



# Lighting Efficiency

**CUE Exchange  
October 2008**

# Overview

- **Prescriptive Rebates**
  - Retrofit
  - New Construction
  - Prescriptive High-bay Changes (2008)
- **Parking Garage Lighting**
- **Custom Efficiency**
- **Lighting Redesign**
- **Measurement and Verification**

# Lighting Efficiency Retrofit Rebates

Equipment	Rebate
Fluorescent T8 or Super T8 lamps with electronic ballasts	\$5.00 - \$18.00
Fluorescent T5 lamps with electronic ballasts	\$5.00 - \$16.00
High-bay fluorescent T8, T8VHO or T5HO lamps with electronic ballasts	\$50.00 – 125.00
Hardwired and modular CFL fixtures	\$8.00 - \$24.00
Low-wattage T8 Lamps (25w or 28w)	\$0.50/lamp
Metal halide and high pressure sodium fixtures	\$17.00 - \$45.00
Pulse-start metal halide fixtures	\$25.00 - \$65.00
Occupancy sensors and photocells	\$12.00 - \$36.00
LED exit signs	\$6.00

# Lighting Efficiency Retrofit Rebates

Equipment	Rebate
Premium Efficiency Ballasts	\$1.50/ballast
Delamping	\$8.00/fixture
Parking Garage Lighting (replace 150W or 175W HID)*	\$30.00/fixture

\*See application for technologies that qualify for these rebates.

# Lighting Efficiency New Construction Rebates

Equipment	Rebate
Fluorescent Super T8 lamps with electronic ballasts	\$1.75 - \$2.25
Fluorescent T5 lamps with electronic ballasts	\$2.00 - \$2.50
High-bay fluorescent T8, T8VHO and T5HO lamps with electronic ballasts	\$12.00 - \$50.00
Hardwired CFL fixtures	\$3.00 - \$8.00
Metal halide and high pressure sodium fixtures (150w or less)	\$6.00
Pulse-start metal halide fixtures	\$6.00 - \$18.00

# Prescriptive Rebate Requirements

- **Indoor lighting only**
- **Overall wattage reduction**
- **One-to-one retrofits or quantity of fixtures installed**
- **Rebate applications must be submitted within 12 months of invoice date**
- **Rebate cannot exceed 50 percent of the project cost (equipment and labor)**

# High-bay Rebates Prior to March 10 - (Retrofit)

<b>Existing</b> <b>(What was removed?)</b>	<b>Proposed</b> <b>(What was installed?)</b>
<b>400W (mercury vapor, high pressure sodium, metal halide or pulse-start metal halide fixtures)</b>	<b>4 ft. 6 - 8 lamp T8 system, or 4 ft. or less T5HO 4 - 6 lamp system</b>
<b>1000W HID system</b>	<b>4 ft. 12 - 18 lamp T8 system, or 4 ft. or less T5HO 8 - 14 lamp system</b>

# High-bay Rebates After March 10 – (Retrofit)

<b>Existing</b> <b>(What was removed?)</b>	<b>Proposed</b> <b>(What was installed?)</b>
<b>250W HID (mercury vapor, high pressure sodium, metal halide or pulse-start metal halide fixtures)</b>	<b>High-bay fluorescent 2-lamp T5HO 3-lamp T5HO 4-lamp T8</b>
<b>310-400W HID</b>	<b>High-bay fluorescent 3-lamp T8VHO 4-lamp T5HO 6-lamp T8 or T5HO 8-lamp T8</b>

# High-bay Rebates After March 10 – (Retrofit)

Existing (What was removed?)	Proposed (What was installed?)
750W HID	High-bay fluorescent 6-lamp T8VHO 8-lamp T5HO 12-lamp T8 16-lamp T8
1000W HID	High-bay fluorescent 8-lamp T8VHO 10-lamp T5HO 18-lamp T8 20-lamp T8

# Parking Garage Lighting

- **\$30 per fixture**
- **Separate application for parking garage lighting only**
- **Qualifying fixture sizes include:**
  - **4 ft., 2 & 3-lamp high-bay T8 and T5HO systems**
- **New total fixture wattage must be less than the existing fixture wattage**
- **Performance criteria requirements include:**
  - **Facility lighting must be on 24/7**
  - **Underground or semi-enclosed existing facility**
  - **Existing equipment must be 150W or 175W HID**

# Custom Efficiency

- **Provides incentives for lighting projects not covered by the prescriptive program**
  - **Examples**
    - **Retrofit is not “one-for-one” by fixture**
    - **LED, induction, day lighting**
    - **Not found on prescriptive application**
  - **Xcel Energy preapproval required prior to order or purchase of equipment**
  - **Promotion – Increase rebate up to \$400/kW saved for all custom projects.**
    - **Promotion available between April 15<sup>th</sup> and December 31<sup>st</sup>, 2008**

## Lighting Redesign

- **Program launched April 15<sup>th</sup>, 2008**
- **Study determines proper lighting levels in over-lit or mis-lit facilities**
- **Lighting levels in many older facilities can be four times higher than needed**
- **Available to existing facilities**
- **Preapproval is required**

# Lighting Redesign

- **Study**
  - **Funding for up to 50 percent of the cost of a lighting redesign study, not to exceed \$15,000**
- **Implementation**
  - **Customers can earn rebates up to \$400/kW saved for implementing recommended design changes**
    - **One-to-one fixture replacements: existing prescriptive rebates applied as appropriate**

# Lighting Redesign Study Professional Requirements

- **Study must be performed by Lighting Certified (LC) professional or Certified Lighting Efficiency Professional (CLEP) or member of the International Association of Lighting Designers (IALD)**
- **More information**
  - [ncqlp.org](http://ncqlp.org)
  - [aeecenter.org](http://aeecenter.org)
  - [iald.org](http://iald.org)

# Measurement and Verification

- **Xcel Energy conducts random inspections of installations**
  - **Third party conducts the inspections**
  - **Approximately 10 percent of projects are audited**
    - **Larger projects receive a higher weighting**
    - **Vendors in which a project has failed inspection receive a higher weighting**

## Collateral

- [xcelenergy.com/rebates](https://xcelenergy.com/rebates)
- **Feature sheet**
- **Rebate applications**
- **Input wattage guide**

## Contact Information

**Carla Hahn**

**Product Portfolio Manager**

**Carla.hahn@xcelenergy.com**

**303-294-2696**