

● FEBRUARY 2022

iowa

ELECTRIC COOPERATIVE LIVING

Apply for the
2022 Youth Tour

Scholarships for
students and future
lineworkers

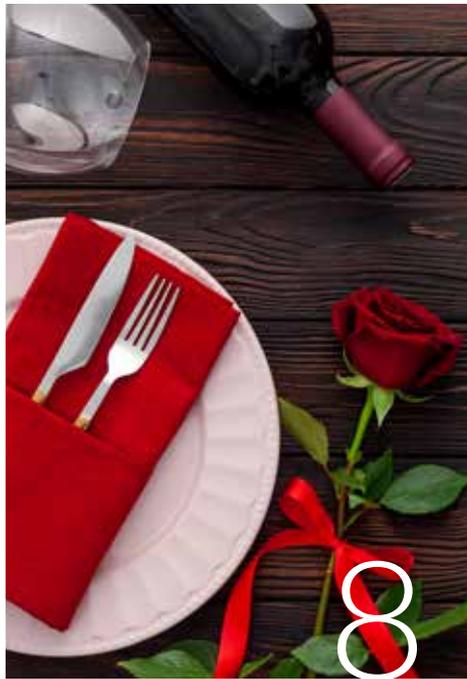
Date night recipes

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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 Iowa 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 Iowa'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 Iowa'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 within 3.5 hours, PD 60W quick charge, solar generator for outdoor travel and camping, plus emergency charging of devices at home.

Visit our website and win!

Enter this month's contest by visiting www.ieclmagazine.com no later than Feb. 28. 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 Philips Soup Maker from the December issue was Arlene Mueggenberg, Raccoon Valley Electric Cooperative.



UPCOMING EVENTS

FEB. 28	Youth Tour application deadline
MARCH 9	Youth Tour interviews
MARCH 15	Scholarship deadline
MARCH 15	Lineworker Scholarship deadline
MARCH 22	REC Day on the Hill with legislators
MARCH 31	Photo contest deadline

You can access your account information 24 hours a day, every day, on our website or through our SmartHub app for mobile devices. You can also call our office to report service interruptions and request account information at 866-242-4232. ⚡



Access Energy Cooperative is dedicated to exceeding members' expectations for safe, reliable and efficient service, while being a good citizen in our communities.

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E-mail: contactus@accessenergycoop.com

Office Hours: Monday-Thursday, 7 a.m.-4:30 p.m.
Friday, 7 a.m.-3:30 p.m.

Call our office 24/7: 319-385-1577

Payments can be placed in dropbox under flag pole.
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Larry White	District 2	Director
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This institution is an equal opportunity provider.

WORKING WITH LOCAL LEGISLATORS

BY KEVIN WHEELER



"All politics is local." This observation by the late Thomas P. "Tip" O'Neill, Jr., former Speaker of the House of Representatives, means that even national politics have a local impact,

and people care most about issues that directly affect them. Indirectly, this famous adage underscores the importance and value of local politics.

At Access Energy Cooperative, we think it's critical to develop and cultivate relationships with local legislators because they craft, introduce and vote on legislation that impacts the local business climate, the environment and quality of life for our communities. That's why we work closely with our local elected officials. After all, our purpose is to provide safe, reliable, affordable energy, but our mission is to help our communities thrive.

Access Energy Cooperative is a local business that powers economic development and prosperity for our region. As a cooperative, we have deep roots here, and we listen closely to our members to better understand the needs of the communities. Our leadership, board members and employees live and work right here in the communities we serve.

We strive to be an advocate for our communities, ensuring that local legislators know, understand and act on the issues that are important to our area.

Providing industry guidance and expertise

As a practical matter, we recognize that most legislators are "generalists," yet they vote on a wide range of issues. Their expertise may not include the changing energy industry, which is why Access Energy Cooperative provides

guidance and expertise from subject-matter experts who've been in the energy industry for many years.

Today's energy landscape is an increasingly complex topic covering not only the traditional engineering and vegetation management aspects of the industry, but also technology, cybersecurity, the electrification of the transportation sector and more.

Our experts provide briefings and background information to legislators, committees and staff, and we offer expert testimony for hearings and other legislative or regulatory meetings or gatherings. And because we're involved in economic development and we know local community leaders, we can provide insight on how issues and policies under discussion might impact our region.

