

2018

**Demand-Side
Management Programs**

CIPCO Incentive Program Guide



Revised Date: 12/20/17

CIPCO INCENTIVE PROGRAM GUIDE – 2018

This Program Guide in conjunction with the terms and conditions provided on rebate application forms contains requirements that must be met to ensure eligibility for CIPCO program incentives.

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Water Heaters and Hot Water Saving Equipment

Water Heating Equipment	Minimum Energy Factor (EF)	Rebate
Heat Pump Water Heater – Integrated unit	Energy Star Qualified	\$650
Heat Pump Water Heater – Add-on to electric unit	2.00	\$300
Solar Water Heater with Electric auxiliary tank	Energy Star Qualified	\$350
Electric Resistance Storage Water Heaters*		
Geothermal Assisted Unit (45-55 gal. w/ desuperheater)	0.90	\$150
Resistance Storage Unit (Stand-alone unit, 45-55 gallon)	0.90	\$50
Other Hot Water Saving Equipment		
Drainwater Heat Recovery Pipe		\$450

Eligibility Criteria for Water Heaters:

1. Water heaters must be electric and must have an Energy Factor as shown in the table.
2. Electric storage water heaters must have a 45 to 55 gallon storage tank.
3. The water heater must be used for domestic water heating only. The unit cannot be used in conjunction with radiant space heating systems or connected to a gas system. (e.g. boiler for in-floor or baseboard heating)
4. The electric water heater must be energized and cannot be used as a storage only tank.
5. There is a limit of two resistance water heater (stand-alone unit) rebates per home. There is also a limit of 3 total water heater rebates per home. For example, you could have 2 resistance water heaters plus one Geo assisted unit.
6. Solar and heat pump water heaters must be ENERGY STAR qualified.
7. Electric storage water heaters and add-on heat pump water heaters must have GAMA/AHRI certified ratings.
8. Add-On heat pump and solar units must use an electric water heater with a minimum 40 gallon capacity.

NOTE: Size and Energy Factor information can be found using AHRI database at <http://www.ahridirectory.org>.

*The minimum energy factor for electric resistance water heaters is the same as the federal minimum. Electric resistance water heaters manufactured in the U.S. are required to meet these minimums. All 45-55 gallon units listed in the AHRI directory should be eligible for an incentive.

Eligibility Criteria for Drain Water Heat Recovery Pipe Systems:

1. Must have an electric water heater. Rebate not to exceed cost of system.
2. Incentive is also available for commercial customers and apartment complexes (Maximum of \$3000)
3. Must be approved Drain Water Heat Recovery pipe system. Homemade systems are not eligible.
4. Manufacturers with DWHR systems currently pre-approved for this incentive are as follows:

Renewability Energy Inc. (PowerPipe)	ReTherm Energy Systems Inc. (ReTherm)
Watercycles Energy Recovery Inc.	Swing Green
Inventroment Inc. (ECO-GFX)	

For units not manufactured by a company listed above, call CIPCO to see if it will qualify.

Residential Lighting

Fixtures		Rebate /fixture
Indoor LED fixtures	Minimum 4 Watts	\$5
Outdoor LED Fixture	20 to 34 Watts	\$15
	35 to 49 Watts	\$20
	50 to 74 Watts	\$40
	75 to 124 Watts	\$50
	125 Watts or more	\$60

Requirements:

- Fixtures must be ENERGY STAR® or Designlights® qualified lighting products and listed on the appropriate website at www.energystar.gov or www.designlights.org.
- A household limit of \$600 is applied to each Member account. Limit applies to activity in most recent five calendar years including the current year. Installations from previous residents are not included.
- The rebate cannot exceed 50% of the installed costs
- The following proof of purchase must be provided to the Cooperative:
 - Retail Purchase - Member must provide receipt and product cutouts for each fixture. The invoice and product cutouts must confirm product type, quantity, brand, model number and purchase date. For ENERGY STAR Qualified Fixtures, the ENERGY STAR logo, product type and model should be visible on a single product cutout.
 - Contractor Installed - Member must provide contractor invoice. The invoice must include product type, quantity, brand, model number and installation date.
- Indoor fixtures must be at least 4 Watts per fixture.
- All purchased lighting products must be installed and are subject to utility verification.
- ENERGY STAR Qualified LED Fixtures apply to many different fixture types, including can fixtures, surface mount, and torchiere lamp fixtures.
- ENERGY STAR or DesignLights Qualification can be verified by one of the following:
 - Provide cutout of package displaying the ENERGY STAR or DesignLights logo.
 - Provide printout from ENERGY STAR or DesignLights website confirming eligibility of each fixture model indicated on the rebate form.
- Must replace or install entire fixture (no lamp or bulb replacements)
- Replacement fixtures must have a lower wattage than the original fixtures.
- Outdoor lighting fixtures must also meet the following requirements:
 - Must be on from dusk to dawn and controlled by an automatic photocell sensor.
 - Lights cannot be wired to motion sensor or manual switch.**
 - Approved Mountings: wood or steel poles, side of buildings or yard post.
 - Pre-approved is necessary for single requests of over 25 outdoor units
 - DLC qualified LED “Corn Lamps” are eligible

ENERGY STAR Air Conditioners

Residential Equipment	Minimum Efficiency		Rebate Per Unit
	SEER	EER	
ENERGY STAR Central AC (Split)	15	12.5	\$75
ENERGY STAR Central AC Replacement with ECM Fan Replacement	15	12.5	\$125

Requirements:

- 1) Air conditioners must meet ENERGY STAR energy efficiency criteria for air conditioners at the time of purchase. Current ENERGY STAR Information and qualifying equipment lists can be found at www.energystar.gov.
- 2) The minimum SEER and EER efficiencies provided on the form are the minimums required for ENERGY STAR at the time the form was published. ENERGY STAR requirements periodically change and the Customer is responsible to ensure their system meets current ENERGY STAR criteria in effect at the time of installation.
- 3) Customers must provide a copy of the equipment invoice. This should contain the size, efficiency and model and serial numbers.
- 4) A maximum of two air conditioner rebates per residence are allowed.
- 5) The rebate for an ECM Fan motor replacement is only available in combination with an eligible **replacement** ENERGY STAR air conditioning system. The rebates must be applied for on the same form.
- 6) Eligible ECM fan motor replacements include:
 - a) An upgrade from a Permanent Split Capacitor (PSC) fan motor to an ECM fan motor or,
 - b) An upgrade from a PSC fan motor to a brushless permanent magnet (BPM) fan motor with a peak efficiency of 75% or higher. (Qualifying BPM brands include the Evergreen IM and Concept 3 motors), or
 - c) Replacement of an old furnace or air handler utilizing an older PSC fan motor with a new system using an ECM or BPM fan motor.
- 7) To be eligible, customers must install both a new outdoor unit (condenser) and a new matching indoor A-coil (evaporator). Most residential air conditioning systems are split systems that consist of indoor and outdoor equipment with performance determined by the matched assembly.

Important Information Regarding Central Air Conditioners

The AHRI (Air-Conditioning Heating and Refrigeration Institute) certified SEER for a matched split system must be verified and meet the minimum efficiency required regardless of whether the system is labeled as ENERGY STAR.

An ENERGY STAR label on the outdoor unit does not ensure that the total system, including the indoor coil and blower assembly, meets ENERGY STAR requirements for central air conditioning equipment.

The installing contractor should provide the homeowner with the SEER and EER rating for their specific system. These ratings and the system capacity for matched equipment should be listed in the online AHRI Unitary Directory at www.ahridirectory.org.

Locating ENERGY STAR Central Air Conditioners

From the Consortium for Energy Efficiency’s (CEE) website, you can search the database for ENERGY STAR labeled equipment. This database contains AHRI certified ratings and is located at www.ceedirectory.org.

Heat Recovery Ventilators

Qualifying Systems	Requirements	Rebate
Heat/Energy Recovery Ventilator (HRV/ERV)	<ul style="list-style-type: none"> • Must be tied to a central ductwork system • The primary space heating system must be electric. • Internal fan system and separation of indoor and outdoor airflows. • Two per home limit. 	\$250 /per unit

Geothermal Heat Pump Program

Equipment	Requirements	Rebate
GSHP with Closed Loop	AHRI listing	\$400 /ton
GSHP with Open Loop	AHRI listing – No “pump and dump”	\$300 /ton
GSHP Hybrid (Gas Backup)	AHRI listing- integrated geo/gas system (a separate GSHP and separate gas furnace is not eligible)	Add \$100/ton to above amounts
GSHP Unit Replacement	Applies if existing ground or water loop is NOT replaced.	\$250 <u>per unit</u>
Contractor Rebate	Payment to installing contractor of approved AHRI rated equipment <u>ONLY if new ground loop installed</u>	\$300 /home

Requirements:

1. Equipment must be listed in the AHRI Certification Directory for geothermal equipment. This information can be verified online for a given model number at www.ahridirectory.org. Efficiency and capacity data must be obtained from the appropriate section as follows:
 - GWHP Ratings: required for Open Loop geothermal equipment rebate.
 - GLHP Ratings: required for Closed Loop geothermal equipment rebate.
2. Closed or open loop heat exchangers must be designed to maintain water temperatures within AHRI performance test parameters for the type of equipment and rebate being considered.
3. Hydronic units may be used for domestic water heating or pool heating. These will NOT qualify for special heat rate programs unless units also provide space heating.
4. Rebates are based on the unit cooling capacity measured in tons (rounded to nearest ½ ton). The rated capacity provided in the AHRI Directory is measured in "Btuh." This amount must be divided by 12,000 to determine the number of tons (equipment for a typical home provides 2 to 7 tons of cooling). Installing contractors should have this information or it can be found at www.ahridirectory.org.
5. For rebate purposes, the number of tons (Btuh/12,000) can be rounded as shown below:

0.7 - 1.19, Rounded to 1 Ton	1.7 to 2.19, Rounded to 2 Tons
1.2-1.69, Rounded to 1.5 Ton	2.2 to 2.69, Rounded to 2.5 Tons

... And so on.

