

# Understanding Your Electric Bill with Solar Net Metering

Now that Your Solar Panels are Installed



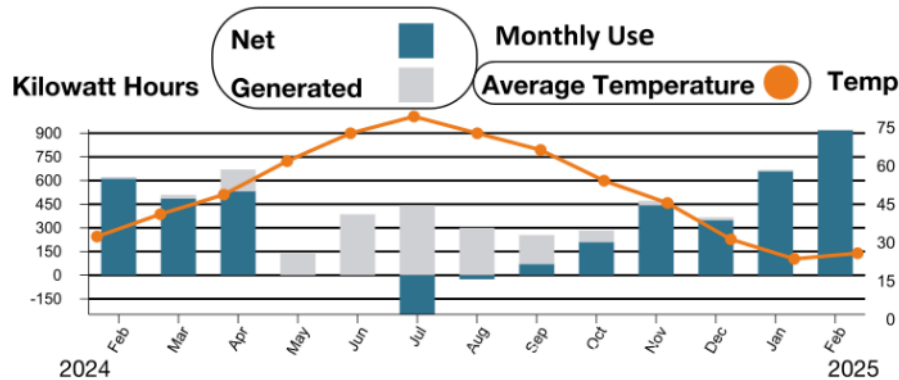
**CONCORD** MUNICIPAL  
LIGHT PLANT

ELECTRIC | BROADBAND | ENERGY MANAGEMENT

# How Solar Reduces Your Billed Electric Usage (kWh)

(Example #1)

Meter #	Rate Schedule	Services		Days	Readings		Meter Multiplier	kWh Usage
		From	To		Previous	Present		
351016915	NETC	01/01/2025	02/01/2025	31	2917	3841	1.0	924 <b>A</b>
351016915	NETG	01/01/2025	02/01/2025	31	1576	1582	1.0	6 <b>B</b>
351016915	RES	01/01/2025	02/01/2025	31	1994	2912	1.0	918 <b>C</b>



Power Cost Factor	918 kWh @ -0.004	-\$3.67
Service Charge		\$20.00
Net Metering Distribution		\$7.70
Underground Surcharge		\$3.25
Capacity And Transmission	657 kWh @ 0.05619	\$36.92
	178 kWh @ 0.06928	\$12.33
	83 kWh @ 0.09445	\$7.84
Distribution Charge	918 kWh @ 0.06561	\$60.23
Energy Charge	918 kWh @ 0.08393	\$77.05
NYPA Power Cost Adjustment	75 kWh @ -0.025	-\$1.88
	843 kWh @ 0.00	\$0.00
<b>Electric Service Subtotal</b>		<b>\$219.77</b>

**Line A:** Amount of electricity CMLP delivered to the customer that month **924 kWh**

**Line B:** Amount of excess electricity generated by solar panels, not used by the customer at that time, and therefore sent back out the grid to CMLP\* **6 kWh**

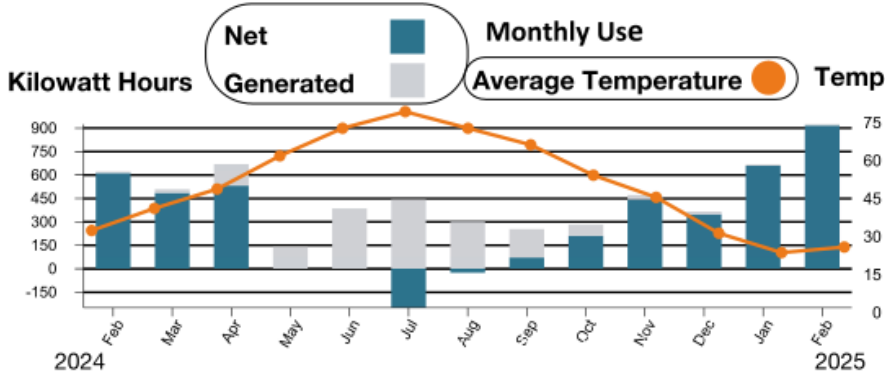
**Line C:** Net usage billed = line A minus line B **924 kWh – 6 kWh = 918 kWh**

\*NOTE: CMLP's net meter doesn't interface with the solar array meter your solar installer provided; we don't know how much solar generation was produced and can't measure the total amount of electricity used. See slide 7 below to learn how to calculate how much electricity you've generated and used.

