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Additional submitted attachment is included below.

July 14, 2017

Submitted via website: <https://efiling.energy.ca.gov/EComment/EComment.aspx?docketnumber=17-BSTD-01>

Mr. Andrew McAllister
Commissioner
California Energy Commission
1516 Ninth Street
Sacramento, California 95814

Docket No.: 17-BSTD-01

Philips Lighting Comments on the Draft CASE Report (June 2017) NR Indoor Controls for the 2019 California Building Energy Efficiency Standards, California Code of Regulations, Title 24, Part 6

Dear Commissioner McAllister,

Philips Lighting appreciates the opportunity to provide the attached comments on the Draft CASE Reports of June 2017 for the Nonresidential Lighting provisions of the 2019 California Building Energy Efficiency Standards California Code of Regulations, Title 24, Part 6. We also send our thanks to the California Energy Commission and recognize the CEC's efforts as well as that of the CA IOUs and consultants to involve industry in the development of the CASE Reports.

Philips Lighting is a global leader in lighting products, systems and services. Our understanding of how lighting positively affects people coupled with our deep technological know-how enable us to deliver digital lighting innovations that unlock new business value, deliver rich user experiences and help to improve lives. Serving professional and consumer markets, we sell more energy efficient LED lighting than any other company. We lead the industry in connected lighting systems and services, leveraging the Internet of Things to take light beyond illumination and transform homes, buildings and urban spaces.

Please contact me if you have any questions about these comments.

Sincerely,



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Proposed changes to Section 130.1(c)1.C – Shut-off Control

We support the proposal to change the zone limit for shut-off control from a square footage limit of 5,000 sf to a wattage limit of 3,000 watts for most spaces and 15,000 watts for malls, auditoriums, single tenant retail, industrial, convention centers, and arenas. We agree with the Statewide CASE Team's findings that this modification would add clarification to the code and make compliance and enforcement significantly easier for designers and building owners completing both new construction and retrofit projects.

Proposal to require commissioning of automatic time-switch controls in Manual-ON mode

We support the proposal for automatic time-switch controls to be commissioned in manual-ON mode. However, the proposed language for Section 130.1(c)3C. indicates something entirely different; that automatic time-switch controls should *operate in manual-ON mode*. This is not an appropriate mode of operation for an automatic time-switch control, which is a schedule-based control, not an occupancy-based control.

We propose that Section 130.1(c)3.C. "automatic time-switch shall be configured to operate in manual-ON mode¹. Lighting shall not turn on until area controls are manually activated" be removed from the proposal in its entirety. The proposed language to commission automatic time-switch controls in manual-ON mode should be proposed for the appropriate sections of the Reference Appendices and Compliance Manuals. If our understanding is incorrect and this proposed language is intended for Section 130.1(c)3.C, we would appreciate if the Statewide CASE Team could clarify the rationale for it.

3. If an automatic time-switch control, other than an occupant sensing control, is installed to comply with Section 130.1(c)1, it shall incorporate all of the following features: an override lighting control that
- A. Each space shall have an area control that complies with Section 130.1(a) and is capable of turning lights OFF; and
 - B. Allows Area controls are capable of initiating a timed override of the time-switch control. When the area control turns lights ON during normally unoccupied periods, the lighting to shall remain ON for no more than 2 hours when after an override is initiated; and
 - C. Automatic time-switch shall be configured to operate in manual-ON mode. Lights shall not turn on until area controls are manually activated.
- EXCEPTION to Section 130.1(c)3B: In the following function areas, the override time may exceed 2 hours: Malls, auditoriums, single tenant retail, industrial, and arenas where captive-key override is utilized.
- EXCEPTION to Section 130.1(c)3C: Automatic ON time-switch control is allowed in the following function spaces: industrial, single tenant retail, malls, auditoriums, concourses, lobbies and other areas open to the general public.
- 4D. If an automatic time-switch control, other than an occupant sensing control, is installed to comply with Section 130.1(c)1, it shall incorporate an automatic holiday "shut-OFF" feature that turns OFF all loads for at least 24 hours, and then resumes the normally scheduled operation.
- EXCEPTION to Section 130.1(c)4 3D: In retail stores and associated malls, restaurants, grocery stores, churches, and theaters, the automatic time-switch control is not required to incorporate an automatic holiday shut-OFF feature.

¹ CASE Report, pg. 59

Proposal to remove the requirement to provide a reasonable uniform level of illuminance in accordance with Table 130.1-A from Section 130.1(c)7.C Shut-off Control in Parking Garage and Section 130.1(e) Demand Responsive Controls

We are concerned about the removal of the requirement to provide a reasonable uniform level of illuminance in accordance with Table 130.1-A.

We oppose the removal of this language because providing a reasonably uniform level of illuminance supports good lighting practice and positive perception of occupancy safety, which is of paramount concern in parking garages. We believe the code should continue to promote lighting reduction to satisfy demand response requirements that are comfortable to the occupants in all spaces, especially offices and other "front of house" spaces.

Proposal to add Section 130.1(f) Controls Coordination

We appreciate the Statewide CASE Team's intent with this proposal – to protect the energy savings of The Building Energy Efficiency Standards and clarify the controls requirements for all users of the code.

However we oppose the idea that The Building Energy Efficiency Standards can predict all behaviors and needs of people and as a result, does not recognize any instance where the occupant may have need to override the lighting controls to raise the light level. We believe the code is not predictive of human behavior and a user should have the ability to override the automatic controls for a short time period for any reason; Technology is not perfect, nor will it ever be.

In 2020, connected, integrated, and dynamic systems will be more widespread and as with any innovation, there will be learning necessary and time needed to ensure the optimally desired operation. Therefore, we suggest that language allowing a user to increase the light level for a period of no longer than 30 minutes be added to Section 130.1(f). We believe the short time duration will satisfy the true need while limiting abuse of this exception.

Thank you for your consideration of Philips Lighting Comments on the Draft CASE Report (June 2017) NR Indoor Controls for the 2019 California Building Energy Efficiency Standards, California Code of Regulations, Title 24, Part 6.