# **COMMERCIAL & INDUSTRIAL RETROFIT 2023 Lighting Incentive**



## **APPLICATION INSTRUCTIONS**

Fill out Steps 1-3 and submit to your utility provider. Do not sign Steps 5-6 until instructed by your utility provider.

STEP 1 CUSTOMER INFORMATION				
Select your utility company:   Eversource  Liberty  NH Ele	ctric Co-op 🛛 Unitil Date:			
Electric Account #:	Natural Gas Account #:			
Company Name:	Contact Person:			
Phone Number:	Contact Email:			
Installation Address:	City: State: Zip:			
Mailing Address:	City: State: Zip:			
STEP 2 CONTRACTOR INFORMATION (if self-installed leave	blank)			
Contractor Company (if applicable):	Contact Person:			
Mailing Address:	City: State: Zip:			
Contact Phone:	Contact Email:			
STEP 3 PAYEE INFORMATION				
Check Payable to: Customer Contractor Other	Payment To:			
Mailing Address:	City: State: Zip:			
LIBERTY CUSTOMERS ONLY - Signature (for payment to Contractor	r/Other):			
STEP 4 RETURN APPLICATION TO UTILITY REPRESENTAT	IVE			
Send to your utility representative or email to your utility here:				
Eversource: efficiencynh@eversource.com	Liberty: nhsaves@libertyutilities.com			
New Hampshire Electric Co-op: solutions@nhec.com	Unitil: efficiency@unitil.com			
STEP 5 PRE APPROVAL OFFER				
<b>STOP</b> Once you have received Utility Pre-approval notification, sign and Program Terms and Conditions.	n below accepting incentive offer, payment arrangement,			
Utility Signature:	Date:			
Amount Of Incentive:				
CUSTOMER SIGNATURE:	Date:			

## **STEP 6 PROJECT COMPLETION**

**STOP** Sign below to indicate that project is completed. Send final signed application to Utility. Final Incentive calculated based on 'as-installed' conditions.

Utility Signature: Dat	ate:
CUSTOMER SIGNATURE: Dat	ate:
Final Project Cost: Final	nal Incentive Amount:

Powered by:









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	RETROFIT LIGHTING INCENTIVE WORKSHEET										
	EXISTING LIC	HTING					NEW LIGHTIN	G			
Location / Room / Area	Lighting Type (from Table 1)	Fixture Wattage	Number of Fixtures	Annual Hours	Product Code (Table A)	Make/Model of LED	Fixture Wattage	Number of Fixtures	Incentive per Fixture (\$)	Total Incentive (\$)	
Example: Parking Lot	High Pressure Sodium	90	8	4,345	90L	LED Lamps and Fixtures-LED	90	8	\$150	\$1,200	
								LIG	ITING TOTAL		

The schedule of 'existing' and 'proposed' conditions can be submitted on a supplementary document. Please contact your utility for a data entry template to be used when submitting larger projects.

LIGHTING CONTROLS INCENTIVE WORKSHEET										
Location / Room / Area	Lighting Control Product Code (Table A-1)	Number of Controls	Lighting Type (from Table 1)	Controlled Fixture Wattage	Number of Fixtures Controlled	Annual Hours without Controls	Annual Hours Reduced with Controls	% Power Reduction for Daylight Dimming	Incentive per Unit (Table A1) (\$)	Total Incentive (\$)
Example: Conference Room	1	6	T8 HP - 4 Foot	32	12	3,200	800	N/A	\$50	\$300
Example: Reception	3	8	LED Lamps & Fixtures – LED	35	10	3,200	N/A	50%	\$20	\$200
								LIGH	ITING TOTAL	

TABLE 1: LIGHTING TYPES							
Biaxial - 2 Foot	Low Voltage Halogen – LVH	T12 - 4 Foot	T12VHO - 4 Foot	T8 - 3 Foot	T8 HP - 4 Foot – Low Power Ballast		
Compact Fluorescent – CF	Mercury Vapor – MV	T12 - 5 Foot	T12VHO - 8 Foot	T8 - 4 Foot	T8 HP - 4 Foot – High Power Ballast		
High Pressure Sodium – HPS	Metal Halide – MH	T12 - 6 Foot	T5 - 2 Foot	T8 - 5 Foot	T8 Tandem Wired - 4 Foot		
Incandescent – I	Metal Halide Track Lighting – MHT	T12 - 8 Foot	T5 - 3 Foot	T8 - 8 Foot	T8 Tandem Wired - 8 Foot		
LED Exit Signs – LEDX	Quartz/Halogen - Q	T12HO - 4 Foot	T5 - 4 Foot	T8 HP - 2 Foot	T8 HP Tandem Wired - 4 Foot		
LED Lamps & Fixtures – LED	T12 - 2 Foot	T12HO - 6 Foot	T5 HO - 4 Foot	T8 HP - 3 Foot	OtherDescribe		
Low Pressure Sodium – LPS	T12 - 3 Foot	T12HO - 8 Foot	T8 - 2 Foot	T8 HP - 4 Foot			



