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A new single-axis tracking panel is installed at Corn Belt Power Cooperative's new 150-kilowatt solar project at Wisdom Station, Spencer, Iowa. This 600-panel project replaces the space once occupied by the plant's coal pile. Photo taken by Marena Fritzler, marketing director, Corn Belt Power Cooperative.

Electric co-op advocates continue working hard for lowa's communities

BY HALEY MOON

Iowa's locally owned electric cooperatives have a long and successful history of working with elected officials and policymakers to advocate for their member-consumers. Iowa Rural Power advocates – made up of co-op directors, employees and member-consumers – are known for wearing the iconic green shirts while attending events in their

communities, in Des Moines and in Washington, D.C., to talk about issues impacting rural Iowans. Rural Power advocates work hard to educate elected officials on public policy that promotes rural economic development and supports safe, reliable, affordable and environmentally responsible energy.

Because of the COVID-19 pandemic, many of the opportunities Rural Power advocates typically attend to engage with candidates for office and elected officials were canceled. Events such as the annual REC Day on the Hill at the State Capitol in Des Moines, the NRECA Legislative Conference in Washington, the Iowa State Fair and countless campaign events were canceled, postponed or shifted to a virtual platform. And like all of us getting through this pandemic, Rural Power had to adjust.

Advocates adapt to pandemic changes

Even though the methods aren't the same as we're used to, Iowa's electric cooperatives have successfully kept communication lines open with elected officials. Through phone calls and video conferencing, and small socially distanced events at the co-op, advocates have continued to speak up for their communities. Because even though the pandemic has changed plenty, one thing that

hasn't changed is the importance of ensuring electric co-op memberconsumers have a consistent voice

and a credible message.

You can be a voice for rural lowa

One of the most important ways to ensure co-op member-consumers have a voice is by voting. Member-consumers like you know best what is important in your community, and

you can help send a message to elected officials that rural Iowa deserves their support. Iowa Rural Power, in conjunction with the national organization Co-ops Vote, is working to encourage voter registration and participation in the election on Nov. 3. We don't care who you vote for, we just care that you vote!

In Iowa, you can vote early in-person, on election day or by absentee ballot. Remember these dates as you get ready to vote:

Oct. 5 – First day of absentee voting

- Oct. 24 at 5 p.m. Preregistration deadline; Deadline to request absentee ballot to be mailed
- Oct. 31 Auditor's Office open for absentee voting
- Nov. 2 Absentee ballot inperson deadline; Postmark deadline for absentee ballots
- Nov. 3 Election Day

To learn more about voting in this year's election, visit www.voterready. iowa.gov or contact your county auditor.

If this year has taught us anything, it is the importance of community. Our core cooperative principle of concern for community has always driven the work of Iowa Rural Power. Now more than ever we are proud to advocate on behalf of our communities, the people served and the lives powered by electric cooperatives. Follow @iaruralpower on Facebook and Twitter or visit www.iaruralpower.org to learn more.

Haley Moon is the advocacy and political action manager for the Iowa Association of Electric Cooperatives.

EDITOR'S CHOICE CONTEST

Win a \$100 gift card to a local business!

Being a member of an electric cooperative is being part of something local. From the board of directors who guide the strategic direction of your co-op to the office headquarters, everything revolves around serving the local community. To celebrate National Co-op Month, we want to help you show your support for a local business! We're giving away a \$100 gift card to your choice of a hometown business. It will be good for a restaurant, hardware store, gift shop, grocery store, beauty salon or other family-oriented business that's vital to your community.



Enter this month's contest by visiting www.livingwithenergyiniowa.com no later than Oct. 31, 2020. 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 dehydrator and cookbook from the August issue was Ashley Verheyen, Access Energy Cooperative.

LOCAL PERSPECTIVE

We're "Powering On" for National Co-op Month

BY COZY NELSEN

So far, 2020 has been tough for all of us and filled with things that we never thought we'd see in our lifetimes. An unprecedented pandemic. Social unrest and division. A devastating derecho.

I want to let you know that through it all, Guthrie County REC's top priority has been to provide our member-consumers with the safe, reliable and affordable energy they've come to depend on. Because we are a co-op, our mission is to enrich the lives of our members and to serve the long-term interests of our local community – and this mission has never been more critical than during these times.

It's in this spirit of coming together as a community that we join with electric co-ops across the country to celebrate National Co-op Month and highlight the many ways we "power on." As Midwesterners, we are known and admired for our steadfastness in the face of adversity and overcoming challenges with an equal measure of grace and fortitude. These qualities





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Office Hours

Monday through Friday, 8 a.m. - 4:30 p.m.

