NYS Net Metering FAQ - Commercial



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Sustainable CUNY Background

Sustainable CUNY is implementing NYSolar Smart, a strategic plan supported by the U.S. Department of Energy and New York State initiatives aimed at lowering the 'soft costs' of installing solar across the state. Under this program, Sustainable CUNY formed a NYS Net Metering & Interconnection (NMI) Working Group that includes all of New York's major electric utility companies. This FAQ was developed by the NMI Working Group to increase public understanding of net metering for non-residential electric customers of Central Hudson Gas & Electric, Consolidated Edison, PSEG Long Island, National Grid, New York State Electric & Gas, Orange & Rockland, and Rochester Gas & Electric.

How Net Metering Works

Net metering allows customers who generate their own electricity from alternative energy systems, such as solar, to transfer electricity they do not use back into the grid in exchange for credits on their utility bills.

- During the day, a solar photovoltaic (PV) system produces electricity for immediate use on the home or building.
- Any extra energy not being consumed at the site (unless the site has a battery ٠ storage system) is sent to the utility grid.
- Energy is supplemented from the utility when the solar system does not supply ٠ your entire daytime needs or at night when it is not producing.
- Any credits earned during a billing cycle, offset electricity usage at other times. ٠



Solar Electric vs Solar Thermal

Solar electric or PV systems are eligible for net metering. They produce electricity measured in kilowatt-hours or kWh, which offsets your electric bill.



Solar thermal or hot water systems

use the sun to heat water and can offset usage of your existing water heater. They are not eligible for net metering because they do not produce electricity, but they can still create savings on your energy bills.

What System Size Should I Install?

A solar contractor will size a system that will work best for your building based on your energy usage, roof or property space, financial investment, and sustainability goals. In New York, non-residential PV systems that are net metered are limited to 2 MW (megawatts) per electric meter.

It's usually not recommended to install a system that will produce more energy than your annual usage unless you are utilizing remote net metering. The New York State Energy & Research Development Authority (NYSERDA) offers incentives through the NY-Sun Incentive Program to solar customers. The program does not allow a system to be sized more than 110% of your previous 12 months usage history (per electric meter) to qualify for incentives. New construction projects without a full 12 months usage history are based on 110% of the projected kWh usage.

How do I know my 12 months usage history? Visit your electric utility's website, and create an account if you have not done so already. You will be able to access your usage history from there.

Are There Costs For Net Metering Applications?

Net metering applications are free for systems under 50 kW, and \$350 for larger systems except in PSEG-LI territory where systems 25 kW and over are \$350. A more in-depth engineering study, called a CESIR (Coordinated System Interconnection Review), may need to be conducted by the utility for large systems because utility grid upgrades could be necessary to handle energy flowing both ways.

For systems under 25 kW, any upgrade costs are capped at \$350. For systems over 25 kW, you would be required to pay for the equipment and labor costs incurred by the utility for any necessary upgrades required to interconnect the solar system. Your installer can coordinate with the utility in advance to determine any possible costs.

NYSEG

nyseq.com

For more information on solar and net metering, visit your utility's website under the distributed generation page.

Sustai	inab	le	CU	NΥ
Sustai	nahle		nv c	na

Central Hudson centralhudson.com

Con Edison

coned.com

PSEG-LI psegliny.com

National Grid nationalgridus.com Orange & Rockland **Rochester G&E** oru.com

rge.com

Non-Residential 'Commercial' Billing

The following summary applies to utility customers on a non-residential, electric rate classification. Non-residential customers are split into different rate classifications based on how much energy they use. Smaller energy users fall into the non-demand category and larger energy users are subject to demand charges. The energy usage that defines the category depends on the utility.

Non-Demand Meter Bills

<u>Small scale</u>, non-residential customers without demand charges have electric bills based on kWh consumption for the monthly or bi-monthly billing cycle.

What happens if the PV system produces <u>less</u> energy than my building uses? Your bill will look almost the same as without net metering except the kWh usage and charges will be less than you had without solar.

