

Menard Electric Cooperative

scholarships

APPLY NOW

for university, community college and vocational school scholarships.

- \$2,000 4-year college or university
- \$1,500 2-year community college
- \$1,500 vocational/technical program

Bonus

Trip to Washington, D.C.

Applicants may also apply for an all-expenses-paid trip on the Youth to Washington Tour, to travel with other Illinois students for a week-long tour of Washington, D.C., in June 2024.

Apply to be selected as an ambassador for Menard Electric!

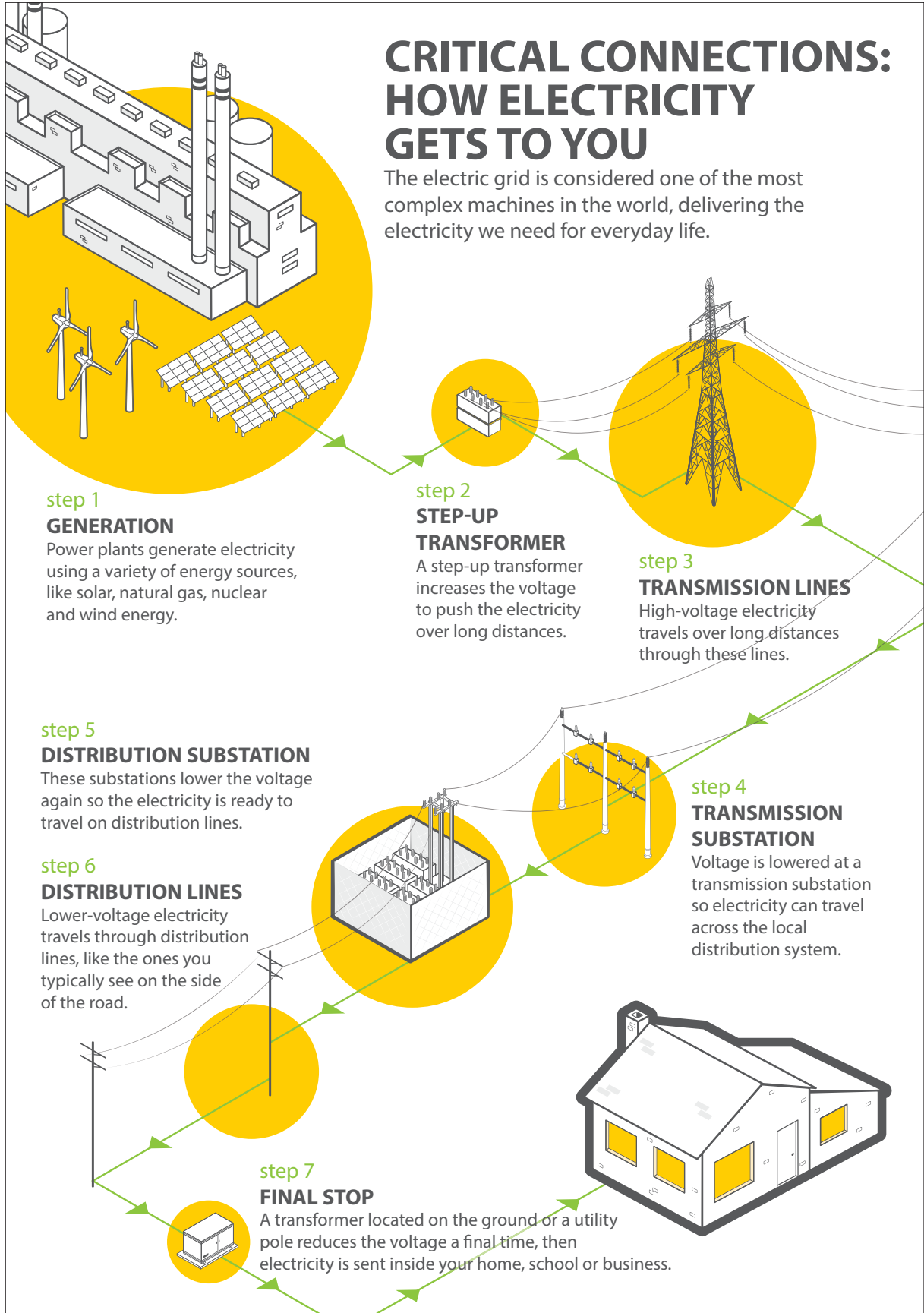


Scholarship applicants must be a high school senior or equivalent, graduating during 2024. Applicant's parent/legal guardian must be a Menard Electric Cooperative member with their primary residence or business served by the cooperative.

See more details and apply at menard.com/scholarships by Friday, March 1, 2024.

CRITICAL CONNECTIONS: HOW ELECTRICITY GETS TO YOU

The electric grid is considered one of the most complex machines in the world, delivering the electricity we need for everyday life.



Beginner's Guide to the Electric Grid

Electricity plays an essential role in everyday life

It powers our homes, offices, farms, medical centers and schools. We depend on it to keep us warm in the winter (and cool in the summer), charge our phones and binge our favorite TV shows. If the power goes out, even briefly, our lives can be disrupted.

