

HVAC and VSD Incentives Worksheet

January 1, 2024 - December 31, 2024

Document updated on November 13, 2023

Customer Name: _____

DIRECTIONS: Please save a copy of this form to your computer by selecting "File/Save As" before entering text and numbers. Then fill in your information electronically and select "Save." Note that this form requires Adobe Reader® version 11.0 to function properly. Download the most recent version of Adobe Acrobat Reader DC® at <https://get.adobe.com/reader/>.

PLEASE NOTE: Values should be entered into tables without punctuation or symbols (punctuation and symbols are generated by form field).

General Specifications

1. Pre-application is required; review instructions on the standard incentives application form. Wait for a reservation letter before starting your project.
2. Building energy management measures are available in the [Energy Management Systems incentive worksheet](#).

Chillers

Specifications and Eligible Equipment:

1. This incentive is only applicable to systems used for comfort cooling. Process cooling systems are not eligible for this incentive, but may be eligible for a custom incentive. Visit [ComEd.com/Custom](https://www.comed.com/custom) for more information.
 - a. Will the proposed chiller(s) be used for comfort cooling only?: ☐ Yes ☐ No
2. Must have a rated kW/ton for both Full Load (FL) and Integrated Part Load Value (IPLV) that is less than the qualifying efficiency.
3. Qualifying chillers must comply with both IECC 2021 Path B Full Load (FL) and Integrated Part Load Value (IPLV) efficiencies listed in the table below.
4. The chillers performance must be evaluated under the AHRI standards 550/590 (I-P), be UL listed, and use a minimum ozone-depleting refrigerant that complies with local codes (e.g., HCFC or HFC).
5. The actual capacity value should be used to determine the chiller tons.
6. A manufacturer's specification sheet with the rated kW/ton-IPLV or COP-IPLV and nominal tonnage must accompany the application. The specification sheet must also break out the kW/ton values at 100%, 75%, 50%, and 25% load per AHRI Standard 550/590 (I-P).
7. Redundant chillers are not eligible for incentives
 - a. Will the proposed chiller(s) be used as a redundant chiller(s)? ☐ Yes ☐ No
 - i. (A redundant chiller is estimated to run less than 500 hours a year)

Water-Cooled Chiller^{#1}

\$5 for IPLV improvement per ton

New or replacement water-cooled chiller (centrifugal, scroll/helical-rotary, reciprocating).

Efficiency incentive is paid for an efficiency rating below the qualifying efficiency. The incentive is \$5.00 per 0.01 kW/ton IPLV for water-cooled chillers.

| Chiller Type | Size Category | IECC Path B - Minimum Qualifying Full Load Efficiency | IECC Path B - Minimum Qualifying Part Load Efficiency |
|--|-----------------|---|---|
| Centrifugal | < 150 tons | 0.695 kW/ton-FL efficiency | 0.440 kW/ton-IPLV efficiency |
| | 150 to 299 tons | 0.635 kW/ton-FL efficiency | 0.400 kW/ton-IPLV efficiency |
| | 300 to 399 tons | 0.595 kW/ton-FL efficiency | 0.390 kW/ton-IPLV efficiency |
| | ≥ 400 tons | 0.585 kW/ton-FL efficiency | 0.380 kW/ton-IPLV efficiency |
| Reciprocating, Scroll, or Helical-Rotary (Screw) | < 75 tons | 0.780 kW/ton-FL efficiency | 0.500 kW/ton-IPLV efficiency |
| | 75 - 149 tons | 0.750 kW/ton-FL efficiency | 0.490 kW/ton-IPLV efficiency |
| | 150 - 299 tons | 0.680 kW/ton-FL efficiency | 0.440 kW/ton-IPLV efficiency |
| | 300 - 599 tons | 0.625 kW/ton-FL efficiency | 0.410 kW/ton-IPLV efficiency |
| | ≥ 600 tons | 0.585 kW/ton-FL efficiency | 0.380 kW/ton-IPLV efficiency |

In the chart below, please use the following abbreviated selections;

