



Words on the Wire

"Why was my power out?"



Alisha Anker General Manager

A Review of 2021 **Outages**

It goes without saying that Mother Nature can be a prime contributor to widespread outages and this was the case in 2021. System-wide, members experienced 87,900 consumerhours of service interruptions last year, a

total three times higher than 2020.

However, if seven days during 2021 were set aside – those being the first four days of the year (extreme ice storm) and the three days in December during the tornadic event - the number of total consumer-outage hours for 2021 would lower by 57,000 to bring 2021 statistics right on target with the outage-hours impact of 2020. No excuses being made here, but figures which indicate any electric system's reliability can be impacted in a mere seven days of 365 to account for twice the outage hours as experienced during the entire remainder of the year are staggering.

Keep that in mind as we break down the causes here.

41% Power Supplier (aka Transmission)

Taking first place again as the leading percent cause of outage hours during 2021, this category is up no matter how the data shakes out. Power Supplier outages occur when Prairie Power or Ameren IL lose a transmission line serving one of our substations, or when equipment failure occurs within the substation. Admittedly, weather impacts can cause transmission outages,

however, as a distribution provider Menard Electric does not own its substations and therefore must track and report when Power Suppliers do not or cannot deliver. During most Power Supplier outages, we have the ability to backfeed from another substation so power to our members may be restored; however not always, causing this cause to be so frustrating as it is entirely out of our control.

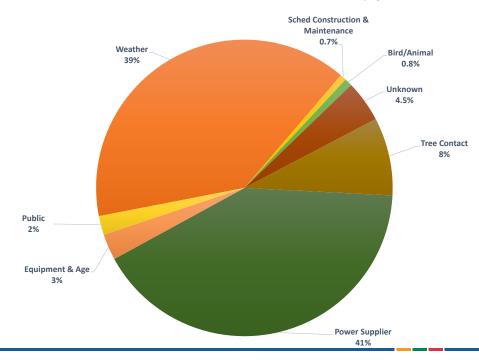
39% Weather

As mentioned, Weather came in hard on us in 2021. Weather events caused 341 actual outages, up from 91 in 2020. In hard numbers of hours, Weatherrelated outages accounted for 34,250 consumer-hours of power disruption, which is 6.5x higher than 2020 in this same category. Our electrical facilities poles, wires and structures - are built to withstand the harshness Mother Nature can bring, but service disruptions due to lightning, tornados, straight-line winds, ice and rain, and other environmental extremes are an unfortunate consequence of the electric industry.

8% Tree Contact (aka Vegetation)

Continued optimism rings as outage-hours due to Tree Contacts with our power lines stands merely mediocre among the crowd of causes of 2021 consumer-outage hours. The Co-op prides itself in its diligent right-of-way clearing, spraying and vegetation management program. While not popular, the numbers are on the decline again this year. I continue to appreciate all the patience our members have when the Line Clearance trimmers are in your neighborhoods. Thank you for helping us to create an electric system for which the Tree Contact cause continues to decline.

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4.5% Unknown

Entering the *cause* of each outage is required before a Lineman can Close an outage ticket, and a fair amount of diligence is taken to report accurately. However, many times the Linemen are simply left questioning the root cause themselves. I call these the Gremlins — tough to describe as they become the buffet from which conspiracy theorists prefer to dine. Believe it or not, these remain a mystery.

3% Equipment and Age-Related Failure

The one bright note for 2021 was the significant reduction in outages *caused* by Equipment and Age-Related Failures – so much so that these categories are re-coupled this year after being separated for 2020 reporting. True to the numbers, Equipment and Age outages were down by one-half over last year. These represent the general wear-and-tear, not to mention advanced age, of a subset of our electrical infrastructure. Each year we work to rebuild approximately 3-5% of our system's miles so it is good to see this cause reducing.

2% Public & Member Accidents

This safety-related category is one we pray will continue to reduce year over year. Down by 20% over 2020 were outage-hours related to vehicles, farm machinery, and other equipment making contact with our electric lines. Please be alert when navigating near power lines and always remember to look up as these contacts can be not only detrimental to the electric system but also to the equipment and/ or its operator.

