Access Energy Cooperative℠
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MARCH 2022

# iowa

## ELECTRIC COOPERATIVE LIVING

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VOLUME 75 • ISSUE 3






*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.




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**ON THE COVER** Special thanks to Jim Hirschberg, a Calhoun County Electric Cooperative Association member-consumer, for supplying this month's cover image. Submit high-resolution photos for consideration to editor@ieclmagazine.com. You could win $100!

# COOPERATIVE MODEL HELPS SUPPLY CHAIN

BY MATT BRANDRUP

The equipment needed to power our homes, farms and businesses is an afterthought for some. We simply flip a switch or press a button, and we have power. We don't think of the power grid and labor needed to deliver electricity. And without the necessary materials to ensure power delivery, routine maintenance, emergency work (especially during storm seasons) and new utility-related projects could come to a standstill.

An adequate inventory of power cable, transformers, utility pole hardware and other products is vital, especially in times of supply chain disruptions and inflationary challenges. That's why 37 electric cooperatives in Iowa are members of the Rural Electric Supply Cooperative (RESCO) to ensure equipment and materials are readily available, regardless of the circumstances.

## Delivering wholesale equipment and materials for generations

Founded in 1936 in response to the challenge rural electric cooperatives faced in acquiring equipment and materials, RESCO is a member-owned, not-for-profit electrical wholesaling organization. Its members are rural electric cooperatives in the Upper Midwest, extending from Michigan to Montana, including Iowa.

RESCO operates under a not-for-profit membership model, like the cooperatives it serves. This model enables RESCO to work with its manufacturer partners to deliver extremely competitive prices, which in turn allows its cooperative members to stay within their expense budgets and, ultimately, pass these savings to their own members. And just like electric cooperatives, any "profits" RESCO makes are returned to members in the form of patronage credits.

In addition to cost savings, RESCO's cooperative model helps ensure that electrical equipment damaged during storms and other weather-related emergencies is addressed and repaired in a timely manner. RESCO operates a warehouse in Ankeny for quick distribution of products and materials, 24/7.

## Addressing the impact of supply chain disruptions and inflation

No industry has been immune to the disruptions caused by ongoing supply chain issues. For electric cooperatives, the impact could delay the start of new projects or postpone scheduled maintenance. High inflation rates have also contributed to operational challenges, stretching budgets and potentially requiring cooperatives to pass some of these increases on to their members.

Fortunately, RESCO is effectively managing these challenges by carrying a record amount of inventory. This gives members the peace of mind that their product needs will be met.

In addition to its inventory reserves, RESCO is also helping members stay within their purchasing budgets by maintaining product pricing, thanks to its not-for-profit cooperative model. When demand increases, for-profit companies typically increase their pricing to maximize margins. RESCO does not. This, along with the availability of many necessary products housed in its warehouses, is enabling RESCO and its cooperative members in Iowa to weather the storm, so to speak, of logistical challenges in the electric utility sector.

What goes on behind the scenes is what keeps the lights on. RESCO's membership model helps cooperatives ensure reliability, along with savings passed on to their own members.

*Matt Brandrup is president and CEO of Rural Electric Supply Cooperative (RESCO), a member-owned and not-for-profit distribution and transmission material supply distributor serving electric cooperatives and public power districts in 11 states in the Upper Midwest and Northern Plains.*

EDITOR'S CHOICE CONTEST

## Win a NutriBullet Pro Plus Personal Blender

This compact yet powerful personal blender has a 1200-watt motor and specialized blades to effortlessly pulverize and puree ingredients with the push of a button. It's an easy way to make shakes and smoothies!

### Visit our website and win!

Enter this month's contest by visiting www.ieclmagazine.com no later than March 31. You must be a member of one of Iowa's electric cooperatives to win. There's no obligation associated with entering, we don't share entrant information with anyone and multiple entries from the same account will be disqualified. The winner of the Fitbit Versa 2 from the January issue was Jeremiah Manken, Consumers Energy.

## UPCOMING EVENTS

| | |
|---|---|
| MARCH 15 | Scholarship deadline |
| MARCH 15 | Lineworker Scholarship deadline |
| MARCH 22 | REC Day on the Hill with legislators |
| MARCH 31 | Photo contest deadline |
| APRIL 11 | Lineworker Appreciation Day |
| APRIL 15 | Office closed in observance of Good Friday |
| APRIL 17 | Easter |

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.*

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# CHANGES TO OUR FAIRFIELD OUTPOST

**BY KEVIN WHEELER**

Access Energy Cooperative continuously evaluates how we can most efficiently and reliably serve our members-owners. Over the years, we've proudly rooted co-op decision-making in the needs of our communities both today and into the future.

In 1987, the board of directors decided to create an Access Energy Cooperative outpost in Fairfield. It included adding a facility, materials, equipment and team members with specific assignments for the area. This move was designed to serve as an advanced staging point for the added work Vedic City put on our system.

Since the outpost was established, population growth in Vedic City has diminished and a four-lane highway has been added to make transportation to the area easier. The existing outpost facility also needed upgrades and investment to be suitable for our ongoing operations.

With changing realities of our communities' and members' needs, we spent the past year evaluating the advantages and disadvantages of the outpost. With the support of our board of directors, we closed the Fairfield outpost and moved all Access Energy Cooperative employees and operations to the Mount Pleasant headquarters. It made business sense to incorporate all our services here, centralized within our load center. Our load growth continues to be predominately in the east side of the territory, which also supported the decision to consolidate everything into one main location.

