Win a four-pack of Wi-Fi enabled smart plugs ▶ See Page 5

High school students – win a free trip to Washington, D.C.!

Visit our website at www.livingwithenergyiniowa.com

Recipes for chocolate lovers

Digital meters go the distance



Volume 72 • Issue 2

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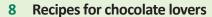
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Electric cooperatives have been using digital meters for decades. They continue to evolve and are valuable tools for safety, reliability, affordability and environmental responsibility.



Chocolate is popular in February because of Valentine's Day, but you'll love the recipes all year long! **PLUS**: Find out how you can receive a \$25 credit on your power bill!



High school sophomores, juniors and seniors: Find out why you should enter our annual contest to score an all-expenses-paid trip to the nation's capital this June!







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ON THE COVER

smart plugs

Barns are classic icons across Iowa's landscape. Lisa Lawler captured this majestic image of the late Abner Bernard "Ab" White's classic red barn in Hardin County. It's been in the White family since the 1800s. Most electric cooperatives in Iowa formed in the 1930s and 1940s when farmers had to band together to gain access to affordable electricity.



Trip of a lifetime

The Youth Tour is a trip of a lifetime. There is truly nothing like it. While seeing all the sites in D.C.

last summer was a lot of fun, we were there for a more significant reason – to learn more about cooperatives and show that cooperatives have a strong voice that will continue to be heard for generations to come.

To better understand the cooperative business model, Iowa Youth Tour students formed a snack cooperative during the trip. After the formation of our "D.C. Munchie Cooperative," we learned the real-life application of how a cooperative works, along with providing quality snacks at an affordable price. As the week continued, we became more acclimated to the atmosphere of this amazing business model. We learned how the principles founding this great

nation are similar to the principles surrounding cooperatives. We stood inches away from the documents that crafted our nation into what it is today, reminding us of the instilled sense of community we all have inside of us.

By the end of Youth Tour, we truly understood the

influence cooperatives have in our lives and the endless opportunities they provide for us, our communities and the nation. While learning about cooperatives was a big part of our trip, that wasn't all we did.

On the first day of our trip, we took a guided tour of D.C. I love facts, and they were in abundance during the tour. We learned many things, such as why Thomas Jefferson faces the direction he does in the Jefferson Memorial, how secure the FBI building is and why the Martin Luther King, Jr. Memorial breaks

the unofficial rule that statues can't be more than 19.5 feet tall. Another highlight was a steamboat cruise

> on the Potomac River with Youth Tour students from other states. Plus, we had an early morning run with Sen. Grassley. I met some of the smartest kids with highly developed leadership skills. It was amazing to be immersed in a like-minded, driven group of individuals.

Youth Tour was the highlight of my summer because I was shown the world of opportunities out there for me. It is an amazing feeling to understand how cooperatives are impacting people's lives in countless ways. Youth Tour has shown me that electric cooperatives are so much more than utilities. Electric cooperatives are organizations with a mission to empower people's lives by making sure their opinions are heard



across the nation, helping community organizations thrive and developing the next generation of leaders who will lead on local and national levels. And, they also provide electricity. If there is one thing I can share with students – apply for Youth Tour and encourage others to do so; you won't regret it!

Jacob Risse is a senior at Wapsie Valley High School. In June 2018, he attended the Iowa Youth Tour and was sponsored by Butler County REC. He was chosen to represent Iowa on the National Youth Leadership Council.

Intern chosen for 2019 Youth Tour

Clayton
Merritt, a
2012 Youth
Tour alumnus
from Chariton
Valley Electric
Cooperative,
will be the
lowa Youth
Tour Intern for



the June 2019 trip to Washington, D.C. He'll help with social media efforts and assist with all types of tasks before, during and after the trip. Merritt is a registered nurse at Wayne County Hospital and is currently a graduate student at **Graceland University pursuing** his Master of Nursing, Family **Nurse Practitioner Degree. After** graduation, he plans to work in an economically underserved area as a nurse. In addition, he plans to stay engaged in the local political process with the possibility of running for state office someday. In January, he also began his fourth year as a city councilman for the City of Seymour.

High school students:

Check out Pages 10-11 to learn how you can win an allexpenses-paid trip of a lifetime to Washington, D.C.!

QUOTE OF THE MONTH

"Protecting our nation's vast power grid is a national priority and focus for electric cooperatives. Ensuring appropriate information sharing and preserving existing partnerships and structures are essential to these efforts. NRECA will advocate for resources and technologies that meet the unique cybersecurity and recovery needs of smalland medium-sized utilities to help protect our systems."

Statement from the National Rural Electric Cooperative Association (NRECA), which advocates on many public policy issues on behalf of electric cooperatives across the country. As the new Congress kicks off, grid resilience is one of several electric co-op policy priorities for 2019.