Equipment Type Installed: C = Centrifugal, SHR = Scroll or Helical Rotary, R = Reciprocating

| Equipment Type Installed | IPLV Efficiency of Unit Installed (kW/ton) | FL Efficiency of Unit Installed (kW/ton) | (A) Unit Size (tons) | (B) Number of Units Installed | (C) Incentive Per IPLV Improvement | (D) IPLV Improvement Below Code Requirement | (AxBxCxDx100) Incentive |
|--------------------------|--|--|----------------------|-------------------------------|------------------------------------|---|-------------------------|
| Example: C | 0.340 | 0.580 | 410.00 | 1 | \$5.00 | 0.04 | \$8,200.00 |
| | | | | | \$5.00 | | |
| | | | | | \$5.00 | | |
| | | | | | \$5.00 | | |
| | | | | | \$5.00 | | |
| | | | | | \$5.00 | | |
| Incentive Subtotal | | | | | | | |

Chiller With Integrated VSD & Oil Free Bearing Chiller#1

\$10 for IPLV improvement per ton

New or replacement water-cooled chiller with integrated VSD or Oil Free Bearing chiller.

If a VSD or oil-free bearing-based chiller is being installed, the project is only eligible for this incentive and not the water-cooled chiller measure.

Efficiency incentive is paid for an efficiency rating below the qualifying efficiency. The incentive is \$10.00 per 0.01 kW/ton IPLV for chillers with integrated VSD & oil free bearing chillers.

Incentive Calculation for Chiller with Integrated VSD

In the chart below, please use the following abbreviated selections;

Chiller Type: OFBC = Oil Free Bearing Chiller, CIVSD = Chiller with Integrated VSD

Equipment Type Installed: C = Centrifugal, SHR = Scroll or Helical Rotary, R = Reciprocating

| Chiller Type | Equipment Type Installed | IPLV Efficiency of Unit Installed (kW/ton) | FL Efficiency of Unit Installed (kW/ton) | (A) Unit Size (tons) | (B) Number of Units Installed | (C) Incentive Per IPLV Improvement | (D) IPLV Improvement Below Code Requirement | (AxBxCxDx100) Incentive |
|--------------------------|--------------------------|--|--|----------------------|-------------------------------|------------------------------------|---|-------------------------|
| Oil Free Bearing Chiller | Example: Centrifugal | 0.340 | 0.580 | 410.00 | 1 | \$10.00 | 0.04 | \$16,400.00 |
| | | | | | | \$10.00 | | |
| | | | | | | \$10.00 | | |
| | | | | | | \$10.00 | | |
| | | | | | | \$10.00 | | |
| | | | | | | \$10.00 | | |
| Incentive Subtotal | | | | | | | | |

Air-Cooled Chiller#1

\$6 for IPLV improvement per ton

New or replacement air-cooled chiller.

Efficiency incentive is paid for an efficiency rating below the qualifying efficiency. The incentive is \$6.00 per 0.01 kW/ton IPLV for air-cooled chillers.

| Size Category | IECC Path B - Minimum Qualifying Full Load Efficiency | IECC Path B - Minimum Qualifying Part Load Efficiency |
|---------------|---|---|
| < 150 tons | 1.24 kW/ton-FL efficiency | 0.760 kW/ton-IPLV efficiency |
| ≥ 150 tons | 1.24 kW/ton-FL efficiency | 0.750 kW/ton-IPLV efficiency |

| Equipment Type Installed | IPLV Efficiency of Unit Installed (kW/ton) | FL Efficiency of Unit Installed (kW/ton) | (A) Unit Size (tons) | (B) Number of Units Installed | (C) Incentive Per IPLV Improvement | (D) IPLV Improvement Below Code Requirement | (AxBxCxDx100) Incentive |
|-----------------------------|--|--|----------------------|-------------------------------|------------------------------------|---|-------------------------|
| Example: Air-Cooled Chiller | 0.700 | 1.20 | 200.00 | 1 | \$6.00 | 0.05 | \$6,000.00 |
| Air-Cooled Chiller | | | | | \$6.00 | | |
| Air-Cooled Chiller | | | | | \$6.00 | | |
| Air-Cooled Chiller | | | | | \$6.00 | | |
| Incentive Subtotal | | | | | | | |

#1For new chiller projects pre-approved in 2024, ComEd will reserve the same incentive rate through 2025 if a final application is submitted by 12/31/25.