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TABLE A: LIGHTING SYSTEMS INCENTIVES								
Product Code	Product Description	Per Fixture Incentive	Eligibility Criteria	Min Watts Saved				
10L	<b>TLED Tubes</b> Linear LED Tubes using existing bi-pin fluorescent sockets	\$5 Per Tube	UL Type A, B, or AB Lamps LED lamps are required to be listed by Design Lights Consortium. (for more information see www.designlights.org)	10 Per Tube	Ť			
12L	LED Tube or Strip Kits Must not use existing bi-pin fluorescent sockets.	\$8 Per Tube/Strip	For retrofit tube/strip kits with drivers that do not use existing bi-pin fluorescent sockets or ballast. UL Type C. LED lamps are required to be listed by Design Lights Consortium (for more information see www.designlights.org)	15 Per Strip	Ne.			
20L	<b>LED</b> High Efficiency Interior Fixtures & Retrofit Kits	\$60	1x4, 2x2 and 2x4 fixtures and retrofit kits. Fixtures are required to be listed by Design Lights Consortium (for more information see www.designlights.org)	32				
30L	<b>LED</b> Linear Ambient 4ft & 8ft Fixtures	\$60	LED Linear Ambient: Direct or with Indirect Component. Eligible luminaires or kits are required to be listed by the Design Lights Consortium and must meet DLC Technical Requirements for Indoor Luminaires or Indoor Retrofit Kits—Linear Ambient with greater than 375 lumens per foot Fixtures are required to be listed by Design Lights Consortium (for more information see www.designlights.org)	32				



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	TABLE A: LIGHTING SYSTEMS INCENTIVES							
Product Code	Product Description	Per Fixture Incentive	Eligibility Criteria	Min Watts Saved				
32L	<b>LED</b> Stairwell Fixture with integral Occupancy sensor controls	\$75	To be eligible for incentives, fixtures must be installed in an 8,760 hour stairwell application with integral occupancy sensor control, setting lights to 50% output or less in control mode (not occupied). Not eligible for additional control incentive Fixtures are required to be listed by Design Lights Consortium (for more information see www.designlights.org)	27				
40L	<b>LED</b> High and Low Bay High Intensity Fixtures & Retrofit Kits	\$125	Minimum wattage is 35 watts to 149 watts. Recommended mounting height is > 16 feet above the floor. Fixtures are required to be listed by Design Lights Consortium (for more information see www.designlights.org)	95				
41L	<b>LED</b> High and Low Bay High Intensity Fixtures & Retrofit Kits	\$175	Minimum wattage is $\geq$ 150 watts. Recommended mounting height is $>$ 16 feet above the floor. Fixtures are required to be listed by Design Lights Consortium (for more information see www.designlights.org)	150				

Incentives will be pre-approved within program budget caps and restrictions. Please contact your utility with any questions.



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	TABLE A: LIGHTING SYSTEMS INCENTIVES							
Product Code	Product Description	Per Fixture Incentive	Eligibility Criteria	Min Watts Saved				
60L	<b>LED</b> Cooler, Freezer, or Refrigerated 3' & 4' Fixture	\$40	Fixtures are required to be required to be listed by Design Lights Consortium (for more information see www.designlights.org).	14				
61L	<b>LED</b> Cooler , Freezer, or Refrigerated 5' & 6' Fixture	\$55	Fixtures are required to be required to be listed by Design Lights Consortium (for more information see www.designlights.org).	23				
70L	<b>LED</b> Garage & Canopy Fixtures & Retrofit Kits	\$75	LED Low Bay for Garages and Canopies 25-99 watts. Fixtures are required to be listed by Design Lights Consortium (for more information see www.designlights.org).	60				
71L	<b>LED</b> Garage & Canopy Fixtures & Retrofit Kits	\$100	LED Low Bay for Garages and Canopies greater than 99 watts. Fixtures are required to be listed by Design Lights Consortium (for more information see www.designlights.org).	100				
80L	<b>LED</b> Exterior Wall, Post, Ground, and Arm Mount Floods and Fixtures & Retrofit Kits	\$75	Wattage range is 25 watts to 99 watts. Must be automatically controlled to avoid daylight operation. Fixtures are required to be listed by Design Lights Consortium (for more information see www.designlights.org).	60				
81L	<b>LED</b> Exterior Wall, Post, Ground, and Arm Mount Floods and Fixtures & Retrofit Kits	\$100	Minimum wattage is 100 watts. Must be automatically controlled to avoid daylight operation. Fixtures are required to be listed by Design Lights Consortium (for more information see www.designlights.org).	100				

