The tradition of adding lights to a Christmas tree has been around since 17th century Germany. These early trees, however, relied on candles for their festive glow. The risk of fire was great, making it necessary to have a bucket of water always positioned nearby. By the end of the 1800s, inventors Thomas Edison and Nikola Tesla would change all that.

Electricity was very new in the 1880s, and the "War of Currents" between Edison and Tesla was well underway. Each inventor had developed a system for delivering electric power to homes and businesses. Edison's direct current (DC) moved in one direction, but lost power quickly after leaving the generation facility. Tesla's alternating current (AC), which changed direction 60 times per second, ultimately won the battle with its ability to travel farther distances and be converted to different voltages. Within three years of the debut of Tesla's AC power system at the 1893 Chicago World's Fair, his method was already becoming the dominant type of electric distribution — which we still use today.

HOLIDAY LIGHTING SAFETY

- Use holiday lights that are approved by a nationally recognized testing organization, such as Underwriters Laboratories (UL).
- · Before hanging your lights, inspect them for frayed wires, broken sockets, or other signs of wear and tear.
- Avoid connecting more than three strings of lights together, unless the directions indicate otherwise.
- If decorating a real tree, water it every day and prevent the lights from coming into contact with tree branches.
- If choosing an artificial tree, make sure it's certified as fire resistant. Look for the UL label.
- · For outdoor decorating, only use lights and power strips that have been approved for outdoor use.

While Tesla can be credited with bringing the gift of electricity into our homes, we have Edison and his business associate and fellow inventor, Edward Hibbard Johnson, to thank for the introduction of electric Christmas tree lights. Before the War of Currents was even settled, Edison had engineered and hung a strand of small electric lights around his laboratory. In 1882, Johnson expanded the idea to promote the wonder of electric lighting. Using 80 red, white, and blue bulbs,



Dan McNaull GENERAL MANAGER

he created a dazzling holiday display featuring blinking lights on a Christmas tree that rotated on a pedestal.

Early Christmas lights were tremendously expensive a single strand at the turn of the 20th century would have cost roughly the equivalent of \$360 today — making them a luxury only for the very wealthy. Advances in lighting technology were rapid, though. By the 1920s, homes throughout the country were able to purchase a string of electric Christmas lights for just \$1.75.

Electric Christmas lights continue to bring us holiday joy to this day, and the advent of LED lighting makes them more economical than ever. While 1,000 mini incandescent bulbs require over 400 watts to operate, LEDs use less than seventy watts — a difference of five cents per hour versus under one penny. While that doesn't sound like much, over time it adds up!

As we enjoy the gift of electricity and the joy of Christmas lights this holiday season, keep the holiday lighting safety tips at left in mind. And, as we wrap up 2020 and eagerly look forward to a brighter new year, remember to also cherish the gift of family and friends.



CO-OP NEWS

2020 CHRISTMAS LIGHTING CONTEST

Show us your holiday spirit!

Firelands Electric Cooperative invites members to submit a photo of their 2020 indoor or outdoor Christmas lighting display for a chance to win a \$25 bill credit.

From Nov. 23 through Dec. 20, email a digital photo of your display to members@firelandsec.com (maximum of 10 MB). Be sure to put "Christmas Lighting Contest" in the subject line and include your name, address, and phone number. Photos may also be mailed to: Christmas Lighting Contest, Firelands Electric Co-op, P.O. Box 32, New London, OH 44851.



Submitted photos will be posted in an album on Firelands Electric's Facebook page, where the public can vote for their favorite. One winner will be chosen every Monday morning (Nov. 30, Dec. 7, Dec. 14, and Dec. 21). The photo that receives the most likes at the end of each new contest period will be declared the winner and will receive a \$25 credit on their next Firelands Electric Cooperative bill.

Limit of one entry and one prize per member address. Visit www.firelandsec.com/contests for complete rules.

2020 USO Step Up for Soldiers

The USO Step Up for Soldiers annual drive will look a bit different in 2020. Due to COVID-19 restrictions, the organization is currently unable to accept items for care packages.

This year, Firelands Electric Cooperative has again teamed up with local radio stations WLKR-FM and K96-FM to collect donations for the Bob Hope USO Lounge at Cleveland Hopkins International Airport (www.clevelandairport.com/airport/services-amenities/uso-lounge). Available to U.S. military servicemen and women and their families, the lounge provides a place to grab a snack, send email, read, or just find a quiet spot on a busy day of travel.

