

# Technical Specifications

## 2017-2018 Business Lighting Program

**STEP 1 – RESERVE FUNDS FOR YOUR LIGHTING PROJECT** before the materials are purchased and work has begun. Installation may begin after the project is approved and the reservation is confirmed by Roseville Electric Utility.

- **Applicants should contact the City of Roseville’s Building Department (916-774-5332) for building permit requirements and to apply for a building permit.**
- **Complete and submit RESERVATION REQUEST – FORM A, including the RESERVATION CHECK-LIST.**
- Provide an approved lighting schedule.
  - Download lighting schedule here: [\*\*Roseville Electric Utility Lighting Schedule Download\*\*](#)
- Provide the manufacturer’s specification sheets for all proposed new equipment.
- Provide testing agency’s proof of approval for each proposed product. Consortium for Energy Efficiency, ENERGY STAR or Design Light Consortium approval is required as outlined in the technical specification section of this document. Manufacturer’s literature is not acceptable as proof.
- Provide site map, with legend, for all projects greater than 30 fixtures.
- Provide Title 24 documentation and permit information as needed.
- **Submit RESERVATION - FORM A** By Email - Scan Application (PDF/Worksheet files): [elecbizrebates@roseville.ca.us](mailto:elecbizrebates@roseville.ca.us)  
Or Mail – Attention Business Rebates:  
Roseville Electric Utility, 2090 Hilltop Circle, Roseville, CA 95747

**STEP 2 – INSTALLATION CONFIRMATION** - After the installation is complete:

- Submit any changes in quantity or products from what was reserved on an updated **RESERVATION REQUEST – FORM A**, include supporting documentation for those changes.
- **Complete, sign and submit INSTALLATION CONFIRMATION – FORM B to Roseville Electric Utility.**
- Roseville Electric Utility will review package and perform necessary audits to verify project compliance for rebates.

**STEP 3 – REQUEST REBATE PAYMENT** - After the project installation is complete: (Form B and Form C can be submitted at the same time if no changes have occurred.)

- **Complete, sign and submit PAYMENT REQUEST – FORM C to Roseville Electric Utility.**
- Attach the itemized invoices for products, labor, and rebates. The manufacturer name and model number of each item installed must appear on the invoice. If the contractor is receiving the incentive, a credit for the rebate amount shall be on final invoice.
- **Rebate payments will only be paid to the customer of record, the installing contractor or their third party corporate office.** Once approved, rebate payments take approximately 6-8 weeks.

### GENERAL REQUIREMENTS FOR ALL LIGHTING APPLICATIONS

- For non-residential lighting projects only. All equipment must be new and be UL approved. Used or rebuilt equipment is not eligible.
- Rebate items must be installed at the premise of the Roseville Electric Utility account listed on the application.
- Rebate reservations are good for up to 90 days for projects with rebates less than \$10,000 and 120 days for larger than \$10,000.
- This program has a limited budget. Reservations for funds will be accepted on a first come, first served basis, until funds are depleted or until June 30, 2018, whichever comes first.
- Roseville Electric Utility reserves the right to pre- or post-inspect the customer facility for existing and installed materials listed on this rebate application.
- Equipment must meet the technical requirements listed in this application. Roseville Electric Utility reserves the right to withhold payment for products that do not meet the requirements. All customers and/or contractors must ensure new equipment is compatible with existing equipment and controls and fits into existing equipment; resulting light level is adequate and acceptable for the tasks being performed; and that all required state and local energy codes are met.
- Installing contractors must follow proper disposal and recycling procedures with removed materials. Resale of removed equipment is prohibited.

For more information, please call Roseville Electric Utility at (916) 79-POWER (797-6937)



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- The City of Roseville and Roseville Electric Utility are currently operating under 2016 California Building Standards Code. In an effort to promote greater code compliance Roseville Electric Utility is now seeking proof of [2016 Building Energy Efficiency Standards, Title 24](#), compliance for the business lighting rebate program. Roseville Electric Utility will need to see how all lighting projects meet California's Building Energy Efficiency Standard title 24 requirements for nonresidential lighting alterations. The reduction in lighting wattage is a critical component of the lighting rebate program however compliance with current Title 24 building standards is also required. All projects, with rebates larger than \$5,000, shall provide applicable 2016 Title 24, compliance documentation (forms) complying with nonresidential lighting energy standards. For exterior lighting projects, requiring Title 24 documentation, a photometric site layout may be required.
- All installing contractors shall provide active contractor license information and agree to Roseville Electric Utility's [Contractor Code of Conduct](#).

