

MARCH 2024

# ELECTRIC COOPERATIVE LIVING

Understanding dividend allocations and dividend payments

What to know if you're considering solar energy

Sheet pan recipes

Upcoming scholarship application deadlines See Page 5

# CONTENTS



VOLUME 77 • ISSUE 3

#### 3

STATEWIDE PERSPECTIVE

Education and training are essential

#### EDITOR Ann Foster Thelen

DESIGNERS Megan Walters Bree Glenn

IAEC EXECUTIVE VICE PRESIDENT Chuck Soderberg

IAEC DIRECTOR OF COMMUNICATIONS Erin Campbell

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3

**EDITOR'S** 

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13

ENERGY

EFFICIENCY

Spring tips to

maximize efficiency

#### **Editorial Office**

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

#### Email Address

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

#### 14

SAFETY MATTERS

Grain bin annual notice

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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 lowa'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 lowa 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 lowa's electric cooperatives. Participants attend inperson 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.

#### EDITOR'S CHOICE CONTEST

## SPRING CLEAN BY WINNING A BISSELL® 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!

This two-day, in-person training moves beyond technical aspects of the job and teaches leadership skills necessary to

**Field Leader Training** 

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.



#### **ENTER ONLINE BY MARCH 31!**

Enter this month's contest by visiting www.ieclmagazine.com no later than March 31. You must be a member of one of lowa's electric cooperatives to win. There's no obligation associated with entering, we don't share entrant information with anyone and multiple entries from the same account will be disqualified. The winner of the All-Clad immersion blender from the January issue was Connie Stickley, a Butler County Rural Electric Cooperative member-consumer.

# UPCOMING EVENTS 16

MARCH 6	Youth Tour interviews	H
MARCH 15	All scholarship application deadlines	3
MARCH 21	Board meeting	
MARCH 29	Closed in observance of Good Friday	
MARCH 31	Photo contest deadline	
APRIL 18	Board meeting	

You can access your account information at any time using SmartHub on our website at www.accessenergycoop.com or through the SmartHub app for mobile devices. Use SmartHub to report outages to save time and ensure that it goes directly into our system to notify us. You can also call our office at 866-242-4232 for account information or to report service-related concerns.



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

Office: Access Energy Cooperative 1800 W. Washington St., P.O. Box 440 Mount Pleasant, Iowa 52641 Phone: 319-385-1577 or 866-242-4232 Fax: 319-385-6873 Call Before You Dig (Iowa One Call): 8-1-1

Website: www.accessenergycoop.com
Facebook: facebook.com/AccessEnergyCoop
Twitter: twitter.com/AccessEnergyC
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General Manager/CEO: Kevin Wheeler Editor: Kimberly Davis Assistant Editor: Cherity Wibben Officers and Directors: Marvin Larson, District 1, President mlarson@accessenergycoop.com

Robert Chesnut III, District 3, Vice President bchesnut@accessenergycoop.com Michael Holtkamp, District 3, Secretary maholtkamp@accessenergycoop.com

**Robert P. Smith,** District 2, Treasurer *rsmith@accessenergycoop.com* 

Jerry Barker, District 2, Director jbarker@accessenergycoop.com

Fred Hickenbottom, District 1, Director *fhickenbottom@accessenergycoop.com* David Hollingsworth, District 1, Director

*dhollingsworth@accessenergycoop.com* **Marvin Newton,** District 3, Director

mnewton@accessenergycoop.com Larry White, District 2, Director lwhite@accessenergycoop.com

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# OUR TAKE ON ELECTRIC VEHICLE PROS AND CONS

#### BY KEVIN WHEELER



As we wrap up our series on sharing our experiences with the Ford Lightning pickup, it's time to take a candid look at what this electric vehicle

offers, from the highs to the lows. While there are certainly positive aspects, a discerning eye reveals challenges potential buyers should be aware of.

