



An Exelon Company

PECO Energy Efficiency Solutions for Your Business

Commercial and Industrial Solutions
Application Manual

Effective October 1, 2021

CONTENTS

PECO Energy Efficiency Solutions For Your Business.....	1
Application Process Overview.....	1
Follow These Easy Steps.....	1
Step 1: Verify your eligibility.....	1
Step 2: Submit your application to reserve funds.....	1
Step 3: Install equipment or perform project work.....	1
Step 4: Submit final application.....	1
Incentive Application Checklist.....	3
Supporting Documentation Guidelines.....	3
Lighting.....	3
HVAC.....	3
Electric Chillers.....	3
Motors and VFDs.....	3
Compressed Air Systems.....	3
Refrigeration.....	4
Data Centers.....	4
New Construction.....	4
Custom.....	4
Terms and Conditions.....	5
Program Effective Dates.....	5
Program and Project Eligibility.....	5
Incentive Payment Limits.....	5
Application Review Process.....	5
Inspections and/or PUC’s Statewide Program Evaluation.....	6
Requirements for Custom Project Electricity Savings Calculation.....	6
No Endorsement.....	7
Warranties.....	7
Limitation of Liability.....	7
Assignment.....	7
Customer’s Certification.....	7
Termination.....	7

Acknowledgment	7
Retrofit Lighting Incentives	8
LED Lamps and Fixture Eligibility	8
Minimum Wattage Requirements.....	8
Linear or U-tube LED Installation Requirements	8
Permanent Fixture Removal	9
Lighting Measure Codes.....	9
HVAC Equipment.....	12
Air-Cooled Air Conditioners and Air-Cooled Heat Pumps	12
Package Terminal Systems (Replacements).....	12
Water Cooled Heat Pumps.....	12
Electric Chillers	14
Motors and Variable Frequency Drives (VFD).....	16
Compressed Air Systems	17
Refrigeration.....	18
Data Centers	20
New Construction – Lighting	21
New Construction - Whole Building	22
Whole Building Design Incentive.....	23
Custom	24
Custom, General.....	24
Combined Heat and Power (CHP)	24
Energy Management System (EMS).....	24
Demand Control Ventilation (DCV).....	24
Retrocommissioning (RCx)	25

PECO Energy Efficiency Solutions For Your Business

Application Process Overview

The PECO Energy Efficiency Solutions for Your Business Program is available from June 1, 2021 to May 31, 2026, or until funds are exhausted. Incentive values and measures may be modified or terminated at any time without prior notice.

Follow These Easy Steps

Step 1: Verify your eligibility

Applicants must verify that they are business customers of PECO (commercial, industrial, governmental, institutional, or nonprofit). A copy of a PECO bill showing the PECO account number is typically used for this verification.

The project must be a new facility improvement that results in an improvement in electric energy efficiency (kWh) or a permanent reduction in electric energy usage.

All equipment must be installed in facilities served by PECO. The facility must have a valid PECO account number on an eligible PECO nonresidential rate.

Step 2: Submit your application to reserve funds

Online: tinyurl.com/pecowaystosave

Email: pecowaystosave@dnv.com

Mail: PECO Energy Efficiency Solutions For Your Business,
4377 County Line Road, Chalfont, PA 18914.

Fax: 1-215-996-3982

Incentive funds will be reserved when your application is Reserved, communicated by a reservation letter.

A project scope must be completed for each measure you plan to install.

For some projects, a pre-installation inspection is required. Most projects require documentation of the equipment being replaced.

Incentive funds are reserved for 90 days. Contact the PECO Energy Efficiency Solutions for Your Business team for specific questions regarding funding reservations and extensions.

Step 3: Install equipment or perform project work

The equipment installed must meet or exceed the specifications and requirements found in the measures tables and detailed in this Application Manual. Equipment must be installed within the program period.

Step 4: Submit final application

Submit a final application within 180 days of project completion but no later than May 15, 2026. Include the following documentation with your final application: customer/contractor information, a customer-signed final application, itemized invoices, specifications, and an updated scope of work. All projects that include lighting require a completed TRM Lighting Worksheet.

The program team will review your final application. For some projects, a final inspection is part of the final review.

The program team will send incentive checks four to six weeks after your final application is approved. If you need assistance, please contact our program hotline at 1-866-371-9343.

Incentive Application Checklist

Pre Application	Final Application
<ul style="list-style-type: none"> <input type="checkbox"/> Incentive application completed <input type="checkbox"/> (optional) Work scope completed in appropriate page (e.g., HVAC) for lighting see below* <input type="checkbox"/> PECO account # or copy of current PECO bill <input type="checkbox"/> Documentation of existing equipment such as photos, inventories, etc. <input type="checkbox"/> Lighting Worksheet* (for lighting projects) <input type="checkbox"/> New Equipment Specifications/Cut Sheets <input type="checkbox"/> Building Permit and COMCHECK report (for New Construction projects only) 	<ul style="list-style-type: none"> <input type="checkbox"/> Signed Final Application agreement <input type="checkbox"/> Documentation of new and existing equipment such as photos, inventories, etc. <input type="checkbox"/> (optional) Final Work scope in appropriate page (e.g., Retrofit Lighting, HVAC) <input type="checkbox"/> Equipment Specifications/Cut Sheets (if scope has changed) <input type="checkbox"/> Lighting Worksheet* (if scope has changed) <input type="checkbox"/> Certificate of Occupancy (for New Construction projects only) <input type="checkbox"/> Itemized invoice

*TRM Lighting Worksheets can be submitted for retrofit lighting projects.

Supporting Documentation Guidelines

Lighting

Lighting project submittals should include a line by line showing pre and post upgrade fixture types and quantities. Cut sheets for upgrade lighting should be included. The cut sheets should be marked up so that the exact part number being installed is identified (typically, multiple versions of a lamp or fixture are listed on a cut sheet). Upgrade LED lamps/fixtures must be listed on the Design Lights Consortium (DLC) or ENERGY STAR qualified product lists. Plans or engineering submittals are required for large projects. Square footage for centrally controlled lighting systems may be required. The applicant should complete the Technical Resource Manual (TRM) Lighting Worksheet as part of a final application.

HVAC

HVAC submittals should include unit quantities and equipment-specific cut sheets for each unit. Cut sheets should contain detailed equipment characteristics including efficiency ratings (EER, SEER, IEER, kW/ton, etc.). AHRI documentation is also acceptable for equipment-specific efficiency ratings.

Electric Chillers

Electric Chiller submittals should include unit quantities and equipment-specific cut sheets which contain detailed equipment characteristics, including efficiency ratings (EER, kW/ton). AHRI documentation is also acceptable for equipment-specific efficiency ratings.

Motors and VFDs

Motor and VFD submittals should include a description of the motor's function (pump, fan, process, etc.), plus motor quantity and horsepower. Early Replacement Premium Motors submittals should include a motor cut sheet indicating efficiency. VFD submittals should include cut sheets.

Compressed Air Systems

Compressed Air submittals should include cut sheets of the upgrade equipment. Cut sheets for VFD air compressors should contain detailed equipment characteristics including HP, kW/cfm performance, etc. CAGI (Compressed Air and Gas Institute) data sheets for specific air compressors are preferred.

Refrigeration

Information about existing equipment (specs, pictures) is preferred. Upgrade equipment submittals should include quantities and cut sheets.