The cooperative will be collecting donations for the Bob Hope USO Lounge through Dec. 11. Although our lobby is currently closed to the public, items may be dropped off in the collection boxes located right inside the front entryway during regular business hours, Monday through Friday, 7:30 a.m. to 4 p.m. Suggested donation items include razors, cotton swabs, tissues, deodorant, toothpaste, eye drops, ear plugs, playing cards, chewing gum, hard candy, beef jerky, trail mix, and snack packs.

Additional information and a list of recommended donation items is available on our website at www.firelandsec.com/uso-northern-ohio, as well as on our Facebook page.

In addition, the USO is collecting monetary donations. If you are interested in making a tax-deductible contribution, please visit https://northernohio.uso.org/support/donate.



CO-OP NEWS

CARL AYERS CELEBRATES

10 YEARS OF SERVICE

This month, Carl Ayers celebrates his tenth year as District 5 trustee for Firelands Electric Cooperative. He was appointed to the board in 2010, after Linda Beck stepped down due to health issues. Carl has served as the board's secretary/treasurer since November 2017.

A life-long resident of the district, Carl grew up on the family dairy farm. Now in its seventh generation, Ayers Farms is operated by Carl; his wife, Janet; their daughter, Kathy; his brother, Steve; sister-in-law, Deb; and nephew, Jesse. The family, along with several dedicated long-time employees, oversees 690 dairy cows and nearly 2,000 acres of cropland near Perrysville.

Having lived in rural Ashland County his entire life, Carl understands the unique responsibilities of providing power to Firelands' members. To keep up to date on the latest information and issues affecting electric cooperatives, Carl invests time in state and national industry meetings and training sessions on a regular basis. "New technology brings new opportunities. As a trustee, it's my duty to look at and evaluate these opportunities — Firelands Electric's board has an obligation to seek out what is in the best interests of our members," Carl says.

The ever-evolving realm of renewable energy also poses a challenge for electric cooperatives. In order to provide members with the most reliable, affordable power possible, it's important to maintain a well-balanced approach when it comes to electric generation. "Cooperatives have to be constantly aware of the various alternative sources of energy on the horizon and keep them in mind as they plan for the future," Carl says.

Working with his fellow trustees and the dedicated, knowledgeable employees at Firelands Electric has been a highlight of Carl's time on the board. "We share a vital and rewarding responsibility to provide quality electrical power for our members every single day," he says.

Carl attended The Ohio State University in Mansfield and served in the U.S. Army in Vietnam. He is also a past member of the Green Township Zoning Board and several other civic and agricultural organizations. He and his wife are members of the First Presbyterian Church of Loudonville. Carl has an avid interest in soil conservation and water management of the rolling hills of his family's farm. When he is not farming or serving on Firelands Electric's board, Carl enjoys creating decorative items from reclaimed wood.



Carl Ayers SECRETARY/TREASURER DISTRICT 5 TRUSTEE

Merry Christmas By New Year!

As a reminder, our office will be closed

Dec. 24-25 and Jan. 1

so that our employees may enjoy the holidays with their families. As always, emergency service is available 24/7 by calling 1-800-533-8658.

CO-OP NEWS

Academic Excellence

3 noting the power of

The A Team recognizes students in grades 6-8 for their hard work and dedication in the classroom. Students who live in a home receiving its power from Firelands Electric Cooperative and who have a minimum of three A's on their most recent report card are eligible to enter.

A drawing will take place at the end of each grading period, and three students will be chosen to receive an Amazon gift card. Winners will also have their photo published in an upcoming issue of Ohio Cooperative Living magazine and be featured on the co-op's website and social media outlets.

> The next drawing is Dec. 10. Visit www.firelandsec.com/team for complete details.

Stealing electricity and meter tampering are crimes!

Stealing electricity or tampering with a meter is serious business. And it's against the law! Theft of utility electricity is a first-degree misdemeanor if the value of the stolen electricity plus any utility equipment repairs is less than \$150. It's a fourthdegree felony if more than \$150.

Tampering crimes carry similar penalties. Tampering is defined as "to interfere with, damage, or bypass a utility meter, conduit, or attachment with intent to impede the correct registration of a meter or the proper function of a conduit or attachment." Conviction of tampering can mean from six months in jail and a \$1,000 fine to up to five years and a \$2,500 fine.