#### Pros

- Whispers in the wind. The Ford Lightning's standout feature is its near-silent operation. The serene ride is further enhanced by the vehicle's substantial weight, approximately 1,000 pounds heavier than its sister F150. This weight lends itself to exceptional handling, particularly on snowy roads.
- Innovative frunk storage. The front cargo area, fondly called the "frunk," is a commendable positive. Acting as a spacious compartment in the absence of a traditional internal combustion engine, it also houses exterior outlets for convenient charging of smaller devices.
- Performance prowess. Performance is a strong suit for the Lightning. Smooth acceleration and the ability to maintain a set speed, even on challenging terrains, make for a stressfree driving experience. Additionally, the instantaneous warmth provided by the electric heat in winter is a noteworthy advantage.

#### Cons

- Mileage woes. Despite Ford's claim of a 330-mile range with the extended battery, real-world results have fallen short, averaging around 240 miles in moderate weather and a mere 190 miles in colder conditions or against a stiff wind. Cold weather encourages the vehicle to prompt users to plug in for maintenance to ensure the battery retains range.
- Charging time quandaries. Charging the Ford Lightning demands patience. Even with the fastest Level 3 charger, replenishing from a quarter to three-quarter charge takes

45-60 minutes, depending on temperature. Rural areas face a scarcity of Level 3 chargers, and the more common Level 2 chargers can take up to 15 hours for a full charge when the vehicle is at one-tenth capacity.

Home charging realities. Charging at home may increase the demand for your electric service, potentially leading to a higher electric bill. Residential chargers, a near necessity for home charging, come with an upfront cost around \$700, excluding installation and potential electrical service upgrades.

One uncertainty concerning efficiency involves converting kilowatt-hour (kWh) usage to miles per gallon (mpg). To date, the Lighting yields a variable range between 35-55 mpg, depending on driving conditions, weather and temperature changes. This unpredictability emphasizes the need for ongoing monitoring and adaptability. We will continue to place information in *lowa Electric Cooperative Living* magazine based on real-time driving of the Lightning.

In conclusion, the Ford Lightning presents a compelling case for electric vehicle enthusiasts, but the realities of range limitations and charging times should be carefully considered. Through our series, we aimed to shed light on these aspects, and at Access Energy Cooperative, we strive to be your trusted source of information. Please contact us with any questions.

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

# FORD LIGHTNING EV

The following is the data for the cooperative's Ford Lightning electric pickup in January.

- 1,231 miles driven.
- Total charge time of 143 hours and 15 minutes with a Level 2 charger.
- Total 1,092 kWh for charging.
- \$136.50 in total electricity costs at \$0.125 per kWh.
- Converted to gallons of gas (at \$3.50/gallon), this compares to 40.93 gallons of fuel at 30.07 mpg.

# UNDERSTANDING THE DIFFERENCE BETWEEN DIVIDEND ALLOCATIONS AND DIVIDEND PAYMENTS

#### BY TAMMY SNAVELY



Receiving a dividend payment is one of the primary benefits of being a member of Access Energy Cooperative. Organized as a

cooperative, we are owned and governed by our members, and do not exist to earn profits. Instead, any revenues above the cost of doing business during a given year are considered "margins."

Annually, these margins are allocated to each member's dividend account based on their usage for that year. Once the allocation is processed, there will be a statement showing the amount of dividends being allocated to your dividend account for 2023. The image below shows where you can find it on your bill. The following month, Access Energy Cooperative's board of directors reviews the cooperative's current financial condition. They determine if it is favorable to retire dividends from members' accounts, and if so, how much will be retired. Dividend checks are then prepared and will be handed out at the annual meeting of members on Aug. 6. Any check not picked up at the meeting will be mailed.