Data Centers

Data Center submittals should include equipment cut sheets which include efficiency information (Seasonal Coefficient of Performance, or COP). Certain data center projects (UPS upgrades, multi- system upgrades, etc.) will require pre and post upgrade trend data.

New Construction

New Construction – Lighting projects require DLC/Energy Star confirmation and COMcheck reports. New Construction – Whole Building projects typically require energy models, equipment cut sheets, floor plans, etc. Please see the New Construction section below for additional details.

Custom

Custom projects are defined as energy efficiency projects that are not specifically listed in the sections above. Custom projects require a project scope description, a site-specific measurement and verification plan (SSMVP), and pre and post upgrade trend data. Custom project types include Combined Heat and Power (CHP), Retrocommissioning (RCx), Energy Management System (EMS), Demand Controlled Ventilation (DCV) and large (> 250,000 kWh savings) mechanical projects. Program engineers will coordinate with participants to establish measurement and verification protocols.

Terms and Conditions

PECO Energy Company (PECO) is offering prescriptive and custom incentives under PECO Energy Efficiency Solutions for Your Business to facilitate the implementation of cost-effective energy

efficiency measures for commercial and industrial customers. The program may be modified or terminated without prior notice. As ordered by the Pennsylvania Public Utility Commission (PAPUC), any and all peak demand reductions from energy efficiency resources generated by the project described in this application will be retained by PECO to be bid into the PJM Forward Capacity Market (FCM). In addition, any and all energy savings or environmental credits generated by the project described in this application will also be retained by PECO.

Program Effective Dates

The program is available until May 31, 2026. Incentives are offered until approved funds are exhausted or until May 31, 2026, whichever comes first. All projects must be completed, and the final applications received no later than May 15, 2026, to be eligible for incentives.

Program and Project Eligibility

PECO Energy Efficiency Solutions for Your Business incentives are available for the common energy efficiency measures listed in this Application Manual. Program incentives are available under PECO Energy Efficiency Solutions for Your Business to non-residential customers within PECO's service territory. These incentives are available to all customers who pay into the Energy Efficiency Charge and receive their electricity over PECO's distribution network, regardless of the retail electric supplier.

Most commercial projects involving energy savings are eligible. Incentives are available for both prescriptive and custom measures. Prescriptive measures are energy efficiency measures with pre-determined savings and incentive levels and are paid on a per unit basis. These measures are available for specific Lighting, HVAC, Refrigeration and Food Service, Variable Speed/Frequency Drives, Compressed Air measures.

Custom measures include energy efficiency measures not listed on the prescriptive application forms. Custom incentives must be approved by PECO in advance, are determined on a case-by-case basis and are paid per unit of energy (kWh) saved. Examples of projects that are NOT eligible for incentives under this program include projects focused primarily on power factor improvement and renewable energy projects.

Installation must be at the customer's facility and provide 100% of the energy benefits as stated in the application for a period of five years, for most measures, and a period of twenty years for CHP (combined heat and power), or for the life of the product, whichever is less. PECO has the right to claim

a pro-rated amount of any incentive paid if the customer ceases to be a distribution customer of PECO or removes the equipment or systems at any time during the five-year period or the life of the measure.

Incentive Payment Limits

Prescriptive and custom incentives cannot exceed 100% of the customer's total costs. Contractor labor costs can be considered in the total project cost, while customer internal labor costs cannot.

Application Review Process

Pre-approval is not a guarantee of program acceptance. Completed applications will be reviewed in the order received. The location or business name on the invoice must be the same as the application information. The incentive is reserved for the project when PECO receives a complete pre-approval application and determines that the project meets the program eligibility requirements. Applicants who submit incomplete applications will be notified of deficiencies upon review of the application and could lose their place in line in the review process until all requested information is received.

Applicants are encouraged to call the program hotline at 1-866-371-9343 if they have any questions about documentation

requirements.

PECO will review final applications for eligibility and completeness. The final application and all required supporting documentation must be received within 90 days for projects submitted through the conventional prescriptive application process, and within 180 days of project completion for projects that were previously completed. Final documents must be received no later than May 15, 2026 to be eligible for incentives. Project documentation, including original dated invoices for the purchase and installation of the measures and/or product specification sheets, is required.

The project invoice must provide sufficient detail to separate the project cost from the cost of other services such as repairs and building code compliance. PECO reserves the right to request additional supporting documentation necessary to ensure measure eligibility and verify that the expected energysavings will occur. Requested information may include, but is not limited to equipment purchase dates, installation dates, proof that the equipment is operational, manufacturer specifications, warranty information and proof of customer co- payment. PECO will make every effort to maintain the confidentiality of customer information except that such information must be provided to the PA PUC and its contractor, as well as PECO's contractor for measurement and evaluation.

The installed measures are not eligible for incentives from other PA Act 129 Phase IV Energy Efficiency Programs.

Inspections and/or PUC's Statewide Program Evaluation

PECO, its agents, measurement and verification contractor and/or the PUC statewide program evaluator have the right to audit or inspect all projects to verify compliance with the program rules and verify the accuracy of project documentation. This may include pre- installation and/or post- installation inspections, detailed lighting layout descriptions, metering, data collection, interviews, and utility bill data analyses. The customer must allow access to project documents and the facility where the measures were installed for a period of five years after receipt of incentive payment by PECO.

Requirements for Custom Project Electricity Savings Calculation

The annual electricity savings must be calculated for custom projects using industry accepted engineering algorithms or simulation models. The applicant must estimate the annual electricity usage of both the existing and proposed equipment based on the current operation of the facility. If the existing equipment is at the end of its rated useful life, the applicant must substitute equipment that would meet the applicable federal and local energy codes as the baseline when calculating the annual energy savings. The applicant must be able to clearly describe the method used to calculate the savings. The applicant must provide all assumptions used in the calculations and document the source for these assumptions. Further information on custom measures can be found in the Application Manual, which can be downloaded from tinyurl.com/pecowaystosave. The method and assumptions used by the applicant to calculate the annual savings will be reviewed by PECO. PECO has sole and final determination of the annual energy savings to be used in calculating the incentive amount. PECO also reserves the right to require specific measurement and verification activities including monitoring both before and after the retrofit and to base the incentive payment on the results of these activities.

PECO may need to conduct inspections both before and after the retrofit projects to verify equipment and operation conditions. Pre-approval application must be submitted while the existing equipment is still in operation in order to allow PECO the opportunity to view the existing equipment.

No Endorsement

PECO does not endorse, support, or recommend any particular manufacturer, product or system design in promoting this program and PECO does not guarantee any specific level of energy savings with respect to any product, system design or energy efficiency measure.

Warranties

PECO DOES NOT WARRANT THE INSTALLATION OR PERFORMANCE OF MEASURES OR INSTALLED EQUIPMENT EXPRESSLY OR IMPLICITLY. PECO MAKES NO WARRANTIES OR REPRESENTATIONS OF ANY KIND, WHETHER STATUTORY, EXPRESSED, OR IMPLIED, INCLUDING WITHOUT LIMITATIONS, WARRANTIES OF MERCHANTABILITY OR FITNESS FOR PARTICULAR PURPOSE REGARDING ANY ENERGY EFFICIENCY MEASURE PROVIDED BY MANUFACTURER OR VENDOR. CONTACT YOUR CONTRACTOR FOR DETAILS REGARDING EQUIPMENT/MEASURE PERFORMANCE AND WARRANTIES. PECO, DNV AND ITS SUBCONTRACTORS PROVIDE NO WARRANTIES REGARDING SAFETY, HEALTH OR WELL-BEING.

