

DOCKETED

Docket Number:	25-BSTD-03
Project Title:	2028 Energy Code Pre-Rulemaking.
TN #:	268178
Document Title:	NEMA High Performance Buildings Codes & Standards Review Committee Inputs to CASE Team
Description:	N/A
Filer:	Alexander Baker
Organization:	National Electrical Manufacturers Association
Submitter Role:	Public
Submission Date:	1/7/2026 8:51:22 AM
Docketed Date:	1/7/2026



1812 N. Moore Street, Suite 2200
Arlington, VA 22209



703.841.3200

01.05.2026

Yao-Jung Wen, PhD
Engineering Fellow
Energy Solutions
449 15th Street, Suite 400
Oakland, CA 94612

Dear Yao-Jung,

The National Electrical Manufacturers Association (NEMA) represents over 300 electrical equipment manufacturers that make safe, reliable, and efficient products and technologies that power, connect, and light our world. Together, our members contribute a full 1% of U.S. GDP and directly provide over 580,000 American jobs, adding more than \$330 billion to the U.S. economy. Learn more at makeitelectric.org.

NEMA's High Performance Buildings Codes and Standards Review Committee carefully reviewed the CASE team's 16 June 2025 Proposal Summary for indoor lighting controls and developed the inputs on the following pages for the team's consideration. We look forward to your feedback and/or questions; please contact me at alex.baker@nema.org.

Regards,

A handwritten signature in black ink, appearing to read "Alex Baker".

Alex Baker
Director, Regulatory & Industry Affairs

Item 1: Require nighttime dimming in parking garage daylight adaptation zones.

NEMA comments:

1. Parking garage vehicular entry/exit eye adaptation area supplemental lighting control can improve the efficiency and application of the Title 24 standard. Other energy efficiency codes and standards address these adaptation areas for efficiency and to maintain safety for eye adaptation at parking garage entrances and exits.
2. Not all parking garage vehicular entries/exits are designed with supplemental lighting for eye adaptation. Title 24 requirements should be structured so parking garages without eye adaptation supplemental lighting at vehicular entries and exists cannot access or utilize the eye adaptation supplemental lighting power in areas without eye adaptation supplemental lighting.
3. Parking garage vehicular entries/exits eye adaptation area illumination has specific recommended practices which should be followed for safety and adequate eye adaptation. The provision should align illumination levels, and the area controlled with ANSI/IES RP-8, Recommended Practice: Lighting Roadway and Parking Facilities, Chapter 17 – Parking Lots and Parking Garages.
4. The illumination level in garage eye adaptation areas during nighttime (non-adapted) hours should be as recommended by ANSI/IES RP-8.
5. Daylight responsive control of lighting in the parking garage should be exempt in the vehicular entry/exit eye adaptation areas as its operation is counter to the visual adaptation needs of vehicular entries and exits.
6. It is recommended that the Title 24 standard aligns with other codes and standards to simplify compliance and usage by practitioners.

Item 2: Require partial or full OFF occupant sensing controls in more spaces.

NEMA comments:

1. NEMA is supportive of this proposed change.

Item 3: Reduce occupant sensing control time delay to 15 minutes.

NEMA comments:

1. NEMA supports reducing occupant sensing control time delay to 15 minutes to gain additional efficiency with lighting reduction and shut-off control. This will also align with recent changes in ANSI/ASHRAE/IES 90.1 and proposed changes pending for the 2027 IECC.
2. Many lighting control manufacturers ship occupancy sensor products with a default time delay set at 15 minutes. Since the time delay is typically a configurable setting in occupancy sensor products, products not set to 15 minutes as a default can be changed to this timing at the factory or in the field.
3. Occupancy sensor-based control is also used for Occupant Sensor Ventilation Control Devices in T24 120.1 (d) 5 (occupied-standby mode) and Controlled Receptacles in T24 130.5 (d) provisions. Occupancy sensor time delays for those requirements should also align with the 15-minute time delay change.

Item 4: Clarify the definition and reduce the threshold for requiring multilevel lighting controls.

NEMA comments:

1. NEMA recommends that changes to this provision emphasize the use of manual dimming controls. This is clearer than the “multilevel” term, which could just be the capability of a luminaire to dim (which nowadays nearly all luminaires are capable of continuous dimming). The manual control of lighting by users provide energy efficiency savings as lighting is manually controlled to a desired level.
2. The threshold should be 0.4 W/sf (including equal to 0.4 W/sf), so it captures all the key spaces where manual dimming control make sense. In the proposed language (see below suggested changes) is added exceptions for spaces that meet the 0.4 W/sf threshold but didn’t make sense to require manual dimming control (see exception 2).
3. The healthcare facilities exception is too broad. There are many spaces within healthcare spaces where manual dimming control makes sense like nurse’s stations, patient rooms, and recovery rooms.
4. Exception 4: There is no longer a need for the HID language. NEMA proposes an exception to allow for keypads or preset scene controls to also comply even if they don’t have raise/lower buttons for the lighting.

Recommended mark-up & strike out changes: Title 24 Part 6 Section 130.1(b)

- b) Manual dimmer controls.** The general lighting of any space with a connected lighting load greater than or equal to 0.4 watts per square foot shall be provided with manual dimmer controls. The dimmer controls shall provide and enable continuous dimming from 100 percent to 10 percent or lower of lighting power.

Exception 1 to Section 130.1(b): An indoor space that has only one luminaire.

Exception 2 to Section 130.1(b): Restrooms, stairwells, corridors, electrical, mechanical, telephone rooms, locker rooms, and storage rooms.

Exception 4 to Section 130.1(b): Scene controls that provide presets within the continuous dimming range.

Item 5: Require continuous dimming for daylight responsive controls regardless of the lighting code Section 130.1(b) multilevel lighting controls exception.

NEMA comments:

1. Most interior lighting daylight responsive controls today are already using continuous dimming. LED lighting is much more controllable than previous lighting technologies. Continuous dimming daylight responsive control is a less expensive, simpler to implement, and visually less obtrusive for space occupants.
2. Providing the capability to override daylight responsive controlled lighting should be permissible (but not mandated), provides controllability of the lighting for the users. Not being able to raise lighting levels can be unexpected and frustrating to space occupants. However, any daylight responsive lighting override should automatically revert to automatic responsive control after an

operational cycle of the space's schedule, not more than 24 h, or based on a detected occupied /unoccupied change in the space.