Members have the option to choose to

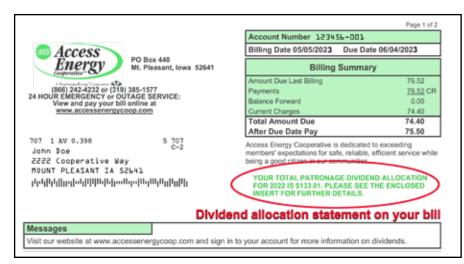
receive their dividend payments in the form of a bill credit, rather than a check. If you wish to set your dividend account up to receive a bill credit instead of a check, please contact our office at 866-242-4232 or send an email to finance@accessenergycoop.com.

# Members with closed cooperative accounts

Members who have closed their account with the cooperative have the option to receive the amount in their dividend account as a discounted lump sum payment or choose to receive payments at the normal retirement cycle, which is currently 20 years. If you close your account and are interested in receiving a lump sum payment, please contact our office at 866-242-4232 or send an email to finance@accessenergycoop.com.

#### Address updates and questions

If you have a change of address, please keep the cooperative informed of where your dividends can be sent. To update your address, submit questions, or receive further information about patronage dividends, visit our website at www.accessenergycoop.com or contact our finance department at 866-242-4232 or send an email to finance@accessenergycoop.com.



#### \$25 BILL CREDIT DRAWING WILL BE HELD MAY 31

Each member who is signed up to receive 2024 and future dividend payments as bill credits, in lieu of checks, will be entered into a drawing to receive a \$25 bill credit. If you are already signed up, you do not need to sign up again.

### SCHOLARSHIP APPLICATION DEADLINES

**Scholarship Applications** *Due March 15* 

Access Energy Cooperative is offering six \$1,500 scholarships to high school seniors. Applicants must be a high school senior receiving post-secondary education. Parents or legal guardians must be members of the cooperative.

#### **Lineworker Scholarship Applications** *Due March* 15

Up to two \$2,000 scholarships may be awarded per year to students enrolled, or planning to enroll, in a one- or two-year electric lineworker program. Applicants are not required to be members of the cooperative.

#### **Obtain an application**

Details about each program, including applications, can be found on our website at www.accessenergycoop.com. Applications can also be obtained at qualifying area high school guidance counselor offices or by contacting our office at 866-242-4232.

### Four Ways an Energy Audit Can Benefit You

A home energy audit can determine the overall efficiency of your home or business and ways to improve it. Here are the main benefits of conducting an energy audit.



An audit will identify where most of your energy use is going and ways to use energy more efficiently to save money.



An audit can identify potential safety issues with home wiring and ventilation.

\$

Making changes based on the audit recommendations can raise your property value.



Now is the perfect time for an energy audit to find ways to save in your home. Call our office at 866-242-4232 or email mktg@accessenergycoop.com to schedule a free energy audit.

# TRACK ENERGY USE WITH SMARTHUB

Did you know you can see your energy usage on your phone, desktop or other mobile device?

Through the SmartHub app, you can monitor and download your daily energy consumption 24/7 and see how it is trending over time. SmartHub can even alert you when a set usage level is exceeded.



for more information.

# **GO TO PAPERLESS BILLING**

To sign up for paperless billing, you must first have a SmartHub account. SmartHub is a web and mobile app, that can be used to view and pay your bill. To create an account, visit our website at www.accesssenergycoop.com or download the SmartHub app on your mobile device.

Once you sign up for paperless billing in SmartHub, you will be notified by email when your bill is available for viewing. This email will include the amount due and the due date. You can pay securely online or in the app, anytime, anywhere, as long as you have an internet connection.

We are happy to answer any questions you have. Call us at 866-242-4232. Or you can email our billing department at billing@accessenergycoop.com.

1. From the home screen, click on "Settings" on the left navigation.

- 2. Select "Paperless Billing" from the drop-down menu.
- 3. Turn on paperless billing by switching your account(s) on.

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# ONLY CERTIFIED WORKERS CAN TRIM TREES NEAR POWER LINES

Can anyone trim trees near power lines? The answer is no. Specialized tree trimmers, certified by the Occupational Safety and Health Administration (OSHA) in utility clearance, are the only persons legally allowed to trim within 10 feet of power lines.