Variable Speed Drive on HVAC Chiller

\$55 per ton

New variable-speed drives (VSDs) installed on an existing chiller (where applicable).

Specifications and Eligible Equipment:

- 1. The installation of a VSD must accompany the permanent removal or disabling of any throttling devices, such as inlet vanes, bypass dampers, and throttling valves.
- 2. New chillers with integrated VSDs are not eligible for this incentive, but may be eligible for Chiller with Integrated VSD incentives.
- 3. Chillers with existing VSDs, operational or non-operational, are ineligible. VSDs for process chillers are not eligible for this incentive but may be eligible for a custom incentive.
- 4. **This measure cannot be combined with the Energy Management System measure. Customers are ineligible for this measure for 12 months following an installed Energy Management System measure.**

| Application Description | (A) Size (ton) | (B) Number Installed | (C) Incentive Per Ton | (AxBxC) Incentive |
|-------------------------|-------------------|-------------------------|--------------------------|----------------------|
| | | | \$55.00 | |
| | | | \$55.00 | |
| | | | \$55.00 | |
| | | | \$55.00 | |
| Incentive Subtotal | | | | |

Variable Speed Drive on Fan or Pump

\$150 per HP

Installation of a VSD on an HVAC fan or pump **200 HP or less**.

Specifications and Eligible Equipment:

1. The VSD must be installed with automatic control technology.
2. Installation of the VSD must accompany the permanent removal or disabling of existing flow control devices, such as inlet vanes, bypass dampers, and throttling valves.
3. VSD must be installed on a HVAC fan, chilled water pump, hot water pump, or cooling tower fans.
4. The following VSD applications are not eligible. Please indicate below if your project includes any of them:
 - **Does your project include these applications?**
 - ☐ **Yes** ☐ **No** Replacement of an existing VSD
 - ☐ **Yes** ☐ **No** VSD installed on equipment which operates less than 1200 hours per year
 - ☐ **Yes** ☐ **No** VSD installed on redundant/backup motors
 - ☐ **Yes** ☐ **No** VSD installed in place of multi-speed flow control equipment (e.g., two-speed cooling tower fans)
 - ☐ **Yes** ☐ **No** VSD installed for the sole purpose of “soft-starting” motors
 - ☐ **Yes** ☐ **No** VSD installed on pumps where affinity laws are not in effect, such as sump pumps
5. The following VSD applications are not eligible for this incentive but may be eligible for custom incentive. Please indicate below if your project includes any of them:
 - **Does your project include these applications?**
 - ☐ **Yes** ☐ **No** VSD installed in place of variable pitch blade flow control equipment
 - ☐ **Yes** ☐ **No** VSD installed for the purpose of reducing motor speed to a single set point and not modulate
 - ☐ **Yes** ☐ **No** VSD installation in a process load is not eligible for this incentive but may be eligible for a custom incentive.
 - ☐ **Yes** ☐ **No** IECC required VSD (VSDs required by code are not eligible.)
6. This measure is not applicable for VSD installation in new cooling towers with motors greater than 7.5HP.
7. **This measure cannot be combined with the Energy Management System measure. Customers are ineligible for this measure for 12 months following an installed Energy Management System measure.**

| Fan or Pump ID Tag | Installation Type Code from Table 1 | Controls Before VSD from Table 2 | Annual Operating Hours Greater > 1,200 | (A) Motor Nominal Horsepower (Must Be ≤ 200) | (B) Motor Quantity | (C) Incentive Per HP | (AxBxC) Incentive |
|--------------------|-------------------------------------|----------------------------------|--|--|--------------------|----------------------|-------------------|
| E.g. Supply Fan #1 | SFA | DD | Yes | 50 | 1 | \$150.00 | \$7,500.00 |
| | | | | | | \$150.00 | |
| | | | | | | \$150.00 | |
| | | | | | | \$150.00 | |
| | | | | | | \$150.00 | |
| | | | | | | \$150.00 | |
| | | | | | | \$150.00 | |
| | | | | | | \$150.00 | |
| | | | | | | \$150.00 | |
| Incentive Subtotal | | | | | | | |

