DISTRIBUTED *GENERATION*

FREQUENTLY ASKED QUESTIONS

CENTRAL
electric cooperative

Can I install a wind generator or solar panels to my service?

Yes. Central Electric Cooperative allows, and encourages, interconnection of all types of distributed generation (DG), especially renewables like wind and solar.

What is Distributed Generation (DG)?

Distributed Generation (DG) is an all-encompassing term for any kind of power generation that occurs on a smaller scale, close to where the energy is used. This can include, but is not limited to, solar panels, wind turbines, fuel-cells, and some small geothermal plants.

What is the difference between DG and a wind/solar farm?

The main difference is that DG is small customer-owned equipment that provides power to the member in parallel with the Cooperative's system. A wind or solar farm is a collection of very big wind generators or solar panels connected to the transmission system. Central Electric Cooperative is a distribution cooperative and does not own any transmission line.

Are there any tax breaks or incentives for renewable DG systems?

Central does not currently have any rebates for renewables. Research can be done on any state and federal tax policies. DG manufactures are generally more knowledgeable about current and future tax incentives.

Will the Cooperative buy my power from a DG system?

Yes. Central buys power in 2 ways: Net Metering and Power Export. Net Metering is offered for systems 300 kW and smaller. Power Export is offered for systems 25 kW to 3 MW systems. Power Export is where Central will install a separate meter and buy back power at the wholesale rate as approved by the Generation & Transmission Cooperative. For systems above 3 MW, Member requests and/or the Member's DG facility may require connection to bulk electrical system (transmission system) and it will be considered by Central on a case-by-case basis.

What is Net Metering?

Net metering allows your electric meter to turn backwards (or count backwards with a digital meter) when your generator produces more energy than you are currently using. For example, let's say your DG system produces 1000 kWh and your residence uses 1800 kWh in a given month. When Central reads your meter, the usage will only show you used 800 kWh. Therefore, the bill you receive the following month will only be for 800 kWh. If your DG system produced your full usage of 1800 kWh, Central will only bill you the applicable rate service availability fee. In short, Net Metering means Central essentially buys back power from you at the retail rate as long as you don't produce more power than you use in a month.

Can my excess power be evaluated on a yearly basis instead of a monthly?

We currently offer only the monthly settlement option.

What voltage requirements are in place for Net Metering?

Since the Cooperative's distribution system and your DG system will operate as parallel power sources, the DG system must be the same voltage level as your service. For residential services, this is almost always single-phase 120/240V 60 Hz.

What happens if Central has a power outage?

If Central loses power, the DG system should shut down immediately. If the DG system remained in service, it could potentially back-feed and energize the Cooperative's distribution line. (This would be a very dangerous situation where linemen would expect the line to be dead and it is actually energized.)

What does Central require if I decide to install a DG system of 25 kW or less?

For DG systems that are Net Metered, all equipment is located on the member's side of the meter; therefore, Central is not directly involved in the installation. Central does have the following requirements that must be met before it allows Net Metering to occur:

1) Member must submit an application and pay the appropriate application fee.
2) Certification from manufacturer or engineering firm that equipment meets IEEE 1547, UL 1741 and other applicable codes and standards.
3) Highly recommended that member use an Oklahoma licensed electrician/electrical contractor.
4) Installations of a separate, lockable, Central accessible, safety disconnect.
5) Contract between Central and member must be executed.
6) Central inspection of the final installation.

Central requires the DG system to comply with all applicable laws, ordinances rules and regulations of any federal, county, state, and/or local authority, including, but not limited to the most recent IEEE Standard 1547 Guide for Distributed Generation Interconnection, applicable ANSI standards, including ANSI C84.1 Range A, relating to installation, safety, easements, code restrictions, operation and other matters.

What is IEEE 1547 and how do I know that my DG system meets its requirements?

IEEE 1547 is an industry wide specification that provides requirements for safe interconnection to a utility's power distribution system. The DG manufacturer should have a certification, usually from Underwriters Laboratory (UL), stating its equipment meets IEEE 1547 and other applicable codes and standards.

Why does the cooperative have so many requirements for DG interconnection?

As a rural electric cooperative, Central is your partner in providing you with safe, reliable electric service. These requirements are in place to address issues of safety, grid integrity and cost fairness. Those requirements ensure that the cooperative can (1) protect the safety of members and cooperative employees; (2) maintain the integrity of the grid; and (3) establish mechanisms to ensure each member shares appropriately in the costs.