

### Mission Statement:

Improving the quality of life of our member-owners.

**James B. Riddle**

Executive Vice President/  
General Manager

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### Office Closings

Good Friday,  
Friday, April 2

### What to do if the power goes off

1. Check your main fuses or circuit breakers.
2. Check your meter pole or pedestal. If you have breakers, make sure they are "on" by first pushing to the 'off' position and then pushing them to the 'on' position. If you live in a mobile home, codes require a main disconnect near the meter. If you have a dusk-dawn light and it is working, you have a breaker or fuse out.
3. Check with your neighbors. If they are out of power also, the main line is most likely out.
4. During office hours: Steeleville 965-3434 or Murphysboro 684-2143 or (800) 606-1505 for either office. After office hours call (800) 606-1505.
5. Make sure you have the name on the account and if possible, the account number.

## The Carrot or the Stick

As our nation faces the challenge of finding cost effective methods to overcome an impending shortage of energy, electric and otherwise, some of the articles in industry trade publications would have you believe that "smart-meters" and a "smart-grid" will be the salvation of our problems. Just the other day I read yet another article in the Wall Street Journal (WSJ) about what utilities have learned from the testing of smart-meter systems. As I read it, there was one sentence in particular that really disturbed me: "Utilities have run dozens of tests of digital meters and found that people cut power consumption the most when faced with higher peak-hour rates."

Several years ago, Egyptian Electric installed digital meters (the back-bone of a smart-metering system) in the southern portion of our electric system and is currently doing the same in the northern portion. We did this for several reasons.

- Preparing annual billing packets was becoming quite expensive for printing, preparation and mailing.
- We needed to upgrade our member information and accounting software and very few software vendors were able to deal with a self-billing system (as the majority of our system was) without significant labor from Co-op employees.
- Many members did not like to read their own meter, feeling that it was our responsibility to do so.
- A self-billed system does not allow for on-line bill payment options as we now offer.
- Reading meters with manpower was becoming even more costly.

- Electronic meters offer communication capabilities for outage management and information.

There were other factors with lesser importance that also contributed to the decision to deploy electronic meters.

As I read the Wall Street Journal article and others like it, I find that most investor-owned utilities look to smart-meters as an opportunity to initiate time of use rates. The WSJ even stated "one charged a 'critical peak price' of 75 cents a kilowatt-hour during certain hours on a handful of days, and 11 cent per kWh at other times." Wow, that's nearly seven times their normal rate!

As our current Administration in Washington has taken a chosen path to reduce and/or eliminate our use of coal as an energy source, one has to wonder if their support of smart-meters and a smart-grid technology with American Recovery and Reinvestment Act (ARRA) funds may be for this reason. If they can encourage more utilities to deploy smart-meter technology, then time-of-use pricing can be used to reduce energy consumption. You might think of this as using a stick to achieve the desired outcome.

At Egyptian Electric, we prefer to encourage our members to be energy efficient, what some might consider as the

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**Jim Riddle**

Executive  
Vice President/  
General Manager



**Integrity : We are credible, trustworthy, honest and believable.**

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offering of a carrot. Over the years and even more so in recent times, we have offered programs, articles and advice to educate and encourage our member's wise use of electricity and energy. In the future, as technology and software allows us to do so economically, we do hope to give our members a way to see their current rate of consumption in near real time, not just when the monthly bill arrives. We believe you can't control something when you can't see the rate of use.

Right now, the use of energy nationwide has gone down due to the recession and we have more spare capacity than we did two years ago. But when the economy does recover, it won't take long for that spare capacity to be eaten up by economic growth. To ensure we have the

capacity we need for tomorrow, we can all voluntarily do the right thing and reduce our energy consumption with more efficient heating and cooling systems,

appliances, additional insulation and air-sealing, or we can continue on the path we were on and let others force us to conserve through higher prices.

### Our support of energy efficiency

- Doug Rye radio program on WXAN radio 103.9 FM, 9 a.m. Saturday mornings.
- Certified Comfort Home program for new home builders.
- Weatherization books at no charge.
- Energy audits, both in person and on our Web site, [www.eeca.coop](http://www.eeca.coop).
- Regular articles in this publication.
- Doug Rye seminars held locally.
- Promotion of Energy Star rebates and other information on federal tax incentives.
- Voluntary contribution to the Illinois Department of Commerce and Economic Opportunity Energy Trust fund, allowing EECA members access to 30 percent grants for photovoltaic and wind systems.
- Net metering for small photovoltaic and wind systems.