Limitation of Liability

All parties, including customers, acknowledge and agree that PECO, DNV and its SUBCONTRACTOR'S liability is limited to paying the incentive specified. The parties, including customers, agree that PECO IS NOT LIABLE FOR ANY CONSEQUENTIAL OR INCIDENTAL DAMAGES, OR FOR ANY DAMAGES IN TORT CONNECTED WITH OR RESULTING FROM SERVICES PROVIDED BY THIS PROGRAM OR PARTICIPATING THEREIN, INCLUDING ANY DAMAGES RELATING TO SAFETY, HEALTH OR WELL-BEING. PECO reserves the

right to not pay this incentive if the application and accompanying documentation are incomplete or inaccurate.

Assignment

Customers may assign a portion or all of their program incentive payment to a specified vendor.

Customer's Certification

Customer certifies that he/she purchased and installed the equipment listed in the application. Customer agrees that all information is true and that he/she has conformed to all of the program and equipment requirements listed in the application.

Termination

PECO reserves the right to extend, modify (this includes modification of program incentive levels) or terminate this program without prior or further notice.

Acknowledgment

PECO customers must read, understand and be in compliance with all rules and regulations concerning this incentive program. You must certify via signature on the Final Application that all information provided is correct to the best of your knowledge, and give PECO permission to share your records with the Pennsylvania PUC, and agents, representatives and contractors it selects to manage, coordinate or evaluate the program. Additionally, you must authorize PECO to have reasonable access to your property to inspect the installation and performance of the equipment and installations that are eligible for incentives under the guidelines of the program.

Retrofit Lighting Incentives

LED Lamps and Fixture Eligibility

LED lamps and fixtures must be listed on the ENERGY STAR certified products list or the Design Lights Consortium (DLC) qualified products list to confirm eligibility. If a product is not listed on Energy Star or DLC, LM-79 and LM-80 test reports may be submitted. These reports will be reviewed to determine if the equipment meets the required specifications.

ENERGY STAR certified fixtures:

www.energystar.gov/productfinder/product/certified-light-fixtures

ENERGY STAR certified integral LED lamps:

www.energystar.gov/productfinder/product/certified-light-bulbs

Design Lights Consortium (DLC) qualified products: [Error! Hyperlink reference not valid.](#)

DLC products are incentivized per their Primary Use category within DLC (e.g. wall wash luminaire vs. linear ambient luminaire). DLC qualified products that are not listed in the incentive table below are eligible for custom incentives.

Minimum Wattage Requirements

In most instances, the wattage of the upgrade luminaire must be at least 20% lower than the wattage of the luminaire being replaced. The exceptions to this are Measure Codes ELED5, ELED6, and ELED7 (LED Pole/Arm Mounted Parking and Roadway Fixtures and Retrofit Kits). These Measure Codes have a minimum watts reduced threshold requirement of 50, 75, and 100 Watts respectively. For example, if an existing 250 watt Metal Halide fixture is being replaced with a 100 watt ELED6 fixture (5001 and 10,000 lumens), the upgrade fixture exceeds the 75 minimum watts reduced threshold and would therefore be eligible for incentive.

Linear or U-tube LED Installation Requirements

LED lamps must be listed on the Design Lights Consortium qualified products list. Currently, 2-foot, 3-foot, 4-foot, and 8-foot linear tubes and 4-foot U-tubes are eligible.

Type A

Type A linear LED lamps must be powered by fluorescent ballasts.

If present, existing magnetic ballasts must be removed and replaced with compatible energy-efficient electronic ballasts.

Equipment must meet the Design Lights Consortium primary use requirement and be classified as “plug and play” replacement lamps (UL Type A).

A label must be affixed in a prominent location to the interior of each fixture. The label should indicate that the fixture has been retrofitted with a tubular LED, and that a fluorescent lamp should not be installed as a replacement.

Type B

Type B LED tubes must be powered by internal drivers.

Existing fluorescent ballasts must be removed, and each fixture’s incoming power wires must be connected directly to the lamp socket. Strict adherence to installation instructions is critical when rewiring existing fixtures.

Each linear LED lamp must be installed with a UL 1598C classified luminaire retrofit kit. The linear LED lamps must be installed on luminaires that are already UL listed.

A retrofitted luminaire must be clearly identified with the label included in the retrofit kit, indicating that the luminaire has been modified and can no longer operate with a fluorescent lamp.

Type C

Type C linear LED lamps must be powered external drivers.

Existing fluorescent ballasts must be removed and replaced with compatible external drivers.

Equipment must meet the Design Lights Consortium primary use requirement and be classified as one of the following:

- 2-lamp external driver lamp-style retrofit kit (UL Type C)
- 3-lamp external driver style retrofit kit (UL Type C)
- 4-lamp external driver lamp-style retrofit kit (UL Type C)

Technical specifications (manufacturer's cut sheet) for the drivers must be submitted with the application.

Permanent Fixture Removal

This measure can only be used in conjunction with lighting retrofits and is intended for spaces that are currently over lit. Incentives are \$0.50 per watt reduced, only on fixtures removed (not on total watts reduced for entire projects). Overall net lumen reduction must be achieved to qualify for a permanent fixture removal incentive. For example:

20 existing fixtures at 10,000 lumens each = 200,000 lumens

14 proposed fixtures at 15,000 lumens each = 210,000 lumens

Because there is no net reduction in lumens, the six fixtures removed are not eligible for a permanent fixture removal incentive. Recommended foot-candle levels can be found in the IESNA Lighting Design Guide. A program engineer will evaluate lumen reduction based on the type of fixtures removed and the Design Lights Consortium lumens rating of the fixtures installed.

Lighting Measure Codes

The Measure Names listed below often contain lumen levels. Please be aware that these lumen levels refer to the new fixture or lamp, not the one being replaced.

Interior Lighting

Measure Code	Measure Name	Incentive	Unit	Notes
TLED2	LED Replacement Lamps (Tubes), 2'	\$6.00	Lamp	Types A, B, and C are eligible
TLED3	LED Replacement Lamps (Tubes), 3'	\$6.00	Lamp	
TLED4	LED Replacement Lamps (Tubes), 4'	\$7.00	Lamp	
TLED8	LED Replacement Lamps (Tubes), 8'	\$8.00	Lamp	
LED1	ENERGY STAR Integral LED fixture: Indoor Portable Lamp/Torchiere	\$3.00	Fixture	
LED2	ENERGY STAR Integral LED fixture: Indoor Recessed Downlight	\$25.00	Fixture	
LED3	ENERGY STAR Integral LED fixture: Indoor Recessed Downlight Retrofit Module	\$20.00	Fixture	
LED4	LED Accent/Track Lighting Fixtures	\$2.00	Head	
LED5A	LED Low-Bay Fixtures, 4,000-10,000 Lumens	\$80.00	Fixture	Low Bay is defined as fixtures \leq 15' above finished floor
LED5B	LED Low-Bay Fixtures, 10,001-20,000 Lumens	\$100.00	Fixture	
LED5C	LED Low-Bay Fixtures, >20,000 Lumens	\$120.00	Fixture	
LED6A	LED Low-Bay Retrofit Kits, 4,000-10,000 Lumens	\$80.00	Fixture	
LED6B	LED Low-Bay Retrofit Kits, 10,001-20,000 Lumens	\$100.00	Fixture	
LED6C	LED Low-Bay Retrofit Kits, >20,000 Lumens	\$120.00	Fixture	
LED7A	LED High-Bay Fixtures, \leq 20,000 Lumens	\$120.00	Fixture	High Bay is defined as fixtures > 15' above finished floor
LED7B	LED High-Bay Fixtures, >20,000 Lumens	\$200.00	Fixture	
LED8A	LED High-Bay Retrofit Kits, \leq 20,000 Lumens	\$120.00	Fixture	
LED8B	LED High-Bay Retrofit Kits, >20,000 Lumens	\$160.00	Fixture	
LED9A	LED Surface and Suspended Linear Fixtures, 2'	\$20.00	Fixture	Surface and Suspended Fixtures include wrap, vapor tight, and strip
LED9B	LED Surface and Suspended Linear Fixtures, 4'	\$25.00	Fixture	
LED9C	LED Surface and Suspended Linear Fixtures, 8'	\$30.00	Fixture	
LED10A	LED Troffer Fixtures and Retrofit Kits, 2'	\$25.00	Fixture	2' Troffers are typically 2x2 lay-in ceiling configuration
LED10B	LED Troffer Fixtures and Retrofit Kits, 4'	\$30.00	Fixture	4' Troffers are typically 4x4 lay-in ceiling configuration
LEDSIGN	Indoor LED Channel Signage	\$15.00	Letter	Typically replaces neon lighting
PFR	Permanent Fixture Removal	\$0.50	Watt Reduced	Removal of non-operational equipment not eligible

