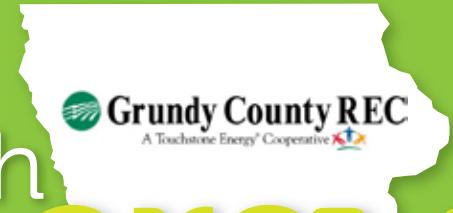


living with energy IN IOWA

JULY 2021



Grundy County REC announces patronage for members ► See Page 5



Visit our website at www.grundycountyrecia.com

Grundy County REC
operations update

Iowa's electric co-ops
embrace diverse
generation

Sweet corn recipes

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living with energy IN IOWA



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**HIS JOB IS
DANGEROUS
ENOUGH.**

When you see utility crews at work, slow down and move over. You have the power to protect a life.



**MOVE OVER
SLOW DOWN**

Electric cooperatives disappointed with legislative session

BY KEVIN CONDON

As lawmakers and Gov. Kim Reynolds tout the 2021 Iowa legislative session's legitimate advances in public policy that benefit rural Iowans, one area where progress will go unclaimed is in the interests of Iowa's electric cooperatives.

Although the session went three weeks into overtime, absent from debate was the opportunity to have worthy and robust discussions on two key priorities for Iowa's electric co-ops and their member-consumers.

Establishing or changing laws isn't easy and can take time. With that said, we're disappointed that policies pertaining to vegetation management and the sales tax code inequities co-ops face are not new issues being raised by rural electric cooperatives (RECs).

Lack of vegetation management standards

In the January edition of this column, I detailed the issue surrounding vegetation management distances and how the August 2020 derecho exposed part of our concerns. We hoped that lawmakers would have recent and ample evidence of the need to set a statewide safety and reliability standard for distances that electric co-ops could perform tree trimming and other management practices.

Unfortunately, despite our best efforts, the same opposition groups that prevented the legislation from becoming law a few years ago were able to keep this renewed effort from reaching the House and Senate for a full debate. Sadly, misinformation and scare tactics about the proposal won the day, and the state will continue to lack a standard that provides greater safety for co-op members and linemen while increasing reliability of electric service to rural Iowa.



Sales tax code inequities continue

Further, RECs were disappointed when provisions to resolve a sales tax inequity impacting electric co-ops included in a proposal put forward by the House were stripped out of the final legislation by Senate negotiators. In what appears to be an oversight from legislation passed in 2018, not-for-profit utilities like RECs have been subject to a tax on digital goods and services that for-profit, investor-owned utilities

(IOUs) are exempt from. It is estimated that rural electric member-consumers are paying \$250,000 more in sales taxes through their electric bills than ratepayers served by IOUs.

We believe resolving the inequity was certainly worthy of inclusion in a tax proposal that included tax provisions for Iowa's non-profit food banks and casinos, both of which will have General Fund impacts, just as the REC proposal would. We congratulate both of those entities for securing a place in the legislation. We also caution those who might claim the potential for a "slippery slope" in resolving this sales tax inequity issue.

To be clear, the electric co-ops appreciate the role of the Legislature and are grateful to those lawmakers who are willing to put their name on a ballot and serve. In our estimation, they continue to deserve our respect; but when it comes to our concerns this session, RECs are not taking any victory laps.

We look forward to developing our policy goals for the 2022 Iowa legislative session and will enjoy planning for our traditional and effective in-person events with lawmakers. We hope they are prepared to answer friendly but direct questions about the lack of progress on these issues. We hope our electric cooperative advocacy on behalf of the

650,000 Iowans we serve throughout all 99 counties will result in more favorable outcomes next year.

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

EDITOR'S CHOICE CONTEST

Win a \$100 home improvement gift card!



Home improvement projects can boost the curb appeal, resale value and energy efficiency of your home. We'll award one lucky winner with a \$100 gift card from a local business or retailer of your choice for a home improvement project!

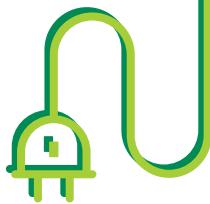
Visit our website and win!

Enter this month's contest by visiting www.livingwithenergyinowa.com no later than July 31, 2021. 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 Arbor Day tree packages from the May issue were:

- Gregg Hoins, Allamakee-Clayton Electric Cooperative
- Lavern Hooper, Butler County REC
- Rose Lennie, Chariton Valley Electric Cooperative
- Gary L Payton, Franklin REC
- Timothy Colburn, Grundy County REC
- Mark Schwartz, North West REC
- Kennon Goedken, Osceola Electric Cooperative
- Emily Mikesh, Prairie Energy Cooperative
- Kyle Leonard, Southwest Iowa REC
- Jeff Gropper, T.I.P. REC

Energy Efficiency Tip of the Month

During summer months, run large appliances that emit heat (like clothes dryers and dishwashers) during the evening when it's cooler. This will minimize indoor heat during the day when outdoor temperatures are highest.



Grundy County REC

A Touchstone Energy® Cooperative 

Our mission is to provide our members safe, reliable, electric service!



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Fax: 319-824-3118

Call Before You Dig (Iowa One Call):
800-292-8989

Website: www.grundycountyreca.com

Facebook: facebook.com/GrundyCountyREC

E-mail: mgeerde@grundycountyreca.org

Office Hours: Monday-Friday, 8 a.m.-4:30 p.m.
Call our office 24/7: 319-824-5251

General Manager: Michael Geerde

Officers and Directors:

District 1: Kevin Pruisner

District 2: Norbert Boyle

District 3: Nick Strohbehn

District 4: Larry Rohach

District 5: Matt Kopriva

District 6: David Schmidt

District 7: Jason Paper

This institution is an equal opportunity provider and employer.

