Grundy County REC
A Touchstone Energy® Cooperative
"Our mission is to provide our members safe, reliable, electric service"

MARCH 2022

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ELECTRIC COOPERATIVE LIVING

Advanced metering system selected

Harnessing the power of battery storage

Favorite fish recipes

Learn about serving on GCREC's board ▶ See Pages 4-5

CONTENTS

VOLUME 75 • ISSUE 3

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Iowa Association of Electric Cooperatives
A Touchstone Energy® Cooperative

ON THE COVER Special thanks to Jim Hirschberg, a Calhoun County Electric Cooperative Association member-consumer, for supplying this month's cover image. Submit high-resolution photos for consideration to editor@ieclmagazine.com. You could win $100!

COOPERATIVE MODEL HELPS SUPPLY CHAIN

BY MATT BRANDRUP

The equipment needed to power our homes, farms and businesses is an afterthought for some. We simply flip a switch or press a button, and we have power. We don't think of the power grid and labor needed to deliver electricity. And without the necessary materials to ensure power delivery, routine maintenance, emergency work (especially during storm seasons) and new utility-related projects could come to a standstill.

An adequate inventory of power cable, transformers, utility pole hardware and other products is vital, especially in times of supply chain disruptions and inflationary challenges. That's why 37 electric cooperatives in Iowa are members of the Rural Electric Supply Cooperative (RESCO) to ensure equipment and materials are readily available, regardless of the circumstances.

Delivering wholesale equipment and materials for generations

Founded in 1936 in response to the challenge rural electric cooperatives faced in acquiring equipment and materials, RESCO is a member-owned, not-for-profit electrical wholesaling organization. Its members are rural electric cooperatives in the Upper Midwest, extending from Michigan to Montana, including Iowa.

RESCO operates under a not-for-profit membership model, like the cooperatives it serves. This model enables RESCO to work with its manufacturer partners to deliver extremely competitive prices, which in turn allows its cooperative members to stay within their expense budgets and, ultimately, pass these savings to their own members. And just like electric cooperatives, any "profits" RESCO makes are returned to members in the form of patronage credits.

In addition to cost savings, RESCO's cooperative model helps ensure that electrical equipment damaged during storms and other weather-related emergencies is addressed and repaired in a timely manner. RESCO operates a warehouse in Ankeny for quick distribution of products and materials, 24/7.

Addressing the impact of supply chain disruptions and inflation

No industry has been immune to the disruptions caused by ongoing supply chain issues. For electric cooperatives, the impact could delay the start of new projects or postpone scheduled maintenance. High inflation rates have also contributed to operational challenges, stretching budgets and potentially requiring cooperatives to pass some of these increases on to their members.

Fortunately, RESCO is effectively managing these challenges by carrying a record amount of inventory. This gives members the peace of mind that their product needs will be met.

In addition to its inventory reserves, RESCO is also helping members stay within their purchasing budgets by maintaining product pricing, thanks to its not-for-profit cooperative model. When demand increases, for-profit companies typically increase their pricing to maximize margins. RESCO does not. This, along with the availability of many necessary products housed in its warehouses, is enabling RESCO and its cooperative members in Iowa to weather the storm, so to speak, of logistical challenges in the electric utility sector.

What goes on behind the scenes is what keeps the lights on. RESCO's membership model helps cooperatives ensure reliability, along with savings passed on to their own members.

Matt Brandrup is president and CEO of Rural Electric Supply Cooperative (RESCO), a member-owned and not-for-profit distribution and transmission material supply distributor serving electric cooperatives and public power districts in 11 states in the Upper Midwest and Northern Plains.

EDITOR'S CHOICE CONTEST

Win a NutriBullet Pro Plus Personal Blender

This compact yet powerful personal blender has a 1200-watt motor and specialized blades to effortlessly pulverize and puree ingredients with the push of a button. It's an easy way to make shakes and smoothies!

Visit our website and win!

Enter this month's contest by visiting www.ieclmagazine.com no later than March 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 Fitbit Versa 2 from the January issue was Jeremiah Manken, Consumers Energy.

ARE YOU READY TO SERVE?

BY MICHAEL GEERDES

In one of the most notable inaugural speeches given, John F. Kennedy spoke his famous words, "Ask not what your country can do for you, ask what you can do for your country." His inspiring message urged Americans to take actions that benefited the greater good. In essence, President Kennedy was saying our country thrives when we all contribute our talents to the common good.

On a smaller scale, I think the same can be said about our co-op, specifically our board members. Grundy County REC's board members are community-minded individuals with a variety of skill sets. Our board is made up of farmers and business owners, representatives of agricultural businesses and interests, and some who serve on a variety of boards. We rely on their talents and experiences to help us make informed decisions on long-term priorities and investments. Our directors live right here in Grundy County REC's service area, and we consider them the eyes and ears of the community because they provide their perspective on important local issues.

We recognize it takes many people with different skills to create a well-rounded board that can represent the full spectrum of our community. That's why when we're seeking new directors, we want folks with diverse perspectives, experience, expertise and views. We're seeking local members of our community who can apply their unique talents to benefit all our friends and neighbors. But above all else, we're looking for people who love our community and want to see it thrive now and in the future.

What does it mean to serve on the board?