(Example #1)

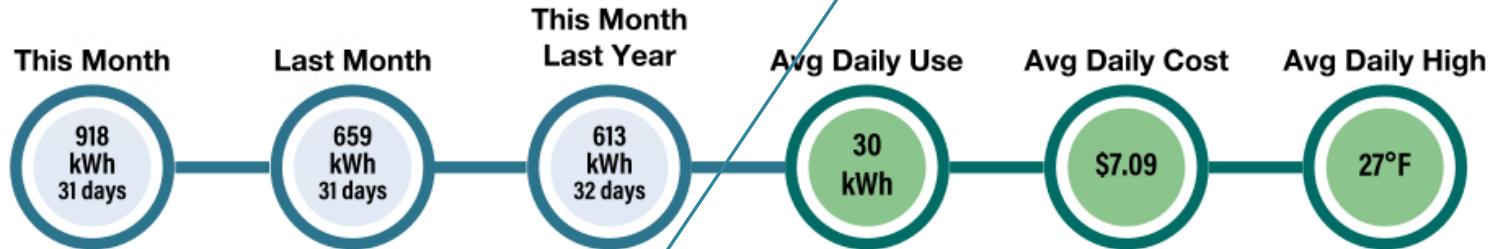
# Solar Net Meter Charge

Meter #	Rate Schedule	Services		Days	Readings		Meter Multiplier	kWh Usage
		From	To		Previous	Present		
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Power Cost Factor	918 kWh @ -0.004	-\$3.67
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<b>Electric Service Subtotal</b>		<b>\$219.77</b>

## Energy Usage Comparison



All solar net metering customers are assessed a monthly **Net Metering Distribution Charge** based on the size of their solar PV system.

See slide 6 below for more information.

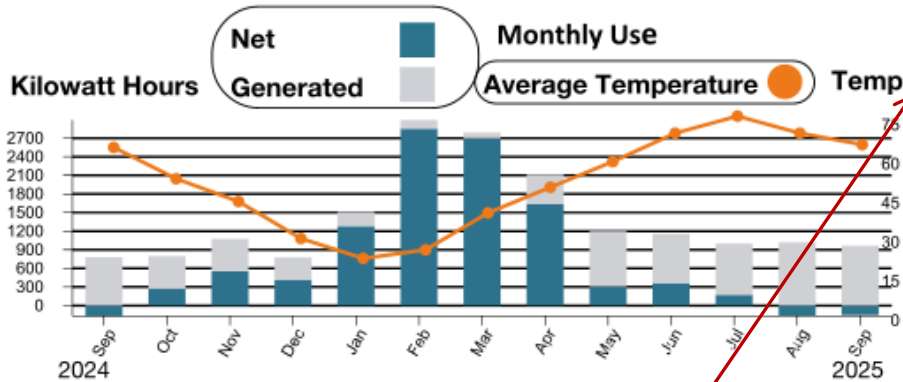
(Example #2)

# Solar Net Meter Credit

Electric

Description: ELE Solar

Meter #	Rate Schedule	Services		Days	Readings		Meter Multiplier	kWh Usage
		From	To		Previous	Present		
351012579	NETC	08/01/2025	09/01/2025	31	14768	15579	1.0	811
351012579	NETG	08/01/2025	09/01/2025	31	4755	5720	1.0	965
351012579	RES	08/01/2025	09/01/2025	31	9575	9421	1.0	-154



Service Charge	\$20.00
Net Metering Distribution	\$16.06
Underground Surcharge	\$0.45
<b>Excess Generation Credit</b>	<b>-\$5.74</b>
<b>Electric Service Subtotal</b>	<b>\$30.77</b>

(See slides 3 & 6 for more information about the Net Metering Distribution charge)

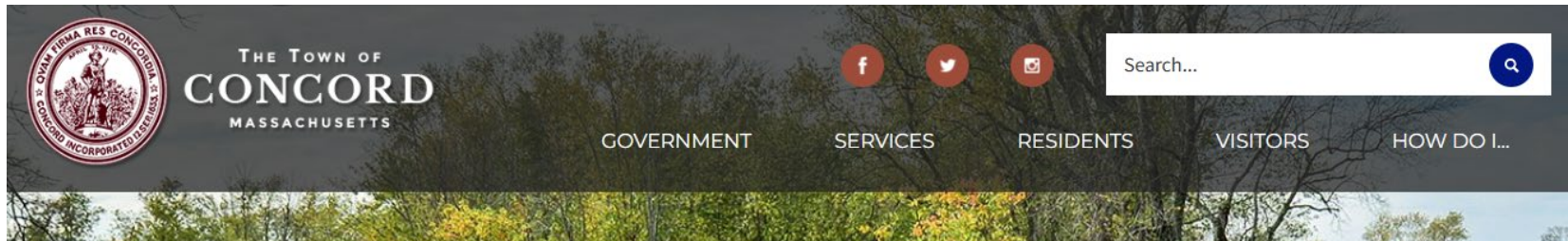
**Net Metering Credit:** This home generated & sold back to the grid more electricity than was needed from CMLP. The resulting negative usage, shown on the bill as ‘Excess Generation’, is their Solar Net Metering Credit.  $-154 \text{ kWh} * (3.725\text{¢} / \text{kWh}) = -\$5.74$

The value per kWh of this excess energy varies as described in the Residential Net Metering with Banking rate. You can find the value of each month’s credit here:

[www.concordma.gov/536/Solar-Net-Metering-Credit](http://www.concordma.gov/536/Solar-Net-Metering-Credit).

