

DEDICATED TO PROVIDING RELIABLE SERVICE FOR OUR MEMBERS.

SEPTEMBER 2023 VOL.16, NO. 9

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SEPTEMBER CALENDAR

Sep 4th: Labor Day - Office Closed



Sep 17-23: Farm Health & Safety Week Sep 19th: IT Professionals Day Sep 23rd: First Day of Autumn Sep 29th: National Coffee Day

UPCOMING

Oct 2nd: Operation Round Up Deadline

HOLIDAYS OBSERVED: New Year's Day, Good Friday, Memorial Day, Independence Day, Labor Day, Veterans Day, Thanksgiving Day, the day following Thanksgiving, and Christmas Day.



OFFICE: 217-707-6156 FAX: 217-854-3918 18300 SHIPMAN ROAD (PO BOX 80) CARLINVILLE, IL 62626



FARM SAFETY & HEALTH WEEK

STAYING SAFE ON YOUR FARM OR RANC

BY: SAFEELECTRICITY.ORG

There are all types of precautions ranchers and farmers take to stay safe. Electrical hazards, however, can sometimes be overlooked since electricity is not seen or heard and overhead power lines can become part of the landscape.

Here are some electrical safety tips to implement on your farm or ranch:

- In general, look for exposed energized parts and unguarded electrical equipment that could become energized unexpectedly.
- Be careful when operating watering tanks with electric pumps. In addition, sprays of water from irrigation systems should not be near overhead power lines.
- Inspect electrical fencing regularly to ensure that everything is tight and secure and that no parts are frayed. A sagging fence not only means that animals could escape, but it can also create electrical issues.
- Ensure your electric fence is well supported. A lack of support can cause it to sag.
- Make sure electric fencing is visible by using electric fence tape, warning signs or other methods.
- Cap posts, especially metal T-posts, to prevent an animal (or human) from becoming impaled.
- Be aware of overhead power lines when moving bales of hay.
- Do not store hay bales under power lines.
- Be aware that tarps that cover hay can come loose and blow in heavy winds, sometimes causing an outage if the tarp gets too close or contacts a power line.
- When using a generator and double throw switch, make sure they are in good working order and up to code.
- Check electrical center pivot equipment before and after use to ensure it is grounded, that the housing is protected and that the wiring is sound (this protects livestock and people).



- Ensure that irrigation equipment is regularly inspected. Follow the manufacturer's instructions for inspection and maintenance.
- Always turn off the power before working on an irrigation system.
- After a storm, make sure the system has not become ungrounded due to lightning.
- Position irrigation pipes at least 15 feet away from power lines; also, store unused pipes away from power lines.
- Always be aware of overhead power line locations and use a spotter when working close to lines or poles.
- Follow safe digging procedures; call 8-1-1 to have underground utilities marked before breaking ground.

To learn more about electrical safety on the ranch or farm or in general, visit **SafeElectricity.org**.



photo by Stan Petersen from Pixabay.com

ALONGTHELINES

by MJM Electric Cooperative www.mjmec.coop

18300 Shipman Road (PO Box 80) Carlinville, IL 62626

Office: 1-217-707-6156 Pay by Phone: 1-855-313-6314

Office Hours:

Monday - Friday 7:30 a.m.- 4:00 p.m.

HOW TO REPORT AN OUTAGE:

Call 217-707-6156 or use your SmartHub app.

- When you report an outage, give your name and location number.
- Before calling, check your fuses or circuit breakers.
- Check with your neighbors. Call to report hazardous conditions.

Please do not report outages on Facebook/Social Media.

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A Touchstone Energy® Cooperative ស

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Have an Electric Vehicle?

Let MJM know if you are a member that owns an EV, this will help future planning and development of infrastructure upgrades as more and more electric vehicles begin charging on MJM lines.

Contact: info@mjmec.coop or call 217-707-6156

Energy Efficiency Tip of the Month

Did you know fall is the perfect time to schedule a tune-up for your heating system? Home heating accounts for a large portion of winter energy bills, and no matter what kind of system you have, you can save energy and money by regularly maintaining your equipment.

