GM'S REPORT

Making the solar decision

Residential solar is an investment. And just like any other type of investment, it's important to do your research before signing on that dotted line.

Where to look for help

Contacting your electric provider should be at the top of your to-do list. Firelands Electric has experienced and knowledgeable staff who can help you navigate the overwhelming amount of information — and misinformation — out there. They can also provide you with the guidelines for connecting your solar array to the electric grid, assess your home's energy needs, and calculate the production of a proposed system. Remember, we're here to help you make a well-informed decision about what's best for your particular situation.

Make sure to also choose a qualified and reputable contractor. Find one who has solid references and a history of providing quality installations. Avoid "fly by night" vendors that may offer what appears to be a bargain. Their lack of experience and support can end up costing you much more in the long run.

It's also important to use only trusted resources when poring over information online. Stick with sources like the factsheet from The Ohio State University at https://ohioline.osu.edu/factsheet/CDFS-4102 or Touchstone Energy's collection of articles on renewable energy at www.touchstoneenergy.com/technology.

Be wary of "too good to be true" promises

Be mindful of questionable statistics. For starters, some vendors may claim that your solar system will generate 100% of the electricity your home requires. This is very unlikely. A standard-sized residential system is 10 kilowatt-direct current (kW-DC), which costs between \$20,000 and \$35,000 and has the potential to generate 12,500 kilowatt-hour (kWh) per year (or about 1,000 kWh per month). Keep in mind that this figure is based on having ideal weather conditions at all times. Since the average home uses around 1,200 kWh per month, producing all of your power with a solar array is not realistic.

In addition, look closely at cost savings estimates provided by solar companies. These calculations sometimes contain inaccurate or unattainable figures. If you're seriously considering solar panels, we recommend getting quotes from at least three different suppliers. Over the years, we've seen dramatic price differences among the various providers.

Finally, the vast majority of residential solar systems in Ohio are grid-connected.

To operate, they rely on electricity provided by the power lines they are attached to. Because of this, most solar panels WILL NOT operate



Dan McNaull
GENERAL MANAGER

during a power outage and cannot be used to replace a generator as a backup source of electricity.

Assess your home's efficiency

To make sure you get the most from your solar investment, start by assessing your home. Consider the age and condition of your roof and what the cost would be to have the panels removed if you should need new roofing installed. Adding solar panels is a major project, so you don't want a roof that is in disrepair or will need replaced in just a few years.

Most importantly, make sure that your home is as efficient as possible. Would an investment in more insulation, better air-sealing, or other repairs and upgrades provide a better rate of return than solar panels? If your home's efficiency is subpar, that solar-generated energy could be literally floating out the window, under the door, or through air leaks. If you're not sure about your current efficiency, take advantage of a free energy consultation from Firelands Electric's knowledgeable energy advisors. They will be happy to assist you with pinpointing ways to use less energy.

With so many items to consider, it's important to find a partner you can rely on to make informed decisions about residential solar — and Firelands Electric Cooperative is here to help you throughout the entire process. For questions regarding residential solar, contact our energy advisors at 1-800-533-8658 or visit www.firelandsec.com/renewable-energy-resources.

INDUSTRY NEWS

THE EVER-EVOLVING WORLD OF COLOR SEIGHBLES

Purchasing an electric vehicle (EV) wasn't necessarily on the radar for Firelands Electric Cooperative member Dan Osborne. As a self-proclaimed "car guy," he has always owned traditional combustion-driven vehicles, including a Jeep and a Camaro. He's also rented a variety of other gasoline-powered cars while travelling for Schmidt Security Pro in Mansfield, where he is a project manager. When car rental companies offered promotional pricing for Teslas last year, Osborne had the opportunity to drive several different models. And ever since then, he has been hooked, even purchasing his own 2023 Tesla Model 3 in mid-December.

While EV ownership may not be growing as fast as originally predicted, Osborne and others like him still contributed to the sale of 1.1 million all-electric vehicles in 2023 — a 50% increase compared to the previous year. Top-selling EV models last year included the Tesla Model Y, Tesla Model 3, and Chevy Bolt. The Tesla Model Y also ranked No. 2 in sales among gas- and electric-powered vehicles combined.

A recent national survey revealed that 70% of U.S. consumers are considering an EV. Of these, 38% are "next-wave adopters" who plan to purchase an EV once technological updates alleviate their concerns about range, purchase price, and charging. However, the number of EVs actually purchased is dramatically lower in rural areas, mostly due to a lack of charging stations. In fact, rural drivers purchased roughly 40% fewer EVs in 2023 than urban drivers.