Exterior Lighting

Measure Code	Measure Name	Incentive	Unit	Notes
ELED1	ENERGY STAR Integral LED fixture: Outdoor Recessed Downlight	\$20.00	Fixture	
ELED2	ENERGY STAR Integral LED fixture: Outdoor Recessed Downlight Retrofit Fixture	\$20.00	Fixture	
ELED3	LED Outdoor Flood Light Fixtures ≤ 5,000 Lumens	\$50.00	Fixture	Products must be listed as Exterior Flood in DLC Primary UseField to be eligible
ELED4	LED Outdoor Flood Light Fixtures > 5,000 Lumens	\$75.00	Fixture	
ELED5	LED Pole/Arm Mounted Parking and Roadway Fixtures and Retrofit Kits: ≤ 5,000 Lumens	\$50.00	Fixture	ELED5 typically replaces fixtures ≤ 175 W. Minimum of 50 watts reduced required.
ELED6	LED Pole/Arm Mounted Parking and Roadway Fixtures and Retrofit Kits: 5,001 - 10,000 Lumens	\$100.00	Fixture	ELED6 typically replaces fixtures 175 W to 400 W. Minimum of 75 watts reduced required.
ELED7	LED Pole/Arm Mounted Parking and Roadway Fixtures and Retrofit Kits: > 10,000 Lumens	\$150.00	Fixture	ELED7 typically replaces fixtures > 400W. Minimum of 100 watts reduced required.
ELED8	LED Wall Mount Fixtures and Retrofit Kits: ≤ 5,000 Lumens	\$60.00	Fixture	ELED8 typically replaces fixtures ≤ 175 W
ELED9	LED Wall Mount Fixtures and Retrofit Kits: > 5,000 Lumens	\$100.00	Fixture	ELED6 typically replaces fixtures > 175 W

Garage/Canopy Lighting

Measure Code	Measure Name	Incentive	Unit	Notes
LED11A	LED Parking Garage and Canopy Fixtures and Retrofit Kits, Outdoor ≤ 5,000 Lumens	\$70.00	Fixture	LED11A typically replaces fixtures ≤ 175 W
LED11B	LED Parking Garage and Canopy Fixtures and Retrofit Kits, Outdoor 5,001 - 10,000 Lumens	\$120.00	Fixture	LED11B typically replaces fixtures 175 W to 400W
LED11C	LED Parking Garage and Canopy Fixtures and Retrofit Kits, Outdoor > 10,000 Lumens	\$150.00	Fixture	LED11C typically replaces fixtures from > 400 W

Lighting Controls

Measure Code	Measure Name	Incentive	Unit	Notes
CTL	Unitary Sensor Controls	\$10.00	Sensor	Minimum of 30 watts controlled per sensor
DAYOCC	Controls Combination - Daylighting and Occupancy Fixture Mounted	\$10.00	Sensor	Minimum of 30 watts controlled per sensor
ALC	Advanced Lighting Controls	\$0.10	kWh Saved	Custom Analysis required

HVAC Equipment

Air-Cooled Air Conditioners and Air-Cooled Heat Pumps

New unitary air-cooled air conditioners or air-cooled heat pumps that meet or exceed the qualifying cooling efficiency shown in the HVAC Incentives Table below are eligible for incentive. They can be splitsystem or single package units. All packaged and split system cooling equipment must meet ARI standards (210/240, 320 or 340/360), be UL listed and use a minimum ozone-depleting refrigerant (e.g., HCFC or HFC). All efficiencies thresholds are based on ASHRAE Standard 90.1-2013, or comply with the requirements outlined in IECC 2015 Chapter 4. A manufacturer's specification (cut sheet) indicating system efficiency must accompany the application. Disposal of the existing unit must comply with local codes and ordinances.

Package Terminal Systems (Replacements)

Incentives are available for through-the-wall, self-contained, package terminal air conditioner and packaged terminal heat pump units.

Ductless Mini-Split Heat Pumps Less Than 5.4 Tons

Incentives are available for ductless mini-split heat pumps with capacities of less than 5.4 tons.

Water Cooled Heat Pumps

Incentives are available for water-cooled heat pump systems that meet or exceed the energy efficiency requirements shown in the HVAC Incentives Table. All HVAC installations other than comfort cooling and heating, such as process cooling, will be considered custom measures

Air Cooled Air Conditioners

Measure Code	Measure Name	Subcategory	Cooling Baseline	Heating Baseline	Incentive	Unit
H1	Air Cooled Air Conditioners < 5.4tons	Split System	SEER = 14.3	N/A	\$40.00	Ton
		Single Package	SEER = 15.4	N/A		
H2	Air Cooled Air Conditioners ≥ 5.4 and < 11.25 tons	Split System or Single Package	EER = 11.76 IEER = 14.19	N/A	\$50.00	Ton
H3	Air Cooled Air Conditioners ≥ 11.25 and < 20 tons	Split System or Single Package	EER = 11.55 IEER = 13.64	N/A	\$60.00	Ton
H4	Air Cooled Air Conditioners ≥ 20 and < 63.33 tons	Split System or Single Package	EER = 10.5 IEER = 12.76	N/A	\$1,400.00	Air Conditioner
H5	Air Cooled Air Conditioner ≥ 63.33 tons	Split System or Single Package	EER = 10.185 IEER = 12.32	N/A	\$1,600.00	Air Conditioner

Air Cooled Heat Pumps

Measure Code	Measure Name	Subcategory	Cooling Baseline	Heating Baseline	Incentive	Unit
H6	Air Cooled Heat Pumps < 5.4tons	Split System	SEER = 15.4	HSPF = 9.02	\$75.00	Ton
		Single Package	SEER = 15.4	HSPF = 8.8		
H7	Air Cooled Heat Pumps ≥ 5.4 and < 11.25 tons	Split System or Single Package	EER = 11.55 IEER = 13.42	COP = 3.465	\$85.00	Ton
H8	Air Cooled Heat Pumps ≥ 11.25 and < 20 tons	Split System or Single Package	EER = 11.13 IEER = 12.76	COP = 3.36	\$85.00	Ton
H9	Air Cooled Heat Pumps ≥ 20.00 tons	Split System or Single Package	EER = 9.975 IEER = 11.66	COP = 3.36	\$1,800.00	Heat Pump

