

MARCH 2024

iowa

ELECTRIC COOPERATIVE LIVING

SPECIAL INSERT:

Franklin REC
2023 Annual Report



Attend Franklin REC's Annual Meeting on April 2 ▶ See Page 4

CONTENTS



8



10



12

VOLUME 77 • ISSUE 3

3

STATEWIDE PERSPECTIVE

Education and training are essential

3

EDITOR'S CHOICE CONTEST

Win a Bissell® carpet cleaner

14

SAFETY MATTERS

Grain bin annual notice

15

OUT BACK

Inspiration from the top of the world

EDITOR
Ann Foster Thelen

DESIGNERS
Megan Walters
Bree Glenn

IAEC EXECUTIVE VICE PRESIDENT
Chuck Soderberg

IAEC DIRECTOR OF COMMUNICATIONS
Erin Campbell

IAEC BOARD OF DIRECTORS
Kenny Vandenberg, District 1 – President
Jim Miller, District 5 – Vice President
Deena Moore, District 4 – Secretary/Treasurer
Tony Lem, District 2 – Asst. Secretary/Treasurer
Jerry Keleher, District 3
Gordon Greimann, District 6
Bruce Amundson, District 7
Marion Denger, Prairie Energy Cooperative – NRECA Representative
Kevin Wheeler, Access Energy Cooperative – Managers' Representative

Iowa Electric Cooperative Living magazine (ISSN: 2770-8683) is published monthly by the Iowa Association of Electric Cooperatives, a not-for-profit organization representing Iowa's member-owned local electric cooperatives. Association address: 8525 Douglas Ave., Suite 48, Des Moines, IA 50322-2992. The phrase **Iowa Electric Cooperative Living** is a mark registered within the state of Iowa to the Iowa Association of Electric Cooperatives. The magazine does not accept advertising.

Editorial Office
8525 Douglas Ave., Suite 48, Des Moines, IA 50322-2992. Telephone: 515-276-5350.

Email Address
editor@ieclmagazine.com. *Iowa Electric Cooperative Living* magazine does not assume responsibility for unsolicited items.

Website
www.ieclmagazine.com

Postmaster
Send address changes to *Iowa Electric Cooperative Living* magazine, 8525 Douglas Ave., Suite 48, Des Moines, IA 50322-2992. Periodicals Postage Paid at Des Moines, Iowa, and at additional mailing offices.

Change of Address
Every local electric cooperative maintains an independent mailing list of its members, so please send your change of address directly to your local electric cooperative's office. *Iowa Electric Cooperative Living* magazine cannot make an address change for you.

© Copyright 2024, Iowa Association of Electric Cooperatives. No portion of the editorial, photographic or other content of *Iowa Electric Cooperative Living* magazine or its website may be reproduced without written permission of the editor.



ON THE COVER

Special thanks to Abigail Westbrook, a Consumers Energy member-consumer, for supplying this month's cover image. Submit high-resolution photos for consideration to editor@ieclmagazine.com. You could receive \$100!

EDUCATION AND TRAINING ARE ESSENTIAL TO BEST SERVE OUR ELECTRIC COOPERATIVE MEMBERS

BY KATRINA DAVIS



While many of us enjoy spring break in March, education and training are always on the calendar for Iowa's electric cooperatives.

In my role as director of education and training for the Iowa Association of Electric Cooperatives (IAEC), I organize more than 50 trainings, workshops and conferences each year for the staff and board directors of Iowa's electric co-ops.

In our cooperative mission to power lives and empower communities, we have an obligation to serve with excellence. Electric cooperatives invest in educating their directors and employees because they know their knowledge will result in even stronger leadership for years to come.

The following are just a few of the affordable learning opportunities that we offer at IAEC.

Directors' Update

This annual event is held for a day and a half in February and covers topics relevant to Iowa electric cooperative board members. Our 2024 agenda included emerging trends like how to prepare the cooperative workplace for the next generation of employees, the co-op board's role in a changing industry and what to know about cybersecurity insurance for electric cooperatives.

Conferences for Professional Groups

Each spring and fall, IAEC hosts conferences for various professional groups, including co-op managers and staff in human resources, information technology, communications and member services, accounting and finance, and safety and operations. Co-op employees benefit from presentations that shine a light on emerging technologies, industry trends,

and statewide updates on regulatory and legislative developments. Attendees also have opportunities to network with each other and share best practices.

Cooperative Leadership in Iowa Program

The Cooperative Leadership in Iowa Program (CLIP) is a new and emerging leadership program for employees of any department at Iowa's electric cooperatives. Participants attend in-person and virtual sessions throughout the year and graduate from the program in December during IAEC's annual meeting. In our first year, 15 employees graduated from the program in 2023, and 17 employees are going through the program this year. CLIP graduates walk away with a greater understanding of the electric cooperative business model and learn how to harness their strengths for effective leadership at the co-op.

Field Leader Training

This two-day, in-person training moves beyond technical aspects of the job and teaches leadership skills necessary to effectively direct the activities of a crew, work on the crew and communicate with management. The interactive scenarios and cases are just like the ones encountered on the job every day, so learning can be immediately applied when planning work, leading teams and improving safety.

Investing in education and training for effective leadership is just one way that your electric co-op ensures you receive safe, reliable, affordable and sustainable electricity. I'm proud to help directors and employees accomplish these goals through my role at the statewide association.

Katrina Davis is the director of education and training for the Iowa Association of Electric Cooperatives.

EDITOR'S CHOICE CONTEST

SPRING CLEAN BY WINNING A BISSELL® SPOTCLEAN PROHEAT CARPET CLEANER!

There is no need to pull out a full-size carpet cleaning machine every time a stain or spot appears on your carpet. BISSELL® SpotClean ProHeat uses the power of heated cleaning to remove tough spots and stains. It's a powerful compact cleaning machine. Designed to easily clean carpets, upholstery, stairs, area rugs, auto interiors and more.