What happens if the PV system produces more energy than my building uses?

- ♦ KWH credits are indicated on the bill with a (—) negative sign
- These excess credits are rolled over to the next bill until they are used unless you are on remote net metering
- You only pay a basic, customer service charge for using the utility grid & billing system. The amount depends on your utility and rate classification.

Only non-residential customers in PSEG-LI territory will receive a refund check if credits remain after a year. However, it's at the 'avoided cost of power' rate, not the retail rate you are credited between other billing cycles.

Example Net Metering Bill With A Credit (actual bill will look different)

July reading (Actual)		56351		
June reading (Actual)		-56451		
Total Usage KWH 32 Days		-100	Credit	
Net Metering Summary				
Prior Credit	-50			
Actual Metered Kwh	-100			
New Cumulative Credit	-150			
Billed KWH	0			
Anniversary Month	April			
Delivery Charges				Cannot be
Basic Service/Customer Charg	ge			\$19.47 offset
Delivery Charge	0 KWH @	0.XXX	1 vary	$\underbrace{}_{.00}$ with solar
NY State Assessment	0 KWH @	0.XXX 🔇	Prices	.00
SBC/RPS Charge	0 KWH @	0.XXX	-1	.00
Government surcharges - Taxe	es			.50
Total Delivery Charges				\$19.97
Supply Charges				
Electricity Supply	0 KWH @	0.XXX		.00
Total Supply Charges				\$0 Amount
CURRENT ELECTRIC CHARGES				\$19.97 Due

Demand Meter Bills

Large scale, non-residential customers pay for consumption charges (kilowatt hours or kWh) and demand charges (kilowatts or kW). Consumption charges are based on the total number of kWh used. Depending on the utility, demand charges are often based on the highest level of electricity supplied over a 15 or 30 minute time period in the billing cycle aka 'peak demand.' However, there are additional rules that may apply like minimum demand charges, 'ratchet' clauses, or other exceptions.

Difference in Demand & Consumption



In the graph above, the building used the most energy around 1pm. The demand will be measured everyday for the entire billing cycle (month or bi-month). They will likely be charged based on the maximum energy supplied over 15 or 30 minutes in one day.

Peak demand usage is rarely reduced with solar. This is because everyday of the entire billing cycle would need to be ideal weather and shade conditions on the solar array to ensure demand would not spike on one particular 15 or 30 minute time period. In addition, some building's highest demand is at night or as the sun is going down when the solar system is not producing much electricity.

What happens if the PV system produces *more* energy than my building uses? Solar energy credits offset consumption charges first, and then can be converted to a \$ amount to offset your outstanding demand, customer, and other electric charges. In PSEG-LI territory, only kWh consumption charges can be offset with solar so this section does not apply to their customers.*

The kWh to \$ conversion is calculated by adding the total delivery and supply price per kWh line items on your bill, multiplied by the number of excess credits.

Any charges not offset by the credits must be paid. If excess credits were to remain after offsetting all charges, the credits would be converted back to kWh at the same rate and rollover month to month until used unless you are on remote net metering.

Example:

Your building uses 1,500 kWh in July and had a maximum 12 kW demand at one point in time over the month. Meanwhile, the solar system produced 2,000 kWh.

The excess 500 kWh will be exported to the utility grid. Your kWh consumption charges are \$0, but you owe money for demand charges and other billing items. The 500 kWh credit will be converted to a \$ amount to offset the other charges.

Delivery +Supply x Excess Credits = \$ credit to demand & other charges This example does not apply to PSEG-LI.*

What is Remote Net Metering?

It allows renewable energy system owners with excess net metering credits to offset other electric accounts that are also in their name. The site or electric meter the solar system is connected to is called the Host Account, and the sites receiving the excess credits are the Satellite Accounts. The Host Account's electric charges including demand costs would be offset first before being applied to Satellite Accounts.

Who is eligible? Non-residential solar, wind, & farm waste sites can be either the Host Account or the Satellite Account as well as residential farm accounts. All other residential sites can only be the Satellite Account.

