Com Ed. Energy Efficiency Program

AGRICULTURAL INCENTIVE WORKSHEET

January 1, 2020 through December 31, 2020

| ENERGY CONSERVATION MEASURE | UNIT | INCENTIVE | QUANTITY | TOTAL INCENTIVE |
|---|------------|---|----------|-----------------|
| LED Fixtures | \$0.85 | Per Watt Reduced | | |
| TLED Retrofits | \$0.80 | Per Watt Reduced | | |
| LED Grow Light for Retrofit | \$0.70 | Per Watt Reduced | | |
| LED Grow Light for New Construction | \$0.70 | Per Watt Reduced | | |
| Occupancy Sensors - Fixture Mounted | \$50.00 | Per Sensor | | |
| Occupancy Sensors - Remote Mounted | \$75.00 | Per Sensor | | |
| Time Clocks for Lighting | \$0.25 | Per Watt Controlled | | |
| Photocells for Lighting (Outdoor Only) | \$0.20 | Per Watt Controlled | | |
| Photocells Plus Time Clocks (Outdoor Only) | \$0.35 | Per Watt Controlled | | |
| Engine Block Timer | \$24.00 | Per Timer | | |
| Thermally-Insulated Livestock Waterer | \$130.00 | Per Waterer | | |
| High Speed Circulation Fan | \$1,200.00 | Per Fan | | |
| High-Speed Exhaust and Ventilation Fan (24"-35" Diameter) | \$40.00 | Per Fan | | |
| High-Speed Exhaust and Ventilation Fan (36"-47" Diameter) | \$75.00 | Per Fan | | |
| High-Speed Exhaust and Ventilation Fan (48"-71" Diameter) | \$150.00 | Per Fan | | |
| High-Speed Circulation Fan (24″-35″ Diameter) | \$40.00 | Per Fan | | |
| High-Speed Circulation Fan (36"-47" Diameter) | \$75.00 | Per Fan | | |
| High-Speed Circulation Fan (48″-71″ Diameter) | \$150.00 | Per Fan | | |
| Fan Thermostat Controller | \$100.00 | Per HP | | |
| No-Loss Condensate Drains | \$500.00 | Per Drain | | |
| Low Pressure Sprinkler Nozzles | \$0.50 | Per Nozzle | | |
| Variable Displacement Screw Air Compressor | \$40.00 | Per HP | | |
| Compressed Air Pressure Flow Controller | \$12.00 | Per HP | | |
| Variable Speed Drive (VSD) for Air Compressor ≤150 HP | \$70.00 | Per HP | | |
| Air Compressors with Integrated Variable Speed Drives (VSDs) ≤150 HP | \$400.00 | Per HP | | |
| Variable Speed Drive (VSD) for HVAC Fan or Pump ≤200 HP | \$150.00 | Per HP | | |
| HVAC Air-Cooled Chiller | \$6.00 | Per Integrated Part Load Value (IPLV) Improvement Per Ton | | |
| Dairy Refrigeration Scroll Compressor - With Heat Exchanger | \$0.08 | Lb. Of Milk Per Day | | |
| Dairy Refrigeration Scroll Compressor - W/O Heat Exchanger | \$0.04 | Lb. Of Milk Per Day | | |
| VSD Milk Pump with Plate Cooler Heat Exchanger | \$0.14 | Lb. Of Milk Per Day | | |
| Milk Pre-Cooler | \$0.20 | Lb. Of Milk Per Day | | |
| Dairy Refrigeration Heat Recovery | \$0.30 | Lb. Of Milk Per Day | | |
| Custom (Lighting) | \$0.07 | \$/kWh Saved (See Custom Worksheet) | | |
| Custom (Non-Lighting) | \$0.12 | \$/kWh Saved (See Custom Worksheet) | | |



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LED FIXTURES

\$0.85 per watt reduced

Replacement of an existing interior lighting system with a new lighting system containing LED fixtures (project does not have to be a one-for-one replacement).

Note: This measure does not apply to channel signs, open signs or refrigerated display case lighting.

Specifications and Eligible Equipment

1. Product must be listed on the DesignLights Consortium Qualified Products List available at www.designlights.org

TLED RETROFITS

\$0.80 per watt reduced

Replacement of an existing interior lighting system with a retrofit lighting system containing LEDs.

Note: This measure does not apply to channel signs, open signs, LED screw-based replacement for HID lamps or refrigerated display case lighting.

Specifications and Eligible Equipment

- 1. Product must be listed on the DesignLights Consortium Qualified Products List available at www.designlights.org.
- 2. Linear types A and B LED tubes are not eligible for standard incentives but may be eligible for instant discounts from participating distributors; visit **ComEd.com/BizLights** for details.

