

● APRIL 2022

iowa

ELECTRIC COOPERATIVE LIVING

Supply and demand
impacts on co-op
operations

Batteries are booming

Spring forward with
salad recipes

Board candidates announced for Access Energy Cooperative ▶ See Page 5

CONTENTS



VOLUME 75 • ISSUE 4

3

STATEWIDE PERSPECTIVE

2022 Legislative Session update

3

EDITOR'S CHOICE CONTEST

Win an electric string trimmer

14

TECHNOLOGY MATTERS

Batteries are booming

15

OUT BACK

April Fools' fails

EDITOR
Ann Thelen

ART DIRECTOR
Joel Clifton

IAEC EXECUTIVE VICE PRESIDENT
Chuck Soderberg

IAEC DIRECTOR OF COMMUNICATIONS
Erin Campbell

IAEC BOARD OF DIRECTORS
Roger Solomonson, District 3 – President
Gordon Greimann, District 6 – Vice President
Kenneth Vandenberg, District 1 – Secretary/Treasurer
Neal Heldt, District 7 – Asst. Secretary/Treasurer
Tony Lem, District 2
Jim Miller, District 5
Deena Moore, District 4
Marion Denger, Prairie Energy Cooperative – NRECA Representative
Brian Krambeer, MiEnergy Cooperative – Managers' Representative

Iowa Electric Cooperative Living magazine (ISSN: 1935-7176) 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 2022, 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 Linda Eastman, a Consumers Energy member-consumer, for supplying this month's cover image. Submit high-resolution photos for consideration to editor@ieclmagazine.com. You could win \$100!

ENDING THE RURAL ENERGY TAX

BY KEVIN CONDON



Even with all the news about income taxes at the Iowa Capitol this year, there are still more tax issues the Iowa Association of Electric Cooperatives (IAEC) is pushing

our elected officials to address. After years of education and advocacy from Iowa's electric cooperatives, rural Iowans and others were mistakenly left out of a tax exemption established in 2018.

Oversight costs rural co-op members

With the explosion of digital and online transactions, Iowa legislators grappled with appropriately applying sales and use taxes. In an attempt to keep true to Iowa's longstanding approach of taxing outputs and not inputs for business and industry, a catchall definition for most for-profit, corporately organized businesses (e.g., investor-owned utilities) was created in 2018. Other organizations, including not-for-profit electric cooperatives, were to be spelled out elsewhere for the tax exemption. Unfortunately, electric co-ops and the 650,000 Iowans we serve were unintentionally left off the list.

IAEC estimates that co-op member-consumers have paid nearly \$300,000 more each year because their electric cooperatives are assessed the digital goods sales tax. Since the tax went into effect in 2019, that overall number is likely more than \$1 million. It will only continue to grow with the further transition to digital goods and services, as well as the responsibility to protect co-ops from cybersecurity threats.

Correcting the tax policy

Iowa's electric co-ops are working hard to ensure another legislative session doesn't adjourn without

correcting this oversight. We are working with Iowa lawmakers to support HF 2520, which will fix the tax exemption mistake. We believe a zip code shouldn't dictate whether you pay higher taxes on goods and services necessary for your utility to conduct business and provide your power. Paying more on your energy bills because of your address isn't a fair way to apply the sales and use tax.

Monitoring other energy issues at the statehouse

In addition to tax policy, Iowa's electric co-ops are on the lookout for legislation that could make affordable and environmentally responsible power more difficult to provide. One such bill (HSB 697), which didn't survive in the statehouse, would have attempted to create a scheme where a select group of individuals

could create a solar farm to benefit a select few and, in turn, shift the costs of the infrastructure onto their fellow co-op neighbors. Another bill we're monitoring (SF 2321) would strip landowners of their property rights by prohibiting them from deciding how they want to use their land, based on a corn suitability rating score.

Whether ending the rural energy tax or trying to prevent poorly crafted bills mentioned above, Iowa's locally owned electric co-ops will always advocate for the member-consumers we serve. In addition to our commitment to provide electric service to you, we also want to keep decision-making local and your hard-earned money in local communities.

Kevin Condon is the director of government relations for the Iowa Association of Electric Cooperatives.

EDITOR'S CHOICE CONTEST

Win an electric string trimmer

This Craftsman Weedwacker V20 makes caring for your lawn a breeze! It is 20-volt max, battery operated and cordless. The string trimmer easily doubles as an edger with a simple twist of the telescoping pole.

Visit our website and win!