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	TABLE A: LIGHTING SYSTEMS INCENTIVES							
Product Code	Product Description	Per Fixture Incentive	Eligibility Criteria	Min Watts Saved				
90L	<b>LED</b> Pole Mounted Parking, or Roadway Fixtures & Retrofit Kits	\$150	Wattage range is 45 watts to 149 watts. Must be automatically controlled to avoid daylight operation. Fixtures are required to be listed by Design Lights Consortium (for more information see www.designlights.org).	100				
91L	<b>LED</b> Pole Mounted Parking, or Roadway Fixtures & Retrofit Kits	\$200	Minimum wattage is 150 watts. Must be automatically controlled to avoid daylight operation. Fixtures are required to be listed by Design Lights Consortium (for more information see www.designlights.org).	150				
92L	<b>Mogul Screw-Base (E39/E40)</b> Replacements for HID Lamps: Indoor, Low Bay, Outdoor Low Output & Mid Output Lamps	\$40	LED Mogul Screw-Base (E39/E40) Replacement for HID Lamps are required to be listed by the Design Lights Consortium and must meet DLC Technical Requirements.	100				
93L	<b>Mogul Screw-Base (E39/E40)</b> Replacements for HID Lamps: Indoor High Bay, Outdoor High Output & Very High Output Lamps	\$60	LED Mogul Screw-Base (E39/E40) Replacement for HID Lamps are required to be listed by the Design Lights Consortium and must meet DLC Technical Requirements. >75W	200				
99L	LED New Fixtures & Retrofit Kits	\$20	LED fixture categories not covered under other codes, or fixtures that do not meet minimum watt reduction in other codes. Fixtures are required to be listed by Design Lights Consortium or ENERGY STAR. Linear TLED Tubes are not eligible as code 99L.	20				



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	TABLE A-1: SENSORS & CONTROL SYSTEMS INCENTIVES								
Product Code	Product Description	Incentive	Eligibility Criteria	Min Controlled Wattage					
61	Remote Mounted Occupancy Sensor	\$30	Comply with manufacturer's coverage recommendations. Ceiling mounted control. No manual "ON" overrides permitted.	40	0				
62	Daylight Dimming System and/ or Occupancy Controlled Dimming System	\$15 (per fixture)	LED drivers must be automatically controlled based on occupancy or daylight levels.	20 (per fixture)					
63	Interior Integral Fixture Mounted Dual Sensors	\$35 (per fixture)	Integral fixture mounted dual sensors with motion and photocell/ambient light sensors. System to control motion response and illumination levels. Only one incentive per fixture.	20 (per fixture)					
63A	Integral Fixture Mounted Dual Sensors and Network-Capable Controls	\$45 (per fixture)	Integral, fixture-mounted, addressable sensors with motion and photocell/ambient light-sensing capabilities along with embedded programming that can be configured and networked. System to control motion response, illumination levels, and scheduling. Please see additional requirements for Networked Lighting Control Systems below. Only one incentive per fixture. See the Specification and QPL for specific requirements: https://www.designlights.org/lighting-controls/	50 (Total wattage of networked group)					
64	Wall Mounted Occupancy Sensors	\$20	Occupancy Sensors must operate as automatic on and off. Sensors are wall mounted devices only. Vacancy Sensors with Manual ON/OFF options are allowed, however, manual "ON" overrides are not permitted.	20					

Incentives will be pre-approved within program budget caps and restrictions. Please contact your utility with any questions.



