Access Energy Cooperative℠
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APRIL 2023

iowa

ELECTRIC COOPERATIVE LIVING

Local student wins trip to Washington, D.C.

Ways electric co-ops stay ahead of Mother Nature

Breakfast and brunch recipes

2023 annual meeting entertainment announced ▶ See Page 6

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VOLUME 76 • ISSUE 4

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ON THE COVER Special thanks to Shirley Kellenberger, a Lyon Rural Electric Cooperative member-consumer, for supplying this month's cover image. Submit high-resolution photos for consideration to editor@ieclmagazine.com. You could receive $100!

ELECTRIC CO-OPS WILL NEVER GAMBLE ON THE RELIABILITY OR AFFORDABILITY OF YOUR POWER

BY CHUCK SODERBERG

In late February, *The Des Moines Register's* editorial board published a reckless column calling for MidAmerican Energy and other Iowa electric utilities to abandon coal, *"even if doing so also means taking some gambles on brownouts and blackouts, price volatility and newer technology."*

I'm here to tell you that Iowa's locally owned electric cooperatives will never gamble on our responsibility to provide reliable and affordable service to member-consumers. Our mission to power lives and empower communities guides the decision-making of our elected co-op boards, not a newspaper's editorial board.

Electricity has become an essential service in our lives. Your electric cooperative is committed to providing power around the clock for your elderly neighbor on a fixed income to the local ethanol plant and every other member in between. Your community relies on electricity to power critical services and the local economy, and we don't take that responsibility lightly.

We've talked before in the pages of this magazine about how the transition to a renewable energy economy will take decades. Last summer's generation shortfall warning from the North American Electric Reliability Corporation (NERC) underscored the need for a diversified energy mix to ensure reliable electricity. And we all heard about the devastation that resulted from emergency blackouts during the February 2021 polar vortex crisis in Texas, as demand for electricity greatly exceeded supply.

Your electric cooperative uses an "all of the above" generation strategy to ensure the availability of power when you flip the light switch or turn the thermostat dial. Here are two realities we must work with in the electric industry today:

1. Many renewable energy sources like wind and solar are *intermittent*; they don't generate electricity when the sun doesn't shine or the wind doesn't blow. Other generation sources like coal, natural gas and nuclear are *dispatchable*, which means we can turn them on and ramp up production when needed.
2. Generally speaking, electricity must be simultaneously generated as it is consumed. This requires supply to be in constant balance with electric demand. We must be able to dispatch more electric generation quickly when needed, usually on very hot or very cold days as people increase the use of air conditioners or electric heat. Battery technology has yet to be developed that can adequately store electricity from intermittent sources on a utility-scale for a long range of time.

While we invest in battery technology advancements to make renewable sources more dispatchable for utility-scale, Iowa's electric cooperatives continue to maintain a variety of generation sources to protect the reliability and affordability of your power. Electric co-ops are transitioning to more renewable sources of generation when it is feasible to do so.

And we will continue to advocate for an "all of the above" energy strategy with state and federal policymakers because we refuse to gamble reliability, affordability or the trust you place in us.

Chuck Soderberg is the executive vice president and general manager of the Iowa Association of Electric Cooperatives.

EDITOR'S CHOICE CONTEST

Win a Smart Lock!

ENTER ONLINE BY APRIL 30!

A smart lock is a secure, easy-to-install and convenient way to control who can access your home. The Ultraloq U-Bolt Pro Wi-Fi Smart Lock contains a biometric fingerprint scanner, a keypad and a traditional keyway that hides behind a fold-down faceplate.

Visit our website and win!

Enter this month's contest by visiting www.ieclmagazine.com no later 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 CTECHi Portable Power Station from the February issue was Dennis Moon from T.I.P. Rural Electric Cooperative.

UPCOMING EVENTS

APRIL 7	Office closed in observance of Good Friday
APRIL 9	Easter
APRIL 11	Member Advisory Committee meeting
APRIL 20	Board meeting
MAY 14	Mother's Day
MAY 18	Board meeting
MAY 29	Office closed for Memorial Day

You can access your account information 24 hours a day, every day, on our website at www.accessenergycoop.com 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
Email: 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

SUSTAINING A RELIABLE ELECTRIC SYSTEM

BY KEVIN WHEELER

We've all heard the phrase, "Don't put all your eggs in one basket." This popular adage is often used in conversation or a story when someone is about to do something foolish or risky. If they heed this advice, it means they did not commit to "one basket" but instead hedged their bets with multiple options.

This strategy is how I describe Access Energy Cooperative's common-sense approach to the current energy transition. We know that consumer interest in renewable energy continues to grow.

Changing fuel mix

Recent innovations and advances in renewable energy technologies have led to some decreases in costs, making some renewables more feasible, accessible and scalable. Our power generation cooperative, Associated Electric Cooperative, Inc. (AECI), is constantly adjusting its fuel mix and utilizing more renewables. This means the power we receive from AECI includes renewable energy, the majority of which is wind and hydro.

Nationally, there is increasing reliance on renewable energy sources while fossil fuel plants are being taken offline, often ahead of schedule. Additionally, we're seeing more pressure on the electric grid due to the increasing frequency and intensity of severe weather events and rising electricity demand.

Maintaining reliability

So how do we reconcile the challenges of grid pressure and a changing fuel mix? Solar, hydro and wind energy are certainly beneficial for the environment, but they are limited resources because the sun does not always shine, it doesn't always rain

and the wind does not always blow. At Access Energy Cooperative, our primary responsibility is to provide electricity 24/7, year-round to our members. To do this, we need reliable sources of power that will meet *all* the peaks and valleys of on-demand energy in our connected world.

That's why we spread our "eggs" into multiple baskets. There is great value in maintaining a diverse mix of fuel sources – fossil fuels and renewables – to ensure reliability and resiliency while meeting the growing demand for electricity.