Enter this month's contest by visiting www.ieclmagazine.com no later than April 30. 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 portable power station from the February issue was Dan Ries, T.I.P. Rural Electric Cooperative.



ENTER ONLINE BY APRIL 30!

UPCOMING EVENTS

APRIL 11	Lineworker Appreciation Day
APRIL 15	Office closed in observance of Good Friday
APRIL 17	Easter
MAY 8	Mother's Day
MAY 30	Office closed in observance of Memorial Day

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



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

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

E-mail: contactus@accessenergycoop.com

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

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

Payments can be placed in dropbox under flag pole.
Visa and MasterCard accepted.

General Manager/CEO: Kevin Wheeler

Editor: Kimberly Davis

Assistant Editor: Cherity Wibben

Officers and Directors:

Marvin Newton	District 3	President
Marvin Larson	District 1	Vice President
Robert Chesnut III	District 3	Secretary
David Hollingsworth	District 1	Treasurer
Fred Hickenbottom	District 1	Director
Jerry Barker	District 2	Director
Robert P. Smith	District 2	Director
Larry White	District 2	Director
Michael Holtkamp	District 3	Director

This institution is an equal opportunity provider.

NAVIGATING SUPPLY CHAIN ISSUES TO ENSURE RELIABILITY

BY KEVIN WHEELER



While you are likely noticing the realities of supply chain issues and inflation at the meat counter or the hardware store checkout line, you may not immediately realize

these same challenges can impact the equipment and materials it takes to power homes, farms and businesses.

In last month's edition of *Iowa Electric Cooperative Living*, Matt Brandrup, president and CEO of the Rural Electric Supply Cooperative (RESCO), shared his perspective on supply chain issues impacting the availability and costs of wholesale electric supplies. The guest column described how RESCO, our primary material supplier, is managing and stocking inventory at unprecedented levels to supply 37 Iowa cooperatives.

Supply chain issues impacting electric co-ops

Much like RESCO, Access Energy Cooperative is also witnessing supply chain issues for electric materials, such as power cables, transformers and utility poles. For example, a basic bolt used in power line construction is at a four-to-six-week lead time, and each power line pole uses numerous bolts of

different sizes. We are seeing material lead times up to 52 weeks for delivery in some instances.

To continue delivering safe, reliable and affordable power to our members, we must have equipment and supplies readily available. A robust inventory ensures our teams can manage everyday needs, maintain existing infrastructure and embark on new projects that align with our large-scale work plans.

Inventory strategy and considerations

Over the past 18 months, our team has been diligently analyzing historical material use and forecasting equipment needs – both for routine activities and major projects – for the next three years. With this, we have increased our inventory by about 20%. Fortunately, because the materials we use do not have a shelf life, we can store items indefinitely as long as we have space. Moving forward, you may notice extra storage containers or materials stored at our warehouse as we house additional materials.

As we navigate this influx in inventory, we are continually analyzing and balancing all facets of the co-op to meet the required financial ratios by our lenders. This takes careful equity management, an important part of operating a cooperative, because it represents the value of our members' stake in the cooperative.

Our board of directors and employees are working together to ensure these plans are strategic, responsible and in the best interest of our members. We cannot guarantee what the future holds, but rest assured we are controlling what is within our grasp and remain focused on providing the safe, reliable and efficient power you expect today and into the future.

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



Photo courtesy of RESCO.

ATTEND YOUR ANNUAL MEETING

Not every company invites its customers to an annual meeting to elect the board of directors and help set policies. But Access Energy Cooperative does just that, except you are not our customers – you are our member-owners.

When you signed up to receive power from Access Energy Cooperative, you automatically became a member and part-owner of the business.

Cooperatives use a business model that is different from other companies. We don't sell stock on Wall Street, so there are no out-of-town investors. Control of your cooperative is local.

- You may vote for the candidates who run for the board of directors.
- You may run for a seat on the board of directors.
- Every candidate is a member-consumer of Access Energy Cooperative.
- Your cooperative has been paying dividends back to you – the members – on an annual basis.

We're excited to return to an in-person meeting format this year. It's important to attend Access Energy Cooperative's annual meeting of members on Aug. 2.

- You can meet other members and catch up on what has happened the last two years.
- You can meet the co-op's employees.
- You can get to know the directors who advise the staff and decide on important policy matters.
- You can vote for the board of directors.
- You can learn about the industry issues and challenges your cooperative is managing.



- You can participate in a variety of activities planned for family members of all ages.