OSHA requires this certification because electricity is a serious and widespread hazard to tree workers or anyone working around them. According to the Tree Care Industry Association, electricity is the leading cause of death in the tree care profession, causing about 15% of all industry fatalities. You do not have to directly contact a power line to be electrocuted; about half of all electrocution fatalities of tree workers are the result of indirect contact.

Qualified line-clearance trimmers must be specially trained in how to safely work in proximity to energized lines. They must understand how an electrical grid functions, the effects of tree growth patterns and tree damage, and how to implement directional pruning, as required by the American National Standard for Arboricultural Operations' safety standards.

# A professionally certified tree trimmer typically must:

 Wear properly approved personal protective equipment, including fall protection equipment when needed.

#### PHOTO CONTEST

WIN UP TO \$100 IN ACCESS ENERGY COOPERATIVE'S PHOTO CONTEST

- Work with a second line-clearance tree trimmer within voice range.
- Determine the voltages of lines before work begins or assuming that the line is operating at the highest possible voltage if it is not possible to determine voltage.
- Use only insulated tools and equipment to remove branches and limbs that are in contact with, or are within the minimum approach distance of, energized lines or equipment.
- Determine if weather conditions are no longer safe to work in, such as the presence of high winds, ice, thunder or lightning that would make the work hazardous.
- Begin work on storm restoration efforts in the aftermath of a storm ONLY if they have been trained in the special hazards involved with this type of work.

Please contact our office if you have any further questions.



### TREE TIMMING FOR SAFETY, RELIABILITY AND EFFICIENCY

#### SAFETY

- Reduces limbs falling into power lines
- Reduces lines in trees hidden from lineworkers or kids climbing trees

#### RELIABILITY

Reduces outages and blinks

#### **EFFICIENCY**

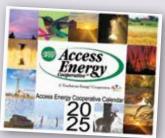
 Reduces expensive unplanned trips for repairs

For questions about vegetation management or concerns about vegetation in power lines, call 866-242-4232.

We are now accepting photos for the 2025 Access Energy Cooperative calendar! Horizontal, color photos work best for calendar entries, and we are looking for all seasons of the year. Submissions can be sent to mktg@accessenergycoop.com before March 31, 2024.

Thirteen photos will be chosen and winners will be awarded \$75, plus an additional \$25 bill credit if they are a member of the cooperative.

Visit www.accessenergycoop.com for complete rules.





#### **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
- 1⁄2 teaspoon garlic powder
- 1/4 teaspoon dried oregano
- 1 teaspoon paprika ¼ teaspoon salt
  - black ground pepper, to taste
- <sup>1</sup>/<sub>2</sub> 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
- 1<sup>1</sup>/<sub>2</sub> cups shredded cheddar or Swiss cheese
- 3 cups frozen chopped broccoli, thawed and drained
- 1 10¾-ounce can condensed cream of chicken soup, undiluted
- 1<sup>1</sup>/<sub>3</sub> 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, <sup>1</sup>/<sub>2</sub> teaspoon salt and <sup>1</sup>/<sub>4</sub> 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, <sup>1</sup>/<sub>2</sub> teaspoon salt and <sup>1</sup>/<sub>4</sub> 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.

Denergy 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.

Affordability Consider your overall outof-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.



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.

#### 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.

**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 coop'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 communityowned 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.

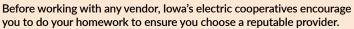


#### **SOLAR ENERGY GUIDE**

lowa's electric cooperatives are committed to helping memberconsumers 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

# **BEWARE OF SOLAR SCAMS**



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.

### 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.



# **ADVANCEMENTS IN NUCLEAR ENERGY**

#### BY JENNAH DENNEY

The top priorities of lowa'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 largescale 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.