Electric cooperatives discuss important issues at legislative reception



Chariton Valley Electric Cooperative board and staff met with Rep. Holly Brink. Pictured, left to right: Mike Miller, director/board president; Tod Faris, member service and economic development manager; Marchelle Brown, director; Wes Green, director; Rep. Holly Brink; Kenny VandenBerg, director/board secretary; Sen. Ken Rozenboom; Richard Welsh, director/board vice-president; and Becky DeTar, director/board treasurer.

In January, more than 150 directors, managers and staff members from Iowa's electric cooperatives discussed priorities with nearly 100 state legislators and policymakers during the annual Welcome Back Legislative Reception at the State Historical Building in downtown Des Moines. The Iowa Association of Electric Cooperatives hosted the event in conjunction with the Iowa Biotechnology Association, the Iowa Institute for Cooperatives, the Iowa Communications Alliance and the Petroleum Marketers and Convenience Stores of Iowa.

In the coming months, the Iowa General Assembly will be addressing several key topics, including issues central to Iowa's rural economy. Beginning with the Welcome Back Legislative Reception, Iowa's electric co-ops are advocating on behalf of our member-owners as we fulfill our mission to provide safe, reliable, affordable, and environmentally responsible power to more than 650,000 Iowans.

In the weeks ahead, electric coop advocates from all over the state will meet with legislators at the Capitol.

Nature's incredible paintbrush Early January delivered magnificent sunsets, especially on Monday, Jan. 7. Garrett Thompson, director of finance and administration for Farmers Electric Cooperative, Inc., in Greenfield, captured this glorious scene in rural lowa.

Gov. Reynolds outlines priorities

On Jan. 16, Gov. Kim Reynolds addressed a joint convention of the Legislature for the second time as Iowa's chief executive. The 45-minute long address provided a roadmap for the Reynolds Administration's priorities for the 2019 Legislative Session and offered a glimpse to what issues will take center stage in the coming months. Calls for increased adult and childhood mental health initiatives, a boost in K-12 education spending and rural economic growth were themes throughout her speech. Regarding rural growth, there are three main areas the Governor wants to pursue, based on recommendations from the Empowering Rural Iowa initiative, including:

1. Requesting the Legislature appropriate \$20 million, split over two years, for broadband infrastructure. According to Gov. Reynolds, this funding will accelerate expansion and leverage an additional \$120 million in private investment for high-speed internet.



- 2. Requesting the Legislature double the amount of workforce housing tax credits that are set aside for rural communities, putting the total at \$10 million. These tax credits must be competitive, meaning that they will go to those projects that are well-planned, not just first in line.
- 3. The establishment of a Center for Rural Revitalization within the Iowa Economic Development Authority. This center will focus on making rural Iowa an even greater priority and give Iowa's Main Streets a roadmap for success.

Iowa's electric cooperatives and Rural Power advocates stand ready to work with Gov. Reynolds and the Legislature to advance priorities of common interest that will provide for growth and vitality throughout rural Iowa.

WE WANT YOUR PHOTOS

Your photo could be our next cover!

The Living with Energy in lowa team is always looking for high-quality, local photos that show electric cooperative power lines, landscapes or other images showcasing the areas served by electric cooperatives. If you have a great image that might work for our cover, email

it to editor@livingwithenergyiniowa. com with *Cover Submission* in the subject line. Please also include a brief



description of the photo and when and where it was taken along with your contact information. Most importantly, you must remain safe while taking image. Follow all safety rules and never come into contact with energized power lines or electric cooperative equipment. If we select your image for a

future cover, we'll award you with a \$100 Visa gift card and give you photo credit.

EDITOR'S CHOICE CONTEST

Win four Wi-Fi enabled smart plugs!



Are you forever leaving the living room light on? Or maybe it's the computer. If you forget to turn off these items before you leave for work, they suck up energy the whole time you're

gone. With a smart plug like Apple's iDevices Switch, you can remotely cut power



to these devices and save energy. The iDevices Switch works with Siri, Alexa and the Google Assistant, allowing you to control your home with the power of your voice. You can monitor energy use of any device plugged into the iDevices Switch with the free iDevices Connected app.

Visit our website and win!

Enter this month's contest for the Wi-Fi enabled smart plugs by visiting the Living with Energy in Iowa website at www.livingwithenergyiniowa.com no later than Feb. 28, 2019. 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 weather station in the December issue was Heidi Biersner, Grundy County REC.

Digital meters go the distance Technology evolves to provide more information

BY ANN THELEN

Some 30 years ago, cell phones were emerging in the marketplace and gained popularity in the mid-1990s. Back then, the mass appeal was the ability to place and receive phones calls - the nearly lone feature of the bulky handheld devices.