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	TABLE A-1: SENSORS & CONTROL SYSTEMS INCENTIVES								
Product Code	Product Description	Incentive	Eligibility Criteria	Min Controlled Wattage					
65	Outdoor Sensor with Integral Dual Sensors	\$30	Integral fixture mounted dual sensors with motion and photo-cell/ambient light sensors. System to control motion response and illumination levels. Only one incentive per fixture.	50	9				
65A	Outdoor Integral Dual Sensors with Adaptive, Network-Capable Controls	\$55 (per fixture)	Outdoor integral controller (may be NEMA mounted). Controller to be programmable and able to report, monitor, schedule, and control lamp/driver illumination levels. Communication capable between fixtures and a centralized network. System would allow network communication to receive and transmit data for configuring groups, addressability, reporting and advanced scheduling. Only one incentive per networked fixture. Please see additional requirements for Networked Lighting Control Systems below.	100 (Total wattage of networked group)					
68	Integral Occupancy Sensor for High Bay Fixtures	\$25 (per fixture)	Fluorescent ballasts or LED drivers must be automatically controlled based on occupancy. Systems with manual "ON" or override switches are not eligible. Occupancy sensors must be integral to (built into) or permanently attached to each fixture.	50 (per fixture)	2				

## Networked Lighting Control System Requirements (Codes 63A & 65A):

• The gualified space must utilize a Networked Lighting Control system as defined by the DLC. Documentation can be found on the DLC website at https://www.designlights.org/. See Qualified Products List (QPL) and Project Requirements to learn which products have been qualified and what requirements must be fulfilled to participate.

Networked communication between Luminaires and Devices

- Supplemental Requirements: •
  - Lighting Control System specification including control narrative

For Interior applications, the Networked Lighting Control System must meet all required performance criteria as listed on DLC's Qualified Products List, including:

- Scheduling
- Zoning .
- Daylight Harvesting

Occupancy Sensing • High-End Trim (Task-Tuning)—a minimum of 10% required

Continuous Dimming

For Exterior applications, the Networked Lighting Control System must include the following:

- Scheduling Astronomical Timer •
- Photocell Dusk to Dawn Sensor •
- . Bi-Level Scheduled Dimming
- **Bi-Level Occupancy Sensor** .

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- Energy Monitoring
- High-End Trim (Task Tuning)—a minimum of 10% required
- Network Communication between Luminaires
- Addressability for Grouping and Diagnostics
- Certification that Networked Lighting Control System includes Energy Monitoring. .

To qualify for Incentives, Customers must commission the NLC system, and provide an initial 30 days of reported kWh saved. NLC systems not meeting the data and reporting requirements may be eligible for the lower tier control incentive.

# 2023 Lighting Commericial & Industrial Retrofit



## Instructions for completing the Retrofit LIGHTING Incentive Worksheet

### **General Notes:**

- 1. This application is for replacing existing lighting fixtures or systems with new higher efficiency lamps, ballast and lighting fixtures, systems and controls.
- 2. Cutsheets/specifications including photometric tables must be submitted and reviewed by the utility to verify compliance with technical requirements.
- 3. Proof of Purchase includes invoice(s) indicating the cost, type, manufacturer, model or part number, purchase date, and vendor of the efficient equipment are required for payment of incentives.
- 4. The incentive, in conjunction with all other sources of funding, cannot exceed the total project cost.
- 5. Project must be completed by the "Offer Valid Through" date on the front of the application to be eligible for incentive. After that date the preapproval is void and the business will need to contact their Utility to reapply for incentive pending funding availability.

## **Eligibility Requirements:**

- 1. The existing lighting should be in-place and operational at the time of pre-inspection.
- 2. Project is NOT eligible for incentives on this application if equipment has been purchased and participated in the NHSaves mid-stream instant incentive program or received an incentive through any other NHSaves programs.
- 3. Use Code 99L for LED fixtures not covered by another product code.
- 4. Systems must operate on average 2,000 hours annually unless otherwise specified by the product code. Lighting project average must be at least 2,000 hours (total kWh/total kW).
- 5. Minimum watts for prescriptive control products is the average total watts controlled per controller.
- 6. The incentive offer is not valid unless signed and dated by the Utility Representative. The Customer accepts the Utilities incentive offer and agrees to the Terms and Conditions of the Utility by signing in the pre-approval offer block.
- 7. Projects need to be pre-approved prior to installation to be eligible for incentives.
- 8. Each fixture type must meet the Minimum Watts Reduction listed in Table A. The Minimum Watts Reduction is the average savings per new fixture. This is the difference between the total existing fixture system watts and the total new replacement system fixture watts / quantity of new fixtures. Quantity of fixtures installed may be different than the quantity of fixtures removed as long as the average minimum watts reduction is met. For Product Code 10L, Linear LED Tube wattage must include the ballast power when a ballast is used to operate the LED tubes. When entering the new lamp wattage on the incentive worksheet, use the total fixture wattage, including ballast power, divided by the total number of LED tubes in the fixture.
- 9. DLC qualification requires documentation of safety certification. Installation instructions must be followed with care.
- 10. Some linear LED tubes may utilize either the existing or a new fluorescent ballast. It is essential to select a compatible LED tube and ballast combination. Failure to do so may damage system components, shorten product life or result in a hazardous condition. The age and condition of the existing ballast may also shorten system life.