0.8% Animals

Coming in near last again this year as a percent cause of outage hours, and in terms of actual numbers of and outages due to animals, we are happy to report those critters lost due to contact with power equipment continues to decline. Some claim the reduction in trees and vegetation near our lines helps this cause to also be reduced. I tend to agree as we all know critters like to launch themselves from branch to branch, sometimes leading to their climb-and-snoop behavior around our

"Weather came in hard on us in 2021."

electric poles and transformers. For all others, we do attempt to deter them with the installation of shields and guards, for their protection as well as that of the electrical devices.

0.7% Scheduled Construction & Maintenance

Finally, during a very small number of hours last year (~20), members were without power for the sake of scheduled construction and maintenance. We do our best to alert members ahead of time of these events so that the impact to your daily lives is not further disrupted. This cause does come with our sincere apologies and we do appreciate your patience while our crews work safely to make needed repairs.



This month we move back into the kitchen to test the energy usage of the office microwave. First patented in the 1940s, the microwave oven didn't come into affordable vogue until the 1980s. Now, these innovative appliances are a mainstay in any kitchen, so much so that

most office settings have multiple units to accommodate the train of employee lunchtime leftover reheats.

Our microwave is a Sharp 1.8-cu ft model with a 15-inch carousel turntable and 10 power levels. An LED clock/counter provides time of day and cook time indication. Plenty of one-touch buttons are available to

drive the warm-up, but let's be honest – anyone using more than the +30 Sec button is striving for Top Chef status.

Standing by on the counter looking pretty, this unit pulled 2.0 watts/hr to maintain the clock feature. Measured for a month, the minimum energy usage is therefore just shy of

1,500 watt-hours, an \$0.18/mo cost for ready convenience. During any cooking time, the power level 10 default setting drew 1,600 watts of power demand. Check the label on your model at home to determine the cook power rating for your appliance. Generally, power requirements for a microwave range from 850 to 1,800 watts.

Throughout the test month, usage of course varied based on several factors, including number of workdays, employee appetite and meal choice. At the end of the test period, this small appliance pulled 12,500 watt-hours of energy during the month, amounting to a \$1.55/mo cost.

Korner Recommendation: Every model varies of course, however when compared to the alternative re-heating option of a conventional oven which requires twice the power demand and cook times tenfold that of a microwave oven, the choice is simple ... stick with convenience and efficiency.







Five ways to save energy when working from home

1) Use a smart power strip.

Plugging in frequently used devices, like computers, monitors and routers, to a smart power strip ensures they are not drawing power when not in use.

2) Unplug your least-used equipment.

Unplug the least-used electronics and devices, such as printers and scanners, since many of them draw energy even when not in use.

3) Choose ENERGY STAR-certified office equipment.

Computers, monitors, imaging equipment and other electronics that receive the ENERGY STAR rating include power management features to make saving energy easy, and most are designed to run cooler and last longer. Look for the ENERGY STAR label when buying new.

4) Flip the switch and use natural light instead.

Open blinds, curtains and other window coverings to take advantage of natural light and additional warmth from the

5) Lower the thermostat.

Turn the thermostat down a couple degrees during the day to reduce energy use and save money. The Department of Energy recommends setting the thermostat to 68 degrees or cooler during winter months.

Five safety tips for your home workshop

1) Wear safety gear, glasses & gloves

Dress appropriately. Avoid loose clothing and never wear dangling jewelry or scarves. Roll up your sleeves or choose ones that are tight against your skin. Closed-toe shoes are a must, and steel-toed boots are recommended.

Safety glasses are necessary 100% of the time. Gloves are fine for handling materials but take them off before reaching for a belt sander or scroll saw to minimize the risk of them getting caught.

2) Observe electrical safety

Inspect all power tools and cords for loose plugs, exposed wires or worn insulation. Fires are one of the top dangers when working with electric gear, especially if you have combustible materials around, such as sawdust.

If you must use an extension cord, choose one heavy-duty (appropriately rated) cord and keep it untangled and out of the way; when you are finished, unplug everything and put it away.



3) Keep your workshop clean

Anything on the floor is a tripping hazard. Anything cluttering up a worktable introduces obstacles that can get caught in a saw or drill mechanism or block your ability to move a project safely. Byproducts of do-it-yourself work such as sawdust, cast-off nails and screws, and rags or brushes with potentially combustible or hazardous fluids on them, increase the risk of fires and projectiles.