# Historic Net Meter Rates

[www.concordma.gov](http://www.concordma.gov)



Home > Government > Departments > Municipal Light Plant > Electric Service > Rates > Solar Net Metering Credit



Solar Net Metering Credit

New York Power Authority Credit

Power Cost Adjustment

2025 CMLP Electric Rates Narrative

2024 CMLP Electric Rates Narrative

2023 CMLP Electric Rates Narrative

2022 CMLP Electric Rates Narrative

Understanding Your Residential Electric Bill

2020 Cost of Service Study

Time-of-Day Electric Rates

Home > Government > Departments > Municipal Light Plant > Electric Services > Rates > Solar Net Metering Credit

## Solar Net Metering Credit

The net metering credit is based on the average Real Time Independent System Operator-New England (ISO-NE) price for all hours in the month prior to the current billing month between 9 a.m. - 4 p.m. The credit amount for energy generated that exceeds a customer's purchases from CMLP is a variable amount as described in the Residential Net Metering with Banking rate.

ISO-NE oversees the constant availability of electricity in New England by ensuring the day-to-day operation of New England's bulk power generation and transmission system, ensuring the fair administration of the region's wholesale electricity markets, and managing regional planning.

### Solar Photovoltaic Rebate Programs

CMLP offers rebates for solar photovoltaic installations. Read more for information about our [Solar Photovoltaic Rebate Program](#) for your home or business.

Net credit per Kilowatt Hour	Month Kilowatt Hours sold to CMLP	Month customer's bill rendered
\$0.03725	August 2025	September 2025

# Net Metering Distribution Charges

All solar net meter customers are assessed a monthly **Net Metering Distribution Charge** based on the installed generating capacity of their solar PV array

Find more information about CMLP's net metering rider rate and the net metering distribution charges at: [www.concordma.gov/DocumentCenter/Home/View/1205](http://www.concordma.gov/DocumentCenter/Home/View/1205)

Installed Generation Capacity:		Charge / mo.
Equal or Greater Than	and Less Than	
2 kW (AC)	4 kW (AC)	\$4.18 / mo.
<b>Ex. #1</b> 4 kW (AC)	7 kW (AC)	\$7.70 / mo.
7 kW (AC)	10 kW (AC)	\$11.88 / mo.
<b>Ex. #2</b> 10 kW (AC)	13 kW (AC)	\$16.06 / mo.
13 kW (AC)	16 kW (AC)	\$20.24 / mo.
16 kW (AC)	19 kW (AC)	\$24.42 / mo.
19 kW (AC)	22 kW (AC)	\$28.71 / mo.
22 kW (AC)	25 kW (AC)	\$32.89 / mo.
25 kW (AC)	28 kW (AC)	\$37.07 / mo.
28 kW (AC)	31 kW (AC)	\$41.25 / mo.
31 kW (AC)	34 kW (AC)	\$45.43 / mo.
34 kW (AC)	37 kW (AC)	\$49.17 / mo.
37 kW (AC)	40 kW (AC)	\$53.79 / mo.
40 kW (AC)	46 kW (AC)	\$62.26 / mo.
46 kW (AC)	58 kW (AC)	\$78.98 / mo.
58 kW (AC)	82 kW (AC)	\$112.53 / mo.
82 kW (AC)	130 kW (AC)	\$179.74 / mo.
130 kW (AC)	167 kW (AC)	\$231.44 / mo.

# How Much Electricity Did You Use?

To figure out how much electricity you used in a month (ii):

1. Take your monthly solar output reading from your solar production meter or inverter web portal (the gross reading from your array) (i)  
(Note: CMLP doesn't know this number, so it's not reflected on your bill)
2. Add the electricity delivered from CMLP (A on the sample bill)
3. Subtract the electricity sold to CMLP (B on the sample bill, gross)



## Example #1

..... kWh Gross from Solar Meter (i)  
+ 924 kWh CMLP → Home (A)  
- 6 kWh Home → CMLP (B)  
= ..... Total kWh Used = Home Load (ii)

## Example #2

..... kWh Gross from Solar Meter (i)  
+ 811 kWh CMLP → Home (A)  
- 965 kWh Home → CMLP (B)  
= ..... Total kWh Used = Home Load (ii)

# CMLP's Basic Residential Service Rate

To learn more about the Residential Service rate for Concord residents:

[www.concordma.gov/DocumentCenter/Home/View/1199](http://www.concordma.gov/DocumentCenter/Home/View/1199)

1. Both the Energy (8.393¢ / kWh) and Distribution (6.561¢ / kWh) charges are calculated based on kWh used and are not affected by CMLP's tiered rate structure.