This move allows for easier crew assignments, better security, less drive time, and many equipment and operational efficiencies. In addition, there will be overall financial savings to Access Energy Cooperative.

As with all co-op matters, this decision was not taken lightly. This change in our footprint will allow us to continue fulfilling our mission to provide safe, reliable, efficient service, while being a good citizen in our communities.

If you have any questions about this change, don't hesitate to contact me at 319-385-1577.

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

# ACCESS ENERGY COOPERATIVE VISITS THE CAPITOL

The Access Energy Cooperative board of directors, General Manager/CEO Kevin Wheeler and Director of Member Services and Public Relations Kim Davis visited the Capitol to talk with legislators about issues affecting members and the energy industry. Thank you to the legislators who took time out of their busy schedules to visit with our representatives!

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

Electric cooperative representatives from all parts of the state will return to the Capitol to visit with legislators during the annual REC Day on the Hill on March 22.

## MARK YOUR CALENDAR!

**2022 Annual Meeting of Members • Tuesday, Aug. 2, 5 p.m.**


**Watch for more details in upcoming issues of this publication.**

## LINEWORKER SCHOLARSHIP PROGRAM DEADLINE APPROACHING

Up to two $2,000 scholarships will be awarded per year by Access Energy Cooperative to students enrolled, or planning to enroll, in a one- or two-year electric lineworker program.

Complete details can be obtained on our website at www.accessenergycoop.com.

Applications can be found:

- At all area high school guidance counselor offices
- By visiting our website at www.accessenergycoop.com, downloading the application and either faxing, mailing or bringing it to our office; the form can also be submitted online.
- By contacting the Access Energy Cooperative headquarters office in Mt. Pleasant at 866-242-4232

**Applications are due in our office March 15.**

# SCHOLARSHIP PROGRAM DEADLINE APPROACHING

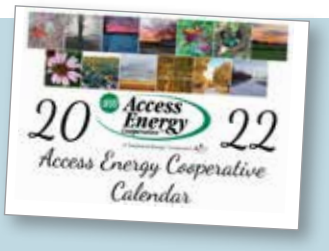
Six $1,500 awards, two in each of the cooperative's three districts, are available through the Access Energy Cooperative scholarship program. Applicants must be high school seniors receiving post-secondary education. Parents or legal guardians must be members of the cooperative. More details can be found on our website at www.accessenergycoop.com.

Applications can be found:

- At all area high school guidance counselor offices
- By visiting our website at www.accessenergycoop.com, downloading the application and either faxing, mailing or bringing it to our office; the form can also be submitted online
- By contacting the Access Energy Cooperative headquarters office in Mt. Pleasant at 866-242-4232

**Applications are due in our office March 15.**

# PHOTO CONTEST DEADLINE APPROACHING – WIN UP TO $100




We're looking for photos of rural settings in southeast Iowa, including landscapes, animals, buildings or people in any season of the year. Winning photos will appear in the 2023 Access Energy Cooperative calendar. Horizontal photos work best to fit on a calendar page. Entries should be high-resolution files so they can be enlarged correctly, and judges give preference to full-color photos.

We will award $75 to each photographer whose entry is selected as one of the 13 featured photos for the calendar. If the winning entry is submitted by a member of Access Energy Cooperative, they will receive an additional $25 bill credit!

Submit all entries by March 31 to mktg@accessenergycoop.com.

**Visit www.accessenergycoop.com for complete rules.**

# SAFETY TIPS FOR YOUR HOME WORKSHOP

Without taking proper precautions, the enjoyment of a do-it-yourself (DIY) project can quickly turn into disaster. You may have all the latest power tools, hand tools, hardware and materials, but if you do not put safety first, you may end up with a trip to the hospital instead of a new set of shelves, upgraded lighting in the kitchen or a trendy shiplap accent wall in the bedroom. Here are some fundamental workshop and electrical safety tips to help keep things running smoothly.

### 1. Wear safety gear

Avoid loose clothing and jewelry that can get caught in power tools. Roll up your sleeves or choose ones that are tight against your skin. Closed-toe shoes are a must, and steel-toed boots are recommended. Safety glasses are necessary 100% of the time. Gloves are fine for handling materials. Before you reach for a belt sander or scroll saw, however, take the gloves off to minimize the risk of them getting caught. It also gives you tactile feedback in case anything goes wrong.

### 2. Observe electrical safety

Before you start any DIY project, inspect power tools and cords for loose plugs, exposed wires or worn insulation. Fires are one of the top dangers when working with electric gear, especially if you have combustible materials around, such as sawdust.

If you must use an extension cord, choose one long, heavy-duty (appropriately rated) cord and keep it untangled and out of the way to prevent tripping.

### 3. Keep your workshop clean

Anything left on the floor is a tripping hazard. Anything cluttering up your worktable introduces obstacles that can get caught in a saw or block your ability to move your project safely as you work on it. Remove trash, such as sawdust, rags or brushes with potentially combustible or hazardous

fluids on them, which can increase the risk of fires and projectiles.