Contractor Information:

Installing contractor should provide Member with the information needed to complete the rebate application. Contractors should be made aware of program requirements prior to installation to ensure that a qualifying system is specified. Homeowners may not receive a contractor rebate unless they are a legitimate contractor by trade.

If there are doubts about program eligibility, you should contact CIPCO before the installation to ensure that the equipment will qualify.

Air Source Heat Pump (Energy Star) Program

Equipment	Rebate	Requirements
Standard ASHP	\$200 /ton	ASHP units over 3/4 ton that meet current federal standard efficiencies: SEER 14, HSPF 8.2
Hybrid ASHP	\$300 /ton	ASHP units over 3/4 ton that meet current federal standard efficiencies: SEER 14, HSPF 8.2 Must be a new hybrid ASHP system with gas furnace or an add-on ASHP (outdoor unit and indoor A-coil) added to existing gas furnace
ENERGY STAR* Bonus	\$250 /unit	Bonus rebate for ENERGY STAR qualified units (Residential only) with at least 1.5 ton capacity. Bonus added to Standard or Hybrid ASHP rebate. Limit of 2 bonus payments per home. ENERGY STAR Minimum Efficiency: Split Systems: SEER 15, EER 12.5, HSPF 8.5; Single Package Units: SEER 15, EER 12.0, HSPF 8.2
Contractor Rebate	\$300 /home	To installing contractor of approved AHRI rated ASHP equipment.

General Requirements:

1. Eligible equipment includes air source heat pump, mini-split heat pumps and multi-split heat pumps.
2. Air source heat pumps must meet current federal minimum efficiency requirements and have a minimum capacity of 0.75 tons. Units must be rated in the AHRI Directory (published by the Air-Conditioning Heating & Refrigeration Institute) which is available online at www.ahridirectory.org.
3. The minimum SEER and EER efficiencies provided are values required for ENERGY STAR qualified equipment at the time this document was published. Member is responsible to ensure that their system meets the ENERGY STAR criteria in effect at the time of installation.
4. When installing a split system (most common type of residential unit) both a new outdoor unit (condenser) and a new indoor A-coil (evaporator) must be installed.
5. A hybrid air source heat pump (ASHP) system is the combination of an ASHP with a propane or natural gas furnace. The indoor evaporator A-coil and controls for qualifying Hybrid or Add-On heat pumps must be integrated with a new or existing gas furnace.
6. Eligible Hybrid/Add-on heating systems must be designed with a maximum backup size of 3 kW of resistance. When heating requirements exceed the capability of the ASHP unit plus the resistance, the ASHP should be de-energized and the integrated gas furnace should be utilized.
7. Rebates are based on the unit cooling capacity measured in tons (rounded to nearest ½ ton). The rated capacity provided in the AHRI Directory is measured in "Btuh." This amount must be divided by 12,000 to determine the number of tons (equipment for a typical home provides 2 to 7 tons of cooling). Installing contractors should have this information or it can be found at www.ahridirectory.org.
6. For rebate purposes, the number of tons (Btuh/12,000) can be rounded as shown below:

0.7 - 1.19, Rounded to 1 Ton	1.7 to 2.19, Rounded to 2 Tons
1.2-1.69, Rounded to 1.5 Ton	2.2 to 2.69, Rounded to 2.5 Tons

... And so on.

Important Information:

Size and efficiency (SEER, EER and HSPF) information for units that are Energy Star and above can be found at the CEE online database at <http://www.ceedirectory.org>. If not listed here as ENERGY STAR, you may want to check the AHRI database at <http://www.ahridirectory.org> to confirm why it is not Energy Star.

* System must be listed as ENERGY STAR on the CEE database. Units with an ENERGY STAR logo do not automatically qualify. If not rated by AHRI, systems must be listed on the ENERGY STAR website as "ENERGY STAR unit not listed by AHRI" to qualify for the ASHP rebate and ENERGY STAR Bonus.

Heat Plus – Electric Heating Heat Rate Incentive

Equipment	Rebate
Heat Plus Rate Meter	\$100 per home; \$50 per apartment/unit

Program Requirements:

1. The primary heating system must be electric and metered separately.
2. The primary electric heating source must operate first, with the backup system operating only when the primary system is unable to satisfy the indoor thermostat setting.
3. An electric water heater (storage, heat pump, or supplemental solar) must be installed and provide 100% of the domestic water heating for the home or apartment. (May not be enforced for participants grandfathered into this program)
4. The space heated by the electric system must be an area of 400 square feet or more.
5. The rebate is only available to building owners. The rate is applicable to all ratepayers (including renters).

Heat Plus is not intended for periodic heating applications. A building that is unconditioned during unoccupied times is unacceptable. The Utility may suspend the rate and remove metering equipment owned by the Utility if a customer is no longer using equipment on a regular basis or violates program requirements.

There is a guarantee of rate availability through May 2020. This guarantee does not fix the magnitude of the rate offered.

Qualifying Facilities

Residential:

- Single family residential dwellings and their outbuildings
- Residential apartments and other multi-family buildings (e.g. nursing homes/assisted living complexes).
NOTE: Cooperative may further limit this to buildings with 12 or fewer living units such as a 12-plex apartment building with individual heat meters or residential facilities with circuitry for heating systems ran through a small number of common meters (12 or less).

Non-residential:

- Buildings or facilities that 1.) are served by one or more transformers with a combined rated capacity of 75 kVA or less, or 2.) maintain an actual combined peak of 75 kW or less.
- Separately metered building spaces that maintain an actual combined peak of 75 kW or less.

Applying the Rate Credit

CIPCO will adjust the member system’s power bill by applying the special rate and subtracting kW demand credits for approved loads.

- Member systems report all energy (kWh) for Heat Plus accounts on Form A to CIPCO on a monthly basis (for 8 heating months beginning October 1 through May 31st). Form A can be found in the Energy Efficiency/Incentive Programs area on the CIPCO Intranet.
- KW demand credits are determined using a demand calculation method based on the kWh and number of consumers reported monthly by each member system.
- The KW credits are subtracted from each member system's billing demands and wholesale kWhs are sold at the Heat Plus rate as documented in the Cooperative's current rate schedule.

Energy Star Clothes Washers and Clothes Dryers

Equipment	Rebate
ENERGY STAR Clothes Washer replacement (with Electric Water Heater and Dryer)	\$50
ENERGY STAR Clothes Washer replacement (with Electric Water Heater Only)	\$30
ENERGY STAR Electric Clothes Dryer	\$20

Requirements:

1. These rebates are not available for homes receiving the All-Star Home Incentive.
2. Clothes washers and clothes dryers must be listed as ENERGY STAR qualified products at the time of purchase.
3. Hot water used by an eligible clothes washer must be provided by an electric water heater.
4. ENERGY STAR verification must be provided and can include the following:
 - Customer provides cutout of package showing ENERGY STAR logo, product type and model.
 - Customer provides a copy of the yellow EnergyGuide label showing the ENERGY STAR logo.
 - Provide printout from ENERGY STAR website (www.energystar.gov) showing the model is ENERGY STAR
5. Limit of two (2) clothes washer and/or (2) clothes dryer rebates per home.

All Star Home

Equipment	Rebate
All-Electric Home	\$500 per home

Program Requirements:

1. Must install a geothermal system or an ENERGY STAR qualified air-source heat pump system to provide 100% of home’s heating AND cooling requirements.
2. Domestic hot water must be provided by a heat pump water heater, solar water heater (electric supplemented), or a new electric storage water heater (AHRI listed) supplemented by a geothermal system.
3. All electric appliances (clothes washer, clothes dryer, dishwasher and refrigerator) must be installed and ENERGY STAR qualified. If a new freezer is installed, it must be ENERGY STAR qualified.
4. Efficient Construction must be verified by one of the following methods:
 - A signed ENERGY STAR Home certificate from an approved ENERGY STAR rater.
 - A signed HERS (Home Energy Rating Service) report by an approved HERS rater showing that a home has received a HERS rating of 55 or less.
 - A signed copy of the All-Star Home Checklist from the builder confirming that minimum efficiency levels have been met.

The builder/contractor must also provide their signature on the rebate application form.