Co-op as a convener

In addition, we periodically invite legislators and their staff to the co-op for tours so they can see firsthand how we operate and can view our operations center and substations.

Representing your best interests

We strive to be a trusted resource on energy issues. Because of our deep roots in the community, we have a firm understanding of local issues and needs. We will continue looking after the long-term interests of our members. This means we are able to cultivate and foster positive, productive relationships with legislators who know and trust us, because we're advocating on behalf of the community we serve.

We're proud to power your life and bring good things to the community. We hope you'll continue to advise Access Energy Cooperative on matters of importance so we can continue to advocate on your behalf and improve the quality of life for all.

Kevin Wheeler is the general manager/CEO of Access Energy Cooperative.

ACCESS ENERGY COOPERATIVE SCHOLARSHIP PROGRAM

Six \$1,500 awards, two in each of the cooperative's three districts, are available through the Access Energy Cooperative scholarship program. Applicants must be a high school senior receiving post-secondary education. Parents or legal guardians must be members of the cooperative. More details can be found on our website at www.accessenergycoop.com.

Applications can be found:

- At all area high school guidance counselor offices
- By visiting our website at www.accessenergycoop.com, downloading the application and either faxing, mailing or bringing it to our office; the form can also be submitted online

- By contacting the Access Energy Cooperative headquarters office in Mount Pleasant at 866-242-4232

Applications are due in our office March 15.

Winners will be chosen and announced at their senior awards ceremonies.

When are the scholarships paid?

A portion of the scholarship (\$500) will be paid to recipients at the completion of their first semester of post-secondary education, with proof of enrollment for the second semester. The remaining \$1,000 will be paid after completion of the third semester, with proof of enrollment of the fourth semester.



STATEMENT OF NON-DISCRIMINATION

USDA prohibits discrimination in all its programs and activities on the basis of race, color, national origin, sex, disability, age, reprisal or retaliation for prior civil rights activity. (Not all prohibited bases apply to all programs.)

Recipients are required to notify applicants with disabilities and Limited English Proficiency (LEP) persons of their right to free language assistance and accommodations and provide free language assistance and accommodations upon request.

To file a program discrimination complaint, complete the USDA Program Discrimination Complaint Form, AD-3027, found online at www.ascr.usda.gov/complaint_filing_cust.html and at any USDA office or write a letter addressed to USDA and provide in the letter all of the information requested in the form. To request a copy of the complaint form, call 866-632-9992. Submit your completed form or letter to USDA by: mail: U.S. Department of Agriculture, Office of the Assistant Secretary for Civil Rights, 1400 Independence Avenue, SW, Washington, D.C. 20250-9410; fax: 202-690-7442; or email: program.intake@usda.gov.

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SOPHOMORES AND JUNIORS: WIN A FREE TRIP TO WASHINGTON, D.C.

What do 1,500 high school students, our nation's capital and electric cooperatives have in common? The answer is the electric cooperative Youth Tour, of course! Youth Tour was established to inspire our next generation of leaders. Since 1964 more than 50,000 young Americans have taken advantage of this special opportunity offered by their electric cooperatives.



It all takes place June 18-24, when hundreds of electric co-ops across the country send participants to Washington, D.C., for a chance to learn about the cooperative business model and enjoy a full week of sightseeing.

While in D.C., participants have a chance to meet with their elected officials and discuss the issues that are important back home. Without a doubt, Youth Tour has grown into an invaluable program that gives young Americans an experience that will stay with them for the rest of their lives.

Access Energy Cooperative sends two students each year. If you're a high school sophomore or junior interested in traveling to Washington, D.C., to experience a once-in-a-lifetime trip, check out our website at www.accessenergycoop.com to download or submit an application. Applications also can be found at your guidance counselor's office or by calling our office at 866-242-4232.

Applications are due in our office Feb. 28. Personal interviews to choose our two student representatives will be held at our office March 9. You must be able to participate in an interview on that date to participate.

FIVE WAYS TO SAVE ENERGY WHEN WORKING FROM HOME

BY ABBY BERRY

When working at home, it means more energy is probably used throughout the day. Here are five easy ways to save energy and reduce your electric bill when working from home.