Combining proper equipment maintenance and upgrades with recommended insulation, air sealing and thermostat settings can save about 30% on your energy bills. Source: Dept. of Energy



POWER IN YOUR HANDS



BY MJM PRESIDENT/CEO, **JOE HEYEN**

Recently, one of our newer employees asked me what makes electric co-ops different than other types of utilities. This month, I thought I'd tell you of few of the things I told her.

Because we're a co-op, we operate a little differently than other utilities. MJM's decisions are made locally, by directors who also live right here in our community. Everyone who pays to receive electricity from the co-op is a member. When you pay your electric bill each month, your money stays here – to pay for the electricity used, or to make improvements to our local system to strengthen service reliability. The money you pay the co-op doesn't line the pockets of shareholders five states away. We're a co-op, and we exist to provide a service to you, our local members.

You may notice that throughout the year, we schedule opportunities for you to attend co-op events, like our annual meeting, so we can hear from you. We also offer a live stream on Youtube for those who can't join us in person. We conduct an annual survey to gather your feedback on co-op programs and services so that we can plan and adjust for the future. Our success lies in your satisfaction, which is why we offer these opportunities to engage and listen to what you have to say.

Because you're part of an electric cooperative, you can count on our team to maintain local jobs, at-cost electricity and first-class service, no matter what the economy and supply chain issues throw at us.

MJM is striving to keep our costs as low as possible so we can keep more money in your pocket. We want to help you maximize the value you can get from our services and offerings. For example, we can help you save on energy bills through our Power Moves rebates, energy saving tips and tricks articles in our monthly newsletter, and the helpful links on our website. If you want to receive important information from MJM, such as power restoration updates and tree trimming crew alerts, sign up for our text message notifications with SmartHub alerts, follow us on Facebook, and be sure to read our monthly newsletter.

Please know that you--the members of MJM--are at the heart of everything we do. Co-ops adhere to seven guiding cooperative principles that reflect core values of honesty, transparency, equity, inclusiveness and service.

We exist to serve you and provide the quality, reliable, friendly service you expect and deserve. While we've grown over the years, we're still driven by the same guiding principles to serve our community. We hope to see or hear from you soon. This co-op was created for you, the members. The power is in your hands.



Next Deadline: October 2, 2023

Section 501(c)(3), 501(c), and 509(a)(1) non-for-profits organizations within the MJM service territory are encouraged to apply for an Operation Round Up (ORU) grant.

Please send all applications, additional forms, and paperwork to **Operation Round Up, P.O. Box 80, Carlinville, IL, 62626**. Once the application and information is completed and submitted to MJM, the information will then be considered by the Grant Review Board for approval of funds.

https://mjmec.coop/operation-round

STORM SAFETY BY: SAFEELECTRICITY.ORG



Sometimes a storm pops up or changes direction without any warning, while other times it is forecast days in advance and follows its predicted course. In either case, knowing what to do right before, during and after a storm can help to keep you safe.

WHEN A STORM HITS

When stormy winds blow, follow these weather-related reminders from FEMA and the Red Cross:

- Never seek shelter under an isolated tree, tower or utility pole, since lightning tends to strike tall objects.
- Immediately vacate elevated areas such as hills and mountain ridges and peaks.
- · Get away from ponds, lakes and other bodies of water.
- Stay away from objects that conduct electricity, including wires and fences (and golf clubs!).
 (Approximately 5 percent of annual lightning deaths and injuries in the United States happen on golf courses, according to the National Oceanic and Atmospheric Administration.)
- Never lie flat on the ground.
- Pick a safe place in your home, away from windows and doors, for family members to gather during a thunderstorm.
- Know the difference between a watch and a warning for extreme weather such as a tornado or severe thunderstorm. A watch means that the weather is possible in and near the area. A warning means that severe weather has been reported by spotters or indicated by radar. A warning is more serious than a watch and means that there is imminent danger to life and property.