4) Keep tools in good condition

Everything works better if you have clean, sharp and well-lubricated tools. A dull saw blade brings a much higher chance of injury than a sharp one. It is less likely to cut smoothly through the wood or other material and more likely to kick back and cut you. Dull saws, routers or drill bits also run the risk of breaking during use. Use appropriate lubrication, such as WD-40 or others specifically created for power tools.

5) Know your limits

If you have a lot of experience as a doit-yourselfer, there are projects you can tackle from memory. However, approach anything new as if you are a beginner for maximum workshop safety. Read instructions. Look up reputable guide videos to refresh skills or learn new. Recognize when you are in over your head and leave those projects to the professionals.

For more information about electrical safety, visit SafeElectricity.org.

Energy Efficiency

Tip of the Month

About 30% of a home's heating energy is lost through inefficient windows. Caulk and weatherstrip all windows to seal air leaks. When running your home heating system, lock all operable windows to ensure the tightest seal possible.

Source: Dept. of Energy





Board highlights

For full minutes visit menard.com or contact the office.

November 30, 2021

- · All Directors present; also Manager of Accounting & Information Systems Chris Hinton, Director of Accounting & Finance Brian Hartsock, General Manager Alisha Anker & Attorney Charles Smith.
- · Reviewed 2022 Financial Budget. Co-op will not request waiver for Revenue Deferral Plan 2017-2027 for 2021; co-op will request waiver under Plan for 2022.
- Adopted Resolution to re-adopt Executive Compensation Program under IRC Section 457.
- · Anker reviewed monthly & YTD financial operating report, balance sheet & financial trends. Operating margins YTD as of 10/31 were \$2,538,211 compared to \$2,031,263 last year; equity at 45.46%; 12-mo TIER 3.55 & DSC 1.96.
- · Reviewed Member Svs report w 226 generated cut-off tickets and \$359.31 in write-offs for the month.
- Reviewed Operations report w/72 incidents; longest outage 358 minutes, downed pole/ wind storm; largest outage 236 members, 12 min., scheduled to switch circuits on Athens Blktp.
- Voted to contribute \$500 to CFC Integrity Fund.
- · Board entered into executive session; reconvened.
- Next mtg 12/28/21

Congratulations

Treasurer Dennis Ryan has earned his Director Gold Credential through the National Rural Electric Cooperative Association (NRECA). According to NRECA, earning the Director Gold Credential is the hallmark of a committed electric cooperative Director. It helps drive professional self-confidence and demonstrates a Director's commitment to continuing education to members, regulators and elected officials.

General Manager Alisha Anker serves on the Board of Directors of our wholesale energy provider Prairie Power, Inc. (PPI). In December she was elected to represent PPI as their Director on the Board of Directors of the Association

of Illinois Electric Cooperatives for the term 12/21 - 07/23 (this finishes the term of the retiring PPI Director).

Forester Ross Cloninger earned his Commercial Applicators license and Engineering Manager Brady Smith, P.E., achieved his Commercial Operators license from the Illinois Department of Agriculture to use pesticides as part of their employment. The licenses permit Cloninger to be responsible for any purchasing, storage, handling, use of pesticides and supervision of licensed operators; Smith is permitted to use pesticides under an applicant's supervision. The licenses are valid for three years.

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Eliminate the worry of mail delays or forgetting to pay online or by phone by paying your bill automatically through your bank account or credit card on the 10th, 17th or 24th of each month.

Download the form at: www.menard.com/waystopay

You will still receive a bill each month telling you the amount to be deducted on your chosen date. To pay a consistent amount each month combine this option with our Budget Wise program. You can also sign up online to receive email notification when your bill is ready and to select paperless billing if desired.



See page 6 for details on our Youth to Washington Scholarships



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- One \$1,000 scholarship to a 4-year college or university
- One \$500 scholarship to a 2-year community college
- One \$500 scholarship to an accredited technical school
- One winner selected from among scholarship winners for an additional all-expenses paid trip on the Youth to Washington Tour June 17-24, 2022

Who Can Apply

- Applicants must be a high school senior or equivalent, graduating during 2022.
- Applicant's parent/legal guardian must be a Menard Electric Cooperative member with their primary residence or business served by the cooperative.
- See more details and apply at menard.com/scholarships.
- Deadline is March 1, 2022.