- 1. Use a smart power strip.** Plugging in your most-used devices, such as computers, monitors and routers, to a smart power strip ensures these devices aren't drawing power when they're not in use. Smart power strips also give you the option to select which devices should stay in "always on" mode.
- 2. Unplug your least-used equipment.** If your home office includes equipment like printers and scanners, you're probably not using these electronics every day. In this case, unplug unused equipment since it can draw energy even when it's not being used.

- 3. Choose ENERGY STAR®-certified office equipment.** If you're looking to purchase new equipment like computers, monitors or imaging equipment for your workspace, look for the ENERGY STAR® label to ensure you're getting the most energy-efficient features.

- 4. Use natural light.** When you're working during the day, turn off lights and open blinds, curtains and other window coverings to let natural light in – this will take advantage of the additional warmth from the sun, too!

- 5. Lower the thermostat.** Home heating makes up a significant portion of your energy bills. Put on an extra layer of clothes and turn the thermostat down a couple degrees during the day to reduce energy use and save money. The Department



of Energy recommends setting the thermostat to 68 degrees F or cooler during winter months.

For additional energy saving ideas, visit our website at www.accessenergycoop.com.



Abby Berry is the senior communications resources manager at the National Rural Electric Cooperative Association (NRECA).

ACCESS ENERGY COOPERATIVE LINEMAN SCHOLARSHIP PROGRAM

Up to two \$2,000 scholarships will be awarded per year to students enrolled, or planning to enroll, in a one- or two-year electric lineworker program, such as the Northwest Iowa Community College Powerline program in Sheldon or the Utilities/ Lineman Program at State Technical College in Linn, Missouri.

2022 timelines

- March 15 – Application deadline
- April 30 – Awards announced
- Award recipients have until March 31, 2023, to apply for initial scholarship payment

Eligibility requirements

- Must be a high school graduate
- Must maintain a grade point average of 2.5 or above
- Must reside in southeast Iowa in the general Access



Energy Cooperative service area (not limited to Access Energy Cooperative territorial boundaries)

- By contacting the Access Energy Cooperative headquarters office in Mount Pleasant at 866-242-4232

Application process

Applications can be found:

- At all area high school guidance counselor offices
- By visiting our website at www.accessenergycoop.com

Complete details can be found on our website at www.accessenergycoop.com.

CALL FOR DIRECTOR NOMINATIONS

Your Board of Directors is elected by and from the membership of Access Energy Cooperative. Three seats are up for election, one in each of the three districts. Each board member is elected to a term of three years. Terms that will expire with the 2022 annual meeting to be held Tuesday, Aug. 2, 2022, include the following listed below.

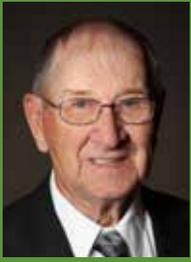
**District 1
Fred
Hickenbottom**



**District 2
Robert P. Smith**



**District 3
Marvin Newton**



The Board of Directors appointed the Nominating Committee in January who will select candidates to run for the expiring terms. Anyone interested in running for a seat on the board may contact a member of the Nominating Committee (listed below). This list is also posted in our office or on our website at www.accessenergycoop.com; or you can call our office at 866-242-4232 for information.

In order to serve on the Access Energy Cooperative Board of Directors you must meet all of the qualifications as specified in the cooperative Bylaws, Article III, Section 3 as summarized below.

No member shall be eligible to become or remain a director or to hold any position of trust in the Cooperative who:

- is not a bona fide resident of premises served by the Cooperative
- is in any way employed by or financially interested in a competing enterprise or a business selling electric energy or supplies to the Cooperative or a business primarily engaged in selling electrical or plumbing appliances, fixtures or supplies to the members
- within two (2) years preceding a director candidate nomination was an employee of the Cooperative
- within seven (7) years preceding a director candidate nomination has

received benefit from any collective bargaining agreement with the Cooperative

- is a close relative of a director or employee of the Cooperative, with close relative being defined as: spouse, cohabitant, mother, father, mother-in-law, father-in-law, sister, brother, sister-in-law, brother-in-law, and natural, step, and adopted children
- within fifteen (15) years preceding a director candidate nomination has been convicted of a felony whether by judgment, order, settlement, conviction, plea of guilt, or plea of nolo contendere
- is or becomes the full-time employee or agent of another director or employee
- is or becomes the full-time employer or principal of another director
- is the incumbent of or candidate for an elective public office other than on a school board, board of supervisors, township trustee, township clerk, or member of the State legislature

When a membership is held jointly, either one, but not both, may be elected a director, provided, however, that neither shall be eligible to become or remain a director or hold a position of trust in the Cooperative unless both shall meet the qualifications herein above set forth.