LOCAL PERSPECTIVE

Grundy County REC operations update

BY DAN STELPFLUG

We're more than halfway through the year, making it a great time to provide a project update to our members.

Projects completed in 2021

- We have completed construction of a 6.7-mile three-phase line replacement project along N Avenue, Highway E29, O Avenue and 245th Street in Perry and Carroll Townships. The line is part of the major tie between substations in the southeast part of the system, and the improvement will provide greater reliability under normal and emergency operations. The line was replaced due to the age and condition of the existing line.
- A 1-mile section of single-phase overhead line was replaced west of Traer in conjunction with an upgrade to an ITC transmission line.
- We have replaced a .5-mile single-phase line on Grundy Road west of Hudson. This project was done to accommodate a highway improvement project.
- Each year, the cooperative uses a pole testing contractor to test approximately 10% of the poles on the system. They also check the lines and hardware for potential problems so they can be repaired to avoid failures, which often cause an interruption of power. In 2020, 1,916 poles were tested, with 30 rejects reported and 68 maintenance repairs that need to be addressed. During the past several months, crews have replaced all the rejected poles and repaired the reported maintenance problems.



■ We have been working on replacing OCRs (oil circuit reclosers) scheduled for maintenance this year. These devices are used for line protection and also reduce the number of members affected during outage events. We plan to test and perform maintenance on 124 devices this year.

With the remaining months of 2021, the Grundy County REC crew will be staying busy with additional construction projects.

Projects to be completed

- We will be extending three-phase power to several locations for grain drying and storage facilities. One project involves the replacement of 1.7 miles of single-phase overhead line with three-phase overhead. Another project involves adding two lines to an existing single-phase overhead line to convert it to three-phase, and the remaining projects will be completed using underground wire.
- We also plan to complete a 1-mile line replacement project needed for system improvement.

Dan Stelpflug is the operations manager for Grundy County REC.

SOCIAL MEDIA

Follow us on Facebook!



Make sure to follow Grundy County REC on Facebook to stay up-to-date on energy efficiency information, safety tips, current promotions, outages and more! 

Meet Grundy County REC Director Matt Kopriva

Each month, Grundy County REC will feature a different member of your co-op board. This is an excellent opportunity for members to learn more about the board that serves you.

This month, we introduce you to Matt Kopriva of Traer.

How long have you been on the board of GCREC?

Almost two years.

Why did you decide to run for the board?

I wanted to run for the board because I thought it would be interesting to learn about how we get electricity efficiently to all the member-consumers in our rural coverage areas. I know how important it is to have reliable and affordable power, and I enjoy being a part of making it possible.

What are some of your accomplishments while serving on the board and committees?

I have not been on the board for very long compared to the other directors, but it has been eventful. We went through the hiring process of our new manager Mike Geerde. Mike is doing a great job in his new role, and we look forward to seeing him keep the cooperative going in the right direction. I also was on the nominating committee for directors that are up for election in 2021.

CONTEST WINNER

Co-op members win Editor's Choice Contest for April

Melinda and Monte Eggers, Grundy County REC members, were randomly selected winners of *Living with Energy in Iowa* magazine's April Editor's Choice Contest in April, receiving a \$100 gift card to a local nursery. Congratulations! 



What's your favorite thing about serving on the GCREC board?

My favorite part of serving on the board is the people. I enjoy working with the other directors and our excellent staff. Everyone is great and works together like a big family. I enjoy hearing different perspectives on certain topics or issues and working together to find the best fit for the co-op and its members.

What do you like to do in your free time?

I farm and sell Pioneer Seed for a living, so there is not much free time, especially in the spring and fall. However, when I find extra time, it is spent with my wife Jaime and our two young boys Oliver and Lane. We like relaxing around our place and working on projects with the boys. We usually find time to get an ice cream treat on Sundays. We love spending time with family and friends. 

CONGRATULATIONS

Snakenberg celebrates work anniversary

Derek Snakenberg, apprentice lineman, celebrated his first anniversary with Grundy County REC on June 1. His favorite part of working at the cooperative is working with members and building new things. In his free time, Derek enjoys spending time with his family and working out. A fun fact about Derek: In August, he will participate in his first Ironman competition, which will be held in Colorado. 



BENEFIT OF MEMBERSHIP

Patronage will be returned to members in August

When you began receiving power from Grundy County REC, you became a member of the electric cooperative. This means that you share in the co-op's excess revenue. While other businesses return their profits to investors/stockholders, we return that excess revenue, called patronage (or capital credits) to you.



In May, Grundy County REC's board of directors approved a \$492,786.78 patronage retirement for our members. This retirement includes the remaining 100% of the years 2005 and 2006 along with 100% of the 2020 Corn Belt patronage. Members usually receive retirements as bill credits in December; however, the board decided on an early retirement.

All current members will receive a bill credit on their August electric bill. Please call our office at 800-390-7605 if you have any questions. 



Four keys to understanding the new electric grid

BY PAUL WESSLUND



With thousands of miles of power lines, nearly 200,000 utility employees and 7,300 power plants, America's electric grid and all its parts must work together to keep power flowing smoothly.

