

FEBRUARY 2022

ELECTRIC COOPERATIVE LIVING

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ON THE COVER

Special thanks to Bruce A. Morrison, a North West REC member-consumer, for supplying this month's cover image. Submit high-resolution photos for consideration to editor@ieclmagazine.com. You could win \$100!

INTRODUCING IAEC'S NEW BOARD PRESIDENT: ROGER SOLOMONSON

BY ERIN CAMPBELL



Roger Solomonson is no stranger to serving on cooperative boards. His family jokes that they will one day inscribe his tombstone with the phrase, "He's at a meeting." He began

his cooperative board service long ago at the age of 21 when he served as a director for a local grain elevator and hasn't slowed down since.

History of advocating for cooperatives

As a retired grain and livestock farmer near Lake Mills in Winnebago County, Solomonson is a longtime advocate of the cooperative business model. He has served as a director for Heartland Power Cooperative for 27 years and is serving his fifth year as a director for the lowa Association of Electric Cooperatives (IAEC), most recently serving as the board secretary and treasurer before becoming president in December.

Solomonson previously served as vice president and treasurer of the board for Dairyland Power Cooperative, which supplies electricity to Heartland Power Cooperative. As a big believer in education and training, he has earned his Credentialed Cooperative Director designation, the Board Leadership Certificate and the Director Gold designation.

Heart for community service

Many in north-central Iowa know Solomonson from his extensive community service work. Over the years, he has served in leadership roles at the local bank, grain elevator, church boards, township council, extension council, Winnebago Farm Bureau and pork, corn and soybean commodity organizations. Solomonson has also committed his time as Iowa State Membership Coordinator and North

Iowa Regional Director for Gideons International.

"I've lived in this community my whole life, and I'm passionate about giving back," he humbly shares.

Vision for board leadership in 2022

As the incoming board president for IAEC, Solomonson hopes to connect with all directors at Iowa's local electric cooperatives so he can best represent their needs. "My goal this first year is to attend one board meeting at each electric cooperative so I can get to know my fellow co-op directors on their own turf," he shares.

Solomonson's priorities as a leader include open communication. "With three new directors on the statewide board, the dynamics have changed a bit," he shares. "We're bringing a new perspective as we look at issues like cybersecurity and political engagement."

When reflecting on challenges facing

the electric industry, Solomonson says, "I think there are two issues that will challenge lowa's electric cooperatives in the years ahead. How are we going to maintain reliable electricity as we rely more on intermittent energy sources like solar and wind? And also, how will we deal with increased regulations that are changing the way we supply energy? The goal is to safely supply reliable, affordable energy every time our consumers flip the switch."

Solomonson looks forward to serving lowa's electric cooperatives in this new leadership role. His industry knowledge, leadership track record and passion to serve will be valuable assets. And if you're trying to track him down, he's probably at a meeting.

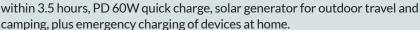
Erin Campbell is the director of communications for the Iowa Association of Electric Cooperatives.

> Editor's Note: An introduction to the three new statewide directors will appear in the March issue of this magazine.

EDITOR'S CHOICE CONTEST

Win a CTECHi Portable **Power Station!**

The specs of this CTECHi Portable Power Station include 200W, 320Wh LiFePO4 battery backup power supply, fully charged



Visit our website and win!

Enter this month's contest by visiting www.iecImagazine.com no later than Feb. 28. You must be a member of one of lowa'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 Philips Soup Maker from the December issue was Arlene Mueggenberg, Raccoon Valley Electric Cooperative.



5 REASONS WE LOVE SERVING OUR MEMBERS

BY LEILANI TODD



February may be the shortest month of the year, but it is packed with special observances like Presidents Dav. Black History Month and Valentine's Dav.

in addition to a host of unofficial "national" days you have probably never heard of like "National Tater Tot Day." But they all have something in common. They were created to draw attention to a particular issue or theme.

Valentine's Day may seem like an observance originally created by a greeting card company, but over time, it has become a widely celebrated day generating millions of dollars spent on flowers, candy and, of course, greeting cards professing our love. But Valentine's Day is not just for the lovebirds. It is also the perfect time to let our friends, family, co-workers and other special people in our lives know we care about them - with or without a store-bought greeting card.

So, in that vein, we have created our list of the top five reasons why we love serving you, the members of Chariton Valley Electric Cooperative (CVEC).

