

● JANUARY 2025

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ELECTRIC COOPERATIVE LIVING

RVEC offers scholarships

**How electricity demand
impacts co-ops**

Recipes: Bread winners

Win a stainless steel bread machine ▶ See Page 3

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ON THE COVER

Special thanks to Cindi Miller, a Guthrie County REC member-consumer, for supplying this month's cover image. Submit high-resolution photos for consideration to editor@ieclmagazine.com. You could receive \$100!

A GRATEFUL FAREWELL: REFLECTING ON MY STATEWIDE SERVICE

BY KENNY VANDENBERG



Last month, the Iowa Association of Electric Cooperatives (IAEC) held its 2024 Annual Meeting in West Des Moines, with the theme of “Powering Lives, Empowering Communities.”

With a statewide leadership transition in 2024, it was a year of new beginnings at IAEC. But amidst change, we remain steadfast in our cooperative mission to help Iowa’s electric cooperatives power lives and empower communities every day.

The annual meeting was a bittersweet time for me as it signaled the end of my six-year tenure on the IAEC board, where I most recently served as board president. It has been an honor to represent the electric cooperatives of District 1 on the statewide board, and I found myself reflecting on the many things that our statewide trade association has accomplished in the past six years, including:

- Keeping safety as our top priority, with fiscal responsibility also a priority.
- Seeing great participation in IAEC’s educational and safety training opportunities for co-op staff and directors.
- Witnessing cooperation among cooperatives and restoring power in the wake of two derechos.
- Meeting the COVID pandemic challenges head on and creating more ways to connect with Iowa’s electric cooperatives virtually and digitally.
- Launching our first statewide Shine the Light contest in 2021 to celebrate our cooperative commitment to community.
- Introducing our Cooperative Leadership in Iowa Program in 2023 to equip emerging leaders at Iowa’s electric cooperatives.

- Sending two crews of volunteer linemen to rural Guatemala (in 2019 and 2024) to bring the advantages of electricity to underserved areas.
- Maintaining a credible reputation while defending local co-op governance with legislators and regulators.
- Welcoming Leslie Kaufman as IAEC’s new executive vice president and general manager in July 2024.

None of these accomplishments would have happened without the foresight of the IAEC board along with support from Iowa’s electric co-ops and the statewide staff.

The power in stepping outside of one’s comfort zone

I want to thank the current board members as well as past board members who have helped me along the way over the past six years. There are not enough words to thank the IAEC staff for their help, knowledge and willingness to go above and beyond.

Serving on the IAEC board was the furthest thing from my mind all those years ago, but a few individuals challenged me to step out of my comfort zone and expand my knowledge of the electric industry. If it weren’t for their encouragement, I wouldn’t be here looking back on what was accomplished. I owe these folks a huge thank you for believing in me and giving me a little push.

So, as I pass the baton to new statewide directors at the start of a new year, I challenge each of you to step out of your comfort zone, try new things and get involved in your community. You will be amazed at what you will learn and the lifelong friendships that will develop.

I wish you and your family a blessed year!

Kenny Vandenberg is the outgoing board president for the Iowa Association of Electric Cooperatives and currently serves as board president of Chariton Valley Electric Cooperative.

EDITOR’S CHOICE CONTEST

WIN A STAINLESS STEEL BREAD MACHINE!

The KBS stainless steel smart bread machine has 17 settings for making bread, jam, yogurt, cake, pizza dough and more! Plus, it features an automatic fruit and nut dispenser. It bakes up to a 2-pound loaf, with three crust settings in light, medium and dark. An ultra-quiet 710-watt motor makes kneading quick and even, strong and durable, so the dough is soft and elastic. A unique ceramic bread pan uses safe nanotechnology to achieve a nonstick effect.



ENTER ONLINE BY JAN. 31!

Visit our website and win!

Enter this month’s contest by visiting www.ieclmagazine.com no later than Jan. 31. You must be a member of one of Iowa’s electric cooperatives to win. There’s no obligation associated with entering, we don’t share entrant information with anyone and multiple entries from the same account will be disqualified.

The winner of the iRobot Roomba from the November issue was **Edward Mosbach**, a **Prairie Energy Cooperative** member-consumer.

LINE PATROL BEGINS

Annual maintenance of our entire system has started. Our linemen are inspecting lines for defective items, checking meters and looking for any safety hazards.

During the inspections, we look for shot insulators, blown arrestors, loose guy wires and split or bad poles. We check to make sure poles have nothing stapled to them and that trees are not close to our electric lines. We are also looking for inadequate clearances from buildings and other driveways.

We have maintenance programs to upgrade lines, which ensures you have the most reliable and safest system possible.

If you have questions about the trucks in your neighborhood, give us a call.

WHAT'S AHEAD FOR THE NEW YEAR

BY JIM GOSSETT



Last month, I reflected on Raccoon Valley Electric Cooperative's (RVEC) achievements in 2024. Now, let's look at some of the opportunities and challenges RVEC will address in the coming year.

Twenty-five years ago, we braced for Y2K, worried our systems couldn't handle a year starting with "2." While that turned out to be a non-event, today's equivalent may be the ongoing threat of cyberattacks. Cybersecurity is a constant battle where attackers only need to succeed once. Fortunately, RVEC has a proactive approach, which includes vigilant member-owners, skilled employees and strong partnerships with experienced vendors. Even so, protecting our businesses, homes and farms requires ongoing diligence from all of us.