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 All-Clad immersion blender from the January issue was Connie Stickley, a Butler County Rural Electric Cooperative member-consumer.



ENTER ONLINE BY MARCH 31!

FRANKLIN RURAL ELECTRIC COOPERATIVE NOTICE OF ANNUAL MEETING OF MEMBERS

The 2024 Annual Meeting of the Members of Franklin Rural Electric Cooperative will be held at the Franklin County Convention Center in Hampton, Iowa, at 6:30 p.m., on Tuesday, April 2, 2024, to take action upon the following matters:

1. The reports of officers, directors, and committees;
2. The election of three directors for a term of three years each;
3. All other business which may legally come before the meeting or any adjournment or adjournments thereof.

In connection with the election of three directors scheduled for this meeting, the following members have been nominated for Director by the Committee on Nominations appointed by the Board of Directors of the Cooperative pursuant to the Bylaws.

THREE-YEAR TERM

District 1, One to be Elected: Matthew Roelfs

District 2, One to be Elected: Don Greimann

District 3, One to be Elected: Dale Schaefer

You are urged to attend the meeting, hear the reports of the officers, cast your vote for directors, and transact such other business as may come before the meeting.

DATED this 1st day of February 2024.



Darwin VanHorn, Secretary

2024 DIRECTOR CANDIDATES

MATTHEW ROELFS — DISTRICT 1

INCUMBENT



A member of Franklin REC since 2001, Matt Roelfs and his wife Megan live on the southern edge of the county between Ackley and Iowa Falls. They are the parents of seven children.

After graduating from Ackley-Geneva High School, Roelfs earned his bachelor's degree from Central College in Pella.

He was previously employed in quality assurance at Vermeer Manufacturing in Pella and in sales for Iowa Veterinary Supply in Iowa Falls.

Since 2014, Roelfs has owned Iowa Steel Masters in Ackley, where steel panels and trim for agricultural, residential and commercial use are manufactured. He is also vice president of the Ackley Development Commission.

Roelfs says of serving on the board for the past three years, "I have been very surprised about how much I enjoy serving on this board. It is challenging because there is a lot to learn and important decisions to make, but I have also been able to take many classes to learn how to make those decisions well. Franklin REC has a great board and staff that deeply care about the members and the community. I'm very excited to be part of this team and hope that I can continue in the future."

DON GREIMANN — DISTRICT 2

INCUMBENT



Don Greimann has been a member of Franklin REC since 1978 and has served as a director since 1996. He holds the Credentialed Cooperative Director, Board Leadership and Director Gold certificates through the National Rural Electric Cooperative Association.

He and his wife Alice live on a farm

southwest of Chapin, where they grow corn and soybeans. They have two daughters and three grandchildren.

Greimann graduated from Sheffield-Chapin High School and began farming in 1973. In 1987, he started working at Greimann Brothers, Inc., in Chapin, where he is part owner. He is a member of Zion St. John Lutheran Church in Sheffield.

Greimann is proud to be a part of the changing world of electric cooperatives with Franklin REC venturing into solar generation. He is also proud that, as a small cooperative, Franklin REC has been able to recruit great managers. In addition, he values the emphasis on safety programs to keep employees and members safe, along with having a great group of employees that represent the cooperative and community.

DALE SCHAEFER — DISTRICT 3

INCUMBENT



Dale Schaefer has been a member of Franklin REC since 1971, serving as a director since 1985 and board secretary/treasurer for 25 years. In addition, he has served on the Corn Belt Power Cooperative board for 12 years and is currently vice president. Schaefer holds the Credentialed Cooperative Director, Board Leadership and Director Gold certificates through the National Rural

Electric Cooperative Association.

He and his wife Lana live on a farm southwest of Rockwell, where they grow corn and soybeans and raise cattle. They have two sons, one daughter and seven grandchildren

After graduating from Rockwell-Swaledale High School, Schaefer attended Muscatine Community College. He returned to the area and started farming in 1973. He is a member of St. Peter Lutheran Church in Rockwell and has served on church boards.

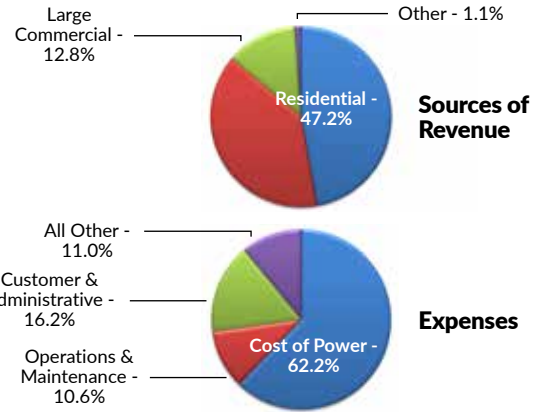
Schaefer has found serving on the Franklin REC board to be rewarding and challenging. He believes the accomplishments of the co-op are a great measure of the success of Franklin REC.

FINANCIALS

INCOME STATEMENT	2023	2022
Revenues		
Operating Revenue and Patronage Capital	\$8,288,758	\$7,468,479

Expenses		
Cost of Power	\$5,000,820	\$4,533,006
Operations and Maintenance	\$853,226	\$738,018
Consumer Account Expense	\$128,174	\$139,342
Customer Service & Sales Expense	\$178,589	\$127,588
Administrative & General Expense	\$997,010	\$952,120
Depreciation	\$568,968	\$602,563
Interest and Other	\$317,064	\$266,353
Total Expenses	\$8,043,851	\$7,358,990

Operating Margins	\$244,907	\$109,489
Generation & Transmission Capital	\$636,360	\$778,317
Other Capital Credits	\$54,161	\$32,051
Non Operating Margins	\$78,995	\$51,767
Total Operating and Non-Operating Margins	\$1,014,423	\$971,624