2022 NOMINATING COMMITTEE

District 1

- Joe Heckethorn, Stockport
- Brandon Ledger, Stockport
- Kenneth Whitham, Fairfield

District 2

- Matt Lawler, Mt. Pleasant
- Bob Scarff, Mt. Pleasant
- Randy White, Mt. Pleasant

District 3

- Myrna Folker, Donnellson
- Dean Mabeus, Wever
- Tim Myers, New London

MARK YOUR CALENDAR!

**2022 Annual Meeting of Members
Tuesday, Aug. 2, 5 p.m.**



Watch for more details in upcoming issues of this publication.

Date Night

RECIPES

AT HOME

CHICKEN PARMESAN FOR TWO

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

Place chicken breasts in freezer bag on a solid, level surface. Firmly pound chicken with smooth side of meat mallet until $\frac{1}{2}$ -inch thickness. Season chicken with salt and pepper. Beat egg in a shallow bowl, set aside. Mix bread crumbs and $\frac{1}{4}$ 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 $\frac{3}{4}$ 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 $\frac{1}{4}$ cup Parmesan cheese and $\frac{1}{2}$ 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

- 1½ cups egg whites (12 eggs)
- 1½ teaspoons cream of tartar
- 1 cup granulated sugar
- 1½ teaspoons vanilla
- $\frac{3}{4}$ cup cake flour
- 1½ cups powdered sugar
- $\frac{1}{4}$ 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.

Sonya Colvin • Ames • Consumers Energy

WILD RICE QUICHE

- 3 eggs, beaten
- 1½ cups half and half
- $\frac{3}{4}$ cup Swiss cheese, grated
- $\frac{3}{4}$ cup Monterey Jack cheese, grated onion, to taste parsley, to taste
- 5 slices bacon, fried and crumbled
- 2 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

SWEET & SOUR MEATLOAF

- 1 8-ounce can tomato sauce
- ¼ cup brown sugar
- ¼ cup vinegar
- 1 teaspoon yellow mustard
- 1½ - 2 pounds ground beef
- ¼ 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 SQUIRREL 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

THE REWARD:

\$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

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



OPPORTUNITY OF A LIFETIME: WIN A TRIP TO WASHINGTON, D.C.!



Enter our Essay Contest by March 25



iowayouthtour.com



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[@IowaYouthTour](https://twitter.com/IowaYouthTour)



[IowaYouthTour](https://www.snapchat.com/add/IowaYouthTour)



[iowayouthtour](https://www.instagram.com/iowayouthtour)

SOME OF THE THINGS STUDENTS WILL DO AND SEE ON YOUTH TOUR:

- Washington Monument
- World War II Memorial
- World War I Memorial
- Albert Einstein Memorial
- Franklin Delano Roosevelt Memorial
- Vietnam Veterans Memorial
- The National Mall
- Boat cruise on the Potomac River
- Holocaust Memorial
- Ford's Theater
- Korean War Veterans Memorial
- Lincoln Memorial
- Washington National Cathedral
- Mount Vernon
- Iwo Jima Sunset Parade
- White House
- U.S. Capitol

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, juniors 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 Iowa 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 Iowa electric co-op. **One all-expenses-paid trip will be awarded by *Iowa 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 *Iowa 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.IowaYouthTour.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.

Farmers Electric Cooperative, Inc.
(Greenfield)
Franklin REC
Grundy County REC
Harrison County REC

Heartland Power Cooperative
Iowa Lakes Electric Cooperative
Lyon REC
Midland Power Cooperative
MiEnergy Cooperative

Nishnabotna Valley REC
North West REC
Pella Cooperative Electric Association
Prairie Energy Cooperative

Raccoon Valley Electric Cooperative
Southern Iowa Electric Cooperative
Southwest Iowa REC
United Electric Cooperative

USING THE CLOCK TO SAVE ENERGY

BY KATHERINE LOVING

Did you know the time of day you use energy can impact electricity rates? Think of times of high energy demand like rush-hour traffic. These are times when a lot of people in our communities are using electricity – whether getting ready for work, which involves showering and making breakfast, or coming home in the evening to cook dinner, wash clothes, bathe the kids or wash dishes.