### LIGHTING MEASURE DETAILS

#### **MEASURE A. INTERIOR LIGHT EMITTING DIODE (LED) LAMPS or Conversion Kits**

- Qualifying fixtures must reduce existing lamp wattage by 50% or more.
- Lamps must be on the [ENERGY STAR](#) or [DLC](#) qualified products list.
- Products purchased with a utility buy down discount applied do not qualify.

#### **MEASURE B. INTERIOR FLUORESCENT RETROFITS**

- **LED Troffer Kit – (Existing 2X2 or 2X4 fixtures only, with 2 Lamp, 3 Lamp, or 4 Lamp Fluorescent Lamps)**
- Qualifying retrofits must reduce existing lamp wattage by 25% or more.
- Applies to linear fluorescent fixture retrofits where complete removal of existing fluorescent lamps, ballast and sockets occurs and are replaced with a Design Light Consortium (DLC) qualified replacement kit with a new optical assembly designed for LEDs.
- Troffer kits fixtures must be UL Classified with continuous dimming and must be enabled, installed, and activated to meet current Title 24 requirements for non-residential lighting.
- This measure does not qualify for an additional sensor or lamp removal rebates.
- Note that self-ballasted drop in lamp replacements are not considered "retrofit kits." Tubular LED retrofits do not qualify.

#### **MEASURE C. INTERIOR BI-LEVEL STAIRWAY OR HALLWAY COMPLETE FIXTURE**

- Qualifying fixtures must reduce existing lamp wattage by 35% or more.
- Existing fixtures must be replaced one-for-one with new lighting system, permanently hardwired and located in an interior area that is normally on during the day.
- Existing fixtures must be fluorescent only and be 1X8, 2X2, or 2X4 with 1-4 lamps.
- Ballasts, lamps, and fixtures must comply with [CEE](#) or [DLC](#) requirements as appropriate for the technology installed.
- The ultrasonic motion sensor must be internally mounted and contain a fail-on feature with no manual overrides in case of lamp failure.
- This measure does not qualify for an additional motion sensor rebate.

#### **MEASURE D. INTERIOR CUSTOM LIGHTING**

- Have a lighting retrofit that doesn't fit one of the items described? Here you can design your own retrofit with LED or Non-LED lighting technology. It must meet the technology requirements called out within this application for the technology used.
- The application must be for an area that is normally on during the day. LED fixtures must include continuous dimming down to 10% and do not qualify for additional sensor rebates.
- The proposed fixture or retro fit kit must be on the [ENERGY](#) or [STAR](#) [DLC](#) qualified products list.
- Application should include a daily schedule of operation, calculations showing kW demand, annual kWh of existing and proposed equipment and a detailed lighting schedule of operation.
- For projects with more than 30 fixtures, include a map with fixture locations.
- **Tubular LED retrofits do not qualify.**

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### MEASURE E. SENSORS

- Interior LED troffer retrofits, interior LED full fixture replacement, interior bi-level lighting and exterior LED fixtures do not qualify for an additional sensor rebate.
- Lighting controls are per controller, not per fixture controlled.
- Occupancy sensors on exterior fixtures are eligible for rebates.
- **MOTION** sensor - only passive infrared and/or ultrasonic detectors are eligible. They must be hardwired and control interior lighting fixtures and installed in areas with no previous sensor controls.
- **PLUG LOAD** sensor - applies to passive infrared and/or ultrasonic detectors to control electricity-using equipment in offices or cubicles or shared copiers and/or printers. A minimum of 50 watts must be connected and controlled for rebate eligibility. Detailed installation location list with wattage connected must be provided.
- **INTEGRATED HIGH BAY** sensor - is permanently installed in the high bay fixture to control all lamps in the fixture. This measure does not apply to LED High Bay Fixtures.