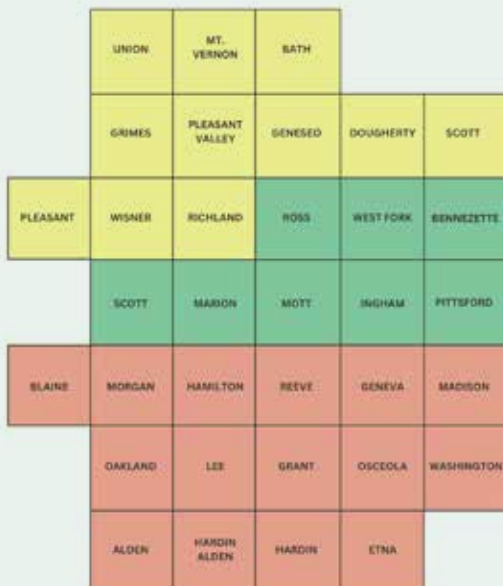


BALANCE SHEET	2023	2022
Assets		
Net Utility Plant	\$12,559,849	\$11,816,363
Other Property and Investments	\$6,489,430	\$6,284,382
Current Assets/Deferred Credits	\$3,291,623	\$2,155,138
Total Assets	\$22,340,902	\$20,255,883

Liabilities & Equity		
Margins & Equities	\$9,585,550	\$8,950,876
Total Long-Term Debt	\$11,212,860	\$9,769,464
Current & Accrued Liabilities/Deferred Credits	\$1,542,492	\$1,535,543
Total Liabilities	\$22,340,902	\$20,255,883

BOARD OF DIRECTORS

FRANKLIN REC SERVICE TERRITORY



- District 1
- District 2
- District 3



DISTRICT 1

DAVID KENINGER



DISTRICT 1

MATTHEW ROELFS



DISTRICT 1

JOHN SNYDER



DISTRICT 2

DON GREIMANN



DISTRICT 2

GORDON GREIMANN



DISTRICT 3

DALE SCHAEFER



DISTRICT 3

DARWIN VAN HORN

SPEAKER SPOTLIGHT



Join us at Franklin REC's traditional annual meeting on Tuesday, April 2, at 6:30 p.m., where Lauren Koehler will share insights into rural electrification.

Koehler is a first-year Iowa State University student majoring in Family & Consumer Sciences Education and Studies. Koehler's enthusiasm for rural electrification was sparked when her professor assigned students to read "The Secret History of Home Economics: How Trailblazing Women Harnessed the Power of Home and Changed the Way We Live."

This book sheds light on the achievements of Louisan Mamer, who played a pivotal role in the Rural Electrification Administration. As Lauren delved deeper into her research, her passion for electrification evolved into a hands-on hobby. She crafts miniature displays (pictured) inspired by the electrification of rural households.



ANNOUNCEMENT

Your 2024 Franklin REC voting ballot and the official return envelope are en route to your mailbox! Details of the Annual Meeting and your meal voucher to redeem at the meeting are included in the mailing. Present your voucher on April 2 and indulge in a mouthwatering steak sandwich meal, grilled to perfection by the Franklin County Cattlemen's Association.

EXECUTIVE MESSAGE

BY GARRETT THOMPSON



It was another great and busy year for Franklin REC in 2023. We closed out a record 62 work orders (or job tickets), which included new line builds, the retirement of old services, service upgrades and multiple jobs carried over from 2022. That's about the only advantage of being in a drought; we had a lot of sunny days to work out in the field!

Employees fuel co-op and community success

One of our linemen, Tom Demro, received his journeyman lineman card in 2023, which is no small feat. Receiving a journeyman's card requires passing 13 tests and logging more than 7,500 hours of on-the-job training. These numbers are a good representation of how technical, intense and dangerous it is to be a lineworker. I appreciate our line crew's work to empower rural Iowa, so our members can feed America.

The office staff was not to be outdone in 2023, however! This marked our third annual Light Up the Night event, which was bigger and better than ever. Emily Rush and Madison Alert logged many hours at Bandshell Park, putting up lights and festive decorations. On the day of the event, different activities were held throughout downtown Hampton, which included ornament making, building your own snow globe, trolley rides and pictures with Santa. Every activity was well-attended, especially the pictures with Santa, who had more than 200 pictures with kids and families.

The Light Up the Night parade was fantastic yet again. It felt as though we were in a Hallmark movie, with the beautiful snow gently falling before and during the festivities. It was a perfect way and day to kick off the Christmas season.

Emphasis on ongoing education and training

We also concentrated on additional training in 2023. With our new metering system now in place, we will use as many features as possible. Chad Foster, our director of member services, attended several conferences to learn more about the system and what it can do for us in serving members. As with any new technology, there are growing pains, but now that we have the overall system in place, we are ready to learn more.

Your board of directors also put an emphasis on education this past year. They attended classes ranging from board governance, the resiliency of the electric grid, electric vehicles, board leadership and many others. Cultivating an educated board takes a lot of time and sacrifice, and I'm proud that Franklin's board takes education seriously.

Directors were also engaged with Corn Belt Power Cooperative – the power supplier for Franklin REC – to learn the issues at hand on the generation and transmission side.

David Keninger, director, serves on the RESCO board. RESCO supplies much of the material Franklin REC needs on a day-to-day basis. There are still supply chain issues within our industry, but it has improved.

Gratitude for members

The year brought about challenges, but there were also plenty of victories along the way. However, if it weren't for our members, we couldn't do any of the items described above. We appreciate all that you do for the local community, the state of Iowa, America and even the world. Franklin REC is lucky to be able to call this place home, and it's because of you. Here's to another safe and prosperous year in 2024!

Garrett Thompson is the general manager/CEO of Franklin REC.

FRANKLIN RURAL ELECTRIC COOPERATIVE 2023 ANNUAL MEETING OF MEMBERS

APRIL 4, 2023

The Annual Meeting of the Members of Franklin Rural Electric Cooperative was held at the Franklin County Convention Center in Hampton, Iowa, on April 4, 2023, beginning at 6:30 p.m., Central Time.