Serving on Grundy County REC's board means you're making a difference locally, using your individual talents and perspective to guide big decisions about the co-op that in turn benefit the larger community. While day-to-day decisions are made by co-op staff, major decisions are made by the board, whose mission is to look out for the vitality of the co-op and the community it serves. On a granular level, our board members typically provide input and guidance on:

- Budgets
- Co-op goals and direction
- Co-op's community and charitable contributions
- Capital investments and upgrades in equipment and technology
- Renewable investments and energy mix

Grundy County REC
A Touchstone Energy® Cooperative
"Our mission is to provide our members safe, reliable, electric service"

Office: Grundy County REC
303 N Park Avenue • P.O. Box 39
Grundy Center, IA 50638

Phone: 319-824-5251 or 1-800-390-7605

Fax: 319-824-3118

Call Before You Dig (Iowa One Call):
800-292-8989

Website: www.grundycountyrecia.com

Facebook: facebook.com/GrundyCountyREC

Email: mgeerdes@grundycountyrecia.org

Office Hours: Monday-Friday, 8 a.m.-4:30 p.m.
Call our office 24/7: 319-824-5251

General Manager: Michael Geerdes

Officers and Directors:
District 1: Kevin Pruisner
District 2: Norbert Boyle
District 3: Nick Strohbehn
District 4: Larry Rohach
District 5: Matt Kopriva
District 6: David Schmidt
District 7: Jason Paper

NATIONAL AG DAY

Grundy County REC recognizes and celebrates the abundance American agriculture provides. We appreciate all those who keep us fed and often work in challenging conditions!

PERFECT TIME TO CHECK SMOKE DETECTORS

Daylight saving time begins Sunday, March 13. In addition to moving your clocks ahead, this is a great reminder to check the batteries in your smoke and carbon monoxide detectors!

- Co-op's role and involvement in economic development

In addition, Grundy County REC board members also represent our co-op and industry organizations at meetings, both state and nationwide.

The energy industry is undergoing a major transition. Technology advancements and increased consumer preference for more renewable energy are driving change. Grundy County REC is facing big decisions, and board members have an opportunity to help chart a course for our future. To serve the community best, we need input from a wide range of people that represent the broad spectrum of views within our community.

Opportunity to serve

Grundy County REC's board elections will be held in September. Additional information regarding qualification requirements, deadlines and other relevant information will be shared over the next few months. District seats up for election in 2022 are:

- **District 1** – Currently filled by Kevin Pruisner
- **District 5** – Currently filled by Matt Kopriva
- **District 7** – Currently filled by Jason Paper

The nominating committee for these districts will be named after the March 24 board meeting and published on the cooperative's Facebook page and website.

While you don't need to be an expert in electricity or business to run, you do need a passion for the community and a willingness to actively serve and learn. We're looking for individuals who can represent the full gamut of the members we serve. Our board meets on a regular basis, and we offer specialized training opportunities to help board members make informed decisions. Board members gain a deeper understanding of the electric utility industry, the cooperative business model and local economic development efforts.

Ultimately, our board is the community pulse for the co-op and helps keep us on the right track. We love our community and want to help it thrive. If you share the same commitment and want to contribute to the greater good in a tangible way, I hope you'll consider running for a board position.

To learn more about Grundy County REC's director election process and 2022 details, please contact Allyson Miller at amiller@grundycountyrecia.org.
See Page 12 for official details.

Michael Geerdes is the general manager for Grundy County REC.

ANNOUNCEMENT

NEW ADVANCED METERING SYSTEM SELECTED

BY MICHAEL GEERDES

It's no secret that technology is constantly growing and advancing faster than ever before. For example, think back all the way to 2009. What were televisions like back then? What kind of cell phone did you have in 2009, if you had one? How far has agricultural equipment come from that time? The energy sector is not immune to rapid technological developments either.

Benefits in reliability and information

Advancements in metering technology since our current system was installed 12 years ago are nothing short of amazing. New systems can now narrow down outages to a specific meter, which helps with reliability and restoring power more efficiently. They can also provide incredible amounts of data and information to help us know where equipment upgrades are needed. Equipment upgrades help with improved power quality, efficiency and reliability.

With a new advanced system comes more information for you, the member. We are currently working with our billing software company so your individual usage will be available to you 24/7 year-round. This usage will be reported on every hour of every day so it's easier to pinpoint when a spike or dip may have occurred.

Your board of directors recently selected a new advanced metering system because of the benefits mentioned above and a lack of technology support for our current metering system. This system will be supplied by Tantalus with a deployment date scheduled for this summer.

More information will be provided as we move closer to summer, but if you have questions in the meantime, please contact us at 319-824-5251.

Michael Geerdes is the general manager for Grundy County REC.

GET TO KNOW YOUR NEW STATEWIDE DIRECTORS

BY ANN THELEN

Just like at your local electric cooperative, board directors help guide the Iowa Association of Electric Cooperative's (IAEC) decision-making and represent the needs of the member cooperatives in their respective districts.

At the IAEC's recent annual meeting, three new directors were seated following a nomination and election process. Learn more about each director, and discover their vision for helping to serve the interests of Iowa's electric cooperative member-consumers at the state level.

Tony Lem | District 2

Occupation: Farms outside of Slater

Education: Ag systems technology at Iowa State University; diesel technology at Des Moines Area Community College

Family: Wife Ashlea; Daughters Avery and Molly

Activities: Restoring and operating antique Caterpillar machinery, volunteering with the Boone & Scenic Valley Railroad steam crew, and spending time with family and friends. Member of Salem Church in Alleman and Heartland Co-op's young leaders' program.

Electric co-op experience: Consumers Energy (Marshalltown) board for four years.

What do you appreciate most about the cooperative business model?
I appreciate that electric cooperatives are owned and led by the members we serve, rather than shareholders who don't understand the local needs of the communities we serve. Electric cooperatives have a genuine interest in the long-term success of the people and businesses we serve.

Why did you want to become a director for IAEC?
I want to be a voice for members of Iowa's rural electric cooperatives (RECs). It is an important opportunity to ensure we are participating in the debate within the halls of state and federal government – especially when energy policy is being decided.

What energy issues are the biggest concerns for electric cooperatives?
Our biggest challenge will be adapting the grid to meet the energy demands of the future. I believe it is essential to use a balance of generation methods for a reliable baseload while using carbon-free energy generation as much as possible without sacrificing reliability or affordability for the member-consumers we serve.