LED GROW LIGHTS FOR RETROFIT

\$0.70 per watt reduced

Installation of LED grow light in an indoor horticulture or greenhouse environment.

Specifications and Eligible Equipment

- 1. Fixtures must have a power factor (PF) >0.9.
- 2. Fixtures must have a photosynthetic photon efficacy (PPE) ≥1.9 µMol/J.
- 3. Fixtures must be rated greater than 50,000 hours.
- 4. Watts reduced compared to pertinent Illinois building code.
- 5. Due to Illinois legislation, cannabis cultivators installing LED grow lights are exempt from this measure, and should pursue the custom lighting incentive.

LED GROW LIGHTS FOR NEW CONSTRUCTION

\$0.70 per watt reduced

Installation of LED grow light in a new construction indoor horticulture or greenhouse environment.

- 1. Fixtures must have a power factor (PF) > 0.9.
- 2. Fixtures must have a photosynthetic photon efficacy (PPE) ≥1.9 µMol/J.
- 3. Fixtures must be rated greater than 50,000 hours.
- 4. Watts reduced compared to pertinent Illinois building code.
- 5. Due to Illinois legislation, cannabis cultivators installing LED grow lights are exempt from this measure, and should pursue the custom lighting incentive.



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OCCUPANCY SENSORS - FIXTURE MOUNTED

\$50.00 per sensor installed

Installation of new occupancy sensors on a new or existing lighting system. Passive infrared, ultrasonic detectors and fixture-integrated sensors or sensors with a combination thereof are eligible.

Specifications and Eligible Equipment

- 1. Replacement of existing occupancy sensors is not eligible for this incentive.
- 2. An inventory of the controlled fixtures is required with the final application.

OCCUPANCY SENSORS - REMOTE MOUNTED

\$75.00 per sensor installed

Installation of new occupancy sensors on a new or existing lighting system. Passive infrared, ultrasonic detectors and fixture-integrated sensors or sensors with a combination thereof are eligible.

Specifications and Eligible Equipment

- 1. Replacement of existing occupancy sensors is not eligible for this incentive.
- 2. An inventory of the controlled fixtures is required with the final application.

TIME CLOCKS FOR LIGHTING

\$0.25 per watt controlled

Installation of time clocks on exterior lighting.

Specifications and Eligible Equipment

Clocks must control on/off schedule of lighting equipment and must have a three-hour backup system to maintain the program schedule during power outages.

- 1. Astronomical time clocks (where on-off times are in accordance with sunrise and sunset) are required for outdoor lighting when photocells are not in use.
- 2. An inventory of controlled fixtures is required with the final application.

PHOTOCELLS FOR LIGHTING (OUTDOOR ONLY)

\$0.20 per watt controlled

Installation of photocells on exterior lighting.

Specifications and Eligible Equipment

1. Eligible controls are built-in or standalone photoelectric cells that switch outdoor lights on at dusk and off at dawn.

PHOTOCELLS PLUS TIME CLOCKS (OUTDOOR ONLY)

\$0.35 per watt controlled

Installation of both photocells and time clocks to control the same lighting fixture.

- 1. Must meet all specifications for photocells and time clocks for lighting.
- 2. Time clocks must turn off lighting equipment at least 3 hours per night each night.



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ENGINE BLOCK TIMER

\$24.00 per timer installed

Installation of a timer for engine block heater to reduce unnecessary run time.

Specifications and Eligible Equipment

- 1. Underwriters Laboratories (UL) or Electrical Testing Laboratories (ETL) listed outdoor timer rated for minimum of 15 amps of continuous duty.
- 2. Turns on the heater only when the outdoor temperature is below 25°F.
- 3. Maximum of 4 hours of heating prior to use.

THERMALLY-INSULATED LIVESTOCK WATERER

\$130.00 per waterer installed

Replacement of open waterer that has a sinking or floating electrical heating element with a new thermally-insulated livestock waterer.

Specifications and Eligible Equipment

- 1. New waterer must be an electrically-heated, thermally-insulated waterer.
- 2. There must be a minimum of 2 inches of insulation on waterer.
- 3. A thermostat is required on units with a heating element <250 watts. The thermostat must keep the water above 32°F and disable the heater when the outside temperature is above 55°F.
- 4. New waterer must be the same size (equivalent-herd-size watering capacity) as existing unit.

HIGH SPEED CIRCULATION FAN

\$1,200.00 per fan installed

Replacement of 6 or more existing non-high-volume, high speed circulation fans (HVLS) (approximately 3 feet in diameter, cage/basket fans, wall or ceiling mounted/suspended) with new HVLS fans.

