News Lines

March/April 2021 Nishnabotna Valley Rural Electric Cooperative 1317 Chatburn Harlan, Iowa (712) 755-2166 (800) 234-5122 www.nvrec.com

Choose The Right Trees For Energy Efficiency, Electrical Safety, Reliability And Environmental Benefits When Landscaping

Whether planting trees to celebrate Arbor Day, provide a wind break, reduce carbon in the environment or to beautify your landscape, Nishnabotna Valley REC and our partner Safe Electricity reminds everyone of the importance of planting tall-growing trees safely away from power lines. Seek help at one of our local greenhouses like Crees Garden Center in Harlan when choosing and placing trees and bushes that provide shade, color and screening that won't grow to interfere with the electric reliability.

Trees that grow too close to electric lines can create shock and fire hazards as well as power outages. Parents and caregivers are urged to teach children to never climb trees near power lines. NVREC also warns to never trim trees that are close to power lines – leave that to the professionals.

Trees provide many aesthetic, environmental and economic benefits, including energy-efficient shade and cooling during hot summer months, or natural windbreaks against winter winds. But everyone needs to be aware of the dangers and risks created when trees grow into power lines, and the importance of calling the utility or utility locator service before beginning any landscaping project. Landowners also need to understand utility line clearance practices and why they're important for safe and reliable electric service.

In addition, trees help combat the effects of pollution by absorbing carbon dioxide (CO2). When trees grow, they take energy from the sun and combine it with carbon from the air to photosynthesize. They remove carbon from the air and sequester or store it in their biomass, or the wood, and in the ground. This makes trees a natural "carbon sink" or, a living source of carbon reduction. Some trees are better suited for this task than others and, according to the U.S. Department of Energy (DOE), tree species that grow quickly and live long are ideal carbon sinks.

Choosing the right tree for the right place is crucial, especially when it comes to power lines. Trees and wood conduct electricity and can create a safety hazard if grown close to electric lines. Power outages or momentary interruptions can occur when branches come into contact with overhead lines. Electrical arcing and sparking from a wire to a nearby branch also can cause fires.

But a greater concern is the safety risk when children climb trees near power



To avoid future electrical hazards, safe planting tips to remember include:

- Consider mature height of trees. Never plant a tree that could grow to 25 feet or more near a power line. Tall growing trees should be planted a minimum of 20 feet away from power lines, and 50 feet away to avoid future pruning. A mature height of less than 15 feet is recommended for trees planted near power lines.
- Do not plant near underground utility services. Tree roots can grow to interfere with underground pipes, cables and wires. Future repairs to these facilities also could damage the health and beauty of nearby plants and trees.
- Keep areas around electric meters, transformers or other electrical equipment free of any vegetation that could limit utility service access.
- Before digging, call the local underground utility locator service to mark location of underground utilities so that accidental contact, damage and injuries can be avoided.

lines. Accidental contact of electric wires with a tree limb or playing and trimming around the tree can be fatal.

If you have trees that appear to be growing into power lines, contact Nishnabotna Valley REC at 712-755-2166. Never try to prune them yourself. Most utilities have or can recommend skilled professionals trained to safely prune and trim trees for electric line clearance.

There are many beautiful varieties of trees, low-growing trees and shrubs that provide color, screening and shade, and enhance the quality of life in our communities and environment. Consider the types of trees that co-exist well with power lines and the environment to avoid the need for trimming for line clearance.

Plant the Right Tree in the Right Place

Trees beautify our neighborhoods, and when planted in the right spot, can even help lower energy bills. But the wrong tree in the wrong place can be a hazard... especially to power lines.

For more tips on smart tree planting in your community, contact your local electric cooperative or visit www.ArborDay.org.

Be safe! Always call 811 before you dig to locate any buried utility lines.

Source: The Arbor Day Foundation and the National Rural Electric Cooperative Association

Extreme weather leads to unprecedented measures

I thought we'd get to shelve the word "unprecedented" for a while, but there really is no other word to describe what happened at electric utilities across the Midwest in February.