5. Equipment required for this program may qualify for individual prescriptive rebates and must meet all the requirements of the applicable incentive programs.
6. Exceptions to the “All-Electric Rule” include a gas fireplace and the gas backup integrated into a qualified ENERGY STAR hybrid/add-on air source heat pump system.

NOTE: While all new homes in Iowa are required by law to satisfy the Model Energy Code (MEC) of Iowa, it is not the intention of this program to verify compliance with any code. All homes should also meet any applicable National Electric Code (NEC) requirements.

Weatherization (standard)

Type of Installation	Electric Heat		Central AC Only	
	Rebate	Maximum Rebate	Rebate	Maximum Rebate
Attic/Ceiling Insulation	60% of total costs	\$600	15% of total cost	\$150
Wall Insulation	60% of total costs	\$600	15% of total cost	\$150
Foundation Insulation	60% of total costs	\$600	Not Available	NA
Infiltration Control	60% of total costs	\$200	Not Available	NA
Duct Insulation/Sealing	60% of total costs	\$200	Not Available	NA
Maximum per home		\$2200		\$300

Requirements:

1. **Must have electric heat and/or central air conditioning as follows:**
 - a) **Electric Heat:** electric system heats 75% of the home and operates prior to any non-electric backup. Portable space heaters do not qualify. Air conditioning is not required.
 - b) **Central AC Only:** central air conditioning system provides cooling to the entire home (except basement) and the heating system does not qualify as Electric Heat. Homes heated with natural gas are not eligible.
2. To qualify, residential homes must be built prior to 1996. Only upgrades to existing residential homes qualify. Insulation for new building additions does not qualify.
3. Total project cost must be \$150 or more to be eligible. The total project cost can include more than one type of installation as defined for this program.
4. Invoices for the allowances requested must be provided to confirm the total costs used to calculate rebates for each type of installation. Contractor invoices must be itemized with total costs (material and labor) shown for each qualifying installation type.
5. Homeowners cannot include costs for their own labor in the total cost for self-installed projects.
6. **Qualifying Installations:**

- **Insulation:** The original R-value for insulation in the home must be below certain levels and increased to minimum levels. The maximum existing and minimum installed insulation levels are shown in the table to the right. If R-values are unknown, use the R-VALUE REFERENCE table provided. Multiply the insulation thickness by the R-Value/inch to determine the R-Value of insulation in the home. A local building supply store may be able to identify the insulation material from a sample. Descriptions of insulation materials can be found at <http://energy.gov/energysaver/articles/insulation-materials>.

REQUIRED INSULATION LEVELS		
Type of Installation	Pre-Existing Maximum	Post-Install Minimum
Attic Insulation	R-20	R-38
Wall Insulation	R-13	R-13, must add at least R-5
Foundation Insulation	R-8	R5, must add at least R-5
Duct Insulation/Sealing	R-3	R-8

- **Infiltration control:** This includes the installation of house wraps (such as Tyvek), vapor barriers, permanent weatherstripping, caulking and foam sealing. Temporary sealing such as removable strip caulking and plastic window covers do not qualify.
- **Duct Insulation/Sealing:** Professional installation is required. Only ducts located in an unconditioned space such as the attic or crawlspace will qualify. Work where both the ducts and heating system are located in the basement does not qualify. Duct sealing must be done using a mastic sealant to qualify and cannot be sealed with duct tape.

RESIDENTIAL PROGRAMS

7. The installation must be completed before the final application form is submitted to the Cooperative.
8. Rebates will only be paid on work meeting all requirements specified for this program.
9. If the funding limit for this program is reached, funding for reserved projects (if any) will take priority.

TYPICAL R-VALUES FOR INSULATION <small>(from Home Energy Saver website)</small>		
Installation Type	R-value Per Inch (OLD)	R-value Per Inch (NEW)
Flexible Batts		
Fiberglass	2.6	3.2
Rockwool	3.1	3.6
Loose-Fill		
Cellulose	3.2	3.5
Fiberglass	2.0	2.4
Rockwool	2.4	2.9
Perlite	2.3	2.7
Vermiculite	2.0	2.4
Rigid Foam Boards		
Polystyrene, molded (beaded)	4.0	
Polystyrene, extruded (smooth)	5.0	
Polyurethane	6.0	
Polyisocyanurate	8.0	
Spray Foam Insulation		
Urethane	6.0	
Foam Roofing	8.0	

Weatherization (LIHEAP)

Type of Installation	Electric Heat		Central AC Only	
	Rebate	Maximum Rebate	Rebate	Maximum Rebate
Attic/Ceiling Insulation	80% of total cost	\$800	20% of total cost	\$150
Wall Insulation	80% of total cost	\$800	20% of total cost	\$150
Foundation Insulation	80% of total cost	\$800	Not Available	NA
Infiltration Control	80% of total cost	\$200	Not Available	NA
Duct Insulation/Sealing*	80% of total cost	\$200	Not Available	NA
Maximum per home		\$2800		\$300

Requirements:

1. **Must have electric heat and/or central air conditioning** and meet all other requirements of the standard Weatherization program.
2. **Must qualify for Iowa LIHEAP program at the time of installation**, and assist the cooperative to verify LIHEAP status if necessary.
3. Weatherization materials or labor provided through a CAAP agency, or their agent, or any other organization cannot be claimed under this program.

Appliance Recycling

Equipment	Rebate
Refrigerator	\$35 /unit
Freezer	\$25 /unit
Window air conditioners	\$25 /unit

Requirements:

1. Appliances eligible for payment under the Program must be operable at time of recycling. To be considered in operating condition, the compressor and fan (if applicable) must operate when the appliance is plugged in.
2. Appliances are limited to up to three operable units per address (per year): refrigerator, freezer and/or window AC in any combination (more than one of the same appliance type is allowed).
3. The Pull the Plug appliance recycling program is provided through a contract negotiated by CIPCO with CLEARResults. A cooperative must notify CIPCO to participate in the program. All appliances will be certified by CLEARResults to meet program requirements. (see program outline below)
4. Appliances recycled outside of the Pull the Plug program may only be delivered to, or picked up by, a company/facility that verifies:
 - a. refrigerants will be removed in accordance with EPA regulations,
 - b. a permitted appliance demanufacturer will ensure that materials will be recycled appropriately, and
 - c. necessary Iowa DNR appliance disposal permits are secured.
5. Receipt and verification of intent to properly recycle by a vendor or landfill (as the third party) are required.
6. Appliances collected for resale to consumers are NOT ELIGIBLE.

Pull the Plug Program Outline:

Contact and Scheduling

Method A:

- The member calls the toll free Pull the Plug hotline at 1-855-838-7817 and requests collection of appliances. CLEARResults will collect information and establish a collection date (typically set within three weeks of initial contact).

Method B:

- The member contacts the REC and request collection of appliances. The REC verifies the individual is a member, reviews the Program with the member and requests information used to complete an online form that is submitted to CLEARResults.
- CLEARResults will attempt* to contact the member within one business day to verify the collected information and establish a collection date (typically set within three weeks of initial contact).
- *CLEARResults will make 3 attempts to contact member before notifying the coop of contact failure.*

Collection Process

- CLEARResults contacts the member on the day prior to arrival to verify a more precise collection time.

Payment of Fees

Incentive Payments. An incentive check will be delivered to the member by CLEARResults for up to three eligible appliances per the following incentive schedule:

- Refrigerators - \$35 each
- Freezers and Window AC - \$25 each

Fees. All collection fees and penalty fees will be paid for by CIPCO.

CLEARResults will send a monthly invoice to CIPCO for collection fees and reimbursement of incentive payments.

AGRICULTURAL PROGRAMS

Agricultural customers may also apply for Residential or Commercial rebates for equipment, such as appliances, water heating, and HVAC systems not outlined in this section.

Dairy Operations

Equipment	Rebate	Requirements
Dairy Milk Pre-cooler	\$4 per cow	<ul style="list-style-type: none"> The number of cows currently being milked (round up to nearest 25) is used to calculate the incentive. Facility must use electric water heater to be eligible for compressor refrigerant heat reclaimer incentives
Dairy Refrigerant Heat Reclaimer	\$5 per cow	
Replacement Scroll compressor - replacing reciprocating compressor only	\$250 each	<ul style="list-style-type: none"> Scroll compressor must replace a reciprocating compressor for milk cooling system.
Variable Speed Dairy Vacuum pump	\$40 per horsepower	<ul style="list-style-type: none"> Based on controlled horsepower output of pump at rated full load. Must meet IEEE standards for harmonics control (see Commercial ASD Program).
Maximum rebate is \$2000 for each equipment type.		

