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Opposition to proposed code change - Exception 4 to Section 130,2(c)3

Additional submitted attachment is included below.



June 1, 2021

RE: EXCEPTION 4 to Section 130.2(c)3, 2022 Nonresidential Building Energy Efficiency Standards

The newly proposed exception to Section 130.2(c)3 for parking lot lighting that eliminates occupancy-based controls requirements should be removed.

EXCEPTION 4 to Section 130.2(c)3: For parking lots, luminaires with a maximum rated wattage of 78 watts each are not required to have motion sensing controls.

The proposed increased wattage allowance on parking lot, single-pole lighting of 78 watts each [or less]¹ is a step backwards. California needs to be moving in the opposite direction towards occupancy-based control requirements for reduced wattage luminaires and luminaires mounted at 24' or more.

The proposed threshold increase will result in a significant increase in nighttime energy use and light pollution with related circadian disruption. On a practical basis, today most single-pole (less than 24 feet) parking lot luminaires use wattages of 80W or less, which makes 78W threshold completely unrealistic in terms of generating energy savings. This exception would essentially eliminate the use of sensors for all new and retrofitted parking lots in California.

Nearly 10 years ago, 30 W was demonstrated to be cost-effective and documented as such in the docketed IOU CASE report prepared to support the 2013 Energy Standards update. At that time, sensors and controls were much more expensive. Today, even with reduced outdoor power allowances, the cost of controls is so inexpensive that the cost-effectiveness of the occupancy control measure remains valid. Additionally, work completed by the CEC in collaboration with CLTC for the 2019 Energy Standards code cycle, demonstrated that this threshold remained valid. As such, for the 2019 Energy Standards update, the CEC reduced the wattage exception to 40W. Now the Energy Commission is reversing this good work and sacrificing energy savings, community's night skies, citizen health and public safety. There's no reason that any typical wattage parking luminaire should be left on at 100 percent in an empty parking lot. Relying on scheduling controls only that may or may not be activated/maintained would present serious safety and liability issues.

¹ The current 45-day language for this exception does not include the words "or less"; however, this additional wording is assumed to be the intent and included here for completeness.



At a minimum, the existing 40 watt exception for Section 130.2(c)3 should be maintained. At best, California needs to lead efforts to further reduce the threshold to 30 watts or even remove the exception all together. Occupancy-based controls, and fixture-integrated occupancy controls in particular, are widely available, inexpensive, and will deliver increased savings to the state of California, while also reducing light pollution and circadian disruption.