Fast forward to today, and cell phones are vital communication tools. They go far beyond being a conversation tool. They are highpowered cameras; device controllers via apps, including the ability to turn lights off and on and control the thermostat; calendar organizers; entertainment centers for games and videos; and generally, technology wizards.

The same can be said for digital or electronic meter technology. Often referred to as smart meters, it's the digital technology that's the key element and "smart" is often a buzzword. What led to these types of meters earning the "smart" phrase is the increased amount of information that a digital metering platform offers to users. While there is increased attention on these types of meters, they aren't new. What is new, however, is the evolving technology that continues to change the benefits of the devices - similar to the advancing technology of cell phones.

Technology goes way back

Like many of Iowa's electric cooperatives, North West Rural Electric Cooperative and Franklin Rural Electric Cooperative have been using digital meter technology to serve members since the late 1980s and early 1990s.

North West REC serves members in Sioux, O'Brien, Plymouth and Ida counties in northwest Iowa. The co-op started to make the switch from analog (mechanical) meters to digital meters in the 1980s when it started using them for irrigation and commercial/industrial loads, which had time-of-use rates.



"I refer to our early digital meters as a first-generation meter," explains Lyle Korver, CEO of North West REC. "Those meters were one-way communication devices. We could read the meter from the office, but we couldn't communicate back to the meter."

The co-op waited for metering technology to advance and adopted what it dubs as second-generation digital meters 12 years ago. These meters, which are still in use today, use the cooperative's distribution power lines to provide two-way communication between the meter and the cooperative. The benefits have been impressive, including consistent meter reading, better outage management, the ability to



investigate blinks, resolving power usage questions, managing power use during peak demand times and overall better data.

"Up until 12 years ago, members were reading the meters, and consistent readings were difficult because of schedules and other priorities," Korver says. "When a meter is read on varying days, it affects the monthly power bill – potentially higher one month over another."

Benefits keep increasing

Franklin REC serves members in six Iowa counties, including Franklin, the southern one-third of Cerro Gordo, and portions of Butler, Floyd, Hardin and Wright. General Manager Becky Bradburn agrees with Korver that better outage management rises to the top as one of the key benefits of digital meters, which Franklin also calls Advanced Metering Infrastructure (AMI).

"If we receive a call that a member is without power, we can send a test signal to the meter from the office and also neighbors' meters," Bradburn says. "We can quickly determine if the outage is related to something on our

"Digital meters free up time so that our staff can focus on providing more services and benefits to our members."



power lines that we need to address or if the outage is specific to the member. Having this data at our fingertips aids the power restoration process."

Franklin's line crews also have iPads in their vehicles, which allow them to use the digital technology wherever they are located. If they have reports of an outage 10 miles away, they can test the meter right from the iPad. Not only have digital meters saved an extensive amount of vehicle fuel and wear and tear because meter readers don't have to drive from house to house, they also save considerable staff time.

"Digital meters free up time so that our staff can focus on providing more services and benefits to our members," Bradburn says. "When our on-call linemen go home at night, the iPads are with them. If an outage happens in the middle of the night, they can first send a signal to the meter right from home to gather information."

What's next?

North West REC is launching a pilot project early this year with the next generation of digital meters, which will communicate via wireless radio frequency (RF) technology. Among the enhanced benefits of using wireless meters versus the existing over-thewire technology is the ability to stay on if power lines come down from a severe storm or other cause. For those

concerned about RF emissions, Korver savs studies show the RFs of the meters are lower or comparable to many daily use devices, such as cell phones, microwaves, wireless routers or TVs.

"With the new meters, we'll know about an outage before a member ever calls us because the meter won't sense voltages. The backup battery on the meter will give a 'last-breath' report showing the meter is out of power," Korver says. "We'll be able to restore power more quickly and efficiently with these meters."

Another significant benefit of the new meters will be the ability to provide members with real-time energy use information. The meters can be programmed to read hourly, every four hours, daily or whatever timeframe the member desires. The meter will tie into SmartHub applications for increased usage information. "We've had a load management system in place for 30 years, but it's a one-way system. We can send a signal to a water heater or air conditioning unit to turn off, but we don't receive data to show it happened," Korver says. "With our pilot project, we will be able to see the activity by opening up two-way communication and integrate our load management and meter reading into one robust system."

Bradburn also appreciates the data that digital meters provide. For example, if a member notices his or her bill is higher than expected one month, information is available to graph. The data will show exactly when increased use occurred. Then, the member can address potential causes of the spike. From an energy efficiency perspective, members can see yearover-year impacts of energy efficiency improvements in the home and see firsthand benefits in their wallets.