Please describe how the VSD is being modulated:

Table 1: VSD Installation Type

- **SFA** - HVAC supply air fan
- **RFA** - HVAC return air fan
- **BEF** - Building exhaust fan
- **MAF** - Make-up air fan
- **CTF** - Cooling tower fan
- **BDF** - HVAC boiler draft fan
- **CHWP** - Chilled water pump
- **FWP** - Boiler feed water pump
- **HWP** - Hot water pump

Table 2: Control Before VSD

- **DD** - Discharge damper
- **IGV** - Inlet guide vanes, BI, & Airfoil Fans
- **BV** - Bypass Damper
- **ONF** - On/off
- **OD-BI/AF** - Outlet Damper, BI & Airfoil Fans
- **IDB** - Inlet Damper Box
- **IVD** - Inlet Vane Dampers
- **OD-FC** - Outlet Damper, FC Fans
- **ECD** - Eddy Current Drives
- **IGV-FC** - Inlet Guide Vane, FC Fans
- **MISC** - Other (specify):

Chilled Water Reset Controls

\$5 per ton

Install chilled water reset controls on existing chillers to allow them to operate at higher chilled water temperatures during periods of low cooling loads. The existing chilled water system must have a constant chilled water temperature of 45°F or less.

Specifications and Eligible Equipment:

- 1. Only water and air-cooled chillers are eligible for this measure.
- 2. Chillers with existing control strategies are not eligible for this measure.
- 3. The control strategy must use a temperature reset of at least 5°F.
- 4. A copy of the chiller’s mechanical drawings or operation plans must accompany the application to verify that baseline requirements are met.
- 5. **This measure cannot be combined with the Energy Management System measure. Customers are ineligible for this measure for 12 months following an installed Energy Management System measure.**

| Application Description | (A) Unit Size (tons) | (B) Number Installed | (C) Incentive Per Ton | (AxBxC) Incentive |
|-------------------------|-------------------------|-------------------------|--------------------------|----------------------|
| | | | \$5.00 | |
| | | | \$5.00 | |
| | | | \$5.00 | |
| | | | \$5.00 | |
| Incentive Subtotal | | | | |

Package Terminal AC (PTAC) / Package Terminal Heat Pump (PTHP)

\$30 per ton

A through-the-wall or built-in self-contained PTAC or PTHP that is two tons (24,000 Btu/h) or less.

Qualifying Efficiency

| Equipment Type | Capacity (BTU/hr) | Program Qualifying Efficiency (EER/COP) ^{#2} |
|--------------------------|-------------------|---|
| PTAC/PTHP (Cooling mode) | | |
| PTHP (Heating mode) | | |

^{#2}Input the capacity (cap) in BTU/hr to determine program qualifying Efficiency (EER). The formula used to determine eligibility are Cooling mode- $14.0 - (0.300 \times \text{Cap}/1000)$ and Heating mode- $3.7 - (0.052 \times \text{Cap}/1,000)$. If the new equipment EER or COP is ABOVE the calculated qualifying EER and meets the other requirements, it is eligible for incentives.

Specifications and Eligible Equipment:

1. Only units that have an EER greater than or equal to the IECC 2021 efficiencies calculated above qualify for the incentive.
2. EER must be rated per AHRI 310/380.
3. PTAC and PTHPs are eligible for standard or instant discount incentives. Customers who receive a ComEd Energy Efficiency Program instant discount through a participating distributor for PTACs or PTHPs are not eligible to receive a standard incentive or vice versa.

