the industry's concerns.

The IOU Statewide Codes & Standards program supports the Revised 2016 Lighting Alteration Provisions<sup>1</sup> as these revisions increase the energy savings from lighting retrofits relative to the 2013 Title 24 lighting retrofit requirements and address the comments from the lighting retrofit industry. The changes to the lighting retrofits proposal over the last 6 months have transformed a proposal that originally would have eliminated the savings from 2016 standards to one that is now the single largest efficiency measure for the 2016 standard while gaining support from some of the most vocal opponents of the 2013 lighting retrofit requirements. The changes to this proposal are estimated by the CEC to result in an annual increase in savings of 112 GWh/yr as compared to the 2013 Title 24 lighting retrofit requirements. This electricity savings is comparable to the statewide electricity savings in new single family homes for all of the proposed changes in the 2016 Title 24 standards. The CEC staff and all parties participating in the lighting retrofit negotiations should be commended on finding workable solutions that save energy while reducing compliance burden.

Recent improvements to the revised 15 day language that have given us greater confidence in its increased energy savings and enforceability include:

- The proposed alternative compliance method based on wattage reduction more closely reflects utility reporting requirements for lighting retrofit projects namely, reduction in connected watts or kWh/yr savings (when multiplied by deemed operating hours).
- Increasing the required wattage reduction from 35% to 50% in some of the largest occupancies (office, retail, and hotels). The 50% wattage reduction makes it readily apparent that alternate wattage reduction approach is equivalent or more stringent than the "lighting power is  $\leq$  85% of allowance" column in table 141.0-E.
- Dropping the threshold for automatic daylighting controls requirement to 10 luminaires in the daylit zone per room, closely matches 2013 Nonresidential Daylighting CASE report recommended 300 Watt threshold for cost-effective automatic daylighting controls requirements in retrofit situations.<sup>2</sup>

These changes to the 2016 Title 24 nonresidential lighting alteration requirements are greatly improved as compared to the 45 day language proposal. These changes save energy, are more enforceable, more cost-effective, less ambiguous and are more aligned with common retrofit program reporting practices.

This significantly improved nonresidential lighting alterations proposal resulted from:

- developing an objective statewide energy consumption model,
- setting a goal of statewide energy savings and,
- flexibility by most parties in finding a mutually acceptable solution.

---

<sup>1</sup> [http://www.energy.ca.gov/title24/2016standards/rulemaking/documents/15day\\_revised/2015-11-12\\_revised\\_draft\\_15day\\_language.pdf](http://www.energy.ca.gov/title24/2016standards/rulemaking/documents/15day_revised/2015-11-12_revised_draft_15day_language.pdf)

<sup>2</sup> Page 68. California Utilities Statewide Codes and Standards Team. *CASE Report: Nonresidential Daylighting*. October 2011 [http://www.energy.ca.gov/title24/2013standards/prerulemaking/documents/current/Reports/Nonresidential/Lighting\\_Controls\\_Bldg\\_Power/2013\\_CASE\\_NR\\_Daylighting\\_Oct\\_2011.pdf](http://www.energy.ca.gov/title24/2013standards/prerulemaking/documents/current/Reports/Nonresidential/Lighting_Controls_Bldg_Power/2013_CASE_NR_Daylighting_Oct_2011.pdf)


Following adoption, the Statewide IOU Codes & Standards team will provide support to the CEC staff with the implementation of the 2016 Title 24 code. In addition, the IOUs are ready to help the industry with implementing the code through education and tools with the ultimate goal of improving code compliance.

We remain engaged in improving the enforceability and increasing the energy savings for lighting retrofit requirements in the Title 24 standards and we will be supporting compliance enhancement improvements for the 2016 standards and supporting lighting retrofit proposals for the 2019 standards.

Sincerely,



Patrick Eilert  
Manager, Codes and Standards  
Pacific Gas and Electric Company



Sue Kristjansson  
Codes and Standards and ZNE Manager  
Southern California Gas Company



Steven M. Long, P.E.  
Manager, Energy Codes & Standards  
DSM Engineering  
Southern California Edison



Chip Fox  
Codes and Standards and ZNE Planning  
Manager  
San Diego Gas and Electric Company