Telephone Number

641-747-2206 or 888-747-2206 Calls answered 24 hours a day, 7 days a week

Website

www.guthrie-rec.coop

This institution is an equal opportunity provider.

are also the cornerstone of the cooperative business model, and I'm proud to lead an electric cooperative

that powers on when things get tough.

National Co-op Month is typically a time to celebrate all the good things cooperatives bring to our lives. We love being engaged in the communities we serve and showing support not just during the good times,

but during difficult times as well. To me, National Co-op Month is a great reminder of how much we care about this community – because we live here too. I've seen other local businesses rising to meet similar challenges during this time as well, because

that's what communities do. While the hurdles caused by COVID-19 have been daunting, I'm heartened to see how everyone is pulling together.

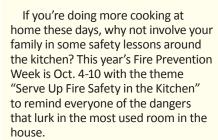
In 1938, Guthrie County REC was built by the community to serve the community, and that's what

we'll continue to do for generations to come – Power On.

Cozy Nelsen is the CEO of Guthrie County REC.

SAFETY MATTERS

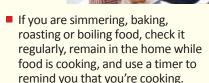
Serving up fire safety in the kitchen



According to the National Fire Protection Association (NFPA), cooking is the leading cause of home fire injuries in the U.S., with almost half (44%) of all reported home fires starting in the kitchen. Two-thirds of home cooking fires are started by the ignition of food or other cooking materials.

NFPA recommends the following tips to help keep your family safe when cooking in the kitchen:

Never leave cooking food unattended. Stay in the kitchen while you are frying, grilling or broiling. If you must leave, even for a short time, turn off the stove.



- Be alert when cooking. You won't be alert if you are sleepy, have taken medicine or consumed alcohol that makes you drowsy.
- Always keep an oven mitt and pan lid nearby when you're cooking. If a small grease fire starts, slide the lid over the pan to smother the flame. Turn off the burner, and leave the pan covered until it is completely
- Have a "kid-free zone" of at least 3 feet around the stove and areas where hot food or drink is prepared or carried.

A cooking fire can grow quickly and get out of hand before you know it. Keeping these safety tips in mind can ensure your food – and your family – remains unscathed by fire.



Required notification of alternate energy production



As of Jan. 1, 2013, Iowa law requires electric utilities be notified of the intent to construct or install an alternate energy production facility at least 30 days prior to construction.

The requirement applies to the owner of the facility that will be attached to an electric transmission or distribution line. Alternate energy production facilities are defined

as the following if they are used to generate electricity:

- Solar panels
- Wind turbine
- Waste management
- Resource recovery
- Refuse-derived fuel
- Agricultural crops or residue
- Wood-burning facility

The written notice must include information on the type of facility being planned and the anticipated completion date of the construction.

If you're considering installing an alternate energy system, please contact Guthrie County REC at 888-747-2206. Let us provide information and assistance before you decide to purchase any type of alternate energy system that requires interconnection with the grid.

BENEFIT OF MEMBERSHIP

Guthrie County REC members will receive capital credits for 2019

At its Aug. 18 meeting, the Guthrie County REC board of directors voted unanimously to allocate \$810,090.46 of the 2019 margin into the patronage account for our co-op members.

As a member, you should have received a postcard from the cooperative stating your individual allocation amount. Please call 888-747-2206 with any questions.

At the end of each operational year, capital credits are allocated based on the margins (profit) achieved in a given year and then pro-rated among Guthrie County REC members based on the amount of energy each member contributed in purchasing electric service.

The margin is divided into four categories: patronage, reserve for contingency losses and expenses, statutory surplus, and education reserve. This year, the board voted to distribute the entire amount to



patronage.

The allocation of capital credits is merely a notification to a cooperative member that the cooperative realized a margin (profit) for the fiscal year 2019 and, in accordance with its bylaws, is allocating a pro rata share of the margin to members based on kWh usage.

Questions or complaints? Let us know



Guthrie County REC strives to provide you with the best service at the lowest possible cost. But sometimes you have questions regarding your electrical service or billing, or possibly a complaint. If you have a complaint about Guthrie County REC's service rather than its rates, you can reach a representative of the cooperative by contacting us during normal business hours: 8 a.m.-4:30 p.m. Monday through Friday at 641-747-2206 or 888-747-2206. You can also write to Guthrie County REC, 1406 State St., P.O. Box 7, Guthrie Center, IA 50115-0007.

