



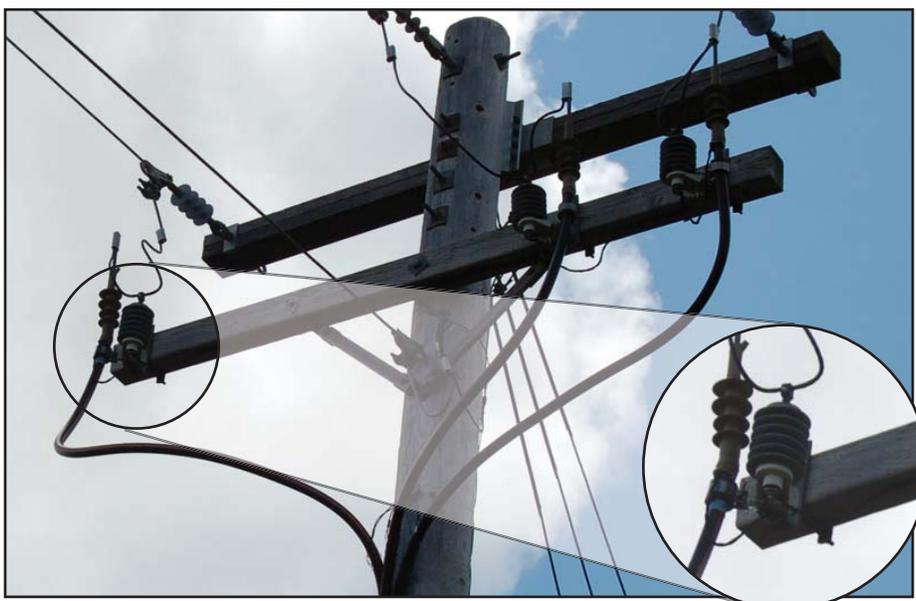
Lightning arresters keep power flowing when the lightning strikes

Lightning rods protect buildings from lightning strikes. Lightning rods used to be installed on nearly every home and building, especially in rural areas. Now lightning rods are mainly used on high-rise structures.

Lightning rods are metal (often copper) and mounted on the roof of a building. A cable leads from the lightning rod to the ground. When lightning strikes the rod, it follows the cable into the earth, thereby protecting the building from the full brunt of the lightning strike.

Your electric co-op also has lightning protection on its equipment. Lightning causes havoc with transmission lines and your co-op's power lines. Lightning can strike a wire, flow downstream from it and damage a great deal of expensive devices, especially in substations. Lightning strikes can even cause transformers to fail. Underground equipment is not immune to lightning strikes either. Lightning can flow into underground cable and cause a fault or outage, requiring linemen to dig the cable up to fix it.

Your electric cooperative does not use lightning rods to prevent these kinds of problems. Your electric cooperative uses devices called arresters to protect its equipment from the damaging effects of lightning strikes.



This pole has multiple arresters on it. They divert lightning away from wires leading to an underground service to prevent lightning from causing a cable fault or outage.

How does an arrester work?

First, an arrester does not absorb or stop the lightning. Rather, it limits the voltage of a lightning strike and diverts it into the ground.

The main part of an arrester is made of a special material that works as an insulator during normal voltages and a conductor at higher voltages.

Arresters are installed between transmission lines and equipment like transformers. The arrester essentially

serves as a switch. During normal operation, it is open to standard voltages. Once lightning strikes, it closes, which then diverts the lightning strike to the ground.

There is an old saying that lightning never strikes the same spot twice. Unfortunately, your electric co-op's transmission system takes numerous lightning strikes each storm season. It is thanks to equipment like arresters that the damage is minimized. Ⓜ

At A Glance



Heat pump rebates add to summer cooling savings & lower heating costs

Pump up cooling efficiency with an air source heat pump, instead of buying a central air that works just in the summer. The heat pump will also reduce your heating costs the rest of the year. Federated's \$1,000 to \$1,500 rebate offsets the extra investment. Rebate form on website. Ⓜ



Don't blow it with bathroom fans

You may love taking long showers or hot baths that transform your bathroom into a sauna. Unfortunately, all of that humidity can cause mold and air quality issues. This is where your bathroom exhaust fan assists. The bathroom exhaust fan removes that humidity and vents it outdoors.