Membership in your cooperative comes with many privileges. It also comes with the responsibility of casting your vote for the directors you think will do the best job.

Mark your calendar! Plan to vote for your co-op directors in July, and then attend the 2022 annual meeting of members on Aug. 2. We look forward to meeting in-person this year and seeing our members again.

THANK YOU, 2022 NOMINATING COMMITTEE!

As an electric cooperative, our members have democratic control over who sits on the board of directors, which sets the policies and rates. The Nominating Committee is comprised of members who find other members to run for the board.

Thank you to the 2022 Nominating Committee for your dedication to Access Energy Cooperative and finding qualified member-candidates to run for our board of directors for the upcoming election. This year's committee includes Brandon Ledger, Kenneth Whitham, Joe Heckethorn, Matt Lawler, Bob Scarff, Dean Mabeus, Tim Myers, Randy White and Myrna Folker.

The following members have been nominated by the committee to run in this year's election to be held at the annual meeting of members on Aug. 2.



Pictured: The 2022 Nominating Committee.

Candidates for 2022 director election

District 1	District 2	District 3
Fred Hickenbottom (Fairfield)	Mark Hotchkiss (Wayland)	Loren Holtkamp (West Point)
Frank Redeker (Fairfield)	Rob Smith (Mount Pleasant)	Marvin Newton (West Point)

AREA YOUTH SELECTED FOR WASHINGTON, D.C., TRIP

Elsie Lange and Andi Scott, both of Mt. Pleasant, have been selected to attend the 2022 Youth Tour, held June 18-24. The opportunity is an all-expenses-paid trip to Washington, D.C., sponsored by Access Energy Cooperative.

Elsie and Andi will join approximately 40 other Iowa students and nearly 1,000 students from across the country who have been selected by their electric cooperative to attend the annual Youth Tour.



Elsie Lange

Elsie is a sophomore at Mt. Pleasant Community High School and is the daughter of Nathan and Kelly Lange. She is involved in a variety of school activities, including basketball, cross country, track and student council. She volunteers in community projects

and church functions, while maintaining different part-time jobs.



Andi Scott

Andi is a sophomore at Mt. Pleasant Community High School and is the daughter of Nathan and Danielle Scott. She participates in several school activities, including basketball, show choir and competition cheering. She volunteers at Old Threshers, Chamber Ambassadors and church events, while maintaining various part-time jobs.

While on tour, Elise and Andi will learn about American history and government. They will visit historical sites, including monuments, museums, the U.S. Capitol, federal agencies and other points of interest. They will also have an opportunity to meet with their legislators in the House and Senate.

Access Energy Cooperative has been a part of the Youth Tour program for more than 50 years and currently selects two students each year to participate in the weeklong trip. The students are selected through an application and interview process.

Thank you to Southern Iowa Electric Cooperative and Chariton Valley Electric Cooperative for helping choose Access Energy Cooperative's 2022 Youth Tour representatives.

PREPARING FOR OUR FUTURE

HOW YOUR CO-OP WORKS

In response to recent and upcoming employee retirements at Access Energy Cooperative, there are some new faces in the office and a promotion to announce.



Congratulations to **Korbin Johnson** who has accepted the position of line foreman. Korbin has been with Access Energy

Cooperative for seven years, most recently serving as a journeyman lineman.

Access Energy Cooperative is proud of our team and their dedication to providing you with safe, reliable and efficient service!



Kassie Bulen



Shelby Ruby



Trey Metz



David Honeycutt



Garrett Maddy

Kassie Bulen has joined the cooperative as a full-time electrical engineer after graduating from Missouri University of Science and Technology. Kassie has been interning with the cooperative the past three summers and during school breaks.

If you come into the office with a question or to pay your bill, you will be greeted by **Shelby Ruby**, who is our new customer service representative.

Also joining our cooperative as apprentice lineworkers are **Trey Metz**, **David Honeycutt** and **Garrett Maddy**. Trey comes from Scobee Contactors, David has been working in Alaska for Alaska Village Electric Cooperative, and Garrett was working at Southern Iowa Electric Cooperative in Bloomfield.

LINEWORKER APPRECIATION DAY

When flipping a light switch, you may not give much thought to why or how the light comes on.

Electric lineworkers provide an essential service. They work hard to install and maintain overhead and underground power lines that keep electricity flowing. These specialized workers are on call 24/7 in case severe storms or other circumstances cause the power to go out.