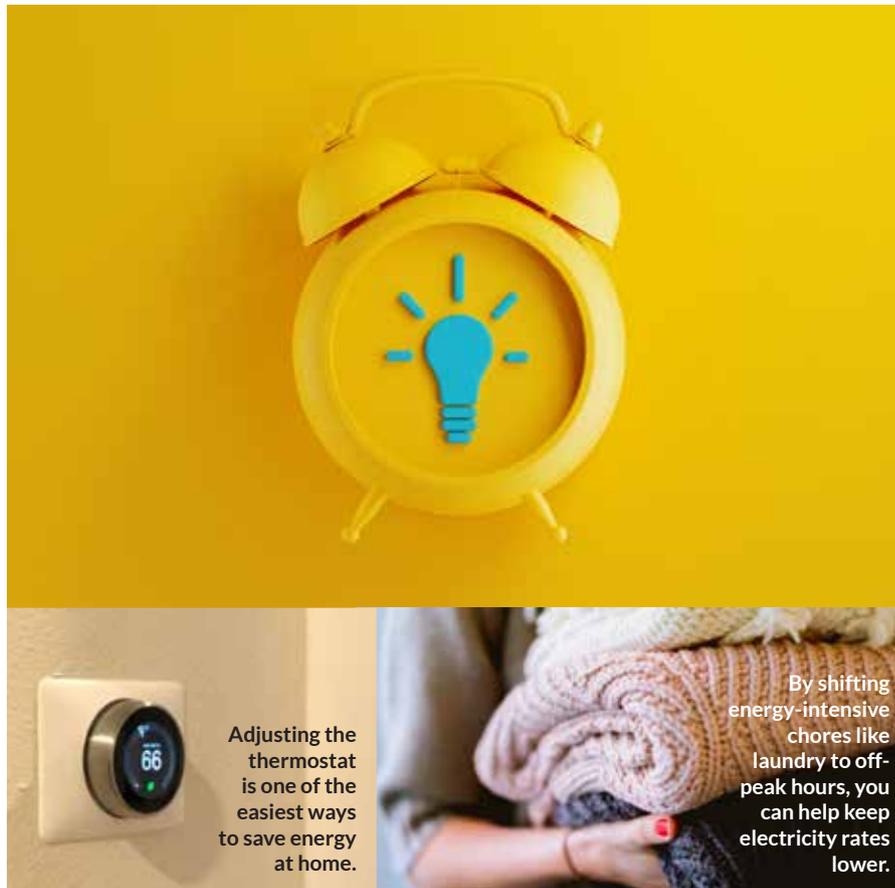
During times of high energy use, your electric cooperative strives to ensure there is enough electricity available to meet the needs of all consumer-members. This often results in buying energy at higher costs (because of higher overall demand) as well as ensuring that grid infrastructure can deliver enough electricity when use is highest. This is especially true when extreme winter or summer weather pushes energy use even higher.

Thoughtful timing helps lower energy demand

There are several ways consumers can help lower energy demand by thoughtfully timing energy-intensive activities at home. Peak energy hours are typically in the morning and in the evening after people return from work and school. Weekends and holidays are typically considered off-peak.

Here are few simple ways you can beat the energy peak:

- **Adjust the thermostat.** Move the temperature up to 78 degrees F in summer and down to 68 degrees F in winter. Bump it further up or down when you're away from home for extended periods of time.
- **Postpone the use of major appliances.** Move laundry loads to later in the evening or weekends. Delay running the dishwasher until well after dinner or use the delay cycle function if your dishwasher has one.
- **Shift hot water use.** Your water heater uses a significant amount of



Adjusting the thermostat is one of the easiest ways to save energy at home.

By shifting energy-intensive chores like laundry to off-peak hours, you can help keep electricity rates lower.

energy. You can reduce its energy burden by showering and bathing at an off-peak time or lowering the temperature on the tank. Some models include the ability to place the water heater on a timer to turn it off during hours it isn't in use.

- **Fire up the grill.** In the summer, consider grilling outdoors to keep the oven off during peak heat days.
- **Unplug when possible.** Unplug charging cables and small appliances when they're not in use. For bigger items like TVs, try plugging them into a power strip that can be flipped on and off.
- **Charge while you sleep.** If you have an electric vehicle, charge it at night when electricity rates are typically lowest.