Here are some things to expect from RVEC in 2025:

- **Enhanced information tools:** In 2024, we introduced a new, easier-to-read bill format. We'll continue providing more useful data to help you manage your energy usage and monthly bills.
- **A stronger distribution system:** A five-year construction plan, soon to be finalized, will guide projects to

build and rebuild systems, ensuring safety, reliability and efficiency.

- **Stable rates:** Despite a supplier energy cost hike, careful planning and revenue management allow us to meet 2025 financial goals without increasing member-owner rates.

While 2025 will bring both expected and unforeseen challenges, RVEC is ready. Co-op employees and board members are committed to improving processes, finding efficiencies and serving you better. The hard work and pride they bring to their roles make a difference every day.

This is my final CEO column, as I am leaving to take a new role in the cooperative family of businesses. I want to thank you for your support during my 11 years at RVEC. When I started in 2013, I was new to the utility industry, but my colleagues welcomed me with patience and care. Together, we've faced changes, challenges and successes. I leave with great respect for the cooperative model and deep appreciation for the dedication of our employees and electric cooperative partners.

It's been an honor to serve you, and here's to a safe and prosperous 2025!

Jim Gossett is the CEO of Raccoon Valley Electric Cooperative.



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Jim Gossett, CEO

RVEC is an equal opportunity provider and employer.

HAVE YOU CASHED YOUR PATRONAGE CHECK?

If you were a Raccoon Valley Electric Cooperative member in 2002, 2003 or 2004 and opted to receive a check instead of a bill credit, you should have received a patronage check in the mail in December. These checks will be void after 90 days, so we encourage you to cash the check(s) as soon as possible. Electric cooperatives operate differently from other utilities because we operate at cost. Any excess revenues (or margins) are allocated and returned to our member-owners. If you have any questions, please contact our office at 712-659-3649.



RURAL ELECTRIC YOUTH TOUR 2025

Win a trip to Washington, D.C.!

An all-expenses-paid trip to Washington, D.C., June 15-21, 2025, and a \$500 scholarship will be awarded to one high school student from the Raccoon Valley Electric Cooperative (RVEC) service area.

Youth Tour contest applicants must currently be a high school sophomore or junior residing in

the RVEC service area, either town or country. However, an applicant's parents DO NOT need to be RVEC members.

Based on an open-book exam and essay, the top three applicants will participate in face-to-face interviews. RVEC will award one winner a one-week, all-expenses-paid trip to Washington, D.C., as part of the electric cooperative Youth Tour.

The winner will also receive a \$500 scholarship for the first year of college or secondary school.

Applications must be received in the RVEC office by March 1, 2025. The open-book exam and study materials will be mailed after March 1.

Additional information and applications may be obtained by contacting RVEC at 712-659-3649 or visiting www.iowarec.org/youth-tour.

YOUTH TOUR CONTEST APPLICATION



Student _____

Address _____ Telephone # _____

School _____

(Must currently be a high school sophomore or junior to enter)

We certify that we are the parents or legal guardians of the above youth and give our permission for the youth to participate in the trip to Washington, D.C., should they be declared the winner; and further agree that their entry will become the property of Raccoon Valley Electric Cooperative.

Date _____

Signature of Parent or Legal Guardian _____

Mail to: Youth Tour Contest, RVEC, PO Box 486 Glidden, IA 51443

IOWA'S ELECTRIC CO-OPS: POWERING LIVES, EMPOWERING COMMUNITIES

Iowa's electric cooperatives are proud to be owned by the members we serve. For more than 85 years, we've been committed to providing safe, reliable, affordable and sustainable power.

Electric cooperatives cover over two-thirds of the state's land mass and maintain enough power lines to wrap around the equator two and a half times – that's close to 62,000 miles! Electric co-ops serve almost 240,000 households, farms and businesses throughout the state, which means we power the lives of approximately 650,000 Iowans throughout all 99 counties.

We serve primarily rural areas of the state, and we're mission-driven to improve the quality of life for our member-owners. We adhere to the

following seven core principles that guide all cooperatives.



Voluntary and open membership. The co-op is open to anyone able and willing to join, accepts responsibility as a member, and uses the organization's services.



Democratic member control. Cooperatives are democratic organizations controlled by their members, who actively participate in setting policies and making decisions.



Members' economic participation. Members contribute equitably to and democratically control the capital of their cooperative.



Autonomy and independence. The co-op members determine

everything they do, allowing the co-op to function independently.




Education, training, and information. Cooperatives provide education and training for their members, elected representatives, managers and employees so they can contribute effectively to their cooperatives' development.



Cooperation among cooperatives. By working together through local, national, regional and international structures, cooperatives serve their members most effectively and strengthen the cooperative movement.



Concern for community. While focusing on member needs, cooperatives work for the sustainable development of their communities.



THE EVER-CHANGING, FAST-GROWING DEMAND FOR ELECTRICITY

BY SCOTT FLOOD

When rural electric cooperatives first strung power lines from farm to farm less than a century ago, most members had but a handful of light bulbs to power. With time, they added appliances like refrigerators, but we're sure they couldn't begin to imagine the number and variety of electrical devices in today's homes and garages.

Across the U.S., people use a growing amount of electricity at work, home, and with the growth of electric vehicles (EVs), even on the road.