Bathroom fans themselves are not super expensive to run. On average they use about \$3.50 a year in electricity. Larger bathroom fans with heaters can use up to \$110.

The hidden cost of bathroom fans occurs when venting humidity outside; these fans can also vent out air that you have already heated or cooled. If you allow bathroom fans to run longer than necessary, they are literally blowing dollars and cents out of your house. For this reason remember to turn it off after it clears your bathroom humidity.

To help with this problem, some bathroom fans come with humidity and motion sensors. A humidity sensor triggers the fan to turn on when humidity rises above a certain level and then to turn off when humidity is reduced. A motion sensor detects when someone enters the bathroom.

Next, look for the Energy Star label. Energy Star ventilation fans provide better efficiency, longer life and less noise with high-performance motors and improved blade design. Energy Star-certified ventilation fans that include lighting can use 70 percent less energy than standard models.

Correct sizing is also important for bathroom fans to ensure they run no more than necessary. Bathroom fans are measured by how many cubic feet of air they move per minute (CFM).

If your bathroom measures ten-feet



Bathroom fans themselves are not that expensive to operate. However, it is what bathroom fans do that can cost you. They vent air you already heated or cooled outside if you use them more than necessary.

by five-feet with an eight-foot ceiling, your sizing formula will look like this:

$$10 \times 5 \times 8 = 400 \text{ cubic feet} \times 8 \text{ air exchanges per hour} = 3,200.$$

$$3,200/60 = 53 \text{ CFM.}$$

The Home Ventilating Institute also recommends adding an additional 50 CFM to every toilet and every toilet and shower/bath combination.

Other bathroom fan tips

- Most bathroom fans are mounted in the ceiling. Vent the bathroom air outdoors, rather than into the attic. If moist air is vented into the attic,

problems with humidity can occur.

- If you install a ventilation fan over a shower, make sure it is UL-listed for that location.

- Beware of noisy ventilation fans. Ventilation fan sound is measured in sones. TVs typically operate at 3-4 sones. If you want a quiet fan, look for fans with sone-ratings that are two or less.

- Each year clean all of the buildup on the blades and interior casing of your bathroom fan; ensure it operates as efficiently as possible. 

Smart window air conditioner enables remote operation

Imagine using your smartphone to turn on a window air conditioner so it's just the right temp as you head for home!

The LG LW8017ERSM features Wi-Fi connectivity so you can monitor and operate the window AC unit using your smartphone or tablet. Select the right operating mode, adjust the temperature when leaving home and prior to returning, program a schedule or monitor the filter life! The AC unit also works with Amazon Alexa and Hey Google so the owner can change settings with voice commands.

Other features include

- This LG smart AC unit operates at sound levels as low as 52 decibels (in low mode), which is around normal conversation levels.
- Energy Star rating features three cooling and fan speeds.
- Cools rooms up to 350 square feet.
- The unit's estimated yearly energy cost is \$65. Your exact costs will depend on use, local utility rates and the type and source of your energy.
- Energy Efficiency Ratio (EER) listed at 12.1.
- Cools between 60 and 86 degrees Fahrenheit. Uses 8,000 BTUs of power to achieve and maintain your desired temperature.
- When it starts feeling a little humid in your room, select "Dry Mode" to remove 2.2 pints of moisture per hour.



Control your LG smart AC at home or away. It is wi-fi enabled and can be operated from your smartphone.

- "Energy Saver Mode" turns the fan off when the compressor shuts off. To save energy the fan will turn on every three minutes and check your room's temperature. It only turns starts the compressor when your room's temperature has risen above your set point.
 - Installs in double-hung windows with minimum heights of 13 inches and widths between 22 and 36 inches with the included installation kit.
 - If a power outage occurs, the unit automatically restarts in its previous setting.
- The LG smart AC unit costs approximately \$300 and is available in stores and online. (E)

Safety

Assume power lines are energized

The best way to stay safe around electricity is to always assume a power line is energized.