Efficient Livestock Ventilation & Circulation Fans

Equipment	Rebate
Ventilation Fans	\$3 per inch (fan blade diameter)
Circulation Fans	\$1 per inch (fan blade diameter)
High Volume Low Speed Fans (HVLS) (minimum 10 ft diameter)	\$35 per foot (fan blade diameter)
Ventilation Thermostat Controller with humidistat	\$25 each

Efficiency Requirements (BESS rated):

Ventilation Fans (rated at 0.1 in. static pressure)	Circulation Fans
14-23 inch - minimum 10.5 CFM/Watt	12-23 inch - minimum 11.0 lbs thrust/kW
24-35 inch - minimum 13 CFM/Watt	24-35 inch - minimum 15.0 lbs thrust/kW
36-47 inch - minimum 16.5 CFM/Watt	36-47 inch - minimum 18.5 lbs thrust/kW
48-49 inch - minimum 18.5 CFM/Watt	48-52 inch - minimum 23.0 lbs thrust/kW
50 & up inch - minimum 19.5 CFM/Watt	

Ventilation Equipment Requirements:

- Agricultural ventilation fans must be listed as Agricultural Ventilation Fans by Bio Environmental and Structural Systems Laboratory (BESS Labs) and found on their website located at <http://bess.illinois.edu>.
- Must have minimum CFM/Watt values shown above for fans rated at a static pressure of 0.10 inches as published by BESS Labs.
- The controller must have both thermostat and humidistat functions.

Circulation Equipment Requirements:

- Circulation fans must be listed as Circulating Fans by Bio Environmental and Structural Systems Laboratory (BESS Labs) and found on their website located at <http://bess.illinois.edu>.
- Thrust Efficiency (lbs thrust/kW) values must be published by BESS Labs and meet minimums shown above.

Total Maximum Rebate (ventilation and circulation equipment) = \$5000 per account (not to exceed costs)

AGRICULTURAL PROGRAMS

Agricultural Lighting

INDOOR LIGHTING EQUIPMENT		REBATE AMOUNT	
LINEAR LAMP REPLACEMENTS (Requires reduction in wattage)		Replacement	New Construction*
LED Tube Replacements (DesignLights Qualified) -replacement of T12 or T8 lamps	Per Lamp	\$3	NA
High Bay Linear Fluorescent Fixtures		HID Replacements Only Onlyly	
T8 or T5 tubes with High Output Ballasts -min. 15 ft. mounting height	Per Lamp	\$6	NA
LED FIXTURES (NON-TROFFER)		Replacement	New Construction*
	8-14 Watts	\$10	\$5
	15-49 Watts	\$15	\$10
	50-99 Watts	\$25	\$20
	≥ 100 Watts	\$40	\$30
LAMPS AND OTHER LIGHTING PRODUCTS		Replacement or New Construction*	
LED Lamps (Screw-based lamp, 8 Watt minimum)		\$2	
Occupancy Sensors		\$15	
LED HIGH BAY AND LED TROFFER FIXTURES		Replacement	New Construction*
LED High Bays	On 1200 to 3999 hours	0.40 x (Lumens/58 – Watts)	0.40 x (Lumens/80 – Watts)
	On 4000 to 6999 hours	0.55 x (Lumens/58 – Watts)	0.55 x (Lumens/80 – Watts)
	On 7000 to 8760 hours	0.70 x (Lumens/58 – Watts)	0.70 x (Lumens/80 – Watts)
LED Troffers	On 1200 to 3999 hours	0.40 x (Lumens/80 – Watts)	
	On 4000 to 6999 hours	0.55 x (Lumens/80 – Watts)	
	On 7000 to 8760 hours	0.70 x (Lumens/80 – Watts)	
Custom Lighting Application		Custom rebate available upon approval	
OUTDOOR LIGHTING EQUIPMENT		REBATE AMOUNT	
LED Fixtures	20 to 34 Watts	\$15	
	35 to 49 Watts	\$20	
	50 to 74 Watts	\$40	
	75 to 124 Watts	\$50	
	125 Watts or more	\$60	

*New Construction or situations where adding fixtures or lighting output to an existing facility.

Agricultural Lighting

General Requirements:

1. REBATE LIMITS: 50% of installed costs and \$45,000 per customer. Projects over \$5000 require pre-approval.
2. All LED lamps and fixtures must be either ENERGY STAR or DesignLights Consortium qualified and listed on their respective websites.
3. LED fixtures include hard-wired fixtures and recessed cans without screw-in adapter assemblies.
4. Linear LED lamps must be DLC qualified replacements of four-foot T8 or T12 fluorescent lamps.
5. Mogul based HID replacements (e.g corn lights) may be eligible for LED fixture rebates.
6. All replacement fixtures must have a lower wattage than the fixture being replaced.
7. Proof of purchase or a copy of the sales invoice must be provided.
8. A MAXIMUM REBATE payment may be applied to rebate requests. For projects where the incentive is expected to exceed \$5,000, you should contact CIPCO for pre-approval prior to installing.
9. Outdoor lighting must be on from dusk to dawn and controlled by an automatic photocell sensor (cannot be wired to a motion sensor or manual switch).
10. Outdoor lights and lighting used in non-heated buildings should be rated for cold starting down to -20 deg. F.
11. For livestock buildings and areas where lighting may be exposed to a corrosive environment, use:
 - Dust and moisture tight nonmetallic fixtures with shatterproof, vapor tight globes.
 - Fixtures with corrosion-resistant materials and gasketed covers.
 - Fiberglass or aluminum enclosures and Lexan® covers. Don't use fixtures with ABS plastic or acrylic diffusers where chemicals and high pressure hot water cleaning and sanitizing systems are used.

CIPCO may approve Custom Rebates for large projects with lighting measures not shown in the rebate schedule.

ENERGY STAR Verification:

Energy Star qualification can be verified by one of the following:

1. Provide cutout of package showing ENERGY STAR logo, product type and model.
2. Provide a printout from the ENERGY STAR website (listing at www.energystar.gov) confirming that a model is ENERGY STAR qualified.
3. Provide model number of product and qualification will be determined by the Cooperative.

DesignLights Consortium (DLC) Qualification:

DLC qualified lights can be found on the DLC Qualified Product List at www.designlights.org.

Livestock Operations

Equipment Application	Rebate per Unit
Efficient Electric Heated Livestock Waterers ≤175W per opening	\$50 each
Heat Lamps (<= 175W)	\$3 / lamp
Single Crate Heating Pads (<=85W)	\$25/ single pad
Double Crate Heating Pads(<=170W)	\$50 /double pad
Heat Lamp or Pad Controller	\$50 / controller

General Requirements:

1. Without pre-approval, the maximum combined rebate per location is \$1200 per year for all livestock equipment shown above. Rebate not to exceed purchase price.
2. Waterers: Maximum power input of 175 watts or less per trough opening. Tank must be constructed of plastic/polyethylene with a minimum of 2 inches of tank insulation and have lid covers. No minimum power input for heaters (if any) as long as the waterer is designed to operate in Iowa during the winter without the water freezing.
3. Heat Lamps: Must be UL listed with a power input of 175 Watts or less.
4. Single Crate Heating Pads: Must be UL listed with a power input of 85 Watts or less.
5. Double Crate Heating Pads: Must be UL listed with a power input of 170 Watts or less.
6. Heat Lamp or Pad Controller: Heat pad controllers must allow control of heat output automatically with temperature sensors. Heat Lamp controllers must allow for variable intensity of heat lamps either through automatic sensor control or manual heat intensity adjustments. Controls integrated into heat pads do not qualify.

Commercial Geothermal and Water Source Heat Pumps

Geothermal Closed Loop System	Rebate	Limit per Member
First 40 tons	\$400 /ton	\$50,000
Remaining tons	\$175 /ton	
Geothermal Open Loop System	Rebate / Limit	Limit per Member
First 40 ton	\$300 /ton	\$30,000
Remaining tons	\$125 /ton	
Water Source System	Rebate / Limit	Limit per Member
First 40 ton	\$200 /ton	\$25,000
Remaining tons	\$75 /ton	
Geothermal Unit Replacement	Rebate / Limit	Limit per Member
All Tons	\$75 /ton	\$15,000

Requirements:

- Equipment must be listed in the AHRI (Air-Conditioning Heating and Refrigeration Institute) Directory for commercial geothermal equipment and must meet ISO Standard 13256-1 or 13256-2. Efficiency and capacity data must be obtained from the appropriate section as follows:
 - WLHP: Water Loop Heat Pump, Required for Water Source equipment rebate
 - GWHP: Ground Water Heat Pump, Required for Open Loop geothermal equipment rebate
 - GLHP: Ground Loop Heat Pump, Required for Closed Loop geothermal equipment rebate
- Rebates are based on the unit cooling capacity measured in tons (rounded to nearest ½ ton). The rated capacity provided in the AHRI Directory is measured in "Btuh." This amount must be divided by 12,000 to determine the number of tons
- Closed or open loop heat exchangers must be designed to maintain water temperatures within AHRI performance test parameters for the type of equipment and rebate being considered.
- Units rated only as water loop (WLHP) heat pump equipment must use water that is temperature controlled by a system such as a boiler/cooling tower. These units do not qualify for geothermal closed or open loop system rebates.
- Hydronic units may be used for domestic water heating or pool heating. These will NOT qualify for special heat rate programs unless units also provide space heating.
- Open loop systems must return water to the aquifer through a reinjection well.

NOTE: The mechanical engineer or equipment specifier and installing contractor should be able to provide the information necessary to complete the application for this program. All parties should be made aware of program requirements prior to installation to ensure that a qualifying system is specified. If there is any doubt, you or a customer representative should contact CIPCO prior to installation to ensure that specified equipment will qualify.

