



New Changes To Lighting Incentives For 2012

In 2012, Linn County REC will continue to offer a wide range of incentives to help our members take advantage of energy efficient products. Most incentives will remain the same, but we will have changes to our residential indoor lighting incentive. Any indoor lighting incentive filed on or after January 1st, 2012 will need to meet the following criteria. (For full terms and conditions, download the incentive form from our website).



The 2012 residential indoor lighting incentive for residential lamps and fixtures is 50% of price paid for qualified products (excludes tax) up to \$20 per lamp or fixture.

Qualified products include:

- ENERGY STAR® CFL lamps and fixtures
- ENERGY STAR® ceiling fans with light kits (ceiling fans alone do not qualify)
- ENERGY STAR® LED lamps and fixtures (non-battery operated)
- T8 and T5 fixtures w/lamps & ballast (these are not ENERGY STAR® rated)

Minimum 4 watts per unit. Maximum incentive of \$20 per lamp or fixture up to \$600 per home. (Call for incentives greater than \$600.)

Along with residential, we offer incentives for agricultural and commercial members too. Visit our website at www.linncountyrec.com for a full listing and to download forms and terms and conditions.

To receive an incentive:

- Download the incentive form
- Fill in ALL required fields
- Provide a copy of the receipt with product circled
- Provide ALL additional required verification, (i.e. Energy Star)
- Must be received within six months of installation

Please note that 10% may be deducted from incentive amount for returned forms without proper information. Need help filling out an incentive form? Visit the video center on our website for a step by step tutorial on the filing process. If you have any questions about our incentive program, please contact our office to speak with member services.

In State College Scholarships Available

Do you have a high school senior who is graduating this May? Linn County REC has scholarships available for students that live in a home served by Linn County REC and will be attending a college in Iowa for the 2012 - 2013 college year.



- \$1,000 scholarships for high school seniors graduating in May who will be entering a full-time undergraduate course of study at an accredited college or university in Iowa for the 2012 - 2013 college school year.
- \$500 scholarships for high school seniors graduating in May who will be entering a full-time associate's degree course of study at an accredited two year vocational/technical school in Iowa for the 2012 - 2013 college school year.
- \$1,000 Allen Feickert Memorial Scholarship for a high school senior graduating in May who will enter the Powerline Diploma Program at Northwest Iowa Community College for the 2012 - 2013 school year.

For a complete list of rules and instructions and to fill out our scholarship application, visit www.linncountyrec.com.



Wind Energy Added

Members of Linn County REC will soon be receiving a greater amount of electricity generated from wind energy by Central Iowa Power Cooperative (CIPCO), our wholesale power provider. CIPCO has signed a long-term power purchase agreement to buy the entire output from two new wind farms being constructed near the towns of Hawkeye and Grand Junction.



The projects will produce a combined 86 megawatts of electricity, which will double the amount of wind energy in CIPCO's generation portfolio when the two wind farms become operational in the fall of 2012.

"Over 95% of CIPCO's electricity is generated in Iowa and with the commitments of the Rippey and Hawkeye facilities, CIPCO's carbon-free and emissions-free resources will be over 50% by 4th quarter 2012," stated Dennis Murdock, CEO and Executive Vice President of CIPCO. "The addition of these two wind farms further enhances our commitment to local energy production and environmental stewardship."

The 36-megawatt Hawkeye Wind Farm and 50-megawatt Rippey Wind Farm will use Nordex 2.5-megawatt turbines on 328-foot high towers, the highest wind turbines in Iowa.

Reinventing The Incandescent Lightbulb

Lighting technologies are advancing rapidly. Manufacturers are developing more options for consumers who like the feel of the classic bulb when it comes to the color of the light, how it is dispersed and the shape of bulbs.

The difference will be found on your monthly electric bill—more efficient bulbs use between 25 - 80% less energy than traditional incandescent bulbs and last much longer. The U.S. Department of Energy claims each household can save \$50 a year by replacing 15 traditional incandescent bulbs (see their video on our website at www.linncountyrec.com).

