8. Know safety requirements.

Member-owners who choose to install distributed generation systems also are connected to the grid. To have reliable electric service available at times when your system isn't producing sufficient energy to meet your needs, your electric cooperative provides backup electricity. Because of this connection, distributed generation owners must work with their co-op to meet their requirements to keep the grid reliable and safe. This also will help to protect your investment so that if the grid experiences an outage, your system does not burn up trying to fulfill the electricity needs of other member-owners on the grid. All interconnection and safety requirements must be met prior to operating a distributed generation system in parallel with your co-op's electric distribution system.

This is necessary to protect other member-owners, cooperative employees, public safety personnel, and the general public from risks that could result from the improper installation of distributed generation.

9. Choose a reputable vendor.

If you have decided to install a distributed generation system, it's important to find a reputable installer who will size the system properly after you have implemented energy efficiency measures and who will give you realistic expectations. Ask for references, check online consumer reviews, and ask for third-party input from credible resources. Refer to the North American Board of Certified Energy Practitioners (NABCEP) at NABCEP.org to locate certified installers and practitioners in your area.

10. Keep thorough records.

Establish a thorough record-keeping process. Retain all data and research that you gather as well as information that is provided by your electric cooperative, vendors and other credible third-party sources. If you proceed with a distributed generation system, you will want to track and compare actual system performance with expected performance based on vendor information.

This information is brought to you by your local energy cooperative.

Allamakee-Clayton Electric Cooperative
Barron Electric Cooperative
Bayfield Electric Cooperative
Chippewa Electric Cooperative
Clark Electric Cooperative
Dunn Energy Cooperative
Eau Claire Energy Cooperative
Freeborn-Mower Cooperative Services
Hawkeye REC
Heartland Power Cooperative
Jackson Electric Cooperative
Jo-Carroll Energy
Jump River Electric Cooperative
Oakdale Electric Cooperative
People's Energy Cooperative
Pierce Pepin Cooperative Services
Polk-Burnett Electric Cooperative
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Top 10 Considerations Before Installing a Distributed Generation System

The following are 10 key things to consider before installing a solar or wind distributed generation (DG) system. As you work through the process, other items also may emerge as key items to consider. As always, make safety your top priority when considering any type of system that will be interconnected to the power grid.

1. Implement energy efficiency.

Completion of a thorough energy efficiency audit is an important precursor to considering distributed generation. Implementing energy efficiency measures in advance of installing a distributed generation system can save you money by reducing your overall energy or water consumption, which subsequently reduces the size of the distributed generation system you'll need to meet your energy needs.

2. Do your homework before you write the check.

First and foremost, if you are considering investing in a distributed generation system, talk to your electric cooperative at the outset of your process. Then, we recommend you also talk to credible, reputable sources of information who are skilled professionals and knowledgeable in distributed generation systems. Once you share some of your preliminary research with them, they can advise you of additional resources to help you understand the economics of a distributed generation system: what type of renewable energy technology would be best for your property; and financing, potential incentives, and other requirements, such as insurance.

3. Know your co-op's rate structure and interconnection and purchased power polices.

As distributed generation is becoming more common, many electric cooperatives (and utilities in general), are examining their rate structure to ensure that its rates are non-discriminatory between distributed generation member-owners and non-distributed generation member-owners. Your local not-for-profit energy provider can help you to understand the rate structure under which you will take service and what type of charges are likely to be incurred, as well as how you may be compensated for the excess energy you don't use that is generated by your distributed generation system.

4. Analyze your electric load and understand the DG system's capabilities.

Understanding your electricity use and overall energy needs is one of the first steps in the process of investigating whether a distributed generation system is a good investment for you. A thorough examination of your electricity needs helps you determine the size and type of the system you will need, and how your energy use fluctuates throughout the day, seasonally and over the year. By researching when various distributed generation systems produce peak energy, you can correlate that information with your current and expected energy use. You'll most likely still need power from a centralized energy grid, so it's important to realize that distributed generation is intended for supplemental power to meet your own energy needs.

5. Determine the costs upfront.

Most electric co-ops do not install or maintain member-owned distributed generation systems. As an individual owner of the distributed generation system, you will be responsible for the initial upfront costs to install the system as well as ongoing maintenance and repair costs. Doing your homework before investing in a system will help you to understand what costs will be involved, such as installation and interconnection costs, insurance, taxes, etc. Costs will vary if you buy a new or used system, and there are variables such as incentives and tax credits. Your research will help to determine if a distributed generation system is economical for your energy needs.

6. Research potential incentives and tax credits.

It's important to know what types of financial incentives are available to offset your investment costs. As a first step to researching incentives, we encourage you to visit with your co-op staff. Incentives often are driven by laws or policies, have expiration dates, and can vary by type and size of system, whether it's for residential or commercial/industrial use, and other factors. The Database of State Incentives for Renewables & Efficiency (www.dsireusa.org) is one source of information on incentives and policies that support renewables and energy efficiency in the U.S. The site features an interactive map, which allows users to click on a state to see a comprehensive listing of federal and state incentives, credits, exemptions, grants, loans and rebates for residential and commercial/industrial projects and programs.

7. Understand responsibilities.

Installing a distributed generation system requires that certain responsibilities are met by all parties involved with the process. For example, the owner of the distributed energy system is responsible for obtaining the proper equipment and ensuring that all requirements of the electric co-op's interconnection agreement are met, including paying any necessary costs. Local and/or state officials are responsible for conducting safety inspections, but the owner of the distributed generation system must notify the local and state officials in order to set this in motion. Once all interconnection requirements are met and the safety and integrity of the system meet all necessary criteria, then the cooperative is responsible for the final stages of interconnection. Ongoing maintenance and system repairs are the responsibility of the generation system owner.