Reliability also means repairing and replacing utility equipment to prevent wear and tear and ensure our equipment can withstand severe weather. We are laser-focused on providing our members with safe, reliable and efficient service through any means possible.

As our nation increasingly depends on electricity to power the economy, Access Energy Cooperative is working with our partners at AECI and Northeast Missouri Electric Power Cooperative to anticipate, plan and respond to market trends and policy shifts. That's how we can power your home and our economy, while continuing to serve as your local energy provider.

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

SAFETY CHECK: SHOULD I CLICK "UNSUBSCRIBE" ON SPAM EMAILS?

BY RICARDO ORTIZ

I often get questions like, "How do I stop the spam?" and "Should I click the 'Unsubscribe' link?" along with "Will that lead to more or less unwanted emails?"

The short answer is that, in general, it is OK to click on a *legitimate* vendor's unsubscribe link. However, if you think the email is sketchy or coming from a source you would not want to validate your email address as valid and active, or you generally just have that uneasy feeling, do not take the chance – skip the unsubscribe action.

Most legitimate business emails include an "unsubscribe" link, usually near the bottom, that allows you to be removed from that specific email list. A minority of legitimate vendors do not include an unsubscribe feature in their email or obscure it so much in "fine print" that it might as well be missing.

Alternatively, the company may process unsubscribe requests if you reply to an email directly. This can typically be done by adding the word "Unsubscribe" in the subject of the email.

Limits to unsubscribing

Unfortunately, unsubscribing does not mean the company has to remove you from any mailing lists they already provided or sold to other third parties. And the resale of your email address can happen so fast that unsubscribing does not prevent your email address from being sold and used by dozens of other third parties.

Likewise, clicking on a fraudster's unsubscribe feature will confirm that your email address is valid and active. This will likely result in your email appearing for sale in cybercriminal forums for years.

The 2003 CAN-SPAM Act states that businesses must provide clear instructions on how recipients can remove themselves from a specific mailing list, and they have ***10*** days to comply.

Some vendors knowingly skirt the law by claiming ignorance. Notably, there is also a loophole in the CAN-SPAM Act that says that a vendor can continue to reach out to you if the email is for "transactional or relationship" purposes, meaning the vendor is responding to a recipient's invited transaction or an ongoing relationship, such as an online order.

You can report non-compliance at www.reportfraud.ftc.gov.

The bottom line is – yes, click on those unsubscribe features when included in *legitimate* emails from *legitimate* vendors, but don't click if the email appears to be from a spam marketer or phishing scam artist.

Ricardo Ortiz is the IT administrator at Access Energy Cooperative.

BEWARE OF THIRD-PARTY PAYMENT PROGRAMS

Access Energy Cooperative member-owners have many options when it's time to pay an energy bill, but the cooperative recommends avoiding third-party payment processing websites.

Third-party sites may charge additional service fees and do not always make the payment on the same day, which could result in your payment being late and your power being disconnected.

Access Energy Cooperative is not affiliated with any third-party payment service. However, the cooperative offers a wide range of payment options through our SmartHub app and on our website.

Using SmartHub is the best way to pay your energy bill and manage your account. For more information about SmartHub, visit www.accessenergycoop.com or call us at 1-866-242-4232.

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.

SmartHub also allows you to access account information, check balances, make payments and report outages.

The SmartHub app is also available from the Apple App Store and Google Play Marketplace. Visit www.accessenergycoop.com for more information.

FEE SCHEDULE

Effective April 1, 2023

Fees and meter test rates	
Collection fee	$70
Non-payment reconnect fee (Remote, during hours, Tariff 12.3)	$75
Non-payment reconnect fee (Remote, after hours, Tariff 12.3)	$100
Non-payment reconnect fee (Non-remote, during hours, Tariff 12.3)	$125
Non-payment reconnect fee (Non-remote, after hours, Tariff 12.3)	$155
Idle service fee (Tariff 16.2)	$300/ year
Returned check charge (Tariff 12.2)	$30
Meter test requested by member (Tariff 13.2)	$50
Meter test third-party referee test (Tariff 13.21)	$30
Reconnect fee (Same name within 12 months, Tariff 15.3)	$240

LINE CONSTRUCTION CONTRACTOR

KIOWA LINE BUILDERS

Access Energy Cooperative has retained Kiowa Line Builders for line construction. They will be working for the cooperative in 2023 and 2024 in Jefferson, Henry, Washington and Lee counties.

If you would like to confirm or validate the presence of an electrical worker in your area, please contact our office.

THANK YOU, 2023 NOMINATING COMMITTEE

As an electric cooperative, our members have democratic control over who sits on the co-op board of directors. To support the election process, we ask a member-based nominating committee to find other members to run for the board.

Thank you to the 2023 nominating committee for your dedication to Access Energy Cooperative and finding qualified member-candidates to run for our board of directors. This year's nominating committee included:

- **District 1:** Joe Heckethorn, Brandon Ledger and Kenneth Whitham
- **District 2:** Matthew Lawler, Bob Scarff and Randy White
- **District 3:** Myrna Folker, Dean Mabeus and Tim Myers

Board nominations

The following members have been nominated by the committee to run in this year's election. The election will be held at the Annual Meeting of Members on Aug. 1. Ballots will be mailed July 6 as part of your annual meeting packet.