## Debunking Home Energy



# Myths

**Myth:** *The condition of my ductwork has no effect on my energy bills.*

**False.** Especially if your ductwork is outside the area of the house you desire to condition (the building envelope). Typically ducts leak as much as 20 percent of the air that flows through them. This is caused by the high air pressure within the duct and the fact that mechanical connections are used to connect them.

Not only is the air you've paid to condition lost to the outside when ducts are in attics and crawlspaces, but pressure imbalances can suck outside air into the house. For instance, when the supply is in the attic, a portion of the air the blower moves through the duct is lost to the attic and not returned to the home. If the return air system is totally within the building envelope, then all of the air comes out of the building envelope that is being sucked back to the blower. This puts the home under negative pressure and the amount of air lost in the attic is made up by the same amount being sucked in through cracks and crevices in the house.

Many times, stud cavities are used as return air chases, putting these areas under negative pressure. As stud cavities are not sealed, air is sucked into the cavity from attics and other unintended areas. Horizontal holes for wiring bored through studs can allow air from distant places to be sucked into the return air system.

Ducts can be made air-tight by painting all joints and seams with duct mastic available from most heating and air conditioning contractors for \$30-40 a gallon. It is paintable and is definitely a do-it-yourself project if you don't mind climbing in your attic or crawlspace. Don't forget to seal the joint between register boots and sub-floors or ceilings. While you're doing this, make sure to inspect any flex duct (plastic duct work) for holes, tears or rips. Flex duct is susceptible to damage and should be inspected annually.

Make sure you do not use duct tape to seal your ducts. Duct tape can be used for many things, but it does not work for sealing ducts. Over time, the adhesive will dry out and the tap will come loose.

**Accountability :** *We act in accordance with our core purpose and values.*

# Summary of Energy Efficiency Incentives

## Federal Tax Credits

The following items are eligible for a 30% tax credit up to \$1,500. Improvement must be an existing home and principal residence. Credit expires December 31, 2010.

Biomass Stove	Efficiency rating of 75%
Heating, Ventilating, Air Conditioning <ul style="list-style-type: none"> <li>Advanced Main Air Circulating Fan</li> <li>Air Source Heat Pumps</li> <li>Central Air Conditioning</li> <li>Gas, Propane, Oil Hot Water Boiler</li> <li>Natural Gas or Propane Furnace</li> <li>Oil Furnace</li> </ul>	<ul style="list-style-type: none"> <li>Must use no more than 2% of furnace total energy.</li> <li>SEER of 15 or higher</li> <li>EER of 13 or higher</li> <li>AFUE of 90% or higher</li> <li>AFUE of 95% or higher</li> <li>AFUE of 90% or higher</li> </ul>
Insulation	Does not include installation cost
Roofs	Metal roof w/ appropriate pigmented coatings & asphalt roof w/ cooling granules that meet Energy Star requirements

## Federal Tax Credits

The following items are eligible for a 30% tax credit with no cap. Improvement must be an existing home and principal residence. Credit expires December 31, 2016.

Geothermal Heat Pumps	EER of 14.1 or higher
Small Wind Turbines	Nameplate capacity of 100 kW or less
Solar Energy Systems <ul style="list-style-type: none"> <li>Solar Water Heater</li> <li>Solar Panels (Photo voltaic) Systems</li> </ul>	<ul style="list-style-type: none"> <li>50% of energy generated must come from sun</li> <li>PV system must provide electricity for the residence and meet fire and electric codes.</li> </ul>

## Illinois Energy Star Rebate Program

The following items are eligible for point of sale rebates from qualifying contractors<sup>1</sup> beginning January 31, 2010, until funds are expired.

Central Air Conditioner	SEER 16 or higher	\$500
Air Source Heat Pumps	SEER 16 or higher	\$1,000
Gas Furnaces	AFUE 95% or higher	\$350
Gas Boilers	AFUE 90% or higher	\$1,200
Electric Heat Pump H2O Heater	Energy Star Qualified (COP 2)	25% Markdown at POS <sup>2</sup>
Gas Storage H2O Heater	Energy Star Qualified (67% Efficiency)	25% Markdown at POS
Gas Tankless H2O Heater	Energy Star Qualified (82% Efficiency)	25% Markdown at POS

1. Visit [www.ildceo.net](http://www.ildceo.net) for list of qualifying contractors  
2. Point of Sale

## Illinois Energy Star Appliance Rebate Program

April 16-25, 2010, Illinois will offer 15% markdown at point of sale for clothes washers, dishwashers, refrigerators, freezers and room air conditioners that are Energy Star qualified.