Just as we've witnessed with cell phones, computers, online shopping, bill paying and a host of other services, technology does not stand still. Electric cooperatives embrace technology to continuously enhance a commitment to the safe, reliable, affordable and environmentally responsible delivery of electric service. Metering technology has a positive impact on all four of these key areas.

"One of our strategic goals is using technology to serve our members more efficiently. Digital, automated metering systems have been one of the best investments. They have helped us to gain many efficiencies, which benefits our members and the co-op," Korver adds. "Technology is consistently improving, so it's a priority to continue to look for ways to deliver enhanced value for our members." 🗲

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







A LOT TO LOVE

Several recent studies have examined the role that chocolate may have on heart health. Cacao beans are full of phytonutrients, which act as antioxidants and provide additional benefits. Cacao beans are rich sources of iron, copper, magnesium, zinc and phosphorus, according to the Harvard T.H. Chan School of Public

Chocolate Dreams Brownies

- 1 cup shortening
- 4 squares unsweetened chocolate
- 2 cups white sugar
- 4 eggs, beaten
- 1 teaspoon vanilla
- 11/4 cups flour
- 1/2 teaspoon salt
- 1 cup chopped nuts, optional

Melt shortening and chocolate in a double boiler over hot water. Remove from heat. Stir in sugar, then eggs and vanilla, mixing well after each addition. Stir in flour and salt. Add nuts if using. Spread evenly into a 13x9-inch jelly roll pan that has been sprayed with cooking spray. Bake at 400 degrees F for 18-20 minutes, until a toothpick inserted in the center comes out clean. Let cool and cut into squares. Can be frosted if desired and served with ice cream. Servings: 24.

Kathy Steele • Hedrick • Access Energy Cooperative

Deluxe Chocolate Fudge

- 3 cups chocolate chips
- 1 cup butter
- 2 cups marshmallow whip or cut up marshmallows
- 2 teaspoons vanilla
- 2 cups nuts
- 1 can evaporated milk (13 or 14.5 ounce)
- 3½ cups sugar

Mix together first five ingredients. Combine milk and sugar in a pan, bring to boil 12 to 15 minutes, stirring constantly. Combine the two mixtures together and pour into a 9x13-inch pan. Chill 2 hours. Refrigerate in covered container.

Bonita Miller • Eldon • Access Energy Cooperative

No-Bake Cookies

- 2 cups sugar
- 1/2 cup cocoa powder
- 1/2 cup margarine
- ½ cup milk
- 3 tablespoons peanut butter
- 1 teaspoon vanilla
- 3 cups quick cook oats

Combine sugar, cocoa, margarine and milk in a saucepan on the stove. Bring to a boil. Let boil for 3 minutes. Remove from heat and add remaining ingredients. Mix well. Drop by spoonfuls onto wax paper. Let cool.

Susan Claypool • Parnell • T.I.P. REC

Chocolate Goo

- 2 tablespoons butter
- 1 square bitter chocolate
- 1¼ cups sugar, divided
 - 1 cup flour
 - 2 teaspoons baking powder
- 1/8 teaspoon salt
- ½ cup whole milk
- 1 teaspoon vanilla
- 1/2 cup brown sugar
- 4 tablespoons baking cocoa
- 1 cup cold water

Melt butter and chocolate in a double boiler over hot water. Mix in ¾ cup sugar, flour, baking powder and salt, then add milk and vanilla. Spread batter in a buttered 9-inch pan. Mix together brown sugar, ½ cup sugar and cocoa. Sprinkle over batter. Pour 1 cup cold water over everything. Do not stir! Bake at 350 degrees F for 40 minutes. Let stand. Serve warm.

Thomas and Sharon Sager • Seymour Chariton Valley Electric Cooperative, Inc.

Health.

CHOCOLATE

BEGINNINGS

Mass chocolate

consumption

hit the U.S. in

the late 1800s

when Milton

began selling

S. Hershey

chocolate-

caramels.

company

introduced

HERSHEY'S

very first

factory

cocoa — the

In 1894, the

coated

Four-Layer Chocolate Dessert

- cup flour
- 1/2 cup oleo
- 1/2 cup chopped nuts
- ounces cream cheese
- cup powdered sugar 1
- 8 ounces Cool Whip
- small packages instant chocolate pudding
- cups milk

Mix flour, oleo and nuts, press into a 9x13-inch pan. Bake at 350 degrees F for 20 minutes, cool. Mix cream cheese and powdered sugar. Fold in ½ of the Cool Whip. Spread over crust. Mix pudding and milk. Pour over second layer. Spread with remaining cool whip. Refrigerate.