Important Information:

Installing contractors should provide Members with the information needed to complete the rebate application. Contractors should be made aware of program requirements prior to installation to ensure that a qualifying system is specified.

If there are doubts about program eligibility, you should contact the Cooperative before the installation to ensure that the equipment will qualify.

Commercial Air Source Heat Pumps

Standard Air Source Heat Pumps (Split or single package)	Rebate	Limit per Member
First 40 ton	\$200 /ton	\$15,000
Remaining tons	\$50/ton	
ENERGY STAR Air Source Heat Pumps	Rebate	
First 40 ton	\$250/ton	\$25,000
Remaining tons	\$100/ton	

Requirements:

- Units must meet federal minimum efficiency requirements and have a minimum capacity of 0.75 tons. Units must be listed in the *AHRI Unitary Directory*, published by the Air-conditioning Heating & Refrigeration Institute and available as an online database at: www.ahridirectory.org.
- To be eligible for ENERGY STAR incentives, units must meet current ENERGY STAR program efficiency requirements for Air-Source Heat Pumps and have a minimum capacity of 1.5 tons.

MINIMUM Energy-Efficiency Criteria for ENERGY STAR® (as of 1/1/2011) Qualified Light Commercial Heat Pumps				
Product Type	SEER	EER	HSPF	COP
Split System (3-phase)<65,000 Btuh	14.0	11.0	8.2	-
Single Package (3-phase)<65,000 Btuh	14.0	11.0	8.0	-
All ASHP ≥65,000 and <135,000 Btuh	11.4 IEER	11.3	-	3.35
All ASHP ≥135,000 and <240,000 Btuh	11.0 IEER	10.9	-	3.25

- For split systems, both a new outdoor unit (condenser) and a new indoor A-coil (evaporator) must be installed.
- Single-phase units <65,000 Btuh must meet the residential criteria for federal minimum and Energy Star units.
- Rebates for air source heat pumps are based on the unit cooling tons. The unit capacity for qualified units is rated in the *AHRI Unitary Directory* by its output in "Btuh". This amount must be divided by 12,000 to determine the unit tons.

IMPORTANT: An Energy Star label on equipment does not guarantee that a product qualifies for this incentive (Refer to requirements above). Current Energy Star information, specifications and eligible equipment lists can be found at: www.energystar.gov.

Contractor Incentives

Contractor Incentives	Rebate	Limit	Requirements
Geothermal and Air Source Heat Pump Installations	\$40 /ton	Contractor may be eligible for payment up to the first 50 tons of heat pump capacity installed or a maximum of \$2,000 .	System must meet criteria for commercial heat pump equipment incentives. <u>Only with new loop installations.</u>

COMMERCIAL PROGRAMS

Commercial Air Conditioning Systems

Central Air Conditioners	Minimum Efficiency**		Rebate
	SEER	EER	
Split System (3-phase) < 65,000 Btuh	14.0	12.0	\$25 per ton Maximum Rebate = \$10,000
Single Package (3-phase) < 65,000 Btuh	14.0	11.0	
All Air Conditioners ≥ 65,000 and < 240,000 Btuh			
w/ electric resistance or no heating	11.8 IEER	11.7	
All other	11.6 IEER	11.5	
ECM Fan Motor			
Replacement Fan Motor (furnaces ≤100,000 BTUh and AC systems <8 tons)			\$75 per unit

Central AC Requirements:

1. Only air-cooled single package and split units used in commercial buildings are covered. (includes rooftop units)
2. Commercial units over 250,000 Btuh may be eligible even though units are not listed as ENERGY STAR qualified.
3. Single phase units ≤ 65,000 Btuh, must meet the residential criterion.
4. All air conditioners must meet current Energy-Efficiency Criteria for ENERGY STAR qualified air conditioners.
Current ENERGY STAR Information and qualifying equipment lists can be found at: <http://www.energystar.gov>.
5. The minimum efficiencies shown here are for ENERGY STAR qualified equipment at the time this guide was published. The Customer is responsible to ensure that their system meets current ENERGY STAR criteria at the time of installation.
6. When installing split systems, a new outdoor condenser unit and new indoor A-coil (evaporator) must be installed.
7. Electronically Communicated Motor (ECM) rebate is available when changing out a non-ECM fan motor to an efficient ECM motor of the appropriate size.
8. ECM rebates are only available for fans used with furnaces with a capacity of no more than 100,000 Btuh or central cooling systems with a capacity of 8 tons or less.

Chiller Measures	Rebate	Limit per Member
Air-Cooled Chillers	\$20 /ton	\$5,000 for all measures
Water-Cooled Chillers	\$30 /ton	
Chiller Pipe Insulation	\$2/linear foot	

Chiller Equipment and Installation Eligibility Requirements:

Chiller Efficiency Requirements				
Compressor Type and Capacity	Full-Load Optimized Applications <i>Must meet both levels</i>		Part-Load Optimized Applications <i>Must meet both levels</i>	
	Full Load (kW/ton)	IPLV (kW/ton)	Full-Load kW/ton)	IPLV (kW/ton)
Air-Cooled Chillers				
< 150 tons	≤ 1.15 (≥ 10.4 EER)	≤ 0.96 (≥ 12.50 EER)	≤ 1.25 (≥ 9.56 EER)	≤ 0.78 (≥ 15.39 EER)
≥ 150 tons	na	≤ 0.94 (≥ 12.75 EER)	na	≤ 0.80 (≥ 15.07 EER)
Water-Cooled Chillers				
Positive Displacement < 75 tons	≤ 0.75	≤ 0.63	≤ 0.80	≤ 0.60
75 to 149 tons	≤ 0.71	≤ 0.61	≤ 0.79	≤ 0.51
150 to 299 tons	≤ 0.68	≤ 0.58	≤ 0.72	≤ 0.50
≥ 300 tons	≤ 0.58	≤ 0.54	≤ 0.64	≤ 0.48
Centrifugal < 150 tons	≤ 0.62	≤ 0.60	≤ 0.64	≤ 0.36
150 to 299 tons	≤ 0.59	≤ 0.60	≤ 0.64	≤ 0.35
300 to 599 tons	≤ 0.56	≤ 0.55	≤ 0.60	≤ 0.36
≥ 600 tons	≤ 0.55	≤ 0.40	≤ 0.57	≤ 0.35

Chiller Requirements Continued:

1. Chiller installations are typically optimized for full-load or part-load operation. Customers should select the requirements that apply to their application and make sure that the chiller purchased meets both full-load efficiency and integrated part-load value (IPLV) requirements for that application as shown in the Chiller Efficiency Requirements table.
2. For air cooled chillers, the required cooling capacity (kW/ton) or the Energy Efficiency Ratio (EER; Btu/watt) may be used to determine a product's eligibility.
3. Required efficiencies are based on standard rating conditions specified in ARI Standard 550/590-98. For Air Cooled Chillers, only packaged chillers are covered (i.e., none with remote condensers).
4. The rebate for chiller pipe insulation is only available for existing buildings and requires that the insulation added to pipe is at least an R-11 and exceeds the current energy code.
5. Customer must provide equipment specifications for chillers and copy of sales invoices for all chiller and insulation equipment installed including materials and labor.

The chiller efficiencies shown for rebate eligibility are those used by the Federal Energy Management Program (FEMP). More information on chillers can be found at: <http://energy.gov/eere/femp/covered-product-categories>.

Commercial Heat Recovery Ventilators

Equipment	Rebate
Heat Recovery Ventilation System	\$180 / ton recovered (cooling tons recovered from exhaust air)

Requirements:

1. Heat recovery ventilators with or without energy (desiccant) wheel can be eligible for this incentive.
2. Units should be rated in accordance with AHRI Standard 1060-2005 for Air-to-Air Heat Exchangers for Energy Recovery Ventilation Equipment. AHRI rated equipment is listed in the online AHRI Directory of Certified Product Performance at www.ahridirectory.org. The direct address is <http://www.ahridirectory.org/ahridirectory/pages/erv/defaultSearch.aspx>.
3. Unit must have a Thermal Effectiveness Rating (percent of available energy that is recovered) that has been tested by AHRI or by the manufacturer in accordance with similar testing procedures.
4. If not AHRI certified, manufacturing specifications will be reviewed by CIPCO for verification of eligible equipment and determination of the appropriate incentive.
5. Tons recovered can be supplied by engineering calculation for specific project, calculated using a worksheet provided by CIPCO or by using the following formula: Tons = System CFM x [1.08 x (Summer Design Temp-75) x Sensible Thermal Effectiveness + 0.68 x Design Grains Difference x Latent Thermal Effect.]/12,000