PTAC/PTHP

Measure Code	Measure Name	Subcategory	Cooling Baseline (EER)	Heating Baseline (COP)	Incentive	Unit
H10A	PTAC or PTHP < 0.66 tons	PTAC, retrofit	10.9 - (0.213 x Cap / 1,000)	N/A	\$45	Ton
		PTAC, NC	14.0 - (0.300 x Cap / 1,000)	N/A		
		PTHP, retrofit	10.8 - (0.213 x Cap / 1,000)	2.9 - (0.026 x Cap / 1,000)		
		PTHP, NC	14.0 - (0.300 x Cap / 1,000)	3.2 - (0.026 x Cap / 1,000)		
H10B	PTAC or PTHP ≥ 0.66 tons and < 0.875 tons	PTAC, retrofit	10.9 - (0.213 x Cap / 1,000)	N/A	\$48	Ton
		PTAC, NC	14.0 - (0.300 x Cap / 1,000)	N/A		
		PTHP, retrofit	10.8 - (0.213 x Cap / 1,000)	2.9 - (0.026 x Cap / 1,000)		
		PTHP, NC	14.0 - (0.300 x Cap / 1,000)	3.2 - (0.026 x Cap / 1,000)		
H10C	PTAC or PTHP ≥ 0.875 tons	PTAC, retrofit	10.9 - (0.213 x Cap / 1,000)	N/A	\$50	Ton
		PTAC, NC	14.0 - (0.300 x Cap / 1,000)	N/A		
		PTHP, retrofit	10.8 - (0.213 x Cap / 1,000)	2.9 - (0.026 x Cap / 1,000)		
		PTHP, NC	14.0 - (0.300 x Cap / 1,000)	3.2 - (0.026 x Cap / 1,000)		

Ductless Mini-Split Heat Pumps (Incentives)

Measure Code	Measure Name	Cooling/Heating Baseline	Incentive	Unit
H11	Ductless Mini-Split Heat Pumps < 5.4tons	See table below	\$40.00	Ton

Ductless Mini-Split Heat Pumps (Baseline Efficiencies)

Existing Equipment	SEER	HSPF
Standard DHP, ASHP, Central A/C	14	8.2 (DHP only)
Room A/C	11.3	N/A
Electric Resistance	N/A	3.412
Electric Furnace	N/A	3.241
PTAC (Replacement/New Construction)	See PTAC table above	N/A
PTHP (Replacement/New Construction)	N/A	See PTHP table above
For new space or no cooling in an existing space:	11.3	N/A
New space, no heat in an existing space, or non-electric heat in an existing space	N/A	3.412

Water Cooled Heat Pumps

Measure Code	Measure Name	Cooling Baseline	Heating Baseline	Incentive	Unit
H12A	Water Cooled Heat Pump <1.4 tons	EER = 12.81	COP = 4.515	\$150.00	Heat Pump
H12B	Water Cooled Heat Pump 1.4 - 5.4 tons	EER = 13.65	COP = 4.515	\$250.00	Heat Pump

Other HVAC

Measure Code	Measure Name	Incentive	Unit
H13	Hotel Guest Room Occupancy Sensor (Electric Resistance Heat & AC)	\$45.00	Per Room
H15	ECM Circulation Fan	\$30.00	Fan
H16A	Integrated Dual Enthalpy Economizer, controlling <5.4 Tons	\$100.00	Per Economizer
H16B	Integrated Dual Enthalpy Economizer, controlling 5.4 - 20 Tons	\$200.00	Per Economizer
H16C	Integrated Dual Enthalpy Economizer, controlling >20 Tons	\$300.00	Per Economizer

Electric Chillers

The Electric Chillers measure includes Air-Cooled Chillers, Water-Cooled Positive Displacement or Reciprocating Chillers and Water-Cooled Centrifugal Chillers. Incentives for multiple chiller configurations (redundant or standby chillers), existing chillers serving multiple load groups, and chillers in industrial applications, will be custom and require site-specific data (equipment-level trend data or utility meter data) to qualify and quantify savings. Redundant chillers or secondary chillers in lead/lag configurations are not eligible for incentive.

Incentives are offered for chillers with an integrated part load value (expressed in kW/ton) that is less than or equal to the qualifying efficiency shown in the Electric Chiller Incentives Table. The chiller efficiency rating must be based on ARI standard 550/590-2003 for IPLV conditions. The chillers must meet ARI standard 550/590-2003, be UL listed, and use a minimum ozone-depleting refrigerant (e.g., HCFC or HFC). The ARI net capacity value should be used to determine chiller tons. A manufacturer's specification sheet with the rated kW/ton IPLV or coefficient of performance IPLV must accompany the application. For custom chiller projects (as described above), the four-point chiller performance data (chiller kW at 25%, 50%, 75%, and 100% loads) is required.

Chillers must satisfy qualifying efficiency requirements for both full load and part load, for either path A or path B. The Electric Chiller Incentives Table below shows the efficiency ratings required to qualify for the prescriptive incentive. The expected operating conditions of the efficient chiller must be consistent with these ratings. For example, if the efficient chiller satisfies path A and generally performs at part load, the appropriate baseline chiller efficiency is the IPLV value under path A. If the efficient chiller satisfies path B and generally performs at full load, the appropriate baseline chiller efficiency is the full load value under path B. Generally, chillers operating above 70% load for a majority (50% or more) of operating hours should use path A, and chillers below 70% load for the majority of operating hours should use path B.

Air Cooled Chillers

Measure Code	Measure Name	Path A	Path B	Incentive	Unit
C1A	Air Cooled Chiller < 75 Tons	10.61 Full Load EER 14.39 IPLV EER	10.19 Full Load EER, 16.59 IPLV EER	\$1,550.00	Per Chiller
C1B	Air Cooled Chiller 75 - 150 Tons			\$3,100.00	Per Chiller

Water Cooled Chillers

Measure Code	Measure Name	Path A	Path B	Incentive	Unit
C2A	Water Cooled Positive Displacement or Reciprocating Chiller ≥ 75 tons and < 150 tons	0.68 Full Load kW/ton 0.53 IPLV kW/ton	0.71 Full Load kW/ton 0.47 IPLV kW/ton	\$20.00	Ton
C2B	Water Cooled Positive Displacement or Reciprocating Chiller ≥ 150 tons and < 300 tons	0.63 Full Load kW/ton 0.51 IPLV kW/ton	0.65 Full Load kW/ton 0.42 IPLV kW/ton	\$20.00	Ton
C2C	Water Cooled Positive Displacement or Reciprocating Chiller ≥ 300 tons and < 600 tons	0.58 Full Load kW/ton 0.49 IPLV kW/ton	0.59 Full Load kW/ton 0.39 IPLV kW/ton	\$20.00	Ton
C2D	Water Cooled Positive Displacement or Reciprocating Chiller ≥ 600 tons	0.53 Full Load kW/ton 0.48 IPLV kW/ton	0.56 Full Load kW/ton 0.36 IPLV kW/ton	\$20.00	Ton
C3A	Water Cooled Centrifugal Chiller ≥ 150 tons and < 300 tons	0.58 Full Load W/ton 0.52 IPLV kW/ton	0.6 Full Load kW/ton 0.38 IPLV kW/ton	\$20.00	Ton
C3B	Water Cooled Centrifugal Chiller ≥ 300 tons and < 400 tons	0.53 Full Load kW/ton 0.49 IPLV kW/ton	0.57 Full Load kW/ton 0.37 IPLV kW/ton	\$20.00	Ton
C3C	Water Cooled Centrifugal Chiller ≥ 400 tons and < 600 tons	0.53 Full Load kW/ton 0.48 IPLV kW/ton	0.56 Full Load kW/ton 0.36 IPLV kW/ton	\$20.00	Ton
C3D	Water Cooled Centrifugal Chiller ≥ 600 tons	0.53 Full Load kW/ton 0.48 IPLV kW/ton	0.56 Full Load kW/ton 0.36 IPLV kW/ton	\$20.00	Ton