Lineworkers work with high-voltage electricity, often at great heights, in all kinds of weather conditions, such as snow, wind, rain, ice, and extreme heat and cold. The work required to maintain the power grid is physically demanding. To become proficient, most lineworkers go through a technical training program and first learn on the job as apprentices under the careful eye of seasoned lineworkers who have earned journeyman status.

Access Energy Cooperative lineworkers typically handle the following responsibilities:

- Install, maintain or repair the power lines that move electricity.



- Drive work vehicles to job sites.
- Know and implement safety standards and procedures.

When a problem is reported, lineworkers must identify the cause and fix it. This usually involves diagnostic testing using specialized equipment and repair work. To work on poles, they usually use bucket trucks to raise themselves to the top of the structure, although all lineworkers must be adept at climbing poles when necessary. Workers use specialized safety equipment to keep them from falling when climbing utility poles.

Storms and other natural disasters can cause extensive damage to power lines. When power outages occur, line repairers must work quickly to restore service to members.

Although everyone at Access Energy Cooperative works hard to provide reliable service, we salute our lineworkers who work around the clock to keep the power on. Their safety, as well as yours, is our top priority.

Source: U.S. Bureau of Labor Statistics

- Identify defective devices, voltage regulators, transformers and switches.
- Inspect and test power lines and auxiliary equipment.
- String (install) power lines between poles and buildings.
- Climb poles and use truck-mounted buckets to get to equipment.
- Operate power equipment when installing and repairing poles and lines.

IN THE COMMUNITY

STUDENTS JOB SHADOW LINEWORKERS

New London High School students Ryan Richey and Ethan Streeter spent a day in the life of a lineworker at Access Energy Cooperative.

They shadowed Daniel Phillips, director of operations, evaluating whether or not linework is a career path they would like to pursue.



Daniel Phillips, director of operations at Access Energy Cooperative (left) with Ryan Richey and Ethan Streeter from New London High School.

LETTUCE SALAD RECIPES

WINTER LETTUCE SALAD WITH POPPY SEED DRESSING

- 1 head romaine lettuce
- 4 ounces Swiss cheese, shredded
- 1 cup cashews
- $\frac{1}{4}$ cup dried cranberries
- 1 apple, cored and sliced
- 1 pear, cored and sliced
- $\frac{1}{2}$ cup white sugar
- $\frac{1}{2}$ cup lemon juice
- 2 teaspoons onion, diced
- 1 teaspoon mustard
- $\frac{1}{2}$ teaspoon salt
- $\frac{2}{3}$ cup vegetable oil
- 1 tablespoon poppy seeds

Tear lettuce into bite-size pieces. In a large bowl, toss lettuce with cheese, cashews, cranberries, apples and pears. In a blender or food processor, combine sugar, lemon juice, onion, mustard and salt. Process until well blended. Add oil slowly, until mixture is thick and smooth. Add poppy seeds and process for a few seconds. Pour dressing over salad just before serving and toss to coat. *Serves 12*

Carol Van De Stroet • Inwood
North West Rural Electric Cooperative

LAYERED GREEN SALAD

- 1 head lettuce, torn
- 1 cup celery, diced
- 1 cup green pepper, diced
- $\frac{1}{2}$ cup onion, diced
- 1 package frozen peas, uncooked
- 2 tablespoons sugar
- 2 cups Miracle Whip
- 1 cup shredded cheese
- 8 strips bacon, cooked and crumbled

Layer the first seven ingredients in a 9x13-inch baking dish or other large non-metal pan. Top with shredded cheese and bacon bits. Make 24 hours ahead or overnight. *Serves 12*

Carmel Hammen • Clarion
Prairie Energy Cooperative

BACON AVOCADO SALAD

- $\frac{3}{4}$ cup extra virgin olive oil
- $\frac{1}{4}$ cup red wine vinegar
- 4 teaspoons sugar
- 2 garlic cloves, minced
- 1 teaspoon salt
- 1 teaspoon Dijon mustard
- 1 bunch romaine, chopped (about 12 cups)
- $\frac{3}{4}$ pound bacon, cooked and crumbled
- 3 medium tomatoes, chopped
- 1 medium red onion, halved and thinly sliced
- 3 medium ripe avocados, peeled and cubed
- 2 tablespoons lemon juice
- 1 cup Gorgonzola or feta cheese, crumbled (4 ounces)

Place first six ingredients in a jar with a tight-fitting lid, shake well until blended. Refrigerate dressing until serving. In a large bowl, combine romaine, bacon, tomatoes and onion. Toss avocados with lemon juice and add to salad. Sprinkle with cheese. Serve with dressing, shaking jar to blend again if needed. *Serves 10*