What future opportunities are you most excited about for Iowa's electric cooperatives?
Electrification has amazing potential to create new growth for RECs that hasn't been possible since the first wires were strung across our state.

Deena Moore | District 4

Occupation: Paralegal for Engel & Maharry, PLC, in Corning

Education: University of Iowa

Family: Husband Corey; Daughters Mikayla, Kennedy and Joslynn

Activities: Camping, horseback riding, kayaking, learning to golf, performing in the local theatre and cheering on the Iowa Hawkeyes. Member of Corning United Methodist Church and the Adams Community Events Committee.

Electric co-op experience: Southwest Iowa Rural Electric Cooperative (Corning) board for seven years.

What do you appreciate most about the cooperative business model?
The attitude of always looking out for other members in our co-op. We are conscious of keeping rates and fees fair for everyone. Further, that collaborative attitude filters out into the community through grants, low-rate loans and economic development.

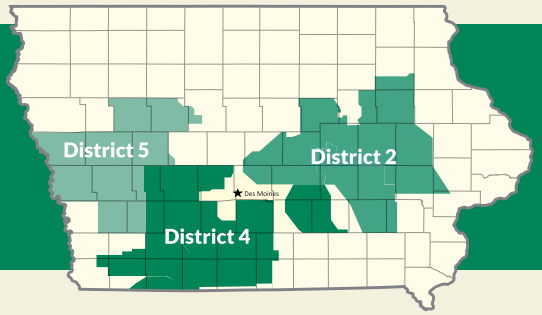
Why did you want to become a director for IAEC?
I have worked hard to educate myself as a cooperative leader, earning my credentialed cooperative director designation, so I wanted to continue doing something positive that will benefit many members.

What energy issues are the biggest concerns for electric cooperatives?
My local co-op serves an area where membership per mile is decreasing, so adding urban development to our load would be beneficial. We are also seeing rising costs of materials needed to provide reliable and safe electric service.

What energy issues are the biggest concerns for electric cooperatives?
Cybersecurity is a top concern for every industry as well as government regulations and decisions made at the statehouse. We want to ensure we have a strong voice as legislators make decisions that impact Iowa's residents.

What future opportunities are you most excited about for Iowa's electric cooperatives?
Like all energy providers, we are being challenged to diversify our energy portfolio. Change always offers new opportunities to think outside the box without losing sight of our core mission of providing safe, reliable and affordable electric service.

Learn more about IAEC's board of directors at www.iowarec.org/who-we-are/districts-and-board.



Jim Miller | District 5

Occupation: Retired from farming outside of Fonda

Education: Morningside College

Family: Wife Rae; Children Benjamin (in heaven), Kendra and Timothy

Activities: Golfing, cheering on the Iowa Hawkeyes, refereeing basketball games and attending Civic Center shows. Member of Our Lady of Good Counsel Church in Fonda and various local Knights of Columbus councils.

Electric co-op experience: Calhoun County Electric Cooperative Association (Rockwell City) for 14 years.

What do you appreciate most about the cooperative business model?
Being democratically controlled and the philosophy of cooperation among co-ops. We have a quote in the co-op board room that reads, "Every decision I make shall be based on what is best for the member-owners of this cooperative." I keep this in mind as we do local and state-level work.

Why did you want to become a director for IAEC?
To learn about the electricity industry on a broader scale and bring the voice of smaller cooperatives to the table. I have earned my credentialed cooperative director designation and board leadership certificate, and I think these milestones prepared me to support state efforts.

What energy issues are the biggest concerns for electric cooperatives?
The top focus for me is cybersecurity. I am also concerned about climate change and feel strongly that we can move toward more renewable energy. Still, we also must have a portfolio that includes all types of electric generation.

What future opportunities are you most excited about for Iowa's electric cooperatives?
With the rise in electric vehicle popularity, I would like to see co-ops involved in building and supporting charging stations throughout Iowa.

Ann Thelen is the editor of Iowa Electric Cooperative Living.

Favorite FISH RECIPES

30-MINUTE AMAZING GRILLED FISH TACOS

- 1 pound lean white fish (e.g., tilapia, halibut, mahi mahi, snapper, cod)
- salt and fresh ground pepper
- 2 tablespoons vegetable or canola oil
- 2 small limes, divided
- 1 clove garlic
- 1½ teaspoons chili powder
- 1 teaspoon cumin
- ½ teaspoon paprika
- ½ cup sour cream
- ⅓ cup mayonnaise
- ½ teaspoon garlic powder
- ½ teaspoon cumin
- ¼ teaspoon salt
- 1 teaspoon sriracha hot sauce, to taste
- 8 white corn tortillas
- Optional toppings: pico de gallo, shredded cheese, shredded cabbage, fresh cilantro, lime wedges, red onion, hot sauce

Season fish with salt and pepper. In a mixing bowl, combine oil, juice from one lime, garlic, chili powder, cumin and paprika. Add fish to large zip-top bag and pour marinade over fish. Seal bag and allow to marinate for 20-30 minutes. Combine sour cream, mayonnaise, juice from one lime, garlic powder, cumin, salt and hot sauce. Preheat grill to medium-high heat. Brush grill grates with oil and grill fish for 3-4 minutes on each side. Flip only once (cook time will depend on thickness of fish). Transfer fish to a plate and allow to rest for a few minutes before gently breaking into pieces. Serve on warm tortillas, topped with taco sauce and desired toppings. *Serves 4*

Erik Folkmann • Marengo
T.I.P. Rural Electric Cooperative

SALMON PATTIES

- 1 16-ounce can salmon
- 1 tablespoon lemon juice
- cold water, as needed
- ½ yellow onion, finely chopped
- ¼ cup celery, chopped
- 1 tablespoon green bell pepper, finely chopped
- 2 large eggs, lightly beaten
- ⅓ cup bread crumbs or cracker crumbs
- 2 tablespoons all-purpose flour
- pinch black pepper
- 1 tablespoon vegetable oil