America's electric grid is often called the most complex machine in the world. That's not a stretch when you think about what it does: it runs your refrigerator and charges your phone, all from a ray of sunshine, a pile of coal, falling water or a prairie breeze.

In between those starting and ending points are 160,000 miles of high-voltage transmission lines, millions of miles of low-voltage power lines, 7,300 power plants, nearly 200,000 electric utility employees, thousands of electrical substations and transformers that adjust voltage for the cross-country trip along transmission lines, then back down before it enters your house – and all these parts must work together to keep power flowing safely. In addition, this complex network is adapting to weather patterns,

increasing cybersecurity threats, consumer expectations and additional decentralized power sources like rooftop solar panels.

Those are big changes for such a vast and intricate system. "But the silver lining is that technology is available to help address the changes," says Venkat Banunarayanan, vice president of Integrated Grid Business & Technology Strategies with the National Rural Electric Cooperative Association (NRECA).

For all its complexity, the electric grid can be described in three major parts: a power source (like a natural gas plant or wind turbine); the wires and equipment that deliver power; and a home or business that receives the power.

To understand the modern grid more deeply, here are four ways it's adapting to the world's new realities.

1 Resilience in the face of more severe weather

Last year was the busiest recorded hurricane season along the Atlantic Coast. Wildfires are increasingly intense, especially in the West, and ice storms and cold weather surprised the South this winter.

These changes call for new ways to make sure the lights stay on.

Electric utilities are increasing grid resilience by integrating weather forecasting with other smart technologies that monitor electric current and analyze how to respond. NRECA's Banunarayanan calls this "predictive technology."

By knowing how weather will affect power equipment, he says, "an electric co-op can preposition work crews so they can quickly



respond to the outage, and they can redirect the flow of electricity to take an alternate route to minimize the duration of a power outage.”

2 Strengthening cybersafety

Cybersecurity measures have become standard operating procedure for utilities to protect against cyberattacks. Electric co-ops and other utilities work closely with the U.S. Department of Homeland Security to monitor and strengthen defenses.

“Utilities are constantly improving to make sure they are more cyber-resilient,” says Banunarayanan.

Electric co-ops also urge consumer-members at home to protect themselves from hackers. When devices like printers and smart TVs connect to the internet, that actually makes them part of the electric grid.

3 More power to consumers

Many utilities have voluntary programs that manage electric loads by turning off water heaters or air conditioners for short periods of time. Those programs add another layer of coordination. Additionally, homeowners are installing solar panels on their roofs or in their backyards, with some even selling excess electricity back to the utility – over the electric grid.

4 Utilities keeping up with the change

Large fields of wind turbine farms and solar power arrays require building transmission lines to new locations. They also involve planning for a kind of power that might only operate when the sun shines or the wind blows. These changes are necessary and helpful, but they are also expensive.

Annual spending on the U.S. transmission system has increased from \$9 billion a year in 2002, to \$40 billion in 2019.

But that spending is paying off.

In 2017, Americans experienced about eight hours of power interruptions, according to the Energy Information Administration. By 2019, that was down to five hours.

“Power outages have been going down because there’s investment being made to increase the robustness of the grid,” says Banunarayanan. “I expect the reliability of the grid to increase.”

Paul Wesslund writes on consumer and cooperative affairs for the National Rural Electric Cooperative Association, the national trade association representing more than 900 local electric cooperatives. From growing suburbs to remote farming communities, electric co-ops serve as engines of economic development for 42 million Americans across 56% of the nation’s landscape.

Last year was the busiest recorded hurricane season along the Atlantic Coast. Wildfires are increasingly intense, especially in the West, and ice storms and cold weather surprised the South this winter. These changing weather patterns call for new ways to make sure the lights stay on.



The electric grid is constantly adapting to changing weather patterns, increasing cybersecurity threats, consumer expectations and additional decentralized power sources like rooftop solar panels.

• FAVORITE •

SWEET CORN

RECIPES



Corn Kernels Source:
Iowa Corn Growers
Association, Iowa
State University
Extension and
Outreach

KERNELS AND ROWS

The number of kernels per ear can vary from about 500 to 1,200. A typical ear of corn has 800 kernels in 16 rows. There is one silk for every kernel that grows in an ear of corn.

Corn and Black Bean Salsa

- 2 cups sweet corn, cooked
- 1 can black beans, rinsed and drained
- 1 scallion, sliced
- ½ cup tomatoes, diced
- ½ red bell pepper, diced
- 1 lime, zested and juiced
- 2 tablespoons canola oil
- ¼ teaspoon seasoned salt
- ¼ teaspoon black pepper
- ¼ teaspoon chili powder
- sprinkle cayenne
- sprinkle garlic powder

Mix all ingredients together, adjust seasonings to taste and serve. This recipe is great as a salsa with tortilla chips or on tacos or burritos. It is also a great stand-alone side salad or served on greens.

