

Solar Power Metering

How to read and calculate your solar energy production and buy back.





YOU'RE IN POWER.

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How the solar energy flow works through your meters.

When you install a solar system at your residential home, an additional meter is required on the output of the solar system. This solar meter, Distributed Generation meter, will allow you to know exactly how much energy your system is producing.

Your Billing Meter has the ability to see bi-directional power flow, but it only sees excess generation (out-flow). When energy is generated by your solar panels, it flows into your home and is used immediately by your lights, HVAC, and other electrical appliances. If your solar panels are generating more than your home needs, the excess generation backfeeds to the grid and that excess is what the billing meter sees.

Sometimes your house consumes all the solar energy and needs more from Farmers EC, sometimes your solar system produces more than your home needs and sends the excess to the grid. This back-and-forth happens many times throughout the day. Your meters see it all and captures the readings appropriately.







Reading your Billing Meter

Once you've installed your solar system and Farmers EC has approved the installation, you will have two meters at your location. One is your "Billing Meter," which is the original meter that will continue to be used to calculate your bill. The other meter is your DG Output Meter (Distributed Generation). The DG Meter is there to measure the solar production generated on site.



Determine how much energy was sent back to the electrical grid.

- 1. Find your billing meter outside of your home.
- **2.** Look at the "REC" register on the LED display (FIGURE 1) of your billing meter and write down the number that it shows.
- **3.** After one month has passed, write down the number displayed on the "REC" register of the Billing Meter.
- 4. Subtract the number from Step 2 from the number from Step 3.
- **5.** This is the total kWh your solar system sent to the grid in that period of time.





Reading your DG Output Meter

The DG Meter (Distributed Generations) is installed so you can monitor how much solar energy was produced by your DG Solar System. Follow the steps listed below to help you calculate how much energy was produced to power your home each month.



Determine how much your solar system generated in one month.

- 1. Find your DG Output Meter (solar meter).
- **2.** Look at the "REC" register on the LED display (FIGURE 2) of your DG meter and write down the number that it shows.
- **3.** After one month has passed, write down the number displayed on the "REC" register of the DG Meter.
- 4. Subtract the number from Step 2 from the number from Step 3.
- **5.** This is the total kWh your solar system generated in that period of time.