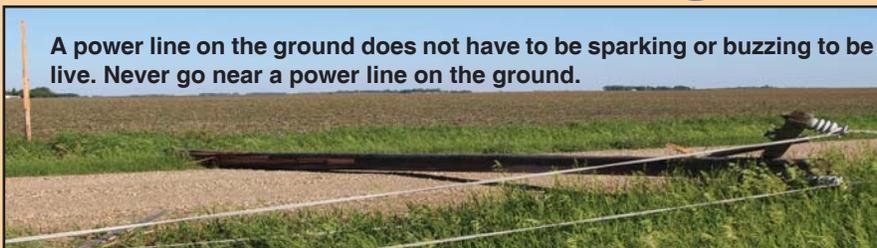
Use the same safety wisdom with a padmount transformer. It is simply connected to an underground line.

In your yard always look up and look out when using a ladder. Always carry long items horizontally instead of vertically.

Always be careful when you are elevated: on your roof, on a hydraulic or scissor lift or on a ladder. Always have 10 feet between you and a power line at all times. Plus, apply the 10-foot rule to an object you are holding or touching since electricity could flow through the object to you.

Do not trim trees or limbs that come within 10 feet of a power line. Only specialized tree trimmers who are certified to clear trees within 10 feet of a power line should do so.

A power line on the ground does not have to be sparking or buzzing to be live. Never go near a power line on the ground.



If anything gets caught in a power line, such as a drone or kite, never try to retrieve it yourself. Call your electric co-op for assistance.

Teach kids to never climb trees with power lines running above or through the tree branches. Teach children do not sit nor play on a padmount transformer's green box.

If you are in a car or tractor that comes into contact with a power line, pole or padmount transformer, staying in the vehicle is usually the safest course of action. Call 911 and wait for the electric co-op to arrive and shut off

the power. Do not get out until you have the go-ahead from the co-op's utility workers.

If you must exit a vehicle due to smoke or fire, jump out without touching the car or cab. Keep your feet together and hop as far away as you can.

If you see someone in trouble who could be exposed to electrical current, do not run toward the scene to help. Instead, call 911 and warn others not to approach the area. (E)

— Information courtesy of safeelectricity.org

Federated Focus

Add second name to your bill?

You can add a second name to a billing account. Both the member and the new assignee must sign the form; both agree the new co-member will be jointly and separately responsible for payment of the bill. The co-member also becomes co-owner of the existing capital credits. Accounts with more than one name may be joint tenancy with full rights of survivorship, tenancy in common or partnerships. A designation of membership type form must be returned to Federated.

One benefit of having both names on the account allows more members to serve on the Board of Directors or Nominating Committee. Another is that less paperwork may occur at the death of one of the members.

A major disadvantage is that if an account is in one person's name, their heirs have the option of having the Federated capital credits paid out in a lump sum at a discounted rate. This is not available on joint accounts til both members are deceased.

The Board of Directors approves any membership changes and meets once a month. Depending on the timing of your paperwork, it may take more than one billing cycle before your bill shows the name changes.

Another request Federated occasionally receives is payment on death or transfer on death. The co-op policy currently does not offer either option.

If you want to change your account membership to two names, please contact Angie at 507-849-7847 or e-mail ziemer@federatedrea.coop.



'Drive-in' 86th Annual Meeting

Wednesday, August 4

Federated is planning for a drive-in Annual Meeting due to the uncertainty of a large member turnout due to Covid concerns.

Vote & earn a \$10 bill credit

- Your mailed ballots arrive around July 1 and must be received back at Federated's office by August 3 at 4:30 p.m. OR
- Members may vote via drive-in August 4 at the Martin County Fairgrounds 4:30 p.m. to 6:30 p.m.

Brief meeting at 6:30 p.m. at Fairmont Fairgrounds

Stay in vehicle; listen through radio in car or at home. Details in next month's newsletter.

Ballots will be counted after the meeting and announced through the media and our Facebook page August 5. Watch for more details in the July *Connections* Annual Report edition.

Member surprise attendance gift

Federated will hand out extra Annual Meeting attendance gifts from previous years. You may receive a cutting board, stemless wine glasses, knife sharpener or wall charger. Drive up to the Annual Meeting August 4 for your surprise gift, while supplies last.

Bring your bar-coded registration card on the back of the July *Connections* newsletter or your bar-coded ballot envelope.