Chris Daniels • Casey
Guthrie County Rural Electric
Cooperative Association

Curried Creamy Corn

- 3 teaspoons butter
- 2 cups fresh sweet corn
- 2 tablespoons green peppers, chopped
- 2 tablespoons onions, chopped
- ½ teaspoon curry powder
- ¼ teaspoon salt
- dash of pepper
- 3 ounces cream cheese
- ⅓ cup milk

In a saucepan, melt butter then add corn, peppers, onions, curry powder, salt and pepper. Cover and cook over medium heat for 8-10 minutes or until corn is tender. Add cream cheese and milk, stir over low heat until combined. *Serves 4*

Gina Lloyd • Linden
Guthrie County Rural Electric Cooperative Association

Cheesy Creamed Corn

- 2 quarts frozen sweet corn
- 4 ounces cream cheese, cubed
- 2 tablespoons butter or margarine
- 2 tablespoons milk
- 1 tablespoon sugar
- 4 slices American cheese
- 1½ teaspoons salt

Cook and drain corn. Stir in remaining ingredients. Cook and stir over medium-low heat until butter and cheese are melted. *Serves 8*

Emily Rassi • Rock Rapids
Lyon Rural Electric Cooperative

Garden Fresh Sweet Corn Salsa

- 1 cob sweet corn
- ¼ cup cilantro, diced
- 3 garlic cloves, diced
- 1 jalapeno, diced
- juice of ½ lime
- ¾ cup yellow or red onion, diced
- 2 cups fresh tomatoes, chopped
- ¼ teaspoon salt
- tortilla chips

Cut cooked corn off the cob. Toss all ingredients except for chips in a bowl. Serve fresh with tortilla chips. Store refrigerated up to 3 days. *Yield: 4 cups*

Susan Harrison • Le Mars
North West Rural Electric Cooperative

Sweet Corn Dip

- 4** cups corn cut fresh off the cob or frozen
- 1** 14.5-ounce can diced tomatoes, drained
- ½** cup sour cream
- ½** cup mayonnaise
- tortilla chips

Cook, drain and cool corn. Mix corn with drained tomatoes, sour cream and mayonnaise then chill. Serve with tortilla chips. For a spicier dip, use a can of diced tomatoes with green chilies. Serves 12

Donna Johnson • Kanawha Prairie Energy Cooperative

BBQ Chicken & Corn Pizza

- 1** tablespoon oil
- 1** onion, chopped
- 2** garlic cloves
- 1½** cups chicken, cooked and chopped
- ¼** teaspoon salt
- ¼** teaspoon pepper
- 1½** cups barbecue sauce, divided
- 1** 15-inch pizza crust, unbaked
- 6** ounces cheddar cheese, shredded
- 1** cup fresh corn
- 4** ounces gouda cheese, shredded
- ¼** cup cilantro

Sauté onion in oil for 5 minutes. Add garlic and cook for 1 more minute. Mix in the chicken, salt, pepper and $\frac{1}{2}$ cup barbecue sauce. Turn off the heat. Spread 1 cup barbecue sauce on the pizza crust, then top with cheddar cheese, chicken mixture, corn and gouda cheese. Bake at 375 degrees F for 30-35 minutes. Remove and top with cilantro. Cool 10 minutes before slicing. Serves 6

Lauren Zollinger • Rock Rapids Lyon Rural Electric Cooperative

Wanted: Soup and Stew Recipes The Reward: \$25 for every one we publish!

Nothing comforts the heart and warms the soul quite like a hearty bowl of soup! With crisp and cool fall days in mind, we want your favorite soup or stew recipe. 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.livingwithenergyinowa.com.

The deadline is July 31, 2021. 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.**

Fried Sweet Corn

- 8** ears sweet corn
- 2** tablespoons butter
- 3** tablespoons red pepper, diced
- ½** cup heavy cream
- 1** tablespoon fresh parsley, chopped
- salt

Husk corn and remove silks. With a sharp knife, cut the kernels from the cob. Add butter to a large sauté pan then add corn and pepper, stirring for several minutes. Add cream and cook for 3 minutes over high heat. Stir in parsley and season with salt.

Barb Walter • Alton North West Rural Electric Cooperative

Easy Corn Fritters

- 3** cups sweet corn kernels, 4 ears of corn
- ½** cup all-purpose flour
- 2** tablespoons cilantro, chopped
- 1** teaspoon coarse kosher salt
- 1** teaspoon black pepper
- 2** large eggs, beaten
- vegetable or canola oil for frying

In a medium bowl, mix corn, flour, cilantro, salt and pepper until well combined. Add eggs and mix well. Heat a large skillet over medium-high heat. Add oil to cover the bottom of the pan and heat until hot. Use about $\frac{1}{4}$ cup of corn mixture for each fritter, drop about 6 fritters into the hot skillet and flatten out a bit. Cook fritters until golden brown, about 2 minutes. Using a spatula, flip and cook another 2 minutes or until golden brown. Repeat with the remaining mixture and serve immediately. Fritters can be kept warm in a 200 degrees F oven if not served immediately. Yield: 12 large fritters

Tamara Kramer • Le Mars North West Rural Electric Cooperative

**SWEET VS.
FIELD CORN**
Only 1% of corn planted in Iowa is sweet corn; the other 99% is field corn.

STORING CORN

Refrigerate sweet corn in tightly wrapped plastic for 1-2 days if the husk is removed. If the husk is still on, store uncovered in a refrigerator for 1-2 days.

BRIGHT GREEN MEANS RIPE

Sweet corn is ripe when husks are bright green and moist. After peeling the husk back, the kernels should be evenly spaced and plump.

MORE THAN DELICIOUS

Sweet corn is undoubtedly an Iowa favorite, but it's more than just delicious. It's also a good source of vitamin C, lutein and fiber.