<u>AFTER THE STORM</u>

Once the storm is over, follow these safety tips from Safe Electricity:

- Never step into a flooded basement or other standing water. The water could be covering electrical outlets, appliances or cords. Never touch (or use) electrical appliances, cords, wires or switches while you are wet or standing in water.
- After a storm, a downed power line could be covered by standing water or debris. <u>Never go near a downed line,</u> <u>and warn others to stay away</u>. If you see a downed line, call 9-1-1, and a crew will be dispatched to de-energize the power and address the problem safely.
- The same safety know-how applies to a downed power line you might encounter while driving or after an auto accident. In either case, do not get out. Instead, call 9-1-1 to report the downed line (pull over first if you are driving). If you must exit your vehicle after an accident because of a fire or smoke, make a solid, clean jump out, landing with both feet together. Then make solid hops with your feet together, hopping as far away as you can.
- If your home has been damaged by a flood, turn off the power to your house if it is safe to do so. (Do not turn power off at the breaker box while standing in water or in damp conditions.)
- If the wiring, electrical system or appliances have been damaged by water, have your home inspected by an electrician; also, have appliances serviced by a qualified technician before using them.

For more information about electrical safety, visit:



MJM WELCOMES



JACK SCHWARTZ STAKING TECHNICIAN

Jack Schwartz, of Waunakee, Wisconsin, joined MJM's team on August 14th. He will be filling the position of Staking Technician. Jack is an outdoor enthusiast and enjoys hiking anywhere he can.

Jack has been working for several years at Davey Resource Group as a Project Coordinator and has been on the road for much of it. Jack holds a bachelor's degree in Geography from the University of Wisconsin in Oshkosh.

We'd like to welcome Jack, and we think he will be a great addition to our team.

STORM SAFETY KIT



F.A.Q: COOPERATIVE BROADBAND



photo by Kieu Truong from Pixabay.com

At MJM, we get the occasional question about our cooperative expanding to include a broadband service. The short answer is no, the topic has been discussed during the MJM Board meetings and it has been concluded as not financially feasible for the Cooperative. To give further insight and explanation, many other factors have gone into the decision, but mainly the costs of creating an entire new department consisting of both in-field installation and maintenance technicians and several employees for maintaining the office records database, mapping, cybersecurity for the department, equipment management, for new services and returns, and scheduling to name a few. The new department would require its own set of policies, bylaws, procedures, and all the necessary legal documents to begin to provide service. Certifications are required for the leadership positions of a telecommunications department, including a Bachelor of Engineering degree and a Professional Engineer License.

Other Cooperatives have encountered their share of hurdles and hardships with maintaining a broadband communications department, including everything listed above, time-management, software integration issues, storm damage repair issues, and even cockroaches, bed bugs, and other small pests in the returned modems and other equipment. Other issues, like costs of materials and lead times on equipment are factors we can all understand from our everyday life, and the telecommunications world is not exempt from these issues.

Within our service area in the past 5 years, efforts by several broadband telecommunications companies have been and are continually being made to install broadband/fiber in the rural areas. The competition has broadened to the point where a new entity could be swallowed up and potentially be put out of business fairly quickly. All these factors and more have gone into the discussions about Broadband and the decision for MJM to not to step into that arena. At MJM, our focus is and continues to be providing reliable electric service as affordably as possible for our Member owners.

WHAT DOES IT TAKE TO GET THE LIGHTS BACK ON? A LINEMAN'S PERSPECTIVE



Source: National Rural Electric Cooperative Association

Brandon Keesee, a journeyman lineman for Sikeston, Missouri-based SEMO Electric Cooperative, wrote this detailed, step-by-step outage restoration essay in the co-op's local pages in the August issue of Rural Missouri, the statewide magazine. NRECA thought Keesee's compelling message to his co-op's members was worth sharing with the cooperative network.

"How long is it going to take?' Those are familiar words to all who work in the electric industry. It's a phrase I've been asked thousands of times in my career. I've been asked by phone, through car windows, from front porches, sidewalks, bicycles, gas pumps, diners. I'm pretty sure I've even been asked by children in car seats. It's the first thing people think when the lights go out. It doesn't take long sitting in the dark to realize how dependent we are on electricity. How much it makes our lives better and easier.