The meeting was called to order by Gordon Greimann, President of the Cooperative, who presided. Dave Keninger, Secretary of the Cooperative, acted as Secretary of the meeting and kept the minutes thereof.

An invocation was offered by Darwin Van Horn.

The Chairman introduced guests and Board members.

The Chairman stated that the presence of the members indicated that Notice of Meeting had been given to the Members in accord with the By-Laws. A motion was made, seconded, and carried to waive the reading of the Notice. A copy of the Notice and the Proof of Mailing will be filed in the records of the Cooperative.

The Chairman stated that the number of members who had registered at the door had been checked, and that a quorum was present for the transaction of business. A list of the members who registered in attendance at the meeting is attached to these minutes and made a part hereof by reference.

The Chairman offered to read the minutes of the 2022 Annual Meeting of the members held on April 5, 2022. A motion was made, seconded and carried to waive the reading of the minutes and they were declared approved as distributed.

The annual Financial Report was presented by Secretary-Treasurer David Keninger and, after full discussion, on motion duly made, seconded and carried, the report was approved and ordered to be filed in records of the cooperative.

The Chairman introduced General Manager Garrett Thompson for his report on the activities of the Cooperative and on issues of current interest in the electric utility industry.

Chairman Greimann then announced the scholarship winners, Kennedy Dodd and Emma Martinek, and the Youth Tour winners for the trip this summer, Lily Strother and Mitchell Roelfs.

The Chairman introduced attorney Dennis Puckett and stated that the next order of business was the election of one Director for a term of three years. Mr. Puckett reported that, in accordance with the By-Laws, the Board of Directors had appointed from the Members of the Cooperative a Nominating Committee, consisting of Verlynn Mensing, Ronald Sailer, Alan Brown, David Bamrick, and Clint Ackerson. The committee had nominated the following members as candidates for Director:

THREE-YEAR TERM

District 3, One to be Elected: Darwin Van Horn

The report of the Nominating Committee was ordered to be identified by the Secretary and annexed to the minutes of the meeting.

The Chairman then appointed Alan Brown, Ron Sailer, and David Bamrick as inspectors of election. A vote was then taken by ballot on the election of Directors for District 3. The ballots were delivered to the inspectors, who proceeded to count them.

A Certificate of Inspectors of Election was then presented and read, certifying that the following members, having received the highest number of votes cast, had been duly elected as Director of the Cooperative to hold office for the term specified, and until his successor shall have been elected and qualified:

THREE-YEAR TERM

District 3, Darwin Van Horn

The Chairman directed the Secretary be directed to annex the Certificates of the Inspectors of Election to the minutes of this meeting, and thereupon declared such member duly elected Directors of the Cooperative to hold office for the term specified, and until their successors shall have been elected and qualified.

The Chairman asked for any old or new business and there was none.

There being no further business to come before the meeting, upon motion duly made, seconded and unanimously carried, the meeting adjourned.

MINUTES FROM THE 2023 ANNUAL MEETING



Franklin REC staff



SAUSAGE & VEGETABLE DINNER

- 1 medium sweet potato
- 1 head broccoli
- 1½ tablespoons olive oil
- salt, to taste
- pepper, to taste
- Cajun seasoning, to taste
- 1 12-ounce package beef smoked sausage
- optional: cherry tomatoes, red onion

Dice sweet potato and cut broccoli into florets, toss in olive oil (along with optional ingredients, if desired) and spread on sheet pan. Sprinkle with salt, pepper and Cajun seasonings. Cut sausage into slices and add to sheet pan or rectangular baking dish. Note: Any type of sausage (substituted for beef) will work. Bake at 425 degrees F for 30 minutes or until veggies are tender. *Serves 4*

**Tiana Stroman • Merrill
North West Rural Electric Cooperative**

LEMON-PARMESAN GNOCCHI

- 16 ounces gnocchi
- 8 ounces mushrooms
- 1 bunch asparagus, cut into pieces
- 1 lemon, juiced
- 2 tablespoons olive oil
- ¼ cup Parmesan cheese, plus some for topping
- ½ teaspoon garlic, minced
- salt, to taste
- pepper, to taste

In large mixing bowl, combine gnocchi, mushrooms, asparagus, lemon juice, olive oil, ¼ cup Parmesan cheese and garlic. Season with salt and pepper. Stir well to combine. Pour mixture onto 15½x10½-inch baking sheet lined with aluminum foil. Spread into a single layer and bake at 400 degrees F for 35 minutes. Serve with extra Parmesan cheese, if desired. *Serves 4-5*

**Donna Johnson • Kanawha
Prairie Energy Cooperative**

OVEN "FRIED" CHICKEN

- 1 cup dried breadcrumbs
- 1 teaspoon onion powder
- ½ teaspoon garlic powder
- ¼ teaspoon dried oregano
- 1 teaspoon paprika
- ¼ teaspoon salt
- black ground pepper, to taste
- ½ cup nonfat buttermilk
- 4 bone-in chicken breasts, skin removed

In a shallow dish, combine breadcrumbs and spices. With a pastry brush or the back of a spoon, "paint" chicken breasts with buttermilk. Buttermilk can be substituted with plain yogurt. Roll chicken in seasoned breadcrumb mixture, and place in small baking sheet sprayed with nonstick cooking spray. Bake at 375 degrees F, about 45 minutes, until brown and internal temperature exceeds 165 degrees F. *Serves 4*

**Tina Ahlberg • Holland
Grundy County Rural Electric Cooperative**

TURKEY LATTICE PIE

- 3 8-ounce tubes refrigerated crescent rolls, divided
- 4 cups turkey, cooked and cubed
- 1½ cups shredded cheddar or Swiss cheese
- 3 cups frozen chopped broccoli, thawed and drained
- 1 10¾-ounce can condensed cream of chicken soup, undiluted
- 1½ cups 2% milk
- 2 tablespoons Dijon mustard
- 1 tablespoon dried minced onion
- ½ teaspoon salt
- dash pepper
- 1 large egg, lightly beaten