### **LED Specific Documentation Requirements:**

LED fixtures and lamps must be listed on ENERGY STARS's (ES), Designlights Consortium (DLC) or the utilities' websites. For more information see the DLC's listing <u>http://www.designlights.org/</u> or ENERGY STAR's website: Bulbs: <u>http://www.energystar.gov/productfinder/product/certified-light-bulbs/results</u> Fixtures: <u>http://www.energystar.gov/productfinder/product/certified-light-fixtures/results</u>

**\*\*Note:** NHSaves and its sponsor utilities do not warrant or accept any liability whatsoever in respect of any LED 4ft or 2ft Linear Replacement Lamps that receive incentives through our energy efficiency programs. Customers are responsible for the proper modification and installation of LED 4ft and 2ft Linear Replacement Lamps in existing fixtures in accordance with manufacturer's instructions. Customers should be aware that this may void fixture warranty. Customers are responsible for proper labeling of all modified existing fixtures. It is the responsibility of the lighting installers to meet current Illuminating Engineering Society standards for light levels, light distribution, uniformity and lighting quality for all installations that use these prescriptive technologies.

# 2023 Lighting Commericial & Industrial Retrofit



## **Existing Lighting Systems Inventory**

- An inventory should be submitted documenting all existing fixtures to be replaced and the proposed fixtures that will be installed. For each fixture, note the lamp size, type, quantity, ballast type and hours of operation. Electronic spreadsheet copies of the Lighting System Inventory similar to the Lighting Worksheets are encouraged to facilitate the incentive application review. Existing and Proposed lighting types can be found in Table 1.
- 2. Complete the lighting and/or lighting controls incentive info found in Table A and A-1. Check to ensure all proposed products meet the criteria and minimum watts saved for products noted in Table A and A-1.
- 3. Fill out a separate line on the Retrofit Lighting Incentive Worksheet for each unique combination of Existing lighting type, Annual Hours of Operation, Product Code and lighting type. Both existing and high efficiency lighting types can be found in Table 1.
- 4. Fill out a separate line on the Lighting Controls Incentive Worksheet for each lighting control product including control description, quantity of fixtures controlled, number of watts controlled and hours of reduction for each device proposed, Refer to Table A-1.
- 5. Hours of operation are the estimated annual hours that the particular fixture(s) actually operates. Try to be as specific and accurate as possible. NOTE: Fixture operating hours are not necessarily the same as the facility operating hours.
- 6. Add the Lighting Total and the Control Total in the Grand Total box. The Incentive Total boxes cannot exceed the total equipment costs.

## **Pre-Installation**

- 1. A site inspection may be performed by a utility representative confirming the existing fixture information and quantities. Make sure to call your utility before starting the lighting project to determine if a site inspection is required.
- 2. The existing fixtures should be verified by lighting type and room/area, reference Lighting Worksheet and Table 1.

### **Post-Installation:**

#### Utility Representative must verify that:

- 1. The new energy efficient lighting fixtures, systems and controls types have been installed and are energized.
- 2. The lighting fixtures, systems and controls match the manufacturer's information represented on the incentive application. If any of the lighting fixtures, systems and controls have changed from what was approved for the initial incentive offer, the substituted lighting fixtures, systems and controls specifications must be re-submitted, reviewed to verify compliance with technical requirements and approved before an incentive is considered.
- 3. Proof of Purchase has been submitted. This includes invoice(s) indicating the fixture manufacturer, model, and number of lamps, ballast specifications (if applicable), fixture quantities, costs, purchase date, and vendor of the efficient equipment. Other forms of payment such as AIA Certificates of Payment may also be acceptable.
- 4. The Utility Representative & Customer have signed & dated the post installation inspection block on the incentive form.