- 1. We love serving our members because, without you, the cooperative would not exist. Our purpose is to provide you with reliable, responsible, sustainable and safe electricity. Simply put, CVEC exists to serve you. That is why we were formed in 1945 - to bring power to our local area when forprofit utilities would not.
- 2. You enable us to complete our mission by supporting our efforts to give back. A major part of our mission is to serve our communities and look after the greater good. With your assistance, we are able to help the most vulnerable members of our communities through food and toy drives, Operation Round-Up and even RECare, our program that helps local families pay their energy bills when times are tough.
- 3. Members of our cooperative also serve on the board of directors. They provide guidance for setting cooperative priorities and helping make strategic decisions. Because our board members live in the area, they are able to serve as the pulse of the larger community and identify immediate and long-term needs. The broader cooperative membership provides helpful input through their vote on director elections and by

cooperative and community issues.

weighing in on

4. You help us get it right. CVEC's members are great about keeping us in the know. We do our best to avoid power outages, but Mother Nature can occasionally throw us a curveball: our members are quick to report any power disruptions and are patient as our crews

work to safely restore power. We know outages are frustrating, and your support as we work through storms means so much to our employees. We also appreciate your feedback on cooperative programs and services. Your opinions are critical for the cooperative's success, and we thank you for that.

5. You and other CVEC members make up the communities we serve - and for us, it is all about community. Many of our employees live and work here too and care about our community the same way you do. We are invested and work to help it thrive. That is why CVEC donates to local charities, schools, groups and scholarship funds. It is also why we invest in economic development, and why you will see our employees volunteering at local schools and other charitable and community endeavors.

As a cooperative, our mission is to enhance the quality of life in the communities we serve and look after their long-term interests. We love serving our members and our local communities, and just like you, want to see it continue to thrive.

Leilani Todd is the CEO/general manager of Chariton Valley Electric Cooperative.





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GET TO KNOW THE PEOPLE BEHIND YOUR POWER



Suzzanne Briggs Billing Supervisor Briggs has worked at CVEC for 13 years. As the billing supervisor, she is responsible for posting payments, ensuring billing is

complete and account information is up to date. She enjoys helping members in person or on the phone to answer their concerns and questions, and always strives to provide the best member service.

Briggs and her husband Todd have two daughters and three grandchildren. The couple enjoys spending time with their family and rebuilding old cars together. She also enjoys reading, watching TV, solving puzzles and walking in her free time.



Kyle Kirchner
Journeyman Lineman
Kirchner has
worked at CVEC
for three years. As a
journeyman lineman
he spends his days
repairing, replacing
or adding new

poles and wires across CVEC's service territory. Sometimes he works on underground lines to help keep power flowing. He enjoys this role because he can spend time outside, especially when the weather is nice.

He and his wife Erica are expecting their first child (a boy!) this month. Currently, they are dog parents to three Labradors named Yoshi, Marley and Banjo. Ahead of the baby's arrival, the couple are spending their free time relaxing and giving their dogs extra attention.



WE LOVE HEARING FROM OUR MEMBERS

Chariton Valley Electric Cooperative (CVEC) knows our members are at the heart of everything we do and because of your member engagement, we are encouraged to continue making a difference in the communities we serve. We recently received notes of gratitude after the windstorm that ripped through our service territory in mid-December. We appreciate these words of kindness.

- Please pass on a big THANK YOU to the crews that were out last night restoring our power. Had to be a little dangerous out there.
- To the hard-working line crews, I just wanted to send a great big thank you after yesterday's horrible windstorm that resulted in a brief power outage that they worked diligently to restore. They truly go above and beyond and need to know that they are appreciated!
- Thanks to the guys for putting a new LED light on my outside pole!
- I think our utility company is the best anywhere. The staff are wonderful, the ones in the workshop are helpful and there are no words for the line crew who put all our comfort before theirs no matter what the weather is doing. I appreciate each of you and love that I am lucky enough to live where you can take care of me. Thank you Chariton Valley Electric Cooperative. And thank you for the January reduction on billing!

Hearing from you, our members, makes a significant difference to each of us here at CVEC. Thank you for taking the time to tell us how we are doing and sharing your thoughts with us!

SERVICE AWARDS

Chariton Valley Electric Cooperative (CVEC) recognizes and thanks several employees for their years of service and dedication to the cooperative. The awards were presented during a holiday gathering of employees.