Congrats grads! Nine students awarded \$700 Operation Round Up scholarships



District 1:
Matthew Madsen
Heron Lake
son of Michael & Diana



District 2:
Isaiah Schmid
Worthington
son of Kevin & Dana



District 3:
Annelise Reiger
Mountain Lake
daughter of John & Amy



District 4:
Alex Jensen
Estherville
son of Jeff & JoAnna



District 5:
Allison Schwieger
Fairmont
daughter of Darren & Michelle



District 6:
Janessa Nelson
Fairmont
daughter of Jason & Michele



At-Large District:
Mersades Ringnell
Sherburn
daughter of Brad & Kia



At-Large District:
Dylan Freking
Heron Lake
son of Mark & Sheila



At-Large District:
Meakin Bang
Okabena
daughter of Paul & Amy

Nine high school seniors received a \$700 Federated Operation Round Up Scholarship. 33 students completed the Federated scholarship application.

This is the 19th year students applied for it. A scholarship was awarded to each co-op district, plus three more where remaining applicants had a second chance of winning. These are the same districts used for director elections.

This is the 31st consecutive year Federated dedicated funds to high school scholarships and the 26th year that the scholarships are from Operation Round Up. This totals \$128,700 in Federated scholarships.

Congratulations to these and all high school graduates! 🎓

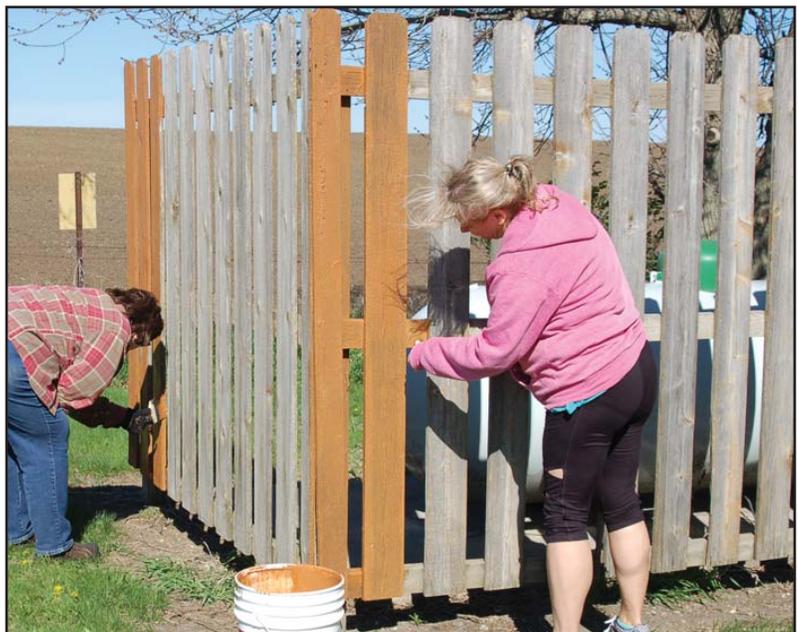
31 volunteers spruce up Kilen Woods State Park

Volunteers added their GreenTouch to Kilen Woods State Park near Lakefield May 1.

Sponsored by Federated, 31 volunteers helped spruce up Kilen Woods. Federated is a Touchstone Energy co-op that has sponsored this spring state park clean up since 2000. This event helps the park prepare for the summer camping season.

“It was a beautiful day to be outdoors enjoying the spring weather and making a difference at Kilen Woods State Park,” said Andrea Christopher, Federated’s marketing & communications manager. “Volunteers picked up litter on trails, cleared overhanging branches on the trails, picked up downed branches in the campground, raked, painted the propane fence enclosure, caulked the office foundation, posted trail signs, rebuilt the sandbox, dismantled an old trail’s bridge, fixed a water leak, cleaned the park office and bathroom/shower building, plus raked up leaves around the amphitheater seats.”

The volunteers received a \$10 Subway gift card from Federated for lunch. 🍷



Sonja Koch and Sheri Lilleberg both from Jackson were among the GreenTouch participants. They applied a new coat of stain.

Minnesota's energy-efficiency standards upgraded to benefit co-op members & co-op

After nearly four years of work, the Energy Conservation & Optimization (ECO) Act, a bill led by electric cooperatives, passed the Minnesota legislature at the close of the regular session with strong bipartisan support. Governor Walz signed the legislation May 25.