Patty Schurk • Burlington • Access Energy Cooperative

Zucchini Brownies

- 11/2 cups granulated sugar
 - cup butter
 - eggs, beaten
 - 2 cups flour
 - 1 teaspoon baking soda
- 1/4 teaspoon cinnamon
- tablespoons cocoa
- 1/2 teaspoon salt
- cups peeled and grated zucchini, drained
- 1 cup chocolate chips
- 1/2 cup chopped nuts
- cup coconut

Cream sugar and butter. Stir in eggs. Stir in the next five ingredients and zucchini, alternately. Pour into large, 12x15-inch greased cookie sheet. Toss together chocolate chips, nuts and coconut. Sprinkle on top. Bake at 350 degrees F for 30 minutes.

David Klenk • Chelsea • T.I.P. REC

Wacky Cake

- cups flour
- 2 cups sugar
- tablespoons cocoa
- teaspoons baking soda
- 1 teaspoon salt
- 3/4 cup vegetable oil
- 2 tablespoons vinegar
- teaspoons vanilla
- cups water

Put flour, sugar, cocoa, soda and salt into a 9x13-inch pan. Mix well until blended and then level the mixture. Make 3 cavities with a spoon. Put oil in one, vinegar in one and vanilla in one. Pour water over all. Mix with a fork until well blended. Bake at 350 degrees F for 30 minutes, or until toothpick comes out clean. Cool and frost with your favorite frosting.

Elaine Knoblock • Larchwood • Lyon REC

Chocolate Waffle Cookies

- cup melted butter or oleo
- 11/2 cups sugar
- 1/2 cup cocoa
- eggs, beaten
- cups all-purpose flour
- teaspoons vanilla

In a mixing bowl, combine butter, sugar and cocoa. Add eggs, blend well. Add flour and vanilla; mix until smooth. Coat waffle iron with cooking spray; heat on medium setting. Drop dough by tablespoons onto hot waffle iron. Close iron and cook for 1-2 minutes. Lift cookie off iron with fork and cool on wire rack. Can be frosted when cool or dusted with powdered sugar.

> **Betty Johnston • Murray** Clarke Electric Cooperative, Inc.

Wanted: Summertime Favorites! The Reward: \$25 for every one we publish!

Whether you love to host backyard barbeques, enjoy the perfect picnic lunch or cool down with crispy salads, we want to see your favorite recipes! Share your summertime go-to 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.livingwithenergyiniowa.com.

The deadline is Feb. 28, 2019. Please include your name, address, telephone number, co-op name and the recipe category on all submissions.

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

MAIL:

Recipes

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

and introduced mass-produced chocolate bars and other shapes, like Hershey's Kisses. **TONS OF BEANS** Chocolate is the most popular sweet treat in the world. People around the world - mostly in Europe and the U.S. consume more than 3 million tons of cocoa beans a year, according to the World Cocoa Foundation. It takes 400 cocoa

beans to make

one pound of

chocolate.

Opportunity of a lifetime:

Win a trip to Washington, D.C.!

► Enter the contest by April 5, 2019

Iowa's local electric cooperatives are just getting started on their selection process for high school sophomores, juniors and seniors from their areas to earn an allexpenses-paid trip for the June 14-20 Youth Tour to Washington, D.C. Unfortunately, there always are more qualified student candidates from these co-ops (as well as deserving students from co-ops that aren't participating in the Youth Tour program) than there are openings on the trip. However, one of those students, for the seventh year in a row, will have the opportunity to win a trip through the Living with Energy in Iowa 2019 Youth Tour Contest!

Of course, students at supporting co-ops first should apply for the Youth Tour through their electric co-ops. However, students can double their chances of winning a trip by entering the magazine's contest right after they enter the one for their electric co-op.



More than 1.800 students from across America take part in the weeklong educational trip to the nation's capital. Participants will travel to Washington, D.C., meet their U.S. representatives and senators, and watch history come alive as they explore museums, memorials and

monuments. They'll also meet student leaders from nearly every state and hear dynamic speakers during Youth Day. Best of all, students will make friendships that last a lifetime and become part of a group that has more than 50,000 alumni in every walk of life, including U.S. senators and CEOs. *

These electric cooperatives are sponsoring the 2018 Youth Tour

All of the electric co-ops on this list are offering one or more all-expenses-paid Youth Tour trips this year, so check your co-op's website or call the office for more details.