Clark DeSmet • Alvord
Lyon Rural Electric Cooperative

HARVEST APPLE SALAD

- 3 Golden Delicious or Fuji apples, chopped
- 1 tablespoon vegetable oil
- 2/3 cup extra virgin olive oil
- 1/3 cup red wine vinegar
- salt and pepper, to taste
- 1 package torn lettuce
- 1 package crumbled blue cheese
- 1/2 cup walnuts or pecans

Sauté apples in vegetable oil until tender. Keep warm. Combine olive oil, vinegar, salt and pepper in a large bowl and mix well. Add lettuce, blue cheese and nuts. Just before serving, add warm apples and toss to mix. *Serves 4-6*

Sarah Shaver • Missouri Valley
Harrison County Rural Electric Cooperative

CASHEW LETTUCE SALAD

- 3/4 cup sugar
- 1 cup oil
- 1/3 cup vinegar
- 1 teaspoon ground mustard
- 1 teaspoon poppy seed
- 1/2 teaspoon salt
- 1 head lettuce, cut up
- 1 cup Swiss cheese, grated
- 1 cup cashews

Mix first six ingredients into a dressing and refrigerate. Mix lettuce, cheese and cashews. Pour dressing over lettuce mixture just before serving.

Deanna Underwood • Aplington
Butler County Rural Electric Cooperative

WILTED LETTUCE SALAD

- 1 pound bacon
- 1/2 cup flour
- 1 1/4 cups vinegar
- 1 1/4 cups water
- 1 head lettuce
- salt and pepper, to taste

Chop bacon into 1-inch pieces, fry in pan. Keep 2/3 grease and add flour to pan to thicken. Add vinegar and water until creamy (add more or less to your liking). Chop lettuce and add to large bowl. Add salt and pepper to taste. Stir in bacon gravy mixture while still warm but not hot. Toss and serve. *Serves 6*

Christine Boecker • New London
Access Energy Cooperative

STEAK SALAD

- 5 cups Romaine lettuce, torn
- 2 small tomatoes, sliced or diced
- 1 yellow pepper, cut into strips
- 1 pound beef flank steak, grilled and sliced
- 1/2 cup cheddar cheese, shredded
- 1/2 cup dried cranberries
- salad dressing

Layer lettuce, tomatoes, pepper, steak and cheese, then toss. Top with cranberries and serve with your choice of salad dressing.

Mary Gropper • Chelsea
T.I.P. Rural Electric Cooperative

SPEEDY SOUTHWESTERN SALAD

- 1/2 cup ranch dressing
- 1/2 cup salsa
- 1 package salad greens
- 1 15-ounce can corn, rinsed and drained
- 1 15-ounce can black beans, rinsed and drained
- 1 cup tortilla chips, broken
- 1/2 cup cheddar cheese, shredded
- 1/2 cup tomatoes, chopped

Mix ranch dressing and salsa together. In a glass bowl, layer all ingredients in the following order: salad greens, corn, beans, ranch salsa mixture, chips, cheese and tomatoes.

Stephanie Messner • Rock Rapids
Lyon Rural Electric Cooperative

WANTED:

STATE FAIR-INSPIRED RECIPES

THE REWARD:

\$25 FOR EVERY ONE WE PUBLISH!

Deadline is April 30

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



10 IDEAS

FOR SUMMER ENERGY SAVINGS

BY MIRANDA BOUTELLE

Pull curtains shut during the hottest times of the day to block out sunlight.

Summer fun is just around the corner! Now is the perfect time to start preparing your home for warmer weather. Consider following these 10 tips to help keep your house cool and save on your energy bills this summer.

1 Service your air conditioner

Air conditioning (AC) units work by moving air over fins or coils that contain refrigerant. When the fins or coils get dirty, the unit doesn't work as well and uses more energy.

Whether you have a portable unit, central AC or a ductless/mini-split, cleaning the filter, coils and fins is a great way to get your system ready for summertime. If you are tackling this yourself, always disconnect power to the unit. Central AC systems have two sets of coils, one inside and one outside. Both coils should be cleaned annually. If you hire a professional, they can check refrigerant levels during the process.

2 Seal your window AC unit

If you have a window or portable AC unit that vents through a window, seal the area between the window sashes. Water heater pipe insulation is a great way to seal this spot. It's available at your local hardware store and is easy to cut for a snug fit.