District 1

- David Hollingsworth, Packwood
- Thomas Kientz, Brighton

District 2

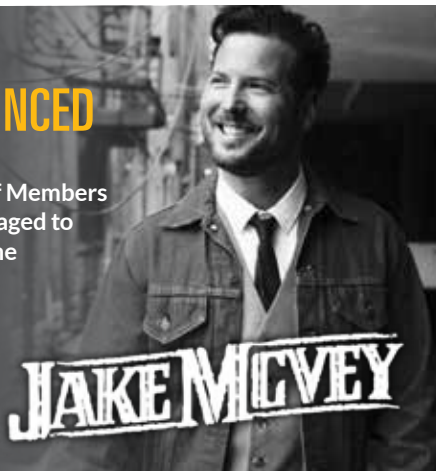
- Jerry Barker, Mount Pleasant
- Allan Woline, Mount Pleasant

District 3

- Michael Holtkamp, West Point
- Loren Holtkamp, West Point

2023 ANNUAL MEETING ENTERTAINMENT ANNOUNCED

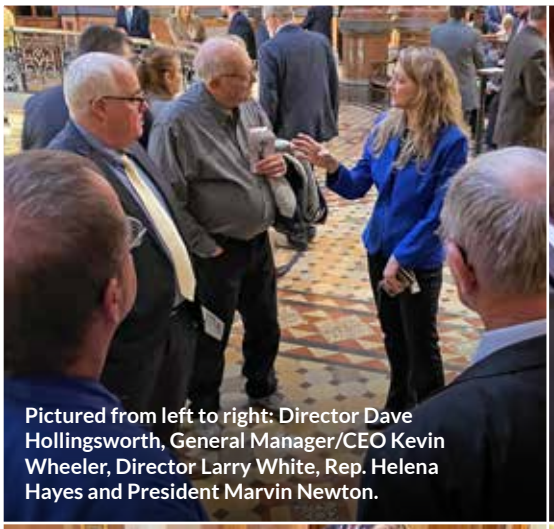
Country singer Jake McVey will provide entertainment for our Annual Meeting of Members on Aug. 1! All co-op members are encouraged to attend the meeting beginning at 5 p.m. The evening will include free food, free fun, free entertainment and opportunities to participate in co-op business activities. More information will be shared in upcoming issues of *Iowa Electric Cooperative Living* magazine.



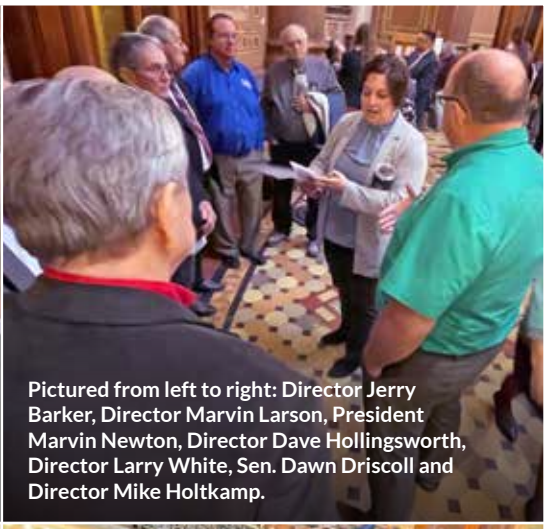
ACCESS ENERGY COOPERATIVE VISITS CAPITOL

The Access Energy Cooperative board of directors and staff visited the state capitol to talk with legislators about issues affecting the members of Access Energy Cooperative and the energy industry.

During this year's session, the Iowa General Assembly is addressing many issues, including items pertinent to Iowa's rural economy. Access Energy Cooperative directors, managers and staff have been important advocates for a balanced approach to addressing energy issues as part of our mission to provide safe, reliable, efficient and environmentally responsible power to our members.

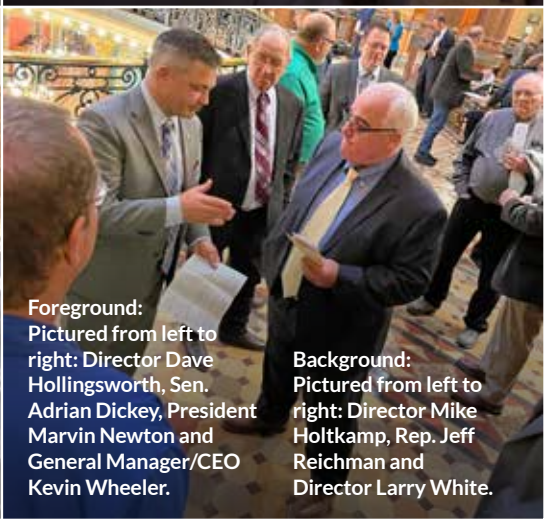


Pictured from left to right: Director Dave Hollingsworth, General Manager/CEO Kevin Wheeler, Director Larry White, Rep. Helena Hayes and President Marvin Newton.



Pictured from left to right: Director Jerry Barker, Director Marvin Larson, President Marvin Newton, Director Dave Hollingsworth, Director Larry White, Sen. Dawn Driscoll and Director Mike Holtkamp.

Pictured from left to right: General Manager/CEO Kevin Wheeler, President Marvin Newton and Rep. Heather Hora.



Foreground: Pictured from left to right: Director Dave Hollingsworth, Sen. Adrian Dickey, President Marvin Newton and General Manager/CEO Kevin Wheeler.

Background: Pictured from left to right: Director Mike Holtkamp, Rep. Jeff Reichman and Director Larry White.

LOCAL STUDENT SELECTED FOR WASHINGTON, D.C., TRIP

Alexis Wagner of Mount Pleasant has been selected to attend the 2023 Youth Tour on June 18-23. The event is an all-expense-paid trip to Washington, D.C., sponsored by Access Energy Cooperative.

Alexis 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.

Alexis is a sophomore at Mount Pleasant Community High School and is the daughter of Alan and Julie Wagner. She is involved in a variety of school activities, including cross country, wrestling, track, jazz band, musical and show choir.

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

Access Energy Cooperative has been a part of the Youth Tour program since 1958 and currently selects up to two students to participate in the seven-day trip. The students are selected through an application and interview process.