### 4. Keep tools in good condition

Everything works better in the workshop if you have clean, sharp and well-lubricated tools. A dull saw blade brings a much higher chance of injury. It is less likely to cut smoothly through the wood or other material and more likely to kick back and cut you. Dull saws, routers or drill bits also run the risk of breaking during use. Use appropriate lubrication, such as WD-40 or others specifically created for power tools.

### 5. Know your limits

Even if you have a lot of experience working on your projects, approach anything new as if you are a beginner for maximum workshop safety. Read instructions. Look up reputable guide videos to refresh your skills or learn something new. Most importantly, recognize when you are in over your head and leave those projects to the professionals.

**For more information about electrical safety, visit www.accessenergycoop.com.**

# WELCOME NEW EMPLOYEES

Access Energy Cooperative is pleased to welcome two new employees to the cooperative team.

**Aimee Sanderson** began training for her new duties as customer service representative in January. She is filling an open position due to employee retirements.

**Kassie Bulen** joined Access Energy Cooperative full time in February after earning an electrical engineering degree from Missouri University of Science and Technology. She has been working as an engineering intern during college breaks for the past three years.

We are excited to have Aimee and Kassie join our mission to provide members with safe, reliable and efficient service.

# SUMMER HELP WANTED

Access Energy Cooperative's operations and engineering departments need part-time help this summer. Applicants must graduate high school by this summer and be enrolled in post-secondary education in the fall.

**Contact Diane Magnani at dmagnani@accessenergycoop.com.**

# Favorite FISH RECIPES

## 30-MINUTE AMAZING GRILLED FISH TACOS

- 1 pound lean white fish (e.g., tilapia, halibut, mahi mahi, snapper, cod)
- salt and fresh ground pepper
- 2 tablespoons vegetable or canola oil
- 2 small limes, divided
- 1 clove garlic
- 1½ teaspoons chili powder
- 1 teaspoon cumin
- ½ teaspoon paprika
- ½ cup sour cream
- ⅓ cup mayonnaise
- ½ teaspoon garlic powder
- ½ teaspoon cumin
- ¼ teaspoon salt
- 1 teaspoon sriracha hot sauce, to taste
- 8 white corn tortillas
- Optional toppings: pico de gallo, shredded cheese, shredded cabbage, fresh cilantro, lime wedges, red onion, hot sauce

Season fish with salt and pepper. In a mixing bowl, combine oil, juice from one lime, garlic, chili powder, cumin and paprika. Add fish to large zip-top bag and pour marinade over fish. Seal bag and allow to marinate for 20-30 minutes. Combine sour cream, mayonnaise, juice from one lime, garlic powder, cumin, salt and hot sauce. Preheat grill to medium-high heat. Brush grill grates with oil and grill fish for 3-4 minutes on each side. Flip only once (cook time will depend on thickness of fish). Transfer fish to a plate and allow to rest for a few minutes before gently breaking into pieces. Serve on warm tortillas, topped with taco sauce and desired toppings. *Serves 4*

**Erik Folkmann • Marengo**
**T.I.P. Rural Electric Cooperative**

## SALMON PATTIES

- 1 16-ounce can salmon
- 1 tablespoon lemon juice
- cold water, as needed
- ½ yellow onion, finely chopped
- ¼ cup celery, chopped
- 1 tablespoon green bell pepper, finely chopped
- 2 large eggs, lightly beaten
- ⅓ cup bread crumbs or cracker crumbs
- 2 tablespoons all-purpose flour
- pinch black pepper
- 1 tablespoon vegetable oil

Drain salmon and save liquid into a measuring cup. Add lemon juice and enough cold water to reach ½ cup liquid total. Set aside. In a large bowl, combine salmon, onion, celery and green pepper. Add eggs and mix, then add bread crumbs, flour and pepper. Add liquid and stir well. Shape ⅓ cup salmon mixture into a ½-inch thick patty. Repeat until you have six patties. Heat oil in a large non-stick skillet over medium heat, add three patties. Cook 2-3 minutes, until golden brown on both sides. Repeat with the next three patties. Serve immediately. If desired, top with lettuce, red onions and sprouts. Serve with pineapple. *Serves 6*

**Nancy Bowman • Coon Rapids**
**Raccoon Valley Electric Cooperative**

## BAKED SALMON

- 2 eggs
- 1 cup thin cream or half and half
- 1 can salmon
- 1 cup cracker crumbs
- ½ teaspoon salt
- ¼ teaspoon celery seed
- 1 tablespoon grated onion
- black pepper, to taste
- butter

Beat eggs until light, then add cream. Remove bones and skin from salmon, add to eggs. Add remaining ingredients. Place in buttered casserole dish. Bake at 350 degrees F for 30-35 minutes or until nicely browned on top. *Serves 4-6*

**Janice Schneidermann • Little Rock**
**Lyon Rural Electric Cooperative**

## SPICY BROILED FISH

- 6 fish fillets (8-10 ounces)
- 1 tablespoon Cajun spice
- 2 teaspoons paprika
- ¼ teaspoon red pepper
- 6 tablespoons butter or margarine, melted
- ⅓ cup lemon juice
- 1 teaspoon dried parsley flakes

Place fish fillets in two lightly greased 13x9-inch baking dishes. Sprinkle Cajun spice, paprika and red pepper over fish. Brush fish with butter, sprinkle lemon juice and top with parsley. Broil 10-12 minutes or until fish flakes easily when tested with a fork. *Serves 6*