COMMERCIAL PROGRAMS

Commercial Lighting

INDOOR LIGHTING EQUIPMENT		REBATE AMOUNT	
LINEAR LAMP REPLACEMENTS (Requires reduction in wattage)		Replacement	New Construction*
LED Tube Replacements (DesignLights Qualified) -replacement of T12 or T8 lamps	Per Lamp	\$3	NA
High Bay Linear Fluorescent Fixtures		HID Replacements Only	
T8 or T5 tubes with High Output Ballasts -min. 15 ft. mounting height	Per Lamp	\$6	NA
LED FIXTURES (NON-TROFFER)		Replacement	New Construction*
	8-14 Watts	\$10	\$5
	15-49 Watts	\$15	\$10
	50-99 Watts	\$25	\$20
	≥ 100 Watts	\$40	\$30
LAMPS AND OTHER LIGHTING PRODUCTS		Replacement or New Construction*	
LED Lamps (Screw-based lamp, 8 Watt minimum)		\$2	
Occupancy Sensors		\$15	
LED HIGH BAY AND LED TROFFER FIXTURES		Replacement	New Construction*
LED High Bays	On 1200 to 3999 hours	0.40 x (Lumens/58 – Watts)	0.40 x (Lumens/80 – Watts)
	On 4000 to 6999 hours	0.55 x (Lumens/58 – Watts)	0.55 x (Lumens/80 – Watts)
	On 7000 to 8760 hours	0.70 x (Lumens/58 – Watts)	0.70 x (Lumens/80 – Watts)
LED Troffers	On 1200 to 3999 hours	0.40 x (Lumens/80 – Watts)	
	On 4000 to 6999 hours	0.55 x (Lumens/80 – Watts)	
	On 7000 to 8760 hours	0.70 x (Lumens/80 – Watts)	
Custom Lighting Application		Custom rebate available upon approval	
OUTDOOR LIGHTING EQUIPMENT		REBATE AMOUNT	
LED Fixtures	20 to 34 Watts	\$15	
	35 to 49 Watts	\$20	
	50 to 74 Watts	\$40	
	75 to 124 Watts	\$50	
	125 Watts or more	\$60	

*New Construction or situations where adding fixtures or lighting output to an existing facility.

Commercial Lighting

General Requirements:

12. REBATE LIMITS: 50% of installed costs and \$45,000 per customer. Projects over \$5000 require pre-approval.
13. All LED lamps and fixtures must be either ENERGY STAR or DesignLights Consortium qualified and listed on their respective websites.
14. LED fixtures include hard-wired fixtures and recessed cans without screw-in adapter assemblies.
15. Linear LED lamps must be DLC qualified replacements of four-foot T8 or T12 fluorescent lamps.
16. Mogul based HID replacements (e.g corn lights) may be eligible for LED fixture rebates.
17. All replacement fixtures must have a lower wattage than the fixture being replaced.
18. Proof of purchase or a copy of the sales invoice must be provided.
19. A MAXIMUM REBATE payment may be applied to rebate requests. For projects where the incentive is expected to exceed \$5,000, you should contact CIPCO for pre-approval prior to installing.
20. Outdoor lighting must be on from dusk to dawn and controlled by an automatic photocell sensor (cannot be wired to a motion sensor or manual switch).
21. Outdoor lights and lighting used in non-heated buildings should be rated for cold starting down to -20 deg. F.
22. For livestock buildings and areas where lighting may be exposed to a corrosive environment, use:
 - Dust and moisture tight nonmetallic fixtures with shatterproof, vapor tight globes.
 - Fixtures with corrosion-resistant materials and gasketed covers.
 - Fiberglass or aluminum enclosures and Lexan® covers. Don't use fixtures with ABS plastic or acrylic diffusers where chemicals and high pressure hot water cleaning and sanitizing systems are used.

CIPCO may approve Custom Rebates for large projects with lighting measures not shown in the rebate schedule.

ENERGY STAR Verification:

Energy Star qualification can be verified by one of the following:

4. Provide cutout of package showing ENERGY STAR logo, product type and model.
5. Provide a printout from the ENERGY STAR website (listing at www.energystar.gov) confirming that a model is ENERGY STAR qualified.
6. Provide model number of product and qualification will be determined by the Cooperative.

DesignLights Consortium (DLC) Qualification:

DLC qualified lights can be found on the DLC Qualified Product List at www.designlights.org.

Adjustable Speed Drives (ASD)

Caution: Due to the complex issues involved in specifying ASD drives, it is strongly recommended that a third party be used to provide an analysis for potential harmonic problems.

ASD Rebate Table			
Load Type	Annual Operating Hours	Code	Rebate Per Horsepower Controlled
Variable (fans, Pumps)	1000-1999	ASD1	\$20
	2000-2999	ASD2	\$40
	3000-3999	ASD3	\$60
Fixed (All Other)	1000-1999	ASD4	\$10
	2000-2999	ASD5	\$15
	3000-3999	ASD6	\$20

General Requirements:

1. The National Electric Code should be followed for all applicable wiring and grounding.
2. The entire facility must comply with IEEE Standard No. 519 (re: harmonics) after an ASD installation or retrofit.
3. In the case of new motor installations, the motor to be controlled must be NEMA Premium.
4. Rebate requests for over \$5,000 shall require pre-approval. Maximum rebate is \$10,000 per facility (per year) or 50% of installed costs
5. The ASD must have either an input line reactor or isolation transformer. The minimum requirement is that a 3% impedance reactor, based on the horsepower rating of the ASD, be installed.
6. System designer or installing contractor should ensure that the ASD installation meets the Harmonic Test for Eligibility (see below) or ensure that the entire facility comply with IEEE Standard No. 519 after completion of the ASD installation or retrofit. Failure to comply with this rule may be cause for the utility to deny the request for a rebate.
7. **No rebate allowed for second unit in redundant applications. Horsepower from a redundant motor cannot be used to determine rebate.**

Harmonic Test For Eligibility:

1. Enter total ASD load to be supplied by the transformer (include sum of existing ASD loads). Total driven motor HP multiplied by 0.85 is a fair estimate of power in kW _____ kW
2. Enter the kVA rating of the transformer supplying power to the ASD loads _____ kVA
3. Divide line 1 by line 2 and multiply by 100. _____ %
4. If the value on line 3 is less than 5% (*ASD demand is less than 5% of the nameplate kVA of the transformer*), no further evaluation of harmonics is required to qualify the system for this program. This is not a guarantee by the Utility, in any way, that harmonics will not cause any problems for the customer.
5. If the value on line 3 is 0.05 or greater (*ASD demand is equal or greater than 5% of the nameplate kVA of the transformer*), you must pre-qualify this application by using third party verification of measures taken to ensure compliance with the IEEE 519 Standard.

Important: ASD's introduce harmonics into the power system. Harmonics present in the motor supply heat the motor and do not produce useful torque, affecting motor lifetime and de-rating the motor capacity. Reduction of harmonics is also important to ensure reliable power quality for other consumers and utility equipment.

Commercial Kitchen Refrigeration

Commercial ENERGY STAR Refrigerator and Freezer Rebates				
Size	Refrigerators		Freezers	
	Solid Door	Glass Door	Solid Door	Glass Door
< 19 cu. ft.	\$25	\$40	\$40	\$125
19-30 cu. ft.	\$40	\$50	\$60	\$150
31-60 cu. ft.	\$60	\$60	\$150	\$300
61-90 cu. ft.	\$100	\$70	\$325	\$600

Commercial ENERGY STAR Dishwasher Rebates		
TYPE	Low Temp	High Temp
Under Counter	\$100	\$100
Stationary Single Door	\$250	\$250
Single Tank Conveyor	\$250	\$250
Multi-Tank Conveyor	\$800	\$800
Pots, Pans & Utensils	\$250	\$250

Commercial ENERGY STAR Cooking Equipment	
TYPE	Rebate
Electric Steam Cooker	\$750

Requirements:

1. Must be listed as an ENERGY STAR qualified commercial food services equipment.
2. See current qualified list under “Commercial Food Service Equipment” at www.energystar.gov .
3. Rebate not to exceed 50% of cost. Maximum rebate per facility is \$5,000 per year.

Custom Incentive Program (Non-Residential)

Equipment	Nominal Incentive Rate*
Lighting I - projects in facilities that operate 3 shifts per day (more than 16 hrs/day)	\$.05 Per kWh Saved
Lighting II - projects in facilities that operate 1 or 2 shifts per day	\$.07 Per kWh Saved
Air conditioning equipment/measures that reduce facility air conditioning load	\$.10 Per kWh Saved
Other manufacturing- process equipment, process heating, refrigeration systems, etc.	\$.09 Per kWh Saved
Measures with improved electrical energy efficiency that reduce peak demand	\$15 Per kWh Saved

*Nominal Incentive Rates may vary. Values shown may be used on typical projects; however, CIPCO reserves the right to adjust rates from time to time and from project to project. Actual incentive rates will be established upon project pre-approval. Final payment is subject to various conditions and may be adjusted based on inspection of final installed measures.