Individuals receiving service awards included:



Missy Bayer Operations Assistant - 5 years

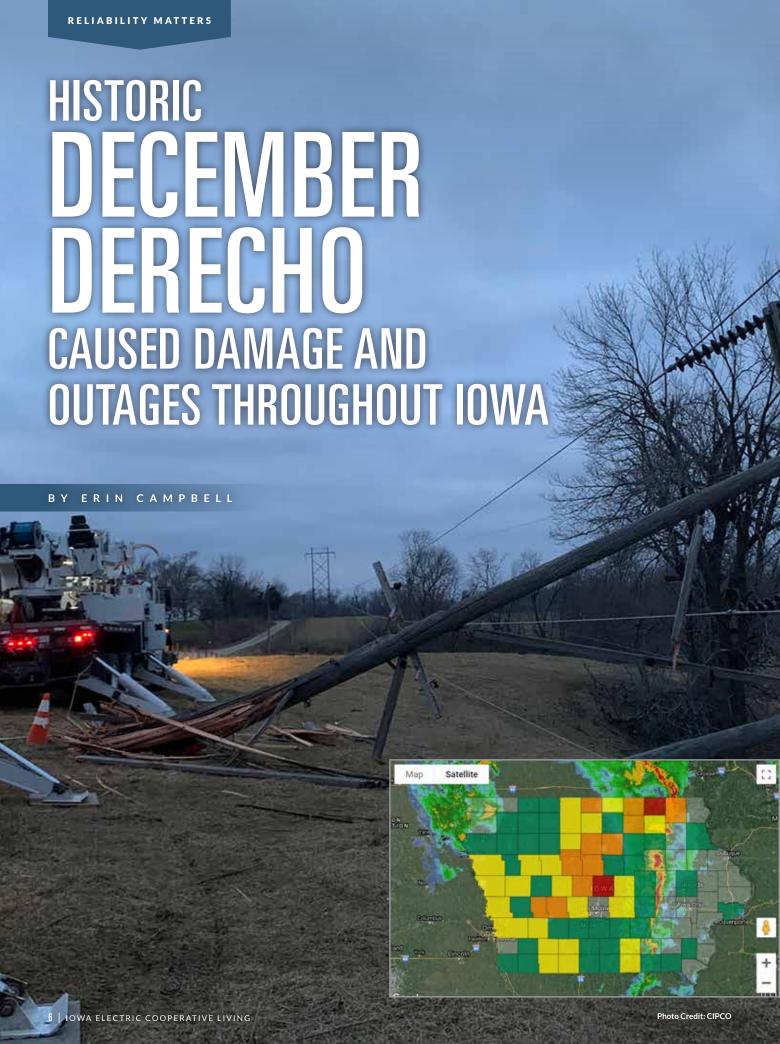


Felicia Hill Accounting Assistant - 5 years



Anna See Communications Coordinator - 5 years

The successful growth of CVEC is a direct result of our valued employees. Your continued dedication and commitment serve as a vital link in our chain. CVEC congratulates each of you as you celebrate this significant milestone in your careers!



Iowa was in the path of a recordbreaking thunderstorm on Dec. 15, which was later classified as the first December derecho in U.S. history. The state was experiencing unusually warm weather for that time of year, with record-setting highs in the 70s coupled with strong winds. lowa's electric cooperatives cautiously monitored the storm system as it moved into southwestern Iowa around 4 p.m. and quickly ripped across the state, leaving northeastern Iowa around 9 p.m.

Record-setting storm

The National Weather Service (NWS) reported the storm spawned 43 tornadoes in Iowa, setting a new record for the most tornadoes in any single day in the state's history. Wind gusts topped speeds of 85 mph in some locations. After the storm passed, several strong wind gusts prevailed throughout the night.

A derecho is often described as an inland hurricane, but with no eye and winds coming across in a line. Derechos are more similar to hurricanes than tornadoes in the damage, which is likely to spread over a wide area. According to NWS, a wind damage swath extending more than 240 miles with wind gusts of at least 58 mph along most of its length can be classified as a derecho.

Service outages and interruptions

For lowa's electric cooperatives, which serve primarily rural areas, there were 22,500 outages at the peak on Dec. 15. This accounts for approximately 10%

of all electric cooperative meters in the state. After the storm, line crews set out to assess the damage and make repairs as best they could in the prevailing wind gusts following the storm.

As the sun rose the next morning, it provided the necessary illumination for crews to better assess the storm's complete damage. Straight-line winds, tornadic activity, flying debris, and trees, limbs and branches contacting power lines caused broken poles, downed conductors and extensive damage to electrical equipment throughout the state.

"With severe storms like this one, we experienced damage to both the electric transmission system and the local electric distribution systems, which can create extended outage situations," says Scott Meinecke, director of safety for the Iowa Association of Electric Cooperatives (IAEC).

Mutual aid efforts help restore service

The safety team at IAEC coordinated crews and equipment from unaffected electric cooperatives to impacted coops to assist in the power restoration effort.

"We call it mutual aid when cooperatives help other cooperatives in times of need," explains Meinecke.

Within the first 24 hours of the storm hitting lowa, power was restored to 18,500 electric cooperative meters. The remaining 4,000 outages were fully restored within the next couple of days.