Meter tampering costs all of us. And it's downright dangerous. If you witness someone tampering with an electric meter, please contact Firelands Electric Cooperative at 1-800-533-8658.



STATEMENT OF NONDISCRIMINATION

Firelands Electric Cooperative is an equal opportunity provider and employer.

If you wish to file a Civil Rights program complaint of discrimination, complete the USDA Program Discrimination Complaint Form, found online at http://www.ascr.usda.gov/complaint_filing_cust.html, at any USDA office, or call 1-866-632-9992 to request the form. You may also write a letter containing all of the information requested in the form. Send your completed complaint form or letter by mail to the U.S. Department of Agriculture, Director, Office of Adjudication, 1400 Independence Avenue, S.W., Washington, D.C. 20250-9410; by fax to 202-690-7442; or email to program.intake@usda.gov.

SAFETY

OUTAGE PLANNING



for those who rely on medical equipment

Firelands Electric Cooperative cares deeply about the health and safety of the people in our community, and we realize that some of our members' health is dependent on having a steady supply of electricity.

As much as we would like to promise that power will always be available every moment of every day, unavoidable outages due to severe weather or a nearby vehicle accident could leave you without electricity. While Firelands' crews can often restore power quickly, the amount and extent of the damage could lead to an extended outage. We encourage all of our members — especially those with specific health needs — to have an emergency plan in place in the event of a power outage.

Details to consider

- Talk with family and friends about what you would do
 if a prolonged power outage occurred. Do you have an
 alternative place to stay? Does your town or city have
 an emergency shelter?
- Many medical devices use electricity or are battery dependent, including breathing machines, power wheelchairs, oxygen, and home dialysis equipment. Read the instructions and talk to the equipment suppliers about backup power options.
- If your devices are battery operated, make sure you have extras on hand.
- Check backup batteries unused rechargeable batteries need to be charged periodically. Portable battery packs can supply hours of backup energy, but only if they are kept fully charged.
- Talk with your doctor or pharmacist about any
 medications that need to be refrigerated. If the power
 goes out, a refrigerator should hold its temperature
 for two to four hours, if you keep the door closed.
 However, it's essential that you and your family
 members know the requirements for your specific
 medications. Find out how long medication can be
 safely kept outside of the fridge and know how to
 quickly replace those that are no longer usable.

 Keep your cellphone charged so that you can call for help or be reached by someone else, in the case of an emergency.

Backup generators

Consider whether your medical needs require investing in a generator for your home. Begin by identifying your basic electrical needs in the event of a power outage and calculating the number of watts you'll need. You may want a generator that produces enough for only the necessities, or you may want one with enough power for your entire home.

Standby generators are connected directly to your home's wiring and are typically powered by natural gas or propane. They will start automatically when the power goes out. An approved generator transfer switch, which keeps your generator separated from the electric co-op's power supply, must be installed by a professional. This is both a requirement of the National Electrical Code and to ensure the safety of the co-op's linemen, your family, and your home.

Portable generators are usually gas powered, can be moved around, and must be used outside the home. Make sure to keep enough fuel on hand to last at least 24 hours.

To safely operate your generator:

- Start the generator first, before connecting appliances.
- Operate your generator once a month for at least 10 minutes to ensure that it is running properly.
- Keep the generator where it will be easily accessible and weatherproof.
- Always place a portable generator outside of your home, away from windows and doors.

If you rely on health equipment that requires electricity, it's extremely important to work with your medical provider to develop an emergency power outage plan. If you have questions regarding power outages, you can also contact Firelands Electric at 1-800-533-8658.

YOUTH PROGRAMS

Class of 2021 COLLEGE SCHOLARSHIPS

- Graduating seniors who live in a home served by Firelands Electric Cooperative are eligible to apply.
- Applicants must have a cumulative grade-point average of 3.5 or above on a 4.0 scale.
- Finalists in the Firelands Electric scholarship competition will be interviewed at the cooperative office on Monday, Feb. 15, 2021.
- Applicants will be judged on scholastic record, school and community activities, cooperative knowledge, and a personal interview.

Complete rules and applications are available at www.firelandsec.com/children-members-scholarship, by contacting Firelands Electric's member services department at 1-800-533-8658, or by visiting your high school guidance department.