Drain salmon and save liquid into a measuring cup. Add lemon juice and enough cold water to reach ½ cup liquid total. Set aside. In a large bowl, combine salmon, onion, celery and green pepper. Add eggs and mix, then add bread crumbs, flour and pepper. Add liquid and stir well. Shape ⅓ cup salmon mixture into a ½-inch thick patty. Repeat until you have six patties. Heat oil in a large non-stick skillet over medium heat, add three patties. Cook 2-3 minutes, until golden brown on both sides. Repeat with the next three patties. Serve immediately. If desired, top with lettuce, red onions and sprouts. Serve with pineapple. *Serves 6*

Nancy Bowman • Coon Rapids
Raccoon Valley Electric Cooperative

BAKED SALMON

- 2 eggs
- 1 cup thin cream or half and half
- 1 can salmon
- 1 cup cracker crumbs
- ½ teaspoon salt
- ¼ teaspoon celery seed
- 1 tablespoon grated onion
- black pepper, to taste
- butter

Beat eggs until light, then add cream. Remove bones and skin from salmon, add to eggs. Add remaining ingredients. Place in buttered casserole dish. Bake at 350 degrees F for 30-35 minutes or until nicely browned on top. *Serves 4-6*

Janice Schneidermann • Little Rock
Lyon Rural Electric Cooperative

SPICY BROILED FISH

- 6 fish fillets (8-10 ounces)
- 1 tablespoon Cajun spice
- 2 teaspoons paprika
- ¼ teaspoon red pepper
- 6 tablespoons butter or margarine, melted
- ⅓ cup lemon juice
- 1 teaspoon dried parsley flakes

Place fish fillets in two lightly greased 13x9-inch baking dishes. Sprinkle Cajun spice, paprika and red pepper over fish. Brush fish with butter, sprinkle lemon juice and top with parsley. Broil 10-12 minutes or until fish flakes easily when tested with a fork. *Serves 6*

Annalee Buffington • Marshalltown
Consumers Energy

HOMEMADE FISH CHOWDER

- 1 pound boneless fish (any type)
- 2 tablespoons margarine or cooking oil
- 1 medium onion, sliced
- ½ cup celery, diced
- 2 cups raw potatoes, diced
- ½ cup carrots, sliced
- 2 cups boiling water
- 1 teaspoon salt
- ½ teaspoon pepper
- 1 cup milk

Cut fish into bite-sized pieces. Melt margarine in a large saucepan. Cook onion and celery until onion is tender and translucent. Add potatoes, carrots, water, salt and pepper. Cover and simmer for 10-15 minutes until vegetables are tender. Add fish and cook 10 minutes longer. Add milk. Reheat, but do not boil. Serve hot with freshly baked homemade bread or rolls and butter. *Serves 4*

Dave Duit • Nevada • Consumers Energy

CRAB PASTA SALAD

- 1 16-ounce package pasta
- 2-3 cups mayonnaise
- salt and pepper, to taste
- 8 green onions, sliced
- 1 bell pepper, diced
- ¾ cup celery, diced
- 3-4 hard-boiled eggs, chopped
- green stuffed olives
- 1½ pounds imitation crab, flaked

Cook and drain pasta. Mix mayonnaise, salt and pepper. Toss with pasta and remaining ingredients. Chill until ready to serve. *Serves 12*

Hana Hartter • Rock Rapids
Lyon Rural Electric Cooperative

FAVORITE BAKED FISH

- filleted white fish, any kind
- 1 can cream of shrimp soup
- milk
- 1 can small shrimp
- buttered bread crumbs
- butter

Butter a flat 9x13-inch baking dish. Place fish fillets in prepared dish. Thin soup with milk and pour over fish. Drain and rinse shrimp, then add on top of fish. Cover lightly with bread crumbs. Bake at 375 degrees F for 30 minutes. *Serves 4-6*

Jane Person • Batavia
Access Energy Cooperative

WANTED:

ON THE GRILL RECIPES

THE REWARD:

$25 FOR EVERY ONE WE PUBLISH!

Deadline is March 31
Please include your name, address, telephone number, co-op name and the recipe category on all submissions. **Also provide the number of servings per recipe.**

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

MAIL: **Recipes**
Iowa Electric Cooperative Living • 8525 Douglas Ave., Suite 48, Des Moines, IA 50322-2992

