



Harrison Rural Electrification Association, Inc.

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Your Touchstone Energy® Partner 
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Theft affects all consumers

IT SEEMS THAT THEFT has risen to epidemic proportions all over the country. Here at the cooperative, we have experienced some theft of service and some loss from theft of copper. However, we continually remain vigilant to the potential for losses of this type on our system.

Theft of electricity happens when someone connects a service illegally. Most of the time this happens when someone doesn't pay their bill and their service has been disconnected for nonpayment. They then proceed to reconnect themselves and try to use electricity without the cooperative's knowledge. With the current metering systems at Harrison Electrification, the office is alerted if an electric service is reconnected illegally. This not only is against the law but is extremely dangerous and can cause injury or loss of life. Information from a meter theft is reported to the local sheriff's de-

partment and the county prosecutor's office.

Charges for meter tampering and for any damage that might be associated with the meter are assessed to the responsible party, as well as charges for any electricity used by the illegally connected meter. These charges can amount to as much as \$200, excluding the amount for the electricity use.

The high price of metals in today's world has caused the price of scrap copper to increase drastically and has led to substation break-ins and the theft of copper grounds off of poles. This illegal activity is very costly to the cooperative and, because we are a member-owned system, this cost is passed on to you as the consumer. Again, this type of activity is extremely dangerous and can cause injury or the loss of life.

Substation break-ins not only cost the cooperative for replacing grounds on the equipment, but can cost well in excess of \$1 million if the substation transformer and voltage regulators are damaged. This has happened in many areas, and there have been many

Manager's Corner

by
Gary Jackson,
CEO/General
Manager



cases across the country where people have lost their lives in a substation for a few dollars' worth of copper.

The cooperative has taken steps to prevent some of this illegal behavior by installing security systems in the substations that send an alarm when a substation is breached and has unauthorized entry. We have begun to replace copper grounds in substations as well as on poles with plated tin wire. This wire has very little value and is a lot harder to cut.

If you see suspicious activity around a substation or someone near electric poles or believe someone is stealing electric service, please contact the cooperative or your local sheriff's department and report it. You may not only be saving your money as a consumer, but you may save someone's life.

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Energy Efficiency *Tip of the Month*

Switch to energy-saving halogen incandescent light bulbs to cut lighting energy use by 25 percent. These bulbs last three times longer than traditional incandescent bulbs and can easily be dimmed. Want to save more? Compact fluorescent lights (CFLs) and light-emitting diodes (LEDs) cut lighting energy use by at least 75 percent. Learn more at energysavers.gov. Source: U.S. Department of Energy

Cooperatives are the fabric of your community

Last year, the U.S. Senate — building off similar action by the United Nations General Assembly — designated 2012 as International Year of Cooperatives. As a result, cooperatives everywhere are celebrating our unique not-for-profit, member-owned and -controlled business model.

If you've read *Country Living*, then you know Harison Rural Electrification Association (HREA) is an electric cooperative — as a result, you and everyone else who receives electric service from us are members, not a customers. Because you and your fellow members govern how HREA operates, our top priority remains providing safe and reliable service and keeping your electric bills affordable. Local control also means we're in the business of improving the quality of life in the communities we serve, from offering college scholarships to advice on how you can make your home or business more energy efficient.

Electric co-ops are just one type of cooperative operating in America. Dairy cooperatives produce nearly 90 percent of our nation's milk. Credit unions? They're cooperatives, too, with more than 8,000 across the country serving 91 million consumers. You can also find housing, hardware and even funeral co-ops throughout the U.S.

Some agricultural marketing cooperatives have become household names: Sunkist, Ocean Spray and Blue Diamond Almonds, for example. But we have other cooperatives right here in our town, such as Harrison County Federal Credit Union, Southern States Cooperative and Fairmont Federal Credit Union.

Together, all of us are a key part of our local economy. We provide good jobs to folks who live right here — your neighbors and friends. We deliver goods and services that keep our communities humming. We're happy to lend a hand when we're able, and we enjoy being involved with schools and community organizations.

At HREA we return any excess profits, called margins, to you in the form of capital credits. That money then gets reinvested locally — perhaps at a grocery store or other retail outlet, which in turn allows the owners to hire more people.

While not a new concept — Benjamin Franklin started the first cooperative, the Philadelphia Contributionship for the Insurance of Houses from Loss by Fire, in 1752 (it still operates today!) — the cooperative form of business continues as an integral part of our lives each day.

Garage door safety: An open-and-shut case

Try this riddle: What weighs 600 pounds, deters intruders and goes up or down at the push of a button? It's your automatic garage door, the largest moving piece of equipment in many homes.