The demand for electricity increased by 2.5% in 2024 and is expected to grow by 3.2% this year. That was after co-ops saw a 4.8% increase in

2022. Through 2029, the nation's peak demand is projected to grow by 38 gigawatts. That would be like adding another California-sized state to our nation's power grid.

Factors driving demand

The rapid growth of artificial intelligence (AI) is driving the development of massive data center facilities, often placed in electric co-op service territories to take advantage of inexpensive land and fewer neighbors to complain. By 2022, these facilities accounted for 2.5% of the nation's consumption of electricity – and by 2030, they'll use 7.5% of all electric power.

Data centers and facilities like warehouses require a large, steady supply of electricity 24 hours a day. That means the electric co-ops supplying them can't rely on intermittent sources of electricity, such as solar or wind energy, to handle the additional load. Instead, they need more of what's known as baseload or always-available power, much of which is currently generated by burning fossil fuels. The more we depend on technology, the more we'll need reliable baseload generation.

Baseload power is essential

Yet that's a problem because at the same time Americans are using more

electricity, power providers are being forced to shut down reliable sources of baseload power such as coal and nuclear power plants. Many large coal plants have been converted to use cleaner-burning natural gas, but others have been deemed too costly to convert and are prematurely being shut down. More than 110 gigawatts of always-available generation – enough to power about 35 million homes – is forecast to retire by 2033.

The U.S. Energy Information Administration’s forecast expects coal-fired generation to drop to half of today’s levels by 2030. Renewable energy will capture a growing share of the supply, but as noted, much renewable energy is not reliable enough to provide baseload power.

Demand will steadily increase

As electricity powers a growing share of life’s tools and conveniences, overall demand is expected to continue its steady growth through 2050. A great example is the efficiency of electric heat pumps. Federal and other subsidies and tax advantages are powering significant growth in their share of the home heating market.

In other words, at the same time everyone is using more electricity than ever, the supply of the most reliable source is drying up. Add in the uncertainty created by public policy debates around energy and climate change, and you can begin to understand why 19 states face a high risk of rolling blackouts between now and 2028.

The energy industry studies demand closely because construction of all types of generation is costly and lengthy – often taking more than a decade from groundbreaking to entering service.

As renewables become more efficient and cheaper to produce, their share of the power mix will only continue to grow. Someday soon, battery technology may reach the point where large-scale storage of renewable generation becomes possible, but until then, we’ll need more of those always-available power sources.

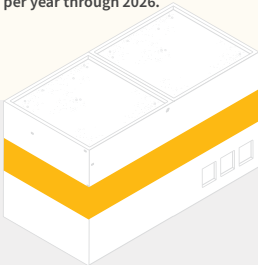
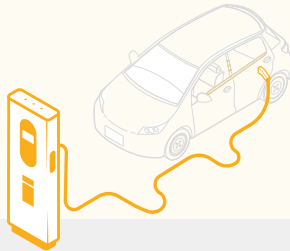
Scott Flood writes on a variety of energy-related topics for the National Rural Electric Cooperative Association.

Soaring Demand

After decades of flat or declining electricity demand, the U.S. is in the midst of a boom in power use. Recent government data shows that power consumption nationwide is set to increase by at least 38 gigawatts (GW) between now and 2028. This trend would ordinarily be great news for the power industry. But government policies aimed at shutting down fossil-fuel-based generation and years-long delays in permitting and siting for new transmission lines are turning this power boon into a capacity crisis. Here are the primary demand drivers:

Electrification

Electric vehicle adoption, electrification of home heating and industrial electrification are expected to increase overall U.S. energy consumption by 1% per year through 2026.



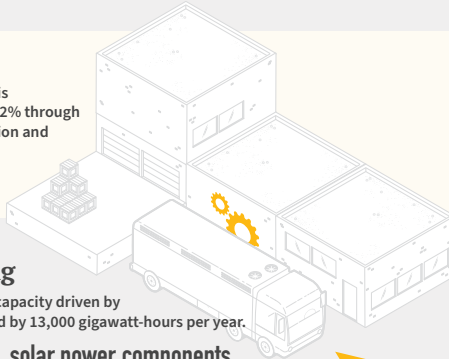
↑
65%

Data Centers

Driven by explosions in artificial intelligence, cryptocurrency and cloud computing, total U.S. data center load is projected to increase by 65% by 2050.

Economic Growth

Residential power consumption is expected to increase by 14% to 22% through 2050 due to increases in population and steady economic growth.



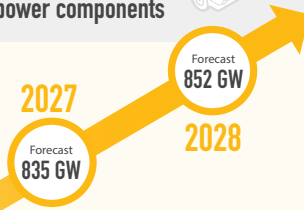
Manufacturing Growth/Onshoring

New, expanding and “onshored/reshored” manufacturing capacity driven by federal incentives is expected to increase industrial demand by 13,000 gigawatt-hours per year.

Key products: EVs, batteries, semiconductors, solar power components

Total Demand

Analysts predicted in 2023 that U.S. peak demand will increase by at least 38 GW over the next five years, nearly double the growth rate predicted in 2022.