As a lineman, it's always a good feeling to help people get those lights back on. I can remember times when I've been on storm or extended outages re-energizing neighborhoods and heard people in their homes cheering as their lights came on for the first time in days. No matter how tired I am or how long I've been working, that feeling will always make it worth it.

But what does it take to get those lights back on? Why does it sometimes take so long? Most people don't get to experience or witness the work that goes into ending outages. Hopefully after reading this, you will have a better understanding of the process and the work that your linemen are doing to restore your power.

The electricity you use travels a great distance and goes through several steps to get to your home. It starts with a power plant. Power plants use fuel to produce power. That fuel could be natural gas, diesel, coal, hydro, wind, solar or nuclear. A power plant typically produces voltages of less than 30,000 volts. That voltage needs to be "stepped up" so it can travel long distances. That process starts next door in the power plant's substation and switchyard. In the substation, a transformer will step the voltage up to 345,000 volts, or sometimes higher, and send it out on transmission lines to another substation.

At the next substation we start to get closer to our final destination. Here we start stepping the voltage down. In this second substation, a transformer will step the voltage down to 69,000 volts and send it out to smaller local substations.

These local substations are the final substation before the electricity reaches your home. Here it is stepped down, again with a transformer, to the 7,200 or 14,400 volts that can then be delivered to the poles outside your home. Once it arrives outside your home, it is stepped down a final time, yes, by another transformer. This final transformer will step the voltage down to 120/240 volts that operate all of the devices that power your lives.

What I just described is hundreds of miles of line and thousands of poles. That's a lot of exposure for something to happen and cause an outage. Just like your home, our system has breakers. Our breakers help us reduce the exposure of the line and allow us to split our system into sections. Doing so helps limit the size of the outages and allows us to keep as many people on as possible. Breakers also help to protect equipment on the line. Ever wonder why your lights blink a few times before going off? That's the breaker. They operate a few times trying to give the fault a chance to clear the line before they open for good.



Now that the lights have blinked, your breaker has opened, and the power is off, what happens?

The Outage Begins

6:35 p.m.: Your local lineman gets a phone call.

When I answer the phone, I'm told that we have an outage. My first question is, "Is this an individual or a line outage?" A line outage will be a large section of line and several people. An individual will be just a single transformer or pole. If it's a line outage, my next thought and question is, "What's the lowest pole number?" This is why it's important to report your outage. It verifies the outage, and it helps the lineman decide where to go. So, if I'm told the lowest reported outage is at pole 135, I'm mentally sectionalizing the line in my head. I know that there is a set of breakers at pole 100. So, if the lowest member to call in is at pole 135, that tells me that most likely the breaker at pole 100 is open, and whatever caused the outage is past pole 100. So, pole 100 is where I'm heading.

Heading Toward the Outage 7 p.m.: The drive

An after-hours outage requires your lineman to respond from home. Depending on where the outage is, the drive alone can sometimes take an hour.

7:45 p.m.: Arrival and line inspection

I often see people outside when their power is off, sitting on their porch or working in the yard. Sometimes I drive by several times. I often wonder what they are thinking when they see me driving by so often. Do they think I'm just driving around? Do they wonder why I'm not getting their power back on? But that's exactly what I'm doing. The first time you see me, I'm most likely driving to the breaker. I need to go to the breaker to verify that it's open. The second time you see me drive by I'm visually checking the line for what may have caused the outage. Checking the line can take some time. It's one of the more time-consuming steps we take, but also one of the most important parts of restoring an outage. We can't just simply flip a switch and restore the power. That can be dangerous for many reasons. The outage could be a line down in someone's yard, or it could have been caused by equipment failure. Re-energizing the line under those two examples would be very dangerous to the public and could cause more damage and just extend the outage longer. So it's very important to visually check the line before trying the breaker. Several things can cause an outage. A few examples of things I'm looking for are fallen trees, tree limbs, old line repairs that have failed, car accidents, lightning, animals and equipment failure.