3 Thermostat settings

Keeping your thermostat at the highest comfortable temperature will save you money. If you aren't home during the day or have vacation plans, increase the thermostat by 8 to 10 degrees F. There's no need to cool an empty house!

4 Keep your cool

Before heading to the thermostat to turn down the temperature, try using a fan, changing into lighter clothing and



Turn off your gas fireplace pilot light in the summer.

drinking something cool. These simple steps may be enough to make you comfortable without spending more money to cool your home. Finding the balance between comfort and savings is key.

5 Lock windows

After opening your windows at night or in the morning to let in fresh air, ensure your windows are closed and locked. Doing so reduces gaps that allow air to flow through and cause drafts. If your locks don't form a tight fit, you may need to add weatherstripping.

6 Weatherstripping and curtains

Sealing and covering windows may seem like a wintertime efficiency practice, yet these help in the summer, too. Windows are typically the least-insulated surface in a room no matter the season!

Add weatherstripping to form a tight seal around the outside of the window. These seals can be found at a hardware store and are easy to install on your own. Another easy way to cool down a room is to close the curtains during the hottest times of the day to block out the sun. Blackout curtains are a thick fabric curtain option that will help keep the room cool and dark.

7 Cook al fresco

Take dinnertime outside to help keep your kitchen cool and your AC from working overtime to counteract kitchen appliances. Some grills have an extra side burner that makes it simple to do outdoor stovetop cooking.

8 Add insulation

While you may associate insulation with cold weather, adding insulation can keep your home more comfortable by keeping cool air in and hot air out. Insulation helps your AC

use less energy to cool your home. As a general rule, if you can see the joists on the floor of your attic, you need more insulation!

9 Turn off gas fireplaces

Reducing the amount of heat entering your home can keep it cooler, especially if you don't have AC. If you have a gas fireplace, the pilot light lets off a small amount of heat into the room. Consider turning the entire fireplace off during the summer months.

10 Add shade outside

Planting trees and shrubs strategically around your home can shade the roof, walls and pavement while reducing heat radiation to your home. According to the U.S. Department of Energy, tree-shaded neighborhoods can be up to 6 degrees F cooler in the daytime than treeless areas. Before buying a tree or shrub, check with your city or utility about free tree programs.

Spring is a great time to be proactive about preparing your home for warmer temperatures. Applying a few of these ideas will help keep you comfortable and provide energy savings all summer long!

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.



Grilling is always a crowd-pleaser. Cook al fresco to keep your home cooler on hot summer days.



Keeping your thermostat at the highest-comfortable temperature will save energy and money.

CAN ROOFTOP SOLAR WORK IN DISASTER-PRONE AREAS?

BY KATHERINE LOVING

Severe weather and natural disasters can result in power outages, leaving residents and businesses without electricity. In areas where these events have an increased risk of occurring more frequently, the thought of installing solar panels may seem like an uncertain option.

The idea of having a source of grid-independent electricity may be appealing, especially as technology improves and costs drop. But concerns about rooftop systems withstanding severe weather conditions are real. Careful planning, maintenance and product choice can help mitigate some risks if installing solar panels makes sense for your home or business.

Considerations for rooftop solar

It is standard practice for rooftop systems to shut off automatically during a power outage. This safety feature ensures the system doesn't send power back to the grid, potentially harming lineworkers.

Installing a battery storage system can help provide emergency power by isolating the home system from the electric grid. A properly sized battery could provide enough electricity to power critical household loads like refrigerators or medical equipment in the case of an outage. A solar inverter and a switch can operate the system without support from the grid and provide limited power when the sun is shining.

Regular maintenance is also essential for rooftop solar generation. The system should be installed in a location that makes it easily accessible for maintenance and repairs.

System hardening, or techniques to reduce vulnerabilities, is another step that may help create resilient solar panels. Hail, strong winds, snow and ice are the top threats to rooftop solar systems and hardening methods vary.



One technology that can help protect panels across many types of weather issues is an axis tracker. This computer-assisted device moves panels to a more vertical position to minimize damage from wind, snow and hail.

Hail

International standards require panels to withstand hail at sizes up to one inch in diameter and speeds up to 50 mph. This may not be strong enough for some Midwest summer storms. Choosing panels made of fully tempered glass, which are thicker and more impact-resistant, may be a solution, but they are much heavier. A stronger frame is also suggested to make the installation more robust.