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

MAIL:
Recipes

Living with Energy in Iowa magazine
8525 Douglas Ave., Suite 48
Urbandale, Iowa 50322

Technology and cost drive a diverse energy portfolio



BY ANN THELEN

Electric cooperatives serving Iowans showcase new projects

Editor's Note: This is the first of a two-part series on how electric cooperatives serving Iowa member-consumers are integrating new energy sources into their energy portfolios. Part two will also feature cooperatives serving the northeastern and southeastern parts of the state.

Solar shines as a cost-effective resource

As Central Iowa Power Cooperative (CIPCO) works to close the gap left by the early closure of Duane Arnold Energy Center, it is focused on finding additional power purchase agreements with developers of wind and solar resources to fortify its power supply portfolio. CIPCO is a generation and transmission electric cooperative and, through its 13 members, serves over 300,000 Iowans in 58 Iowa counties.

"Energy from solar and wind resources are, relatively speaking, low-cost alternatives to other means of generation," says Bill Cherrier, CIPCO executive vice president and CEO. "We give great thought to the value these assets bring to the power supply portfolio, analyzing the costs and the

potential benefits and drawbacks of every decision.

"The solar option has been outstanding for us and really over the last eight years, it's become much more competitive. Compared to nuclear and coal plants, it is very economical and at times more competitive than those. The issue is you don't always have it when you need it," Cherrier continues. "Therefore, coal and natural gas play a very important part in our portfolio and will for some time to come."

CIPCO's involvement in solar projects has been in the spotlight in recent months.

Wapello Solar comes online

Earlier this year, Wapello Solar, LLC came online. CIPCO has a power purchase agreement (PPA) to purchase 100% of the power from the 100-MW_{AC} Wapello Solar for 25 years. Clēnera LLC partnered with Renewable Energy Systems (RES) to construct Wapello Solar in six months, creating approximately 250 jobs at peak construction. Despite beginning construction during the

Corn Belt Power Cooperative brought Wisdom Station's new 150-kilowatt solar facility online in 2020. The project features two different photovoltaic panel arrangements, a fixed-tilt array and an array of single-axis tracking panels. The 600 total panels now occupy space once used for the plant's coal pile. Wisdom Station converted to an all-natural gas burning facility in 2014.

COVID-19 pandemic, Wapello Solar progressed with little to no delays and entered commercial operation in early 2021.

Clēnera acquires, develops, builds and manages utility-scale solar projects and energy storage facilities throughout the U.S.

Located on nearly 800 acres, Wapello Solar features 318,000 bi-facial solar panels on single-axis tracker tables. When siting the projects, it's important to locate and construct at the lowest cost possible, while having necessary access to the transmission system. To check all these boxes, the projects are typically located on land that is rural, and in these instances, landowners are often pleased with the projects because developers work with landowners, and the opportunity creates diversity for their income.

On the heels of the completion of the Wapello Solar in southeast Iowa, CIPCO and Clēnera Renewable Energy announced the execution of a PPA for Coggon Solar, LLC, a 100-MW_{AC} solar project in eastern Iowa.

NextEra Energy Resources and Alliant Energy petitioned the Iowa Utilities Board to close the Duane Arnold Energy Center (DAEC) in Palo in 2020, 14 years before the nuclear power plant's operating license was scheduled to expire. CIPCO is a 20% owner of the plant and received 20% of its generating capacity (in 2020) from DAEC. Corn Belt Power Cooperative is a 10% owner of DAEC. The August derecho accelerated the plant's closure by two months.



Coggon Solar will bring significant economic benefits to the local area. According to Clēnera, the project will contribute several million dollars in property tax revenue to Linn County over the life of the generating facility. Clēnera also estimates that the project will create approximately 350 jobs during peak construction, many of which will be from local labor.

Coggon Solar is anticipated to begin commercial operations in 2022.

"Our electric cooperative members count on reliability more than anything. It's imperative to their lives and livelihood. Our job is to deliver the best balance in a diverse energy portfolio," Cherrier adds.

Solar array occupies the former site of coal pile for power plant

In 2020, Corn Belt Power Cooperative brought Wisdom Station's new 150-kilowatt solar facility online. The project features

two different photovoltaic panel arrangements, a fixed-tilt array and an array of single-axis tracking panels. The panels take up space once occupied by the plant's coal pile. Wisdom Station converted to an all-natural gas burning facility in 2014.

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. 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 arrays.

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.

"We hope to learn more about the true costs and benefits of the

two technologies – fixed-tilt versus single-axis tracking," says Jacob Olberding, vice president, power supply, Corn Belt Power. "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 are monitoring and documenting the performance and costs associated with the two arrays so that our members can make informed decisions when considering the two technologies."

Iowa Choice Renewables, a company established and run by a group of electric cooperatives in rural Iowa, installed the system. The array interconnects to Iowa Lakes Electric Cooperative's distribution system at Wisdom Station. 

Ann Thelen is the editor of *Living with Energy in Iowa*.



Solar panels at Wapello Solar LLC are bi-facial, meaning they have a back layer of transparent glass to give them the ability to utilize the sunlight reflected onto the rear side of the panel as well as onto the traditional front panels.

Photo Credit: RES



The official ribbon cutting for Wapello Solar, LLC, took place in April. From left: Jeremy Teresinski, RES; Tim Jordan, RES; Ken Johnston, FTC Solar; Bill Cherrier, CIPCO; Michael Gallego, Clēnera; Iowa Lt. Gov. Adam Gregg; Sen. Joni Ernst; Rep. Mariannette Miller-Meeks; and Tammi Sevy, Clēnera.