Another factor that can add time to inspecting the line is terrain. We try to put poles along the road, but that can't always be accomplished. Electric co-op lines go where they are needed, and that might be in extremely remote places. While poles and lines that run along the road can be inspected and repaired faster, terrain and direction of the line sometimes require us to run the line offroad. If it's not along the road, the line must be checked on foot. If it's dark, that can make this job even more difficult and time consuming regardless of where it's located.

The Process of Repairs 8:30 p.m.: Outage cause located, but first safety.

Once we find the cause of the outage, there are safety steps that must be taken before we can start the work. These safety procedures add time, but they are vital. It's how we survive in a dangerous job. It's how we ensure linemen are protected and everyone goes home to their families. The most important thing we have to do is isolate and ground the line. This is an important step for many reasons. One reason is to protect from back feed. Linemen always try to be aware of their surroundings. An important thing to listen for and to be aware of are home generators. The transformer on your pole that drops the voltage down can also work in reverse. Your home generator, if installed wrong, could back feed through your transformer and put primary voltage back on the line. To protect linemen from this, we install grounds as close to the work location as we can on both sides of the work. These grounds connect the neutral wire to all primary wires making them all the same "grounded potential: and safe to work on. The final safety step

is the safety briefing. During the safety briefing, the job plan is discussed and explained, hazards are identified, and everyone is made aware of the grounds, their location, and the location of the breaker.

9 p.m.:

All the safety procedures in place. We can begin the work.

Let's say for this outage it was a tree. A 50-foot-tall oak tree fell through the line. It's off the road, but we got lucky – it broke a crossarm, but the pole is good. The wire isn't broken either but is currently under the oak tree. We've got to cut up the tree and get the wire free. This will take some time. Anyone who has cut up a downed tree will understand the danger. You have to be careful and pay attention to the tree and how it's sitting on the ground. Downed trees can shift, and roll while being cut. And here you also have power lines under tension, pinned down by the tree adding an extra layer of danger. Special care and awareness must be used. Sometimes the power lines must be tied down, so that they can be let up in a more controlled manner once the tree is cut. While we work to clear the tree from the line, new material is on the way. We are going to need a crossarm, crossarm braces, new insulators, bolts and ties to tie in the wire.

10:30 p.m.:

The tree has been cleared and the material has arrived.

As I mentioned, the pole is off the road, so that means we can't get a bucket truck to it. We will have to climb the pole. One of our linemen will put on his belt and hooks and climb to the top of the pole. He'll bring all the tools he'll need with him. One thing he will take with him is a handline. It's a rope in a pulley that's long enough to go from the top of the pole to the ground in a loop. This will be used to lift material and other objects to the lineman that were too heavy or awkward to take up in his belt. Once he gets to the top of the pole, he will get to work. He'll start by removing all the broken material. He'll also inspect the top of the pole for damage we couldn't see from the ground. Once he has it cleaned up, we will start sending up material on the handline. He should have taken the crossarm bolt with him when he climbed and installed that in the pole. The lineman on the ground should have already put everything on the crossarm. Next, the lineman on the ground will tie the crossarm onto the handline in a way that will allow the lineman on the pole to just guide the arm onto the bolt as it's being lifted up. Once the new crossarm is on the pole and all the bolts are tightened, the wire will be lifted up, also with the handline, and placed on the arm. The wire ties will be sent up, again on the handline, and the lineman will tie in the wire. After completing all the work in the air, the lineman will send down the handline and then climb down. Once down, he'll remove his belt and hooks and pack them away. The lineman on the ground will now be "making up the handline," which just means he is getting it ready to store until it's needed again.

continued on pg 10.....

A LINEMAN'S PERSPECTIVE

We'll all carry the tools that we used back to the truck and get them packed away. Lastly, we will remove our grounds.