### MEASURE F. EXTERIOR LED LIGHTING

Qualifying exterior lighting fixtures must be typically on all night and controlled by a photo cell or time clock. Exterior lighting measures do not qualify for additional sensor rebates or the fuller kWh reduction due to sensor installation.

- **LED Pole Mounted Retrofit Kits**
  - a. Existing fixture must be 70 watts or greater, and the LED retrofit kits must reduce the maximum wattage by 50% or more.
  - b. The LED "Retrofit Kit" for Outdoor Pole/Arm Mounted Fixture shall be on the [DLC](#) qualified products list.
  - c. Retrofit kits shall have optics with similar lighting patterns to the original fixture which is being replaced.
  - d. Provide a detailed calculation on kW and kWh reduced describing the existing system wattage and the proposed system wattage, using 4,100 hours of annual operation. (Roseville Electric Lighting Schedule contains this information.)
- **LED Pole Mounted Complete Fixture Replacement**
  - a. Existing fixture must be 70 watts or greater, and the LED replacement fixture must reduce the maximum wattage by 50% or more.
  - b. The LED fixture for pole mounted complete fixture replacement must be on the [DLC](#) qualified products list.
  - c. **Retrofit kit replacements do not apply for this rebate. Full fixture replacement is required.**
  - d. Provide a detailed calculation on kW and kWh reduced describing the existing system wattage, and the proposed system wattage, while using 4,100 hours of annual operation. (Roseville Electric Utility's Lighting Schedule contains this information.)
- **LED Wall Pack, Fuel Canopy, Soffit, Decorative Fixture or Other Exterior Fixture Replacement**
  - a. Existing fixture must be 70 watts or greater, and the LED replacement fixture must reduce the maximum wattage by 50% or more.
  - b. The LED fixture for wall pack, fuel canopy, soffit, decorative, or other exterior replacement fixture must be on the [DLC](#) qualified products list.
  - c. Provide a detailed calculation on kW and kWh reduced describing the existing system wattage and the proposed system wattage, while using 4,100 hours of annual operation. (Roseville Electric Utility's Lighting Schedule contains this information.)
  - d. This measure does not qualify for an additional sensor rebate or the fuller kWh reduction due to sensor installation.
  - e. Screw-in exterior A-lamps installations do not qualify for rebates, full fixture replacement is required.
- **LED Parking Garage Complete Fixture Replacement**
  - a. Existing fixture must be 70 watts or greater, and the LED replacement fixture must reduce the maximum wattage by 50% or more.
  - b. The LED fixture for garage complete fixture must be on the [DLC](#) qualified products list.
  - c. Provide project information on Roseville Electric Utility approved lighting schedule.

# Reservation Request Form

## 2017-2018 Business Lighting Program



### Customer Information

Business Name \_\_\_\_\_ Account Number \_\_\_\_\_

Project Address \_\_\_\_\_  
Street Number Street Name City State Zip

Contact Name \_\_\_\_\_ Contact Title \_\_\_\_\_

Phone \_\_\_\_\_ Email \_\_\_\_\_  
Area Code Phone Number Ext.

### Installing Contractor Information

Check here if project will be customer installed \_\_\_\_\_ Proposed Installation Date \_\_\_\_\_

Contractor Name \_\_\_\_\_

Mailing Address \_\_\_\_\_  
Street Number Street Name City State Zip

Contact Name \_\_\_\_\_ Contact Title \_\_\_\_\_

Phone \_\_\_\_\_ Email \_\_\_\_\_  
Area Code Phone Number Ext.

PRESCRIPTIVE MEASURE CATEGORY	NUMBER OF ITEMS, kW, kWh	REBATE / UNIT	REBATE AMOUNT
	A	B	A X B=C
<b>MEASURE A. INTERIOR LED LAMPS or RETROFIT KITS</b>			
LED Decorative Lamp ≤ 3 Watts		\$5.00 / lamp	
LED "A" Lamp ≤ 20 Watts		\$15.00 / lamp	
LED MR-16 Lamp ≤ 10 Watts		\$15.00 / lamp	
LED PAR, R, ER or BR Lamp ≤ 17 Watts		\$15.00 / lamp	
LED PAR, R, ER or BR Lamp > 17 Watts		\$20.00 / lamp	
LED Ceiling Canned Light Fixture or Conversion Kit		\$25.00 / lamp	
<b>MEASURE B. INTERIOR FLOURESCENT RETROFITS</b>			
LED Troffer Kit 2x2		\$75.00 / fixture	
LED Troffer Kit 2x4, 2L existing		\$90.00 / fixture	
LED Troffer Kit 2x4, 3L existing		\$105.00 / fixture	
LED Troffer Kit 2x4, 4L existing		\$120.00 / fixture	