BREAD WINNERS



ORANGE BREAD

- 1 tablespoon orange zest
- juice from 1 orange
- water
- 2 tablespoons shortening
- 1 cup sugar
- 1 teaspoon vanilla
- 1 egg
- 2 cups flour
- ¼ teaspoon salt
- 1 teaspoon baking powder
- ½ teaspoon baking soda
- 1 cup raisins
- ½ cup chopped walnuts, optional

Scrape orange rind to make zest, and squeeze juice from orange adding enough water to make 1 cup of liquid. Cream shortening, sugar, vanilla and egg. Add juice and remaining ingredients. Mix thoroughly. Bake in greased and floured loaf pan at 350 degrees F for 1 hour. *Yields 12 slices*

Carol Reeves • Sheldon
North West Rural Electric Cooperative

QUICK CARAMEL ROLLS

- 2 8-ounce cans refrigerated crescent rolls
- ½ cup butter
- 1 cup brown sugar
- 2 tablespoons water

Leaving crescent rolls in a roll, cut each can into 12 pieces. Place four across and six down in a greased 9x13-inch pan. Mix butter, brown sugar and water. Cook in microwave until it reaches a boil, stirring every minute – do not overcook! Pour mixture over crescent rolls. Bake at 350 degrees F for 15-20 minutes or until golden brown and the edges are bubbly. Invert onto a serving platter.

Steph Messner • Rock Rapids
Lyon Rural Electric Cooperative

QUICK YEAST BREAD

- 1¼ cups warm milk
- ½ cup butter, melted
- 1 egg
- 2 tablespoons sugar
- 2 tablespoons honey
- 4 cups flour
- ¼ teaspoon salt
- 1 tablespoon quick yeast

Mix milk, butter, egg, sugar and honey. In a separate bowl, mix flour, salt and yeast. Mix dry ingredients together with liquid ingredients. Knead and then place in a warm place until doubled in size. Knead again for 5 minutes. Divide into two and place in greased small loaf pans to rise for 1 hour. Bake at 350 degrees F for 30 minutes, until brown. *Serves 4-6*

Alice Draper • Eldora
Grundy County Rural Electric Cooperative

PISTACHIO BREAD

- 1 yellow cake mix
- 1 3-ounce box instant pistachio pudding
- 1 cup sour cream
- ¼ cup oil
- ¼ cup water
- 4 eggs, beaten
- ¼ cup sugar
- ½ cup nuts
- 1 teaspoon cinnamon

Mix cake mix, pudding, sour cream, oil, water and eggs until smooth. Pour half of batter into two greased bread pans. Mix sugar, nuts and cinnamon. Pour mixture on top of batter. Cover with remaining batter. Bake at 350 degrees F for 45 minutes.

Kim Swanson • Lockridge
Access Energy Cooperative

CHALLAH

- 1 cup warm water
- 2¼ teaspoons active dry yeast
- 1 teaspoon granulated white sugar
- 2 large eggs
- ½ cup honey
- 6 tablespoons grapeseed oil
- 4½ cups all-purpose flour
- ½ teaspoon salt
- 2 large egg yolks
- 1 teaspoon water

In a large bowl, whisk together the warm water, yeast and granulated sugar. Set aside for 5-10 minutes, or until foamy. Add the eggs, honey and oil. Whisk well. Add mixture to a stand mixer fitted with a dough hook. Add the flour ½ cup at a time and the salt while mixing on a medium-high speed. Mix for 5-7 minutes, or until a very smooth dough forms. If using a hand mixer fitted with a dough hook, combine the ingredients until a shaggy dough forms, about 2 minutes on medium-low speed, then remove from mixing bowl and knead by hand for about 10 minutes. Grease another large bowl with oil. Place the dough inside the bowl, cover with plastic wrap. Proof for about 1 hour. Lightly flour a clean surface and rolling pin. Place the dough on the surface and punch it down four times with your hands. Cut the dough into six equal dough balls. Using a rolling pin, roll out six long pieces, then roll them into strands with your hands. Use three strands to make each braided loaf. Place the loaves on a baking sheet lined with parchment paper, cover with plastic wrap and proof for one hour. In a small bowl, combine the egg yolks and water with a fork. Remove the plastic wrap from the loaves and brush them with egg wash. Bake at 325 degrees F for 15 minutes. Raise oven temperature to 425 degrees F and bake for 5 minutes. Remove from oven and cool on a wire rack. *Yields 2 loaves*

Addilyne Switzer • Beaman
Grundy County Rural Electric Cooperative

KILLARNEY IRISH BROWN BREAD

- 3¼ cups wheat flour
- ¾ cup white flour
- 2 teaspoons baking soda
- 2 teaspoons salt
- 2½ cups buttermilk
- 1 tablespoon golden syrup (or honey)
- 4 teaspoons butter, melted

Mix the flours, soda and salt into a bowl. Make a well in the center and add the buttermilk, golden syrup and butter. Use a large spoon to mix gently, just until dry ingredients are incorporated. Shape into a round on a baking sheet that has been lined with waxed paper. Cut a cross in the top with a sharp knife. Bake at 400 degrees F for 40 minutes, until the top is slightly cracked and crusty. To check if done, tip the loaf and tap the base – it should sound hollow. Cool on a wire rack. *Serves 12*

Chris Daniels • Casey
Guthrie County Rural Electric Cooperative Association

Visit www.ieclmagazine.com and search our online archive of hundreds of recipes in various categories.