Record-low temperatures which led to escalating demand for electricity, combined with disruptions to natural gas, coal and renewable generation resources, resulted in unparalleled stress on the Midwest power grid. As a result of this pressure on the grid, on Feb. 15 and 16, electric cooperatives in western and north-central Iowa, along with utilities across the Midwest were called upon to curtail electric load. In my nearly twenty years in the electric co-op industry, this was the first time I've experienced an order to curtail load because of tightening generation resources. Electric demand across a 14-state region (from Canada to northern Texas) reached historic highs due to long-lasting, vast heating demands across the country, and the electric load curtailment measures were necessary to prevent a multi-day, system-wide blackout. To put it simply, there was not enough electric generation available, at points during those days, to meet the extent of the amount of electricity that consumers were demanding.

The grid's "air-traffic controllers"

Many electric utilities across the country are members of regional transmission organizations (RTOs) and independent system operators (ISOs), also referred to as power pools. These federally regulated entities work on a regional scale to coordinate, control, and monitor

supply and demand on the electric grid. RTOs do not own the power grid, but they work as "air-traffic controllers" of the grid to ensure reliable supplies of power, adequate transmission infrastructure and competitive wholesale electricity prices on behalf of their member utilities.

RTO Southwest Power Pool (SPP) issued unprecedented Energy Emergency Alert (EEA) Level 2 and Level 3 orders to its member utilities across several states on Feb. 15 and 16, calling for high levels of electric demand reduction/curtailment to match available supply.

Some of you may recall the 2014 polar vortex. Since that time there have been significant changes in electricity markets, particularly in the ERCOT, SPP, and MISO RTO markets. In the years since 2014, the nationwide coal share of generation has decreased from 38.5% to 23.3%, while natural gas has increased from 27.4% to 38.3%, and non-hydro renewables have increased from 6.8% to 10.6%. Nuclear energy and hydro generation have remained relatively flat.

Communication is important

As soon as your co-op learned that electric load curtailment may become a possibility, we shared the information available to us on the fastest media platform accessible - social media. The announcement went out on the co-op's Facebook and Twitter pages on Monday and many members helped us share the information. We asked for voluntary electric conservation and announced that load curtailment may be forthcoming. While it left members with some questions – How long will the load control last? When will it start? – We shared what we knew as soon as we knew it. Ultimately, SPP controlled the timing and amount of curtailment needed by utilities across its 14-state region.

The impact at your co-op

SPP issued the EEA orders to prevent a damaging regional blackout which could have taken days to restore. EEA Level 3 orders are extremely rare and are only implemented when absolutely necessary. In fact, these are the first Level 2 and Level 3 orders issued in SPP's 80-year history.

To comply with the Level 3 orders, some local electric cooperative substations were taken offline for about an hour at

a time on average. Unfortunately, these outages occurred with almost no advanced warning as SPP manages electric supply and demand minute-by-minute in real time. Local



Bill McKim, CEO

electric distribution cooperatives had just minutes to initiate substation outages.

For Nishnabotna Valley REC's power supplier, all curtailment orders from SPP were met through normal operations of the load management program known as Switch Makes Cents. Switch Makes Cents allows member-consumers to opt-in to load management, which provides a rate incentive for allowing strategic interruption of electric service to qualifying electric equipment during periods of high demand. Thanks to the members participating in Switch Makes Cents, we were able to avoid powering down substations to meet load curtailment needs associated with SPP's energy emergency alerts.

Thank you to our members

The extent of these load control measures was unprecedented in our region, and I would like to thank the membership for their patience and understanding while we dealt with its challenges in real time. As always, we will continue to seek the best practices and solutions to maintain our mission to safely provide reliable, affordable, and responsible electric service while enhancing the communities we serve.



This map of the SPP service territory (in red) shows low temps from Feb 14-16, 2021. Dark blue represents temperatures below zero and light blue is 0-32°F.

Electrical Safety Reminders for Your Home

We believe that every parent (or grandparent) with young children should not only be aware of these electrical safety tips but also teach them to their children.