HOW YOUR CO-OP WORKS

Grundy County REC announces candidates for board of directors

Grundy County REC's nominating committee met in-person at Grundy County REC on May 20 to select the 2021 director candidates for Districts 2 and 3.

The Articles of Incorporation state that the nominating committee shall prepare a list of nominees identifying each candidate by name, address and the director district in which they reside. The nominating committee shall make a good faith effort to nominate two (2) candidates for each director position to be filled but may nominate only one (1) candidate for the position.

Mike Wiarda and Kenneth Fogt nominated the following director candidates, each for a three-year term:

- **District 2:** Norbert Boyle
- **District 3:** Nick Strohbehn

The written list of nominations of the nominating committee will be posted at the office of the Grundy County REC not less than 30 days prior to mailing the notice of the annual meeting of members. For 10 days after posting of the list of nominations by the committee, additional nominations of members residing in the district of the vacancy may be made by written petition on forms provided on request of any member and signed by not less than 15 members. Any member nominated shall give prior consent to such nomination whether by committee or petition.

A list of nominations as selected by the nominating committee will be posted by July 31, and nominations by petition will be accepted until Aug. 10.

If you are interested in serving on Grundy County REC's board and live in District 2 or 3 or know of someone who would be interested in serving as a director, please contact the cooperative. 

EQUIPMENT UPDATE



Photo: Aaron Bird

New bucket truck joins Grundy County REC fleet

Last month, Grundy County REC added a new bucket truck to its fleet of vehicles. Pictured here is Aaron Bird, first class lineman, with the new truck. 

FREE AND EASY WAYS TO SAVE ENERGY

Here are 10 easy, no-cost ways to save energy this summer:

-  1. Close or lower window coverings during the heat of the day
-  2. Set your thermostat a few degrees higher
-  3. Take cooler showers (this feels better in the summer, anyway)
-  4. Use countertop appliances or a microwave instead of your oven
-  5. Better yet, grill or smoke food outdoors
-  6. Unplug that extra fridge, especially older, inefficient models (they have to work even harder in a hot garage)
-  7. Optimize your programmable thermostat's features (around 40% of homeowners never program them)
-  8. Check the airflow around windows and doors (add weather stripping if needed)
-  9. Unplug all chargers and electronics before leaving the house
-  10. SHUT THE FRONT DOOR (don't air condition the outdoors)

Safe Electricity.org®
Learn more at:
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Top-performing electric vehicles

BY MARIA KANEVSKY

As electric vehicles gain popularity nationwide, many car manufacturers are creating new electric models to appeal to consumers. Electric vehicles may have higher sticker prices than traditional gas-powered vehicles, however, their lifetime costs can end up being less due to lower maintenance and fuel costs.

Since electric vehicle technology is constantly improving and prices keep decreasing, consumers are starting to consider electric vehicles for their next purchase. There's an electric model out there for everyone, depending on your priorities and preferences.

Affordability matters

For many, affordability is most important when purchasing a new vehicle. There are several budget-friendly options for those who want an electric vehicle but don't want to break the bank. One of the most popular and affordable electric options is the Nissan Leaf. The 2020 Nissan Leaf has a Manufactured Suggested Retail Price (MSRP) of \$31,600, according to *U.S. News & World Report*, and an older Nissan Leaf can be purchased for an even cheaper price. As with conventional vehicles, used (or older) electric models will typically cost less than the newest model.

Another affordable electric vehicle is the 2020 Hyundai Ioniq Electric with an MSRP at about \$33,000. The Hyundai Ioniq Electric has one of the highest MPGe ratings compared to other electric vehicles, at 133 MPGe, meaning it uses electric power very efficiently, thus needing fewer charging sessions. Additional benefits of the Hyundai Ioniq Electric include high safety scores and a long warranty.