"We're always thankful for members" grace and patience as crews work long shifts to restore power," says Meinecke. "The damage from this December storm was particularly heavy in some areas and it can be frustrating when we're not able to provide much detail on when power will be restored. In some cases, crews couldn't safely head out immediately after the storm because the wind gusts made it too dangerous to be out in the buckets or on the poles."

A statewide outage map is available at www.iowarec.org to give a snapshot of current outages for lowa's electric cooperatives. The outage map is automatically updated every 15 minutes and users can view by county or electric cooperative boundary with a weather overlay layer.

While this storm was one for the record books, Iowa's electric cooperatives were prepared for the worst and acted quickly to restore power as safely and quickly as possible.

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



STORM SAFETY REMINDERS

- » Never go near or attempt to drive over downed power lines. Assume they are energized and dangerous and notify the electric utility or authorities.
- » Obey Iowa law and move over or slow down if you come upon utility crews working on the side of the road. Give them room to work safely.
- » Don't use portable generators in partially covered areas like garages or porches. Only use them in ventilated spaces outdoors to avoid carbon monoxide poisoning.

CO-OP COOKS

CHICKEN PARMESAN FOR TWO

- 2 skinless, boneless chicken breast halves salt and pepper, to taste
- 1 egg
- 2/3 cup panko bread crumbs
- ½ cup grated Parmesan cheese, divided
- 1 tablespoon flour
- 3/4 cup plus ½ tablespoon olive oil, divided
- 1/2 cup tomato sauce
- 1/4 cup fresh mozzarella, cubed
- 1/4 cup provolone cheese
- cup fresh basil

Place chicken breasts in freezer bag on a solid, level surface. Firmly pound chicken with smooth side of meat mallet until ½-inch thickness. Season chicken with salt and pepper. Beat egg in a shallow bowl, set aside. Mix bread crumbs and ¼ cup of Parmesan cheese, set aside. Sprinkle flour over chicken on both sides. Dip chicken in egg, then place chicken in bread crumb mixture and coat both sides. Heat ¾ cup olive oil in large skillet on medium-high heat until oil begins to shimmer. Fry chicken until golden brown, approximately 3 minutes each side. The chicken will finish cooking in the oven. Place chicken in baking dish. Top each chicken breast with tomato sauce, mozzarella, provolone and fresh basil. Sprinkle ¼ cup Parmesan cheese and ½ tablespoon olive oil on top. Bake at 450 degrees F for 15-20 minutes until cheese is brown and bubbly. Chicken is cooked through when registering an internal temperature of at least 165 degrees F. Enjoy with mixed greens and crusty bread. Serves 2

> Sue Nagel ● Panora ● Guthrie County Rural Electric **Cooperative Association**

CHOCOLATE ANGEL FOOD CAKE

- cups egg whites (12 eggs)
- teaspoons cream of tartar
- cup granulated sugar
- 1½ teaspoons vanilla
 - cup cake flour
- cups powdered sugar
- cup Hershey's cocoa strawberries

Beat egg whites and cream of tartar until foamy. Gradually add granulated sugar 2 tablespoons at a time. Add vanilla and continue beating until meringue holds stiff peaks. In a large bowl, blend flour, powdered sugar and cocoa. This must be Hershey's cocoa so there is no fat in it; otherwise, the cake will fall out of the pan. Fold the flour mixture into the egg white mixture. Put batter in an ungreased 10x4-inch tube pan. Gently cut through the batter. Bake at 375 degrees F for 20-35 minutes. Invert on a funnel, hang until cold. Serve with fresh strawberries.

WILD RICE QUICHE

- 3 eggs, beaten
- 11/2 cups half and half
- cup Swiss cheese, grated
- cup Monterey Jack cheese, grated onion, to taste parsley, to taste
 - slices bacon, fried and crumbled
- cups wild rice, cooked unbaked pie shell paprika, optional parsley, optional

Combine ingredients, pour into unbaked pie shell. Bake at 450 degrees F for 10 minutes, lower heat to 350 degrees F for 30 minutes more. Remove from oven and let set up for 10 minutes before cutting and serving. Sprinkle quiche with paprika and parsley for garnish if desired. Serves 6

> Penny Sue Haley
>
> Keswick T.I.P. Rural Electric Cooperative

SWFFT & SOUR MEATLOAF

- 1 8-ounce can tomato sauce
- ¼ cup brown sugar
- 1/4 cup vinegar
- 1 teaspoon yellow mustard
- 1½ 2 pounds ground beef
 - 1/4 sleeve saltine crackers, crushed finely
 - 1 medium onion, minced
 - 3 cloves garlic, finely minced
 - 1½ teaspoons salt
 - 1 teaspoon pepper
 - 1 green pepper, chopped
 - 1 egg

Mix tomato sauce, brown sugar, vinegar and mustard until sugar is dissolved, set aside. In separate bowl, mix ground beef, crackers, onion, garlic, salt, pepper, green pepper and egg. Add 1 cup of tomato sauce mixture to meat mixture. Mix well and form into a greased, shallow baking pan. Pour remaining tomato sauce mixture over meatloaf. Bake uncovered at 400 degrees F for 45 minutes to 1 hour.