Unroll two tubes of crescent roll dough and separate into rectangles. Place rectangles in an ungreased 15x10x1-inch baking pan; press onto the bottom and ¼ inch up sides to form a crust, sealing seams and perforations. Bake at 375 degrees F for 5-7 minutes or until light golden brown. Meanwhile, in a large bowl, combine turkey, cheese, broccoli, soup, milk, mustard, onion, salt and pepper. Spoon mixture over crust. Unroll the remaining dough and divide into two rectangles. Seal perforations and cut each rectangle lengthwise into 1-inch strips. Using strips, make a lattice design on top of turkey mixture. Brush with egg and bake 17-22 minutes or until top crust is golden brown and filling is bubbly. *Serves 10*

**Dave Duit • Nevada
Consumers Energy**

RANCH PORK CHOP SHEET PAN SUPPER

- 2 tablespoons honey
- 2 tablespoons Worcestershire sauce
- 1 3.5-ounce package ranch dressing mix, divided
- 5 tablespoons olive oil, divided
- 1½ teaspoons salt, divided
- 1½ teaspoons pepper, divided
- 4 boneless pork chops
- 1½ pounds baby Yukon Gold potatoes
- 8 ounces green beans

Whisk together honey, Worcestershire sauce, 2 tablespoons ranch mix, 2 tablespoons olive oil, ½ teaspoon salt and 1 teaspoon pepper. Place pork chops on one end of sheet pan and brush honey glaze mixture on both sides of chops, set extra glaze aside. Halve potatoes lengthwise. In a bowl, combine potatoes, 2 tablespoons olive oil, 1 tablespoon ranch mix, ½ teaspoon salt and ¼ teaspoon pepper and toss together. Place potatoes in the center of sheet pan, next to chops. Roast chops and potatoes at 475 degrees F for 15 minutes. Mix green beans, 1 tablespoon oil, remaining ranch mix, ½ teaspoon salt and ¼ teaspoon pepper. Toss together and set aside. After 15 minutes, flip chops and brush with additional glaze mixture. Turn potatoes, then spread green beans in the empty space on pan. Return to oven and roast 7-8 minutes, until pork chops are done, and veggies are browned. *Serves 4*

**Joanna Schaefer • Larchwood
Lyon Rural Electric Cooperative**

WANTED:

SUMMER DESSERT 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



WHAT YOU NEED TO KNOW BEFORE CONSIDERING SOLAR

BY MIRANDA BOUTELLE

Often, homeowners conflate installing solar at home with energy efficiency. But what most people don't realize is solar is not energy efficiency. Solar is generating energy. Energy efficiency is finding ways to use less energy. While these are not one in the same, both are thought of as beneficial to the environment and a way to save money.

If you are interested in installing solar, it is important to understand your motivations. It may be saving money, concern for the environment or both. Focusing first on energy efficiency can address both motivations.

Here are the five key energy efficiency

considerations to evaluate when adding solar to your home.

1 Energy consumption
Solar systems are sized based on a home's energy needs. The larger the system, the higher the cost. Before installing solar, make sure your home is as energy efficient as possible. That means it will use less energy and allow you to install a smaller solar system – which will save money and reduce your home's environmental impact.

Verify the efficiency of your lighting, HVAC systems and insulation. A fully insulated and air-sealed home uses less energy, and those insulation

measures are less expensive than solar panels. Finish these energy efficiency projects before installing solar.

2 Affordability
Consider your overall out-of-pocket expenses. The expected lifespan of a heating and cooling system is 15 to 25 years. Check the age and condition of your HVAC equipment and consider the expenses of replacement.

3 Roofing
Consider the age, orientation and shade of your roof. It is more difficult and expensive to reroof a home with solar panels. Evaluate if the



roof will need to be replaced before the solar panels need to be replaced.

The best orientation for solar panels is south facing to receive direct light throughout the day. A shaded roof helps keep your home cool in the summertime but reduces solar energy production.

4 Maintenance
A solar system doesn't last forever. Lifespans range from 25 to 30 years. As systems degrade over time, they produce less energy. Maintenance and repairs may be needed.

5 Electric bills and storage
Solar is not "off the grid." Unless you plan to disconnect from your electric co-op, you will still receive a monthly bill.

Solar panels only produce power when the sun is shining. If you want power to your home at other times, like after dark, you need to be connected to your electric co-op or invest in battery storage system, which comes at an additional cost.

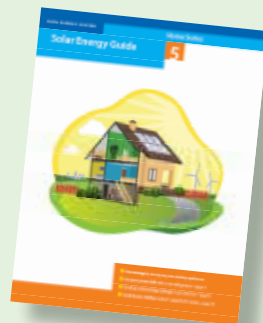
During power outages, don't assume solar panels will supply you with power. Typical solar interconnection to the grid requires panels to shut down during a power outage. This protects lineworkers from injury while making repairs.

Contact your electric co-op
Solar contractors often work in several utility service territories and may not be familiar with your co-op's offerings, rate structures and interconnection agreements. Before signing an agreement, check with your electric co-op for local information rather than relying on what the contractor says.

As with any other system for your home, get bids from three contractors to compare equipment and pricing. Another option may be community-owned solar. Many electric co-ops offer community solar programs. You may have an option to enjoy the benefits of solar without the responsibilities of ownership and maintenance.

Understanding these considerations before installing solar will ensure you meet your money-saving and environmental goals.

Miranda Boutelle writes on energy efficiency topics for the National Rural Electric Cooperative Association, the national trade association representing more than 900 local electric cooperatives.



