



The City of Monroe operates as a “Net Billing” utility for solar interconnection

Why should I install Solar Panels at my home or business? Solar panels can offset utility costs and over a period of time the investment in the solar panels may be less than the savings on the utility bill.

Who does the home or business owner purchase the Solar Panels from? The Solar Panels are purchased from a third party vendor, not the City.

Who installs the Solar Panels? The home or business owner must hire a contractor or the company the solar panels are purchased from may offer installation. The City does not install solar panels for customers.

What is the City's role in the installation of Solar Panels? The City's inspection department will inspect the installation. The City's Electric Division requires a fully executed Purchase Power Agreement and Interconnection Agreement before the solar panels are connected, since the system is interconnected to the City's electric grid.

Why does the City have an Interconnection Process? The City wants to make sure that the customer understands the conditions for interconnecting. The process also allows the City to review the planned work, this allows the City to keep its employees safe and it's equipment undamaged.

What is Net Billing? Any power generated by the participating customer's solar system is first used inside the home or business, and any excess produced power flows back to the power grid. The City will purchase this power from the customer at the rate detailed in the City's fee schedule by the Renewable Energy Credit Rate Rider (RECR-1).

How does the city determine the credit rate? The credit rate is determined based on the avoided cost to the utility. The avoided cost is the variable cost to produce energy that the utility would have spent to purchase the same amount of energy from their normal source. Fixed costs are not included in the Avoided Cost rate as they are recovered from all electric customers through Retail Rates.

For more details, please see the City of Monroe Fee Schedule, the Renewable Energy Credit Rate Rider RECR-1 or contact the City of Monroe at the number below.

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    A[Inquire] --> B[Apply, Pay Application Fee]
    B --> C[Internal Review]
    C --> D[Agreement]
    D --> E[Connect to the Grid]
  
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Inquire

Apply, Pay Application Fee

Internal Review

Agreement

Connect to the Grid

The diagram illustrates the electrical connections for a solar service disconnect switch. At the top, a **Bi-Directional kwh Meter** is shown with arrows indicating **To/From Utility** flow. The meter is divided into **Utility Owned** and **Customer Owned** sections. Below the meter is the **AC Service Entrance Panel 120/240 VAC**, which includes a **Ground** connection. The panel is connected to a **Solar Service Fused Disconnect Switch**, which in turn connects to the **AC/DC Inverter**. The inverter has terminals for **G** (Ground), **L** (Line), **N** (Neutral), and **DC**.

1. *Neutral and ground wiring not shown*
2. *System shall not energize a dead bus*
3. *Inverter/Isolation system to be UL 1741 certified and installed in accordance with the NEC*
4. *The disconnect switch to be sized per NEC. Switch shall be lockable in the open position.*

CITY OF MONROE

**FEE SCHEDULE
ORDINANCE**



ADOPTED: May 10, 2022
EFFECTIVE: July 1, 2022

RENEWABLE ENERGY CREDIT RATE RIDER Electric Rate Rider RECR-1

AVAILABILITY

This rate rider is available to customers on any City of Monroe (“City”) rate schedule who operate solar photovoltaic generating system, without battery storage, located and utilized at the customer’s primary residence or business. To qualify for this rate rider, the customer must have complied with the City’s Interconnection Standards and obtain an approved Interconnection Request Form and an approved Purchase Power Agreement. As part of the Interconnection Request Form approval process, the City retains the right to limit the number and size of renewable energy generating systems installed on the City’s System. The generating system that is in parallel operation with service from the City and located on the customer’s premises must be manufactured, installed, and operated in accordance with all governmental and industry standards, in accordance with all requirements of the local code official, and fully conform with the City’s applicable renewable energy interconnection interface criteria. Qualified customers must be generating energy for purposes of an inflow/outflow arrangement to receive credits under this rate rider. That is, the City agrees to buy energy delivered to the utility and the customer agrees to sell their energy output and associated energy from the renewable energy resource. Customers with qualified systems may also apply for NC GreenPower credits or North Carolina Municipal Power Agency 1 (“NCMPA1”) Renewable Energy Certificate (“REC”) credits.

Qualified customers must be generating energy for purposes of a “net billing” arrangement to receive credits under this rate rider.

MONTHLY CREDIT

Solar arrays below 20kW of installed capacity (DC) – Applicable to Rate (R) and (SC)*

- The customer will be billed according to their retail rate schedule on metered electricity delivered to the customer with the following modifications:
 - Additional metering costs \$2.43/month
 - Monthly standby charge per kW (DC) installed solar \$2.45
- Credited 6.18 cents per kWh for energy delivered by the customers to the City.

Solar arrays between 20kW – 100kW (DC) – Not Applicable to Rate (R) and (SC)**

- The customers will be billed according to their retail rate schedule on metered electricity delivered to the customer with an additional meter charge of \$2.43/month and credited at a fixed amount at the rates listed below:
 - On-Peak Energy \$0.0583
 - Off-Peak Energy \$0.0311

Solar arrays between 100kW – 500kW (DC) – Not Applicable to Rate (R) and (SC)**

- The customers will be billed according to their retail rate schedule on metered electricity delivered to the customer with an additional meter charge of \$2.43/month and credited at a fixed amount at the rates listed below:
 - On-Peak Energy \$0.0374
 - Off-Peak Energy \$0.0311

For larger facilities contact the electric department.

**For generation less than 20 kW the on-peak energy avoided cost credit rate can be applied to all hours.*

*** These energy credits include a capacity component.*

ON-PEAK ENERGY

On-Peak Energy shall be the metered energy during the On-Peak Energy Period of the current calendar month, whereby the On-Peak Energy Period is defined as non-holiday weekdays from 7:00 AM to 11:00 PM EST.

Effective July 1, 2022