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PRESCRIPTIVE MEASURE CATEGORY	NUMBER OF ITEMS, kW, kWh	REBATE / UNIT	REBATE AMOUNT
	A	B	A X B=C
<b>MEASURE C. INTERIOR BI-LEVEL STAIRWAY OR HALLWAY COMPLETE FIXTURE</b>		150.00 / fixture	
<b>MEASURE D. INTERIOR CUSTOM LIGHTING</b>			
Custom Interior Lighting - LED Technology Installed		\$800.00 / kW reduced	
Custom Interior Lighting - Non-LED Technology Installed		\$600.00 / kW reduced	
<b>MEASURE E. SENSORS</b>			
Sensors – Motion, wall switch or ceiling >200 Watts controlled		\$25.00 / sensor	
Sensors – Motion, ceiling 200-499 Watts controlled		\$40.00 / sensor	
Sensors - Motion, ceiling ≥ 500 Watts controlled		\$50.00 / sensor	
Sensor - Plug Load		\$30.00 / sensor	
Sensor - Integrated High Bay		\$40.00 / sensor	
<b>MEASURE F. EXTERIOR LED LIGHTING</b>			
Exterior Pole Mounted Lighting – LED/ Pole Mounted Retrofit Kits		\$0.07 / kWh saved	
Exterior Pole Mounted Lighting – LED/ Full Fixture Replacement		\$0.13 / kWh saved	
Exterior LED Wall Pack, Fuel Canopy, Soffit, Decorative Fixture or other Exterior Fixture Replacement		\$0.13 / kWh saved	
LED Parking Garage Complete Fixture Replacement ≤ 250 Watts		\$160.00 / fixture	
LED Parking Garage Complete Fixture Replacement > 250 Watts		\$180.00 / fixture	
<b>MEASURE H. PERMIT INCENTIVE*</b>	1	Up to \$500.00	
City of Roseville Building Permit Number	BD__ - ____	N/A	N/A
<b>Total Rebate</b>			

\*Permit incentive shall NOT be applied if it causes the project to exceed 100% of total project cost, if the incentive is more than the actual permit fees or if permitting is not required. (Example: A19 lamp replacement) Contact the City of Roseville Building Department for permit requirements, 916-774-5332.

RESERVATION CHECK LIST	
Manufacturer's Specification Sheet	
Detailed lighting schedule by area, include: area name, quantity, type of lighting, fixture quantity, lamps per fixture, fixture wattage and total wattage for the existing and the proposed systems. Excel spreadsheet preferred.	
Detailed lighting map showing location and fixture type is required on projects larger than 30 fixtures.	
<b>Proof of CEE, DLC or ENERGY STAR qualification from the agency's website; clearly identify on the document the product(s) you are using.</b> Manufacturer's literature is not acceptable proof.	
2016 Title 24, compliance documentation (forms) for complying with nonresidential lighting Energy Standards.	

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# Installation Confirmation

## 2017-2018 Business Lighting Program



### CUSTOMER'S PROJECT INFORMATION

Business Name:

Project Address:

Customer Contact Name:

Project Completion Date:

**Customer Self-Install – Customer to complete and sign section (1)**  
**or**  
**Contractor Installed – Contractor to complete and sign section (2)**

### (1) CUSTOMER EMPLOYEE INSTALLATION

Customer Project Manager Name:

Customer PM Phone Number:

Customer PM Email:

- I certify that the products for which rebates are being requested were installed by company employees, and the installed equipment is working properly.
- The project was completed with **no changes** **changes** from the reservation. Changes require resubmittal of **FORM A** and required project documentation.
- I have received the warranty information for products that have been installed.
- Attach a copy of the itemized project invoice, include model numbers of installed equipment.