Motors and Variable Frequency Drives (VFD)

The Early Replacement Motor measure applies to the replacement of constant speed, uniformly loaded motors with new, energy-efficient motors with the same rated horsepower. The motors being replaced must be less than 15 years old. Replacement of an existing motor with a new motor of different horsepower rating is considered a custom measure. Motors with variable speeds, variable loading, or industrial-specific applications are considered custom measures.

The Variable Frequency Drive (VFD) measure applies to existing or upgrade motors which have VFDs added to them. Motors with existing, non-functioning VFDs, VFDs used only for soft start, or backup motors (where only one motor operates at any time) are not eligible.

Early Replacement Motors

Measure Code	Measure Name	Incentive	Unit
M1	Early Replacement with Premium Efficiency Motor 1.5-10 HP	\$150.00	Per Motor
M2	Early Replacement with Premium Efficiency Motor 11-50 HP	\$200.00	Per Motor
M3	Early Replacement with Premium Efficiency Motor 51-100 HP	\$300.00	Per Motor
M4	Early Replacement with Premium Efficiency Motor >100 HP	\$400.00	Per Motor

VFDs on Fans

Measure Code	Measure Name	Incentive	Unit
V1A	VFD on HVAC Fan ≤10 HP	\$500.00	Fan
V1B	VFD on HVAC Fan 11-20 HP	\$1,000.00	Fan
V1C	VFD on HVAC Fan 21-30 HP	\$1,250.00	Fan
V1D	VFD on HVAC Fan 31-40 HP	\$1,500.00	Fan
V1E	VFD on HVAC Fan 41-50 HP	\$2,000.00	Fan

VFDs on Heating Hot Water Pumps

Measure Code	Measure Name	Incentive	Unit
V2A	VFD on Heating Hot Water Pumps ≤10 HP	\$500.00	Hot Water Pump
V2B	VFD on Heating Hot Water Pumps 11-20 HP	\$1,000.00	Hot Water Pump
V2C	VFD on Heating Hot Water Pumps 21-30 HP	\$1,250.00	Hot Water Pump
V2D	VFD on Heating Hot Water Pumps 31-40 HP	\$1,500.00	Hot Water Pump
V2E	VFD on Heating Hot Water Pumps 41-50 HP	\$2,000.00	Hot Water Pump

VFDs on Process Motors

Measure Code	Measure Name	Incentive	Unit
V3A	VFD on Process Motor ≤10HP	\$1,000.00	Per Motor
V3B	VFD on Process Motor 11-20 HP	\$2,000.00	Per Motor
V3C	VFD on Process Motor 21-30 HP	\$3,000.00	Per Motor
V3D	VFD on Process Motor 31-40 HP	\$3,500.00	Per Motor
V3E	VFD on Process Motor 41-50 HP	\$4,000.00	Per Motor

Compressed Air Systems

No-Loss Condensate Drains are controlled by sensors that monitor condensate levels. These drains open only when condensate needs to be drained and close before compressed air can escape. This measure involves replacing timed drains that operate on a preset schedule. Compressed air systems with standard condensate drains operated by a solenoid and timer qualify for this incentive.

The Cycling Refrigerated Thermal Mass Dryer measure applies to the compressed air generated by an air compressor. When air is compressed, water vapor in the air condenses and collects in liquid form. Some of this condensate collects in the air distribution system and can contaminate downstream components, such as air tools, with rust, oil, and pipe debris. Refrigerated air dryers remove the water vapor by cooling the air to its dew point and separating the condensate. Standard air dryers use a hot-gas bypass system that is inefficient at partial loads. This measure is applicable to cycling thermal mass dryers which use a thermal storage medium to store cooling capacity when the system operates at partial loads, which allows the dryer refrigerant compressor to cycle. Desiccant, deliquescent, heat-of-compression, membrane and other types of dryers do not qualify for this incentive.

Storage Tanks for Load/No Load Screw Compressors applies to the installation of air receivers that have pressure or flow controls. Load/no load compressors unload when there is low demand. The process of unloading occurs over time to avoid foaming lubrication oil. A storage tank that controls pressure and flow buffers air demand on the compressor, thereby reducing the number of transition times from load to no load and saving energy.

Variable Speed Air Compressors use a VFD on the compressor motor to match motor output to the load, resulting in greater efficiency compared to fixed-speed air compressors. Less efficient compressors reduce inlet air to modulate compressor output, resulting in increased energy consumption and peak demand. This measure is applicable to new, VFD air compressors replacing constant speed compressors up to 40 HP. Projects having compressors > 40 HP will require pre and post trend data to quantify for savings.

Compressed Air

Measure Code	Measure Name	Incentive	Unit
CA1	No-loss Condensate Drain	\$50.00	Drain
CA2	Cycling Refrigerated Thermal Mass Dryer	\$20.00	Compressor HP
CA3A	Storage Tanks for Load/No Load Screw Compressors <50 HP	\$800.00	Compressor
CA3B	Storage Tanks for Load/No Load Screw Compressors 50-150 HP	\$1,000.00	Compressor
CA3C	Storage Tanks for Load/No Load Screw Compressors >150 HP	\$1,500.00	Compressor
CA4A	Variable Speed Air Compressor ≤50 HP	\$2,200.00	Compressor
CA4B	Variable Speed Air Compressor 51-100 HP	\$4,400.00	Compressor
CA4C	Variable Speed Air Compressor 101-150 HP	\$6,200.00	Compressor

Refrigeration

The Anti-Sweat Heater Control measure provides savings by sensing relative humidity in the air outside of the display case and cycles the glass door or frame anti-sweat heaters when the ambient dew point is below a preset set point. Technologies that turn off anti-sweat heaters based on sensed condensation (on the inner glass pane) also qualify.

The Evaporator Fan Controls measure is applicable to the installation of evaporator fan controls in walk-in coolers or freezers with no pre-existing controls. This measure is ineligible if any of the following conditions apply:

- The compressor runs all the time with high-duty cycle.
- The evaporator fan does not run at full speed at all times.

The Floating Head Pressure Control measure varies compressor head pressure to adjust condensing temperatures in relation to outdoor air temperature. The installation must replace existing constant pressure or manually controlled systems to achieve reduced head pressure and maintain a minimum saturated condensing temperature of 70°F or maintain a 20°F variance below design heat pressure during mild weather conditions. The compressor size must be at least 5 hp.

The Automatic Door Closers for Walk-In Coolers and Freezers measure is applicable to equipment controlling the main, insulated, opaque doors of a walk-in cooler or freezer. The automatic closer must firmly close the door when it is within one inch of full closure. The incentive applies only to newly installed automatic door closers - replacements on previously installed door closers are not eligible.