**Annalee Buffington • Marshalltown**
**Consumers Energy**

## HOMEMADE FISH CHOWDER

- 1 pound boneless fish (any type)
- 2 tablespoons margarine or cooking oil
- 1 medium onion, sliced
- ½ cup celery, diced
- 2 cups raw potatoes, diced
- ½ cup carrots, sliced
- 2 cups boiling water
- 1 teaspoon salt
- ½ teaspoon pepper
- 1 cup milk

Cut fish into bite-sized pieces. Melt margarine in a large saucepan. Cook onion and celery until onion is tender and translucent. Add potatoes, carrots, water, salt and pepper. Cover and simmer for 10-15 minutes until vegetables are tender. Add fish and cook 10 minutes longer. Add milk. Reheat, but do not boil. Serve hot with freshly baked homemade bread or rolls and butter. *Serves 4*

**Dave Duit • Nevada • Consumers Energy**

## CRAB PASTA SALAD

- 1 16-ounce package pasta
- 2-3 cups mayonnaise
- salt and pepper, to taste
- 8 green onions, sliced
- 1 bell pepper, diced
- ¾ cup celery, diced
- 3-4 hard-boiled eggs, chopped
- green stuffed olives
- 1½ pounds imitation crab, flaked

Cook and drain pasta. Mix mayonnaise, salt and pepper. Toss with pasta and remaining ingredients. Chill until ready to serve. *Serves 12*

**Hana Hartter • Rock Rapids**
**Lyon Rural Electric Cooperative**

## FAVORITE BAKED FISH

- filleted white fish, any kind
- 1 can cream of shrimp soup
- milk
- 1 can small shrimp
- buttered bread crumbs
- butter

Butter a flat 9x13-inch baking dish. Place fish fillets in prepared dish. Thin soup with milk and pour over fish. Drain and rinse shrimp, then add on top of fish. Cover lightly with bread crumbs. Bake at 375 degrees F for 30 minutes. *Serves 4-6*

**Jane Person • Batavia**
**Access Energy Cooperative**

**WANTED:**

## ON THE GRILL RECIPES

**THE REWARD:**

## $25 FOR EVERY ONE WE PUBLISH!

**Deadline is March 31**
Please include your name, address, telephone number, co-op name and the recipe category on all submissions. **Also provide the number of servings per recipe.**

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

MAIL: **Recipes**
*Iowa Electric Cooperative Living* • 8525 Douglas Ave., Suite 48, Des Moines, IA 50322-2992