Customer Signature

Date

Print Name

Phone Number

Email

### (2) CONTRACTOR INSTALLATION

Contractor Business Name:

Contractor Project Manager Name:

Mailing Address:

Contractor PM Phone Number:

City | State | Zip:

Contractor PM Email:

#### Contractor Agrees:

- Contractors must comply with the Roseville Electric Utility's [Contractor Code of Conduct](#).
- I certify that employees of, or subcontractors to, the Installing Contractor listed above have installed the products for which rebates are being requested, and the installed equipment is working properly.
- The project was completed with **no changes** **changes** from the reservation. Changes require resubmittal of **FORM A** and required project documentation.
- Warranty information for products installed has been provided to the customer.
- Attach a copy of the itemized project invoice, include model numbers of installed equipment.

Contractor Signature

Date

Print Name

Phone Number

Email

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# Payment Request Form

## 2017-2018 Business Lighting Program



### CUSTOMER INFORMATION

Customer Name:	Project Address:
Account Number:	Project Completion Date:

**Customer to initial each item:**

- \_\_\_\_\_ A copy of the project itemized invoice is attached.
- \_\_\_\_\_ The equipment on this project was installed and is operating satisfactorily.
- \_\_\_\_\_ I received warranty information from the contractor for each of the products installed on this project.
- \_\_\_\_\_ I have the contractor's contact information for warranty questions or issues.
- \_\_\_\_\_ I am satisfied with the lighting levels and results from this lighting retrofit project.

**Rebate Payment Instructions (select one):**

Send check to customer installation address, information provided on **RESERVATION REQUEST - FORM A**.

Send check to a different customer location or property management firm:

Company Name \_\_\_\_\_

Mailing Address \_\_\_\_\_

City | State | Zip \_\_\_\_\_

Customer Project Reference \_\_\_\_\_

Send check to the INSTALLING CONTRACTOR, information provided on **INSTALLATION CONFIRMATION – FORM B**. Contractor invoice must show total cost of project without rebates, rebate amount, permit fees and net balance due from customer. This option is only available when contractors install the items being rebated. Payments shall only be sent to the INSTALLING CONTRACTOR, the CUSTOMER OF RECORD or their third party corporate office.

### TERMS AND CONDITIONS

I have read and understand the program requirements set forth in these application forms and agree to abide by these requirements. I have attached the required documentation for the program under which I am applying. I certify that the information provided on this application and associated required documentation is true and correct.

As a qualified Roseville Electric Utility customer, I certify that I purchased and installed the indicated energy-saving products for use in my business facility and not for resale, and that all equipment installed is new, not rebuilt, remanufactured or used equipment. I agree to participate in project evaluation surveys conducted in person, by phone or in writing and to mandatory project inspections by Roseville Electric Utility and/or their designees for installed efficiency measures verification and evaluation.

Additionally, as a program participant, I agree to allow Roseville Electric Utility to release my company business name and my contact name as a Roseville Electric Utility business customer that has benefitted from receiving rebate funds for energy efficiency improvements.

I agree that the selection, purchase and ownership of the equipment are my sole responsibility. Roseville Electric Utility makes no representation as to the safety, reliability and /or efficiency of the equipment selected or components selected to meet the programs intent.

I agree that if I cease to be a distribution customer of Roseville Electric Utility or I do not provide Roseville Electric Utility with 100% of the related energy benefits for the life of the product or for a period of five (5) years from receipt of rebate, whichever comes first, I shall refund a prorated amount of the rebate dollars to Roseville Electric Utility.

Tax Liability—you are urged to consult your tax advisor concerning the taxability of rebates. Roseville Electric Utility is not responsible for any taxes that may be imposed on your business as a result of your receipt of this rebate.

I certify that Roseville Electric Utility's rebate influenced the purchase of a higher efficiency product than I otherwise would have purchased.

Customer Signature \_\_\_\_\_ Date \_\_\_\_\_

Print Name \_\_\_\_\_ Phone Number \_\_\_\_\_ Email \_\_\_\_\_

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