HARNESSING THE POWER OF BATTERY STORAGE

BY ANN THELEN

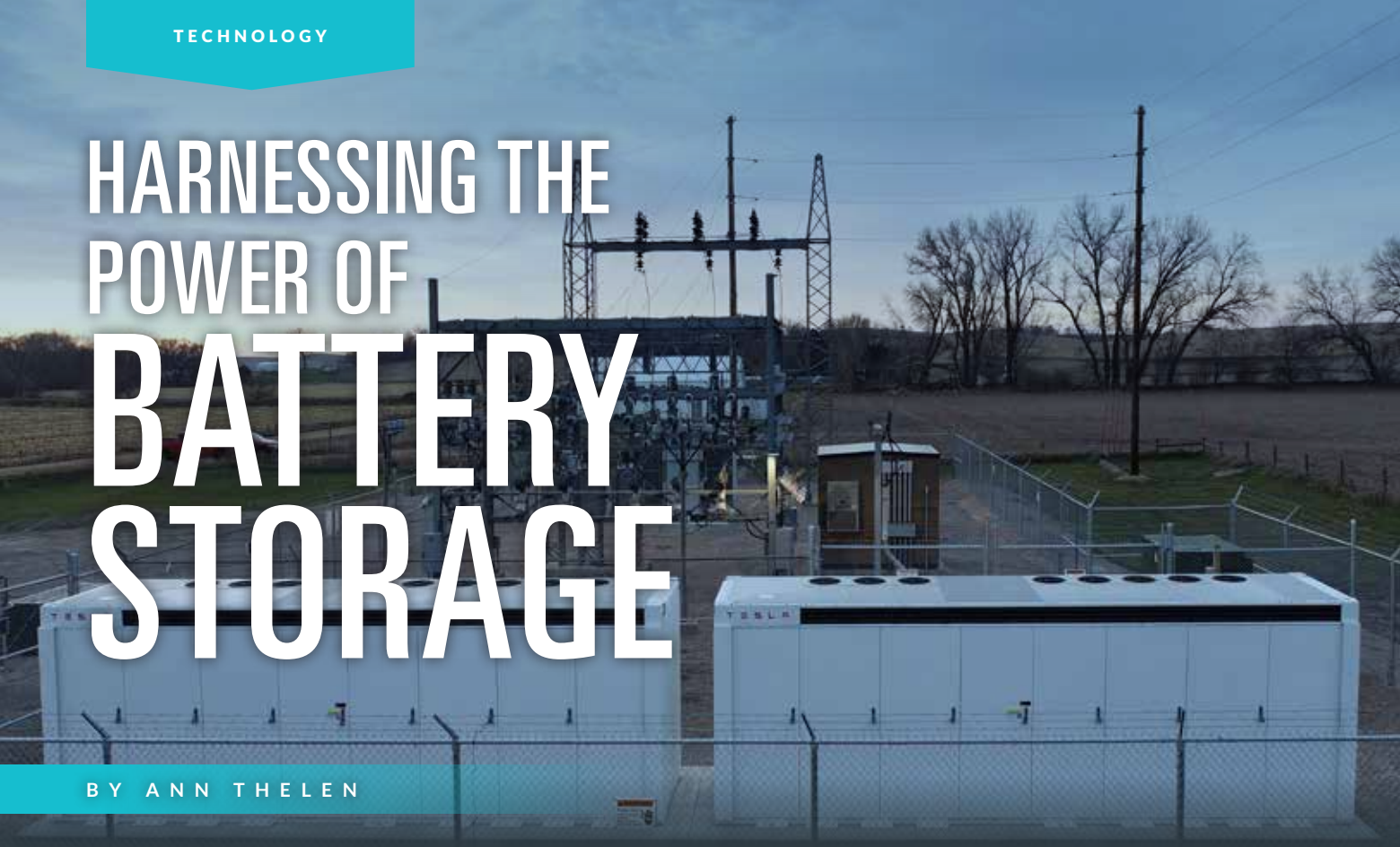


Photo: Kristi Travis, Harrison County REC

Most of us use batteries in some form to help power our lives every day. In simple terms, a battery converts stored chemical energy into electrical energy. From flashlights and toys to cellphones and vehicles, batteries have become a necessary part of our world.

While batteries have been around for centuries, advances in battery storage technology are sparking new ideas on how to power homes, electric substations or entire power grids more efficiently. Modern batteries can store excess energy produced by generators when demand is low, then seamlessly export the stored power during times of peak demand or weather-related power disruptions.

While the efficiency, cost-effectiveness and consumer applicability of battery storage solutions have a way to go for significant deployment, Iowa's electric cooperatives are studying more about the ongoing advances in storage technology.

Iowa co-ops explore potential battery storage solutions

From assessing residential batteries to coordinating large-scale substation battery storage, electric cooperatives across Iowa are exploring various innovative battery storage technologies. Many projects deepen understanding of electric storage technology and how it can benefit member-consumers.

"It's an opportunity to embrace the future," says Brian Krambeer, president and CEO of MiEnergy Cooperative. "We need to be educated about batteries and ready to provide this information and research to our member-consumers."

With ongoing research, development and investment, battery storage technology can innovatively deliver safe, reliable, affordable and environmentally responsible energy. Today's investment in model and scale-up projects has the potential to serve cooperative member-consumers far into the future.

Studying residential battery storage

MiEnergy Cooperative, which serves 18,000 members in northeast Iowa and southeastern Minnesota, launched a trial residential battery storage program in November 2018. In partnership with the National Rural Electric Cooperative Association (NRECA), the 5-to-10-year study is designed to gain insight into residential battery technology opportunities and limitations.

"We chose to study residential batteries because we have 700 members that have installed distributed generation at their homes and farms," Krambeer says. "It's given us the momentum we needed to make sure we're educated on the next round of technology our members may be considering."

The study included residential sites across four participating cooperatives, including six MiEnergy Cooperative member-consumers. It was funded in part by a grant from the Iowa Economic Development Authority. The team at MiEnergy reports the following high-level findings:

- The batteries (16kWh and 10kWh) worked seamlessly as advertised but were cost-prohibitive to the average user at the time ($19,672 to $14,522 plus installation costs).
- Units cover about 20% of a home's energy use and can fluctuate depending on the owner's power use, varying from 263 to 1,030 kWh per month.

- There is about a 30% efficiency loss, potentially due to daily storage loss and the inverter conversion from AC to DC.
- There are limiting factors for residential applications. Homes need an internet connection, a conditioned storage space with temperatures ranging from 41 to 113 degrees F, and adequate ventilation and spacing for the unit.

"With the numbers, we are looking at a payback in about 35 years," Krambeer says. "I don't think anyone is running out right now for that kind of payback, but this is a test – it's education and an investment for the future, especially as battery costs come down."

This is an example of how MiEnergy is proactively looking for new opportunities to control costs, enhance service and exceed member expectations. In part because of this program, the cooperative was awarded a 2021 Electric Cooperative Purpose Award at NRECA's PowerXchange conference.