#### Schedule checkups before TIP 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.

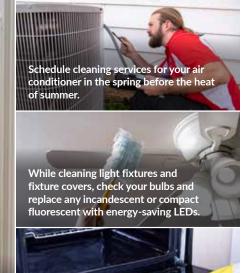
Window AC units can get dirty, too. They can be cleaned with the proper tools, cleaning agents and know-how. Always unplug it before cleaning, and



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.

**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.



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

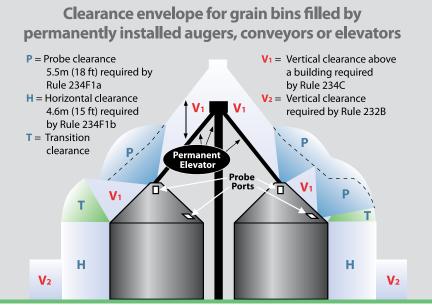
#### Clean the oven and windows

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.

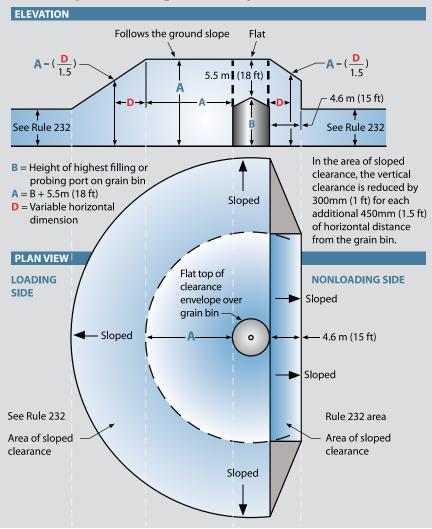
Spring is the ideal time to declutter, deep clean and implement practices that tidy our homes and reduce energy consumption.

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



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



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## MAINTAIN PROPER CLEARANCE AROUND GRAIN BINS

The state of lowa 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 lowa 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.

# ACCESS ENERGY COOPERATIVE VISITS WITH POLICYMAKERS

In February, Access Energy Cooperative's board of directors and Kim Davis, director of member services and public relations, visited the Iowa Capitol to talk with legislators about issues affecting the members of the cooperative and the energy industry.

The Iowa General Assembly is addressing a multitude of issues, including items central to Iowa's rural economy. Continuing with this Capitol visit, the directors, managers and staff have been important advocates for a balanced approach in addressing energy issues allowing Iowa's member-owned electric cooperatives to continue providing safe, reliable, efficient and environmentally responsible power to more than 650,000 Iowans.



Pictured from left to right: Directors Marvin Larson and Dave Hollingsworth; Sen. Adrian Dickey; Rep. Helena Hayes; Directors Jerry Barker, Larry White and Marvin Newton; and Kim Davis, director of member services and public relations.



Pictured from left to right: Directors Marvin Newton and Mike Holtkamp, Sen. Jeffrey Reichman and Director Jerry Barker.



Pictured from left to right: Directors Marvin Newton and Larry White, Rep. Taylor Collins, and Directors Jerry Barker and Marvin Larson.



# SUMMER HELP WANTED

Part-time help is needed this summer in the Access Energy Cooperative operations and engineering departments. Applicants must graduate high school before summer 2024 and must be enrolled in postsecondary education in the fall. Contact Diane Magnani at dmagnani@accessenergycoop.com.

## PLAN BEFORE YOU BURN DITCHES

Burning ditches in the spring is a common way to clear weeds and grass. Access Energy Cooperative urges you to remember safety when you plan a controlled burn. Be sure to know where utility poles are located to avoid damaging electrical equipment.

Here are some things to think about to prevent burnrelated damage to power poles:

- Plan before you begin
- Check the weather forecast for wind
- Burn when relative humidity level is 40% or higher
- Clear all vegetation and weeds at least 4 feet around the base of any utility poles
- Wet the base of any poles in the vicinity with water



The magazine for members of lowa's electric cooperatives.

March 2024

Visit our website at www.accessenergycoop.com

SAFETY TRAINING

# 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.