# HARNESSING THE POWER OF BATTERY STORAGE

BY ANN THELEN

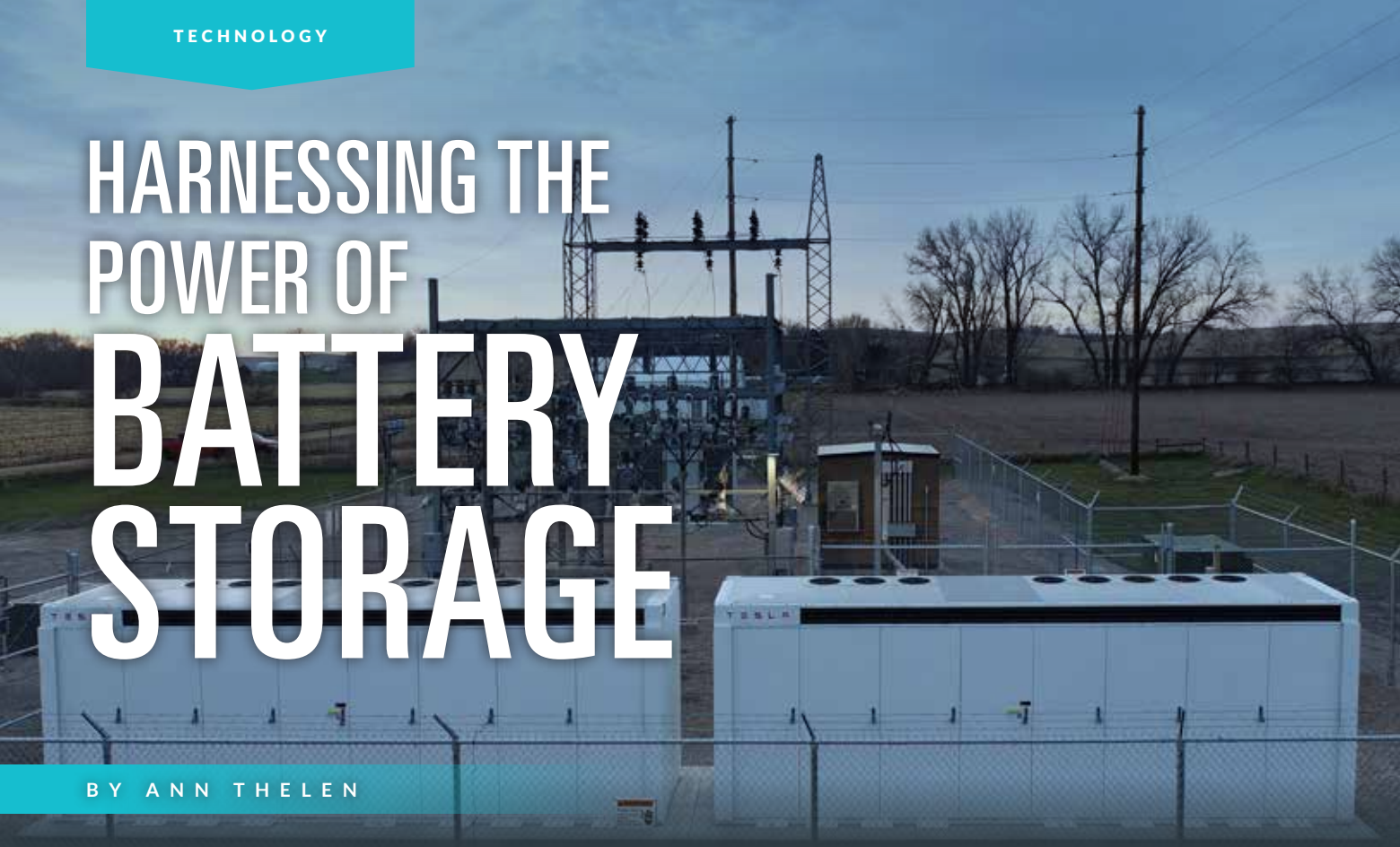


Photo: Kristi Travis, Harrison County REC

Most of us use batteries in some form to help power our lives every day. In simple terms, a battery converts stored chemical energy into electrical energy. From flashlights and toys to cellphones and vehicles, batteries have become a necessary part of our world.

While batteries have been around for centuries, advances in battery storage technology are sparking new ideas on how to power homes, electric substations or entire power grids more efficiently. Modern batteries can store excess energy produced by generators when demand is low, then seamlessly export the stored power during times of peak demand or weather-related power disruptions.

While the efficiency, cost-effectiveness and consumer applicability of battery storage solutions have a way to go for significant deployment, Iowa's electric cooperatives are studying more about the ongoing advances in storage technology.

## Iowa co-ops explore potential battery storage solutions

From assessing residential batteries to coordinating large-scale substation battery storage, electric cooperatives across Iowa are exploring various innovative battery storage technologies. Many projects deepen understanding of electric storage technology and how it can benefit member-consumers.

"It's an opportunity to embrace the future," says Brian Krambeer, president and CEO of MiEnergy Cooperative. "We need to be educated about batteries and ready to provide this information and research to our member-consumers."

With ongoing research, development and investment, battery storage technology can innovatively deliver safe, reliable, affordable and environmentally responsible energy. Today's investment in model and scale-up projects has the potential to serve cooperative member-consumers far into the future.

## Studying residential battery storage

MiEnergy Cooperative, which serves 18,000 members in northeast Iowa and southeastern Minnesota, launched a trial residential battery storage program in November 2018. In partnership with the National Rural Electric Cooperative Association (NRECA), the 5-to-10-year study is designed to gain insight into residential battery technology opportunities and limitations.

"We chose to study residential batteries because we have 700 members that have installed distributed generation at their homes and farms," Krambeer says. "It's given us the momentum we needed to make sure we're educated on the next round of technology our members may be considering."

The study included residential sites across four participating cooperatives, including six MiEnergy Cooperative member-consumers. It was funded in part by a grant from the Iowa Economic Development Authority. The team at MiEnergy reports the following high-level findings:

- The batteries (16kWh and 10kWh) worked seamlessly as advertised but were cost-prohibitive to the average user at the time ($19,672 to $14,522 plus installation costs).
- Units cover about 20% of a home's energy use and can fluctuate depending on the owner's power use, varying from 263 to 1,030 kWh per month.

- There is about a 30% efficiency loss, potentially due to daily storage loss and the inverter conversion from AC to DC.
- There are limiting factors for residential applications. Homes need an internet connection, a conditioned storage space with temperatures ranging from 41 to 113 degrees F, and adequate ventilation and spacing for the unit.

"With the numbers, we are looking at a payback in about 35 years," Krambeer says. "I don't think anyone is running out right now for that kind of payback, but this is a test – it's education and an investment for the future, especially as battery costs come down."

This is an example of how MiEnergy is proactively looking for new opportunities to control costs, enhance service and exceed member expectations. In part because of this program, the cooperative was awarded a 2021 Electric Cooperative Purpose Award at NRECA's PowerXchange conference.


## Coordinating resources for substation battery storage

Northwest Iowa Power Cooperative (NIPCO), which supplies wholesale electric power to seven distribution cooperatives in western Iowa, recently completed a battery storage project at one of its substations.

The project was made possible in part through a Trial Battery Rate offered by Basin Electric Power Cooperative, the generation and transmission cooperative that provides power to NIPCO. The rate allocated up to 150 kWh per Basin Electric member cooperative, and NIPCO engineers developed a plan to pool and optimize this allocation across its membership.

"This approach was a perfect example of better serving member-consumers through the co-op principle of cooperation among cooperatives. Our coordination with Basin Electric and member cooperatives made this project possible," says Matt Washburn, executive vice president and general manager of NIPCO.

NIPCO integrated a 950 kWh Tesla Mega Pack battery storage unit at its Lawton substation in December 2021. Stored power from the battery will replace almost 1 MW of power (enough to power 100 homes) for up to six hours during scheduled load control cycles. While this is only 1% of NIPCO's total energy load, it's an opportunity to study how the technology could be further incorporated while maintaining a reliable, economical power supply for member-consumers.

"We see this as a research and development project," Washburn says. "We want to see firsthand how batteries work operationally and financially."