Access Energy Cooperative Allamakee-Clayton Electric Cooperative **Butler County REC** Calhoun County REC Central Iowa Power Cooperative Chariton Valley Electric Cooperative, Inc. Clarke Electric Cooperative, Inc. **Consumers Energy**

East-Central Iowa REC Eastern Iowa Light and Power Cooperative Farmers Electric Cooperative (Greenfield) Franklin REC **Grundy County REC** Harrison County REC **Heartland Power Cooperative** Iowa Lakes Electric Cooperative Lyon REC Midland Power Cooperative

MiEnergy Cooperative Nishnabotna Valley REC North West REC Pella Cooperative Electric Association **Prairie Energy Cooperative** Raccoon Valley Electric Cooperative Southern Iowa Electric Cooperative, Inc. Southwest Iowa REC T.I.P. REC **United Electric Cooperative**

Connect with us!



www.iowarec.org/youth-tour



IowaYouthTour



@lowaYouthTour



IowaYouthTour



iowayouthtour

Some of the things students will do and see on Youth Tour:

Some of the things students will do and see on Youth Tour:

- Washington Monument
- World War II Memorial
- Albert Einstein Memorial
- Franklin Delano Roosevelt Memorial
- Vietnam Veterans Memorial
- The National Mall
- Boat cruise on the Potomac River
- Holocaust Memorial
- Madame Tussauds Wax Museum
- Ford's Theater
- Korean War Veterans Memorial
- Lincoln Memorial
- Washington National Cathedral
- Mount Vernon
- Iwo Jima Sunset Parade
- White House
- U.S. Capitol tour
- Newseum





An Iowa student will earn a \$1,000 college scholarship too!

During the 2019 Youth Tour this June, a student from each participating state will be chosen to serve on the national Youth Leadership Council (YLC).

Those students will return to Washington, D.C., in July to participate in leadership training and will be invited to attend the 2020 annual meeting of the National Rural Electric Cooperative Association in New Orleans.

As a bonus, the student chosen from Iowa will receive a \$1,000 college scholarship! This year, the Iowa Youth Tour director and chaperones will interview Iowa's YLC candidates on Saturday, June 15, during the Youth Tour.

Jacob Risse from Butler County REC was the 2018 YLC representative from Iowa, and he'll be attending the annual meeting of the National Rural Electric Cooperative Association in Orlando in March.

Read more on Page 3 about Jacob's experience on Youth Tour. 🗲



Official Contest Rules

YOUTH TOUR

WASHINGTON D.C. 2019

The 2019 Youth Tour Contest is open to any high school sophomore, junior or senior who's part of a member family of an Iowa electric co-op that's a member of the Iowa Association of Electric Cooperatives (IAEC). One all-expenses-paid trip will be awarded by Living with Energy in Iowa magazine, in addition to the trips sponsored by local electric cooperatives.

Of course, students at supporting co-ops first should apply for the Youth Tour through their electric coops. Then, to enhance your chances of earning a trip, we encourage you to enter this contest too. If you're chosen as the winner of a trip sponsored by your local electric cooperative, you'll become ineligible to win the trip sponsored by Living with Energy in Iowa magazine.

To enter, you will be required to submit an official entry form plus a short (250-word maximum) essay in response to this statement: Pick one of the seven cooperative principles and share how your local electric cooperative embodies it. Entry forms are available at https://www. iowarec.org/youth-tour/living-withenergy-in-iowa-youth-tour-contestform/. You can submit your essay online at this address or email it to vouthtour@iowarec.org. Entries must be received by April 5, 2019.

Living with Energy in Iowa magazine and IAEC staff will judge all essays anonymously. The decision of the judges will be final. The winner of the Living with Energy in Iowa Youth Tour Contest will not be announced until April 15, 2019, which is after all sponsoring local electric cooperatives will have chosen their 2019 Youth Tour participants. 🗲

IADG Energy Bank yields efficiency

Iowa's electric cooperatives support energy efficiency programs because they help lower energy costs, shift peak demand, bridge the gap in the power generation building cycle and meet power supply goals. The IADG Energy Bank launched in January 2013. This nearly \$2 million revolving loan fund is available to help existing Iowa commercial businesses support their energy efficiency and renewable energy projects. To date, nearly \$3 million has been loaned to enhanced energy efficiencies in **18 businesses** across Iowa, including these recent projects.







BrandFX Body





Silker's General

Power Lift, located in Jefferson, received a loan to help purchase a new CNC flat sheet and tube laser cutter. This new system increases the capacity of output and size of metal that can be cut and improves quality control and operating efficiency on a per piece basis. IADG and Midland **Power Cooperative** (MPC) have been proud to support this local manufacturing company on multiple occasions. MPC assisted as Power Lift consolidated five leased locations into the current facility, later purchasing the building, and then expanding the footprint to add a showroom and offices.