11:45 p.m.: Repairs complete

Now if you still happen to be outside in your yard or on your porch, you will see me drive a third time. This is good news because you are about to get your power restored. I'm heading for the breaker. Once I get to the breaker, I'll call dispatch and get clearance to re-energize. I'll let them know who is with me and if they are in the clear. They will check to make sure no one else is working on the line and then give me clearance to try the breaker. At this time, I will close the breaker, and your power will be restored.

12:05 a.m.: Power restored. Outage over.

Keep in mind this is just one scenario; not every outage is the same. Each outage varies in time for restoration. This example outage took around five and a half hours to restore. If the tree had broken a pole, it would have been even longer.

<u>1 a.m.: Lineman returns home – safe and sound.</u>

We Work for You, Our Neighbors

We've become so dependent on electricity that every outage, whether it is a short outage or an extended one, can be stressful for those without power. The longer outages last, the more stressful and irritating it can become. I hope that I've given you a better understanding of the process so you have an idea what's happening while you wait. Just know that your co-op and its linemen are doing their best to get the lights back on as quickly and safely as possible.

Your cooperative and its employees are members of your community. We live in the same neighborhoods. We shop at the same stores. Our kids go to the same schools. If your lights are off, there is a good chance ours are off too. We will always be committed to serving our members and communities by providing you with safe and reliable electricity–24 hours a day, 7 days a week, 365 days a year.



10 ALONGTHELINES - September 2023

WHY IS MY **POWER OUT**

A storm or a squirrel may be to blame

-Safe -Electricity.org



When the power goes out, we work hard to resume service as quickly and safely as possible.

Here are some common reasons the power goes out:

STORMS:

Mother Nature can interfere with power delivery.



TREES AND VEGETATION:

This is why we work so hard to keep power lines clear.



ANIMALS: Curious animals can cause damage, especially squirrels.



ACCIDENTS: Run-ins with a utility pole or other equipment can cause an outage.



PUBLIC DAMAGE: Unsafe digging, equipment or line damage, vandalism or theft can all interfere.



OVERLOAD: This happens when demand spikes, like on a hot summer day.



EQUIPMENT ISSUES: We maintain and inspect equipment regularly, but sometimes malfunctions occur.

Thank you for your patience during outages.



The Steps to Restoring Power

When a major outage occurs, our crews restore service to the greatest number of people in the shortest time possible – until everyone has power.



1. High-Voltage Transmission Lines

These lines carry large amounts of electricity. They rarely fail but must be repaired first.



Distribution Substations Crews inspect substations, which can serve hundreds or thousands of people.

3. Main Distribution Lines Main lines serve essential facilities like hospitals and larger communities.



Individual Homes and Businesses

After main line repairs are complete, we repair lines that serve individual homes and businesses.

ALONGTHELINES

SEPTEMBER2023



MEMBER TRADING POST

FOR SALE: 1943 Allis-Chalmers tractor, model C. Looks and runs like new, \$2,500. Ford 8N tractor, \$1,700. (0.B.0) Call 618-402-4420.

FOR SALE: Poultry and fowl hatchery complete set-up including insulated/wired 8x12 portable shed stocked with GQF cabinet incubator, cabinet hatcher, 5 layer brooder, mini-fridge. \$12,500 for ALL. Text or call: 618-498-7337 **FOR SALE**: 2006 Jerry flatbed trailer. 7X16ft, double axel, spare tire - \$1,500Food/Concession trailer, outside has been refinished, 7X23ft - asking \$5,000 Call: 618-259-4388

FOR SALE: Deep 14 ft V bottom Mirro Craft lake boat, asking 200 dollars, Coffeen II 618-973-2819

FOR SALE: Massey Ferguson 65 Tractor \$3,500.00, Box Scraper, Blade & Mower Included Call 618-535-8195 **FOR SALE:** Craftsman 48" riding lawn mower. 24 HP Briggs & Stratton engine with only 218 hrs. Hydrostatic drive. Complete with all owners manuals and an extra set of blades. Recently serviced. \$700. Call 618-402-0881.

FOR SALE: V3- Electric three wheel Pride Mobility scooter, good condition \$800. Call: 217-320 1011