NIPCO plans to share ongoing performance data with its membership to highlight the battery's ability to flatten demand curves, reduce power costs and use existing generating resources more efficiently.

*Ann Thelen is the editor of Iowa Electric Cooperative Living.*

## HOW BATTERY STORAGE WORKS

Battery storage systems recharge during off-peak times when energy use and power rates are lower. They can then discharge to provide on-demand energy for emergency power or during peak demand times, helping in the long-term to manage energy usage and lower member-consumer rates.

## THREE WAYS YOU BENEFIT FROM BATTERY STORAGE

01

### COST SAVINGS

Power can cost more for electric cooperatives to purchase during peak times of energy use (such as summer months or dinner time when appliances are running). Batteries can help reduce this peak demand by discharging stored energy to help power the electric grid. Then, when energy costs are lower (like the middle of the night), batteries can recharge and store lower-cost power. Load management, or managing peak energy costs, is one of the best ways cooperatives can save member-consumers money.

02

### EXTRA RELIABILITY

If a large power outage occurs on a transmission line, stored battery energy can kick on to power homes or businesses while the issue is repaired.

03

### PREPARING FOR THE FUTURE

With the uncertainty of extreme weather events and changing state and federal energy policies, battery energy storage can help reduce some uncertainty. As battery storage technology evolves, it can potentially help take the unpredictability out of intermittent wind or solar energy generation, improve grid resiliency and reduce energy consumption.

# FIVE QUESTIONS TO ASK YOUR HOME INSPECTOR

BY MIRANDA BOUTELLE

Many factors go into buying a home, and unfortunately, houses don't typically come with energy efficiency ratings.

It can be difficult for a buyer to know how efficient a home is when viewing the listing online or taking a tour. But a home inspector can help you identify potential energy costs and energy-efficiency upgrades.

Some homes may already be efficient, while other homes may need improvements. There's nothing wrong with buying an inefficient home, but you will want to know what you're getting into and that you can afford the energy costs once you get the keys.

Here are five questions to ask your home inspector:

## 1 What is the condition of the electrical panel and wiring throughout the home?

A panel upgrade or rewiring can be costly. An older panel and wiring aren't inefficient, but they can delay or make some energy-efficiency projects more expensive. Ensure the panel can accommodate any new appliances you might want to add, such as an electric vehicle charger.

## 2 How old is the HVAC system, how efficient is it and has it been maintained?

The typical lifespan of an HVAC system is 15 to 25 years. As the largest energy user and often the most expensive equipment in the home, you will want to know the energy, maintenance and replacement costs.

## 3 How old is the water heater?

The lifespan of a storage water heater is about 10 years. The cost to replace a water heater ranges from $400 to $3,600, depending on the unit type and installation costs. If an older water heater is in a finished space or on a second floor, replace it before it fails and potentially causes water damage.

As the largest energy user and often the most expensive equipment in the home, you'll want to know the age and efficiency of the home's HVAC system.

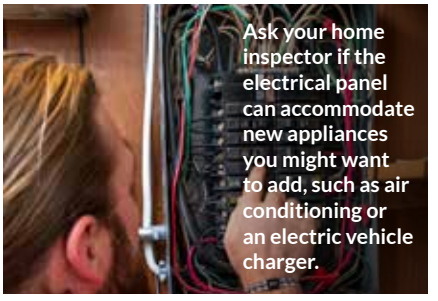
## 4 What are the levels and conditions of insulation in the attic, walls and floor?

Insulation is one of the easiest and most beneficial energy-efficiency upgrades to make. It isn't as pretty as new countertops, but it can make a home more comfortable, waste less energy and reduce outdoor noise.

To cut down on drafts and make insulation more effective, air seal before insulating. Seal cracks, gaps or holes in the walls, floors, ceiling and framing between heated and unheated space. More information about insulation and air sealing is available at www.energy.gov.

## 5 Are there any extras in this home that will increase my utility bills?

Any motors in the home or on the property should be assessed, including pumps for wells and septic systems. When it comes to extras, remember life's luxuries aren't free. You will want to be able to afford the cost of operating amenities, such as pools, hot tubs and saunas.



Ask your home inspector if the electrical panel can accommodate new appliances you might want to add, such as air conditioning or an electric vehicle charger.

When buying a home that checks all your boxes, ask your home inspector the right efficiency questions. Understanding the condition of appliances, features and building materials can save you from hidden surprises in your home and on your first utility bills.

*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.*

# IOWA'S ELECTRIC COOPERATIVES HOST CONFERENCE FOR CONTRACTORS AND BUILDERS

BY ERIN CAMPBELL

After taking a year off due to safety precautions in 2021, the Momentum is Building Conference was back in session last month. Sponsored by the Touchstone Energy Cooperatives of Iowa, the annual two-day conference provides education and training opportunities for Iowa contractors, electricians, plumbers, HVAC professionals and builders.

"Attendees can earn valuable CEUs while also learning about the latest trends and technologies in residential energy efficiency," says Ryan Cornelius, vice president of corporate relations at Corn Belt Power Cooperative. "For more than 25 years, the Momentum is Building Conference has provided electric cooperatives and contractors an opportunity to come together to provide rural Iowans with safe, efficient and cost-effective home comfort solutions."