BREAKFAST & Brunch RECIPES

EASY EGG BAKE

- 4 slices bread, cubed
- 3 cups ham or sausage, cooked
- 1 cup Swiss cheese, shredded
- 1 cup cheddar cheese, shredded
- 8 eggs
- 3 cups milk
- 1 teaspoon dry mustard
- dash salt
- dash pepper
- 1 teaspoon Worcestershire sauce
- 1 cup corn flakes, crushed, optional
- 2 tablespoons butter, optional

Place bread cubes in bottom of 9x13-inch pan. Add meat and cheese on top of bread. Beat eggs, milk, mustard, salt, pepper and Worcestershire sauce. Top with cereal and butter, if desired. Bake at 325 degrees F for 70 minutes. Can be made the night before. *Serves 10-12*

Ardine Dillingham • Hartley
Osceola Electric Cooperative, Inc.

HOLE IN ONE BREAKFAST

- 1 round bakery bun or roll, unsliced
- 1-2 eggs
- 2-3 slices bacon
- spinach
- shredded cheese
- pepper, to taste
- seasoning, to taste

Make a well in the bread by removing the top center of the bun, without breaking through the bottom. Fill this hole with egg, bacon and spinach. Top with cheese and spices of choice. Bake at 350 degrees F for 30-35 minutes. Add your choice of vegetables as desired. *Serves 1*

Jane Person • Batavia • Access Energy Cooperative

MAKE-AHEAD BREAKFAST ENCHILADAS

- 1 pound bulk breakfast sausage
- 1 medium red pepper, diced
- 1 small onion, diced
- ½ cup green onions, chopped
- 2½ cups cheddar cheese, shredded, divided
- 10 flour tortillas
- 2 cups half and half
- 6 eggs
- 1 tablespoon flour
- salsa
- sour cream

In a large pan, brown sausage along with peppers and onions. Cool slightly and combine with 2 cups cheese in a large bowl. Scoop out 1/3 cup mixture onto a tortilla. Roll up tortilla and place seam side down in a greased 9x13-inch baking dish. Repeat with remaining tortillas, squeezing them all into dish. Whisk together half and half, eggs and flour. Pour over tortillas, then cover with foil and refrigerate overnight. In the morning, bake covered at 350 degrees F for 35 minutes. Remove foil and sprinkle remaining ½ cup cheese over enchiladas and bake uncovered for an additional 10 minutes or until cheese is melted. Serve with salsa and sour cream. *Serves 10*

Susie Reiling • Carroll
Raccoon Valley Electric Cooperative

BLUEBERRY BREAKFAST COBBLER

- **4 cups blueberries (fresh or frozen)**
- **1½ cups plus 2 tablespoons sugar, divided**
- **1 tablespoon cornstarch**
- **½ cup butter, softened**
- **2 eggs**
- **1 teaspoon vanilla**
- **1¼ cups flour**
- **1 teaspoon baking powder**
- **½ teaspoon salt**
- **2 tablespoons butter, melted**

Lay blueberries in a 9x13-inch pan. Mix ½ cup sugar and cornstarch, then mix into blueberries. Mix ½ cup softened butter, 1 cup sugar, eggs, vanilla, flour, baking powder and salt. Drop mixture over blueberries. Drizzle with melted butter and sprinkle with 2 tablespoons sugar. Bake at 350 degrees F for 40 minutes.

Lauren Zollinger • Rock Rapids
Lyon Rural Electric Cooperative

EASY BREAKFAST SMOOTHIE

- **1 banana**
- **¼ cup peanuts, almonds or walnuts**
- **1 cup milk**
- **¾ cup rolled oats**
- **1½ teaspoons combined spices: cinnamon, ginger, allspice, cardamom**
- **1 tablespoon maple syrup, optional**

Put all ingredients in container and let sit overnight. In the morning, the oats and nuts will be softened. Blend with food processor, blender or hand blender. Can substitute nuts for ¼ cup peanut butter. *Serves 2*

Jeffrey Hedquist • Fairfield
Access Energy Cooperative

BREAKFAST IN A JIFFY

- **1 pound sage breakfast sausage**
- **2 cups apples, cored and sliced, but not peeled**
- **1 cup sharp cheddar cheese, shredded**
- **2 extra-large eggs**
- **1 cup milk**
- **1 package Jiffy corn muffin mix**

Cook sausage, drain and crumble. Place sliced apples in rows to cover bottom of greased 8x8-inch pan. Cover apples with cheese and sprinkle sausage over cheese. Beat together eggs and milk. Place corn muffin mix into a small bowl and pour milk mixture over it. Blend well and pour over apples, cheese and sausage layers. Bake at 350 degrees F for 30-35 minutes or until lightly browned. *Serves 6-9*

Jeannie Stall • Huxley • Consumers Energy

HOT FRUIT COMPOTE

- **1 can Mandarin oranges**
- **1 jar maraschino cherries**
- **1 large can sliced peaches**
- **1 medium can pineapple chunks**
- **1 stick butter or oleo**
- **¼ cup flour**
- **½ cup sugar**
- **brown sugar**

Drain fruit juices, saving all the cherry juice and 1 cup of the other combined fruit juices. Place fruit in baking dish. In a pan, melt butter or oleo. Add flour and cherry juice. Add the other fruit juice and sugar. Simmer until thick then pour over fruit. Sprinkle with brown sugar. Bake at 350 degrees F for 15-20 minutes, until bubbly. *Serves 8-10*

Barb Rich • Mount Pleasant
Access Energy Cooperative

BACON EGG CUPS

- **8 eggs**
- **salt and pepper, to taste**
- **½ cup cheddar cheese, shredded**
- **12 slices bacon**

Whisk eggs, salt, pepper and cheese. Spray muffin tin cups with non-stick spray. Wrap each slice of bacon around the insides of muffin tin cups. Fill each bacon-lined muffin cup ¾ of the way with egg mixture. Bake at 350 degrees F for 30-35 minutes or until eggs are golden brown. Serve warm. Can be saved and warmed up in microwave for 30 seconds per cup. *Serves 12*

Arie Schiller • Donnellson • Access Energy Cooperative

WANTED:

DESSERT 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

STAYING ONE STEP AHEAD OF MOTHER NATURE

BY JENNAH DENNEY

Drones fly very close to utility assets to take the clearest images and provide data to help keep an eye on how close vegetation is to equipment.

