

PowerLines

April 2017

Employee Appreciation

Each April, we take time for a special thank you to all of our extraordinary employees. All Eastern Illini employees are dedicated to providing you with excellent service as we work hard to keep the lights on for you.

We depend on our entire staff to keep your co-op running smoothly, but on April 10, 2017, we join with utilities across the country to honor linemen who often find themselves in dangerous and challenging situations, so our lives may be a little bit brighter and safer every day.

Here at Eastern Illini Electric Co-op, 23 linemen and servicemen maintain over 4,500 miles of line in our service territory. Without their hard work and commitment to the job, our co-op would not thrive. No matter the time - if the lights go out - so do they.

Perhaps you have seen them raising their bucket trucks in howling winds

and torrential rains, or in freezing, icy conditions. They work around the clock near high-voltage power lines until electricity is restored to every member in our co-op community.

In addition to aiding members in our local service territory, linemen are always willing to volunteer when a neighboring community, county or state is in need after a major outage occurs.

Our linemen are brave, committed and critical to our success. We hope you will join us in thanking the many linemen--both locally and around the world--that light our lives. Remember, your power works because they do!

You can also help spread the word by using #ThankALineman on social media to show your support.

Sincerely,

Bob Hunzinger



**MESSAGE FROM
THE PRESIDENT**



**NATIONAL
LINEMAN
APPRECIATION
DAY.**

APRIL 10, 2017

#ThankALineman

In this issue:

The well-connected lineman
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Thunderstorm safety
You are the co-op

How do you want to save today?

Co-op Connections® Card



Pharmacy discounts
Cash Back Mall
Healthy Savings
Coupons.com
Appliance rebates

Visit www.connections.coop to get your card and start saving.

Save the Date

Eastern Illini's Annual Meeting of Members will be held on Thursday, June 8 in Paxton. More details will be available in the next two issues of this PowerLines newsletter.

Your Touchstone Energy®
Cooperative

Technology: The Well-Connected Lineman

Technology is now driving efficiencies and better member service for today's electric co-op personnel.

When electric cooperatives were formed in the 1930s, their technology was primitive by any standard. Digging holes for the utility poles by hand, walking them up into those holes, and using ladders to reach equipment needing service were all common occurrences. And if you had to get in touch with the line crew, face-to-face communication was the only option.

Today, the lineman rivals any other worker when it comes to having the necessary technology to get the job done safely, quickly and more accurately. Let's take a look at a few of the devices behind this evolution, starting with the tablet.

Eastern Illini now sends our crews into the field with ruggedized tablets.

A common use is to load work orders detailing the day's projects. This can include construction drawings for how the job is to be built, the bill of materials so they know what to pull from inventory before hitting the road, and system maps so they know exactly where to go. Gone are the reams of paper and cumbersome map books of the past.