1. Always look up for power lines before climbing a tree.

At some point, you've probably seen NVREC tree trimming and pruning near power lines. Let your children know that when electrical wires are touching a tree they can be very dangerous. If you see a tree within 10feet of a power line you should call the Cooperative at 712-755-2166.

2. Never yank on an electrical cord.

Teach your children to hold the cord near the plug before pulling the cord out. Yanking on electrical cords, the outlet, or even the appliance that is plugged in can cause damage and can be very dangerous if the yanking causes bare electrical wires to be exposed.

3. Remind family members to be cautious while working outside with electricity.

Anytime anyone uses a ladder, chainsaw, or other outdoor electrical tools, it's best to make everyone within the household aware of any possible electrical hazards.

4. Never climb a fence at an electrical substation.

If there is an electrical substation near your home it is important to teach your children never to climb the substation fence. If they lose a ball or toy behind the substation fence you will need to call NVREC to have the toys retrieved.

5. Cap unused electric outlets or install childproof outlets.

Safety caps or plugs for unused

power outlets (both inside and outside) can deter young children from putting items into an outlet. This can also help lower energy bills by blocking out the cold. You may also consider installing childproof outlets, which are tamperresistant.

6. Keep electrical devices away from water.

Teach your children that water conducts electricity. Many electrical accidents occur by using electrical devices too close to water. This can include a tablet or phone plugged into its charger as well as hair appliances commonly plugged into bathroom outlets.

7. Keep kites away from power lines and sub-stations.

Educate your children on the dangers of flying kites near power lines or electrical power stations. Tell them to exercise extreme caution when kite flying since it is possible for kite string to conduct electricity and send it through a person and into the ground.



8. Always ask an adult for help when using an electronic device.

Depending on a child's age and independence, let them know that they should first ask for help before using any sort of electronic device.

9. Don't plug too many devices into one outlet.

The danger of plugging in too many devices is that the outlet can become overloaded, which can cause a fire.

10. Neatly put away electrical cords when you're done.

You can set an example by putting away electrical cords when they are not being used and teaching your children the importance of doing the same. When unused electrical cords are left lying around they can be a tripping hazard. Plus, many family pets will often chew and damage electrical cords, exposing the wires and making them a fire hazard.

For more electrical safety tips for your home, visit our website at www.nvrec.com.

NVREC Service Department to Focus on Switch Makes Cents Program

Just a Friendly Reminder

NVREC is upgrading the load management system called Switch Makes Cents. Soon, the NVREC member service team will begin replacing nearly 2,600 load management switches. The service department will continue to perform

warranty work for water heaters but will no longer be doing consumer-side electric and HVAC service work.

We have several professional contractors in our area who offer these services. Should you have electrical or HVAC work that needs to be done, please contact a private electrician. You may also contact our office for a list of professional electricians and HVAC contractors in our service territory.



Maintain proper clearance around grain bins

E ach year, NVREC has several requests from members to build services for new grain bin facilities, so we want to remind you of the proper clearance rules concerning electric lines.

The State of Iowa requires specific clearances for electric lines around grain bins, with different standards for those filled by portable augers, conveyors and elevators and permanent equipment. In fact, the Iowa Electrical Code Chapter 199 - 25.2(3) b states: an electric utility may refuse to provide electric service to any grain bin built near an existing electric line which does not provide the clearance 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 September 9, 1992, or to grain bins loaded by permanently installed augers, conveyors or elevators built after December 24, 1997. The Iowa Utilities Board has adopted this language.

Nishnabotna Valley REC is required by the Iowa Utilities Board to provide this annual notice to farms, farm lenders, grain bin merchants and city and county zoning officials. The drawings on this page show the specific clearances regulations – or what needs to be done before you begin placing a new grain bin or moving an existing one. If you have questions concerning clearance regulations, please call NVREC at 712-755-2166 or Northwest Iowa Power Cooperative at 712-546-4141.

Clearance envelope for grain bins filled by permanently installed augers, conveyors or elevators





Disclaimer: These drawings are provided as part of 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 for 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.