CRANBERRY BRAN BREAD

- 1½ cups bran flakes
- 2 cups flour*
- 1½ teaspoons baking powder
- ½ teaspoon soda
- ½ teaspoon salt
- 1 cup sugar
- ½ cup nuts, chopped
- 1 egg
- 2 tablespoons vegetable oil
- 1 cup plus 2 teaspoons orange juice, divided
- 1 cup cranberries, halved
- 2 cups powdered sugar

Mix bran flakes, flour, baking powder, soda, salt, sugar, nuts, egg, vegetable oil, 1 cup orange juice and cranberries. You can substitute cranberries for ½ cup cranberries and ½ cup pomegranates. Bake in a greased loaf pan at 250 degrees F for 1 hour or until done. Mix 2 teaspoons orange juice with powdered sugar and drizzle over baked loaf.

**An alternative to 2 cups white flour would be ¼ cup brown rice flour, ½ cup milled flax seed, ½ cup almond flour, ¼ cup soy flour and ½ cup Nestrum Honey and Wheat cereal.*

Betty Sorden • Webster
T.I.P. Rural Electric Cooperative

WANTED:

SPRING-INSPIRED RECIPES

THE REWARD:
\$25 FOR EVERY
ONE WE PUBLISH!

Deadline is Jan. 31

Submit recipes that use fresh, seasonal ingredients such as asparagus, spring greens, rhubarb and more! Please include your name, address, telephone number, co-op name, recipe category and number of servings on all submissions.



EMAIL: recipes@ieclmagazine.com
(Attach your recipe as a Word document or PDF to your email message.)

MAIL: Recipes
Iowa Electric Cooperative Living magazine
8525 Douglas Ave., Suite 48
Des Moines, IA 50322

IOWA'S ELECTRIC COOPERATIVES: ENSURING AFFORDABLE AND RELIABLE POWER

Editor's Note: This article in Part 2 of a two-part series showcasing the impact of Iowa's electric cooperatives throughout all the state's 99 counties.

Iowa's electric cooperatives have a rich history of local ownership and member-driven governance, playing a pivotal role in bringing electricity to rural communities.

In the 1920s, while urban areas had widespread access to electricity, approximately 90% of rural residents lived without it. This lack of electrification made farm life arduous, with no indoor plumbing, reliable refrigeration, or safe lighting and heating. Investor-owned utilities at the time deemed it unprofitable to extend power lines to sparsely populated rural areas.

Recognizing this disparity, President Franklin D. Roosevelt established the Rural Electrification Administration (REA) in 1935 through Executive Order 7037 as part of his New Deal initiatives. The following year, Congress passed the Rural Electrification Act of 1936, providing federal loans to support the installation of electrical distribution systems in rural regions.

These efforts enabled rural communities to form not-for-profit electric cooperatives, facilitating access to affordable and reliable electricity. By 1950, 80% of American farms had electricity, and by 1960, this figure rose to 99%.

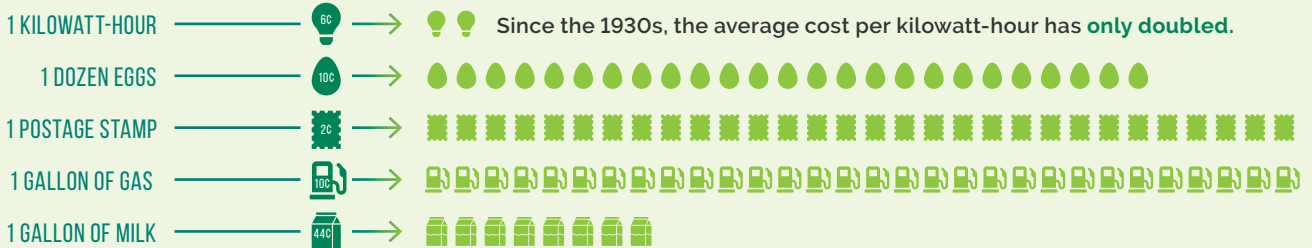
Doing more with less

Serving predominantly rural areas, Iowa's electric cooperatives manage extensive infrastructure with fewer customers per mile compared to investor-owned utilities. To address this challenge, co-ops structure rates to recover costs and collaborate with organizations like the Hawkeye Insurance Association and the Iowa Association of Electric Cooperatives to achieve economies of scale in supplies, insurance and technology solutions. This collaborative approach helps maintain affordability for members.

COST COMPARISON:

1930s

TODAY



In Iowa, the average household served by electric cooperatives spends about

\$5.25 PER DAY FOR ELECTRICITY

THAT'S CHEAPER THAN BUYING A SANDWICH OR SPECIALTY COFFEE DRINK!

The average household served by Iowa's electric cooperatives spends about \$5.25 per day on electricity, highlighting the cost-effectiveness of their services. Co-ops also offer energy efficiency programs, audits, rebates, and incentives to help members use energy wisely and reduce expenses. As member-owned entities, co-ops prioritize cost-based rates over profits, ensuring that financial decisions align with members' best interests.

Commitment to reliability

Ensuring reliable electricity is a top priority for Iowa's electric cooperatives. They conduct regular maintenance, infrastructure inspections and adhere to proactive vegetation management plans to minimize outages.

During the past 10 years, Iowa's electric cooperatives have kept the lights on 99.96% of the time despite

blizzards, ice storms, derechos, tornadoes or other extreme weather events. The average member served by an Iowa electric co-op experiences one outage per year, lasting approximately 138 minutes.

If a co-op does experience extensive outages, they work with neighboring co-ops for mutual aid to restore power to members as quickly and safely as possible.