If your complaint is not resolved, you may ask for help from the lowa Utilities Board, Customer Service, 1375 E. Court Ave., Room 69, Des Moines, IA 50319-0069; 877-565-4450 or customer@iub.iowa.gov. €



Celebrating co-ops and local communities



BY PAUL WESSLUND

We like the word local.

We like it because it's the nearby hardware store where we can get what we need. It's where we meet friends for coffee. It's the shop where they look us in the eye and smile. It's a word of warmth that makes us feel known.

Local also means your electric co-op. It's as local as you and your neighbors because you own it. It's grown and changed with you, possibly starting before you were even born. Because it's made up of you and your neighbors, it's as unique to each part of the country as you are. And it changes to help out with what's going on in your community, whether that means bringing electricity to farmsteads

80 years ago, providing the community with access to high-speed internet or powering your community through the pandemic today.

October is National Co-op Month, and this year, it makes sense to use this time to recognize and celebrate the variety that is the essence of being local.

That local heritage for electric co-ops started in the 1930s with neighborly visits, often on horseback from one farm to the next, talking about the lights they could see in the city but didn't have themselves. They weren't likely to get those modern conveniences because no company saw a profit in stringing wires to power a few light bulbs in a remote farmhouse.

So, the local farmers took matters into their own hands. They pooled \$5 startup fees; organized memberowned, not-for-profit electric cooperatives; and convinced local politicians to create a federal loan program to help with the rest of the cost. They created what others didn't see: one of the most efficient agricultural economies in the world and communities based around a variety of business and industry, from manufacturing to tourism.

No such thing as a typical co-op

Today, 900 electric co-ops provide electricity to more than 20 million businesses, homes, schools and farms. They cover more than half the land in the U.S. They employ







more than 68,000 people and invest \$12 billion a year in local economies, contributing \$88.4 billion to the nation's Gross Domestic Product.

They're big and small. The largest electric co-op serves nearly 350,000 members; the smallest, 113.

They're in metropolitan and non-metropolitan areas. While electric co-ops come from a rural heritage, many of their communities have grown over the decades. About 40% serve counties classified as rural and 60% classified as metropolitan. Another way to look at that variety is by the average number of members served by each mile of its power lines. The co-op with the densest population serves 78 members for each mile of line. The most remote co-op averages less than one person per mile of line.

While those numbers reflect the variety and uniqueness of who coops serve, what they do also matters.

Fewer emissions, more renewable energy

As co-op members became more aware of environmental priorities, co-ops focused on reducing power plant emissions. From 2009 to 2016, co-ops reduced greenhouse gas emissions by 8%, nitrogen oxide emissions by 24% and sulphur dioxide emissions by 66%. Co-ops also launched energy efficiency programs, many offering home and business 'energy checkups' to make sure members got the best value for their energy dollar.

Electric co-ops are helping power the growth in alternative energy. They pioneered the development of community solar, which allows co-op members to participate in renewable energy without the expense and effort of installing solar panels on their own property. Nationwide, co-op solar capacity has more than quadrupled in



the past five years. Seventeen percent of co-op electricity in the U.S. now comes from hydroelectric power, solar, wind and other renewable sources.

Over the next several years, we will see electric vehicle technology transform transportation. Some electric co-ops are making electric cars available to members to try out. Others are working to set up charging stations that will be required for a viable electric vehicle industry.

And now that we're all adapting to the effects of COVID-19, electric coops are again on the job as the virus changes everything from the national economy to how we say hello to our neighbors.

Electric co-ops are developing payment plans for people out of work. They're socially distancing line crews. They're setting up drive-in or virtual membership meetings and many are offering virtual energy audits.

The world keeps changing, and electric co-ops will continue to adapt. Each co-op's approach may differ, but they'll do whatever it takes to adapt in ways that make the most sense for the people in their community. *That's* what it means to be a local electric co-op.

Paul Wesslund writes on consumer and cooperative affairs for the National Rural Electric Cooperative Association.

IOWA FACTS

The not-for-profit electric co-ops of lowa provide reliable, safe, affordable and sustainable electricity to over

650,000 PEOPLE

throughout all every day.

99

counties

lowa's electric co-ops maintain enough power lines to wrap around the equator
2.5 times. 2.5 TIMESI

lowa's electric co-ops provide power to about 15% of the state's population, yet cover approximately 80% of the state's land mass.

lowa's electric cooperatives have helped create or retain more than

50,000 JOBS

in rural Iowa.