Coordinating resources for substation battery storage

Northwest Iowa Power Cooperative (NIPCO), which supplies wholesale electric power to seven distribution cooperatives in western Iowa, recently completed a battery storage project at one of its substations.

The project was made possible in part through a Trial Battery Rate offered by Basin Electric Power Cooperative, the generation and transmission cooperative that provides power to NIPCO. The rate allocated up to 150 kWh per Basin Electric member cooperative, and NIPCO engineers developed a plan to pool and optimize this allocation across its membership.

"This approach was a perfect example of better serving member-consumers through the co-op principle of cooperation among cooperatives. Our coordination with Basin Electric and member cooperatives made this project possible," says Matt Washburn, executive vice president and general manager of NIPCO.

NIPCO integrated a 950 kWh Tesla Mega Pack battery storage unit at its Lawton substation in December 2021. Stored power from the battery will replace almost 1 MW of power (enough to power 100 homes) for up to six hours during scheduled load control cycles. While this is only 1% of NIPCO's total energy load, it's an opportunity to study how the technology could be further incorporated while maintaining a reliable, economical power supply for member-consumers.

"We see this as a research and development project," Washburn says. "We want to see firsthand how batteries work operationally and financially."

NIPCO plans to share ongoing performance data with its membership to highlight the battery's ability to flatten demand curves, reduce power costs and use existing generating resources more efficiently.

Ann Thelen is the editor of Iowa Electric Cooperative Living.

HOW BATTERY STORAGE WORKS

Battery storage systems recharge during off-peak times when energy use and power rates are lower. They can then discharge to provide on-demand energy for emergency power or during peak demand times, helping in the long-term to manage energy usage and lower member-consumer rates.

THREE WAYS YOU BENEFIT FROM BATTERY STORAGE

01

COST SAVINGS

Power can cost more for electric cooperatives to purchase during peak times of energy use (such as summer months or dinner time when appliances are running). Batteries can help reduce this peak demand by discharging stored energy to help power the electric grid. Then, when energy costs are lower (like the middle of the night), batteries can recharge and store lower-cost power. Load management, or managing peak energy costs, is one of the best ways cooperatives can save member-consumers money.

02

EXTRA RELIABILITY

If a large power outage occurs on a transmission line, stored battery energy can kick on to power homes or businesses while the issue is repaired.

03

PREPARING FOR THE FUTURE

With the uncertainty of extreme weather events and changing state and federal energy policies, battery energy storage can help reduce some uncertainty. As battery storage technology evolves, it can potentially help take the unpredictability out of intermittent wind or solar energy generation, improve grid resiliency and reduce energy consumption.

ARTICLES OF INCORPORATION: ELECTION PROCESS

SECTION 2.

(a) The territory served or to be served by the Cooperative shall be divided into seven (7) districts, each of which shall contain as nearly as possible the same number of members and shall be composed of one or more contiguous townships. Each district shall be represented by one (1) Board Member. *The district breakdowns are available at the cooperative headquarters; members can request a printed or emailed copy.*

(b) Not less than one hundred twenty (120) days before the Annual Meeting of the members at which meeting, Board Members are to be elected, the Board should review the composition of the seven districts and, if it would find inequalities in representation, which could be corrected by a redelineation in the districts, the Board should reconstitute the districts so that each shall contain as nearly as possible, the same number of members.

(c) The Nominating Committee shall be appointed not less than sixty (60) days or more than one hundred eighty (180) days prior to the Annual Meeting. Such Nominating Committee shall be composed of those Directors of the Cooperative whose terms expire one (1) year after the Annual Meeting for which nomination of candidates for Directors are being made and other members of the Cooperative who shall be appointed by the President of the Board of Directors. The members appointed by the President of the Board of Directors shall be members of the districts for which Directors shall be elected at the current Annual Meeting. Each nominee for Director shall be a voting member who resides in the district for which a Director is being elected at the current Annual Meeting and shall meet the qualifications for becoming or remaining a Director.

The Nominating Committee shall prepare a list of nominees identifying each candidate by name, address, and the Director district in which they reside. The Nominating Committee shall make a good faith effort to nominate two (2) candidates for each Director position to be filled. In the event the Committee is unable to identify two (2) candidates for each position who consent to be nominated, the Committee may nominate only one (1) candidate for the position. The written list of nominations of the Nominating Committee shall be posted at the office of the Association not less than thirty (30) days prior to mailing the notice of the Annual Meeting of members. For ten (10) days after posting of the list of nominations by the committee, additional nominations of members residing in the district of the vacancy may be made by written petition on forms provided on request of any member and signed by not less than fifteen (15) members of the Association. Any member nominated shall give prior consent to such nomination whether by committee or petition.

The notice of the Annual Meeting of members shall list the names of all nominees for the office of Director.

(d) At each regular Annual Meeting, a number of Directors equal to the number of Directors whose terms expire at the time of such Meeting shall be elected to hold office for the term of three (3) years, and until their respective successors shall have been elected and qualified.

(e) The election of Directors shall be by ballot.

(f) Each voting member of the Cooperative present at the Annual Meeting shall be entitled to vote for one (1) candidate in each district from which Directors are to be elected at the Annual Meeting. The candidate receiving the highest number of votes in each District at the Annual Meeting shall be considered elected as a Board Member for that district.

IN THE COMMUNITY

WELCOMING ENDURANCE PHYSICAL THERAPY

Grundy County REC is proud to have worked with Dana Schmidt on a Revolving Loan Fund Program loan for Endurance Physical Therapy, a new business in Grundy Center!

IOWA'S ELECTRIC COOPERATIVES HOST CONFERENCE FOR CONTRACTORS AND BUILDERS

BY ERIN CAMPBELL

After taking a year off due to safety precautions in 2021, the Momentum is Building Conference was back in session last month. Sponsored by the Touchstone Energy Cooperatives of Iowa, the annual two-day conference provides education and training opportunities for Iowa contractors, electricians, plumbers, HVAC professionals and builders.