Check with your local electric co-op

to see if they offer rates that are directly related to peak energy times and seasonality through special opt-in programs. These programs can include notification of peak hours, either through text or email. Even without these programs, lowering your energy use during peak times allows your co-op to save money on peak demand fuel costs, ultimately saving consumer-members money by keeping rates lower.

Timing energy use to avoid “rush hour” is a great way to keep costs down and practice better efficiency habits. Check with your electric co-op for more information on time-of-use rates and programs.

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

THREE INTERESTING FACTS ABOUT ELECTRICITY

BY PAUL WESSLUND

Electricity turns dark into light, makes hot foods cold and cold foods hot, washes the dishes and searches the internet. It is essential to our everyday lives, yet we rarely think about it. But behind the scenes, interesting things are happening with electricity.

1 Electricity must be used or stored after it's generated

A rechargeable battery stores electricity, but the kind of electricity you use in your home needs to be used after it's generated. Electricity produced from power plants, solar panels, wind turbines and hydro dams needs to be perfectly timed for when you decide to use it.

A vast and intricate system of devices control power flow in a precisely balanced way. It's one reason utility operators must be strategic when adding renewable energy to the nation's fuel mix. Solar energy and wind power depend more on the whims of Mother Nature, which adds an extra degree of difficulty to power management.

Large-scale battery storage technology is rapidly improving, creating another way for electric utilities to better balance the flow and timing of electricity. Battery technology could also make it easier to add solar and wind energy to our grid because it can store energy when it's breezy and sunny, then use it at night and during calm weather.

2 Blame a squirrel for power outages

While severe weather causes most outages, if it's nice out and your electricity goes off, it could be caused by a squirrel. We all know to play it safe around electricity, but squirrels don't. They scamper and chew around transformers, substations and utility poles where they can disrupt high-voltage equipment.

But it's not just squirrels. Snakes, birds and other critters can find their way



into dangerous places. There's no official recordkeeping of wildlife-caused power outages, but estimates run as high as 20%.

3 Highways could charge electric vehicles (EVs) in the future

If researchers have their way, EVs wouldn't need to plug in – they could charge while being driven! “Wireless dynamic charging” projects are underway around the world. The idea is like wireless chargers you can buy for your home electronics, the kind you can set near a charger rather than actually plugging in the smart phone or other device.

Charging cars while they're driving along the freeway is of course a lot

more ambitious. But some developers predict that within five years, there could be stretches of vehicle-charging lanes.

Futurists expect electric trucks would be the most likely users of wireless charging lanes. Wireless dynamic truck charging could keep deliveries rolling rather than stopping for several hours to plug-in and recharge.

Electricity is such a basic part of our everyday life, so it's easy to forget about it. But every now and then it's good to think about all its benefits and mysteries.

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

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.”

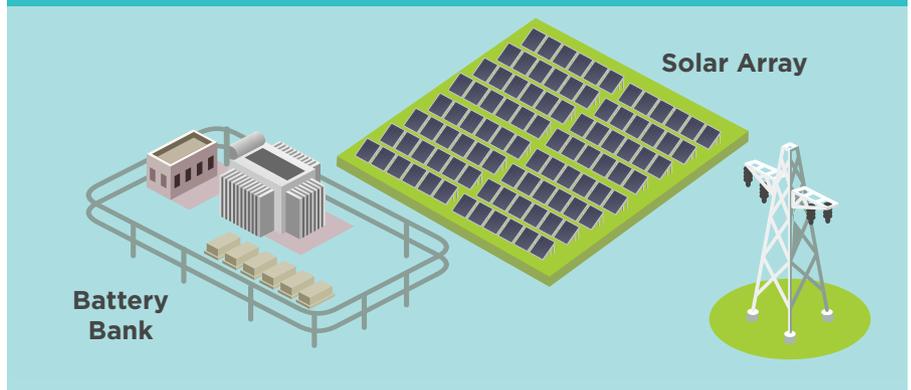
Since the battery technology mainly uses water, air and iron – all abundant and cheap resources – the technology is relatively low cost. These resources also make the technology relatively safe and simpler to recycle since there are no heavy metals.

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 hundreds 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 decoupage 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; my 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 sister-in-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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IOWA ELECTRIC COOPERATIVE LIVING

The magazine
for members of
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