Each year, lowa's not-for-profit electric co-ops pay

\$14 MILLION

in property taxes.

The electric co-ops of Iowa directly employ more than

1,200 PEOPLE 4





Kate's Breakfast Casserole

1 to 11/2 pounds ground pork sausage

- 1/2 teaspoon ground mustard
- 1/2 teaspoon basil
- 1/2 teaspoon oregano
- 1/2 teaspoon thyme
- 8 eggs
- ½ cup milk
- 2 cups shredded cheese of your choice, divided
- 4 ounces mushrooms, sliced
- 1½ pound package frozen tater tots (mini or regular)
- 1/2 cup shredded Monterey Jack cheese

Brown sausage and incorporate seasonings. Pour off grease. Beat eggs, and then beat in milk. Stir in sausage and 1 cup shredded cheese. Pour into greased or sprayed casserole pan. Sprinkle with 1 cup shredded cheese and cover in mushrooms. Top with tater tots. Cover loosely and bake at 350 degrees F for 40 minutes. Remove cover and sprinkle with Monterey Jack cheese. Return to oven to melt cheese. After removing from oven, let rest a few minutes before serving. Meat and seasonings may be prepared on one day and quickly put together the next morning for brunch.

Mabel L. Fisher • Sigourney T.I.P. Rural Electric Cooperative

Source for pork facts: lowa

Pork Producers

Association

SAFE COOKING

TEMPERATURE
The USDA's
Food Safety
Inspection
Service says
pork can be
safely cooked
to medium
rare at a final
internal cooked
temperature
of 145 degrees
F as measured
by a food
thermometer,
followed by a
three-minute
rest time.
Ground pork,
like all ground
meats, should
still be cooked
to 160 degrees F.

Cranberry Pork Festive

- y pound pork tenderloin, trimmed
- 1 tablespoon olive oil or vegetable oil
- 1/2 cup beef broth, divided
- 2 tablespoons dried cranberries
- 1½ teaspoons Dijon mustard
- 1 tablespoon orange juice concentrate
- 1 teaspoon cornstarch

Cut tenderloin into 12 slices; flatten to ¼-inch thickness. Add oil to skillet and brown pork over medium heat. Add ¼ cup beef broth, cover and simmer for 5 to 10 minutes or until meat is no longer pink. Remove meat to a serving dish and keep warm. Add cranberries, mustard and remaining broth to skillet. Combine orange juice concentrate and cornstarch until smooth. Gradually add to broth mixture to skillet, stirring constantly. Bring to boil, cook and stir 1 to 2 minutes. Pour over pork.

Sharon Cline • Kent Southwest Iowa Rural Electric Cooperative

Garlic Apple Pork Roast

- 3-4 pound boneless pork loin roast, thawed
 - 6 ounces apple jelly
- 1/2 cup water
- 2 teaspoons garlic, minced
- 1 tablespoon parsley
- ½ teaspoon salt
- ½ teaspoon pepper

Cut roast in half and place in slow cooker. In a bowl, combine jelly, water and garlic; pour over roast. Sprinkle with parsley, salt and pepper. Cover and cook on low for 8 to 8½ hours. Remove from juice and let stand 5 minutes before slicing. Serve with cooking juices.

Judy Jackson • Hedrick • Access Energy Cooperative

Slow Cooker Ranch Pork Chops

- 4 boneless pork chops
- 1 can cream of chicken soup
- 1 package dry ranch dressing mix

Layer pork chops in slow cooker. Add soup over pork chops and sprinkle with ranch dressing. Cook on high for 4 to 5 hours or on low for 6 to 7 hours. Thicker pork chops will take longer.

Patty Schurk • Burlington • Access Energy Cooperative

Ground Pork Casserole Hickory Chops

- pound ground pork
- 1/2 cup onion, chopped
- 1 can cream of chicken soup
- 1½ cups milk
- ½ cup uncooked rice
- teaspoon poultry seasoning
- cup soft breadcrumbs 1
- tablespoons butter, melted

Brown pork and drain fat, then add onion. Stir in soup, milk, rice and seasoning. Put in casserole dish and bake uncovered at 350 degrees F for 60 minutes. Mix breadcrumbs and melted butter. Sprinkle crumb topping over casserole and bake until golden brown.