The Evaporator Fan Electronically Commutated (EC) Motor for Walk-In/Reach-In Cases measure applies to the replacement of existing, standard efficiency, shaded pole or permanent split capacitor evaporator fan motors (in refrigerated display cases or fan coil walk-ins) with EC fan motors. This incentive cannot be used in conjunction with the evaporator fan control incentive.

The Refrigeration Suction Pipe Insulation measure applies to pipe insulation being installed on formerly uninsulated refrigeration suction lines with a diameter of 1 5/8 inches or less. The incentive is for insulating existing equipment only. Cooler lines require 3/4-inch flexible, closed-cell, nitrile rubber or an equivalent insulation. Freezer lines require 1-inch flexible, closed-cell, nitrile rubber or an equivalent insulation. Insulation exposed to the outdoors must be protected from the weather (e.g., jacketed with medium-gauge aluminum).

The Night Cover measure applies to night covers installed on existing, open refrigerated display cases. This allows for a decrease in cooling load during off hours. The equipment manufacturer must not object to the use of night covers for the existing display case model. The cover must be applied for a period of at least six hours.

The Evaporator Coil Defrost Controls measure minimizes cycle time of an existing system by monitoring evaporator coil temperature and pressure and providing optimal coil defrost when necessary. The new, intelligent control system will typically replace timed-defrost controls.

The Variable Speed Refrigeration Compressor measure is available for a VFD compressor that controls and reduces the speed of the compressor when a refrigeration system does not require the motor to run at full capacity.

The Door Gasket measure applies to the replacement of worn-out gaskets on the doors of walk-in and reach-in coolers and freezers.

The Zero Energy Door measure applies to the installation of no-heat or low-heat clear glass doors on an upright display case. The incentive is limited to doors that are 57 inches high or more. The doors must have heat-reflective treated glass or be gas-filled or both. This measure applies to low-temperature (below 0°F) cases only. The total door rail, glass, and frame heater amperage (about 120 volts) cannot exceed 0.39 amps per door.

The Air-Cooled Refrigeration Condenser measure applies to air-cooled refrigeration condensers with an approach temperature of 13°F or less on low-temperature applications and an approach temperature of 8°F or less on medium-

temperature applications. The specific fan power must be greater than or equal to 85 Btu per hour of heat rejection capacity per watt of fan power.

The LED Open Case Lighting measure is available for the replacement of open or reach-in case, T8 or T12 fluorescent fixtures, with LEDs on refrigerators, coolers, and freezers. The LEDs must be included in the Design Lights Consortium qualified list.

The Doors Added to Open Refrigerated Case measure includes no sweat doors and doors with anti-sweat heaters. If a lighting retrofit is included with the new doors, it must consume the same amount of energy or less energy than the old lighting. Upgrades to lighting or other system components should be processed separately. Horizontal refrigerated cases are not eligible for this incentive.

Refrigeration

Measure Code	Measure Name	Incentive	Unit
R1	Anti-Sweat Heater Controls	\$60.00	Door
R2	Evaporative Fan Controls	\$30.00	Controller
R3	Floating-head Pressure Controls	\$1,000.00	Per Control
R4A	Automatic Door Closers for Walk-in Coolers	\$40.00	Door
R4B	Automatic Door Closers for Walk-in Freezers	\$60.00	Door
R5	Evaporator Fan EC Motor for Reach-in Cases	\$25.00	Motor
R6	Evaporator Fan EC Motor for Walk-in Cases	\$30.00	Motor
R7A	Suction Pipe Insulation for Walk-in Coolers	\$150.00	Per Refrigeration System
R7B	Suction Pipe Insulation for Walk in Freezers	\$180.00	Per Refrigeration System
R8	Night Cover for Display Cases	\$20.00	Per Case
R9	Evaporator Coil Defrost Control	\$104.00	Controller
R10	Variable Speed Refrigeration Compressor	\$2,000.00	Compressor
R11	Door Gaskets	\$50.00	Door
R12	Zero Energy Doors	\$40.00	Door
R13	Air Cooled Refrigeration Condenser	\$250.00	Per Condenser
R15	LED Refrigeration Case Lighting, Open Case, Refrigerator or Freezer	\$0.10	kWh
R16	LED Refrigeration Case Lighting, Reach-in Case, Refrigerator or Freezer	\$25.00	Door
R17	Add Doors to Open Refrigerated Cases	\$45.00	Door

Data Centers

The Data center measures apply to applications ranging in size from an office server closet to large, stand-alone facilities.

The Computer Room Air Conditioner (CRAC) measure applies to air-cooled air conditioning equipments specifically designed for data centers. The Computer Room Air Handler (CRAH) measure applies to the replacement of existing, constant speed, computer room air handler fan motors with VFD or EC fan motors or the retrofit of existing CRAH fan motors with VFD or EC control.

The Water Cooled Centrifugal or Positive Displacement/Reciprocating Chiller measure applies to the upgrade of unitary chillers with more efficient chillers. The replacement of multiple chillers or the addition of chilled water capacity would be considered custom projects.

Uninterruptible Power Supplies (UPS) are used in data centers to provide instantaneous emergency power to critical devices (computers, data centers and telecommunications equipment) in the case of a power failure. In addition, a UPS can protect against power surges, voltage drops and frequency distortions. This measure requires that the equipment is ENERGY STAR certified and requires that pre and post power measurements are obtained. PECO program engineering will consult with the customer or contractor to facilitate this process.

The PC Power Management measure applies to software installed at the facility which controls desktop computer and monitor power settings within a network from a central location, minimizing power when equipment is not being used.

Data Center Equipment

Measure Code	Measure Name	Incentive	Unit
D2A	Computer Room Air Conditioner <5.4 tons	\$350.00	Per CRAC
D2B	Computer Room Air Conditioner 5.4-20 tons	\$550.00	Per CRAC
D2C	Computer Room Air Conditioner >20 tons	\$750.00	Per CRAC
D3	Computer Room Air Handler, variable speed	\$30.00	Per Ton
D4	Water Cooled Centrifugal Chiller < 150 tons	\$20.00	Ton
D5	Water Cooled Positive Displacement or Reciprocating Chiller < 75 tons	\$20.00	Ton
D6	Uninterruptible Power Supply	\$1,500.00	Per Unit
D7	PC Power Management System	\$6.00	PC Controlled

New Construction – Lighting

New Construction – Lighting applies to interior and exterior lighting and controls projects. Projects are evaluated by comparing installed Lighting Power Density (LPD) levels with ASHRAE 90.1 – 2013 thresholds (code). To qualify, LPD levels of the new construction project must be exceeded code by $\geq 5\%$. New construction lighting controls project must exceed code to be eligible for incentive.

The “Space-by-Space” or “Building Area” method can be used to calculate the LPD for the purposes of the incentive. LED products must be listed in either the Design Lighting Consortium (DLC) or ENERGY STAR Qualified Products List. For LED products not yet listed, LM-79/LM-80 test reports can be submitted.

These reports will be reviewed by PECO engineering to confirm that the product meets DLC or Energy Star requirements. Note that the DLC or ENERGY STAR logo on a cut sheet is NOT sufficient to confirm eligibility. Each product’s listing in DLC/ENERGY STAR will be confirmed during technical review.