PTAC/PTHP Incentive Calculation

| Application Description | Cooling Efficiency of Unit Installed (EER) | Heating Efficiency of Unit Installed (COP-PTHP) | (A) Unit Size (tons) | (B) Number Installed | (C) Incentive Per Ton | (AxBxC) Incentive |
|-------------------------|--|---|----------------------|----------------------|-----------------------|-------------------|
| | | | | | \$30.00 | |
| | | | | | \$30.00 | |
| | | | | | \$30.00 | |
| | | | | | \$30.00 | |
| Incentive Subtotal | | | | | | |

Guest Room Energy Management System

Specifications and Eligible Equipment:

- 1. Sensors must be controlled by automatic occupancy detectors or key cards.
- 2. During unoccupied periods, the default setting for controlled units should differ by at least five degrees from the operating set point.
- 3. Incentive is per guest room controlled, rather than per sensor, for multi-room suites.
- 4. Systems with networked control qualify for this incentive.
- 5. Replacement or upgrades of existing occupancy-based controls are not eligible for this incentive.

Note: Your gas company may offer an additional prescriptive or custom rebate for this measure. Visit [NicorGasRebates.com](#), [PeoplesGasRebates.com](#) or [NorthShoreGasRebates.com](#) for more information.

Guest Room Energy Management System (Electric Resistance Heat/AC)

\$100 per guest room

New installation of a temperature setback control system for individual guest rooms with electric heat and air conditioning.

| (A) Number of Units | (B) Cooling Tons Per Unit | (C) Total Cooling Tons | (D) Incentive Per Guest Room | (A x D) Incentive |
|------------------------|---------------------------------|---------------------------|------------------------------------|----------------------|
| | | | \$100.00 | |
| | | | \$100.00 | |
| | | | \$100.00 | |
| Incentive Subtotal | | | | |

Guest Room Energy Management System (Heat Pump Heating/AC)

\$100 per guest room

New installation of a temperature setback control system for individual guest rooms with heat pump heating and electric air conditioning.

| (A) Number of Units | (B) Cooling Tons Per Unit | (C) Total Cooling Tons | (D) Incentive Per Guest Room | (A x D) Incentive |
|------------------------|---------------------------------|---------------------------|------------------------------------|----------------------|
| | | | \$100.00 | |
| | | | \$100.00 | |
| | | | \$100.00 | |
| Incentive Subtotal | | | | |

Guest Room Energy Management System (Natural Gas or No Heat/AC)

\$50 per guest room

New installation of a temperature setback control system for individual guest rooms with natural gas heat and electric air conditioning.

| (A) Number of Units | (B) Cooling Tons Per Unit | (C) Total Cooling Tons | (D) Incentive Per Guest Room | (A x D) Incentive |
|------------------------|---------------------------------|---------------------------|------------------------------------|----------------------|
| | | | \$50.00 | |
| | | | \$50.00 | |
| | | | \$50.00 | |
| Incentive Subtotal | | | | |

Demand Controlled Ventilation

\$40 per 1,000 square feet

Retrofit of an existing building ventilation system with controls that modulate outside air ventilation based on real-time occupancy.

Specifications and Eligible Equipment:

1. Conditioned space must be kept between 65 °F and 78 °F during operating hours (except for garages).
2. Only buildings with space heating and cooling applications are eligible, except for garages. System must currently have a fresh air requirement equal to or greater than 10 percent of supply air requirements.
3. For conditioned interior spaces, carbon dioxide sensors must be installed in conjunction with fully functioning economizers with zone level sensors or return system sensors.
4. For garage spaces, fans must modulate the ventilation airflow based on pollutant concentrations (primarily carbon monoxide) in the space.
5. The incentive is calculated per square foot of area controlled, so a floor plan must be submitted with the preapproval application.
6. **This measure cannot be combined with the Energy Management System measure. Customers are ineligible for this measure for 12 months following an installed Energy Management System measure.**
7. Residential space cannot be included in the claimed square footage.
8. For heating savings, this measure does not apply to any system with terminal reheat (constant volume or variable air volume). These projects may be eligible for a custom incentive.
9. The efficient equipment condition is defined by new CO₂ sensors installed on return air systems where no other sensors were previously installed.