> Linda J. McCarville • New Hampton **Butler County Rural Electric Cooperative**

Sausage Pilaf

- pound bulk sausage
- cup celery, chopped
- ½ cup onion, chopped
- cup green pepper, chopped 1/2
- 11/4 cups milk
- 1/4 teaspoon salt
- cup uncooked rice (not instant)
- 1 can cream of mushroom soup
- 1/2 teaspoon poultry seasoning
- cup soft breadcrumbs
- tablespoons margarine, softened

Brown sausage and drain excess fat. Add celery, onion and green pepper. Cook until tender but not brown. Stir in milk, salt, rice, soup and seasoning. Bake in 1½-quart covered casserole dish at 350 degrees F for 50 minutes, stirring occasionally. Mix breadcrumbs and margarine. Sprinkle breadcrumb mixture on top and continue baking uncovered for 20 minutes.

> Lisa Harris • Akron **North West Rural Electric Cooperative**

- 3 tablespoons molasses
- 2 tablespoons red wine vinegar
- 3 teaspoons liquid smoke
- cloves garlic, minced
- 3/4 cup brown sugar
- teaspoon salt 1
- 1/2 teaspoon pepper
- cup Dijon mustard
- boneless pork chops

In bowl, mix first 8 ingredients into a marinade. Put pork chops into freezer bag and pour marinade over. Seal and refrigerate overnight. Grill until pork chops are desired temperature.

> **Marci Domnick • Rock Rapids Lyon Rural Electric Cooperative**

Sweet and Sour **Pork Chops**

- 4-6 boneless pork chops
 - tablespoon oil
 - medium onion, chopped
 - 2 tablespoons butter
 - 1/2 cup vinegar
- ⅔ cup brown sugar
- 1/3 cup yellow mustard
- cup ketchup rice

In a large skillet, place oil and cook pork chops until meat is no longer pink. In a separate pan, sauté onion and butter until onion is transparent. Add vinegar, sugar, mustard and ketchup. Simmer to blend flavors. Pour sauce over the pork chops, cover and continue cooking about 20 minutes. Serve with rice.

> Lori Miller • Alvord **Lyon Rural Electric Cooperative**

COOK IT Use low-fat

pan-broiling flavor while flavor and vinegar or fatoil-based

SIZE OF A DECK OF CARDS

LEANEST CUTS

the words "loin" " or "round" in

SPICE FOR LIFE

at the same

Wanted: Recipes for Valentine's Day! The Reward: \$25 for every one we publish!

From roses to hearts, red is the color of Valentine's Day! We're looking for foods our co-op cooks love that include something red as a primary ingredient. Whether the recipe contains a red fruit or vegetable, is a dessert or main dish, the contest is open to your creativity! If we run your recipe in the magazine, we'll send a \$25 credit for your electric co-op to apply to your power bill. Recipes submitted also may be archived on our website at www.livingwithenergyiniowa.com.

The deadline is Oct. 31, 2020. Please include your name, address, telephone number, co-op name and the recipe category on all submissions. NEW: Please also provide the number of servings per recipe.

EMAIL:

recipes@livingwithenergyiniowa.com (Attach your recipe as a Word document or PDF to your email message.)

MAIL:

Living with Energy in Iowa 8525 Douglas Ave., Suite 48 Des Moines, IA 50322-2992

Wire-Rama anniversary marks co-ops' longstanding commitment to "Power On"

BY ANGELA CATTON



Right: George Hoffman, Sr. stands beside the main switch box. Pipes leading into the ground carry a plastic cable buried about 30 inches deep. This served as the heart of the entire electrical system.



Above: Dan Hoffman, George Sr.'s grandson, points to the same panel as it was recently rebuilt. The pipes still provide a conduit to the underground cabling that has been updated



October is National Co-op Month, and electric cooperatives across the country are highlighting the many ways they "Power On." For more than 80 years, rural electric cooperatives (RECs) have been defined by their mission to enrich the lives of members and serve the longterm interests of the communities they serve.

This month, when we honor a long history devoted to cooperatives and their relationships with those they serve, Northwest Iowa Power Cooperative (NIPCO) celebrates the 65th anniversary of an initiative to "Power On" a farm in Ida County. The event – the first of its kind in Iowa - was called Wire-Rama and held on Sept. 28, 1955, on the George Hoffman, Sr. farm north of Ida Grove. Today, the farm remains in the family and is owned by Dan

Hoffman, one of George's grandsons. Dan, who currently serves as an Ida County director representative on the North West REC board of directors, was just three years old at the time of the event. His older brother George Hoffman III was 12 years old. The farm is served by North West REC.