Strong winds and derechos

Many panel systems are rated for 140 mph winds as standard. To improve the structural connection, additional hardening can be achieved by bolting (instead of clamping) the frame to the roof. If using an axis tracker is not an option, manually moving the tilts of the panels ahead of a storm may be a good option.

Snow and ice

With winter weather it may be worthwhile to consider stronger support structures because heavy snow piles can stress the system. Solar panels can't produce energy if snow and ice block sunlight but will resume once it melts away.

Katherine Loving writes on consumer and cooperative affairs for the National Rural Electric Cooperative Association.



Solar Energy Guide

Iowa's electric cooperatives are committed to helping member-owners 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 the requirements for interconnection.

www.iowarec.org/publications/solar-resources

UTILITY APPRECIATION DAY TO BECOME ANNUAL RECOGNITION

On Tuesday, March 8, Iowa Sen. Carrie Koelker (R - District 29 from Dyersville) introduced Senate Resolution 103, which was adopted by the Senate. Sponsoring this resolution is particularly meaningful to Koelker, as she explains on her Facebook post:

“I grew up seeing firsthand the hard work of a lineman atop high voltage power lines 24/7: 365 days of the year no matter the weather condition. It took my father’s life at the young age of 43 in 1987.

The Iowa RECs will always have a special place in my heart. When lights go out these hard workers go to work in extreme weather conditions. They’re steeped in personal, family, and professional traditions and are often first responders during storms and other catastrophic events. I invite the people of Iowa to be mindful and join me in appreciation for the dangerous work they do for our great state.”

The resolution closes by declaring “the Senate designates March 8, annually, as Utility Worker Appreciation Day, and calls upon the people of Iowa to be particularly mindful of the dangerous work done under extreme conditions day in and day out by these dedicated public safety workers and show their appreciation at every opportunity.”



Photo Credit: Sen. Carrie Koelker



RECOGNIZING LINEWORKERS ON APRIL 11

Across the state on April 11, Iowa’s electric cooperatives also annually recognize lineworkers. In 2015, the National Rural Electric Cooperative Association passed this resolution:

“Whereas linemen leave their families and put their lives on the line every day to keep the power on; Whereas linemen work 365 days a year under dangerous conditions to build, maintain and repair the electric infrastructure; Whereas linemen are the first responders of the electric cooperative family, getting power back on and making things safe for all after storms and accidents; and Whereas there would be no electric cooperatives without the brave men and women who comprise our corps of linemen; Therefore be it resolved that NRECA recognize the Second Monday of April of each year as National Lineman Appreciation Day and make available to electric cooperatives, materials and support to recognize the contributions of these valuable men and women to America’s Electric Cooperatives.”

BATTERIES ARE BOOMING

BY PAUL WESSLUND

If your smartphone battery has become a large share of your daily thoughts, just wait because the battery market is booming. Innovators are now developing washable and bendable batteries to heat your gloves or be sewn into athletic wear to help track your exercise routine.

Electric utilities use batteries for slightly more practical reasons – to make electricity more reliable and more compatible with renewable energy sources. Also, the booming electric vehicle (EV) market has been made possible by dramatic advancements in battery technology.

Analysts estimate the world battery market value at more than \$100 billion and project it will grow more than 10% annually over the next five years. People need batteries for their phones, laptops, power tools, watches and EVs. They want them to last longer. They want them smaller. They want them cheaper. And researchers and entrepreneurs are busy meeting those demands.

“Big game” ads

EVs – which run on large, rechargeable batteries – are a leading example of the trend. Ten years ago, there were hardly any EVs on the road. In 2020, EV sales hit 3 million, and now there are 10 million on the road worldwide and that growth is expected to continue.

Six of this year’s ads during the NFL’s big game featured EVs. Manufacturers worldwide plan to spend more than half a trillion dollars on EVs and batteries in the next eight years. In the U.S. alone, 13 EV battery manufacturing plants are expected to open in the next five years.

The battery bandwagon brings strong incentives for investments to make batteries even stronger. This cycle of innovation is cutting battery costs too. The price of the most popular type of rechargeable battery is down more than 90% from what it was 10 years ago.



Manufacturers around the world plan to spend more than half a trillion dollars on EVs and batteries in the next eight years. The Kansas City Assembly Plant shown here is Ford’s first U.S. plant to assemble batteries and EVs.

Photo Source: Ford



Utility use of large battery systems, like the Tesla Megapack, is adding efficiency and reliability to the nation’s electric grid.