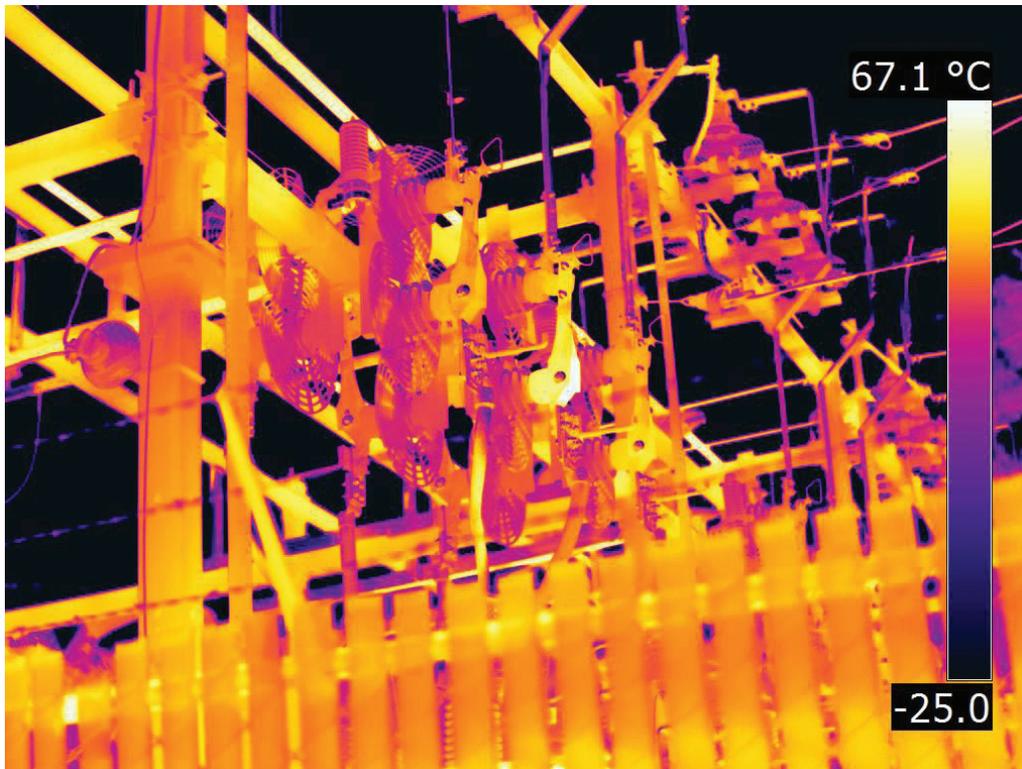
Not quite as new, but equally important, are GPS units. Here at Eastern Illini, we recently completed a major GPS project where we had every component of our system (poles, transformers, regulators, etc.) tagged and GPS located. This GPS capability gets our crews where they need to be in a more efficient manner. We also have our vehicles GPS tagged so we know the exact location of each line truck at any given time. This allows us to more efficiently manage outage restoration. And of course it helps keep our employees safer, too.

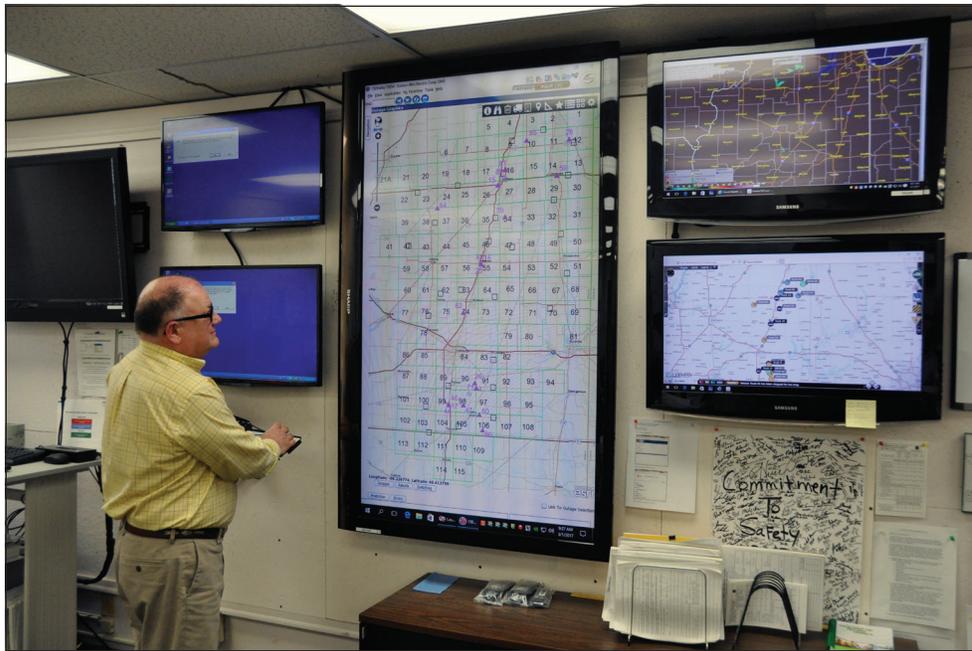
We also utilize forward-looking infrared cameras, also known as FLIR. You may be familiar with this technology from the many ghost hunter programs currently on television. With a FLIR camera, crews can rapidly scan power lines, transformers and other equipment when searching for hot spots. A piece of distribution equipment about to fail will often get hot. While not visible to the naked eye, it shows up clear as day on a FLIR display. Scanning the system with a FLIR camera is a fast and accurate means of spotting a problem before it becomes an outage.