Danice Zern ● Conrad Grundy County Rural Electric Cooperative

SLOW COOKER PEPPER STEAK

- 2 pounds beef sirloin, cut into 2-inch strips garlic powder, to taste
- 3 tablespoons vegetable oil
- 1 cube beef bouillon
- ¼ cup hot water
- 1 tablespoon cornstarch
- ½ cup onion, chopped
- 2 large green peppers, chopped
- 1 14.5-ounce can stewed tomatoes, not drained
- 3 tablespoons soy sauce
- 1 teaspoon white sugar
- 1 teaspoon salt

Sprinkle steak with garlic powder. Heat oil in large skillet and brown beef strips. Transfer to slow cooker. Mix bouillon cube with hot water until dissolved, then mix in cornstarch until dissolved. Pour into slow cooker with meat. Stir in remaining ingredients. Cover and cook on low for 6-8 hours. *Serves 6*

Camilla Williamson ● Albia Chariton Valley Electric Cooperative, Inc.



PINK SOUIRREL DESSERT DRINK

- 1 gallon vanilla ice cream
- 1½ cups cream de cacao liqueur
- 1½ cups cream de almond liqueur whipped cream chocolate covered cherries

Set ice cream out to soften. Blend softened ice cream with both liqueurs, adding less or more to taste. Pour blended ice cream back into bucket or a freezer-safe bowl. Return to freezer until set (will not freeze hard). When ready to serve, dip desired amount into glass. Top with whipped cream and a cherry. This keeps well in freezer for quick and easy entertaining.

Joni Rus ● Rock Valley North West Rural Electric Cooperative

COCONUT CREAM PIE

- 2 cups milk
- ⅓ cup flour
- ¾ cup sugar
- 1 egg, beaten
- 1 teaspoon vanilla
- ½ cup coconut, shredded
- 1 9-inch pie crust, baked

Heat milk in a saucepan. Mix flour and sugar, add some of the heated milk and stir until smooth. Add flour mixture to saucepan and cook until the mixture has started to thicken. Temper beaten egg with stove mixture and add to pan. Once cooked, add vanilla and coconut. Pour into pie crust and refrigerated until set. Enjoy! Serves 8

Laura DeSmet ● Larchwood Lyon Rural Electric Cooperative

WANTED:

ICE CREAM RECIPES





\$25 FOR EVERY ONE WE PUBLISH!

Deadline is Feb. 28

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

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OPPORTUNITY OF A LIFETIME: WASHINGTON, D.C.I.



THESE ELECTRIC COOPERATIVES ARE SPONSORING THE 2022 YOUTH TOUR

All of the electric co-ops on this list are offering one or more all-expenses-paid Youth Tour trips this year, so check your co-op's website or call the office for more details.

Access Energy Cooperative
Allamakee-Clayton Electric Cooperative
Butler County REC
Calhoun County Electric
Cooperative Association

Chariton Valley Electric Cooperative, Inc. Clarke Electric Cooperative, Inc. Consumers Energy East-Central Iowa REC Eastern Iowa Light and Power Cooperative



AN IOWA STUDENT WILL EARN A \$1,000 COLLEGE SCHOLARSHIP TOO!

During the 2022 Youth Tour this June, a student from each participating state will be chosen to serve on the national Youth Leadership Council (YLC).

These young leaders will meet virtually throughout 2022 and participate in leadership training, practice their public speaking skills, attend co-op forums and engage in community activities like voter registration drives.

The Youth Leadership Council experience will officially commence at the 2023 National Rural Electric Cooperative Association (NRECA) Annual Meeting, held in Nashville, Tennessee. Here, the group will spend a few days reflecting on the experiences they've had throughout the year, attend informational and entertaining conference sessions alongside electric cooperative leaders from throughout the country, and solidify lifelong friendships and connections!

Iowa's local electric cooperatives are just getting started on their selection process for high school sophomores, iuniors and seniors from their areas to earn an all-expenses-paid trip for the June 18-24 Youth Tour to Washington, D.C. Unfortunately, there always are more qualified student candidates from these co-ops (as well as deserving students from co-ops that aren't participating in the Youth Tour program) than there are openings on the trip. However, one of those students will have the opportunity to win a trip through the Iowa Electric Cooperative Living 2022 Youth Tour Contest!

