

Being informed is what matters.

Solar energy is an exciting and valuable development; however, many people are still in the dark about the benefits of private commercial and residential solar equipment and how it interfaces with the New Braunfels Utilities (NBU) power grid. These facts are designed to shed some light on getting the most out of solar energy in the NBU service area.



Solar Energy Facts

- Photovoltaic (PV) systems are sized according to their power production capacity in terms of kilowatts (kW).
- Photovoltaic systems produce energy over time, and NBU customers are billed for energy in units of kilowatt-hours (kWh).
- Most PV panels produce direct current (DC) energy which is converted to alternating current (AC) energy by an inverter.
- Panels have different ratings. The most common are Standard Test Conditions (STC), Photovoltaics for Utility Scale Applications Test Conditions (PTC), and Nominal Operating Conditions (NOC). New Braunfels Utilities rates systems using NOC because it most closely matches normal conditions.
- Photovoltaic panels produce energy best when ambient temperatures are low and there is adequate sunlight available. When the panels get hot, or when they don't get direct sunlight, energy production capacity decreases.
- Leased generation systems and generation acquired through power purchase agreements are prohibited by law within the NBU service area.
- All PV systems and the energy produced must be owned by the customer.
- Panel orientation impairs production characteristics:
 - North-facing panels produce roughly 50 to 60 percent of the energy when compared to panels facing other directions.
 - Production of east-facing panels peak in the morning.
 - Production of south-facing panels peak mid-day, and these typically produce the most annual energy.
 - Production of west-facing panels peak in the afternoon.

New Braunfels Utilities offers **FREE** evaluations of residential and commercial solar proposals. Email COGen@nbutexas.com to learn more.



Solar FAQs

Solar energy is an exciting and valuable development; however, many people are still in the dark about the benefits of private commercial and residential solar equipment and how it interfaces with the New Braunfels Utilities (NBU) power grid. Below are answers to some of the most popular questions concerning private solar systems in the NBU service area.



Billing Questions

IS THERE A SURCHARGE FOR SOLAR SYSTEMS?

Yes, NBU assesses a surcharge of \$1.58 per kW of system size. A typical 5kW system may have a monthly surcharge of \$7.90. Additionally, there is an annual \$100 inspection fee.

WHAT HAPPENS IF I GENERATE MORE ELECTRICITY THAN I USE?

Currently, NBU will bank excess generation and apply the banked kWh on subsequent monthly bills. Customers will be notified if this billing practice changes.

WHAT IF I DECIDE TO REMOVE MY SOLAR SYSTEM?

Customers must notify NBU if their system is deactivated in order for their surcharge to be discontinued.

WHAT IS THE MINIMUM BILL AN NBU CUSTOMER COULD PAY IF SOLAR WERE INSTALLED?

The minimum bill for an NBU customer with solar installed, consists of the monthly customer charge, plus the monthly delivery point surcharge. The residential monthly charge is approximately \$17 and small commercial monthly charge is approximately \$23. The residential monthly delivery point surcharge is \$1.58 per kW of installed capacity. The monthly delivery point surcharge for small commercial customers is \$0.86 kW of installed capacity.

Metering Questions

HOW MANY METERS WILL I NEED?

Homes with PV systems are required to have two meters. One meter is a dedicated solar generation meter that measures energy generated on site. The second is a consumption meter that measures energy used on site.

HOW IS MY BILL CALCULATED?

Your bill, not including monthly surcharges, is based on energy consumption minus energy generation.

- Energy Consumption
- Energy Generation
- = Bill Total

Process Questions

WHAT STEPS DO I NEED TO TAKE IF I AM ADDING A NEW SOLAR SYSTEM OR INCREASING MY CURRENT SYSTEM'S SIZE?

Contact NBU's Electric Engineering Department at 830.608.8951 or COGen@nbutexas.com and a technician will be assigned to review your project.

WHAT IS MY MAXIMUM SOLAR SYSTEM SIZE?

Currently, PV systems interconnected with NBU distribution are limited to 999 kW for commercial.

Miscellaneous Questions

DOES NBU HAVE A LIST OF APPROVED OR PREFERRED INSTALLERS?

New Braunfels Utilities **does not** maintain a list of approved or preferred installers. We urge customers to shop around and compare offers from multiple installers.

CAN I GO OFF-GRID COMPLETELY?

New Braunfels Utilities does not prohibit any customer from disconnecting electric service.

HOW CAN I ESTIMATE THE EFFECT THAT SOLAR GENERATION WILL HAVE ON MY ELECTRIC BILL?

New Braunfels Utilities can help customers understand their billing history and estimate production for proposed generation systems. Email COGen@nbutexas.com or call 830.608.8951 for more information. The National Renewable Energy Laboratory (NREL) offers a free calculator to estimate solar costs. To access this free calculator, visit pvwatts.nrel.gov.

CAN NBU TROUBLESHOOT MY EXISTING SOLAR SYSTEM AND INVERTER?

Your manufacturer and/or a licensed electrician is the appropriate contact.

CAN I CHARGE A BATTERY WITH MY PV SYSTEM?

New Braunfels Utilities' connection policy allows for backup battery systems. Please see our Electric Specification Drawings at <https://nbutexas.com/electric-connection-policy>.

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