Scholarships will be awarded as follows:

First place: \$1,800
Second place: \$1,600
Third place: \$1,400
Fourth place: \$1,200
Fifth place: \$1,000
Sixth place: \$750

Two Honorable Mentions: \$500 each
 Two Judges' Choice awards: \$500 each
 NEW! Technical-Trade Scholarship: \$750

The first-place winner will also be eligible to compete at the statewide competition in Columbus on April 13, where he or she can win up to \$3,800 in additional scholarship awards from Ohio's Electric Cooperatives.

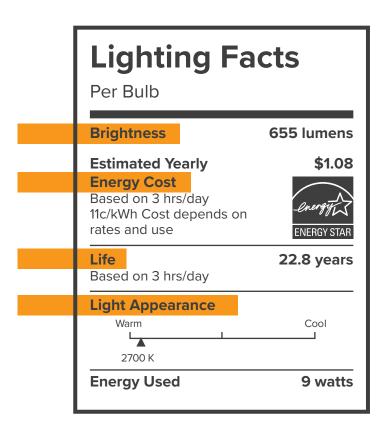


Visit www.firelandsec.com/children-members-scholarship for complete rules and applications.

ENERGY EFFICIENCY

Lighting Labels and Lingo

These days, consumers have endless options when it comes to purchasing light bulbs, but the labels can be confusing! Use the information below as a helpful guide for browsing bulbs.



Source: U.S. Department of Energy

Read the Label

Under the Energy Labeling Rule, all light bulb manufacturers are required to give consumers key, easy-to-understand information on bulb efficiency. Take advantage of the Lighting Facts label, which gives you the information you need to buy the most energy-efficient bulb to meet your lighting needs. The label includes information on the bulb's brightness (lumens), energy cost, life, light appearance (color), and energy used (wattage).

Save Energy

Bulbs are available in **many shapes and sizes** to fit your home's needs. Choosing more efficient bulbs can help reduce energy consumption and save you money!

- LEDs use 25%-30% of the energy and last eight to 25 times longer than halogen incandescent bulbs.
- Purchase ENERGY STAR-rated bulbs to maximize energy efficiency.





















COOPERATIVE UPDATE

BOARD MEETING highlights

Firelands Electric Cooperative's board of trustees met *Sept. 22 and covered the following items:*

- Board President Dan Schloemer reported that the cooperative received 32 membership applications for approval by the board.
- Director of Operations Don Englet reviewed recent activities and projects in the operations department, including the 24-Month Reliability Assessment.
- The board reviewed and approved a report from a safety meeting held Sept. 3.
- General Manager Dan McNaull reviewed options for the 2021 annual meeting of members with the board. Following discussion, the board decided to hold the annual meeting during a member appreciation day, which is planned for June 19, 2021, at the cooperative's facility.
- Director of Finance and Accounting Tabi Shepherd reviewed the July financials and reported on recent accounting and billing department activities.
- McNaull reviewed the outage report for August and the status of the current tree trimming program.

- Trustee Kevin Reidy reported on an OREC meeting he recently attended.
- McNaull reviewed the 2020 Ohio Electric Cooperatives Delivery Points Report, Dashboard Indicator Report, and CPR Special Equipment Summary with the board.
- In Director of Communications and Technology Andrea Gravenhorst's absence, McNaull reviewed a report on recent activities involving the member services and IT departments.
- McNaull reminded trustees that appointments for next year's People Fund Board are due at the Oct. 27 meeting.
- The board was advised that the NRECA Regional Meeting would take place virtually on Oct. 14.

The cooperative's next board meeting is scheduled for 7 p.m. on Tuesday, Dec. 22. If you would like to attend the next scheduled meeting, please contact the Firelands Electric office at 1-800-533-8658.

FIRELANDS ELECTRIC COOPERATIVE, INC.

OUTAGE HOTLINE

1-800-533-8658

OFFICE

103 Industrial Drive P.O. Box 32 New London, OH 44851 419-929-1571

OFFICE HOURS

Mon.-Fri. 7:30 a.m.-4 p.m. www.firelandsec.com















District 9

Rob Turk District 7

BOARD OF TRUSTEES

Dan Schloemer President, District 1

Bruce Leimbach Vice President, District 4

Carl Ayers Secretary/Treasurer, District 5

W.E. Anderson District 8

Tom Lucha District 3

Gene Lamoreaux District 2

John Martin

Kevin Reidv

Electric

COOPERATIN

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GENERAL MANAGER

Email your ideas to:

HAVE A STORY SUGGESTION?

Firelands

members@firelandsec.com

Dan McNaull