

Energy Initiative - Retrofit

Lighting – Systems & Controls

2010 Project Information Form for Upstate New York

This Project Information Form provides a template to collect project systems and equipment information and specifications. In addition, this form serves as a guide to lighting system and controls terms and identifies energy efficiency improvement products and incentives. Prior to the start of any installation of equipment or systems, call your **Energy Solutions representative** to arrange a convenient time to perform an inspection of the existing equipment or systems. This inspection is required for all applications.

Customer Facility Information

Customer Facility Name: _____ Date of Application: _____
 _____ Sq. Ft. Covered by Application: _____
 Contact Person: _____ Federal ID Number: _____
 Street Address: _____ Company Type:
 City: _____ State: _____ Zip: _____ Incorporated Exempt Not Incorporated
 Classification Type: \geq 2MW ____ (Large Industrial only)* Phone Number: _____
 < 2MW ____ (Mid-size) Industrial Commercial Fax Number: _____
 * \geq 2MW Large Commercial customer use the <2MW classification E-mail Address: _____

Customer of Record Information: Billing Account Number: _____ *Internal Use only*

Building Type (select one)

- | | | | |
|--|---|--|--|
| <input type="checkbox"/> Assembly | <input type="checkbox"/> Grocery | <input type="checkbox"/> Motel | <input type="checkbox"/> Secondary School |
| <input type="checkbox"/> Auto | <input type="checkbox"/> Heavy Industrial | <input type="checkbox"/> Multi Story Retail | <input type="checkbox"/> Single Family Residential |
| <input type="checkbox"/> Big Box | <input type="checkbox"/> Hospital | <input type="checkbox"/> Multifamily high-rise | <input type="checkbox"/> Small Office |
| <input type="checkbox"/> Community College | <input type="checkbox"/> Hotel | <input type="checkbox"/> Multifamily low-rise | <input type="checkbox"/> Small Retail |
| <input type="checkbox"/> Dormitory | <input type="checkbox"/> Large Refrigerated Space | <input type="checkbox"/> Other _____ | <input type="checkbox"/> University |
| <input type="checkbox"/> Fast Food | <input type="checkbox"/> Large Office | <input type="checkbox"/> Primary School | <input type="checkbox"/> Warehouse |
| <input type="checkbox"/> Full Service Restaurant | <input type="checkbox"/> Light Industrial | <input type="checkbox"/> Religious | |

Installation Contractor Information

Installation Performed By:* Customer Installation Contractor (Vendor) **If contractor has not been selected, select Customer*

Complete this section if installation is not by the customer

Installation Company: _____ Street Address: _____
 Contact Person: _____ City: _____ State: _____ Zip _____
 E-mail Address: _____ Phone Number: _____

Application Information

Expected Completion Date: _____
 Proposed Incentive Recipient: Customer (Account Credit or Check) Installation Contractor**
**** Complete this section if Installation Contractor has been selected**
 Federal ID Number: _____ Company Type: Incorporated Exempt Not Incorporated

This Form Was Completed By:

Name: _____
 Phone Number: _____ E-mail Address: _____

For More Information

Instructions:

- 1) Prior to the start of any installation of equipment or systems, **call your Energy Solutions representative** to arrange a convenient time to perform an inspection of the existing equipment or systems. This inspection is required for all applications.
- 2) Fill in the Customer information datasheet on page 1.
- 3) For lighting systems, enter the proposed equipment for your facility on the Lighting System Inventory Worksheet on page 8.
- 4) For lighting controls, enter the proposed equipment for your facility on the Lighting Control Inventory Worksheet on page 9.
- 5) Contact your Energy Solutions representative to complete an application and to determine the incentive for this Lighting project.

Guide to Terms

Watts Controlled: total wattage (combined lamps and ballast wattage) connected to lighting controls.

Minimum Watts Controlled: in order to qualify for an incentive, watts controlled **divided by** quantity of controls **must equal or be more than** the minimum watts controlled.

Measure Category: Lighting Systems

Measure Code: refers to National Grid’s unique system of identifying fixture and control types that qualify for incentives. For Measure Codes, see Table 1A Lighting Systems Eligibility and Incentives on page 3.

Device Code: refer to the New York Device Codes and Rated Lighting System Wattage Table

Watts per Fixture (Watts per Device): refer to the New York Device Codes and Rated Lighting System Wattage Table

Annual Hours of Operation: refers to the estimated annual hours that the affected lighting system operates. Minimum 2000 hours*.