SOLAR ENERGY GUIDE

Iowa's electric cooperatives are committed to helping member-consumers make educated energy decisions that make sense for their home or business. Before moving ahead with a solar project, contact your local co-op first and also review the Solar Energy Guide for tips and to learn interconnection requirements.

www.iowarec.org/publications/solar-resources

TOP 10 CONSIDERATIONS BEFORE INSTALLING SOLAR

- 1 Address energy efficiency.** Implementing energy efficiency measures in advance can help reduce your overall energy or water consumption, and subsequently, the size of your solar system.
- 2 Do your homework before writing a check.** Talk to your electric co-op at the outset of the process. Then speak with credible, reputable sources who are skilled professionals that will help guide you through the process.
- 3 Know your co-op's rate structure and policies.** Your co-op will help you understand the rate structure and what type of charges are likely to be incurred. They will also let you know how you will be compensated for the excess, unused energy that is generated by your solar system.
- 4 Analyze your electric load.** Understanding your electricity use and overall energy needs will help determine if solar is a good investment for you.
- 5 Determine costs upfront.** You will likely be responsible for initial upfront costs to install the system, as well as maintenance and repair costs. Doing your homework upfront will help determine if it is economical for your energy needs.
- 6 Research incentives and tax credits.** Visit with your co-op to see if there are financial incentives to offset your investment costs. These are often driven by laws and policies and can vary on the type and size of system.
- 7 Understand responsibilities.** A variety of parties are involved in making a solar project a reality, so it's important to know exactly what tasks and costs you're responsible for.
- 8 Know safety requirements.** Solar is connected to the grid, so it's important that you work with your co-op to ensure you're meeting their requirements to keep the grid reliable and safe.
- 9 Choose a reputable vendor.** It is important to find a reputable installer who will give you realistic expectations. Ask for references, check reviews and ask for third-party input.
- 10 Keep thorough records.** Establish a thorough record-keeping process to retain all data and research you gather.

BEWARE OF SOLAR SCAMS

Before working with any vendor, Iowa's electric cooperatives encourage you to do your homework to ensure you choose a reputable provider.



If you have a complaint regarding solar installation or financing, you can complete and submit an electronic complaint at bit.ly/3usfVj7.

Consumers can also call the Iowa Attorney General's Consumer Protection Division at 515-281-5926 or 888-777-4590 or email consumer@ag.iowa.gov.

ADVANCEMENTS IN NUCLEAR ENERGY

BY JENNAH DENNEY

The top priorities of Iowa's electric cooperatives are providing reliable and affordable electricity to our member-consumers. To meet the growing energy needs of our local communities, we continually explore innovative solutions. With advancements in technology and safety measures, nuclear offers potential for sustainable electricity generation.

The current state of nuclear power generation

Nuclear energy, often overshadowed by solar and wind energy, provides a reliable source of power that can be generated at any time. Over the past two decades, nuclear power has reliably and economically contributed nearly 20% of electrical generation in the U.S. It remains the single largest contributor – accounting for more than 70% – of non-greenhouse gas-emitting power generation in the country.

Nuclear energy currently accounts for about 15% of the electricity delivered by electric cooperatives, and more than two-thirds of all co-ops include a percentage of nuclear energy in their local fuel mix.

There are 92 nuclear reactors operating in the U.S., and nuclear energy has been powering the nation's grid for the past six decades.

Current and developing nuclear technologies

Light water reactor technologies, known as LWRs, comprise the existing U.S. nuclear fleet and have a remarkable safety and performance record. An example is the Vogtle Unit 3, which commenced commercial operations in the summer of 2023. It is the first newly constructed nuclear unit in more than 30 years, can power an estimated 500,000 homes and businesses, and is currently the nation's largest generator of clean energy. The project created numerous jobs during its construction phase and laid the foundation for

future Small Modular Reactor (SMR) deployments across the country.

SMRs are seen as a promising alternative to traditional large-scale nuclear power plants, offering shorter construction times and increased safety. They can be easily transported and located in areas that wouldn't support a full-scale nuclear plant, providing greater flexibility in energy production.

In addition to SMRs, some companies are developing microreactors, a Generation IV technology that is 100 to 1,000 times smaller than conventional nuclear reactors. A microreactor can operate as part of the electric grid, independently from the grid, or as part of a microgrid, providing heat for industrial applications. Most microreactors can be transported and hauled by a tractor-trailer.

Understanding the pros and cons

Like any other power source, nuclear energy has its pros and cons. The most significant benefit is that nuclear power plants are a carbon-free source of electricity, emitting no greenhouse gases. Additionally, these plants provide a reliable source of power, especially during extreme weather

conditions. They operate continuously and have a relatively small physical footprint compared to other forms of energy generation. Nuclear plants in the U.S. have the highest maximum capacity for power output, at 92%. Compare that to 49% for natural gas, 44% for coal, 34% for wind and 24% for solar.

Safety has always been a concern in the nuclear energy sector. Generation III+ nuclear reactor designs, like the Vogtle Unit 3, include safety features that do not require sustained operator action or electronic feedback to shut down the plant safely in an emergency. These enhanced designs are more resilient to accidents and have a reduced environmental impact. By prioritizing safety, nuclear energy can be harnessed responsibly without compromising public well-being.

As electric cooperatives look ahead to long-term energy solutions, embracing innovation will play a key role in empowering local communities and providing our members with reliable and affordable electricity.

Jennah Denney writes on consumer and cooperative affairs for the National Rural Electric Cooperative Association, the national trade association representing nearly 900 local electric cooperatives.



The Vogtle Unit 3 commenced commercial operations in the summer of 2023 and is the nation's first newly constructed plant in three decades.

Photo Credit: Nuclear Regulatory Commission

SPRING CLEANING TIPS TO MAXIMIZE EFFICIENCY

BY MIRANDA BOUTELLE

Spring is a great time to enhance energy efficiency at home. Adopting simple yet effective energy-saving strategies during spring-cleaning routines can create an efficient living environment that may also lower utility bills and extend the life of heavily used appliances.