Automatic garage doors may be a routine part of leaving and arriving home, but you should be aware of the potential for injury. Underwriters Laboratories, Inc., recommends these tips to make safety an open-and-shut case when it comes to your home's garage:

1. Always keep automatic garage doors fully open or fully closed. Some folks may leave a small opening at the bottom for pets to get in and out for food or shade. But a small opening could also be an invitation for a child to try to crawl through and get stuck. Another push of the button could send the heavy door down — causing injury — instead of bringing the door up when trying to free anyone stuck underneath. If you encounter someone stuck in an automatic door, call your local fire department.

2. Read instructions on how to operate and maintain your garage door properly. Check your automatic door monthly to be sure safety precautions are working. Many garage doors boast a safety feature that triggers an automatic reversal if anything is encountered while closing. To check, place a 1.5-inch object (like a flat 2x4) in the

path of the door to make sure the door correctly reverses when contact is made. Instructions should also advise on maintaining a properly balanced door. Call a qualified repair company for service or maintenance.

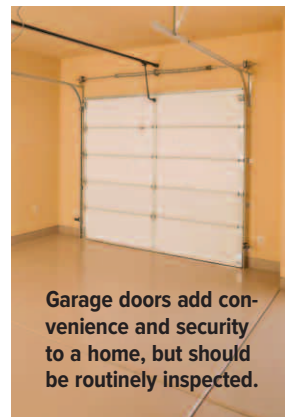
3. Do not allow children to operate a garage door. It may seem like a harmless, simple task to allow children to push the garage opener. But activating heavy equipment should be taken seriously.

4. Avoid walking under a door that is opening or closing. You never know when a malfunction may take place. Steer clear of a moving door.

5. Know when and how to use the emergency release. You'll find a cord with a handle hanging along the track of your garage door. Always use caution when using this release, and only use it when the door is fully closed.

An automatic garage door opener is a common convenience powered by electricity. Just as electricity demands safety and respect, so does the equipment it operates.

Source: Underwriters Laboratories, Inc.



Garage doors add convenience and security to a home, but should be routinely inspected.

Debunking energy myths

Interested in saving energy to lower your electric bill, but confused about new technology and information available to help you do so? Separate fact from fiction with the following energy-saving myths.

Myth 1: It takes less energy to have my thermostat maintain a comfortable temperature while I'm away than it does to have it heat up or cool down my house when I get home.

If you're going to be gone for more than a few hours, then it is more cost-effective to turn heat or air conditioning on once you return than it is to maintain a comfortable temperature while you're out.

ENERGY STAR, a joint program of the U.S. Environmental Protection Agency (EPA) and the U.S. Department of Energy, recommends adjusting your thermostat up in the summer and down in the winter by 8 degrees Fahrenheit while you're asleep or away from your house.

Myth 2: I can save money simply by installing a programmable thermostat.

On their own, programmable thermostats do not make your heating or cooling system more efficient. Their money-saving value lies in their ability to, once properly programmed, automatically regulate the temperature inside your house to coincide with when you're there and when you're not. If you need help programming your thermostat, directions are usually available from the manufacturer's website.

Myth 3: When I turn off electronics (like my TV, game console or computer), they stop drawing power from the outlet.

Even when turned off, most modern electronics con-

sume a small amount of electricity if they're still plugged in. Chargers for mobile devices also consume electricity if plugged in, even when they are not actively charging the device. This wasted energy, called "phantom load," accounts for as much as 10 percent of a home's total electric use, according to the Lawrence Berkeley National Laboratory. The solution: Unplug your electronics when you've finished using them. Using a power strip can help you conveniently unplug multiple devices at once, while newer, "smart" power strips can automatically cut off phantom loads on their own.

Myth 4: Compact fluorescent light bulbs (CFLs) take forever to reach full brilliance, have inadequate light quality or unpleasant color, and make no difference on my utility bill.

As with many products, CFLs vary in quality. Color and brightness differ across manufacturers, and some bulbs simply work better than others. Looking for the ENERGY STAR symbol ensures that you're purchasing a high-quality product. Also, be sure to install CFLs in fixtures that remain on for long periods, or that you use often, to get the maximum energy savings out of your bulbs. In addition, specialty CFLs are available for applications such as spot-lighting or bathroom vanity fixtures.

