Outdoor Lighting for Parking lots

Overview

This measure provides incentives for energy efficient lighting designs and installations that provide lighting to uncovered outdoor parking lots. The Outdoor Lighting Standards conserve energy, reduce winter peak electric demand, and are technically feasible and cost effective. They set minimum control requirements, maximum allowable power levels, minimum efficacy requirements, and require cutoff classification for large luminaires. Title 24 standards do not allow trade-offs between outdoor lighting power allowances and indoor lighting, sign lighting, HVAC, building envelope, or water heating. The allowable lighting power for both general site illumination and specific applications are based on four separate outdoor Lighting Zones. The Lighting Zones characterize ambient lighting in the surrounding areas.

Eligibility

The uncovered outdoor parking lot lighting design shall be in compliance with the 2008 Non residential compliance manual, chapter 6 and have an overall lighting power density (LPD) of .08 watts per square foot or less.

Outdoor Lighting Applications Not Included

Excluded from this measure are all other outdoor lighting applications that do not provide lighting to outdoor uncovered parking lots. Excluded areas and applications include but are not limited to:

- non parking hardscape areas to include:
  - Sidewalk(s), walkway(s), bikeway(s), plaza(s), and other improved area(s) that are illuminated.
- Other excluded applications are:
  - Temporary lighting;
  - Lighting for building entrances, sales and non-sales canopies;
  - Lighting for all outdoor sales areas; and
  - Lighting for buildings.

See the 2008 Non Residential Compliance Manual section 6.1.2 B for an expanded list of excluded applications.

Incentives

Eligible projects will receive an incentive based on a Systems Approach. Projects will be signed up and processed in the same fashion as Savings by Design has processed Whole Building Projects with accompanying parking garages in the past. For Outdoor Lighting for Parking Lots the incentive will be bifurcated and paid as follows:

1. All eligible projects shall receive a $1,500 minimum incentive
2. All eligible projects exceeding this minimum incentive will with an overall lighting power density (LPD) of .08 watts per square foot or less shall receive a flat incentive of $.08 per square foot of defined uncovered outdoor parking lot area.
3. The total incentive will be the greater of 1 or 2 and not added together.
**Example 1**

100’ x 100’ parking area with an overall lighting power density of .08 watts/sf. This project meets the minimum lighting requirements for an incentive.

<table>
<thead>
<tr>
<th>Minimum incentive</th>
<th>$1,500</th>
</tr>
</thead>
<tbody>
<tr>
<td>100’ x 100’ = 10,000 sf x $.08/sf =</td>
<td>$800</td>
</tr>
</tbody>
</table>

**Total incentive** $1,500

*Since this calculated amount is less than the minimum incentive amount, the total incentive awarded this project would be $1,500.*

**Example 2**

200’ x 100’ parking area with an overall lighting power density of .08 watts/sf. This project meets the minimum lighting requirements for an incentive.

<table>
<thead>
<tr>
<th>Minimum incentive</th>
<th>$1,500</th>
</tr>
</thead>
<tbody>
<tr>
<td>200’ x 100’ = 20,000 sf x $.08/sf =</td>
<td>$1,600</td>
</tr>
</tbody>
</table>

**Total incentive** $1,600

*Since this calculated amount is greater than the minimum incentive amount, the total incentive awarded this project would be $1,600.*