

DOCKETED

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Description:	Staff Supplement to CASE Report #2019-NR-LIGHT4-F by Simon Lee.
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Staff Supplement to CASE Report #2019-NR-LIGHT4-F

Date: 12/19/2017

Pages: 2

Author: Simon Lee

Subject: Nonresidential Indoor Controls, 2019-NR-LIGHT4-F

DESCRIPTION OF PROPOSED REGULATORY CHANGES

CASE report #2019-NR-LIGHT4-F, titled Nonresidential Indoor Controls, proposes to make the following changes to the Standards:

This report includes three mandatory measures related to nonresidential indoor lighting controls plus code language cleanup, as summarized in the following bullet items.

1. The “Daylight Dimming plus OFF Controls” measure proposes to require nonresidential automatic daylight dimming controls to include the OFF control step to align with ASHRAE 90.1-2016. The daylight dimming plus OFF Control measure is proposed to be mandatory and apply to the luminaires in the primary sidelit daylit zone and skylit daylit zone. The prescriptive approach for new construction and nonresidential lighting alteration projects would require luminaires in the secondary sidelit daylit zone, in addition to the primary sidelit daylit zone and skylit daylit zone, to have the daylight dimming plus OFF control step. This measure also proposed to update the existing Title 24, Part 6 Power Adjustment Factor (PAF) for daylight dimming plus OFF controls to apply only to areas that are proposed to be exempt in Section 130.1(d)2C.
2. The “Occupant Sensing Controls in Restrooms” measure proposes mandatory occupant sensing full OFF controls in nonresidential restroom to align with ASHRAE 90.1-2016.
3. The “Manual On Time-Switch” measure propose that automatic time-switch be commissioned as manual ON.
4. Nonresidential Indoor Lighting Code Language Cleanup and Alignment with ASHRAE 90.1-2016. A new section is proposed to clarify the code with respect to the sequence of operation when multiple controls are installed that control the same lighting system.

Staff does not agree with the proposed Item #1, “Daylight Dimming Plus Controls”.

Staff agrees with the proposed Item #2, “Occupant Sensing Controls in Restrooms” to Section 130.1(c)3, and have incorporated substantively similar changes into the proposed Express Terms.

Staff agrees with the proposed Item #3, “Manual On Time-Switch” to Reference Appendix NA7.6.2.5, and have incorporated substantively similar changes into the proposed Express Terms.

Staff agrees with the proposed Item #4 to clarify the sequence of operation of two lighting controls are installed to control the same lighting system, and have incorporated substantively similar changes into the proposed Express Terms.

STAFF ANALYSIS AND CONCLUSION

Staff has analyzed the submitted CASE report and reached the following conclusions for the measure included in the Express Terms about the Occupant Sensing Controls in Restrooms:

- Based on the evidence presented in the CASE Report, the measure listed as #2 and #3, as proposed, appear to be cost effective and the author appears to have appropriately followed the Energy Commission’s Life Cycle Cost methodology.
- Measure costs premiums presented in the CASE Report appear reasonable and appropriate for the measure proposed.
- Measure energy savings presented in the CASE Report appear to have been appropriately modeled and appear credible.