Cooperatives are laser focused on providing the best reliability possible at the lowest possible price. A major aspect of reliability is getting the lights back on as soon as possible after an outage. Key in this is the outage management system, or OMS. This system builds on geo-tagged system maps (each pole has its GPS location mapped), sophisticated engineering models of the distribution system, and for maximum accuracy, an advanced metering system.

When an outage occurs, the system uses models and databases to determine the exact location of the fault and the extent of the outage. Crews can then be sent to the right spot to correct the problem. The crews closest to the outage are sent to restore power—and essential information can be accessed on the tablets, depending upon the situation.

Sometimes, all the technology in the world is not enough and a good old-fashioned visual inspection is required. During daylight hours, it can be pretty easy to see the





Technology to Better Serve:
The use of infrared cameras (lower left) helps us quickly determine if critical components of our distribution system are overheated.

Alan Schweighart, our Vice President of Operations & Engineering (left), tracks a normal work day from our command center, which allows us to monitor outages, truck locations, and weather - all in real-time.

Eastern Illini Serviceman Rod Blackburn (below) utilizes his tablet computer to receive his work orders for the day, then uses the digital mapping system to figure out exactly how to get to his desired location.

cause of a problem. But at night, linemen need a reliable source of light. Today, that comes from LED flashlights and truck mounted lights. If you have not invested in a hand-held LED flashlight, you owe it to yourself to get one.

These powerhouses are a fraction of the size of regular flashlights, and they make your incandescent model look like a candle by comparison. In the hands of a lineman, they provide an amazing view of the power lines during the darkest of nights.

Technology is permeating every aspect of cooperative operations, allowing Eastern Illini to constantly improve our service to you. And the well-connected lineman is at the forefront of this technical evolution.



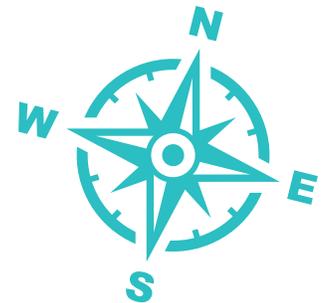
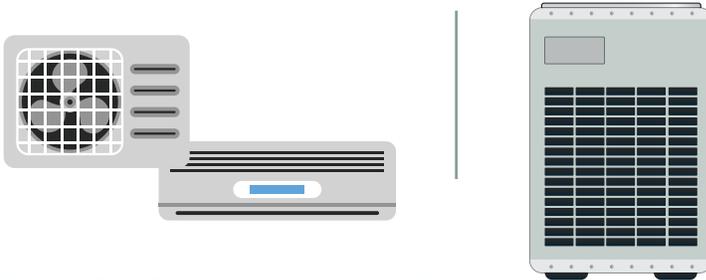
PROPERLY SIZING YOUR HVAC UNIT



An improperly sized HVAC unit can wreak havoc on your home. An oversized unit can cause your system to “short cycle” – constantly turning off and on. An undersized unit will run constantly to keep up with demand. Consider the factors below and choose an HVAC system that works best for your home.