KIDS' CONTEST THANK A LINEWORKER

In April, we are recognizing lineworkers for the amazing job they do to make sure we have reliable electricity. Kids, think about all the ways you use electricity every day.

Do you use a phone, watch TV, play video games, help your parents make dinner, or help do laundry? You are able to do all of these things because of lineworkers. Use the provided space to write a short thank you note to your Nishnabotna Valley REC lineworkers.

Please write your note, then ask an adult to help you send it back to us no later than Monday, April 12, 2021. We will share it with our crews, and your name will be entered into a drawing to win fun prizes from your Electric Cooperative.



Lineman Appreciation Day, Monday, April 12, 2021

Operation Round Up Round Up Your Bill to Help Others



What is Operation Round-Up®?

Operation Round-Up® is a program that allows Nishnabotna Valley REC consumer-owners to make a difference in their own communities. Operation Round-Up® allows you to "round-up" your monthly electric bills and donate the difference to a charitable fund to be used in Nishnabotna Valley REC's service territory. The minimum

amount you contribute each month is \$0.01, and the maximum is \$0.99.

How does Operation Round-Up® work?

If you choose to participate, your electric bill will be roundedup to the next highest dollar each month. For example, if your electric bill is \$52.71, an additional balance of 29 cents will be added, making your bill an even \$53.00.

How will the funds be used?

Donations are made from the fund to non-profit organizations and individuals in need and also for family emergency disasters. The program has been successfully implemented in more than 200 electric co-ops across the nation. The program is administered by Nishnabotna Valley REC's Board of Directors. Application forms are available at the REC office and will be reviewed by the Board of Directors quarterly. Applications should be received no later than the 15th of the month at the end of the quarter. Contributions to the fund are not tax deductible.

Nishnabotna Valley REC

Yes, I would like to participate in the community service program Operation Round-Up®. I understand that my electric bill will be rounded up to the next highest dollar. Those funds will be used for non-profit community activities and programs.

Name			
Address			
City	State	Zip Code	
Account Number(s): _			
Signature			
Date			

By joining with other Nishnabotna Valley REC members, your small monthly donation can make a bigger impact. It's what a cooperative is all about. If you would like to sign up for this worthwhile program and help make a difference, please fill out this form and return it to our office. NVREC, POBox 714, Harlan, IA 51537

Winter heating moratorium ends April 1, 2021

If you've fallen behind on your electric bills, contact Nishnabotna Valley REC by April 1 to work out payment options.

Iowa's winter home heating moratorium protects customers certified for the Low Income Home Energy Assistance Program (LIHEAP), from electric or natural gas service disconnection from November 1 through April 1. Beginning Wednesday, April 1, 2021, energy assistance customers could be subject to service disconnection for unpaid bills, with proper notice. To avoid service disconnection, contact NVREC at 712-755-2166 if you have unpaid electrical bills.

Ask about optional services and programs designed to help those who are struggling to pay their electric bills: Payment Plans Budget Billing RECare



Spring is nearly here, and we are ready to begin outdoor projects. Please remember to dial 811 a few days prior to digging, and your call will be routed to your local One Call Center.

Tell the operator where you're planning to dig, what type of work you will be doing and your affected local utilities companies will be notified about your intent to dig. In a few days, they'll send a locator to mark the approximate location of your underground lines, pipes and cables, so you'll know what's below – and be able to dig safely.

Remember, always call 811 before you start any digging project! You'll avoid injury, expense, embarrassment – and a very inconvenient day in the dark.

For more information on your local One Call Center, or to make an online request for utilities to be marked visit www.call811.com.

Sign up for Smart Choices eNewsletter Be eligible for monthly prize drawings

Smart Choices is a monthly e-newsletter featuring tips and the latest information on energy-efficiency topics, electrical safety, and more. This is a FREE service provided by Nishnabotna Valley REC.

During 2021, we are encouraging members to sign up for this eNewsletter and be eligible to win prizes every month. By signing up for Smart Choices, you will receive a hidden code in one of the articles. Click on the hidden code, which we will provide each month as in the ads below, and one lucky member will receive a free gift throughout 2021.