Students who are eligible to apply for the Youth Tour trip at participating lowa electric co-ops should apply locally first. However, students can double their chances of winning a trip by entering the magazine's contest right after they enter the one for their electric co-op.

Students from across America take part in this weeklong education trip to the nation's capital each year. Participants will travel to Washington, D.C., meet their U.S. representatives and senators, and watch history come alive as they explore museums, memorials and monuments. They'll also meet student leaders from nearly every state and hear dynamic speakers during Youth Day. Best of all, students will make friendships that last a lifetime and become part of a group that has more than 50,000 alumni in every walk of life, including U.S. senators and CEOs.

OFFICIAL CONTEST RULES

The 2022 Youth Tour Contest is open to any high school sophomore, junior or senior who's part of a member family of an lowa electric co-op. One allexpenses-paid trip will be awarded by lowa Electric Cooperative Living magazine, in addition to the trips sponsored by local electric cooperatives.

Of course, students at supporting co-ops first should apply for the Youth Tour through their electric co-ops. Then, to enhance your chances of earning a trip, we encourage you to enter this contest too. If you're chosen as the winner of a trip sponsored by your local electric cooperative, you'll become ineligible to win the trip sponsored by *lowa Electric Cooperative Living* magazine.

To enter, you will be required to submit an official entry form plus a short (250-word maximum) essay in response to this statement: Pick one of the seven cooperative principles and share how your local electric cooperative embodies it. Entry forms are available at www.lowaYouthTour.com. You can submit your essay online at this address or email it to youthtour@iowarec.org. Entries must be received by March 25

Iowa Electric Cooperative Living magazine and IAEC staff will judge all essays anonymously. The decision of the judges will be final. The winner of the Iowa Electric Cooperative Living Youth Tour Contest will not be announced until April 15, which is after all sponsoring local electric cooperatives will have chosen their 2022 Youth Tour participants.



CVEC DISCUSSES IMPORTANT ISSUES AT LEGISLATIVE RECEPTION

More than 160 directors, managers and employees from lowa's electric cooperatives discussed priorities with nearly 90 state legislators on January 11 during the annual Welcome Back Legislative Reception in downtown Des Moines. The Iowa Association of Electric Cooperatives hosted the annual reception in conjunction with the Iowa Biotechnology Association, the Iowa Communications Alliance, the Iowa Institute for Cooperatives and FUELIowa.

The event provided a valuable opportunity to meet with state legislators at the beginning of the 2022 Legislative Session to discuss issues that impact rural electric cooperatives and the communities we serve. For example, as the Legislature and Governor prioritize tax cuts this session, we're asking for a correction to a 2018 legislative oversight that left electric cooperatives out of a tax exemption on digital goods and services. This unfair tax burden has resulted in hundreds of thousands of dollars in increased taxes for rural electric cooperatives.

In the coming months, the Iowa General Assembly will be addressing a multitude of issues, including energy-related matters that are central to Iowa's rural economy. Beginning with the Welcome Back Legislative Reception, electric co-op directors, managers and staff will again be important advocates for a balanced approach in addressing energy issues. Collectively, Iowa's locally owned electric cooperatives provide affordable, reliable, safe and environmentally responsible power to more than 650,000 Iowans throughout all 99 counties every day.

HIGH SCHOOL SENIORS: DON'T MISS YOUR CHANCE AT A SCHOLARSHIP



Are you or do you know a graduating high school or home-schooled senior? If so, don't miss your chance to apply for one of Chariton Valley Electric Cooperative's (CVEC) scholarships! We will award a total of \$5,500 in scholarships to graduating high school students this May.

Four \$1,000 individual scholarships will be awarded to students who plan to pursue post-secondary education in any field of study. In addition, CVEC will award a \$1,500 individual scholarship to a graduating senior who plans to attend an accredited electrical lineworker program and/or climbing school or training center.

Applicant qualifications

- Must be graduating from an accredited high school or homeschooling program.
- Parents or legal guardians must be members of CVEC.
- The student must plan to attend an accredited institution of higher learning, including vocational school, technical school, junior college or university.

- Must complete an application <u>and</u> a 500- to 600-word essay describing who EMPOWERS you, and why and how you will strive to empower others.
- Must maintain a 2.5 GPA during the first semester and provide proof of enrollment in the second semester to receive the disbursement.

All forms must be completed and returned to the cooperative by March 31.