Mother Nature tends to have a mind of her own. In Iowa, we witness this with tornadoes, derechos and ice storms. Utility power lines are constantly at risk from severe storms – particularly fallen and overgrown tree limbs, which can lead to power outages. It's estimated that 50% of outages can be attributed to overgrown vegetation, which is why Iowa's electric co-ops regularly trim and maintain their local systems.

This tried-and-true method requires a significant amount of on-the-ground labor, including manual data collection, in which dozens of workers assess the vegetation that needs to be cleared while walking below the infrastructure. It also takes manual verification of work quality and completion by contractors.

This is how co-ops have handled vegetation management for the past few decades. It has been an effective method, but in the era of extreme weather events and accelerating digitalization, electric co-ops are looking to innovative vegetation management methods to improve power reliability for the members they serve.

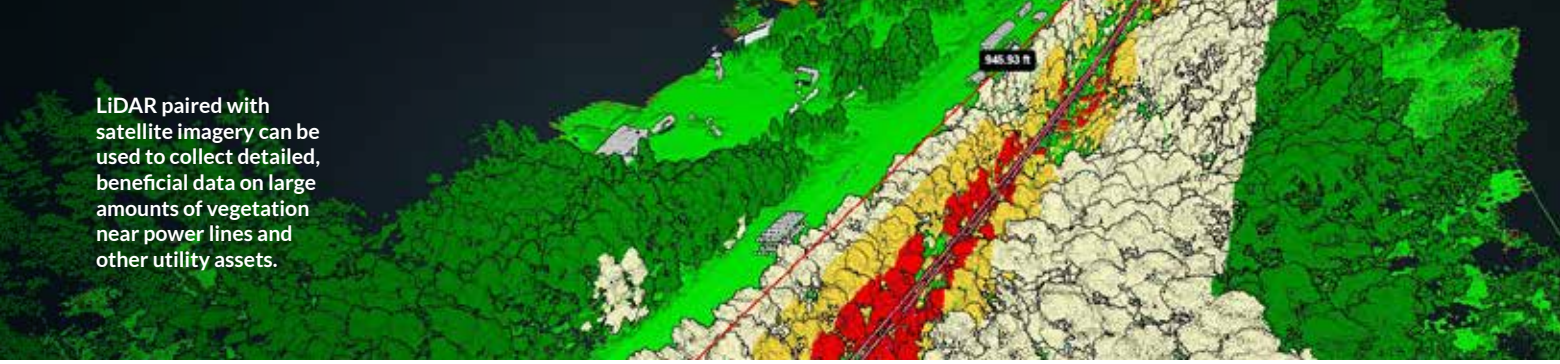
Leveraging new technologies

Technology advancement will continue to impact vegetation management, and electric co-ops are committed to staying informed and undertaking modernization efforts. By utilizing technology, co-ops may be able to dispatch crews to perform trimming at the ideal moment and location, preventing additional outages while enhancing productivity, cutting costs and providing better service. Timely monitoring and maintenance are necessary to identify assets prone to sustaining damage or catching fire, so co-ops are tasked with selecting the right technology to make this process more efficient.

The ideal technology will ensure a consistent supply of energy while managing the environment. Today, there are several cutting-edge vegetation management tools, each with its advantages.

Light detection and ranging

LiDAR, which stands for "light detection and ranging," gives exact, three-dimensional data about the shape of the surface around utility



LiDAR paired with satellite imagery can be used to collect detailed, beneficial data on large amounts of vegetation near power lines and other utility assets.

assets. LiDAR is a popular way to scan portions of forests to determine how tall trees are and acquire information about their health, like whether a tree has leaves. LiDAR doesn't provide data on how healthy plants are in general, but the technology can be paired with high-resolution multispectral satellite imagery to obtain accurate information about the health of the plants surrounding power lines. Timely data like this is extremely beneficial and can help electric co-ops make more proactive planning decisions.

Satellite data

Satellites provide coverage 24 hours a day and can supply two kinds of images: a wide macro view of the area near utility assets and a more detailed micro view. Satellite data can often be used in place of other monitoring methods. With satellite technology, co-ops can learn a lot about local vegetation, including:

- **Health:** This knowledge makes it possible to predict vegetation growth based on actual conditions rather than guesses.
- **Dryness:** This information is valuable for determining the likelihood of a wildfire – and how to protect wildlife around utility infrastructure. While wildfires aren't typical in Iowa, recent major events as close as Missouri showed us they could also occur here.

Satellites are always in orbit around the Earth, so data can be updated quickly, in real-time. This makes it possible to act more precisely and on time.

Today, satellite images can have a spatial resolution as small as 1.6 feet, which makes it easy to spot when vegetation is growing in the right of way near power lines and utility equipment. Typically, satellites can speed up the process of inspecting power lines because they give the utility a solid foundation for making data-driven decisions about vegetation management. Drones and helicopters are effective but can take longer to fly along a network of power lines. A satellite can take pictures of the same area in just a few hours.

Fixed-wing aircraft and drones

Electric co-ops are also using fixed-wing aircraft and drones to keep an eye on and control the growth of trees and plants near power lines. Drones fly very close to assets so they can take the clearest images, provide data on how close vegetation is to equipment and check the health of trees to see if they are likely to fall.