March's gift will be a Hamilton Beach food processor and in April we are giving away an electric gardening tool.

Sign up today for Smart Choices at www.nvrec.com/smartchoices-sign-up or scan the QR code below with your mobile device.

If you have questions about signing up for Smart Choices, feel free to contact our office at 712-755-2166.



Three Electrifying Kitchen Appliances to Save Time and Energy

Whether your oven and stove top are powered by gas or electricity, it's no secret that they consume more energy than smaller countertop appliances, like slow cookers and toaster ovens. In addition to efficiency, smaller kitchen appliances can provide faster cooking times and less hassle with cleanup.

If you're looking for convenient cooking methods with the added bonus of energy efficiency, here are three electrifying appliances for your kitchen:

1. Air fryers are becoming increasingly popular, and consumers have a lot of good things to say about these



Air fryers circulate hot air (convection) to cook the food. This means little to no oil is required, resulting in healthier meals than those from traditional fryers. Photo Credit: Hamilton Beach

appliances. Air fryers use convection to circulate hot air and cook the food this means little to no oil is required, resulting in healthier meals than those from traditional fryers. Air fryers are fairly small,

handy little

so they won't take up much of your counter space, and with everything cooked in the fryer, cleanup will be a breeze. Air fryers are available in a variety of sizes, and prices range from \$40 to \$200+.



Electric griddles consume small amounts of energy and provide quick cooking times, so your energy bill will thank you. Photo Credit: Hamilton Beach

- 2. Electric griddles have certainly been around for a while, and they offer several benefits for any home chef (beyond bacon and eggs!). Griddles are convenient because you can cook everything at once-like a "onepan" meal, and the possibilities are endless. From fajitas to sandwiches to French toast, griddles can help satisfy any taste buds. They consume small amounts of energy and provide quick cooking times, so your energy bill will thank you. Prices and sizes for griddles vary, but you can typically find one for about \$30 at your local retail stores.
- 3. Pizza brings people together, so why not consider a pizza maker for your kitchen? These compact, countertop machines are an inexpensive alternative to a costly brick oven, and they use less energy than your traditional oven. Choose your own fresh ingredients to whip up a faster, healthier pizza at home. Plus, most pizza makers are multifunctional and can be used to cook flatbreads, frittatas, quesadillas and more. You can purchase a pizza maker for about \$30 to \$150+ online or at your local retailer.

These are just a few electrifying appliance options for your kitchen. Remember, when you're cooking a smaller meal, countertop appliances can save time and energy. To learn about additional ways to save



Pizza makers are compact and inexpensive, and they use less energy than your traditional oven. Photo Credit: Hamilton Beach

energy at home, visit https://www.nvrec. com/home-energy-audit-efficiency.

Nishnabotna Valley Rural Electric Cooperative 1317 Chatburn Avenue, PO Box 714 Harlan, Jowa 51537

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Communications	Janell Leinen

Office Hours: Mon-Fri., 7:30 am to 4:00 pm

Telephone: (712) 755-2166 or toll free (800) 234-5122 Fax (712) 755-2351



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Nishnabotna Valley Rural Electric Cooperative is an equal opportunity provider, employer, and lender.

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Nishnabotna Valley REC will provide safe and reliable electric service to its members in a valuable, sustainable, and environmentally responsible manner. PRSRT STD U.S. Postage PAID DPC

Lineman Appreciation Day, Monday, April 12, 2021

Being a lineworker takes years of specialized training, ongoing education, dedication, and equally important, a sense of service. That's why we set aside the second Monday in April to celebrate and recognize the men and women who work around the clock to keep the lights on.



New Apprentice Lineman Jarek Richardson



Jarek is an apprentice lineman who joined the NVREC family in December. He is originally from Logan, Iowa, and attended Metropolitan Community College.

Jarek has over three years experiance as a lineman and enjoys hunting and farming in his free time. Jarek is engaged to Alli Leinen from Panama.

Welcome, Jarek!

FREE Kids' Contest through April 12, 2021. Easy to Enter! Win Prizes! See details on Page 5