The cost of a new EV in the U.S. is currently about 20% more than a gasoline vehicle of similar size and with comparable features, which is equivalent to an average of \$7,200. While federal and state tax credits do exist, not all models qualify and, in the state of Ohio, registering an EV costs an additional \$200. In addition to the price, the speed of home-charging options is also a concern for many potential EV owners. A standard 120-volt household outlet will do the job, but with a one-hour charge resulting in only about five miles of range, it's not very convenient. Installing a Level 2, 240-volt charger will get you 10 to 50 miles of range in the same time frame, but can cost about \$400, plus installation. That price can increase even more if your home's electrical system requires an upgrade to handle the increased load.



EV

integrity community commitment accountability innovation

The news isn't all grim, however. Technological improvements continue to occur at a rapid pace, and charging options are growing in number and type. The number of Level 2 chargers in the U.S. that are available to the general public increased by nearly 20% last year, bringing the national total to more than 134,000. Currently, there are nearly 2,000 stations with more than 4,000 charging ports located in Ohio, making access to charging on the go more accessible than ever. Plus, with the use of apps like PlugShare, EV owners can quickly locate charging stations along their planned route. According to Osborne, with input from its users, the app even provides the cost to use each charging station and photos of its location. Users also rate the stations, as well as list nearby amenities like food options or restrooms.

While installing a home charging station is estimated to increase your electric bill by the same amount as adding a large water heater, the annual savings on fuel costs are between \$1,000 and \$1,500, depending on the make

and model of the EV. Additional savings come from the EV's lack of moving parts, which results in far fewer breakdowns, repairs, and brake changes. Osborne also points out that Tesla owners frequently get additional savings perks through the brand. These include unlimited free charging at Tesla-brand supercharger stations for the first year of ownership and lower insurance rates based on driving habits recorded by Tesla's app.

Even if you want to do your part to reduce greenhouse gas emissions, purchasing an EV and working out the logistics of daily charging can be intimidating, causing many people to hesitate making the transition to EV owner. However, with research and a little planning, it doesn't have to stop you. Osborne recommends renting different EVs, if possible, to help determine which brand and model suits you best. Plus, as the admitted "tech nerd" points out, the quick and silent acceleration, along with features like auto drive, sentry mode, and streaming capabilities found on some models, EVs are simply fun to drive.

CHARGING THE CO-OP COMMUNITY



Co-op member Dan Osborne (left) was one of the first to take advantage of an EV charger installed at New London's Amoco/ Gas Depot at the end of last year. Pictured with him are Gas Depot owner Creighton Ruggles (center) and Firelands Electric Cooperative General Manager Dan McNaull (right). The dual-port ChargePoint Level 2 charger was installed with the help of a program through Firelands Electric and Ohio's Electric Cooperatives.

As reported in the March issue of Ohio Cooperative Living, New London's Gas Depot added an EV charger to its available services in late 2023. The unit, which is a ChargePoint Level 2 charger with two ports, was installed with the help of a program in conjunction with Firelands Electric and Ohio's Electric Cooperatives (OEC). We recently caught up with Gas Depot owner Creighton Ruggles to find out whether EV owners are taking advantage of the new charger.

According to Ruggles, use of the station has continued to grow since its installation in December. March has been the busiest month thus far, with more than 15 charging sessions taking place. Each session has averaged 54 minutes in length. In addition, both March and April saw several new users.

But, what does this mean in terms of the environment? By using electricity instead of gasoline to power their vehicles, EV owners who used the charger since its installation have avoided more than 280 kilograms of greenhouse gas emissions. This is equivalent to seven trees growing for ten years!

"One of the challenges for rural EV owners is a lack of public charging stations," says Firelands' General Manager Dan McNaull. "In less than six months, the charger at Gas Depot is already seeing use. Installing this unit is nothing but positive for owners in our area and the community itself."

IN THE COMMUNITY

Dicture Snapshots from the community

> In May, Abers Towing and Crane Service helped Firelands crews remove a 5-megavolt (MV) transformer from our Fitchville substation. The unit had suffered extensive damage from a lightning strike back in March. The Fitchville substation is currently being powered by backfeeding from three of the co-op's other substations, but the damaged transformer needs to be replaced to maintain reliability. Firelands is in the process of ordering a new 10-MV transformer but this new unit, estimated to cost \$725,000, will not be ready until 2027.