Luxury on a budget

For those interested in a luxury vehicle while still keeping it

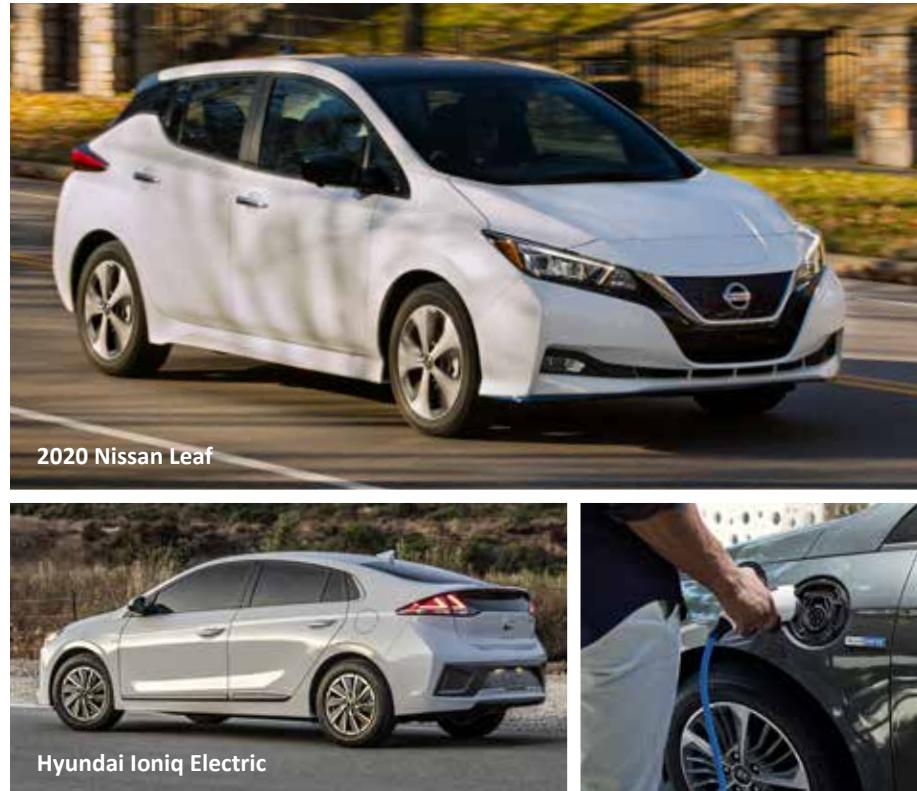


Photo Credit: Nissan

Photo Credit: Hyundai

relatively budget-friendly, the 2020 Tesla Model 3 could be an option to consider. With a starting MSRP of \$35,400, the car provides a sophisticated interior while delivering great efficiency and 220 miles of range.

Mileage range is a priority

Some consumers may instead prioritize a greater mileage range on their electric vehicle to eliminate range anxiety. Several new electric vehicle models have an especially large range. The 2020 Tesla Model S Long Range Plus has the largest range currently available on the market at 402 miles of maximum range. Using a Tesla Supercharger for only 15 minutes can get you about 130 miles of range on the 2020 Tesla Model S, but this car comes with the hefty MSRP price tag of about \$80,000. Another option that's a little more affordable but still provides a modestly long

driving range is the 2021 Chevrolet Bolt, with a maximum range of 259 miles and an MSRP of roughly \$36,600. The Chevrolet Bolt is a strong competitor among many electric vehicles, making it a solid choice as an everyday car.

Before purchasing any new vehicle, be sure to appropriately research which model will work best for you and your family.

Having a plan for charging your new vehicle will also be critical, either at home or at public charging stations. Once you purchase an electric vehicle, let your local electric cooperative know. Many electric co-ops offer one-time rebates or special rate plans for electric vehicle owners that can help you save additional money over time when charging your new car. ↗

Maria Kanevsky writes on consumer and cooperative affairs for the National Rural Electric Cooperative Association.

Stop by and see us at the Iowa State Fair!

The Touchstone Energy Cooperatives of Iowa are pleased to once again sponsor the Bruce Rastetter 4-H Exhibits Building at the Iowa State Fair. As Touchstone Energy members, we're part of a nationwide network of locally owned co-ops that provides resources and leverages partnerships to help member-consumers use energy wisely.

If you're planning a visit to the Iowa State Fair this summer, make sure to stop by and see us in the newly renovated 4-H Exhibits Building on the southwest corner of the fairgrounds. Come into the air-conditioned facility for a break from the heat and look for us near the new concession area.

Electric co-op staff from across Iowa will hand out plastic hard hats for the kids while supplies last. They can also try on some lineworker safety gear and take fun photos in our co-op safety selfie station!

Electric co-op members who take a quick survey on our iPads will automatically be entered into our fair contest. After the fair, three lucky winners will be randomly selected to choose one of three prize options:

- Roomba 614 Robot Vacuum
- DEWALT 20V MAX XR Blower
- Breville Smart Oven Pro

We will also announce the winners from our new Shine the Light contest during the fair. Iowa electric co-op member-consumers and employees had an opportunity to nominate local community volunteers for the contest in June. Three deserving volunteers will each receive a \$1,500 donation for their charity as we celebrate our cooperative commitment to community.

We look forward to connecting with our co-op members at the Iowa State Fair this summer. Please stop by our booth and say hello! 



County fair rides leave a lasting memory

BY VALERIE VAN KOOTEN

Eleven months of the year, a certain tract of land in county seats sits quietly, barns empty, buildings vacant. But come July and August, it fills with 4-H kids, entertainment seekers and the greasy foods we all love, as the county fair kicks into high gear.

Any fair worth its salt has a midway. As a kid, this was the biggest draw. My friends and I loved the stomach-roiling, brain-churning mechanical monsters that threw us against each other and then up along the metal frame.

Whirly rides are a no go

But I've learned my lesson on the "whirly" rides. While I can stomach a roller coaster or a ride that goes straight forward, anything that turns in circles will make me sick the rest of the day. This lesson was imprinted on a muggy July evening at a county fair in central Iowa in the 1980s.

In this party was my mom, her friend Maxine, Maxine's two grandkids aged 9 and 6, and me. I was in my early 20s and found myself delegated to ride the Octopus from Hades with the two smaller kids. This was one of those entertainments that not only turns, but also has a car on the end of each spoke that whirls as well. I was game to ride along with the kids who were begging to go.

The first clue that this might not be so pleasant was the ride attendant, a teenaged boy with hair in his eyes, and a T-shirt with a vulgar saying on it. He grunted at us as we climbed into the Car of Death and latched us in. The second clue that this was going to be the Ride of Horrors was when said attendant started the ride by withdrawing a screwdriver from his back pocket and jamming it into the starting apparatus.