Minimum Watts Saved: refers to minimum amount saved in order to receive an incentive.

Measure Category: Lighting Controls

Measure Code: refers to National Grid’s unique system of identifying fixture and control types that qualify for incentives. For Measure Codes, see Table 1B: Lighting Controls Eligibility and Incentives on page 3.

Quantity of Controls: amount of controls (or ballasts for Codes 62 and 63) to be installed

Device Code: refer to the New York Device Codes and Rated Lighting System Wattage Table

Quantity of Devices Controlled: how many devices will be controlled

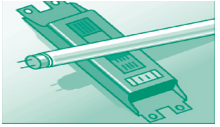

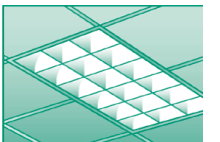

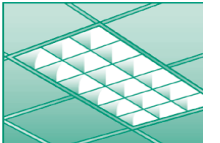
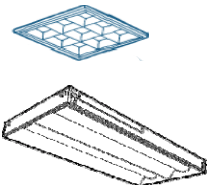
Annual Hours of Reduction: The estimated annual hours that affected lighting system operates

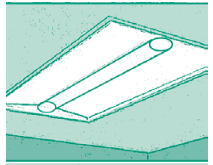
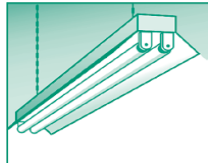
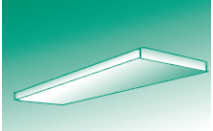




Appendix A: Lighting Systems and Controls – Opportunities and Eligibility Requirements

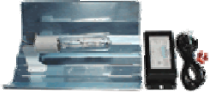

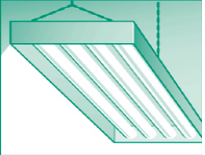
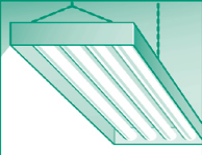
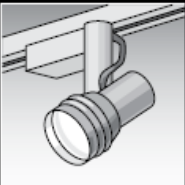


The following table lists the incentives available for energy efficient lighting improvements.

Facility lighting must average a minimum of **2,000** hours per year, except Municipal Facilities which must average a minimum of 1,000 hours.* All Fluorescent Fixtures must have new T-8 or T5 lamps and new electronic ballasts. All Fluorescent Fixtures with High Performance (HP) T-8 lamps and ballasts must meet or exceed the Consortium for Energy Efficiency’s (CEE) High Performance T-8 or Reduced Wattage T-8 specification. For detailed eligibility requirements and a list of qualifying lamps and ballasts, please log onto CEE’s web site at www.cee1.org.

Table 1A: Lighting Systems Eligibility and Incentives:

Product Code	Measure Description	Per Fixture Incentive	Eligibility Criteria	Min Watts Saved	
10 *	Re-lamp/re-ballast of existing fixtures with new High Performance /Reduced Wattage (HP/RW) T-8 or T-5 lamps and HP/RW T-8 Electronic Ballasts	\$15	Re-lamp/re-ballast of existing fixtures with T-8 or T-5 lamps, each fixture is composed of a ballast and 1, 2, 3 or 4 lamps. Only one incentive may be counted per fixture. Multiple fixtures served by a single ballast are only eligible for one incentive. Consider using reduced wattage 25 and 28 T8 CEE qualified lamps/ballasts.	11	
30A *	High Efficiency 2 lamp Prismatic Lensed Fluorescent Fixtures - 2x2 or 2x4	\$35	Overall fixture efficiency must be \geq : <ul style="list-style-type: none"> 83% for 2x4 prismatic lensed fixture with two T-8 or T-5 lamps; 75% for 2x2 prismatic lensed fixture with two T-8 or T-5 lamps (Biax lamps are not eligible). 	27	
30B *	High Efficiency 2 lamp Parabolic Fluorescent Fixtures - 2x2 or 2x4	\$40	Overall fixture efficiency must be \geq : <ul style="list-style-type: none"> 80% for 2x4 fixture with parabolic louver (2" to 3" deep cells) with two T-8 or T5 lamps; 80% for 2x2 fixture with parabolic louver (2" to 3" deep cells) with two T-8 or T5 lamps (Biax lamps are not eligible). 	27	
30C *	High Efficiency up to 2 lamp Recessed Indirect/Direct Fluorescent Fixtures - 2x2 or 2x4	\$50	Overall fixture efficiency must be \geq : <ul style="list-style-type: none"> 75% for 2x4 recessed indirect/direct fixture with two T-8 or T-5 lamps; 75% for 2x2 recessed indirect/direct fixture with two T-8, T-5, or T5HO lamps (Biax lamps are not eligible); 80% for 2x2 advanced glare reducing diffuser fixture with one or two T-8, T-5, T5HO lamps (Biax lamps are not eligible). 	27	
31 *	High Efficiency 3 lamp Fluorescent Fixtures - 2x4	\$25	Overall fixture efficiency must be \geq : <ul style="list-style-type: none"> 83% for 2x4 prismatic lensed fixture with three T-8 or T-5 lamps; 75% for 2x4 fixture with parabolic louver (2" to 3" deep cells) with three T-8 or T5 lamps; 70% for 2x4 recessed indirect fixture with three T-8 or T-5 lamps; <p>Eligible fixtures are limited to 3 lamps with a low power ballast factor < 0.80.</p>	31	
32 *	High Efficiency Recessed Fluorescent 2 lamp Retrofit Kits- 2x2 and 2x4	\$45	Overall fixture efficiency must be \geq : <ul style="list-style-type: none"> 85% for 2x4 parabolic retrofit kit and advanced glare reducing diffuser retrofit kit with two T-8 or T-5 lamps; 80% for 2x2 parabolic retrofit kit and advanced glare reducing diffuser retrofit kit with two T-8, T-5, or T5HO lamps (Biax lamps and reflector kits are not eligible). 	27	

Product Code	Measure Description	Per Fixture Incentive	Eligibility Criteria	Min Watts Saved	
34 *	Advanced Recessed Fluorescent Fixtures 1x4 or 2x4	\$50	Overall fixture efficiency must be \geq : <ul style="list-style-type: none"> 85% for 2x4 advanced glare reducing diffuser fixture with one or two T-8 or T-5 lamps, or one T-5HO lamp; 85% for 1x4 advanced glare reducing diffuser fixture with one or two T-8 or T-5 lamps, or one T-5HO lamp. 	33	
41 *	Industrial/Commercial Fluorescent Fixtures 4 ft. and 8 ft. Fixtures	\$30	Overall fixture efficiency must be \geq : <ul style="list-style-type: none"> 85% for Industrial Reflector fixture with T-8 or T-5 lamps (up to 20% up-light); 83% for Commercial Grade Wraparound fixture with one or two T-8 or T-5 lamps. 85% for reflector kits with specular or semi-specular reflectors <p>Reflector Kits for Existing Fixtures includes 2'x2', and 2'x4' reflector troffer kits, 4' and 8' strip channel, and industrial reflector kits.</p> <p>Applies to fixtures installed at or less than 16 feet above the floor. Only one incentive may be counted per fixture. Eight foot and multiple fixtures served by a single ballast are only eligible for one incentive.</p>	23	 
43 *	Vapor Tight Fluorescent Fixtures- 4 ft. and 8 ft. Fixtures	\$50	Overall fixture efficiency must be \geq : <ul style="list-style-type: none"> 70% for Vapor Tight fluorescent fixture with one or two T-8, T-5, T-8HO, T-5HO or 3-T8 lamps. <p>Typically installed in garage, warehouse, food prep and other industrial applications.</p>	45	
44 *	Clean Room Rated Fluorescent Fixtures – 1x4 or 2x4	\$50	Overall fixture efficiency must be \geq : <ul style="list-style-type: none"> 75% for Clean Room fluorescent fixture with up to three T-8 or T-5 lamps. <p>To be eligible for incentives, fixtures must be installed in a clean room rated environment.</p>	27	
23	Dimmable Compact Fluorescent Fixture	\$30	To be eligible for incentives, all fixtures must be hard-wired and have electronic ballasts with <33% THD. (Retrofit kits and screw-in adapters are not eligible)	35	
25	LED or LEC (Electroluminescence) Exit Fixtures	\$10	All materials and assembled units shall comply with all applicable codes and standards including (but not limited to) Federal/State/Local building, fire, and electrical codes, and may require designated egress lighting to comply with such codes. Exit sign retrofit kits are not eligible.	15	