Nearly 200 industry professionals and electric co-op employees attended the 2022 conference in Altoona. Organized by Iowa's electric generation and transmission cooperatives, the Momentum is Building Conference also connects Iowa's construction industry with the local services and resources available from electric co-ops, which serve nearly 650,000 Iowans throughout all 99 counties.

"Iowa's electric co-ops have long supported energy efficiency efforts and one of our goals is to help member-consumers use energy wisely," explains Angela Catton, manager of member relations and development at Northwest Iowa Power Cooperative. "This conference helps us build local relationships."

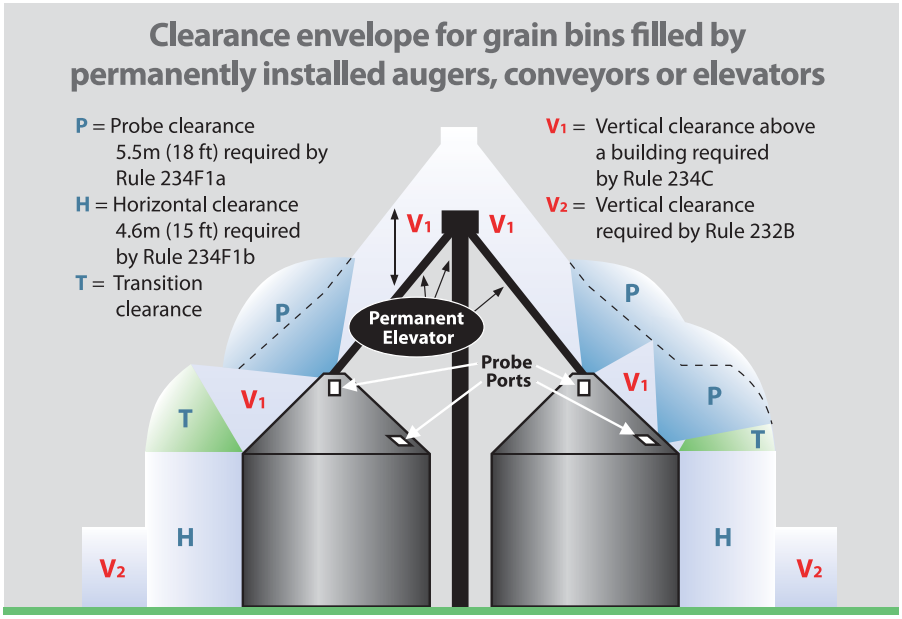
Momentum is Building also allows industry exhibitors and vendors to showcase emerging trends in residential energy efficiency that can save consumers energy and money. Attendees have time to network and learn from one another.


The 2022 opening keynote was presented by Weldon Long, a successful entrepreneur and *New York Times* bestselling author who focused on how to generate powerful sales results through consistency.

"Every year, we like to open the conference with a highly regarded expert who can help our attendees improve their business operations," says Kerry Koonce, vice president of communications and corporate relations at Central Iowa Power Cooperative.

The Momentum is Building Conference will return to the Meadows Event & Conference Center in Altoona next February. Contact the member services staff at your local electric cooperative for more details or visit www.MomentumisBuilding.com.

*Erin Campbell is the director of communications for the Iowa Association of Electric Cooperatives.*

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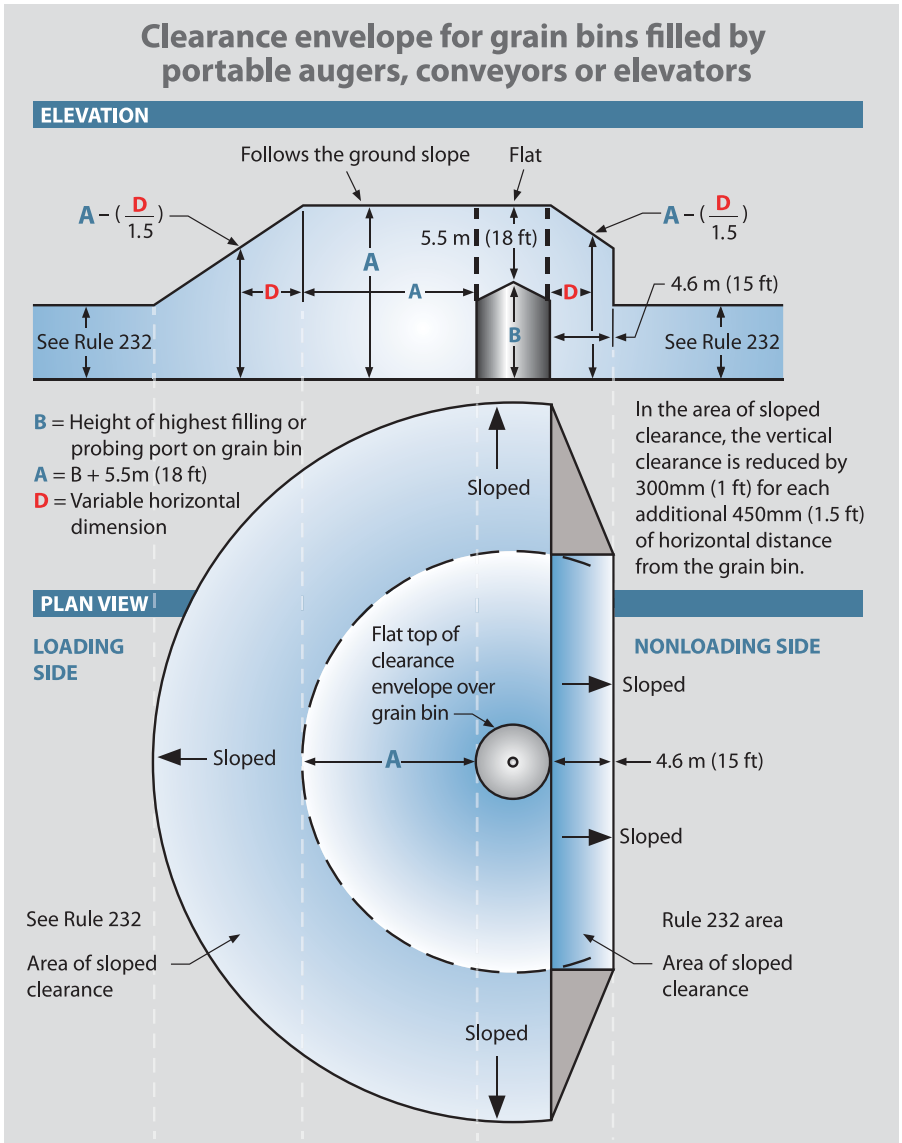