The ride lurched into motion, and I quickly realized that I had not figured the seating chart correctly.



The largest person should be on the outside so that the smaller ones don't get smashed in centrifugal motion. I was in the middle, so the little boy with me was getting the brunt of both his sister and me. I clung to the back of the seat, trying to pull myself away from him, which got more and more difficult the faster we went.

"Grandma" to the rescue

After two minutes of grim determination on our part to hang on, the 6-year-old wanted out. I tried to motion the adolescent attendant, only to find him flirting with a girl in line. It was obvious he was going to be of little aid. As we whirled past my mom and her friend, I tried to get their attention.

"Tell them to STOOOOPPP...." I yelled, the Doppler Effect kicking in and carrying my voice away. She and Maxine were chatting away, totally ignoring us. In the meantime, the 6-year-old was crying, and the 9-year-old looked

pale. I was in real danger of getting hurled upon.

"MOOOOOMMMMM!" I whirled a rotation. "TELL HIM TO STOOPPPPPP...!" Second rotation.

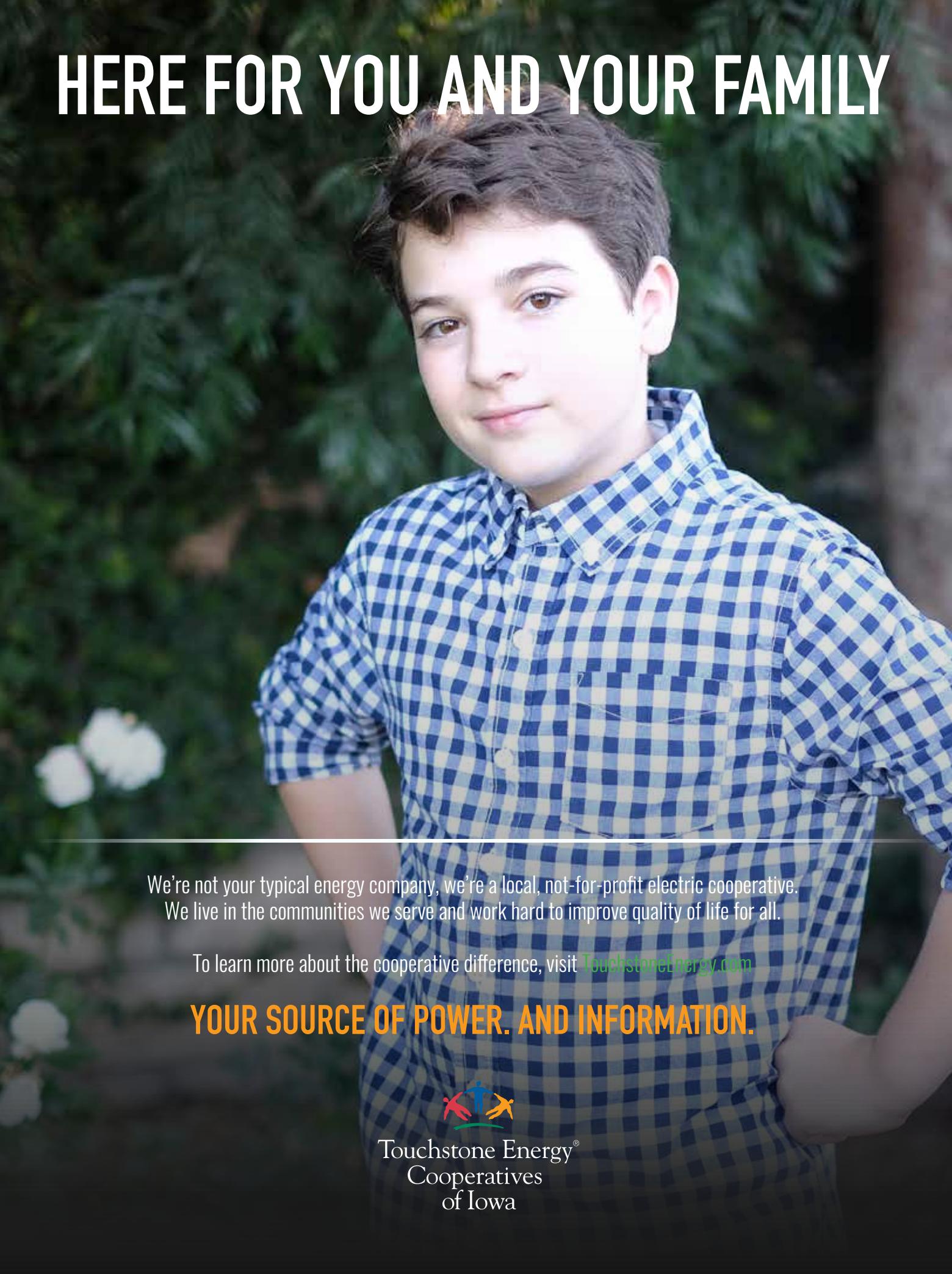
The 6-year-old finally broke through. "GRANDMA! I WANT TO GET OFFFFF!" The two women finally saw us gesturing and screaming and alerted Flirting Attendant, who pulled the screwdriver out of the works and brought us to a grinding halt.

We staggered off the ride, wobbly, sick and angry. Teen Attendant grunted at us as we left. Mom and Maxine found the whole thing somewhat hilarious.

Just in case you're wondering, I've never ridden the Octopus from Hades again. ↗

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.

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