



An **AEP** Company

BOUNDLESS ENERGY™

PSO Business Rebates

New Construction Lighting Technical Requirements

General

- Rebates for new construction lighting are available for reducing the lighting power density (LPD), watts per square foot, from the baseline lighting design that complies with ASHRAE/IESNA 90.1–2004 Interior Lighting Power Allowance.
- Wattage reduction may be calculated on a space-by-space or building-area basis. To qualify for new construction lighting rebates, projects must have an installed LPD that is at least 20 percent less than what the code requires.
- Rebates also are available for qualifying lighting controls, including occupancy controls and daylight dimming controls.

Project Requirements

- Must be a new construction project or, on a case-by-case basis, an extensive/substantial renovation project that consists of the installation of new fixtures throughout the building or renovated spaces.
- Must provide maintained lighting levels in accordance with IESNA recommendations.
- Must provide high-quality lighting achieving appropriate levels of glare control, color rendering, lighting uniformity, and other lighting quality parameters.

Technical Requirements

- High-performance and reduced-wattage T8 lamps and ballasts must be specified if T8 systems are being installed. A current list of qualifying products is available at the [Consortium for Energy Efficiency \(CEE\)](#) website.
- LED luminaires must be listed on the [Design Lights Consortium \(DLC\)](#) or [ENERGY STAR® Qualified Products List](#).

Required Supporting Documentation

- [COMcheck](#) or equivalent document listing equipment model numbers, wattages, and quantities.
- Lighting layout and schedule.
- Manufacturer's specification sheets for all equipment specified.
- New construction lighting worksheet.

Note: PSO reserves the right to require submission of site-specific photometric reports and/or point-by-point lighting calculations for each significant space type.



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New Construction Interior Lighting

New Construction Interior Lighting Calculation Instructions

Projects must have an installed LPD that is at least 20% less than ASHRAE/IESNA 90.1–2004 Interior Lighting Power Allowance baseline LPDs to qualify for new construction lighting rebates. ASHRAE/IESNA LPD reference tables are provided on the new construction lighting worksheet.

Step 1: Select Calculation Method

- Building Area Method:
 - To be used for projects involving the entire building or projects involving a single, independent, and separate occupancy in a multi-occupancy building.
 - All lighting in the building or separate occupancy must be included in the calculations.
- Space-by-Space Method:
 - To be used for projects involving a portion of a building or as an alternative to the building area method for those buildings involving multiple space types.

Step 2: Determine Building or Space Type Information

- Determine square footage of building or space types being considered for this application.
- Determine total lighting wattage for the building or space type.

Step 3: Complete New Construction Lighting Worksheet

- The [New Construction Lighting Worksheet](#) must be completed to calculate the rebates using one of the methods described in Step 1. To be considered for a rebate, an electronic copy of the worksheet (.xls) must be completed and submitted with each application.

New Construction Interior Lighting Rebates			
Measure Code	Upgrade Requirement	Rebate/Watt Reduced	Technical Requirements
Tier 1	> 20% below Base LPD	\$0.20 per watt*	<ul style="list-style-type: none"> • This application can be used for either new construction or major renovation projects. • All performance lighting calculations must be performed using the New Construction Lighting Worksheet found on the PSO website. *Subject to a \$45/fixture cap



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Interior Lighting Controls

Interior Lighting Controls Eligibility and Technical Requirements

- Rebates are also available for new construction projects involving the installation of qualifying lighting controls. Lighting control installations required by applicable state and local energy codes are not eligible for rebates.
- Applicants must claim controls rebates using the new construction lighting worksheet. The following table describes available new construction lighting controls rebates.

Interior Lighting Control Rebates				
Measure Code	Proposed Upgrade	Min. Watts Controlled	Rebate/ Unit	Technical Requirements
81	Occupancy Control – Wall Switch Replacement	40	\$9/ Control	<ul style="list-style-type: none"> • Hardwired wall switch occupancy control; passive infrared, ultrasonic or dual technology • Residential grade controls or those with manual on override capability are not eligible
82	Occupancy Control – Ceiling/Wall Mount	119	\$15/ Control	<ul style="list-style-type: none"> • Hardwired, wireless ceiling or wall-mounted remote occupancy control; passive infrared, ultrasonic or dual technology
83	Occupancy Control – Fixture Mounted	40	\$15/ Control	<ul style="list-style-type: none"> • Hardwired fixture-mounted occupancy controls; passive infrared, ultrasonic or dual technology • Controls may be furnished as new equipment by fixture manufacturer or installed on existing fixture(s) as a retrofit measure



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Exterior LED Lighting

Exterior LED Lighting Eligibility and Technical Requirements

- Rebates are also available for new construction projects involving the installation of exterior LED fixtures. Non-LED exterior fixtures are not eligible for rebates.
- LED luminaires must be listed on the [Design Lights Consortium \(DLC\)](#) or [ENERGY STAR Qualified Products List](#).
- Applicants must claim exterior LED lighting rebates using the new construction lighting worksheet. The following table describes available new construction exterior LED lighting rebates.

Exterior LED Lighting Rebates			
Measure Code	Proposed Upgrade	Rebate / Unit	Technical Requirements
211	Install LED Fixture (<40 Watts)	\$5 / Fixture	<ul style="list-style-type: none"> • Exterior LED fixtures installed as part of a new construction or major renovation project. • LED luminaires must be listed on the Design Lights Consortium (DLC) or ENERGY STAR Qualified Products List.
212	Install LED Fixture (41-65 Watts)	\$10 / Fixture	
213	Install LED Fixture (66-100 Watts)	\$15 / Fixture	
214	Install LED Fixture (101-150 Watts)	\$20 / Fixture	
215	Install LED Fixture (151-250 Watts)	\$35 / Fixture	
216	Install LED Fixture (251-350 Watts)	\$50 / Fixture	
217	Install LED Fixture (351-700 Watts)	\$100 / Fixture	
Tier 1	> 20% below Base LPD	\$0.03 /KWh reduced	<ul style="list-style-type: none"> • This application can be used for either new construction or major renovation projects.
Tier 2	> 30% below Base LPD	\$0.04/Kwh reduced	<ul style="list-style-type: none"> • All performance lighting calculations must be performed using the New Construction Lighting Worksheet found on the PSO website. • *Subject to a \$45/fixture cap

Ready to submit an application? Click [here](#) to begin.