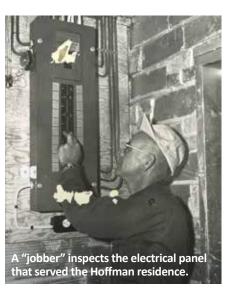
"I remember the promotional marketing," recalls Hoffman III. "There were brochures and posters that featured Willie Wiredhand. That was really neat!"

According to the November 1955 issue of Iowa Rural Electric News, "Wire-Rama translated into language everyone can understand, could be described as souping up an entire electrical system on a farm, including a complete rewiring job, and the addition of new electrical equipment, appliances and a fan, etc."

Wire-Rama promotes "modern electricity"

Wire-Rama was the brainchild of NIPCO's Public Relations/Power Use Advisor Kinney S. Reiser. In his role at NIPCO, Reiser was responsible for promoting the benefits of electric power. Construction on the NIPCO 69,000-volt transmission system had already begun three years earlier but member-consumers in the region were slow to understand the advantages that improved wiring and electrical systems could provide. With farms and homes already incorporating modest and primitive wiring and equipment, Reiser recognized an opportunity to educate and promote how "modern electricity" could further revolutionize mid-century life on the farm, relying on the expertise of their local electric cooperative.

The Hoffman Farm was identified as the ideal setting for the 1955 Wire-Rama. George Hoffman, Sr. was already a heavy user of electricity (about 10,000 kilowatt-hours each month). Hoffman raised and showed cattle and Berkshire hogs. He was interested in improving his operation





Present day photos by Rachel Rogers, communications specialist, NIPCO

by adding more electric equipment but his outdated existing wiring, installed in 1917, could not handle the increased electric load.

NIPCO's Reiser worked with power use advisors from each of NIPCO's member distribution cooperatives, which included 10 coops at the time. Power use advisors (or "P.U. men," as they were often called), were the predecessor to today's REC energy advisors and member service professionals. The group met regularly with Hoffman to plan a system that would meet his needs. Once the layout was finalized and materials list set, they worked with local vendors, manufacturers and "jobbers" (local electricians and tradesmen) to solicit donations of materials and labor. According to the Iowa Rural Electric News article, "A favorable reply from the jobbers, as well as offers from manufacturers contacted by them, saw the first phase of Wire-Rama well on the way to completion."

By donating materials and labor to the project, partners hoped to perpetuate the notion of modernizing antiquated electric

systems and electric appliances. Wire-Rama served as a working trade show exhibit for local electricians and vendors to market their services and products.

Underground wiring stands the test of time

It took approximately one week to rewire the Hoffman Farm. Work began on Sept. 20, with the digging of trenches that would accommodate the underground wiring. Hoffman III remembers that the underground wiring was "really something special" at the time and that many, including his grandfather, wondered how long it would last. Sixty-five years later, Dan Hoffman confirms that much of the underground wiring remains operational today.

A 400-amp capacity service was installed on the yard pole, followed by 100-amp services to several outbuildings, including the family

Thanks to these improvements, George Hoffman, Sr. was able to install a 42-inch fan with a twohorsepower motor to keep flies away from his cattle, something he could



not do with his older system. George III distinctly remembers the giant fan. "It was about 5-foot square, and I remember it was red."

In addition, the Hoffman home was upgraded to include new wiring throughout, including a 100-amp circuit breaker panel, all new light fixtures, outlets and electric appliances. Mrs. Hoffman received a modern electric range but, according to her grandsons, insisted that her trusted propane stove be moved to the basement as her backup. 🗲

Angela Catton is the manager of member relations and development for Northwest **Iowa Power Cooperative**



George Hoffman, Sr. (*left*) and Ida County REC Manager Charles Pullen (*right*) inspect old wiring next to the fan that was installed to cool Hoffman's cattle barn.



Slay the energy vampires

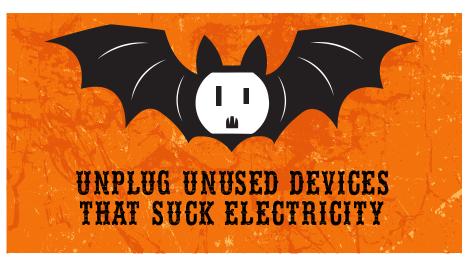
Halloween is almost here, and a band of spooky energy vampires could be lurking around your home. Unfortunately, these energy-slurping electronics are not interested in candy, but rather sucking your electrical outlets bone dry while raising your energy bills every month.