"Attendees can earn valuable CEUs while also learning about the latest trends and technologies in residential energy efficiency," says Ryan Cornelius, vice president of corporate relations at Corn Belt Power Cooperative. "For more than 25 years, the Momentum is Building Conference has provided electric cooperatives and contractors an opportunity to come together to provide rural Iowans with safe, efficient and cost-effective home comfort solutions."

Nearly 200 industry professionals and electric co-op employees attended the 2022 conference in Altoona. Organized by Iowa's electric generation and transmission cooperatives, the Momentum is Building Conference also connects Iowa's construction industry with the local services and resources available from electric co-ops, which serve nearly 650,000 Iowans throughout all 99 counties.

"Iowa's electric co-ops have long supported energy efficiency efforts and one of our goals is to help member-consumers use energy wisely," explains Angela Catton, manager of member relations and development at Northwest Iowa Power Cooperative. "This conference helps us build local relationships."

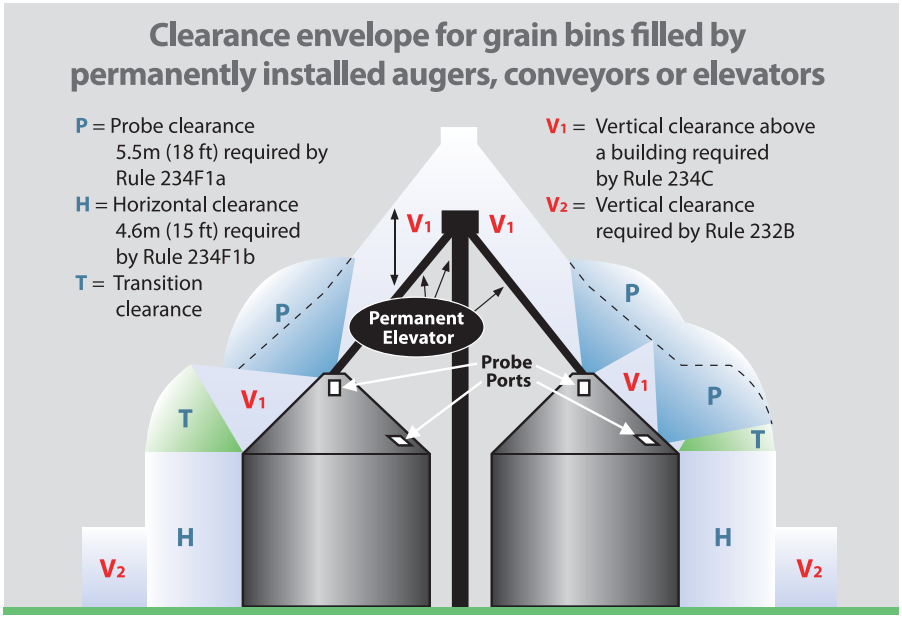
Momentum is Building also allows industry exhibitors and vendors to showcase emerging trends in residential energy efficiency that can save consumers energy and money. Attendees have time to network and learn from one another.

The 2022 opening keynote was presented by Weldon Long, a successful entrepreneur and *New York Times* bestselling author who focused on how to generate powerful sales results through consistency.

"Every year, we like to open the conference with a highly regarded expert who can help our attendees improve their business operations," says Kerry Koonce, vice president of communications and corporate relations at Central Iowa Power Cooperative.

The Momentum is Building Conference will return to the Meadows Event & Conference Center in Altoona next February. Contact the member services staff at your local electric cooperative for more details or visit www.MomentumisBuilding.com.

Erin Campbell is the director of communications for the Iowa Association of Electric Cooperatives.



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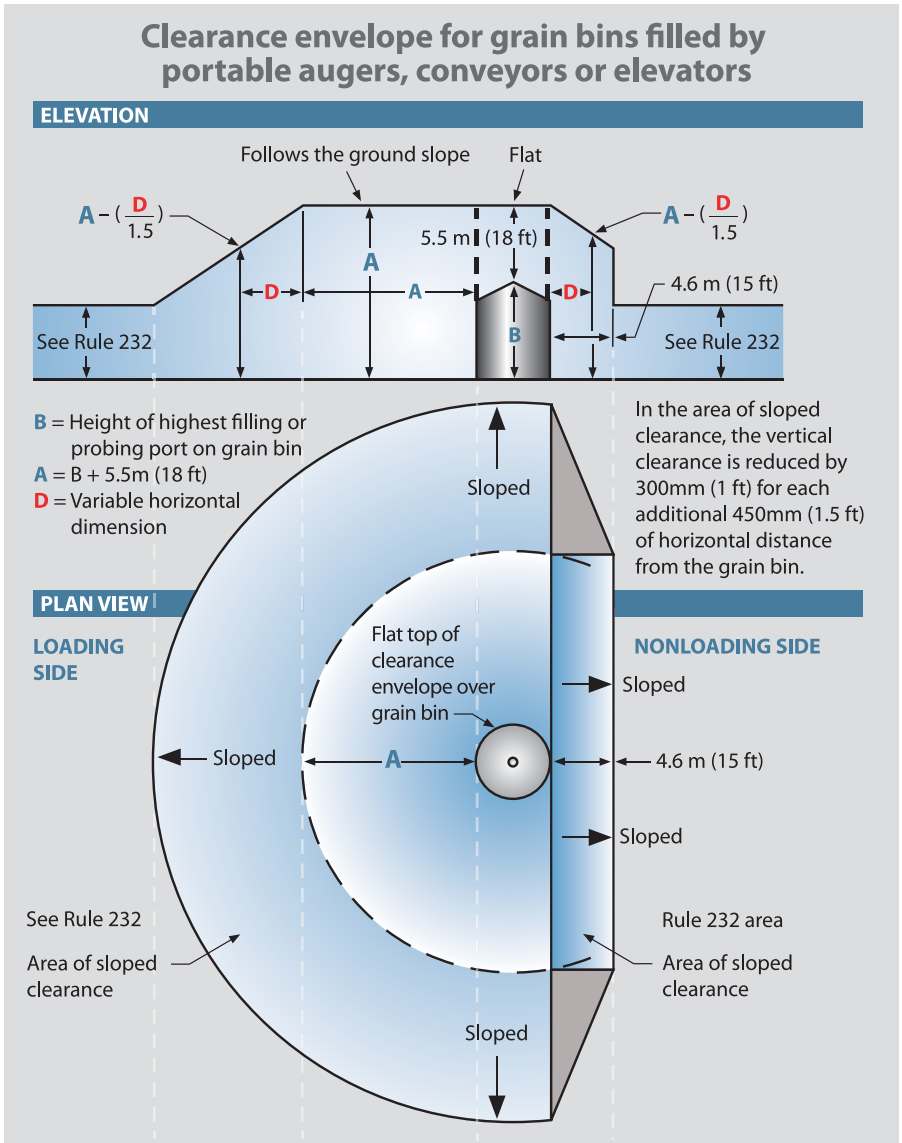