The selection will be based on a combination of academic achievement, leadership and initiative, goals and aspirations, and the prepared essay. The selection committee is comprised of local leaders throughout CVEC's service territory and surrounding cooperatives.

For more information check with your high school guidance counselor, call CVEC at 641-932-7126 or visit our website at www.cvrec.com/scholarship-program.

SUPERIOR MACHINE REACHES NEW HEIGHTS

True to its name, Superior Machine offers top-quality machining, fabricating and welding services. Since its founding in 1994, it has been a mainstay in the Albia community with a reputation for flawless products, short lead times and customer service.

Superior Machine is owned and operated by Ben Van Loon, who purchased the company from his father Kevin Van Loon in 2018. He has long been involved with the business and is focused on aggressively growing the company while investing in employees.

"I grew up on the shop floor," Van Loon says. "Over the years, the team became like family, and I got to experience a lot of different aspects of the business."

Superior Machine works with leading brands across the agriculture, construction, gas and oil industries, as well as local manufacturers across southeast lowa. It takes raw materials - like 20-foot bars of steel, aluminum. brass and bronze - then cuts the metal down to make a customer-specified part using one of its CNC machines.

Depending on customer needs, components can then be fabricated, assembled, painted and inventoried or shipped. And as a value add to customers who purchase a semi-load of material, Superior Machine will deliver for free using one of its three semitrucks.

"Because of the type of work we do, we're not taking business away from someone else in the area as we grow," Van Loon says. "Our success is good for the community because we are bringing in revenue from out-ofstate customers, paying taxes, hiring employees and contributing to local economic development."

What began with one employee and one CNC machine has grown to 115 employees and more than 60 CNC machines, ranging from fiber lasers, brake pressers, weld cells, wet and powder coat paint. It currently



operates out of a 144,000-square-foot space in Albia.

As a Monroe County native, Van Loon sees clear benefits to rooting and growing the business in the area. The sense of community, mechanically minded and intelligent workforce, and his family's long-standing history in the area are all important reasons for the business to remain headquartered in Albia.

Investing in employees ensures quality

Superior Machine has long been committed to investing in employee training and education to ensure efficiency and precision.

Most employees don't have a manufacturing background, but through a rigorous and thorough onboarding process, employees learn how to run basic production within a few weeks; and ultimately learn to program and set up a CNC machine within a few years. Even employees with years of experience participate in ongoing training and education to stay up to date with new technologies.

"It takes a lot of talent to set up the wide variety of projects we do," Van Loon shares. "That's why we work so hard to hire, train and retain our team." Superior Machine offers employees quarterly bonuses, 401(k) match, 100%-paid medical insurance, and dental and vision benefits.

Vision for robotics and skilled labor

Even with a hardworking and skilled employee base, Van Loon says workforce shortages are one of his major challenges. That's why he's strategically incorporating robotic technology into the company's growth plans, and its first robotic cell is being set up in its new Ottumwa plant, which is a 176,000-square-foot space.

"Robots and automation aren't about taking jobs away," Van Loon explains. "It takes out redundant tasks, allowing us to shift our skilled labor to projects that use their talents better."

Van Loon believes automation will help the company meet growing customer demand while also keeping a strong employee workforce in southeastern Iowa. Ultimately, this strategy for growth will help Superior Machine continue to deliver on its longstanding reputation for top-quality products, competitive lead times and quick turnaround.

To learn more about Superior Machine, visit www.superiormachineia.com.

NEW TECH ALERT: IRON-AIR BATTERIES

BY MARIA KANEVSKY

As the electric grid continues to evolve, new technologies are being developed to help advance the grid of the future. One of these technologies is a new form of battery storage technology called the iron-air battery, which could potentially provide long-duration energy storage for *hundreds* of hours.

Long-duration storage adds reliability

Current battery technologies can only offer storage for tens of hours, meaning the innovative iron-air battery could provide energy for roughly 10 times longer than existing grid-scale batteries. This new technology could help ensure grid reliability even with extreme weather, such as hurricanes or powerful thunderstorms.

Long-duration energy storage will also be crucial for adding more solar and wind energy to the grid. This is because renewable energy is dependent on the weather and may not always be available when we need it. New iron-air batteries could provide the missing link by storing excess energy for when the sun isn't shining or the wind isn't blowing.

Low-cost "reversible rusting" technology

The battery technology itself is made up of thousands of small iron pellets that develop rust when exposed to oxygen. This process discharges the battery. When the oxygen is removed, the pellets revert back to iron, which then charges the battery. According to Form Energy, the startup company developing this new technology, this process is known as the principle of "reversible rusting."