These so-called "energy vampires" are appliances that continue to draw power from electrical outlets, even when turned off or idle. While these vampires won't suck your blood, some of these appliances can cause substantial increases to your energy usage, costing you and your family hundreds of dollars per year.

According to the U.S. Department of Energy's Lawrence Berkeley National Laboratory, an appliance constantly taking in 1 watt of electrical current is equivalent to 9 kWh per year, adding up to \$1 in annual costs (basically \$1/watt/ annual). Considering how many appliances are used in an average household, costs can quickly add up to \$100-200 a year.

To prep you for the colder and more expensive energy months, we've prepared a list of cleverly ghoulish (and practical) actions to take care of energy vampires in your home for good:

- 1. In the bathroom: Unplug the hair dryer. Even when turned off, devices like hair dryers, curling irons or electric shavers can idly sip electricity from your outlet costing you money. Outsmart these pesky energy vampires by tugging the plug.
- 2. In the kitchen: Make a habit of turning off all unnecessary kitchen appliances, especially the coffeemaker. While coffee makers only use 1-3 watts when off, if you add that to your microwave, small kitchen television, toaster oven or other unused appliances, you could save \$10-\$20 per year just by turning them off.



- 3. In the home office: You may have finished working, but your laptops and PCs in the home office are contributing to your electric bill. Be sure to keep your computers on sleep mode if not in use. Of course, a desktop or laptop computer can still suck 15-21 watts when idle. Turn it off instead and that could be up to \$20 in savings from one device alone. Inkjet printers and fax machines, as well as other computers, can easily add to these costs, so be sure to use
- power strips and flip them off when not in use.
- **4. In the bedroom:** Space heaters are a great way to keep a basement bedroom warm. Unfortunately, they're also a great way to start a house fire and drive up energy bills. If some rooms are colder in your house, consider fixing leaks and or adding insulation instead of using pricey space heaters. You can find ways to fix leaks in your home with a simple home energy audit. 🗲



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Wisdom Station solar project nearing completion in northwest Iowa

BY RYAN CORNELIUS

Corn Belt Power Cooperative's first solar project is now mostly complete. After a few delays, the remaining panels in the 150-kilowatt array are generating energy at Wisdom Station.

The project features two different types of photovoltaic panel arrangements, a fixed-tilt array and an array of single-axis tracking

"So far, the Wisdom Solar project is performing well," says Jacob Olberding, vice president, power supply, Corn Belt Power. "The fixedtilt array has been in service for almost a year, and the single-axis tracking array began producing power earlier in July. It was a fun project to be a part of and was a good learning experience. The experience gained from this project will be valuable if Corn Belt is able to do another larger solar project in the future."

The panels take up the space once occupied by the plant's coal pile. Wisdom Station converted to an allgas burning facility in 2014.

There are 600 total panels at Corn Belt Power's Wisdom Station with 75 kilowatts of generation on each of the fixed-tilt and single-axis tracking

"We hope to learn more about the true costs and benefits of the two technologies - fixed-tilt versus single-axis tracking," says Olberding. "We tried to set up as much of an "apples to apples" comparison as we could. The two arrays are located right next to each other. Each array has the same size model, quantity of solar panels and inverters. We will be monitoring and documenting the performance and costs associated with the two arrays throughout the life of the project so that our members can make informed decisions when considering the two technologies."



Workers with Iowa Choice Renewables install singleaxis tracking panels in Corn **Belt Power Cooperative's** new 150-kilowatt solar project at Wisdom Station, Spencer, Iowa. The fixedtilt array and single-axis tracking array each have a 75-kilowatt generation capacity. The 600-panel solar project replaces the space once occupied by the plant's coal pile.



A fixed-tilt array is an array in which the panels never move and are pointed in one direction at all times. The single-axis tracking panels will move with the sun to maximize energy generation.

Iowa Choice Renewables, a company established and run by a group of electric cooperatives in rural Iowa, installed the system.

"Iowa Choice Renewables was easy to work with throughout the project," Olberding says. The array interconnects to the Iowa Lakes Electric Cooperative distribution system at Wisdom Station. Olberding says the Iowa Lakes staff was helpful

through the interconnection process.

"They were very accommodating and flexible," he adds. "They were great partners in this process."

Corn Belt Power supplies electricity to nine member cooperatives and one municipal cooperative that serve farms, rural residences, small towns, businesses and industries in 41 counties in northern Iowa. Corn Belt Power plans to set up a webpage for co-op members to see how the two different arrays are performing. 🗲

Ryan Cornelius is the vice president of corporate relations for Corn Belt Power Cooperative.

