

Before You Install Solar on Your Home, Call Randolph EMC First

As your Trusted Energy Advisor, we want to be your resource for energy information. As residential solar generation and battery storage options become widely available, you may have questions. We created this guide to help you through the process of installing solar on your home.

Randolph EMC's Energy Advisors are available to answer questions and help you achieve your solar energy goals.



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Call Your Energy Advisors
at 800-672-8212

Connecting Your Solar System to the Grid

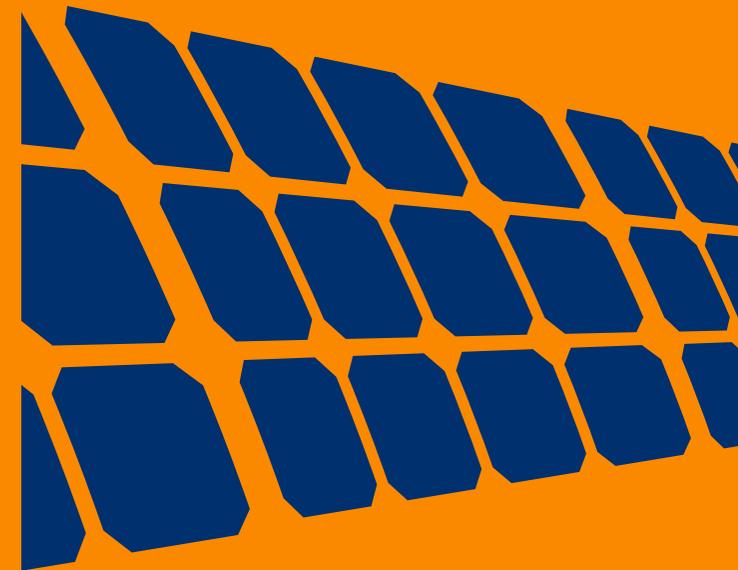
Staying connected with Randolph EMC throughout your solar installation process ensures that your photovoltaic system operates safely and meets the cooperative's required electricity generator standards.

We have designed the application process to be simple from start to finish. Below you will find a list of required items to complete your application.

Interconnection Requirements Checklist

- Interconnection Application Form
- Duplicate of NCUC Compliance
- Interconnection Agreement
- One-Line Diagram of the System
- Certificate of Insurance
- Application Fee
- City/County Inspection
- REMC On-site Inspection

A Member-Owner's Guide to Solar



Cooperative Steps to Solar Success

Step 1. Contact Randolph EMC

As an electric cooperative member-owner, it's essential to fully understand the process of connecting solar to your home and the grid. Contacting Randolph EMC at the beginning of your journey will streamline the process and help ensure you get the best return on your investment.

Step 2. Look at the energy efficiency of your home for low-cost savings

Many members look to solar energy to save money on electric bills. But remember, your most significant savings will always be in the electricity you do not use. An energy-efficient home ensures that the power you pay for makes your family comfortable. By maximizing your home's efficiency first, you will guarantee that any electricity generated is not lost through leaky ductwork, inadequate insulation, or an inefficient heating and cooling system.

Find energy efficiency tips at: RandolphEMC.com/101Ways or call one of your Randolph EMC Energy Advisors for a free home energy audit at 800-672-8212.

Step 3. Consider your home's potential solar energy production

It is essential to know how much solar can be produced at your address. The amount of power generated by a solar energy system depends on how much of the sun's energy reaches it and the size of the system itself. The National Renewable Electric Laboratory (NREL) has a great calculator you can use as a starting point to estimate your energy production: PVWatts.nrel.gov.

Some other items to consider that will impact your home's solar production:

- Nearby shade trees
- Age of your roof
- Homeowner Association (HOA) restrictions

Step 4. Consider alternative options

Purchasing and installing a solar system that you own and maintain is not your only option. If you rent or don't want to purchase a rooftop system, consider these options:

- **Energy Efficiency Upgrades to Reduce Your Bill**– As a Randolph EMC Member-Owner, you can access low-cost financing options through ElecTel Federal Cooperative Credit Union's Energy Efficient Loan. Energy Efficiency improvements may include electric heat pumps, weather stripping, electric/solar water heaters, insulation, windows, doors, and other solar or ENERGY STAR-related items. Visit ElecTel.org to learn more.
- **SunPath Community Solar®** – A community solar array offers an option beyond the traditional, on-site home installation for our member-owners. Instead, Randolph EMC members can utilize locally produced, clean energy to help offset their carbon footprint by claiming one or more panels in the SunPath system. For more information visit RandolphEMC.com/SunPath.

Step 5. Calculate how much solar electricity is needed to meet your goals

Your Randolph EMC Energy Advisors can review your past energy use to help you understand how much solar electricity is required to meet your goals. Examining how your energy use fluctuates throughout the day will help your solar contractor determine the size and type of system to fit your needs.

You should also consider any future changes to your lifestyle that might affect your energy use, such as purchasing an electric vehicle or making energy efficiency improvements to your home. Keep in mind the amount of electricity the solar system can produce generally declines over time.

Step 6. Research solar installers

The cost of solar has fallen around 20 percent over the past five years but still represents a significant investment. As with any major purchase, you will need to do plenty of research before choosing an installer. Be sure to find qualified and insured professionals with the North American Board of Certified Energy Practitioners, the standard certifier for the solar industry.

A good place to start your search is with EnergySage. EnergySage has a network of pre-screened, local installers, which you can find at EnergySage.com.

When interviewing installers, consider asking the following questions:

- Can you provide a list of references?
- What financial assumptions regarding utility costs were used in determining my payback?
- What payment options do you offer?
- Do you handle the paperwork for tax credits?
- Will my roof be strong enough to handle the weight of the solar panels?
- Do you have a builder's permit and electrician's license?
- What type of insurance do you carry?

Step 7. Find out what incentives are available

Visit the Database of State Incentives for Renewables and Efficiency at DSIREUSA.org for an updated list of state and federal incentives for renewable energy installations. As you factor incentives into your final costs, consider also purchasing your solar energy system with cash to maximize the financial benefits of installing solar panels.

Step 8. Set up a meeting with Randolph EMC and the solar installer

Let your team of energy professionals at Randolph EMC take the worry and stress out of going solar. We are happy to work with you and your solar contractor throughout the process. We can provide you with energy usage information to help size your system and provide an accurate savings evaluation. We can make sure you have all required documents and permits in place to make your system operational. We have designed the application process to be simple from start to finish. On the back of this brochure, you will find a list of required items to complete the application process.



Find more answers to solar installation questions at RandolphEMC.com/SolarFAQs