During the past 10 years, Iowa's electric cooperatives have kept the lights on

99.96% OF THE TIME

DESPITE BLIZZARDS, ICE STORMS, TORNADOES, DERECHOS OR OTHER EXTREME WEATHER EVENTS.



Advocating for a balanced energy approach

A recent threat to reliability comes from misguided federal energy policy, which prioritizes intermittent sources of power like solar and wind over dispatchable sources like coal and natural gas.

Iowa's electric cooperatives believe in a diverse power generation strategy to ensure reliability. Our "all-of-the-above" generation portfolios include dispatchable sources of power because we can control the output and ramp up generation when needed to match sudden increases in electric demand.

Learn more about this issue at www.IARuralpower.org.

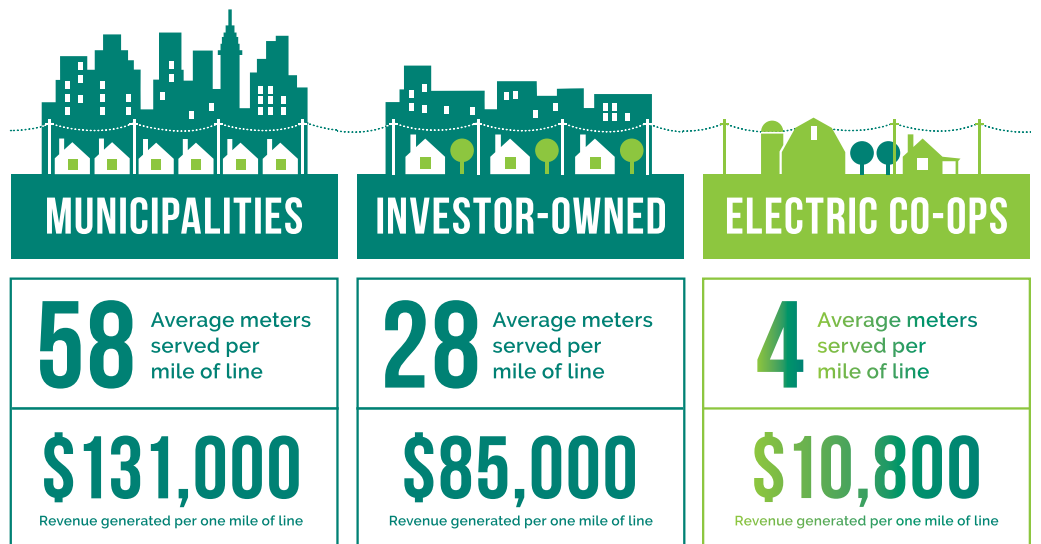
The average Iowa electric co-op member-owner experiences

1 OUTAGE

lasting an average of **138 MINUTES** PER YEAR

A legacy of service

From their inception, Iowa's electric cooperatives have been instrumental in transforming rural life by providing essential electric services. Their commitment to member-owners, focus on affordability, reliability and community collaboration continue to drive their mission, ensuring that the needs of rural Iowans are met with dedication and innovation.



SCHOLARSHIPS AVAILABLE

Wind Energy and Turbine Technology Program Scholarship administered by Iowa Lakes Community College

Committed to the communities it serves and to the production of renewable energy, Corn Belt Power Cooperative, power supplier to Raccoon Valley Electric Cooperative (RVEC), partners with Iowa Lakes Community College to offer a scholarship opportunity to students who study wind energy and turbine technology. Corn Belt Power is interested in maintaining a skilled and educated workforce that can install, maintain and service modern wind turbines.

Applicants must be enrolled in the Wind Energy and Turbine Technology program at Iowa Lakes Community College.

One \$500 scholarship will be awarded annually to an individual who has met the requirements set forth. Recipients may be either first- or second-year students but are eligible for only one scholarship. Each scholarship will be split equally between the first two semesters of enrollment after receiving the scholarship. Scholarship proceeds will be used for tuition, fees and books.

To be considered a candidate for the Corn Belt Power Cooperative Scholarship, applicants must meet the following criteria:

1. Achieve a high school grade point average of 2.5 on a 4.0 scale.
2. Accepted as a full-time student in the identified program at Iowa Lakes Community College.
3. Be an Iowa resident.
4. File scholarship application with Iowa Lakes Community College by April 1.
5. Maintain 2.5 minimum grade point average; eligibility shall be reviewed each semester.



The primary criteria for the award will be the candidate's potential for success and grade point average.

For more information, contact Iowa Lakes Community College, 800-242-5106, ext. 4491.

Electrical Technology, Powerline, Powerline Technology or Substation Technician Scholarships administered by Northwest Iowa Community College

Corn Belt Power Cooperative, power supplier to RVEC, is partnering with Northwest Iowa Community College in Sheldon, to offer scholarship opportunities. As a Touchstone Energy® Cooperative, Corn Belt Power is committed to the communities it serves and to maintaining a skilled and educated workforce to serve its members well into the future.

Applicants must be enrolled in one of the following technical programs at Northwest Iowa Community College: Electrical Technology, Powerline, Powerline Technology or Substation Technician.

Four separate \$500 scholarships will be awarded annually to individuals who have met the eligibility requirements. Recipients may be either first- or second-year students but are eligible for only one scholarship. Each scholarship will be split equally between the first two semesters of enrollment after receiving the scholarship. Scholarship proceeds may be used for tuition, fees and books.