What are the requirements for Remote Net Metering?

- Host and Satellite Accounts must be established in the same customer account name, utility, and NYISO zone (New York Independent System Operator)
- Satellite Accounts must be located on property owned or leased by the Host Account
- The electric accounts/meters can be located in the same building
- Each Satellite Account can only have one Host Account, and cannot also have a net metered system

How do I select Satellite Accounts? If using multiple satellite accounts, percentages and satellite accounts will be selected with the initial remote net metering application and can only be changed on January 1st of each year. Submit changes before January 1st in order for them to be applied during the upcoming year.

Example: A commercial business has 2 offices in the same name, utility, and NYISO zone. The main office installs a solar array (Host Account). In July, the PV system produces 2,000 kWh but the building only uses 1,500 kWh. The extra 500 kWh will be converted to a dollar amount to offset the main building's demand and other charges that may apply, and then will offset the regional office's electric bill (Satellite Account).



Solar & 'Time of Use' Rates

Time of Use (TOU) is a rate option available to all utility customers. Each utility has a set of peak hours such as '8am to midnight' or '9am to 9pm'; times when many customers are using a lot of energy. On TOU, kWh charges for using electricity are lower than the standard rate during off-peak hours and higher during peak hours.

The TOU rate with solar requires credits for excess electricity to stay in the period they were produced. This means credits generated during peak hours in the day cannot offset usage at night (off-peak). Because of this, TOU may not be economical.

Nonetheless, TOU with solar could be a financially viable option in certain circumstances, such as, if the solar array offsets most, but not all, peak usage. In this scenario, the building would: (1) receive low off-peak rates, (2) not have high usage from the utility during peak hours, and (3) not have too many credits that can't be used throughout the year. Please research your utility's peak hours, TOU rules, and carefully assess your usage patterns before selecting this rate option.

NYS Net Metering Laws

Investor owned utilities (IOU) are regulated by the Public Service Commission & the NY Standardized Interconnection Requirements. For more info on net metering requirements visit: www.dps.state.ny.us/distgen.htm



Steps To Going Solar

- Contact a solar installer Receive at least a few different quotes to compare pricing, customer references, and financing options. For a list of participating NY-Sun Incentive Installers, go to: <u>ny-sun.ny.gov/py-installers</u>
- 2) Sign utility interconnection (net metering) paperwork Your installer will help determine what paperwork needs to be signed to notify your utility and local building department you are going solar. It is important to receive approval from the utility before installing the solar system to understand if there will be utility grid upgrades and additional costs.
- 3) **Utility installs a net meter -** Your electric meter will be switched to measure energy flowing both ways. This occurs within 2-4 weeks of the net metering application being approved, and can happen before the solar installation.



- 4) After the solar install Please wait for interconnection approval from your utility to turn on the solar system. This is usually a letter or an email. Before your utility can grant approval, your installer must first obtain all jurisdictional permits and inspections, and provide the utility with a completed verification test form. Typically, the utility will witness the installer perform an on-site verification test for systems 25kW and greater.
- 5) Turn on the solar system and generate renewable energy!

Please be aware meter readings are sometimes estimated when the utility cannot access the meter. Energy savings may not appear until meters can be read.

Disclaimer

This document is a *summary* of net metering policies for electric customers of Central Hudson Gas & Electric, Consolidated Edison, PSEG Long Island, National Grid, New York State Electric & Gas, Orange & Rockland, and Rochester Gas & Electric. It does not apply to ESCO customers with two separate bills or municipal utilities. It does apply to ESCO customers with a single, consolidated utility & ESCO bill. For New York Power Authority (NYPA) customers, the applicable net metering policies are based upon the rules of the utility whose distribution network is being utilized (i.e. Con Edison policies apply for NYC & Westchester while municipal utility policies apply for locally managed electricity providers).

Please check your utility's tariffs for specific net metering rules and rates. Effective tariffs can be found at <u>www.dps.ny.gov/tariffs.</u>