*This information is provided as a summary only. Please visit the appropriate governmental Web site for additional information. Contact your tax advisor for appropriate tax advice and your applicability for the afore mentioned programs.*

**Commitment to Community: We show compassion, care and courtesy to our members and the communities we serve.**

# Egyptian Electric plants seeds of caution around power lines on the farm

**Be aware of potential hazards during planting season**

**A**s farmers make plans to return to their fields for spring planting, Egyptian Electric urges farm workers to be particularly alert to the dangers of working near overhead power lines. Electricity is one of the most overlooked, yet deadly hazards of working on a farm. According to the National Safety Council, farmers are at an increased risk for electrocution and electric shock injury compared to non-farmers. In fact, 3.6 percent of youth under the age of 20 who work and/or live around farms are killed each year from electrocution.

Egyptian Electric Cooperative is a member of the Safe Electricity organization and a part of the “Teach Learn Care” TLC campaign of Safe Electricity urges workers to evaluate farm activities and work practices and to share that information with others. This activity that doesn’t take a lot of time, but can literally save lives. By following a few safety rules, these tragic accidents can be prevented.

Start by making sure everyone knows to maintain a minimum 10-foot clearance from the lines.

“The minimum 10 foot distance is a 360-degree rule - below, to the side and above lines,” says Jay Solomon, University of Illinois Extension Engineering Educator. “Many farm electrical accidents involving power lines happen when loading or preparing to transport equipment to fields, or while performing maintenance or repairs on farm machinery near lines. It can be difficult to estimate distance and sometimes a power line is closer than it looks. A spotter or someone with a broader view can help.”

The most common source of electric shocks come from operating machinery such as large tractors with front loaders, portable grain augers, fold-up cultivators, moving grain elevators and any equipment with an antenna. Handling long items such as

irrigation pipe, ladders and rods also pose the risk of contact with power lines. Coming too close to a power line while working is dangerous because electricity can arc, or “jump,” to conducting material or objects.

Be aware of increased height when loading and transporting tractors on trailer beds. Many tractors are now equipped with radios and communications systems that have very tall antennas extending from the cab that could make contact with power lines. Avoid raising the arms of planters, cultivators, sprayers or truck beds near power lines and never attempt to raise or move a power line to clear a path.

Remember, non-metallic materials such as lumber, tree limbs, tires, ropes and hay will conduct electricity depending on dampness, dust and dirt contamination. Do not try to clear storm-damage debris and limbs near power lines or fallen lines.

Overhead electric wires aren’t the only electrical contact that can result in a serious incident. Pole guy wires, used to stabilize utility poles, are grounded. However, when one of the guy wires is broken it can cause an electric current disruption. This can make those neutral wires anything but harmless. If you hit a guy wire and break it, call the utility to fix it. Don’t do it yourself. When dealing with electrical poles and wires, always call the electric utility.

Even the best laid plans often go awry and Safe Electricity wants farm workers to be prepared if their equipment does come in contact with power lines.

“It’s almost always best to stay in the cab and call for help,” Solomon said. “If the power line is energized and you step outside, your body becomes the path to the ground and electrocution is the result. Even if a line has landed on the ground, there is still potential for the area to be

energized. Warn others who may be nearby to stay away and wait until the electric utility arrives to make sure power to the line is cut off.”

Solomon does provide solutions for leaving the cab if necessary, as in the case of fire or electrical fire. “In that scenario, the proper action is to jump - not step - with both feet hitting the ground at the same time,” Solomon said. “Do not allow any part of your body to touch the equipment and the ground at the same time. Hop to safety, keeping both feet together as you leave the area.”

Once you get away from the equipment, never attempt to get back on or even touch the equipment. Many electrocutions occur when operators try to return to the equipment before the power has been shut off.

Managers should make sure workers are educated on these precautions and danger areas need to be thoroughly identified and labeled. Call the local utility company to measure line height - no one should attempt this on their own without professional assistance. Designate replanned routes that avoid hazard area and educate other workers on their location.

If planning a new out building or farm structure, contact us for information on minimum safe clearances from overhead and underground power lines. And if you plan to dig beyond normal tilling, activities such as deep-ripping or sub-soiling, call the utility locator service (JULIE) to mark underground utilities first.

For more electrical safety information, visit [www.SafeElectricity.org](http://www.SafeElectricity.org). “Teach Learn Care” TLC is a public service campaign of Safe Electricity, a safety public awareness program created and supported by a coalition of hundreds of organizations, including electric cooperatives, educators and others committed to promoting electrical safety.

*Teamwork: We work together to provide excellent service.*