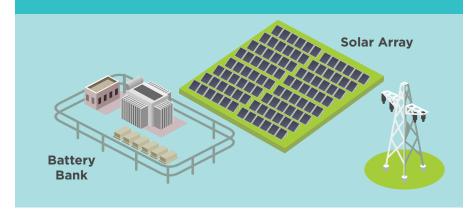
Since the battery technology mainly uses water, air and iron – all abundant and cheap resources – the technology is relatively low cost. These resources also make the technology relatively safe and simpler to recycle since there are no heavy metals.

A key feature of these batteries is their

THE FUTURE OF ENERGY STORAGE

A new form of battery storage technology, known as the iron-air battery, could potentially provide long-duration energy storage for hundred of hours.

Long-duration energy storage will be crucial for adding more solar and wind energy to the electric grid since renewable energy is dependent on the weather and may not always be available when needed.



low cost, with Form Energy promising a price of less than \$20 per kWh. That price is about one-tenth the cost of lithium-ion battery technology, which is currently the cheapest battery technology on the market.

Individual iron-air batteries are about the size of a washing machine, making it easy to group many batteries together in a larger, scalable system. The size of the battery module group can vary depending on the storage needed at a specific site. This means the batteries can be placed in a variety of areas, from rural to urban, to meet energy needs.

Continued research and development

While this technology may be a solution for long-duration energy storage, the battery is not yet ready at the commercial level – although it is close. Form Energy estimates the battery should be ready for mass production by 2025. As a pilot project to test this groundbreaking technology, Form Energy is working with Great River Energy, a generation and transmission cooperative located in Minnesota. The 1 MW/150MWh project is anticipated to go live in 2023.

Given the importance of long-duration energy storage for the future of the grid, other startups are also looking to develop long-duration battery storage technology.

Time will tell if the iron-air battery, or any other long-duration battery, becomes successful as a new emerging technology. In the meantime, electric utilities can start to understand where this technology may potentially fit within their own systems to make the grid more resilient and reliable. Whether this technology becomes mainstream or not, utilities will continue finding ways to provide affordable, long-duration storage as the electric grid continues to change.

Editor's Note: In the March issue, we'll spotlight how several electric cooperatives in Iowa are harnessing battery storage technology.

Maria Kanevsky writes on consumer and cooperative affairs for the National Rural Electric Cooperative Association, the national trade association representing more than 900 local electric cooperatives.

FOOD AS A LANGUAGE

BY VALERIE VAN KOOTEN

On top of my microwave sits an oblong wooden box. The top features a decoupaged rose, with the glue covering the petals a dingy yellow. The entire box is battered and nicked, but it contains a huge part of my history, culinary and otherwise.

Treasured mementos

Inside are recipes and other memorabilia - small index cards and scraps of paper featuring handwriting that can make me catch my breath. The box holds my Grandma Terpstra's letter to me while I was a student at Iowa State University, telling me how she helped my uncle at the local farmers market and that the green beans are about past prime - not a recipe, but a note I treasure and store in the back of the box: mv mom's homemade ice cream directions, written in her angular script on a card that's gone waxy with age; and my own childish fourth-grade penmanship, loopy and large, outlining my neighbor's hot milk cake recipe, with a notation beside the "1 cup margarine" that says in parentheses, "2 sticks."

I can trace my skill and advancing knowledge in the kitchen by these cards. Hot milk cake to deviled eggs to layered desserts to a cheese soufflé I am pretty sure I never attempted but am loath to throw away, just in case inspiration strikes.

My pile of cookbooks shows the same wear; they fall open to old favorites, pages splattered with cake batter and cookie dough. Their spiral bindings are coming apart, and disembodied pages are stuffed in like afterthoughts. These books come from churches and schools, high school home economics classes and local nonprofits. The names accompanying each recipe recall yet more memories, as I remember an older woman in my childhood church, or a family who has since moved away.

Family food memories

As human beings, we tend to relate family and get-togethers and



celebrations and deaths to food. It's always been that way, I suppose.

Mention any holiday and aside from the religious overtones associated with that day, my guess is that your next thought will be the food - the scrumptious taco salad your sisterin-law makes, or the corn casserole everyone requests from your cousin, or the college kid who gets away with bringing potato chips, or the oyster stuffing that only your dad will touch (a dish that is sequestered at the end of the counter as much for those of us who don't want it on our plates as it is for my dad, who doesn't want to share with anyone).

Kent's dad passed away at Thanksgiving. On the evening of the funeral, 30 of us gathered and shared the food that had descended on each of us - meat and cheese trays and ham buns, brownies and bars, gelatin salads and hamburger casseroles. When one doesn't know what to say, food becomes the language of compassion.

And I'm good with that. Unless it's oyster stuffing. Sorry, Dad - I don't know what language that is.

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.



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