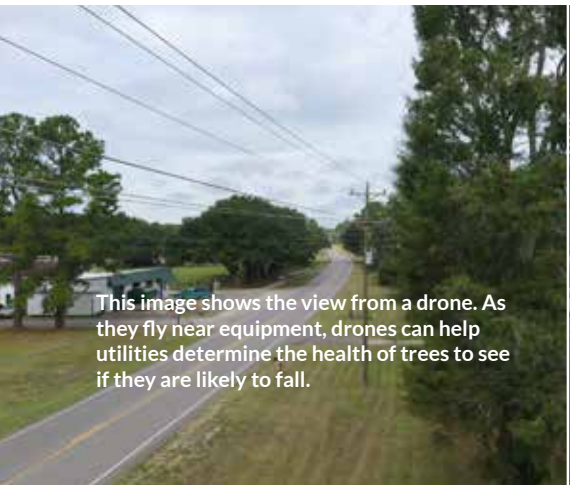
Many co-ops utilize drones with cameras, which began as a novelty tech for utilities but are now considered essential tools. When it comes to taking care of surrounding vegetation, drones are often used for detailed surveys rather than large-scale monitoring like satellites. Once LiDAR or satellites (often together) have collected data on a large amount of vegetation near power lines, drones are used to inspect a single area and do all the necessary checks without putting operators in danger.

Finding the best fit

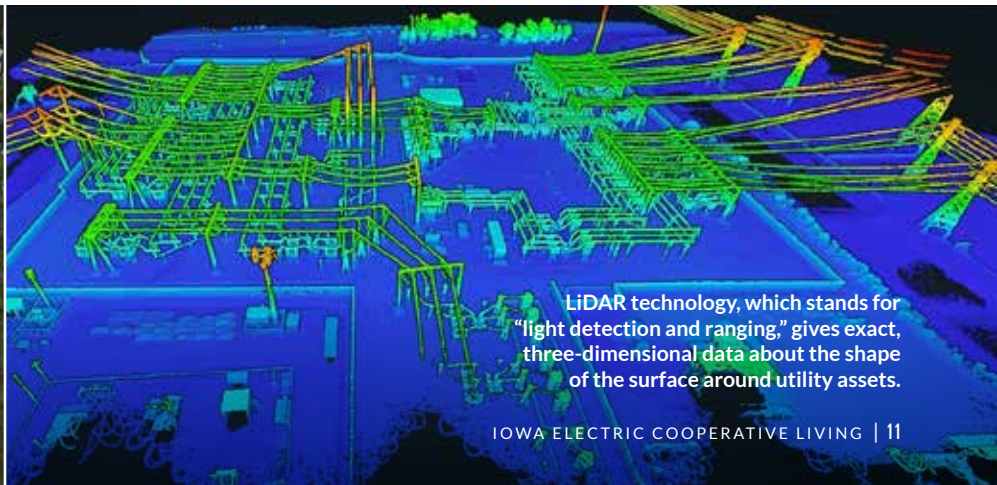
Electric co-ops place a high focus on vegetation management. It is the most crucial tool for reducing the likelihood of power outages. A thorough understanding of the vegetation's past, present and projected future is essential for a successful approach to reducing these risks.

The growth of LiDAR, drone and satellite data presents an opportunity to close the loop with continuous data-driven vegetation management intelligence and to increase the power line system's dependability and safety. Ultimately, all three technologies for managing vegetation serve different purposes, and electric co-ops choose the ones that work best for them.

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



This image shows the view from a drone. As they fly near equipment, drones can help utilities determine the health of trees to see if they are likely to fall.



LiDAR technology, which stands for "light detection and ranging," gives exact, three-dimensional data about the shape of the surface around utility assets.

EASY BEHAVIOR CHANGES TO SAVE ENERGY

BY MIRANDA BOUTELLE

You can change your energy use by changing your behavior. Many people focus on the total dollar amount when looking at electric bills. When managing your energy costs, shifting your focus to how you use energy can be helpful. The following are some actionable behavior changes to help you save on your next bill.

Set goals

Instead of thinking about your bills in terms of dollars, think about them in terms of kilowatt-hours (kWh). A kilowatt-hour is the unit of energy used for most electric bills. Review your monthly kWh use to get an idea of how much you use every month. Once you've reviewed your energy use, set goals for the next month. Try to use less energy than the month before, and then check your results on your next bill.

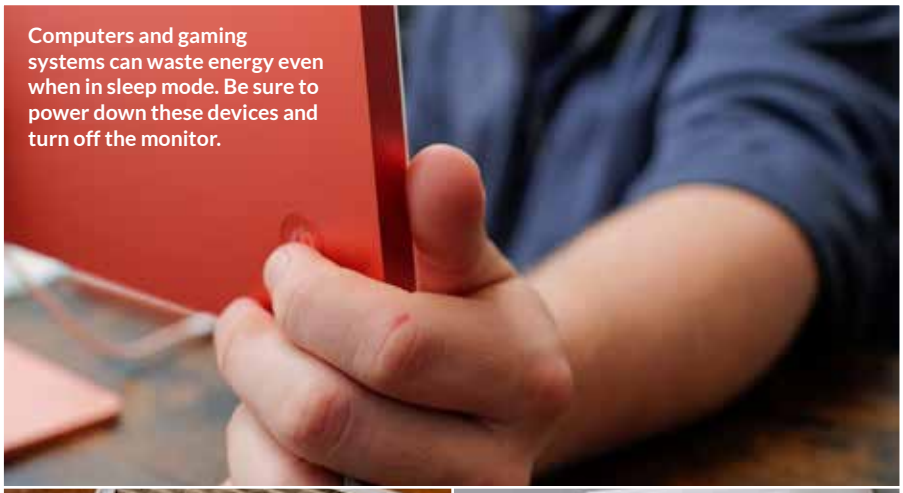
Know when to use less energy

Some electric utilities offer time-of-use rates, which means electricity costs are dependent on the time of day. This pricing structure more closely reflects the cost to electric utilities and helps consumers understand that energy costs more when the demand is higher.

