

# Spotlight

February 2024



## Horses Gallop and So Can Power Lines

*How can galloping lines impact power transmission and distribution?*

Gallop power lines are typically caused when ice and high winds occur at the same time. Freezing rain creates icicles and odd-shaped ice formations on power lines and conductors. The ice buildup changes how wind and air impact the now misshapen, ice-covered line. This change in airflow can cause the power line to start to bounce.

Once the lines get going, they can bounce and buck enough to hit another line, damage themselves enough to cause a power outage or even fall to the ground.

There is not much a power company can do to alleviate galloping lines since the wild motion is caused by Mother Nature. To help prevent this, many power lines have special mechanisms, such as twisted wire or round or angular pieces of metal, attached to the line. While they can help, sometimes they are no match for severe ice and whipping wind.

Aside from ice storms, year-round storms can cause damaging winds, which can knock down power lines and blow trees and limbs onto power lines. Keep the following safety tips in mind:

- When you see power lines on the ground, stay away, warn others to stay away and contact the electric utility or 911. Lines do not have to be arcing or sparking to be live.
- Any utility wire, including telephone or cable lines that are sagging or down, could be in contact with an energized power line, also making it dangerous. Do not try to guess the types of lines —stay away from all lines.
- Be alert to the possibility that tree limbs or debris may hide electrical hazards. Downed power lines can energize objects around them, such as chain-link fences and metal culverts.
- Keep in mind that a dead line could become energized during power restoration efforts or improper use of generators.

- Never drive over a downed line. It could start a chain reaction and cause additional poles or other equipment to collapse.
- If you are in a car that has contacted or is near a downed power line, stay in your vehicle. Wait until the utility crew has arrived and deenergized the line. Warn others not to approach the car.
- Only exit a car or cab near or on downed lines if there is a fire. If this happens, cross your arms over your chest and make a solid jump out and away from the car with both feet together. Then hop away at least 50 feet or more while continuing to keep both feet together.

For more electrical safety information, visit [SafeElectricity.org](http://SafeElectricity.org).

### ENERGY EFFICIENCY

TIP OF THE MONTH

Area rugs are an easy, cost-effective solution to cold floors. Adding area rugs to hard-surface flooring can add warmth to any room and keep your feet cozy on cold winter days.

Choose rugs made from wool or other natural fibers and plush or high-pile textures for the most insulation. Place rugs in areas where you need additional warmth, like the foot of a bed or under a coffee table. Area rugs can enhance the aesthetic of your home and keep you cozier.

A decorative graphic on the right side of the Energy Efficiency tip box shows a portion of a rug with a green and orange pattern, partially covering a white surface.

# FROM THE BOARD ROOM

## December 2023 Board Meeting Highlights



### Monthly Reports:

The Operations report included a discussion about staffing changes coming in 2024 due to retirement. A motion to approve the new 4-year

work plan was laid before the board and approved. Crews are working on day-to-day maintenance and projects. For the year, new service installations came in at 131, only down three from 2022.

The CFO brought the 2024 budget to the board for approval, as well as a change in the policy concerning landlord agreements. The November financials were discussed. It was a good month for the cooperative with kilowatt hour sales coming in 4.2% above budget.

The CEO/General Manager gave updates on grants, upcoming meetings, strategic planning and more. The Cooperative has applied for a grant in round two of the Grid Resiliency and Innovation Partnerships (GRIP) program for two tie-lines. Dunn Energy also applied for a USDA grant for upgrading the lighting in the office and shop area to LED.

### The following items were approved:

- Minutes of the November 2023 Board meeting.
- Capital credit estate payout for deceased members.
- Audit committee report of all checks, ACH payments, wire transfers, credit card statements, and investments accounts.
- 2024-2027 Work Plan.
- 2024 Budget.
- Update to Policy 203.
- RVA/PCA credit on December bills

### Other Business:

Director Zwiefelhofer reported on Dairyland Power activities for the month.

Reviewed the monthly report of new Cooperative members.

Reviewed the monthly governance video on The Future of the Electric Distribution Model.



## ICE ON POWER LINES IS A WEIGHTY SUBJECT



When it comes to getting electricity across power lines and into homes, ice can be a force to be reckoned with.



### ICE ON DISTRIBUTION LINES

Ice can quickly lead to broken power poles and other pole equipment. Ice can also make falling tree branches 30x heavier and much more likely to break power lines.

### ON A 300-FOOT SPAN OF 1-INCH-THICK POWER LINES

- 1/2 inch of ice adds 281 pounds of weight
- 1 inch of ice adds 749 pounds of weight
- 2 inches of ice adds 2,248 pounds of weight

### WHEN ICE MELTS

Melting ice can cause power outages. If ice on the bottom (neutral) line melts before the lines above, it can cause the lines to touch.

### OTHER ICE FACTS

- Damage can begin when ice exceeds 1/4 of an inch
- 1/2 inch of ice can cause a line to sag up to 12 inches
- Pressure can also be caused by a broken tree limb
- Both ice and melting ice can cause power outages

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Source: Jerri Imgarten-Whitley and Victory Electric Cooperative