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Stairwell exemption

Respectively the exemption for shut controls in stairwells should be removed

Â§130.1(c) â€“ Exception 6 to Â§130.1(c)1 â€“ Shut Off Controls for Egress Stairwells

Lighting in stairways provided that the stairway is designated for means of egress on the plans and specifications submitted to the enforcement agency under Section 10-103(a)2 of Part 1.

Bi-level controls for stairwells should be maintained in the California building code.

We were surprised to see this exemption for automatic shut off that effectively removes sensor-based control systems for this application.

Bi-level sensor-based stairwell lighting systems have proven to provide significant energy savings, cost effectively in many building types across California. Previous research conducted at the California Lighting Technology Center clearly demonstrated 50% + savings with a very high level of reliability. Many universities and colleges across California have implemented this highly cost-effective approach to save energy and have not reported any issues related to inadequate illumination.

Bi-level to 50% is more than adequate to maintain safety egress light levels and we have yet to see any safety or related issues in all of the college deployments. Since our original research, statewide demonstrations, and the subsequent title 24, the lighting industry has broadly adopted this bi-level sensor based technology and many commercial systems are available in the marketplace.

The original research on this was funded by the California Energy Commission - PIER program and was one of the first projects that Art Rosenfeld asked us to pursue ~2001 as an opportunity to reduce the amount of wasted energy inside buildings during vacancy. These original studies showed that stairwells are typically unoccupied yet fully illuminated for very long periods of time making this bi-level lighting approach a particularly attractive strategy. This is now becoming an urgent priority given the significant savings opportunity during evening hours with the potential of addressing the emergent duck curve issue. Technologies and approaches like Bi-level stairwell lighting that provide large savings during the evening hours should be considered a very high priority for the Energy Commission.

If California is to address climate change through greenhouse gas mitigation we need to

be more aggressive at encouraging deep energy savings. Please consider restoring the bi-level automatic shut off for stairwells.

Michael Siminovitch, The Arthur H. Rosenfeld Chair
Director, California Lighting Technology Center
Professor, University of California Davis