Note: Your gas company may offer an additional prescriptive or custom rebate for this measure. Visit [NicorGasRebates.com](https://www.nicorgasrebates.com), [PeoplesGasRebates.com](https://www.peoplesgasrebates.com) or [NorthShoreGasRebates.com](https://www.northshoregasrebates.com) for more information.

| Description | Size (sq. ft.) | Incentive Subtotal |
|-------------|----------------|--------------------|
| | | |

Restroom Exhaust Fan Occupancy Sensor

\$15 per fan

Installation of occupancy sensors on a stand-alone restroom exhaust fan with existing control from a manual switch that is either tied or not tied to the lighting.

Specifications and Eligible Equipment:

- 1. Existing restroom exhaust fan must be 0.6 amps to 2.0 amps.
- 2. The occupancy sensor must automatically shut off the exhaust fan after a specified period of time when no occupancy is detected.
- 3. The fans cannot be controlled by any existing building automation system.
- 4. Manual timers controlling the exhaust system do not qualify.
- 5. The existing exhaust volume flow rate must be at least 75 cfm per toilet room fixture.

| Number of Units | Incentive Subtotal |
|-----------------|--------------------|
| | |

Wireless Pneumatic Thermostat

\$100 per thermostat

Replacement of an existing pneumatic thermostat with a new wireless pneumatic thermostat with a direct digital-to-pneumatic signal for control of such end devices as VAV boxes, fan powered boxes, reheat coils, fan coils and radiant heat.

Specifications and Eligible Equipment:

- 1. Wireless pneumatic thermostat system must be new and include:
 - a. Central time control for setback of space temperature
 - b. Minimum setback space temperature of at least 8 °F in both heating and air conditioning mode
 - c. Minimum setback period of more than 2,200 hours per year
- 2. System must include central control interface for all thermostats to set the space temperature setpoints for both heating and air conditioning mode.
- 3. Thermostat may allow for manual override of space temperature setpoints but must be reset to central control setpoints after all setback periods.
- 4. Thermostat must include auto-calibration feature to eliminate drift to better maintain space temperature setpoint.
- 5. **This measure cannot be combined with the Energy Management System measure. Customers are ineligible for this measure for 12 months following an installed Energy Management System measure.**

| Square Feet Controlled | Number of Units | Incentive Subtotal |
|------------------------|-----------------|--------------------|
| | | |

Air-Side Economizer

\$50 per ton

An air-side economizer brings cooler outside air into a building to reduce the amount of mechanical cooling required. Incentives are available for retrofitting existing air-handling units, rooftop units and split-direct expansion systems designed without the capability for 100 percent outside air and exhaust.

Specifications and Eligible Equipment:

- 1. New dampers and controllers must be installed on an existing system and the area served must be air conditioned space.
- 2. System must compare return and outside air temperatures.
- 3. Control of the economizer can be either a comparison of dry-bulb temperature or enthalpy.
- 4. System must be set to introduce outside air whenever it will reduce the requirement for mechanical cooling.
- 5. One hundred percent outside air units, such as kitchen or dedicated outdoor units, do not qualify for this incentive.
- 6. Repairs of existing economizers, and economizers installed on new units, are not eligible for incentives.
- 7. **This measure cannot be combined with the Energy Management System measure. Customers are ineligible for this measure for 12 months following an installed Energy Management System measure.**
- 8. Air-Side Economizers are ineligible if they are required by code.

| Application Description | Size (ton) | Number Installed |
|-------------------------|------------|------------------|
| | | |
| | | |
| | | |
| Incentive Subtotal | | |

Electronically Commutated Motor (ECM) on Fan-Powered Box

\$50 per motor

Installation of electronically commutated motor, brushless DC motor or other type of variable-speed motor on a fan-powered terminal box, fan coil or HVAC supply/return air fan serving both heating and cooling systems.

Specifications and Eligible Equipment:

- 1. The ECM must be rated for 10 HP or less.
- 2. The ECM must have a controller set to control the motor speed based on the difference between the indoor temperature and thermostat set point.
- 3. Newly installed variable speed drives are not eligible for this measure.

| Number of Units | Incentive Subtotal |
|-----------------|--------------------|
| | |

Ground Source Heat Pump

\$30 per ton per EER above minimum efficiency

Installation of a new Ground Source Heat Pump in an existing facility, new construction or replacement of existing electric heating and/or cooling equipment.