TIP Protect equipment and maximize efficiency with a clean filter

Even though it's out of sight, don't leave it out of mind. Check the filter in your HVAC system. Your furnace worked hard during the winter. Ensuring your system has a clean filter is a low-cost and easy way to protect your equipment and maximize efficiency. A dirty furnace filter can cause your system to work harder than necessary, decreasing efficiency and shortening the system's life.

While the filter is easy to replace yourself, you should have your air conditioning serviced and professionally cleaned. Both the indoor and outdoor units should be cleaned. Dirty refrigerant coils reduce efficiency. This also applies to heat pumps and ductless heat pumps, also known as mini-split systems.

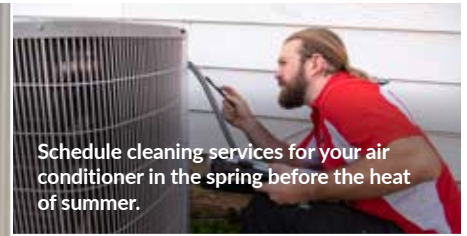
TIP Schedule checkups before the heat arrives

HVAC contractors get busy responding to calls for repairs during the summer heat. Scheduling cleaning services for your air conditioning in the spring – before the heat of the summer – can ensure the work gets done before the rush and even save you money. Some HVAC contractors offer special discounts for cleaning services in the milder months, which helps fill their schedules and keep their technicians working.

Window AC units can get dirty, too. They can be cleaned with the proper tools, cleaning agents and know-how. Always unplug it before cleaning, and



Replacing your furnace filter is a low-cost and easy way to protect your equipment and maximize efficiency.



Schedule cleaning services for your air conditioner in the spring before the heat of summer.



While cleaning light fixtures and fixture covers, check your bulbs and replace any incandescent or compact fluorescent with energy-saving LEDs.



A clean oven heats more evenly and quickly, providing lower energy use.

wait until it is completely dry before plugging it back in again. Take the time to clean it properly in the spring before you need it in the summer.

TIP Brighten your space

Cleaning light fixtures and fixture covers can brighten your space by removing dust and grime collected during the winter. While you're at it, check your bulbs and replace any incandescent or compact fluorescent with energy-saving LEDs. Although they tend to cost a little more, LEDs last longer and use less energy.

According to the U.S. Department of Energy, good-quality LED light bulbs are expected to last 30,000 to 50,000 hours. A typical incandescent lamp lasts about 1,000 hours, and a comparable CFL lasts 8,000 to 10,000 hours. To put this into everyday use, if you have an LED light on for 10 hours per day, it can last 13 years compared to only about three months for incandescent bulbs and about two-and-a-half years for CFLs.

TIP Clean the oven and windows

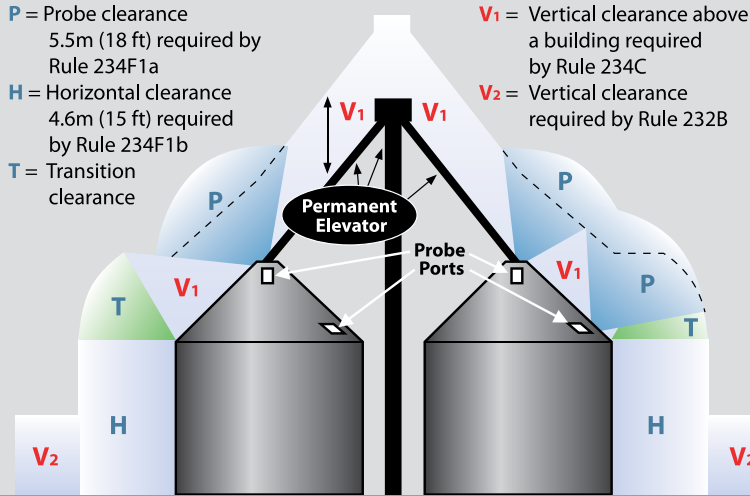
A clean oven heats more evenly and quickly, providing better results and lower energy use. A clean oven window allows you to see the food and how it's cooking without opening the oven door, which wastes energy.

If cleaning windows is on the list, check the seals and sash locks to ensure they close tightly. Check for any areas that need caulking or sealing to reduce drafts. Sealing around windows contributes to year-round comfort in your home. Clean windows also allow more light into the home, reducing the need to turn on lamps and overhead fixtures.

Spring is the ideal time to declutter, deep clean and implement practices that tidy our homes and reduce energy consumption.

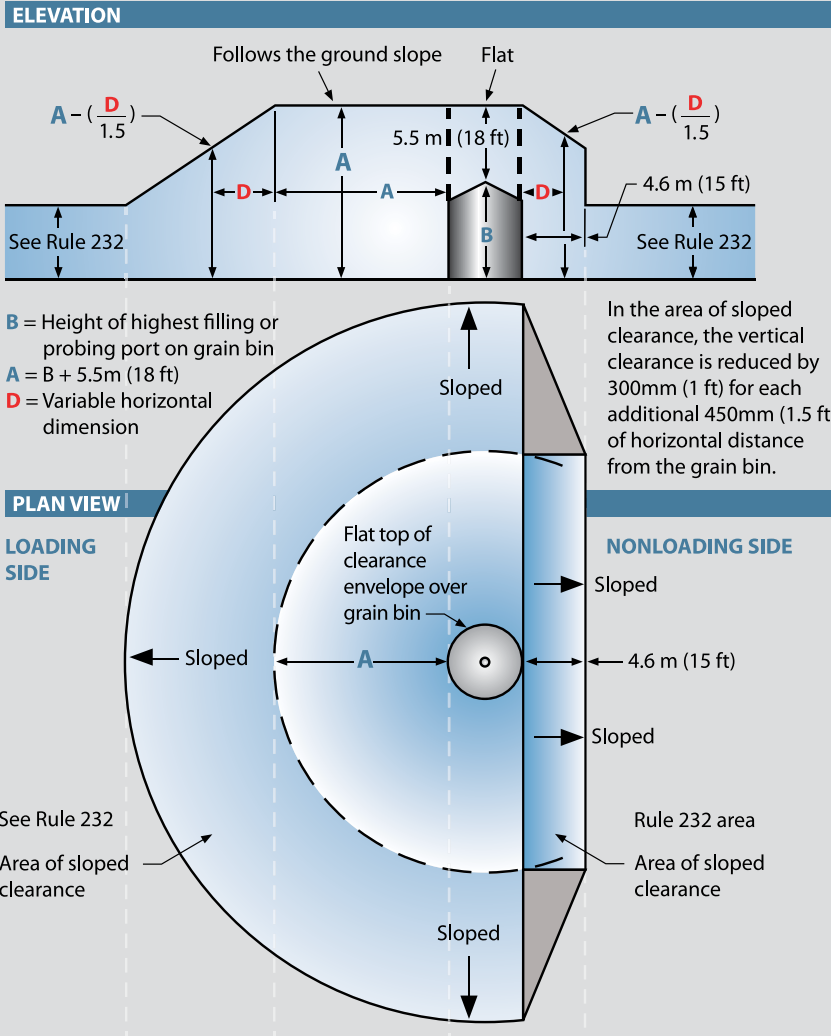
Miranda Boutelle writes on energy efficiency topics for the National Rural Electric Cooperative Association, the national trade association representing nearly 900 electric co-ops.