Residential bulbs will largely fit in three categories, each stacking up a bit differently:

Halogen Incandescents: Use 25% less energy, last three times longer than regular incandescent bulbs.

For consumers comfortable with their old incandescent bulbs, halogen incandescents will be an easy first-step. This new generation of incandescent include a capsule of halogen gas around the bulb's filament. They're available in a variety of familiar colors and can be dimmed.



Compact Fluorescent Lamps (CFLs): Use 75% less energy, last up to 10 times longer.

CFLs are the most familiar options on the market today and the most economical. The technology operates the same as fluorescent lighting in offices or the kitchen. The bulbs are now available in a wide array of colors and some can be dimmed. Always check the package to make sure a bulb meets your needs. As with all fluorescent bulbs, each CFL contains a small amount of mercury (five times less than a watch battery) and should be recycled.



LEDs: Use between 75% - 80% less energy, last up to 25 times longer.

LED technology is still advancing. Currently, LEDs are more expensive than other options—a replacement for a 60-W incandescent bulb costs between \$30 and \$60—but LED costs will fall as manufacturers respond to growing consumer demand. LEDs have to stay cool to operate efficiently, and when several bulbs are placed together for a brighter, more consumer-friendly light, lifespan decreases. However, many manufacturers are accounting for this by adding cooling elements to LED bulbs. Some bulbs feature a spine design to allow air to flow around the base; other models have fans built into the ballast.



For more information on our CFL and LED lighting incentives, visit our website at www.linncountyrec.com.

Stay Connected To Linn County REC With Your Mobile Phone



Access www.linncountyrec.com on your smart phone and you will be automatically directed to our free mobile site with a list of our most popular links for easy navigation.

- View our outage map to get the latest information during service interruptions
- See our full listing of energy efficiency incentives

- Look up account information including your bill statements, usage and payment history and a link to make payments

- Get the latest cooperative news

If you have suggestions for our mobile site, we would like to hear back from you. Send comments to lcrc@linncountyrec.com.

How To Protect Your Motor Driven Systems

Single phasing is a power system problem that can cause motors to fail. In addition to lost productivity, this can lead to substantial repair or replacement costs for damaged equipment. Members are responsible for purchasing and installing phase protection equipment that will help protect your facility from the potentially damaging effects of these electrical disturbances.

What is Single Phasing?

A three-phase motor needs three equal phases to operate properly. The loss of one of these phases from the power system is known as single phasing. The phase loss may be due to a downed line or a blown pole-top fuse. Specific causes include tree contact, animal contact, poor weather conditions, and other natural disturbances. A single-phase overload condition can cause a fuse to blow, or even equipment failure.

Single phasing can cause serious problems for three-phase motors. If the phase loss occurs before the motor starts, the motor will be in a locked-rotor condition and the amperage in the remaining phases will be more than if all phases were available in the circuit with the rotor locked. If the overload device is not calibrated for this condition, the other two windings could burn out. In the best scenario, the motor may not start or may stall under load.

If the loss of phase takes place while the motor is running, it will continue to operate. However, the internal winding connected to the lost phase will still rotate, cutting the magnetic field of the stator. This causes the winding to act as a generator so the voltage measured at the motor

terminals will appear close to normal, even though the remaining phases share the full load current. Because of this overload (about 33%), winding failure occurs quickly.

Phase Protection Solutions

Phase protectors or phase monitors help to shield your motor systems from the harmful effects of single phasing. These devices are intended to sense more than just voltage, they are designed to detect phase loss and shut off the motor before damage occurs. In most cases, either current or phase angle is also measured. This, in addition to a small voltage change, indicates a lost phase. Over voltage, under voltage, phase reversal, and excessive on/off cycling can all damage motors.

Phase protectors detect these scenarios and react to phase unbalance or total phase loss. When a phase is lost, undergoes alterations in sequence, or is under voltage, the phase protector will change state. This change of state can be used to set off an audible or visible alarm or completely shut equipment down to avoid damage.