> In the meantime, to ensure adequate capacity for heavier summer loads, Firelands is installing a temporary 3.75-MV portable transformer from Heartland Emergency Equipment LTD, a consortium of 13 Ohio electric cooperatives (including Firelands), which owns spare transformers for use in emergency situations such as this.

COOPERATIVE ADVOCACY AT THE STATEHOUSE

Leaders representing 17 Ohio electric cooperatives, including Firelands Electric's General Manager Dan McNaull and Director of Communications and IT Andrea Gravenhorst dedicated May 8 to meeting with influential state legislators and officials. The day's discussions focused on grid reliability, kilowatthour tax reform, and opportunities for new ERA funding aimed at promoting reliability within the energy sector.



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On April 25, Firelands Electric's General Manager Dan McNaull (left) and Journeyman Lineman Robert Shepherd (right) took part in New London Preschool's annual Touch-a-Truck day. Students from both the morning and afternoon classes were able to check out and explore one of the cooperative's large bucket trucks. A fire truck, ambulance, police cruiser, and other large equipment were also on hand for the event.

MINI MEMBERS

Firelands Electric recently teamed up with Holmes-Wayne Electric Cooperative to participate in Destination Career at the Ashland County Fairgrounds. Held on May 14, the program was part of the Junior Achievement of North Central Ohio's Inspire to Hire program. The event brought together representatives from the medical, utility, law enforcement, and construction fields, and numerous other trades for

area high school students to explore. At right, Firelands' Line Superintendent Zach Collins is pictured with one of the more than 230 participants.

View
additional
photos from
these events at:

www.flickr.com/ >- Photos/ firelandsec



CAREER EXPLORATION



The 65 pounds of pop tabs collected by cooperative members between November 2022 and April 2024 were recently dropped off at Cleveland's Ronald McDonald House Charities (RMHC). Firelands Electric's tabs were part of a 217-pound donation put together by Kirsten Leonardi (left), a senior attending EHOVE and Vermilion High School, during RMHC of Northeast Ohio's Pull Tab Palooza. Kirsten's goal is to collect a million pop tabs to donate to the RMHC, where they recycle the all-aluminum tabs and use the proceeds to purchase items for the facility's patients and their families. Visit www.firelandsec. com/ronald-mcdonald-house-charities to learn more about Firelands' pop tab initiative.

YOUTH PROGRAMS

POWERFUL LESSONS

Students get behind-the-scenes look at power plant

In April, Firelands Electric Cooperative hosted 16 students from Ashland, New London, Crestview, Loudonville, and South Central high schools on a day-long trip to the Cardinal Power Plant. Located in Brilliant, Ohio, Cardinal has invested \$1.2 billion in environmentally focused technology, making it the cleanest coal-fired power plant of its kind in the world. The plant provides electricity to nearly 400,000 homes and businesses and serves 1 million Ohioans, including the member-families of Firelands Electric Cooperative.

Organized by Ohio's Electric Cooperatives and the power plant, Cardinal Youth Day gave students the opportunity to learn about careers in the utility industry, the generation of electricity, and the technology behind Cardinal's state-of-the-art emissions controls.

Firelands' participants were selected through an application process that took place at the beginning of the year.

Applicants did not need to be members of the co-op, but simply had to attend one of the 16 high schools serving students in our territory.

To view additional photos from Cardinal Youth Day, visit www.flickr.com/photos/firelandsec/albums.

"It was interesting to learn how it takes many different types of equipment, and people to run that equipment, in order to efficiently and safely generate power."

- Mason Cowie 2024 graduate, New London HS "My favorite part was learning about the technology they use to help keep pollution down and the facility running. And the sheer size of the facility surprised me."

- Jeremy Leber
Rising senior, Crestview HS

"I want to thank all the people who came together to do this for us. It was extremely cool to see how hightech everything is. Knowing co-ops were started by farmers who didn't have the ability to get electric to their homes — that's pretty amazing.

- Gavin Hoffman
Rising senior, Ashland HS



PAYMENT OPTIONS

BALANCING YOUR BUDGET

Co-op program provides set monthly payments for qualifying members

Keeping your household budget in check is hard. Having bills that are different amounts every month can make it even more difficult. If this sounds familiar, Firelands Electric's budget billing plan could be just what you need to make your energy expenses more predictable.