Requirements:

- The following Do Not Qualify for Custom Incentives:
 - Equipment and measures that qualify under other prescriptive incentive programs
 - Projects with a calculated rebate of under \$5,000
 - Projects with a payback of less than 2 years (with incentive)
 - Projects that have not received prior pre-approval from CIPCO (before project commences)
 - Measures receiving payment from any local or state entities or other utility funding programs (excluding tax credits)
- Incentive cannot exceed 50% of total project cost. Total site incentive (including prescriptive rebates) cannot exceed \$100,000.
- Efficiency improvements will be calculated and/or measured to determine savings. Necessary documentation to support the energy usage used for baseline and installed measures includes wattage, hours of operation, time of operation (hours, days) and any information needed to calculate energy and demand.
- Baseline usage may be determined using comparable equipment that meets Iowa Energy Code requirements, Federal standards or generally accepted industry standards. Equipment retired solely for efficiency gains (early retirement) can be used as a baseline in some cases; however, equipment monitoring may be required before and after the project is completed. CIPCO may assign baselines or may adjust any baselines provided on an application.
- Demand savings will be based on demand reduction of equipment operating from 5-9 PM during a weekday in July, subject to adjustments from CIPCO to account for load diversity and other factors.
- Pre-approval from CIPCO is required for all projects. When pre-approved, funds covering the estimated incentive payment will be reserved by CIPCO for up to 18 months.
- Custom rebates without pre-approval may be subject to a rebate reduction of 50% for project funding requests “after the fact” with utility option to deny rebate in cases where baseline cannot be established or confirmed (e.g. old equipment removed before requesting incentive).
- Eligibility for this program may require inspections and measurements of the performance of the installed measures. In retrofit situations, inspections prior to the removal of the existing equipment/systems may also be required. CIPCO will determine whether or not inspections will be required prior to pre-approving a project or approving a final application.

COMMERCIAL PROGRAMS

9. In most cases, an energy audit is recommended and may be required. An energy design review will typically be required for new construction/additions projects. Upon completion of the project, the incentive can be increased up to 10% to cover costs of an approved audit/design review which recommended the installed measures.
10. Energy savings for which incentives are paid must represent a reduction in energy supplied by the cooperative. This reduction can be based on the amount of energy per unit of production (kWh savings per widget manufactured). Installation of energy-efficient equipment required for compliance with the Iowa Energy Code will not qualify for incentives. Any improvements beyond Code requirements or a generally accepted industry standard, where applicable, may be eligible for incentives.
11. Measures considered common practice for an industry or individual customer (standard design for a franchise or multiple facility owner) may be ineligible or subject to a rebate reduction of up to 100%. For the purpose of this program, common practice is described where the utility has reasonable proof that a measure has been typically specified by a company for all of its buildings constructed in the past 10 years regardless of location or utility incentives. The customer has the right to protest any such determination from the utility and may offer proof of the contrary to have a project reconsidered for a full or partial incentive.”

CIPCO Turnkey Commercial Services

Power Quality Consultation

Through this service, CIPCO will provide the cooperative with an internal resource to identify and recommend remedies for power problems.

With the introduction of electronic controls and computers integrated into industry, the need for power analysis has heightened. Issues with harmonics, noise, grounding, frequency and transients can put a member at odds with the energy supplier. Over 95% of the issues are caused internal to the facility.

Compressed Air Leak Audit

This audit provides a survey of all of the leaks in a compressed air system. Leaks are discovered with the ultrasonic testing equipment and identified by tagging the component or line where the leak occurs. The audit report documents the location and size of leaks and also provides an estimate of the potential energy savings associated with fixing the identified leaks in the system.

Using an Ultrasonic instrument to trace compressed air leaks for repair is a low cost high value service. According to the Department of Energy, compressed air leaks are one of the largest causes of energy waste. Ultrasound also can be used to pick up corona, tracking on insulators, bad steam valves, leaking valves, bearings and vacuum pump issues.

Paul Erickson is a Level I certified ultrasound inspector and has been trained on the use of the UE Systems Ultraprobe.

Thermography Services

Using an infrared camera, loose electrical connections can be identified and categorized for potential problems. This service provides visual confirmation of varying levels of heat including hot spots in motor control centers that can be devastating to an industrial plant if they catch fire.

This is a highly sought after service for industrial facilities which utilizes non-contact technology. It is recognized by the insurance industry as preventative maintenance tool which can minimize fire risks and electrical failures. Thermography can also detect moisture penetration, missing insulation, motor and bearing issues.

Paul Erickson is a Certified Level II Thermographer and trained in the use of FLIR equipment with over 13 years and 1,000 hours experience in industrial settings.

Questions/Scheduling: Contact Paul Erickson at 319-734-4330

Retro-commissioning Program (RCX)

Program Description

The RCx program provides for an evaluation of a facility's energy usage that identifies ways to optimize its HVAC or process controls, and provides no-cost/low-cost operational and maintenance solutions that can result in significant energy and cost savings.

Upon completion of the study, members will receive:

- A portfolio of measures with a net payback of less than two years.
- Reimbursement of all study costs for implementing the entire portfolio of measures.
- Significant savings of approximately 20 percent of both electric and natural gas bills.
- Post-implementation testing of building systems to determine whether contractors' work was completed before they leave the worksite, eliminating change order costs while ensuring realization of energy savings and occupant comfort.
- Training, customized manuals, and follow-up bill monitoring to demonstrate energy savings and persistence of savings.

The Cooperative and CIPCO may approve all contacts and documents prior to customer delivery.

Financing

Members who implement all measures identified in a 2-year payback portfolio will have the cost of the study and certain pre- and post-implementation services fully paid by CIPCO. No other incentives apply.

Member Requirements

- Must be a CIPCO system electric commercial or industrial member
- Building must have energy management system (EMS) or direct digital controls (DDC)
- Recommended building size is greater than 25,000 sq. ft. Smaller energy-intensive buildings may also qualify and will be addressed with specific targeting.
- Building must pass screening and benchmarking process for cost-effectiveness
- Building systems must be free of problems requiring major capital repairs
- Building must have no planned major renovations or retrofits

Typical Measures

- HVAC controls optimization - HVAC scheduling, temperature reset, chiller sequencing, eliminating simultaneous heating and cooling
- Outside air optimization - demand control ventilation, rebalancing
- Variable frequency drives (VFDs) - adding or optimizing VFDs (pumps and fans)
- System repairs - control valves, damper actuators, sensors, compressed air leaks, insulation
- Lighting controls - occupancy sensors, daylighting, time clocks
- Miscellaneous - de-lamping, carbon monoxide (CO) sensor control of parking garage exhaust fans, recommissioning old thermal energy storage systems

Program Implementation

Pre-implementation Services

Prospecting: The Cooperative identifies members, completes a screening form and submits it to the program contractor. Also, the program contractor can work with each cooperative to determine members with the best opportunities for savings. At the Cooperative's request, the program contractor can contact the member and provide literature to facilitate this process.

- *Member Screening:* Using billing and member facility data, the program contractor will determine whether the RCx program can deliver the most cost effective benefits to the member. If member isn't recommended for the RCx program, the program contractor will refer them to the Cooperative for determining whether other services may apply.
- *Proposal Draft:* Program contractor provides proposal to Cooperative and CIPCO for review and makes revisions per Coop/CIPCO requests.
- *RCx Study Proposal:* The Cooperative and/or program contractor deliver the proposal to the member. The member signs the proposal, agreeing to implement a portfolio of cost-effective measures determined from the study.

All costs in this phase paid for by CIPCO and the program contractor.

Retrocommissioning Study

- *Site Visit:* Program contractor schedules a visit to the member's facility to perform a comprehensive site review and may install monitoring equipment. (Coop/CIPCO may attend.)
- *Energy Analysis:* The study of the member's energy systems may include building energy modeling. A list of energy-saving measures will be generated.
- *Draft Report:* Program contractor prepares draft report and provides to Cooperative and CIPCO for review. Cooperative determines what material is given to the member.
- *Final Report:* The Cooperative and/or, program contractor deliver the study report to the member. The report includes a portfolio of measures that will pay back in two years or less.

Study costs are paid by member with 50% reimbursed by CIPCO upon delivery of the report.

Implementation

- Member works with third party contractors to implement all measures defined in the "Two Year Payback Portfolio"

All implementation costs are paid for by the member.

Post-implementation services

- *Performance Testing:* Program contractor performs testing to ensure that the implementation work satisfies the measures in the portfolio. Adjustments can be made while still on-site.
 - Remaining 50% of study costs reimbursed by CIPCO upon successful testing.
 - RCx savings can now be counted toward Cooperative goals.
- *Staff Training:* Program contractor trains building staff to secure energy savings over the estimated measure life. Training materials unique to each member will be developed and provided by the program contractor.
- *Bill Monitoring:* Program contractor monitors bills at three and 12 months to demonstrate that energy-savings measures have not been undone and that predicted savings are real.
- *Project Report:* Program contractor issues final project report which summarizes the project for the member, Cooperative and CIPCO.

All costs in this phase are paid for by CIPCO.

Tracking and Reporting

The program contractor will develop a database of member projects by cooperative to record project information and track project status. The program contractor will provide CIPCO with reports showing projects by cooperative, including their energy savings and status. The program contractor will review project status and program progress with CIPCO and Cooperative staff as requested.

Retro-commissioning Program (RCX) – continued

Other

Upon agreement with the Cooperative and CIPCO, the program contractor can develop and deliver customer satisfaction surveys that address program delivery, customer satisfaction and the decision-making process. Payment for this service from CIPCO will be based on available budget funds.