Even if your electric bill does not include time-of-use rates, it can be beneficial to delay energy-intensive chores or tasks to when demand is lower. Peak hours are typically in the morning as we get ready for work and in the evening when we get home and start preparing food and turning on entertainment devices. Doing laundry and running the dishwasher are easy activities to delay until after peak hours.

Power "off" for energy savings

When looking for energy savings, remember that "off" is the most efficient setting. Turning off lights is a classic strategy, especially if your lighting is incandescent. Consider switching to energy-saving LED lightbulbs.



Computers and gaming systems can waste energy even when in sleep mode. Be sure to power down these devices and turn off the monitor.

Ensuring the filters in your heating and cooling system are clean is an easy way to keep it maintained and operating efficiently.

If you can turn the temperature down a few degrees in winter and up a few in summer, you will save on energy costs.

Computers and gaming systems can waste energy even when in sleep mode. The higher the wattage and the more hours the device is on, the more energy used. Laptops use the least energy, followed by personal computers at about 200 watts. Gaming consoles typically use less energy than gaming PCs. Remember to turn off the monitor as well.

Many electronics continue to draw power even when they are turned off. According to the Department of Energy, leaving them plugged in could add 5% to 10% to your monthly bill. Installing smart power strips is an easy way to ensure devices are completely turned off and not drawing power.

Adjust the temperature

When it comes to lowering your energy use, the settings on your thermostat are another great place to check. Remember that the weather affects your electric bill for heating and air conditioning.

The closer you can keep the indoor temperature to the outdoor temperature, the more you will save. You want to protect your home from damage in extreme heat and cold, but if you can turn the temperature down a few degrees in winter and up in summer, you will save on energy costs.

Ensuring the filters in your heating and cooling system are clean is an easy way to keep your system maintained and operating efficiently. Adding annual servicing by a professional maximizes the efficiency and can lengthen the life of your system.

Understanding your energy use and making small adjustments to your routine will help you reach your energy use 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.

EXPLORE IOWA THIS SPRING AND SUMMER

The spring/summer edition of the Iowa Travel Guide is now available to inspire travelers who want to plan an Iowa road trip. Many of the destinations covered in this statewide guide feature businesses and community sites served by Iowa's electric cooperatives.

The publication includes features on new events and attractions for 2023, including:

- RAGBRAI's 50th anniversary
- The Iowa State Fair
- The Loess Hills
- Stops along the Lincoln Highway
- Golf courses
- Adventures on wheels

The guide also contains suggested attractions, restaurants, lodging properties, events, an itinerary for each of the five travel areas and campground listings.

"Demand for travel continues to be strong," says Amy Zeigler, state tourism manager for the Iowa Tourism Office. "According to the U.S. Travel Association, nearly half of Americans with travel plans agree that taking time off is more important than ever, and more than half say travel is a priority in their budget. The redesigned Iowa Travel Guide is a great inspiration piece to encourage people to visit our state."

Investing in Iowa communities

While focusing on member-consumer needs, Iowa co-ops are dedicated to supporting the sustainable development of their communities. Encouraging local tourism – whether it's through placemaking or beautification efforts or supporting local restaurants and lodging options – is one way co-ops are living out the cooperative principle of Concern for Community.

The Iowa Tourism Office, part of the Iowa Economic Development Authority, works closely with community partners (such as Iowa's electric co-ops), attractions and events to promote the state's beautifully vast scenery and unique history. Tourism in Iowa generated $1.8 billion in tax revenues in 2021, with more than $1 billion supporting state and local governments while employing a total of 65,000 people statewide.

The free 140-page Spring/Summer Iowa Travel Guide can be ordered online at www.traveliowa.com, by phone at 800-345-IOWA or picked up at any of Iowa's Welcome Centers. An online version is also available.

ENERGY-EFFICIENT FARMING EQUIPMENT

BY MIRANDA BOUTELLE

The importance of farms cannot be understated. Farmers feed our families and keep Iowa and the country running. But the business brings many challenges, including risk and uncertainty. Finding ways to use less energy can reduce costs and result in energy savings for years to come.

When looking to improve farm energy efficiency, consider the following areas.

Motors and pumps

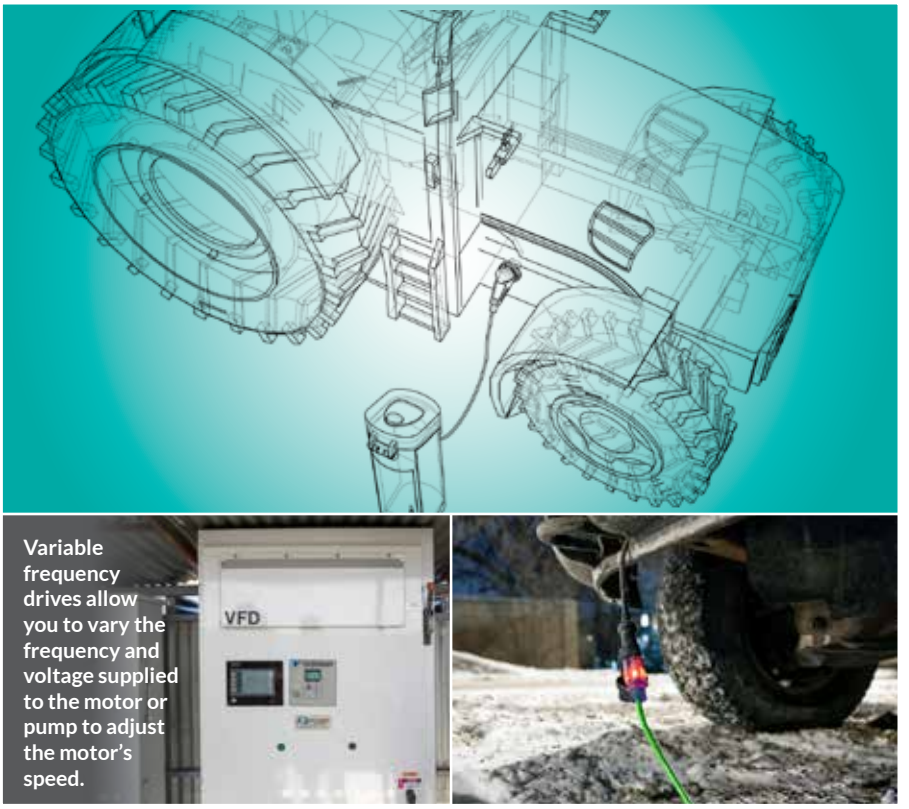
Because motors and pumps account for a significant amount of energy use on a farm, replacing inefficient motors with efficient models can save energy and reduce costs. Adding variable frequency drives (VFDs) allows you to vary the frequency and voltage supplied to the motor or pump to adjust the motor's speed. This saves kilowatt hours and reduces load by only operating at the needed capacity. VFDs can be used in place of a phase converter, which allows the use of three-phase power equipment where there is only access to single-phase power.