IECC 2021 Minimum Requirements GSHP Requirements

| Equipment Type | Size Category | Rating Condition | Minimum Efficiency |
|---|-----------------------------------|---------------------|----------------------|
| Brine to Air: Ground Loop (Cooling Mode) | <135,000 Btu/h | 77°F entering fluid | 14.1 EER |
| Brine to Water: Ground Loop (Cooling Mode) | <135,000 Btu/h | 77°F entering fluid | 12.1 EER |
| Brine to Air: Ground Loop (Heating Mode) | <135,000 Btu/h | 32°F entering fluid | 3.2 COP _H |
| Brine to Water: Ground Loop (Heating Mode) | <135,000 Btu/h | 32°F entering fluid | 2.5 COP _H |
| Water to Air: Ground Water (Cooling Mode) | <135,000 Btu/h | 59°F entering fluid | 18 EER |
| Water to Water: Ground Water (Cooling Mode) | <135,000 Btu/h | 59°F entering fluid | 16.3 EER |
| Water to Air: Ground Water (Heating Mode) | <135,000 Btu/h (Cooling Capacity) | 50°F entering fluid | 3.7 COP _H |
| Water to Water: Ground Water (Heating Mode) | <135,000 Btu/h (Cooling Capacity) | 50°F entering fluid | 3.1 COP _H |

Ground Source Heat Pump Incentive Calculation

| Equipment Type Installed | Efficiency Standard (EER2/EER) | Efficiency Cooling EER | Efficiency Heating COP | Cooling Capacity (BTU/hr) | Heating Capacity (BTU/hr) | Cooling Efficiency Improvement Over Baseline | Incentive |
|--------------------------------------|--------------------------------|------------------------|------------------------|---------------------------|---------------------------|--|-----------|
| Example: Brine to Water: Ground Loop | EER | 16 | 4 | 65,000 | 65,000 | 3.9 | \$633.75 |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| Incentive Subtotal | | | | | | | |

Rooftop Unit

\$20 per ton per IEER/SEER2 above efficiency requirement

Installation of a new Rooftop Unit in an existing facility, new construction or replacement of existing electric heating and/or cooling equipment.

Specifications and Eligible Equipment:

1. Rooftop units are eligible for standard or instant discount incentives. Customers who receive a ComEd Energy Efficiency Program instant discount through a participating distributor for a rooftop unit are not eligible to receive a standard incentive or vice versa.
2. For additional roof-top and split system incentives, please see the DX tune-up worksheet at [ComEd.com/Worksheets](https://www.comed.com/worksheets).
3. Mini-Split systems are not eligible for this measure.

IECC 2021 Minimum Requirements Cool Systems

| Equipment Type | Size Category | Heating Section Type | Subcategory or Rating Condition | Efficiency Requirement | Test Procedure |
|---------------------------------|---|----------------------------------|---------------------------------------|---|----------------|
| Air Conditioners, Air Cooled | < 65,000 Btu/h | All | Split System | 13.4 SEER2 | AHRI 210/240 |
| | | | Single Package | 13.4 SEER2 | |
| | ≥ 65,000 Btu/h and < 135,000 Btu/h | Electric Resistance (or None) | Split System and Single Package | 11.2 EER / 10.6 EER2 14.8 IEER | AHRI 340/360 |
| | | All other | | 11.0 EER / 10.5 EER2 14.6 IEER | |
| | ≥ 135,000 Btu/h and < 240,000 Btu/h | Electric Resistance (or None) | | 11.0 EER / 10.5 EER2 14.2 IEER | |
| | | All other | | 10.8 EER / 10.5 EER2 14.0 IEER | |
| | ≥ 240,000 Btu/h and < 760,000 Btu/h | Electric Resistance (or None) | | 10.0 EER / 9.5 EER2 13.2 IEER | |
| | | All other | | 9.8 EER / 9.3 EER2 13.0 IEER | |
| | ≥ 760,000 Btu/h | Electric Resistance (or None) | | 9.7 EER / 9.2 EER2 12.5 IEER | |
| | | All other | | 9.5 EER / 9.0 EER2 12.3 IEER | |

