Proposal Summary



2022 California Energy Code (Title 24, Part 6)

Outdoor Sources – Nonresidential Lighting Zone Reclassification

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Introduction

The document summarizes proposed revisions to the California Energy Code (Title 24, Part 6) that will be discussed during a utility-sponsored stakeholder meeting on September 5, 2019. The Statewide Utility Codes and Standards Enhancement (CASE) Team is seeking input and feedback. To provide your comments, email <u>info@title24stakeholders.com</u> by September 19, 2019.

Measure Description

This measure would modify the outdoor lighting zone (LZ) classifications so they would be based on land use (rural, suburban, and downtown areas) instead of population. This change would result in energy savings throughout the state. At present, 90 percent of California nonresidential outdoor lighting is classified as Illuminating Engineering Society (IES) LZ 3, which is used to describe city centers. Many of the areas that are currently classified as LZ 3 could be reclassified as either LZ 1 (rural area) or LZ 2 (suburban area). If a repeatable, unambiguous method of determining outdoor LZs can be developed that results in a more accurate classification per the IES LZs definitions, the state could realize energy savings and benefit from reduced light pollution. The Statewide CASE Team may rely on a region's zoning designations to determine new LZs but will investigate the best approach.

Draft Code Language

The proposed changes to the Standards and Reference Appendices are provided below. Changes to the 2019 documents are marked with red <u>underlining</u> (new language) and strikethroughs (deletions). Expected sections or tables of the proposed code (but not specific changes at this time) are highlighted in yellow.

Standards

TABLE 10-114-A LIGHTING ZONE CHARACTERISTICS AND RULES FOR AMENDMENTS BY LOCAL JURISDICTIONS











Zone	Ambient Illumination	State wide Default Location	Moving Up to Higher Zones	Moving Down to Lower Zones
LZ0	Very Low	Undeveloped areas of government designated parks, recreation areas, and wildlife preserves.	Undeveloped areas of government designated parks, recreation areas, and wildlife preserves can be designated as LZ1 or LZ2 if they are contained within such a zone.	Not applicable
LZI	Low	Single or dual family residential areas, parks, and agricultural zone districts, developed portion of government designated parks, recreation areas, and wildlife preserves. Those that are wholly contained within a higher lighting zone may be considered by the local government as part of that lighting zone.	Business parks located in a residential neighborhoods and rural town centers, as defined by the 2010 U.S. Census, can be designated as LZ2 if they have high anticipating of nighttime use. Developed portion of a government designated park, recreation area, or wildlife preserve, can be designated as LZ2 or LZ3 if they are contained within such a zone.	Not applicable.
LZ2	Moderate	Multi-family housing, mixed use residential neighborhoods, and light commercial business districts or industrial zoning districts. Rural areas, as defined by the 2010 U.S. Census.	Special districts within a default LZ2 zone may be designated as LZ3 or LZ4 by a local jurisdiction. Examples include special commercial districts or areas with special security considerations located within a <u>mixed use</u> <u>residential rural</u> area.	Special districts and government designated parks within a default LZ2 zone maybe designated as LZ1 by the local jurisdiction for lower illumination standards, without any size limits.
LZ3	Moderately High	High intensity commercial corridors, entertainment centers, heavy industrial or manufacturing zone districts. Urban areas, as defined by the 2010 U.S. Census.	Special districts within a default LZ3 may be designated as a LZ4 by local jurisdiction for high intensity nighttime use, such as entertainment or commercial districts or areas with special security considerations requiring very high light levels.	Special districts and government designated parks within a default LZ3 zone may be designated as LZ1 or LZ2 by the local jurisdiction, without any size limits.
LZ4	High	None.	Not applicable.	Not applicable.

NOTE: Authority: Sections 25402 and 25402.1, Public Resources Code. Reference: Sections 25007, 25008, 25218.5, 25310, 25402, 25402.1, 25402.4, 25402.5, 25402.8, and 25943, Public Resources Code.