Company produces advanced composite service bodies, line bodies, inserts, toppers and covers for installation on service trucks. Two of its eight U.S. production and installation facilities are in Pocahontas and Swea City, Iowa. A loan through the IADG Energy Bank helped the company update lighting in its Pocahontas facility. The project includes replacing 195 fixtures of metal halide lighting in its 160,000 square foot manufacturing facility with LED lighting. The facility investment will save energy and provide a better, more well-lit work environment for

Trinity Fabricators, Inc. in New Albin received IADG Energy Bank funds to increase efficiency through the purchase of a plasma cutting system. The system allows Trinity to replace multiple pieces of equipment with an automated fabrication process, which only requires a fraction of the time compared to manually cutting and preparing the same material. Trinity can process more volume and bigger, more complicated designs. Trinity Fabricators (nominated by Allamakee-Clayton Electric Cooperative) was a 2018 Iowa Venture Award recipient, recognized for its entrepreneurial leadership and achievement.

Merchandise Store has been operating in Epworth since the 1890s. The company's **Energy Bank project** included replacement of refrigeration cases, building air conditioning system, and building entry and windows. In addition to the energy savings associated with the new, more efficient refrigeration cases and facility improvements, the project will allow for increased inventory and variety of refrigerated and frozen merchandise for community residents. 🗲

The IADG Energy Bank is focused on making loans (\$50,000 to \$300,000), to businesses and industries for qualifying energy-related projects within lowa. As an RLF, additional funds will become available as loans are repaid. Learn more at www.IADG.com/EnergyBank.

employees.

7 low-cost energy tips

BY PAT KEEGAN AND BRAD THIESSEN

Energy efficiency improvements to the home can save money, but not everyone can replace their furnace with an air-source heat pump. Here are seven low-cost efficiency tips that can help you reduce your energy bills.

Mind the thermostat. You might be able to trim your energy bill by carefully managing the temperature in your home. The Department of Energy suggests setting your thermostat to 68 degrees F on winter days. If that's too cool, try other ways to stay warm like layering with an extra sweater. You can save more energy by turning down the thermostat even lower at night or when no one is home.

Go programmable. If you don't always remember to adjust your thermostat manually, you could benefit from a programmable model. In the right situation, set correctly, programmable thermostats can save \$150 a year. Some programmable thermostats can be managed from your smartphone or other devices.

you don't mind lessused rooms being colder, you might be able to save energy (and money!) by zone heating. Electric baseboards make it easy because they typically have thermostat settings on the units or in each room. Portable electric space heaters can also be a good tool for zone heating if they are used safely and wisely in the area you spend the most time. Keep in mind, if you're using space heaters, you'll need

Try zone heating. If

to reduce the heating you're supplying to the rest of the home. Space heaters that are misused can be dangerous and increase energy costs.

Stop air leaks. Small gaps around windows, doors, wiring and plumbing penetrations can be major sources of energy loss. This problem can be alleviated with a little weather stripping and caulk. A \$10 door draft stopper is a simple way to block gaps underneath exterior doors. Sealing air leaks around your home could shave up to one-fifth of your heating and cooling

Manage your windows and window coverings. Your windows may be letting heat out during the winter. Window coverings like medium or heavy-weight curtains and thermal blinds can help. On cold winter days, window coverings can keep warmth inside and improve comfort. Opening window coverings when you're receiving direct sunlight is a 'passive solar' technique that can help cut your heating costs. You can also cover windows with clear plastic to reduce heat loss and air leaks.





Look for energy wasters. There are also small steps you can take every day to reduce your energy use. Water heaters should be kept at 120 degrees F. Wash dishes and clothes on the most economical settings that will do the job and always wash full loads. Use the microwave instead of the oven when possible.

Have an energy audit. A home energy audit is the best way to identify areas for energy efficiency improvements. Contact your electric cooperative to see if they offer energy audits or if they can recommend someone local.

This column was co-written by Pat Keegan and Brad Thiessen of Collaborative Efficiency.

lowan appointed to national post

BY ANN THELEN

Since 2013, Nick Wagner has been serving as one of three board members for the Iowa Utilities Board (IUB). The IUB has been assigned certain regulatory responsibilities related to electricity and natural gas providers in Iowa. In November 2018, Wagner was elected as President of the National Association of Regulatory Utility Commissioners (NARUC) and he is the seventh president from Iowa in the history of the organization. We recently sat down with Wagner to learn more about this role.

What is the primary purpose of NARUC?

Founded in 1889, NARUC is a non-profit organization dedicated to representing the state public service commissions, which regulate the utilities that provide essential services such as energy, telecommunications, electricity, water and transportation. NARUC's members include all 50 states, the District of Columbia, Puerto Rico and the Virgin Islands. Through NARUC, we help educate our members and advocate for positions that are beneficial to utilities and the consumers we serve.