Clearance envelope for grain bins filled by permanently installed augers, conveyors or elevators



From IEEE Std. C2-2017, "National Electrical Safety Code." © Copyright 2016 by IEEE. All rights reserved.

Clearance envelope for grain bins filled by portable augers, conveyors or elevators



From IEEE Std. C2-2017, "National Electrical Safety Code." © Copyright 2016 by IEEE. All rights reserved. The IEEE disclaims any responsibility or liability resulting from the placement and use in the described manner.

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.

VIEW FROM THE TOP: LIVING A LIFE OF ADVENTURE AND PURPOSE

BY DARCY DOUGHERTY MAULSBY

Have you ever been bold enough to have a dream so big everyone thinks it's impossible? Charlie Wittmack has.

This Des Moines-area attorney climbed Mount Everest, swam the English Channel, and rode a bicycle 8,000 miles across Europe and Asia to Kathmandu, Nepal. He shared remarkable stories of his "World Triathlon" during a program at the Lake View Public Library in early January, and I was riveted.

There was an overflow crowd that Saturday afternoon. None of us were super-athletes looking for tips to gain the winning edge. Yet that's exactly what Wittmack gave us, thanks to his ability to translate lessons from endurance sports into real life. Consider these gems:

1 Take small steps to reach big goals. When Wittmack was growing up in the Boone area, he read a book about Captain Matthew Webb, an Englishman who was the first recorded person to swim the English Channel. The story captivated Wittmack. Why not try it himself? What if he made it part of the world's toughest triathlon? To fund his dreams, Wittmack started working various jobs, making \$8 per hour pouring concrete. The young adventurer also secured a loan from Bankers Trust. He says, "I learned early on the importance of taking small steps to get me from where I was to where I wanted to be."

2 Do the next right thing. When Wittmack was completing the World Triathlon, his body burned about 14,000 calories a day. Sometimes his epic odyssey almost overwhelmed him. When it was time to bicycle from Europe to Asia, Wittmack didn't dwell on the hardships inherent in crossing 11 countries, including a massive desert. "Instead of focusing on how



Charlie Wittmack (far right) visits with attendees of his January speaking event at the Lake View Public Library.

I'd get from France to Kathmandu, I just got on the bike and made it go forward," he shares.

3 Seek signs of hope. Wittmack understands the allure of giving up. During his 8,000-mile bicycle journey to Nepal, he decided to call it quits in the desert. As he pedaled to the next town to find the nearest train station, he met some French adventurers on an around-the-world walking journey. "There was something really different about these guys' thinking. They said, 'Oh, you're the American who's always in such a hurry,'" says Wittmack, who credits this interaction with renewing his hope and motivating him to press on toward his goal. "We all have times in life when we're going through a desert. Look for signs of hope, especially when it feels like your destination is a long way off."

4 Don't give up. There are good days and bad days, whether you're training for a triathlon or just living daily life. During his grueling World Triathlon quest, Wittmack was diagnosed with amoebic dysentery, pulmonary anemia and cerebral

anemia. If pushing his body to the limit wasn't enough, he was hit by a car in Kazakhstan and lost vision in his right eye. "Take advantage of the good days to charge your batteries for the tough days," he advises.

5 Find the purpose beyond your passion. Climbing Mount Everest (the highest point on Earth, at 29,035 feet above sea level) as part of the World Triathlon became more than a personal quest for Wittmack. During his time in Nepal, he was troubled to learn that thousands of newborns and young children in the country die each year from preventable causes. He has helped raise money for Save the Children, an international organization that helps kids get a good start in life. He adds, "When I reached the top of Mount Everest, I realized what a small piece of creation I am, yet what a difference we can make if we commit to being part of the change."

Indeed, Charlie. Thanks for the inspiration from the top of the world.

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



IOWA ELECTRIC COOPERATIVE LIVING

The magazine
for members of
Iowa's electric
cooperatives.

March 2024

Visit our website at www.franklinrec.coop

A group of utility workers, including men and women, are gathered around a piece of electrical equipment in a training facility. One man in a light blue shirt and white cap is speaking to the group. The equipment has a sign that says 'SAFETY TRAINING'. The background shows a large industrial space with yellow safety barriers and orange traffic cones.

SAFETY

IS THE BACKBONE OF RELIABILITY

Safety is **#1** at your **Touchstone Energy® cooperative**.

From the ongoing training of our lineworkers
to classroom safety programs for our kids.

Our commitment to electrical safety has always been job one.

So we can deliver reliable energy and peace of mind.

That's why safety runs through everything we do.



Touchstone Energy®
Cooperatives