To be considered a candidate for the Corn Belt Power Cooperative Scholarship, applicants must meet the following criteria:

1. Reside in a county served by a member cooperative of Corn Belt Power Cooperative.
2. Achieve a high school grade point average of 2.5 on a 4.0 scale.
3. Accepted as a full-time student in one of the identified programs at Northwest Iowa Community College.
4. File scholarship application with the Northwest Iowa Community College Foundation by March 1.
5. Maintain 2.5 minimum grade point average; eligibility shall be reviewed each semester.

All applicants are required to submit a letter of reference from a high school instructor, guidance counselor, current employer or manager of a member electric cooperative with their applications. This reference should address the applicant's potential for success in the program chosen for enrollment. The primary criteria for the award will be the candidate's potential for success and grade point average.

For an application form or more information, contact the Northwest Iowa Community College Foundation, 603 West Park Street, Sheldon, IA 51201-1046, 800-352-4907, ext. 246.

WINTER CAN CREATE ADDITIONAL HAZARDS FOR DRIVERS

Driving in the winter can create hazards, especially when sleet, ice or snow covers the roads. It is important to be prepared for a potential accident. Vehicle crashes always present danger, but when electricity is involved, decisions made in the moments after the accident are especially crucial.

According to the U.S. Department of Transportation Federal Highway Administration, 24% of weather-related vehicle crashes occur on snowy or icy pavement.

Follow these tips to stay safe on the roads this winter.

Before the winter storm

Prepare ahead for cold temperatures, snow and ice with seasonal maintenance on your car to ensure:

- Batteries are charged
- Tires have sufficient tread
- Spare tire is inflated
- Jumper cables are in good condition
- Windshield wipers work
- Headlights, brake lights and turn signals work
- Gas tank is at least half full

Create a car emergency kit

Keep an emergency kit in your vehicle, which should include:

- Blankets
- Flares
- Ice scraper
- Portable shovel
- Sand or kitty litter for traction
- First aid kit
- Phone charger
- Flashlight and extra batteries
- Warm hat
- Nonperishable snacks
- Bottled water

If you are stranded in your car

Observe the following precautions:

- Do not stay in one position for too long
- Stay awake
- Do not overexert yourself to avoid strain on your heart
- Watch for warning signs such as a change in skin color, numbness, shivering, slurred speech, loss of coordination or confusion

DOWNED POWER LINES

Downed power lines present a threat because they could still be energized when they are on the ground. Coming into contact with a downed line can be life threatening. Keep these safety tips in mind:

- 1 Slow down when driving in icy conditions, and always keep your eyes out for hazardous conditions or downed power lines. Also, watch for debris near down poles and lines, as it may be energized as well.
- 2 If you see a car in an accident with a power pole, your first instinct may be to rush toward the vehicle to offer help. Always remember to keep your distance from the vehicle and all electrical equipment that has been damaged. Instruct those in the car to stay inside until the power has been shut off.
- 3 If a power line falls on your vehicle, and you must exit the vehicle because it is on fire, jump clear of it with your feet together and without touching the vehicle and ground at the same time. Keeping your feet together, shuffle or “bunny hop” to safety. Doing this will ensure that you will not have different strengths of electric current running from one foot to another.
- 4 Keep in mind that a downed line does not need to be sparking to be energized. It is best to assume that all low and downed lines are energized and dangerous.
- 5 Never drive over a downed line because that could pull down a pole or other equipment, causing additional hazards.
- 6 If you see a downed line, do not get out of your car. The safest place is inside your vehicle. Contact 911 to notify the utility immediately.



UTILITY-SCALE VS. RESIDENTIAL BATTERY STORAGE

BY JENNAH DENNEY

In an ever-changing energy landscape, electric cooperatives are on the cutting edge of delivering reliable, resilient power to the local communities they serve. Co-ops utilize a variety of generation and grid technologies to provide power, including battery energy storage – but not all battery storage systems are the same, and understanding the key differences between each is important. It's also important to recognize that the technology and cost-effectiveness of battery storage options are still being developed.

Utility-scale battery systems are designed for large-scale energy storage to support the electric grid, requiring high initial investments but offering significant long-term savings and benefits. In contrast, residential battery systems cater to individual homes, providing more energy independence and savings while still representing a significant investment.

Utility-scale battery storage

Utility-scale storage systems are large installations designed to store vast amounts of electricity. Typically connected to the grid, these systems can store power generated from both baseload and renewable energy sources, with capacities ranging from several megawatt-hours (MWh) to gigawatt-hours (GWh).

While most battery storage system projects are developed with a primary application in mind, they can also be optimized for multiple applications, which adds significant additional value.

Utility-scale storage systems could play a crucial role in grid stabilization by absorbing excess energy during periods of low electricity demand and releasing it during peak demand, which is particularly



Often paired with residential solar panels, residential battery storage systems allow homeowners to store excess energy generated during the day for use later at night or during power outages. *Photo Source: LG*



Utility-scale battery systems are designed for large-scale energy storage to support the electric grid, requiring high initial investments but offering significant long-term savings and benefits. *Photo Source: Trico*

beneficial in rural areas where demand can fluctuate significantly.

Electric cooperatives can also deploy utility-scale storage systems at electric substations to enhance grid resilience and ensure a steady supply of electricity as needed. In the event of a power outage, utility-scale storage systems can provide backup power to critical infrastructure, such as hospitals and emergency services.