Is the unit operation based on DX cooling? ☐ Yes ☐ No

Are the proposed rooftop unit(s) intended for space cooling only? ☐ Yes ☐ No

Heating Fuel Type: ☐ Electric ☐ Gas ☐ None

Rooftop Unit Incentive Calculation

| Equipment Type Installed | Efficiency Rating of Unit Installed ^{#3} | | | | Input Heating Capacity (MBH) | Heating Efficiency (%) | (A) Unit Size (tons) | (B) Number of Units Installed | (C) Incentive Per Ton Per SEER2/IEER | (D) Cooling Efficiency Improvement Over Baseline SEER2/IEER | (AxBxCxD) Incentive |
|--------------------------|---|---|--|--|------------------------------|------------------------|----------------------|-------------------------------|--------------------------------------|---|---------------------|
| | ^{#4} Efficiency Standard (SEER2/SEER/IEER) | Efficiency Ratio of Unit Installed (SEER2/IEER) | ^{#4} Efficiency Standard (EER2/EER) | FL Efficiency Ratio of Unit Installed (EER2/EER) | | | | | | | |
| Example: Rooftop Unit #1 | IEER | 16 | EER2 | 11 | 120 | 80 | 7 | 1 | \$20.00 | 1.4 | \$196.00 |
| | | | | | | | | | \$20.00 | | |
| | | | | | | | | | \$20.00 | | |
| | | | | | | | | | \$20.00 | | |
| | | | | | | | | | \$20.00 | | |
| | | | | | | | | | \$20.00 | | |
| | | | | | | | | | \$20.00 | | |
| | | | | | | | | | \$20.00 | | |
| Incentive Subtotal | | | | | | | | | | | |

^{#3}EER/EER2=Energy Efficiency Ratio, IEER=Integrated Energy Efficiency Ratio, SEER/SEER2=Seasonal Energy Efficiency Ratio, FL= Full Load

^{#4}Please use the tool below to convert your equipment SEER aand EER Ratings:

SEER to SEER2

Please enter the proposed equipments SEER to convert it to SEER2. SEER2 = SEER x 0.95

EER to EER2

Please enter the proposed equipments SEER to convert it to SEER2. EER2 = EER x 0.95

Energy Recovery Ventilator

Specifications and Eligible Equipment:

- 1. Does not apply to wheel-type devices with purge sections, or to sensible-only devices such as heat pipes.
- 2. Only applicable for healthcare, multifamily, office or retail facilities. Others may be eligible to receive incentives through Custom.
- 3. If ERV is required by IECC, it is ineligible for this incentive.

Installation of Enthalpy Wheel

\$0.20 per SCFM

Installation of energy recovery equipment on existing or new unitary equipment.

| Design Air Flow of Energy Recovery Ventilator (SCFM) | Incentive Subtotal |
|--|--------------------|
| | |

Installation of Enthalpy Plate

\$0.10 per SCFM

Installation of energy recovery equipment on existing or new unitary equipment.

| Design Air Flow of Energy Recovery Ventilator (SCFM) | Incentive Subtotal |
|--|--------------------|
| | |

High Efficiency Pumps and Pumping Efficiency Improvements (Retrofits)

\$15 per HP

Improvement of pump efficiency to optimize the design and control of the current water pumping system. Depending on the specific application, possible options include slowing the pumping speed, trimming/replacing the impeller and replacing the current pump with a more efficient pump.

- 1. Only water pumps are eligible for this measure.
- 2. Only pumps up to 20 HP are eligible for this measure; larger HP motors may be eligible for custom incentives.
- 3. Pumping efficiency must improve by a minimum of 15 percent.
- 4.If a pump is to be replaced, the new pump must be rated at the same HP as the existing pump.
- 5.Redundant pumps are not eligible for this measure.

| Application Description | Size (HP) | Number Installed |
|-------------------------|-----------|------------------|
| | | |
| | | |
| | | |
| Incentive Subtotal | | |

| Grand Total Incentive Requested |
|---------------------------------|
| |

Incentive cannot exceed 90% of the incremental measure cost and 90% of the total project cost and must meet all program terms and conditions.