Irrigation

Upgrade irrigation equipment to use less water, which means less pumping and reducing the amount of water and energy consumed. The goal is to get the right amount of water where it is needed, which can be accomplished by reducing evaporation through system design and fixing leaks in the system. GPS and geographic information system technologies allow for more specific irrigation targeting. Monitor and test systems regularly to ensure maximum efficiency.

Lights

The longer lights are on, the higher the potential for savings. Prioritize replacing incandescent or fluorescent exterior lighting on photocells or lights that stay on all night. LED lights last two to four times longer than fluorescents and 25 to 35 times longer than incandescents. That means less frequent replacement, which saves on materials and labor costs.



Variable frequency drives allow you to vary the frequency and voltage supplied to the motor or pump to adjust the motor's speed.

Heater controls

In climates where engine block heaters are used to keep vehicle engines warm enough to start, adding engine block heater controls with temperature sensors and timers will reduce electricity use. To keep water from freezing on farms with livestock, save energy by using stock tank heaters with thermostatic controls, which operate only when needed instead of running constantly. Insulated stock tanks may eliminate the need to heat water.

Emerging technology

New farming technologies that offer efficiency possibilities include electric tractors, space heating and water heating. Equipment with information technology capabilities can aid efficiency by monitoring conditions and automating farming tasks. As with home efficiency practices, consider the equipment used most and the savings potential from upgrading or modifying existing equipment.

Rebates

About 80% of U.S. farms are located in counties served by electric cooperatives. Check with your local electric co-op to see if they offer rebates on farming equipment and energy-efficiency projects that help reduce energy use. Improving efficiency on the farm can result in less energy use, lower bills and improved farming success during challenging financial times.

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.

EFFICIENCY UPGRADES TO HELP YOU SAVE THIS SUMMER

BY ABBY BERRY

Spring and summer are opportune times for home upgrades and do-it-yourself (DIY) projects. If you're planning to make improvements to your home, consider upgrades that promote better efficiency.

Here are a few projects that can help you save energy and money – and increase the comfort of your home.

Smart technology. Installing a smart thermostat is one of the simplest ways to manage home energy use and keep summer bills in check. Smart thermostats are easy to install and allow you to control your heating and cooling system from your phone. You can purchase an ENERGY STAR®-certified smart thermostat for as low as $100, which can save you 8% on annual heating and cooling costs, about $50 per year. This upgrade will quickly pay for itself, and you'll gain insight into better ways to heat and cool your home.

Additional devices like smart LED bulbs also offer convenient control and help boost energy savings at home. With smart lighting, you can set a schedule for when and how your lights should be turned on or off. The next time you head out to run errands and realize you left the lights on, all you have to do is turn them off through your phone. Smart lights come in a variety of shapes, colors

and brightness levels – and you can purchase bulbs for indoor or outdoor use. Schedule outdoor smart lights to illuminate your home at night and when you're out of town for better security.

Caulk and weather stripping. Sealing air leaks around your home is a simple, effective way to save energy and lower your bills. Applying new (or replacing old) weather stripping around doors and windows can instantly make your home more comfortable and reduce energy waste. Applying caulk to fill gaps can also improve the seal of your home. Caulk can be applied to a variety of areas, including windows, doors, bathtubs and sinks.

Insulation. If your home feels too warm during summer (and too chilly during winter) even after you've sealed with weather stripping and caulk, your home may need additional insulation. Insulation is considered a more expensive efficiency upgrade; however, if your home is under-insulated, additional insulation can make a big impact on reducing energy use and costs. The cost of new insulation depends on a variety of factors like materials, size of the home and whether you use a contractor. Typically, the project costs can be recouped in a few years and your home will immediately feel more comfortable.

Energy audit. If you're wanting to make your home more energy efficient but you're not sure where to start, your best bet is to enlist the help of an expert to conduct an energy audit of your home. An energy audit can easily identify areas to boost efficiency, and then you can determine the projects you want to tackle first based on your budget and needs. Call us at 1-866-242-4232 or visit www.accessenergycoop.com for more information to address your saving needs or to schedule a home energy audit.

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

IT'S TIME TO REVERSE CEILING FANS

Use ceiling fans to cut your energy bills! During warmer months, flip the small switch on the side of your ceiling fans to reverse the blade rotation to counterclockwise. This helps the blades push the air downward. Remember, fans cool people – not rooms – so shut them off when not in use.

DIVIDEND BILL CREDIT DRAWING ON MAY 31

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

Each member who is signed up to receive 2023 and future dividend payments as bill credits 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. The drawing will be held May 31.

Access Energy Cooperative℠
A Touchstone Energy® Cooperative
IOWA ELECTRIC COOPERATIVE LIVING

The magazine for members of Iowa's electric cooperatives.

April 2023

Visit our website at www.accessenergycoop.com