Required documentation for New Construction - Lighting projects is as follows:

- a) U.S. DOE COMcheck lighting report
- b) Lighting Submittal/Spec Sheets,
- c) Lighting plans (showing layout, quantities, and Fixture types),

Other recommended documentation includes:

- a) Lighting equipment schedule, Cover Sheet with Code Analysis

Eligible projects will receive an incentive of \$0.10/kWh, based on the difference between the ASHRAE 90.1-2013 allowed wattage and the installed wattage. Final Incentives for New Construction Lighting projects require that 100% of the building lighting systems, as described in the lighting submittal and plans, are operating. Equipment will not be eligible if it is installed, but not operating (e.g., lights are off because there is no occupancy). For projects where a subset of equipment is ineligible, the customer has the option to delay project finalization and energy savings calculation until an agreed-upon future date (when more equipment may be operating and eligible). At that time, a follow up inspection will occur to determine final equipment eligibility and incentive amount.

New Construction - Whole Building

The whole building systems approach is intended to encourage integrated energy-efficient designs by providing enhanced incentives to the customers who address overall energy performance. Owners of eligible and qualifying new construction and major renovation projects can receive whole building systems incentives when energy modeling indicates a project's energy usage exceeds code (ASHRAE standard 90.1-2013) by more than 5%. Savings achieved through renewable energy sources are not counted toward project energy savings and are not included in the savings basis. The incentives for eligible New Construction – Whole Building projects are tiered, the value based on the magnitude of modeled savings above code (representing one year of facility operation):

Required documentation for New Construction – Whole Building is as follows:

- Architectural floor plans, exterior wall details, and window schedule
- Lighting Fixture schedule, including ballast details and lighting floor plans
- Mechanical equipment schedule and floor plans
- COMcheck Reports (Interior/Exterior Lighting, Mechanical, Envelope)

Fully executable modeling software files for both the Baseline and the As-Built Building:

- eQuest, EnergyPlus, Carrier HAP, Trane Trace, etc.
- Copy of Building permit, showing permit issue date
- Copy of Building Occupancy Certificate
- Code compliance summary sheets

Final incentives for New Construction - Whole Building projects require that 100% of the building systems operate as described in the submitted energy model. The model typically includes systems like HVAC and lighting. To be eligible for an incentive, the equipment must be operating in a manner consistent with the energy model. Eligibility will be verified during an inspection, at which time one of two conditions must be confirmed:

- 1) The equipment is installed and being operated by the occupant in a manner consistent with the energy model.
- 2) The equipment is installed and being operated in a manner consistent with the energy model, but the building is not currently occupied (e.g., HVAC equipment is energized and responding to heating and cooling loads).

For projects with a subset of ineligible equipment, the owner has the option to delay project finalization and energy savings calculation until an agreed-upon future date (when more equipment may be operating and eligible). At that time, a follow-up inspection will occur to determine final equipment eligibility and the incentive amount. If the decision is made to finalize the project as is, an updated model representing verified equipment operation will be required, and final incentives will be based on the as-is energy savings. Projects receiving whole building systems incentives are not eligible to receive other incentives, such as the prescriptive or custom program incentives, for the same scope. Exterior lighting, process, receptacle, and miscellaneous loads; and other unregulated end uses are not eligible for the incentives. Custom incentives are available for exterior lighting in new construction.

Whole Building Design Incentive

PECO is committed to assisting design teams towards developing building energy models that are technically sound and accurate for the purposes of this program. The design incentive for Whole Building

- New Construction projects is \$0.05/kWh of verified energy savings, capped at \$25,000. This incentive has the following requirements:

- The project is fully implemented, a final Certificate of Occupancy has been issued, and a signed final application has been submitted.
- PECO engineering verifies energy savings and confirms that performance is at least 10% above code.

New Construction

Measure Code	Measure Name	Incentive	Unit
NC1	Whole Building: >5% to 10% better than code	\$0.15	kWh Saved
NC2	Whole Building: 11-20% better than code	\$0.16	kWh Saved
NC3	Whole Building: 21-30% better than code	\$0.17	kWh Saved
NC4	Lighting Power Density, Building Area Approach	\$0.10	kWh Saved
NC5	Whole Building - Design Incentive	Up to \$25,000	Application

Custom

Custom, General

Customer implemented energy efficiency measures that are not listed on the previous pages are considered to be custom. Custom measures generally require pre/post upgrade trend data (either equipment level or whole building level) as the basis of savings. The International Performance Measurement and Verification Protocol (IPMVP) is generally used to qualify and quantify those savings. The custom savings analysis extrapolates savings to one year and those extrapolated kWh savings are incentivized at \$0.10/kWh. The sections below list some common custom measures and the requirements specific to them.

Combined Heat and Power (CHP)

CHP is defined as the concurrent production of electricity and useful thermal energy (typically heating and/or cooling) from a single fuel source. All qualified projects are eligible for incentives. Once the project is deemed commercially operable, the PECO team will coordinate with the customer/contractor to arrange for system trend data capture. Once the annual estimated usage is determined, the incentive will be equivalent to \$0.10/kWh of net production (gross CHP electric output minus parasitic load) over one year. Incentives are capped at either 50% project cost or \$2,000,000, whichever is lower.

In order to qualify for incentives, the CHP system must be designed to be baseloaded and utilize thermal heat recovery year-round (except during normally scheduled system maintenance periods). The customer agrees to meter CHP system data in order to satisfy the terms of the incentive payments. System data includes, but is not limited to, time stamped values of: power output (kW), electricity production (kWh), parasitic loads (kW), and thermal energy production (MBtu/hr).

Energy Management System (EMS)

The EMS measure is available for installation of web-based building automation systems in existing buildings that currently do not leverage energy management sequence of operation strategies. Upgrades of energy management HVAC systems with lack of or inoperable energy management sequence of operation strategies functions will be reviewed on a case-by-case basis for incentive eligibility. The application must include the control sequence of operation strategy implemented. Site-specific data (equipment-level trend data or utility meter data) is required to quantify savings which are produced by control strategy measures implemented by the EMS. Incentives will be \$0.10/kWh of demonstrated annual savings

Demand Control Ventilation (DCV)

DCV provides the capability for a ventilation system to automatically reduce outdoor air intake below design rates when the actual occupancy of spaces served by the system is less than design occupancy. Site-specific data (equipment-level trend data or utility meter data) is required to quantify savings which are produced by the reduction of outdoor air rates incurred because of the DCV. Incentives will be \$0.10/kWh of demonstrated annual savings.

Retrocommissioning (RCx)

Retrocommissioning is a systematic process to improve an existing building's energy control and performance. RCx project submittals should include a description of those measures implemented and the date range when they occurred. Site-specific data (equipment-level trend data or utility meter data) is required to quantify savings which are produced by the implemented RCx measures

Custom Incentives

Measure Code	Measure Name	Incentive	Unit
CHP	CHP	\$0.10	kWh Saved
CustomCA	Custom Compressed Air	\$0.10	kWh Saved
CustomCHVAC	Custom HVAC	\$0.10	kWh Saved
CustomDC	Custom Data Center	\$0.10	kWh Saved
CustomL	Custom Lighting	\$0.10	kWh Saved
CustomMRI	Custom Motors and Drives	\$0.10	kWh Saved
CustomO	Custom Other	\$0.10	kWh Saved
CustomP	Custom Process	\$0.10	kWh Saved
CustomR	Custom Refrigeration	\$0.10	kWh Saved
CustomRCx	Retrocommissioning, Whole Building	\$0.10	kWh Saved
CustomEMS	Energy Management System	\$0.10	kWh Saved
CustomDCV	Demand Controlled Ventilation	\$0.10	kWh Saved