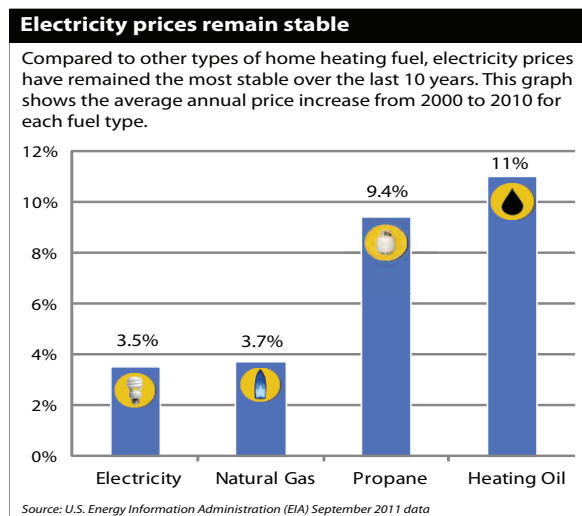
Myth 5: Mercury from CFLs poses a serious risk to the environment.

On the contrary, CFLs actually prevent the release of mercury into the environment by reducing the electricity needed from power plants. According to the U.S. Energy Information Administration, about half of the electricity in the U.S. is generated from coal. EPA estimates that coal combustion for power plants releases roughly 400 times the mercury into the environment than the cumulative mercury contribution from land-filled CFLs, assuming that no CFLs are recycled. However, it is still important to dispose of burned-out bulbs and clean up broken bulbs properly. Learn how at www.lamprecycle.org.

Myth 6: It is not worth my time or money to seal small air leaks around my windows and doors, or to make sure my home is adequately insulated.

According to ENERGY STAR, air leaks around cracks and gaps throughout your home become the equivalent of leaving a window open all year long. Typical homeowners can save up to 10 percent on their total annual energy bill by sealing and insulating their home.

Courtesy esource.com



A spotter's guide to distribution poles

BY MAURICE MARTIN,
COOPERATIVE RESEARCH NETWORK

Ever look up at a utility pole and wonder, “What is all that stuff?”

While wires are easy — everyone knows they carry electricity — how about those attached metal boxes and other mysterious gadgets? What are they called, and what purpose do they serve?

With a little information, you can understand a lot more about the utility line you pass every day. Not only could “pole spotting” shed light on the work done by your local electric co-op, but you just might be able to impress your friends and family. A guide to pole spotting follows. Enjoy, but please keep in mind:

- Utility poles are not for climbing! Looking is OK, but keep a safe distance from all equipment described here.
- The measurements and descriptions given here represent common configurations, but in the real world, design varies greatly. Part of why electric co-op employees undergo such extensive training is to enable them to identify components in the field with a high level of confidence and certainty.

Transmission vs. distribution

First, make sure that the pole you're looking at is a distribution pole and not a transmission pole.

Distribution poles are those seen in neighborhoods, unless the distribution lines run underground. They are generally up to 55 feet high and made of wood. Power running through distribution lines ranges from 4,600 volts to 33,000 volts.

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Transmission lines are designed to carry electricity longer distances and at higher voltages — 69,000 volts and above. Relative to distribution poles, transmission poles are much larger — from 55 feet to more than 100 feet — with the conductors higher off the ground. Some large transmission lines use steel poles and tower structures.

Four common distribution devices

Transformers are something most people can already spot — they're hefty metal cylinders that hang off poles. The transformer that connects your home to a distribution line lowers the distribution voltage to what you need in your house — generally 120 volts for your outlets and 240 volts for your air conditioner and clothes dryer. Look at the top of a transformer and you'll see bushings — ceramic projections with several disks running around the outside. On the inside of bushings are metal conductors; the outsides are insulators, so that when they attach to a transformer the metal casing doesn't become electrically charged.

Capacitors look somewhat like transformers, with bushings on top, but have flat, rectangular casings. While transformers change voltage, capacitors improve the power factor on the utility lines — they prevent power from being wasted and help boost the voltage on long rural distribution lines.

Reclosers protect lines and consumers from short circuits. For example, if a tree branch touches a line, electric current will flow through the tree, burning it and overheating the wire. Eventually, this will result in a fault that causes a protective device, like a fuse or circuit breaker, to operate and interrupt the power. Circuit breakers open the circuit, cutting off the power. Because many shorts correct themselves in a few seconds — as the high current will usually burn a tree limb away from the line — most modern circuit breakers have a mechanism that allows them to reclose a moment later (hence the name recloser). Like transformers and capacitors, reclosers also have bushings. They tend to be rectangular, like capacitors, but squatter.

Fuses are also designed to protect lines and homes from short circuits. But fuses are one-shot devices — a fault, like the tree branch described above, on the load side of the fuse will cause them to burn out. High-voltage fuses look like a bar offset from the pole by one or more insulators. When a fuse blows, lineworkers have to go out and find why the fuse blew, fix the problem and refuse the line to restore power.

These four devices are the most common on distribution poles. Once you know what they look like, you'll realize you've been seeing them every day for years.