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MAINTAIN PROPER CLEARANCE AROUND GRAIN BINS

The state of Iowa requires specific clearances for electric lines around grain bins, with different standards for those filled by portable and permanent augers, conveyors and elevators. According to the Iowa Electric Safety Code found in Iowa Administrative Code Chapter 199 – 25.2(3) b: *An electric utility may refuse to provide electric service to any grain bin built near an existing electric line which does not provide the clearances required by the American National Standards Institute (ANSI) C2-2017 "National Electrical Safety Code," Rule 234F. This paragraph "b" shall apply only to grain bins loaded by portable augers, conveyors or elevators and built after Sept. 9, 1992, or to grain bins loaded by permanently installed augers, conveyors, or elevator systems installed after Dec. 24, 1997.* The Iowa Utilities Board has adopted this language.

Your local electric cooperative is required by the Iowa Utilities Board to provide this annual notice to farmers, farm lenders, grain bin merchants and city and county zoning officials. The drawings on this page show the required clearances, but your co-op's policies may be more restrictive. If you have any questions concerning these regulations – or what needs to be done before you begin placing a new grain bin or moving an existing one – please call your electric co-op for help.

These drawings are provided as part of the Iowa electric cooperatives' annual public information campaign and are based on the 2017 Edition of the National Electrical Safety Code. To view the actual drawings, refer to that publication.

Every care has been taken for the correctness of the contents of these drawings. However, the Iowa Association of Electric Cooperatives and its member cooperatives accept no liability whatsoever for omissions or errors, technical inaccuracies, typographical mistakes or damages of any kind arising from the use of the contents of these drawings, whether textual or graphical.

PERMED HAIRSTYLES COME FULL CIRCLE

BY VALERIE VAN KOOTEN

I recently attended an evening gathering where we were seated at round tables. One woman, a local salon owner, rushed in about 15 minutes later and apologized as she sat down next to me. "I probably smell like a perm," she said. "I just got done giving one."

Huh? After all, you don't hear about perms much anymore among women's hairstyles. I asked about what I assumed were likely her older clientele who were still getting perms to add curls and body to their straight locks.

"Oh, no," she assured me. "Perms are huge with college girls right now, especially girls with really long hair."

I was a bit stunned. Were girls really wanting to start this cycle of submitting to the acrid, eye-stinging, burning, pillowcase-ruining solution that was once squirted onto so many of our heads?

Permanent perm memories

Oh yes, I've had my share of perms. With my fine, stick-straight hair, I'm the perfect candidate. And I go way back, before the days of salon permanents. I'm talking the days of a box of Lilt or Toni's administered by your mom or next-door neighbor. Where the amount of time you left it on was a fluid thing, depending on how much your mom got to talking on the phone. And how a lack of water to rinse it off spelled disaster.

You might sense a bit of a backstory here. You would be right.

For three years in my early high school years, our farm's well was running dry. The city of Pella was running a water line from Pella to Otley, which would pass by our house. So naturally, my folks weren't going to dig a new well when they could connect to city water. But one thing after another stalled the planned water lines. For the entirety of those years, the cattle and hogs got the majority of the water, with the house getting sputtering, jerking, rusty spurts of water late at night after the livestock were done drinking.

And for three years, my folks drove their pickup to town once or twice each day with a roll of quarters and bought water directly from the city, administered through a hose on the back of the fire station. It supplemented the well water and gave us what we needed for the house.

Disaster strikes at the sink

On the day in question, I don't remember why we didn't have any water saved back. Usually there were milk jugs all over the kitchen full of the life-giving liquid. But when the time came to rinse my home perm and Mom opened the spigot … nothing. Not a drop. We stared, incredulous, and then Mom declared, "To Grandma's!" We hopped in the car and headed to town, where I ran to her sink and doused my head under the faucet.

I remember that perm as a disaster but reflecting on my later poodle perms of the 1980s, I'm not sure any of them were much better.

Good luck to this new generation of gals getting perms. Just be sure to use an old pillowcase afterward.

Valerie Van Kooten is a writer from Pella who loves living in the country and telling its stories. She and her husband Kent have three married sons, two incredibly adorable grandsons and a lovely granddaughter.

Grundy County REC
A Touchstone Energy® Cooperative
"Our mission is to provide our members safe, reliable, electric service"

IOWA ELECTRIC COOPERATIVE LIVING

The magazine for members of Iowa's electric cooperatives.

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