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# MAINTAIN PROPER CLEARANCE AROUND GRAIN BINS

The state of Iowa requires specific clearances for electric lines around grain bins, with different standards for those filled by portable and permanent augers, conveyors and elevators. According to the Iowa Electric Safety Code found in Iowa Administrative Code Chapter 199 – 25.2(3) b: *An electric utility may refuse to provide electric service to any grain bin built near an existing electric line which does not provide the clearances required by the American National Standards Institute (ANSI) C2-2017 "National Electrical Safety Code," Rule 234F. This paragraph "b" shall apply only to grain bins loaded by portable augers, conveyors or elevators and built after Sept. 9, 1992, or to grain bins loaded by permanently installed augers, conveyors, or elevator systems installed after Dec. 24, 1997.* The Iowa Utilities Board has adopted this language.

Your local electric cooperative is required by the Iowa Utilities Board to provide this annual notice to farmers, farm lenders, grain bin merchants and city and county zoning officials. The drawings on this page show the required clearances, but your co-op's policies may be more restrictive. If you have any questions concerning these regulations – or what needs to be done before you begin placing a new grain bin or moving an existing one – please call your electric co-op for help.

These drawings are provided as part of the Iowa electric cooperatives' annual public information campaign and are based on the 2017 Edition of the National Electrical Safety Code. To view the actual drawings, refer to that publication.

Every care has been taken for the correctness of the contents of these drawings. However, the Iowa Association of Electric Cooperatives and its member cooperatives accept no liability whatsoever for omissions or errors, technical inaccuracies, typographical mistakes or damages of any kind arising from the use of the contents of these drawings, whether textual or graphical.

# PERMED HAIRSTYLES COME FULL CIRCLE

BY VALERIE VAN KOOTEN

I recently attended an evening gathering where we were seated at round tables. One woman, a local salon owner, rushed in about 15 minutes later and apologized as she sat down next to me. "I probably smell like a perm," she said. "I just got done giving one."

Huh? After all, you don't hear about perms much anymore among women's hairstyles. I asked about what I assumed were likely her older clientele who were still getting perms to add curls and body to their straight locks.

"Oh, no," she assured me. "Perms are huge with college girls right now, especially girls with really long hair."

I was a bit stunned. Were girls really wanting to start this cycle of submitting to the acrid, eye-stinging, burning, pillowcase-ruining solution that was once squirted onto so many of our heads?

## Permanent perm memories

Oh yes, I've had my share of perms. With my fine, stick-straight hair, I'm the perfect candidate. And I go way back, before the days of salon permanents. I'm talking the days of a box of Lilt or Toni's administered by your mom or next-door neighbor. Where the amount of time you left it on was a fluid thing, depending on how much your mom got to talking on the phone. And how a lack of water to rinse it off spelled disaster.

You might sense a bit of a backstory here. You would be right.

For three years in my early high school years, our farm's well was running dry. The city of Pella was running a water line from Pella to Otley, which would pass by our house. So naturally, my folks weren't going to dig a new well when they could connect to city water. But one thing after another stalled the planned water lines. For the entirety of those years, the cattle and hogs got the majority of the water, with the house getting sputtering, jerking, rusty spurts of water late at night after the livestock were done drinking.

And for three years, my folks drove their pickup to town once or twice each day with a roll of quarters and bought water directly from the city, administered through a hose on the back of the fire station. It supplemented the well water and gave us what we needed for the house.

## Disaster strikes at the sink

On the day in question, I don't remember why we didn't have any water saved back. Usually there were milk jugs all over the kitchen full of the life-giving liquid. But when the time came to rinse my home perm and Mom opened the spigot … nothing. Not a drop. We stared, incredulous, and then Mom declared, "To Grandma's!" We hopped in the car and headed to town, where I ran to her sink and doused my head under the faucet.

I remember that perm as a disaster but reflecting on my later poodle perms of the 1980s, I'm not sure any of them were much better.

Good luck to this new generation of gals getting perms. Just be sure to use an old pillowcase afterward.

*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.*

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

The magazine for members of Iowa's electric cooperatives.

March 2022

Visit our website at www.accessenergycoop.com