Specifications and Eligible Equipment

- 1. Replace with high speed circulation fans.
- 2. Each fan motor must have VSD controls.
- 3. Fans (approximately 3 feet in diameter, cage/basket fans, wall or ceiling mounted/suspended) are not eligible.

HIGH-SPEED EXHAUST AND VENTILATION FAN (24"-35" DIAMETER)

\$40.00 per fan installed

Qualifying Efficiency

14.0 cfm/W @ 0.10" SP

HIGH-SPEED EXHAUST AND VENTILATION FAN (36"-47" DIAMETER)

\$75.00 per fan installed

Qualifying Efficiency

17.1 cfm/W @ 0.10" SP

HIGH-SPEED EXHAUST AND VENTILATION FAN (48"-71" DIAMETER)

\$150.00 per fan installed

Qualifying Efficiency

20.3 cfm/W @ 0.10" SP



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HIGH-SPEED CIRCULATING FAN (24"-35" DIAMETER)

\$40.00 per fan installed

Qualifying Efficiency

12.5 lbf/kW

HIGH-SPEED CIRCULATING FAN (36"-47" DIAMETER)

\$75.00 per fan installed

Qualifying Efficiency

18.2 lbf/kW

HIGH-SPEED CIRCULATING FAN (48"-71" DIAMETER)

\$150.00 per fan installed

Qualifying Efficiency

23.0 lbf/kW

FAN THERMOSTAT CONTROLLER

\$100.00 per HP

Installation of a ventilation fan thermostat controller for fans operating in livestock housing.

Specifications and Eligible Equipment

- 1. Must control ventilation fans in livestock housing barns that currently operate continuously from May to October.
- 2. Must disable fans when outside air temperature reached pre-set temperature.

COMPRESSED AIR NO-LOSS CONDENSATE DRAINS

\$500.00 per drain installed

Replacement of existing standard condensate drains (open valve, timer or both) with no-loss drains

Specifications and Eligible Equipment

- 1. Incentives are only available for new no-loss condensate drains. Replacement or upgrades of existing no-loss condensate drains are not eligible for this incentive.
- 2. Manufacturer's specifications for the no-loss condensate drain must accompany the application.
- 3. Specify the drain type being replaced: \Box Timer \Box Open valve
- 4. Specify the compressor type together with the control type:

Reciprocating: \square On/off \square Load/unload

Screw: \Box Load/unload \Box Inlet modulation \Box Inlet modulation with unloading \Box Variable displacement \Box Variable speed drive \Box Other

LOW PRESSURE SPRINKLER NOZZLES

\$0.50 per nozzle installed

Installation of new low-pressure sprinkler nozzles on irrigation systems.

- 1. Nozzles must operate at ≤35 PSI.
- 2. Must be replacing existing nozzles that operate at ≥50 PSI.



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VARIABLE DISPLACEMENT SCREW AIR COMPRESSOR

\$40.00 per HP

Replacement of a screw modulating or load/unload compressor with a variable displacement screw compressor

Specifications and Eligible Equipment

- 1. This is for new displacement compressors only.
- 2. The rated horsepower of the compressor must be ≥ 50 HP.

COMPRESSED AIR PRESSURE FLOW CONTROLLER

\$12.00 per HP

Installation of compressed air pressure flow controller to increase the control of an air storage strategy

Specifications and Eligible Equipment

- 1. Pressure flow controller must be installed downstream of the primary air storage receiver tank before the process loop.
- Pressure flow controller must be installed on the main pressure header, not to replace drop line regulators or filter regulator lubricators.
- 3. The compressor must be ≥ 50 HP.
- 4. The actual discharge pressure must be reduced by ≥0.5 psig.

VARIABLE SPEED DRIVE (VSD) ON AIR COMPRESSOR ≤150 HP

\$70.00 per HP

Specifications and Eligible Equipment

- 1. A pre-approval application is required; review instructions on the Agricultural Pre-approval and Final Application. Wait for pre-approval before starting your project.
- 2. Installation of the VSD must accompany the permanent removal or disabling of existing flow control devices.
- 3. VSD must be installed on a piece of equipment with varying load.
- 4. Custom incentives are available for projects greater than 150 hp.

AIR COMPRESSORS WITH INTEGRATED VSD ≤150 HP

\$400.00 per HP

New or replacement of an air compressor without an integrated VSD with a VSD-integrated air compressor

- 1. Compressors must run a minimum of 1,200 hours per year.
- 2. Air compressors purchased or installed for backup or redundant systems do not qualify.
- 3. Replacing existing air compressor with integrated VSD with a new VSD-integrated air compressor does not qualify.
- 4. Air compressors larger than 150 HP may be eligible for custom incentives.