Product Code	Measure Description	Per Fixture Incentive	Eligibility Criteria	Min Watts Saved	
51	Pulse Start Metal Halide Lamp and Electronic Ballast Kits	\$50	All kits must include a new matched Pulse Start Metal Halide Lamp and Electronic Ballast installed per manufacturer's specifications and applicable codes. Indoor and Outdoor fixtures are eligible.	50	
52	Pulse Start Metal Halide Fixture with Electronic Ballast	\$70	Only New Metal Halide Pulse Start fixtures with Electronic Ballasts are eligible. Retrofit of existing metal halide fixture of less than 200 watts with new fixture is not eligible. Indoor and Outdoor fixtures are eligible.	64	
56 *	High Intensity Fluorescent Fixtures (HIF) for High and Low Bay Applications (less than or equal to 210W)	\$75	Minimum wattage is 111 Watts and Maximum wattage is 210 Watts. Minimum fixture efficiency must exceed 80%. recommended mounting height > 16 feet above the floor. High Intensity Fluorescent fixtures incorporate a number of lamp technologies that include T-8, T-5, T-5HO and compact fluorescent. Low power ballasts are not eligible.	55	
57 *	High Intensity Fluorescent Fixtures (HIF) for High and Low Bay Applications (greater than 210W)	\$100	Minimum wattage is greater than 210 Watts. Minimum fixture efficiency must exceed 80%. Recommended mounting height > 20 feet above the floor. High Intensity Fluorescent fixtures incorporate a number of lamp technologies that include T-8, T-5, T-5HO and compact fluorescent. Low power ballasts are not eligible.	85	
70	Metal Halide Specialty Lighting Hard Wired Fixtures with Electronic Ballast	\$50	Metal Halide Specialty Fixtures may be track, recessed or surface mounted and used for high quality display type lighting. Must be approved by UL or similar agency.	55	
71	Integral Metal Halide PAR Replacement Lamp	\$12	Install an Integral Metal Halide PAR replacement lamps, not to exceed 25W PAR38 lamp or similar.	27	
80	LED Downlight Fixtures- Hard Wired	\$50	This incentive only applies to hardwired LED fixtures on Energy Star's list (for more information see www.energystar.gov)	25	







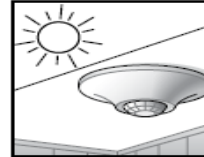



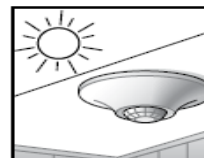

Product Code	Measure Description	Per Fixture Incentive	Eligibility Criteria	Min Watts Saved	
81A	Integral LED Directional Replacement Lamps - MR16 & PAR16	\$15	Eligible LED Directional Integral replacement lamps for these reflector styles: MR16 and PAR16. Eligible lamps are required to be listed by Energy Star (for more information see www.energystar.gov)	12	
81B	Integral LED Directional Replacement Lamps – PAR20, PAR30 AND PAR38	\$35	Eligible LED Directional Integral replacement lamps for these reflector styles: PAR20, PAR30S, PAR30L and PAR38. Eligible lamps are required to be listed by Energy Star (for more information see www.energystar.gov)	25	
82A	LED Cooler or Freezer Case Fixtures – 5' Fixture	\$50	Eligible LED Cooler and Freezer Case fixtures are required to be listed by Energy Star or Design Lights Consortium (for more information see www.energystar.gov and www.designlights.org)	30	
82B	LED Cooler Freezer Case Fixtures – 6' Fixture	\$65	Eligible LED Cooler and Freezer Case fixtures are required to be listed by Energy Star or Design Lights Consortium (for more information see www.energystar.gov and www.designlights.org)	40	
83	LED Low Bay Fixtures - Garage & Canopy fixtures	\$150	Eligible LED Low Bay fixtures are required to be installed in 8,760 hour applications and be listed by Energy Star or Design Lights Consortium (for more information see www.energystar.gov and www.designlights.org)	60	
*			<p>Note: 4ft straight tube T8 lamps and ballasts must meet the Consortium for Energy Efficiency’s High Performance / Reduced Wattage (HP/RW) T8 specifications. For eligibility requirements and a list of eligible lamps and ballasts, log onto CEE’s web site at www.cee1.org.</p> <p>Note:</p> <ul style="list-style-type: none"> 2ft and 3ft, T8 lamps must have a minimum efficacy of 75 mean lumens per watt, a CRI greater than 80 and an average rated life of 24,000 hours at 3 hours per start. 4ft -30 watt U-bent T8 lamps must have a minimum efficacy of 79 mean lumens per watt, a CRI greater than 80 and an average rated life of 18,000 hours at 3 hours per start. 2ft, 3ft and 4ft 30 watt U-bent T8 ballasts must meet the CEE’s High Performance T8 Ballast Specifications. 		