Locally, thanks go to Representatives Rod Hamilton and Bjorn Olsson, and Senators Julie Rosen, Gary Dahms, Nick Frentz, Scott Newman and Bill Weber for supporting significant and beneficial reform to the state's energy-efficiency standards, a cornerstone of the state's energy policy.

"Your local electric cooperative is excited about the improved benefits," stated Federated's General Manager Scott Reimer. "We will be able to pass along these benefits directly to our member-owners due to the proactive provisions in the ECO Act."

"The ECO Act gives electric cooperatives more flexibility to recognize and respond to emerging technologies and consumer behaviors and demands," added Mike Heidemann, Brown County REA CEO.

Utility programs that encouraged the adoption of technologies, like LED lighting and Energy Star rated appliances, have provided more than \$6 billion in net benefits to the state and supported local jobs in every corner of Minnesota. However, as new technologies have emerged, CIP became outdated and needed reforms to continue providing tangible savings and environmental benefits for energy consumers.

This bill allows utilities to create programs that incentivize adoption and installation of new technologies to help reduce total energy use and save member-owners money; another ground breaking reform around efficient fuel-switching — substituting electricity or natural gas for a consumer-owner's current fuel source — is provided in the bill. As part of the reforms, efficient fuel-switching improvements will allow cooperatives to offer programs that substitute electricity for a customer's current fuel when those programs achieve a trifecta of:

1. Reducing the overall amount of energy;
2. Reducing greenhouse gas emissions; and
3. Reducing consumer costs.



Your electric co-op has offered Energy Star appliance and cooling rebates since 2003. This spring's Minnesota legislation is the second major upgrade to the program, which recognizes changes in technology and energy-efficiency. Electric co-op member-owners are the energy-efficiency winners.

For more than eight decades Minnesota's electric cooperatives have been providing local homes, businesses, schools, hospitals and other essential services with safe, affordable and reliable electricity. The ECO Act helps electric co-ops to further efforts to help member-owners save money and energy, plus continues a decades-long campaign to decarbonize our energy production.

To learn more about your local electric cooperative's energy-efficiency rebates, visit the cooperative's website or call and speak with the co-op's energy expert. ☎



An electric water heater from your electric co-op has a limited lifetime warranty against leaks. Start the countdown and call today. Our price won't put you into orbit. ☎

Are you keen on green beans? Share favorite green bean recipes

Green bean garden season draws near... Send us your favorite green or yellow string bean recipes, whether canned, pickled, in salads or hot dish! Mail to Editor, Federated Rural Electric, PO Box 69, Jackson MN 56143-0069 or e-mail to christoffer@federatedrea.coop by June 25. Add your name and phone number. Thanks for sharing with us! 📧

Spaghetti Pie by Marcia Clay, Truman

7 oz. spaghetti	32 oz. can of spaghetti sauce
1 egg, beaten	1 lb. grated mozzarella
½ c. milk	1 pkg. pepperoni
1½ lb. hamburger	½ tsp. garlic powder
4 oz. can of mushrooms, optional	salt & pepper
4 oz. can of ripe olives, optional	

Brown hamburger. Cook spaghetti. Add beaten egg and milk to drained spaghetti and pour into a 9x13" pan. Continue to layer with sauce, pepperoni, and cheese. Cover with foil. Bake at 350° for 1½ hours. Remove foil with 15 minutes remaining.

This can be made ahead of time and refrigerated until baking. It works great to serve company — just add a salad and garlic toast. 📧

Correction on portable air conditioner costs

The May 2021 portable cooling units story from Page 3 requires a correction. The examples of costs to run window AC units per hour (\$1.26, \$1.10 and \$1.65) were incorrect. The correct costs should be 12 cents for the portable AC unit, while the window air conditioners cost 11 cents to 16 cents for one hour. Sorry for the confusion due to the misplaced decimal. 📧

King's Casserole by Howard Blume, New Ulm

1½ lbs. ground beef
 1 large onion, chopped
 ½ green pepper, chopped
 1 tsp. salt
 ¼ tsp. pepper
 small pkg. medium noodles
 2 cans tomato soup
 2 cans vegetable soup

Bacon (as many strips as you like...I like to pretty much cover the top of the casserole)

Fry the ground beef and when nearly done, add the onion and green pepper. Cook noodles and drain. Mix together all ingredients except the bacon. Lay the bacon slices across the top of casserole. Bake at 350°F. for one hour or until the bacon is done. 📧