Electrifying end-use appliances

Many of the everyday appliances in your home have the potential to be powered by electricity instead of gas, propane or any other type of fossil fuel. Switching over to electric appliances and technologies can help you save money over time in power and maintenance costs.

Four major electric technologies around the home are changing the way we use energy:



Electric induction stove tops

New induction stove tops can now warm up more quickly than gas stoves, can heat pans more evenly than before and are much more efficient than older versions of electric resistance stoves. Induction stove tops require specific pots and pans to be compatible with the stove top. The prices for electric stove tops have also declined in recent years, making most of them on par with the cost of gas stove tops.

Electric water heaters

A hybrid heat pump water heater is another option to electrify an appliance in your home and is much

more efficient than a traditional electric water heater. Hybrid heat pump water heaters generally save money since they use energy more efficiently than gas-powered water heaters. Households can potentially save hundreds of dollars per year, while also not having to worry about



any combustion safety issues.

Another key feature of the electric water heater is that it can serve as a battery by storing thermal energy. Water heaters can retain their heat for hours, which means owners can power water heaters at night when electricity may be cheaper.



Electric lawn mower

Instead of using gasoline to power your lawn mower, consider a batterypowered mower, which doesn't expel exhaust fumes or require engine maintenance. Battery-powered mowers start instantly and are quieter to operate. Although most battery-powered mowers cost more upfront, the savings can be recouped over time by not needing to pay for engine maintenance or fuel.



Electric vehicles

Electric vehicle technology is changing quickly, with prices now becoming on par with gasoline-fueled vehicles over the long term. While there are luxury options like Tesla, there are many other manufacturers coming out with more affordable hybrids, especially for used cars. Electric vehicles also reduce exhaust emissions, which can improve air quality on a larger scale.

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Driving us over the edge

BY VALERIE VAN KOOTEN

Being quarantined with those nearest and dearest to us has brought out the best and the worst characteristics in everyone. The joys and sweetness were amplified; the most grating and obnoxious characteristics were magnified. It was those everyday annoyances that drove us to the edge. And what made it more vexing is that my family acted as if they had never heard these things ... as if I were giving them newspaper headlines in announcing them:

- **Hear Ye! Hear Ye!** You can use a bath towel more than once if you're clean! I know this is a revelation to many in my family, but if you get out of a shower and you've just scrubbed yourself, that towel is not going to be dirty. If you hang it up, you can re-use it! But once you fling it on the floor, it will turn into a moofy, mildewy-smelling lump.
- **This Just In!** It helps no one if you eat the last snack cake, the last cup of cereal, the last couple chips, and then put the box back! Just as bad: leaving 1/8-inch of orange juice so that you don't look like a pig who just drank the rest of the carton. Face it: You did drink the rest of the carton. Own it.
- **Breaking News!** Those items placed on the stairs aren't there for decoration or for you to trip over. They are meant to go up and be put away. Reverse the process for items at the top of the steps. Isn't that a novel idea?
- I Know This is Hard to Believe! Mom doesn't know where your boots/book/car keys/screwdriver/ measuring tape is! And you know why she doesn't know? Because she hasn't worn/ pocketed/used them!
- **Take Note!** There is no laundry category for "placing the item on



top of the clothes hamper!" It can be in the hamper (preferable state) or on the floor, but no one knows what to do with something on top of the hamper. Give it the sniff test and make a decision.

- **Be Warned!** When a responsible adult-type person is on the phone or a Zoom meeting, do not ask them stupid questions about where the aforementioned keys are. Unless there is blood or smoke, do not disturb said
- You Heard It Here First! Moms really don't like to be "mooed" at. What do I mean? That long, mooing "Moooooooom" thing kids do (incessantly) when they want your attention wears on the nerves and frays the temper. I know, it sounds incredible, but moms and grandmas really don't like it.

- It Confounds Science! Studies say people can go weeks without food, but grandchildren seem to need snacks 10 minutes after a meal. And 20 minutes. And an hour
- **Who Knew?** Once the toilet paper gets down to the cardboard roll, it needs to be replaced. Amazing, no?

In a world where we were scared of a pandemic, what annoyed many of us the most was not being required to wear a mask or having to sanitize everything we touched. It was the habits of those we were ready to take a letter opener to, even though we loved them more than anything. Except when they leave an empty egg carton in the fridge.

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 and two incredibly adorable grandsons.