Photo Source: Tesla

Batteries aid renewable energy use

Utility use of large batteries adds efficiency and reliability to the nation’s electric grid.

Utilities, including locally owned electric cooperatives, use batteries in several ways. They can smooth out voltage and frequency differences that damage equipment and affect power quality. Batteries can also make better use of the intermittent nature of renewable energy sources. By storing excess solar energy produced during the day when electric demand is low, batteries can make that sun power available for use at night when electric demand is high.

Utility-scale battery capacity jumped 35% in 2020, tripled in the past five years, and by 2023, the U.S. Energy Information Administration (EIA) reports electric utilities will have 10 times the battery capacity they had in 2019.

EIA reports that much of that increase comes from battery systems located near large solar projects, making it easier to store electricity produced by solar panels.

One especially innovative use of batteries came in 2020 when a heatwave strained California’s electric supply. The state’s energy manager asked businesses and homeowners with batteries to supply emergency power. More than 30,000 responded, including backup power owners and EV charging providers.

Whether used for making electricity more reliable or a fun new gadget to track our fitness habits, battery technology will continue to play a major role in our future.

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

APRIL FOOLS' FAILS

BY VALERIE VAN KOOTEN

I come from a long line of failed pranksters. Practical jokes backfire; carefully wrought capers fizzle. We just haven't figured out the knack, I guess.

When my sister Amber and I were about 10 and 8, we decided to trick our 2-year-old brother Brendan, who had an inexplicable fear of custard. Yes, the pudding-like substance that I'm not sure he'd ever tasted. Taking advantage of his toddler naivete, we told him to "open your mouth and close your eyes, and you'll get a surprise that will make you wise."

The only ones surprised were Amber and I when Brendan threw up all over and we had to clean it up.

My Grandpa Beyer had a dubious tradition of calling his kids on their birthdays at the brink of day and bellowing a truly off-tune version of "Happy Birthday." His daughter's birthday is on April 1; when she answered the phone, he went through his routine, only to be scolded roundly by some unhappy woman on a wrong number who didn't find this funny at all. To be fair, neither did Grandpa.

Classroom joke backfires

But the prank that I remember most, the one where I was hoisted on my own petard, so to speak, is an April Fools' joke from second grade.

Bradley was a kid in my class who was intent on eating my lunch. Well, not my whole lunch, but any sweet thing my mom had packed that day. He was particularly partial to small candy bars that would occasionally end up in my "The Partridge Family" lunchbox, and I'm sure he had the nose of a bloodhound. He never bothered me on the days when I had raisins or grapes.

He'd amble up to me as the first recess bell rang and say, "Can I have your candy bar/cookie?"

"No!" I'd exclaim with all my second-grade righteousness on fire. "Bring your own!" I knew full well that Bradley had



a well-stocked "Star Trek" lunchbox of his own, so I wasn't having any of it.

This went on for the better part of the school year, but once April 1 rolled around, I had the perfect solution.

I took a miniature chocolate bar – the flat kind – and pushed the waxy wrapped chocolate out of the outer wrapper. I removed the chocolate and replaced it with a piece of cardboard the exact same depth that I had cut from an old shoebox. I re-wrapped the chocolate and pushed it back into the outer wrapper. It was sublime! Bradley would never know the difference!

April 1 arrived, and I went off to school with two candy bars – my own and the faux version. As Bradley galloped over to me at recess and asked for my candy bar, I feigned compassion and

said that just this once, he could. He couldn't believe his ears! He grabbed the preferred candy bar from my hand, ripped it open, and snarfed up the chocolate.

Something was wrong here. Where was the cardboard?

I had given him the real candy bar!

Well, you can surmise that I felt like an idiot, but Bradley never caught on, and pride would never allow me to 'fess up.

I never again tried to trick anyone with food; however, I'm wondering how my kids would react to me calling them at dawn and singing "Happy Birthday"?

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



IOWA ELECTRIC COOPERATIVE LIVING

The magazine
for members of
Iowa's electric
cooperatives.

April 2022

Visit our website at www.accessenergycoop.com

TOUCHSTONEENERGY.COM

FOCUSED ON YOUR STREET. NOT WALL STREET.

Think of your not-for-profit Touchstone Energy cooperative as your very own local energy advisor. After all, we're owned by you and the other members in our community, which means you'll always have a say in how your co-op runs. To learn more, visit TouchstoneEnergy.com.



Touchstone Energy®
Cooperatives
of Iowa

YOUR SOURCE OF POWER. AND INFORMATION.