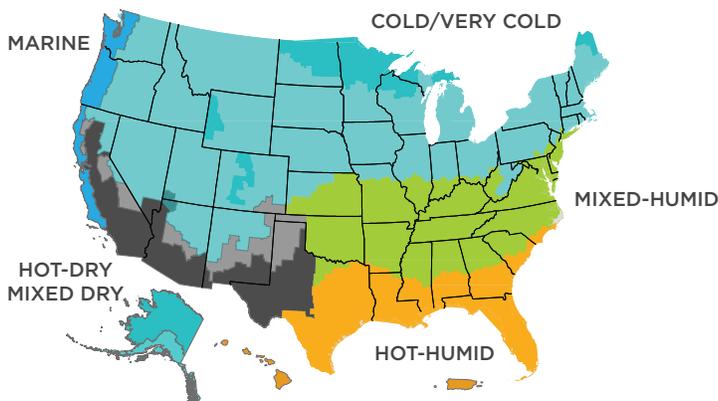
SIZE MATTERS

The square footage of your home can help determine the load capacity of your HVAC unit, but it should not be the only factor considered when reviewing unit sizes. Enlist the help of a licensed professional to determine the best HVAC unit for your home.



GEOGRAPHICAL LOCATION

The region in which your home is located will factor into how much capacity you need per square foot. In our area, we need about 1/3 the cooling but 40 times more heating than Florida.



HOME'S ORIENTATION

How sunlight hits your home during different times of the day impacts the load capacity required to properly heat or cool your home.

INSULATION EFFECTIVENESS

The better insulated your home is, the fewer BTUs (British Thermal Units) per square foot your home will need to stay at the desired temperature. We recommend cellulose or foam insulation. Also, make sure your attic and crawl space are well insulated.



HVAC SYSTEM TYPE

Choosing the best type of HVAC system for your home is critical once you determine the correct size. Electric heating systems, like geothermal or air-source heat pumps, can offer substantial savings when paired with our electric heat rate.

A reliable HVAC contractor will help you determine how each of these factors affect your system's load capacity. Contact Eastern Illini at 800-824-5102 for more information.

Source: Dept. of Energy

Keeping You Safe: Thunderstorm Safety

When thunderstorms are rolling your way, stay safe with these helpful tips.

Spring weather in Illinois can certainly be unpredictable. Knowing what to do if a spring storm comes through can help you protect your friends and family from dangerous situations.

The American Red Cross has developed this list of tips and strategies to help you stay safe during a spring storm.

- Listen to local news or NOAA Weather Radio for emergency updates. Watch for signs of a storm, like darkening skies, lightning flashes or increasing wind.

- Postpone outdoor activities if thunderstorms are likely to occur. Many people struck by lightning are not in the area where it is raining.

- If a severe thunderstorm warning is issued, take shelter in a substantial building or in a vehicle with the windows closed. Get out of mobile homes that can blow over in high winds.

- If you can hear thunder, you are close enough to be in danger from lightning. If thunder roars, go indoors! The National Weather Service recommends staying inside for at least 30 minutes after the last thunder clap.

- Avoid electrical equipment and telephones. Use battery-powered TVs and radios instead.

- Shutter windows and close outside doors securely. Keep away from windows.

- Do not take a bath, shower or use plumbing.

- If you are driving, try to safely exit the roadway and park. Stay in the vehicle and turn on the emergency flashers until the heavy rain ends. Avoid touching metal or other surfaces that conduct electricity.

- If you are outside and cannot reach a safe building, avoid high ground; water; tall, isolated trees; and metal objects such as fences or bleachers. Picnic shelters, dugouts and sheds are NOT safe.



BE PREPARED BEFORE A STORM STRIKES

In the event of a power outage, be prepared by keeping the following items in an easy-to-find emergency supply kit.

■ WATER

Three-day supply, one gallon per person per day.

■ TOOLS

Flashlight, extra batteries, manual can opener, battery-powered or hand-crank radio, NOAA Weather Radio with tone alert.

■ FIRST AID KIT AND PRESCRIPTIONS

First aid supplies, hand sanitizer and at least one week's supply of prescriptions and medications for the family.

Learn more at www.ready.gov

Source: American Red Cross, Federal Emergency Management Agency.

I AM THE CO-OP

The information we get from Eastern Illini Electric Cooperative about efficiency, safety and technology gives us the power to make informed decisions.

Visit www.eiec.coop to discover the power of your co-op.

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