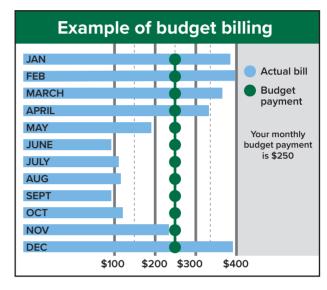
Utility bills are generally highest during cold winter months and hot summer months, often resulting in much larger balances being due. Budget billing is a free service that makes managing your cash flow — and paying these bills — easier. The program avoids drastic changes in the balance due by levelizing your bill and setting up a consistent amount to be paid each month.

Your budget amount is based on an estimated average of your home's past 12 months of electric use. In short, a year's worth of electric bills is spread out into even payments over the year. Since the amount is based on previous use, members need to have at least one year of residency listed in their name at their current address to be eligible for the program.

Firelands Electric's budget plan also has a built-in annual "catch-up" month at the end of the 12-month period. Any balance remaining on your electric account is due by Aug. 14. If you have a credit, this will be reflected on your August bill and you will not owe a payment for the month. (Please note: This is for the month of August only.) Members' accounts are reviewed quarterly and based on changes in actual electric consumption, the monthly payment amount may be adjusted to avoid having a significant balance or credit at the end of the budget year in August.

THE DEADLINE TO SIGN UP FOR FIRELANDS ELECTRIC'S NEXT BUDGET PLAN YEAR IS FRIDAY, AUG. 16.

The cooperative's budget billing option is available at no extra cost. You can also participate in automatic budget payments, where you can sign up for both auto pay and budget billing. When enrolled in both programs, the same



amount is automatically paid electronically from your bank account, debit card, or credit card every month.

In addition to budget billing, Firelands Electric has numerous other convenient options for paying your electric bill. Members can make payments by mail, at the drive-up window, or in our night drop box. You can also pay by phone 24 hours a day, seven days a week, by calling 1-800-533-8658. Other convenient payment options include:

- AUTO PAY This service enables you to have your Firelands Electric payment automatically deducted from your checking, savings, debit card, or credit card each month. You save postage costs and time, and your money stays in the bank until the 14th day of each month.
- **SMARTHUB APP** Firelands Electric's online payment system gives members the ability to schedule future payments, save payment methods, report outages, and receive important notifications regarding their accounts. Transactions can be completed on a desktop or laptop computer, or through the free mobile version anytime, anywhere.

For more information on billing options, please contact Firelands Electric Cooperative at 1-800-533-8658 or email us at billing@firelandsec.com.

COOPERATIVE UPDATE

BOARD MEETING highlights

Firelands Electric Cooperative's Board of Trustees met *April 23 and covered the following items:*

- Board President Dan Schloemer reported that the cooperative received 25 membership applications for approval by the board.
- General Manager Dan McNaull provided a recap of the co-op's April 6 annual meeting, advising that 385 members and guests were in attendance. He also reviewed voting statistics from the trustee elections.
- McNaull provided the board with the 2023 audit report, advising that it was a clean audit and that no issues were found.
- The board elected officers for the upcoming year. Dan Schloemer was re-elected as president, Bruce Leimbach as vice president, and Carl Ayers as secretary/treasurer.
- Updates were provided on the Coulter substation rebuild project, property for the proposed Hillsdale substation, and the co-op's efforts to combat cybersecurity threats.
- The board reviewed applications for the general manager position, which will become vacant upon McNaull's retirement in August.

- Director of Finance and Accounting Tabi Shepherd reviewed the March financial reports and provided an update on recent accounting and billing department activities.
- McNaull reviewed the status of the 2024 tree-trimming plan and the outage report for the past month.
- Director of Operations Don Englet reported on activities in the operations department, including an update on the efforts to replace a transformer at the Fitchville substation that was damaged by lightning earlier in the year.
- Schloemer reviewed a recent OREC meeting that he attended, including information on new transformer regulations and updates on the EPA's proposed new regulations.
- Director of Communications and Technology Andrea Gravenhorst reported on recent activities involving the member services and IT departments, including new phone payment procedures that will take effect July 1.

The cooperative's next board meeting is scheduled for Tuesday, May 28. 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

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OFFICE HOURS

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



BOARD OF TRUSTEES

Dan Schloemer President, District 1

Bruce Leimbach Vice President, District 4

Carl Ayers Secretary/Treasurer, District 5

Joe Williams District 2

Tom Lucha District 3

Kevin Reidy District 6

Greg Hess District 7

Elaine Oswald District 8

Brian Cucco District 9

GENERAL MANAGER

Dan McNaull

HAVE A STORY SUGGESTION?

Email your ideas to: members@firelandsec.com



AS A REMINDER, OUR OFFICE WILL BE **CLOSED ON THURSDAY, JULY 4.**