Program Contractor

At this time CIPCO has chosen to allow one company to serve as the RCx Program Contractor. Contact information for the current program contractor is provided below:

MICHAELS ENERGY

201 1st Avenue SE, Suite 200

Cedar Rapids, IA 52401

Phone: (608) 792-9320

Fax: (815) 717-9693

www.MichaelsEnergy.com

Primary Contact: Brian A’Hearn

Direct: 319.531.9981

Cell: 319.533.4868

BFA@MichaelsEnergy.com

The program (including the designated contractor) is effective July 1, 2012 until further notice.

Hot Water Energy Saving Measures

Delivery Method	Delivery Code	Equipment Rebates (per unit)			
		Faucet Aerator	Shower-head	Water Heater Blanket	Pipe Insulation
Direct: Mail, annual meeting, hand delivered, office handout	A	\$0.50	\$2.50		
Opt-in: Business reply card order, office pick-up in response to newsletter or redemption coupon	B	\$2	\$5	\$5	
Verified: Contractor Installed	C	\$4	\$12	\$6	\$3
Verified: Cooperative Installed	D	\$4	\$12	\$6	\$3

Requirements:

1. Equipment must be documented to perform at specified product requirements as shown below:

Product	Requirements:	Limit per household
Faucet Aerators	Flow rate: 1.5 GPM maximum - .5 GPM minimum	3
Showerheads	Flow rate: 2.0 GPM maximum - 1.5 GPM minimum flow	2
Water Heater Blanket	Minimum R8 insulating blanket (if tank warm to touch)	1
Pipe Insulation	Minimum 3' of pipe insulation product installed on hot and cold supply of water heater	1

2. Cooperatives are required to submit an installation activity report provided by CIPCO to capture delivery method, units delivered, rebate amounts, etc.
3. The maximum flow in gallons per minute (GPM) for low flow devices must be clearly stated on product, packaging or invoice from vendor or manufacturer.
4. WaterSense qualified products are recommended for aerator and showerheads and may become mandatory when more readily available. For more information on WaterSense requirements and product information go to web site: www.epa.gov/watersense
5. Insulation products must conform to minimum industry standard specifications for the application.
6. All showerheads should have a flow compensating valve (FCV) that keeps constant flow rate. A 1.5 GPM showerhead with a FCV should get 1.5 gpm at 60 PSI or 40 PSI.

Performance satisfaction with the low flow devices should be weighed against the relative energy savings to determine what flow level should be installed to meet expectations.

Showerhead Satisfaction Guide**

Water Pressure	Water Source*	Flow Rate (GPM)		
		1.5	1.75	2
low pressure	local wells	Poor-Fair	Fair-Good	Good-Excellent
medium pressure	city, local wells, rural water	Fair	Fair-Good	Good-Excellent
high pressure	city, local wells, rural water	Good	Good-Excellent	Excellent

*With rural cooperative water a regulator at home can be adjusted to lower or higher constant pressures. Local well pressure valves can be adjusted to run at higher pressures, however, there is typically a 20 PSI dip before pump brings pressure back up to set pressure. Example: Pump set to provide 60 PSI would drop to 40 PSI before pump turns back on and increases pressure to 60 PSI setpoint. WaterSense testing helps to ensure that showerheads operate well in this low range.

**Satisfaction levels are subjective and vary based on individual expectations.

DIRECT DELIVERY

Bulk LED Distribution

Bulk LED Distribution	Rebate (per project)	Project Limits
LED handouts	50% of bulk purchase price	\$2 per member served

CIPCO will reimburse the utility for 50% of the bulk purchase price for LEDs distributed through a mass-delivery process including but not limited to hand delivered, office handouts, annual meetings or events.

Model Housing Program

The Model Housing Program is a promotional tool used to create awareness of the benefits offered by living in an advanced technology, all-electric home with ENERGY STAR and other advanced efficiency equipment.

The program provides a \$5,000 maximum bonus for allowing public access and promotion of home.

- Co-ops must co-fund 30% of bonus amount, up to \$1,500 per home
- CIPCO will pay a maximum of \$3,500 per home, plus the individual equipment program rebates

Requirements:

1. To ensure funding, a Pre-approval Request Form (Form M) should be submitted to CIPCO prior to groundbreaking. This Form can be found on the CIPCO Intranet under Energy Efficiency Information/Incentive Programs.
2. Approval, funding & open house should take place in a single year.
3. Model Home projects must exhibit state-of-the-art technology.
4. Must meet "All Star" home energy efficient criteria.
5. Must be a new construction, single family home.
6. Must foster improved awareness of electric heat, water heating and advanced energy efficient electric technologies.
7. Must allow reasonable time for public viewing and promotion.
8. Member system must provide progress action plans of project.
9. Rebates should be applied for and submitted in the CIPCO rebate portal prior to submitting the Model Home Payment Request form. Copies of ALL rebate requests should be provided with the Model Home Payment Request form.

Commercial Energy Services Funding Program

CIPCO's Commercial Energy Services program funds and promotes energy efficiency, energy management and other energy related services provided to commercial, large agricultural and industrial customers of CIPCO member cooperatives.

Qualified Services

- Energy Audits
- Infra-red Thermal Imaging (not for residential)
- Design Reviews (to identify energy efficiency improvements)
- Power Quality Survey/Analysis
- Process Energy Sales Tax Exemption Audits
- LEED Certification Consulting Services
- Energy Modeling for Building System Optimization
- Energy Management Systems Analysis
- Energy Efficient Design for Commercial Construction
- Other energy related services as approved by CIPCO

Funding for 2013

Each cooperative shall be eligible for introductory funds for up to \$1200 for qualified energy services performed and invoiced (to member or member-cooperative) during the year. After the \$1200 is used, services will be co-funded by CIPCO as described below under Matching Funds.

Matching Funds

Matching funds can be applied to the cost of energy services after the cooperative's introductory funds of \$1200 have been paid by CIPCO. CIPCO will provide a 2:1 match of the cooperative's funding, with a maximum CIPCO payment equal to 40% of the eligible costs per customer/project.

Program Requirements:

- Matching funds are subject to qualification and availability of program funds.
- Guaranteed funding available from CIPCO for any one cooperative is \$12,000 through September 30. Funds can be applied to one project or stretched out over many projects.
- CIPCO must pre-approve all project funding requests. The company providing the service must be listed on an updated energy service provider list supplied by CIPCO or pre-approved prior to requesting funding for any services through this program.
- The customer/cooperative must provide project information as requested by CIPCO.
- Eligible costs shall only include costs not covered through other programs. (e.g. If a government grant will pay for 25% of an audit, only 75% of costs for the service can be used to determine eligible matching funds from CIPCO).
- Funding terms may vary on an annual basis (e.g. % co-pay, maximum per cooperative).

Energy Service Provider Listing

Refer to current provider list.

Energy Service Provider Listing (Updated as of 2/28/17)

Energy service providers whose services may qualify for CIPCO’s Commercial Energy Services program funding are listed below. The brief services listing is provided for reference only – please contact the organization to determine their qualifications for your specific project.

CLEAResult

Phone: 319-246-7901 (Cedar Rapids)

- Commercial Energy Studies
- Energy Management
- Retrocommissioning
- Design Build for Energy Savings
- CoolSaver™ A/C tune-up program

Kloberdanz Consulting (Des Moines)

chad@kloberdanzconsulting.com

Phone: 515-333-8461

- Agricultural Energy Audits

The Energy Group (Des Moines)

Phone: 515-564-1045

- Small Commercial Energy Audits
- Agricultural Energy Audits
- Infra-red Thermal Imaging
- Process Energy Sales Tax Exemption Audits
- Energy Modeling for Building System Optimization
- Energy Management Systems Analysis

KJWW Engineering Consultants

Phone: 515-334-9906 (Des Moines)

Phone: 309-788-0673 (Rock Island)

- Energy Audits / Facility Assessments
- Life-Cycle Cost Analysis
- Sustainability / LEED
- Systems Commissioning

Michaels Energy (Cedar Rapids)

Phone: 608-792-7844 (La Crosse headquarters)

- LEED® Services
- Industrial Process Optimization
- Commissioning and Retrocommissioning
- New Construction Design Assistance
- Energy Modeling
- Daylighting

The Weidt Group (Des Moines)

Phone: 515-271-9906 (field staff throughout Iowa)

- Construction/Design Review & Optimization
- LEED Certification Consulting Services
- Daylighting Design Analysis
- Energy Modeling for Building Systems

Farris Engineering (Des Moines)

Phone: 515-331-0981

- Energy Audits
- Life Cycle Costing Studies/Assessments
- LEED Certifiable Designs
- BIM - Building Information Modeling

A-TEC Energy Corp. (Urbandale)

Phone: 515-244-1704 or 1-800-798-1704

- Small Commercial Energy Audits

Burns & McDonnell (Kansas City, MO)

Phone: 816-822-4367

- Facility Audits
- Performance Contracting
- Design, Management and Commissioning

Energy Service Provider companies may be added or subtracted from this list from time to time. If a service company of interest is not currently on this list, you should request prior approval from CIPCO. Service providers will be required to provide professional credentials adequate for the proposed services for CIPCO approval.