Distributed Generation and Net Metering

What you need to know about wind and solar power

Generating your own power.

There is growing interest in small-scale, home or business-based power generation such as small wind turbines and rooftop solar panels, which are referred to as distributed generation (DG). Most members with DG systems use the electric co-op's grid to buy power during times when their DG systems are not producing enough power to meet their needs and to sell power to their co-op when their systems are producing more electricity than is needed. To encourage DG systems when they first came to market, many states approved a billing system called net metering.

What is net metering?

Net metering is the metering process designed to determine the net amount of energy provided to the member by the co-op and the energy provided to the co-op by the member. Simply put, it's the difference between how much energy is used at a member's location and how much energy the DG system produces every month.

Give me an example.

Pretend you installed DG at your home and connected to the grid. IECA will net your monthly use against your monthly generation produced and delivered to the grid, measured during each billing cycle. If your monthly use is more than your monthly generation produced, you will pay the difference based on IECA's retail rate. If the generation your system produced and delivered to the grid is more than your monthly use, you will receive a credit, based on avoided cost, on your next monthly bill.

Take a look at the billing example to better understand how a member with a DG system would be billed.

What is avoided cost?

Per the Missouri Net Metering Act, any credit from generating more energy than you use will be based on the average monthly avoided cost of Associated Electric — IECA's wholesale power provider. Avoided cost is what it would cost Associated to generate, or purchase, power. The credits will never be paid in cash to a member. They may only be used as a credit for excess energy used and billed at IECA's retail rate. Under the Act, credits must be used within 12 months or they expire without compensation.

You will still have an electric bill.

Regardless of the amount generated by your DG system, you will always need to pay IECA's service availability fee. This charge helps IECA cover operating costs for things such as poles, wires, meters, and other infrastructure to keep power safe and reliable. Net metering credits are not allowed to be used to pay that charge.

How do the meters work?

Under net metering, IECA uses a single meter to measure the net of the energy used and produced. The member's generation produced will reverse the meter and reduce any energy used, thereby providing a one-for-one credit for generation used and produced. A positive reading means the member used more than they produced and a negative reading means the member produced more than they used.

Next steps?

If you are considering installing a DG system, please contact us at 866-621-3679. We will provide you with resources to help you decide if a DG system is right for you, and provide you with the proper legal information and forms you will need going forward.

Net Metering & Easy Connection Act

Missouri's Net Metering Rules and Regulations are based on legislation effective January 1, 2008. The "Net-Metering and Easy Connect Act" states that distributed generation is intended to primarily offset part or all of the customer-generator's own electrical energy requirements.

Full retail price is paid (credited) for all energy put on the grid up to the amount purchased that month from the utility. Avoided cost is paid for all energy put on the grid in excess of that month's purchase. This amount above what is purchased can remain as a credit on the customer's bill for up to a maximum of one year. That month's credit will expire if not used within one year or at the time of disconnect. All service availability fees still apply.

Net Metering Bill Example

Now that you've read all about distributed generation and net metering, let's look at a bill example.

Co-op availability fee: $44.70 ($1.49 per day)
Co-op energy rate: $0.0933 per kWh
Avoided cost: $0.025 per kWh*

**Actual avoided cost is figured monthly and will be noted on bill. Applicable tax is not taken into consideration and service availability fee is calculated as a 30 day month for this example.*

Jan — Used 1,000 kWh, no excess to the grid
Billed for 1,000 kWh use and monthly fee
=$93.30 + $44.70 fee, total bill **$138.00**

Feb — Used 1,000 kWh, 500 kWh excess to the grid
Billed for difference, 500 kWh, and monthly fee
=$46.65 + $44.70 fee, total bill **$91.35**

Mar — Used 1,000 kWh, 1,000 kWh excess to the grid
Zero kWh billed, just monthly fee
=$0 + $44.70 fee, total bill **$44.70**

Apr — Used 1,000 kWh, 1,500 kWh excess to the grid
Zero kWh billed, just monthly fee
*500 kWh credit (at avoided cost) of **$12.50***
=$0 + $44.70 fee, total bill **$44.70**

May — Used 1,000 kWh, 2,000 kWh excess to the grid
Zero kWh billed, just monthly fee
*1,000 kWh credit (at avoided cost) of **$25.00***
*plus **$12.50** (from April) = **$37.50** credit*
=$0 + $44.70 fee, total bill **$44.70**

Jun — Used 1,000 kWh, 500 kWh excess to the grid
Billed for difference, 500 kWh, and monthly fee
*Can use credit from April/May of **$37.50***
=$46.65 (less **$37.50** credit) = $9.15
+ $44.70 fee, total bill **$53.85**

Intercounty Electric Cooperative Association
Your Touchstone Energy® Cooperative
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***Note:** This is a general overview of Missouri's Net Metering Rules & Regulations. Please contact us at 866-621-3679 with specific questions. The cooperative has an application and agreement for interconnection and net metering that is required before a distributed generation system is installed.*