

Frequently Asked Questions Associated with Interconnecting Distributed Generation – Solar and Wind Energy

Audience: Member-Consumers

May 2010

General Solar or Wind Energy Questions:

1. What is the cooperatives' position on solar or wind energy?

Today's changing energy landscape is bringing more attention to renewable energy resources, including solar and wind. Indiana's rural electric cooperatives support generation that is safe, reliable, cost-effective and environmentally responsible.

2. What is required by the cooperative if I install a solar or wind generator?

Cooperatives must adhere to all applicable federal and state laws when working with a member-consumer to connect solar or wind generators to the grid. When considering the installation of a generator, a strong emphasis must be placed on safety considerations for the cooperative's employees and member-consumers; protection of the cooperative's and member-consumers' delivery system; and fairness to other member-consumers of the cooperative from a cost (billing) perspective. A written agreement between the cooperative and the member-consumer has been developed to ensure proper communication and protections are in place, prior to connection of the facility to the grid. Consideration must also be given to established requirements for installation, maintenance, metering, switching and liability insurance.

3. What is required of me, as a customer, if I decide to install a solar or wind generator?

The general requirements include paying for any interconnection devices that are necessary to protect the safety of the general public and cooperative representatives and to maintain the integrity of the delivery system. The member-consumer is also expected to carry liability insurance in the amount of at least \$1 million dollars per occurrence. If needed beyond standard equipment, individuals must pay for any metering equipment used to measure kWhs delivered back to the grid by the member-consumer.

4. What is the process for installing a solar or wind turbine?

Before investing in a solar or wind generator or before connecting it to the grid, the member-consumer should meet with the appropriate Jackson County REMC representatives to gain an understanding of the expectations for both the cooperative and the member-consumer. The member-consumer and the cooperative will work together toward a written agreement, which will address these expectations as well as each party's responsibilities. The agreement will also cover the terms and conditions associated with the interconnection, including rates that the cooperative will pay the member-consumer for the power they deliver to the grid, insurance requirements and metering requirements, to name a few. This agreement must be in place before the solar or wind generator can be connected to the grid.

5. Once I purchase a solar or wind generator, how long will it take before it is generating electricity?

This will depend on several variables including meetings to reach an agreement on the terms and conditions of the interconnection, construction time, availability of necessary equipment, weather, etc. By working with Jackson County REMC, a timeline can be established taking into account the variables related to connecting to the grid.

6. Which vendors should I work with regarding my solar or wind generator?

Jackson County REMC does not endorse one particular vendor related to solar or wind generators. There are several resources on the Internet, for example, which may give you some additional background information.

7. What does a solar or wind generator cost?

Jackson County REMC does not routinely monitor the market price of solar or wind generators. However, factors such as size or capacity of the solar panel, turbine, type of turbine, manufacturer, and supply and demand for such turbines, may affect cost.

8. Why do the cooperatives have so many requirements before a solar or wind generator can be interconnected with the grid?

As a rural electric cooperative, Jackson County REMC is your partner in providing you with safe, reliable electric service. We have requirements in place to address issues of safety, grid integrity and cost fairness. Those requirements ensure that cooperatives can (1) protect the safety of member-consumers and cooperative employees (2) maintain the integrity and reliability of the grid and (3) establish mechanisms to ensure adherence to the cost causation principle.

9. Do I have to have two meters if I install a solar or wind generator?

Cooperatives require metering capability to measure electrons being drawn from the grid by the member-consumer and metering capability to measure electrons being delivered to the grid by the member-consumer. There are some situations where this can be accomplished with one meter. Other situations may necessitate two meters.

10. Is solar or wind worthwhile to put up? What are the economics of installing a solar or wind generator? Tell me why I should or shouldn't consider putting up a solar or wind generator.

Installing your own solar or wind generator is an individual decision for each member-consumer. A cooperative's role in this process is to help educate the member-consumer regarding the co-op's expectations in this process. The cooperative, together with the member-consumer, is also responsible for compiling a written agreement. First and foremost, Jackson County REMC must protect the safety of cooperative member-consumers and employees, maintain the integrity and reliability of the grid and establish mechanisms to ensure cost fairness.

The cooperative will try to help you obtain information you deem relevant to your decision-making process. However, the decision is one you must make on your own or with the assistance of consultants hired to provide you with advice.

Financial Questions:

11. What rate will the cooperative pay me for kWhs generated from my solar or wind generator?

Jackson County REMC will pay rates based on avoided cost for kWhs that the member-consumer generates and delivers to the grid. What costs does the cooperative avoid because of a consumer's excess generation? Our standard rate for qualifying facilities with a design capacity of 15 kilowatts or less is delineated in Jackson County REMC Purchase Offer 'R'.

12. Why do I have to carry \$1 million dollars of liability insurance?

It is very common for businesses and individual homeowners to carry liability policies to insure against various types of losses or claims. Conceptually and generally, customers should not view carrying liability insurance on a solar or wind generator any differently than the liability insurance that is carried to drive an automobile. Insurance on automobiles is carried to provide coverage for damages to others and their property. This basic business principle applies to carrying liability insurance for a solar or wind generator. Just as it is true for other personal property, it is up to the owner of a solar or wind generator to assume responsibility for insurance coverage.

13. Will the cooperative net meter or net bill for me?

There are many different interpretations of "net metering" or "net billing". The standard cooperative billing arrangement is for the consumer to pay for the kWhs delivered to their property based on a tariffed cost-based rate. This rate is designed to compensate the cooperative for the costs it incurs to generate the kWhs and to deliver the kWh through the transmission system and distribution system. Jackson County REMC will pay the solar or wind generator for the kWhs delivered to the grid on an avoided cost basis. Our standard rate for qualifying facilities with a design capacity of 15 kilowatts or less is delineated in Jackson County REMC Purchase Offer 'R'. The sale and purchase transactions are then periodically netted on the consumer's bill.

14. What is net metering?

Net metering is a mechanism where the kWhs being delivered to the grid by a customer are netted against those being delivered to the customer by the cooperative through the metering process. The "netting" of kWhs delivered can create a windfall since the consumer would in effect received full retail price for excess generation without providing full retail services. If customers do not pay their fair share of costs necessary to provide them with electric service then other cooperative customers must pay these costs.

15. Does the cooperative charge a different rate to solar or wind generators versus customers that do not have solar or wind?

No, Jackson County REMC does not currently have a separate price or rate schedule for co-generators, but reserves the right to create a separate price or rate based upon the unique characteristics of such member-consumers.

16. What if I have further questions or concerns?

Member-consumers are encouraged to discuss any concerns with Jackson County REMC representatives to resolve questions or issues associated with connecting a solar or wind generator to the grid. As your rural electric cooperative, it is our goal to work with our member-consumers to address questions and concerns. Your local board of directors makes decisions concerning the policies of the cooperative.