Table 1B: Lighting Controls Eligibility and Incentives

Please note that only one incentive control strategy will be approved per fixture/area. Also consider using program start CEE qualified ballasts for all appropriate control measure codes to ensure longer lamp life over instant start ballasts.

Measure Code	Measure Description	Per Control Incentive	Eligibility Criteria	Min Controlled Wattage	
61	Remote Mounted Occupancy Sensor	\$60	Comply with manufacturer’s coverage recommendations. Ceiling mounted control. No manual “ON” overrides	110	
62	Daylight Dimming System (DDS-FL)	\$25 (per fixture)	Must have continuous dimming or adjust to a minimum of 4 levels. Typical lamping is either a 30 watt or 32 watt T-8 lamps.	53 (per fixture)	
63	Occupancy Controlled Step-Dimming System	\$20 (per fixture)	Ballast must be automatically controlled based on occupancy. Power consumption in low mode must not exceed 60%.	53 (per fixture)	
64A	Wall mounted Occupancy Sensors	\$25	Occupancy Sensors must operate as Automatic On and Off. Sensors are wall mounted devices only. Not eligible if installed in restrooms, locker rooms, stairwells or rooms of greater than 250 square feet	51	
64B	Wall mounted Vacancy Occupancy Sensors	\$30	Vacancy Sensors must operate as Manual On, Automatic Off. Sensors are wall mounted devices only. Not eligible if installed in restrooms, locker rooms, stairwells or rooms of greater than 250 square feet	51	
65	Photocell Sensors (lighting systems on 24/7)	\$50	Photocell control for lighting systems that operate on 24 hours a day, 7 days a week (8,760 hours annually)	70	
68	High Bay Fluorescent (HIF) Occupancy Control Systems	\$25 (per fixture)	Ballasts must be automatically controlled based on occupancy. Systems with manual “ON” or override switches are not eligible. Sensors to be mounted on individual fixtures	110 (per fixture)	

Energy Initiative Lighting Systems Inventory Worksheet

Building and Room Identification (*Installation Site*): _____

Line Item	Location	Existing/ Proposed	Measure Code (Appendix A)	Device Code*	Watts per Fixture (Watts per Device)*	Annual Hours of Operation**	Minimum Watts Saved	Device Quantity (a)	Unit Incentive \$ (b)	Total Incentive \$ (a) x (b)
Ex	Room 202, first floor	Existing	--	F42SE	86	---	---	70		
		Proposed	10	F42SSILL	48	4850	38	70	\$ 45	\$ 3150
		Existing	--							
		Proposed							\$	\$
		Existing	--							
		Proposed							\$	\$
		Existing	--							
		Proposed							\$	\$
		Existing	--							
		Proposed							\$	\$
		Existing	--							
		Proposed							\$	\$
		Existing	--							
		Proposed							\$	\$
		Existing	--							
		Proposed							\$	\$

* Refer to the NY Device Codes & Rated Lighting System Wattage Table

** Facility lighting must average a minimum of 2,000 hours per year, except Municipal Facilities which must average a minimum of 1,000 hours.

Energy Initiative Lighting Control Inventory Worksheet

Building and Room Identification (*Installation Site*): _____

Line Item	Measure Code	Device Description*	Quantity of Controls (or ballast for Codes 62& 63) (A)	Minimum Required Connected Watts per Control (B)	Device Code*	Quantity of Devices Controlled (C)	Watts Per Device (D)	Annual Hours of Reduction **	Minimum Connected Watts Verification		Wattage Test (Actual > Required, Y or N)	Unit Incentive \$ (E)	Total Incentive \$ (A) x (E)
									Required (A x B)	Actual (C x D)			
Ex.	61	Remote-Mounted Occ Sens. (OS)	7	119	F42SSILL	70	48	1200	833	3360	Y	\$ 60	\$ 420
												\$	\$
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* Refer to the NY Device Codes & Rated Lighting System Wattage Table

** The estimated annual hours that affected lighting system operates.