The system that delivers your electricity is often described as the most complex machine in the world, and it's known as the electric grid.

What makes it so complex? We all use different amounts of electricity throughout the day, so the supply and demand for electricity is constantly changing. For example, we typically use more electricity in the mornings when we're starting our day, and in the evenings when we're cooking dinner and using appliances. Severe weather and other factors also impact how much electricity we need.

The challenge for electric providers is to plan for, produce and purchase enough electricity so it's available exactly when we need it. Too much or too little electricity in one place can cause problems. So, to make sure the whole system stays balanced, the electric grid must adjust in real time to dynamic changes and unforeseen events.

At its core, the electric grid is a network of power plant generators, power lines, substations, transformers, and other infrastructure that spans the entire country. But for security purposes it's not just a singular system. Instead, three regional interconnected grids comprise the nation: the Eastern Interconnection, the Western Interconnection and the Electric Reliability Council of Texas. These grids operate independently but are linked by high-voltage direct current transmission lines to allow electricity to be transferred between regions when backup support is required.

Within the three regions, seven balancing authorities known as independent system operators (ISOs) or

regional transmission organizations (RTOs) monitor the grid, signaling to power plants when more electricity is needed to maintain a balanced electrical frequency. ISOs and RTOs are like traffic controllers for electricity. Central Illinois is within the Midcontinent Independent System Operator (MISO) balancing authority. If you are curious about how the MISO region operates, check out <https://misoenergy.org> to see real time electric load information.

The journey of electricity begins at power plants

Electric generation power plants can be thought of as factories that make electricity using various energy sources like coal, natural gas, oil, nuclear fission, and renewable resources such as solar, wind and water. Across the U.S., more than 11,000 power plants deliver electricity to the grid.

Menard Electric Co-op receives power from our generation and transmission (G&T) co-op, Prairie Power, Inc. We work closely with Prairie Power to ensure our electricity purchases are at the lowest cost possible. Being part of a G&T benefits members like you by placing ownership and control in the hands of your Co-op, prioritizing affordability and reliability, supporting local economic development and fostering a sense of community. Prairie Power owns and operates several power plants, keeping good jobs alive and well in Central Illinois.

To get the electricity generated by those power plants to your Co-op and then to you, we need a transportation system.

High-voltage transmission lines act as the highways for electricity, transporting power over long distances. These lines are supported on tall power poles and by massive towers which are located across vast landscapes, connecting power plants to electric substations.

Substations are like pit stops along the highway, where the voltage of electricity is lowered for delivery to the homes, offices, farms, medical centers and schools mentioned previously. The substations play a crucial role in managing power flow and ensuring that electricity is safe for local distribution. Prairie Power owns and operates over 600 miles of high-voltage transmission lines and over 150 substations. Your Co-op takes delivery of power from its G&T at twenty distribution substations throughout the service territory.

Once the electricity voltage is reduced at the substation, it travels through circuits of distribution power lines, like the ones you typically see on the side of the road or in your neighborhood. Distribution lines exist overhead and underground. They carry electricity from substations to the end-use consumers. Distribution transformers, which look like metal buckets on the tops of power poles or large green boxes on the ground, further reduce the electricity voltage to safe levels suitable for metering purposes to serve in-home wiring, agricultural equipment, household appliances and electronic devices.

From the time it's created to the time it's used, electricity travels great distances to be available at the flip of a switch – to power everyday life. That's what makes the electric grid our nation's most complex machine.

Office closings

New Year's Day

Jan. 1, 2024

Martin Luther King Jr. Day

Jan. 15, 2024

Board highlights

Oct. 24, 2023

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

- All directors present except Michael Patrick & Steven Worner, also present General Manager & Attorney. Director Dennis Ryan appointed acting secretary.
- Tour of expanded warehouse & mechanics facilities.
- Approved FEMA Public Assistance Grant Agreement, IEMA Federal Fund Accountability & Transparency Act (FFATA) Certification, & the IEMA Public Assistance Risk Assessment documents for declared disaster DR-4728-IL.
- IDNR License Agreement approved.
- Anker reviewed September monthly & YTD financial trends. Operating margins \$3,304,077 compared to \$1,975,179 last year; equity at 42.68%, 12-mo TIER 3.45 & DSC 2.35.
- Reviewed preliminary 2024 operating budgets; specifics next month.
- Reviewed Operations report w/48 incidents; longest duration 218 min affecting 3 members due to tree/wind storm; largest # affected by single outage 112 due to equipment.
- Board approved & adopted actions taken in executive session.
- Next mtg 11/28/23.

TAKE A LOOK!

Bills now feature both names when Menard Electric memberships are joint. It is important that both names are correct. Take a look at the upper right hand corner of your bill, and if you need to make a change, please let us know.

ENERGY EFFICIENCY TIP OF THE MONTH

During winter months, ensure your home is well sealed to reduce the need for excessive heating. Seal air leaks around your home and add insulation where needed to save up to 10% on annual energy bills.

Install weather stripping on exterior doors and apply caulk around windows. Check attic insulation levels and hire a qualified contractor if additional insulation is required.



Source: energystar.gov



The danger is real:
NEVER go near
a substation

Safe
Electricity.org