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VARIABLE SPEED DRIVE (VSD) FOR HVAC FAN OR PUMP ≤200 HP

\$150.00 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. The following VSD applications are not eligible:
 - Replacement of existing VSD
 - VSD installed on equipment which operates less than 1,200 hours per year
 - VSD installed on redundant/backup motors
 - VSD installed in place of multi-speed flow control equipment (e.g., two-speed cooling tower fans)
 - VSD installed for the purpose of "soft-starting" motors
 - VSD installed on pumps where affinity laws are not in effect, such as sump pumps
- 3. The following VSD applications are not eligible for this incentive but may be eligible for a custom incentive:
 - VSD installed in place of variable pitch blade flow control equipment
 - · VSD installed on a motor larger than 200 HP
- 4. If new construction, VSDs required by code are not eligible.
- 5. VSDs installed on fan or pump larger than 200 HP may be eligible for custom incentives.

HVAC AIR-COOLED CHILLER

\$5.00 per Integrated Part Load Value (IPLV) improvement per ton

Specifications and Eligible Equipment

- 1. This incentive is only applicable to systems used for space cooling. Process cooling systems are not eligible for this incentive, but may be eligible for a custom incentive. Visit **ComEd.com/Custom** for more information.
- 2. Must have a rated kW/ton for the Integrated Part Load Value (IPLV) that is less than the qualifying efficiency.
- 3. Efficiency rating must be based on AHRI Standard 550/590 (I-P)-2018 for IPLV conditions and not based on full-load conditions.
- 4. <u>Must qualify for either IECC 2015 Path A or B efficiency, but will receive incentives based on qualifying efficiencies below.</u>
 - Refrigerant must comply with local codes.
 - The AHRI net capacity value should be used to determine the chiller tons.
 - A manufacturer's specification sheet with the rated kW/ton-IPLV or COP-IPLV and nominal tonnage must accompany the application.
 - Redundant chillers are not eligible for incentives.

DAIRY REFRIGERATION SCROLL COMPRESSOR WITH HEAT EXCHANGER

\$0.08 per pound of milk per day

Installation of a scroll compressor on milk refrigeration storage tanks.

Specifications and Eligible Equipment

1. Must be replacing reciprocating compressor.

DAIRY REFRIGERATION SCROLL COMPRESSOR WITHOUT HEAT EXCHANGER

\$0.04 per pound of milk per day

Installation of a scroll compressor on milk refrigeration storage tanks.

Specifications and Eligible Equipment

1. Must be replacing reciprocating compressor.



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DAIRY REFRIGERATION HEAT RECOVERY

\$0.30 per pound of milk per day

Installation of a refrigeration heat recovery unit to pre-heat domestic hot water.

Specifications and Eligible Equipment

1. Existing water heater must be an electrically powered.

VARIABLE SPEED DRIVE (VSD) MILK PUMP WITH PLATE COOLER HEAT EXCHANGER

\$0.14 per pound of milk per day

Installation of a VSD on an existing milk pump in conjunction with a plate cooler heat exchanger.

Specifications and Eligible Equipment

1. Plate cooler must be installed at the same time as the VSD.

MILK PRE-COOLER

\$0.20 per pound of milk per day

Installation of a milk pre-cooler heat exchanger.

Specifications and Eligible Equipment

1. Pre-cooler must be a new installation. Cannot replace existing pre-cooler.

CUSTOM LIGHTING

Replacement of lighting that is not covered by the LED Fixtures or LED Retrofits measures may be eligible for custom incentives. Visit ComEd.com/Custom for more information and custom worksheets.

CUSTOM NON-LIGHTING

Replacement of energy saving equipment that is not covered by the prescriptive measures may be eligible for custom incentives. Visit ComEd.com/Custom for more information and custom worksheets. Example custom projects include but are not limited to; VSD vacuum pump, dehumidification equipment for indoor agriculture, drip irrigation equipment, VSD on irrigation equipment, environmental controls for greenhouse or indoor agriculture facility, and moisture controls for grain drying systems.

CONTACT US:

040-0013-01-00_110819-7

- Email: <u>BusinessEE@ComEd.com</u> (10MB file size limit; submit multiple emails if necessary)
- Fax: **773-853-2205**
- Mail: The ComEd Energy Efficiency Program, 120 N. Racine Ave., Ste. 220, Chicago, IL 60607

Download incentive applications and worksheets at ComEd.com/Agriculture.

Questions? Call 855-433-2700 or contact the applicable email address above.