As a member of an lowa electric cooperative, what does it mean for me to have an **Iowan leading NARUC?**

Because we're constantly engaging with other states, we can learn best practices on a variety of topics from others' experiences and better serve Iowans with this information. In my capacity as NARUC president, the conversations often lend themselves to discussions about Iowa's successes, such as how the state has integrated wind generation. I tout Iowa as a progressive state, doing things in positive ways to help consumers.

From your perspective, what's the next big technology on the horizon for electric consumers?

I'm not convinced it's one single thing. Instead, it will be a combination of maximizing technology to allow customers to be more engaged when it comes to their energy use. We see diversity in how much information consumers desire. Some customers simply want the power to come on when they flip a switch. Others want to see what their energy use is to the minute so they can make choices of how to use energy differently to save money. Helping electricity providers serve their consumers in the manner they want to be served provides tremendous opportunities.

What are your thoughts on the term "smart" meter?

In general, smart is a term that has been used for a lot of different things. Our grid has been pretty smart all along. When you have a switch that allows lights to come on, that's smart in and of itself. A lot of work goes into making this happen. We're always improving the grid, and there is room for continuous improvement.

As a state utilities commissioner and president of NARUC, what issues keep you up at night?

A combined cyber and physical attack is always a concern. Daily, safety is paramount. Ensuring we have power reliability and grid resilience also ranks high.

Cybersecurity is a topic that affects everyone and nearly every industry. Does NARUC have any specific initiatives in place to address cyber threats?

NARUC emphasizes cybersecurity through its



Critical Infrastructure Committee. We're heavily engaged at the federal, state and local levels. We receive monthly threat briefings with declassified information and work closely with national groups, such as the Department of Homeland Security (DHS), National Institute of Standards and Technology and the North American Electric Reliability Corporation. This winter, we'll tour a DHS facility to see firsthand what they are doing related to cybersecurity.

Is there anything you would like to add?

I'm extremely appreciative of the work that electric cooperatives do in Iowa to serve their members with safe, reliable, affordable and environmentally responsible power.

Nick Wagner received his bachelor's degree in biomedical engineering in 1996 and a master's degree in electrical engineering in 1998, both from the University of Iowa. He and his wife, Mandie, reside in Marion and have a daughter and son. 🗲

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

Raising independent children doesn't work when Mom's a wimp

BY VALERIE VAN KOOTEN

I recently read an article on raising children who are happy, healthy and independent. Having lived through the toddler years and then the tempestuous teens, I can assure you that most kids master the independence thing quite nicely, thank you.

This article, however, dealt with children who don't take responsibility for getting their own things to school: the forgotten assignments, the PE clothes, the money for a field trip. A series of questions helped the reader to work through the whole process of taking ownership. How can you prevent this in the future? What planning needs to take place ahead of time? All moot points, in my book.

In our house, it was musical instruments. None of our three boys wanted to be in band, so they waged a passive-aggressive war on "forgetting" their instruments at every turn. This was especially true of my oldest son, who made leaving behind his trombone into an art

In my efforts to produce cultured, well-rounded children, I had wanted my sons to experience the joy of music that had made my life so much

They fought me tooth and nail at every opportunity. I raised the white flag on piano lessons, as I finally got tired of cajoling, wheedling and bribing – all to get them to practice. The recorders they brought home in fourth grade drove me to distraction. When band appeared on the horizon in fifth grade, I tried my hardest to work with the teacher to find an instrument each son would excel at and enjoy.

Our oldest son, his teacher, and Kent and I settled on a trombone.



For our efforts, we were saddled with a payment plan and a sulky kid. For the first two weeks, before the novelty wore off, he practiced sporadically in elephantine blasts for five minutes at a time.

Soon, however, the trombone was simply something to trip over in the hallway, where it was perched, ready to grab when the bus came. The trouble was, it never moved.

At 8:15 a.m. on band days, the phone would ring.

"Mom, I forgot my trombone." "That's too bad. What are you going to do about it?"

"You need to bring it in."

Using my philosophy of "Your lack of planning does not constitute an emergency on my part," I refused. "Sorry. I'm not your lackey."

"I don't even know what that means, but you need to bring it in." "I don't need to do anything. You had to have tripped over it when you left for the bus."

Silence. "Well, are you going to bring it in or not?"

"What happens if I don't?"

"I'll get in big trouble and probably get kicked out of band."

"That's what you're hoping. I'll drop it off at the office at 10. This is the last time I'm doing this."

The kid had me over the barrel, and he knew it. The trombone lasted a full year before it was sold to another hopeful parent who had big intentions for Junior. Sucker, I gloated to myself.

Needless to say, none of my sons became Mozart. And I have to say that recorders should be outlawed.

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.





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