Residential battery storage

Residential battery storage systems are compact installations designed for individual homes, typically ranging from a few kilowatt-hours (kWh) to tens of kWh in capacity. Often paired with residential solar panels, these smaller systems allow homeowners to store excess energy generated during the day for use later at night or during power outages, providing a level of energy independence.

By utilizing stored energy, homeowners can reduce their energy bills and ensure a steady supply of power, even during grid disruptions and outages, enhancing the resilience of rural households. However, the initial cost of purchasing and

installing a residential storage system can be expensive, which may deter some homeowners.

Electric co-ops are increasingly recognizing the benefits of residential battery storage. These systems not only support grid stability and resilience but also help reduce costs for co-ops and their members. Some co-ops offer energy storage programs and rates, which means homeowners can contribute to a more efficient and reliable energy system. This benefits the entire community.

As electric co-ops navigate the complexities of modern energy supply and battery storage continues to evolve, the strategic deployment of both utility-scale and residential battery energy storage systems can potentially play a transformative role.

By understanding the unique advantages and challenges of each type of system, co-ops and their members can make informed decisions that enhance grid reliability, reduce costs and improve resilience for their communities.

Jennah Denney writes on consumer and cooperative affairs for the National Rural Electric Cooperative Association.

FINDING BEAUTY IN THE BROKEN

BY DARCY DOUGHERTY MAULSBY

Time is a funny thing, isn't it? We spend time. We kill time. We lose track of time. We invest time. And yet time keeps passing – something we're keenly aware of at the start of each new year.

Now's the time when many people resolve to start fresh, leaving the past behind. Just think of all the New Year's resolutions that abound. I'm going to eat healthier! I'm going to exercise more! I'm going to spend less time on social media! I'm going to save more money! (Do any of these sound familiar?)

Yet how many of these big goals become big accomplishments? It depends on who you ask. According to the Baylor College of Medicine, 88% of people who set New Year's resolutions fail them within the first two weeks. (Been there, done that.) Psychology articles in magazines like *TIME* and *Forbes* state that only 8% of people stick with their resolutions the entire year.

Maybe we need a different perspective to make the most of the year ahead. Perhaps we all could use fewer resolutions and a little more kintsugi. What's that, you ask? This remarkable Japanese art form finds beauty in the broken. While it dates back hundreds of years, it's a compelling metaphor for modern life.

Kintsugi is built on the idea that in embracing flaws and imperfections, you can create an even stronger, more exquisite piece of art. In kintsugi, the artist fixes broken pottery with gold. Instead of repairing the item like new, this technique highlights the "scars" as a part of the design.

From broken bowls to books

This concept captured my attention during a "Come to the Quiet" retreat at the Woodlawn Christian Church in Lake City in March 2024. Lorene Knobbe, a Lake City native who lives in Davenport, displayed

a gorgeous kintsugi bowl to help us visualize one of the lessons.

Lorene, a retired elementary school teacher, now provides spiritual direction through her ties to the Benet House Retreat Center at St. Mary Monastery in Rock Island, Illinois. She serves as a facilitator for church retreats and similar events.

As she held her kintsugi bowl on that cold winter afternoon in Lake City, she encouraged everyone to think of your life as a book with chapters and stories. Some of your chapters are filled with fun, exciting stories. Other chapters are dark and painful. None of the chapters can ever be erased, though. All of them will always be part of you – just like the cracks in the kintsugi bowl.

That isn't necessarily comforting, especially if you're struggling to reach New Year's resolutions, or you're overwhelmed by a trauma-shattered life.

The good news? You don't need to try to hide the cracks as you put the pieces back together. Instead, highlight those repaired seams, which add strength, beauty and immeasurable value.

Reframing life's experiences

Kintsugi isn't just for broken pottery or shattered ceramics. Kintsugi can be found in people whose bodies are injured or failing. While these folks can't do what they once did, their spirit can become more beautiful, helping the rest of us see the divine more clearly.

Kintsugi is also reflected in people who have learned to "rewire" their brain to focus on the positive instead of the negative. These amazing souls routinely express gratitude, knowing that there's always something to be thankful for.

The chapters of these authentic life stories are filled with resilience and hope. They can also inspire the most practical resolution for the year ahead – embrace the principles of kintsugi. What a powerful way to reframe life's experiences and write new chapters in our story, all by finding beauty in the broken.

Darcy Dougherty Maulsby lives near her family's Century Farm northwest of Lake City. Visit her at www.darcymaulsby.com.



A kintsugi bowl that was shared during the "Come to the Quiet" retreat in Lake City.



IOWA ELECTRIC COOPERATIVE LIVING

The magazine
for members of
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Visit our website at www.rvec.coop

A photograph of a woman and two young girls sitting on a couch in a dimly lit room, likely a living room or theater. They are all smiling and looking towards the right side of the frame, presumably towards a television screen. The woman is in the background, wearing a red and black plaid shirt and holding a large pink bowl of popcorn. The two girls are in the foreground, also smiling and looking up. The girl in the foreground is holding a white bowl of popcorn. The overall atmosphere is warm and happy.

POWERING LIFE'S BEST MOMENTS

It's good to know your Touchstone Energy® cooperative is always there so you can keep doing all the things that are important to you. Our commitment is to give you the energy you need to enjoy life's moments.

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