Protector settings vary depending on the relay manufacturer, but a range of 5% to 15% is common. A time delay prevents nuisance dropouts. Phase protectors are chosen based on the incoming line voltage and frequency that will be detected.

Phase protectors are relatively inexpensive, simple to install, and provide protection for expensive, critical equipment. Prices usually range from \$100 to \$300, depending on the features, which is far below the cost of a new or rewind



Official Complaint Notice

Any complaint that you, as a member of Linn County REC, may have against the cooperative will be answered by contacting us during normal business hours (8 a.m. - 4:30 p.m., Monday through Friday) by calling 319-377-1587 or toll free at 1-800-332-5420, in person at 5695 REC Drive, Marion, IA., or by writing to Linn County REC, P.O. Box 69, Marion, IA., 52302-0069. You may also email us at lcrec@linncountyrec.com.

If Linn County REC does not resolve your complaint, you may request assistance from the Utilities Division, Department of Commerce, Lucas State Office Building, Des Moines, IA. 50319, or phone 515-281-5979.

Statement of Non-Discrimination

Linn County Rural Electric Cooperative Association is subject to the provisions of Title VI of the Civil Rights Act of 1964, as amended, Section 504 of the Rehabilitation Act of 1973, as amended, the Veteran's Readjustment Act of 1974, as amended, the Age Discrimination act of 1975, as amended, and other Federal rules and regulations which provide that no person in the United States on the basis of race, color, national origin, age or disability shall be excluded from participation in, admission or access to, denied the benefits of, or otherwise be subjected to discrimination under any of this Association's programs or activities.

Any individual, or specific class of individuals, who feels that this Association has subjected them to discrimination may obtain further information about the statutes and regulations listed above from and/or file a written complaint with this organization; or with the appropriate Federal agency. Complaints must be filed within 180 days after the alleged discrimination. Confidentiality will be maintained to the extent possible.

C Chex Caramel Corn

- 4 cups popped microwave popcorn
- 4 1/2 cups Corn Chex® or Rice Chex® cereal
- 1/2 cup honey-roasted peanuts, if desired
- 1/4 cup butter or margarine
- 1/3 cup packed brown sugar
- 2 tablespoons light corn syrup
- 1/4 teaspoon vanilla

Remove and discard unpopped kernels from popped popcorn. In large microwavable bowl, mix popcorn, cereal and peanuts; set aside. In medium microwavable bowl, microwave butter, brown sugar, corn syrup and vanilla uncovered on High about 2 minutes, stirring after 1 minute, until mixture is boiling. Pour over cereal mixture, stirring until evenly coated. Microwave uncovered on High 5 to 6 minutes, stirring and scraping bowl after every minute. Spread on waxed paper to cool, stirring occasionally to break up. Store in airtight container.

Why My Co-op Matters

This month we kick off a year-long celebration marking the International Year of Cooperatives 2012.



In July of 2011, the U.S. Senate unanimously passed a resolution designating 2012 as the International Year of Cooperatives. The measure recognizes the vital role cooperatives play in the economic and social well-being of the United States.

From eggs and milk to the electricity that powers your home, cooperatives play a big role in your everyday life.

The nation's 900-plus electric co-ops:

- Serve about 42 million people in 47 states—that's 18 million businesses, homes, schools, churches, farms, irrigation systems, and other establishments in 2,500 of 3,141 counties.
- Employ 70,000.
- Retire more than \$500 million in capital credits annually.
- Own assets worth \$130 billion.
- Own and maintain 2.5 million miles, or 42%, of the nation's electric distribution lines, covering three-quarters of the nation's land mass.

Around the world, all types of co-ops:

- Boast nearly 1 billion members in more than 90 countries.
- Account for 80 - 99% of milk production in New Zealand, Norway, and the United States.
- Generate 100 million jobs.
- Close to half of all residents of Finland and Singapore are co-op members; 33% in Canada, Honduras, New Zealand, and Norway, and 25% in Germany, Malaysia, and the United States.
- Under the umbrella of the World Council of Credit Unions, 49,000 credit unions serve 177 million members in 96 countries.