**Pick up the phone
 before the shovel;
 call before digging!**

1-800-252-1166



Call Gopher State One Call before doing any digging more than 12" deep — 48 hours before digging

for foundations, trees, tiling and more. You can also register at www.gopherstateonecall.org or call 811. Call a licensed electrician to locate the underground lines on your side of the meter. 📧



Scott Reimer

Manager's Message

Revolving Loan Fund (RLF) available

Federated Rural Electric has encouraged economic development for many years in our service area, and beyond, for the benefit of all. One of these programs is the Revolving Loan Fund that we manage. Policy states: Federated will accept and consider applications for loans for projects that will significantly benefit rural areas within the Federated service area.

The Federated Board of Directors is the sole authority for approval or denial of loans from the RLF and is responsible for all decisions and actions of the fund. Plus, the RLF is operated and maintained solely by Federated.

Federated intends that funds from the RLF program serve as seed money to generate economic development. Federated will work with local lenders and others to maximize the RLF dollars so the result is the maximum possible economic development. It is further intended that Federated use the RLF program to supplement, but not compete with, capital that may already exist within communities. Previous Federated RLF recipients were for community infrastructure, such as a township hall, fire trucks and a water treatment plant.

Looking for new applicants

In a recent meeting it was noted that RLF applications had dwindled, although we thought we were doing a good job of promoting it. The pandemic kept most development at bay. However, we believe now would be a good time to get the word out. We encourage applications. Unfortunately, not every application will qualify so here's some details.

Eligibility criteria

Borrowers and activities, which are eligible for financing assistance by the RLF, are as follows.

- Eligible area: the project must be located in Federated's service area. The applicant is not required to receive electrical service from Federated.
- Eligible applicants: all business types and local government units.
- Eligible use of proceeds: land and building operations, land improvements, new building construction, building renovation, machinery and equipment, infrastructure improvements, working capital (available in a limited amount, only in conjunction with other RLF funding) and inventory purchase, sewer and water improvements.

Types of projects eligible for RLF funding

- Industrial/commercial development, small business expansion or startup, business incubators, community infrastructure, community facilities, medical facilities, training/educational facilities and tourism.

Types of projects/activities ineligible for RLF funding

- Refinancing of existing debt or payment to business owners or partners, projects without any supplemental financing, activities determined to be for investment purposes, general improvement loans related to



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77100 US Hwy 71, PO Box 69

Jackson, MN 56143-0069

E-mail: info@federatedrea.coop

Website: <http://www.federatedrea.coop>

Facebook.com/Federated

Phone: 847-3520 or 1-800-321-3520

Office hours: 8 a.m.-4:30 p.m. Monday-Friday

Scott Reimer, General Manager

David A. Hansen, President — 847-3530

David Meschke, Vice President — 238-1122

Darvin Voss, Secretary/Treasurer — 662-6679

Bruce Brockmann — 399-3487

Glenn Dicks — 840-1075

Jon Saxen — 236-7027

Scott Thiesse — 399-6427

The Board of Directors generally meets the last business day of the month at 8 a.m. at the Jackson office. Regular board meetings are open to the membership. Members interested in discussing business items should contact the general manager or president three days before the meeting.

normal replacement needs of a business and unrelated to business expansion/job creation, agricultural production costs (i.e., cultivation, production, harvesting), vehicles used for general purposes or that may be considered for personal use, projects that are primarily working capital with limited security, construction projects of an individual residential nature, illegal activities and legalized activities (e.g. gambling casinos) that in the opinion of the Board of Directors adversely affect RLF interests.

My intent is simply to raise the interest level so people start thinking about what your cooperative has to offer, while they look to grow their businesses. Our staff is ready and willing to take your calls with questions and get the applications in the queue. We have a limited amount of funds available (\$500,000) so if you, or someone you know, is interested, contact us as soon as possible. The program typically requires matching funds from the applicant; the interest rate is 1 percent, with the applicant paying closing costs. The applicant also pays an annual servicing fee of 1 percent on the remaining loan balance. The minimum loan is \$10,000 and the maximum loan is \$200,000. As loan payments are made, more funds are available in this RLF. We look forward to hearing from you with your projects. ☺