2. Capacity and transmission charges are broken down into three tiers depending on monthly electricity usage:

- a) First 657 kWh: 5.619¢ / kWh
- b) Next 178 kWh: 6.928¢ / kWh
- c) Any use above 835 kWh: 9.445¢ / kWh

### Example #1

- a) 657 kWh
- b) 178 kWh
- c) 83 kWh

### Ex. #1 if no solar

- a) 657 kWh
- b) 178 kWh
- c) 89 kWh

### Example #2

- a) 0 kWh
- b) 0 kWh
- c) 0 kWh

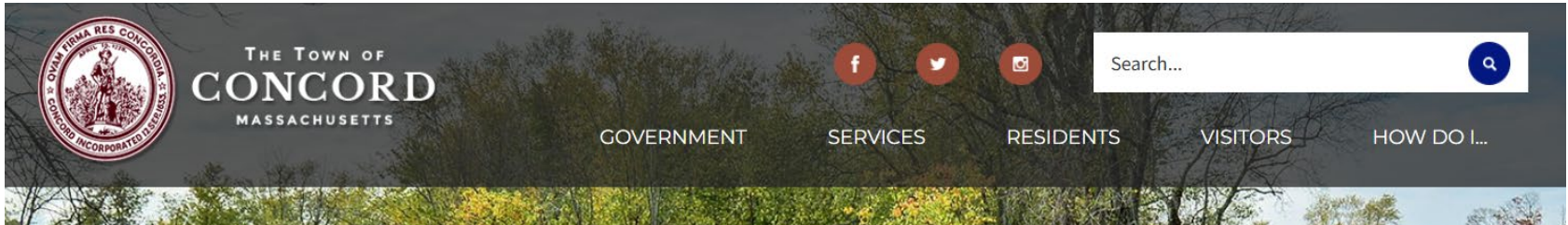
3. Combined energy, distribution, and capacity and transmission charges broken down into three tiers depending on electricity usage are:

- a) First 657 kWh:  $(8.4¢ + 6.6¢ + 5.6¢) / \text{kWh} = 20.6¢ / \text{kWh}$
- b) Next 178 kWh:  $(8.4¢ + 6.6¢ + 6.9¢) / \text{kWh} = 21.9¢ / \text{kWh}$
- c) Any use above 835 kWh:  $(8.4¢ + 6.6¢ + 9.4¢) / \text{kWh} = 24.4¢ / \text{kWh}$



# Install Solar in Concord

[www.concordma.gov](http://www.concordma.gov)



Home > Government > Departments > Municipal Light Plant > Energy Saving Rebates and Services > Your Home > Rebates for Your Home > Solar Panels



[Lease/Buy/Choose an Installer](#)

[How to Read Your Solar Net Metered Bill](#)

[Solar Net Metering Credit - Historic Rates](#)

[CMLP's Current Service Rates](#)

[What Are RECs?](#)

[Combining Solar with Electric Vehicles](#)

[Map of Concord Solar Arrays](#)

Home > Government > Departments > Municipal Light Plant > Energy Saving Rebates and Services > Your Home > Rebates for your Home > Solar Panels

## Solar Panels

(last update: 8/19/25)

### SOLAR in Concord - Overview

18 [slides](#) on:

- Financial, environmental, & energy independence benefits of solar
- Siting decisions and, if you move ahead, steps in the process
- Ways to learn, do, give, and ask more on these topics

### Rebate

**CMLP Solar PV Rebate:** \$625 per kW(DC) of installed solar PV generation capacity, capped at \$3,125 per service address. Residential installations up to 167 kW(AC) and commercial installations of any size are eligible. There is no expiration date anticipated for this rebate.

### Steps to Install Solar

A. Explore Options & Sign a Contract:

# Questions?

For more information about CMLP's solar program or other questions, please contact:

Pamela Cady  
Energy Efficiency & Electrification Specialist  
CMLP  
1175 Elm Street  
Concord, MA 01742  
(978) 318-3149 [pcady@concordma.gov](mailto:pcady@concordma.gov)



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# Steps to Installing Solar on Your Property

Property owner finds a solar installer to work with  
[www.concordma.gov/1795/LeaseBuyChoose-an-Installer](http://www.concordma.gov/1795/LeaseBuyChoose-an-Installer)

Start!  
→

Installer gathers all needed paperwork  
[www.concordma.gov/2029/Solar-Panels](http://www.concordma.gov/2029/Solar-Panels)

Step 1  
→

All solar paperwork bundled & sent to CMLP  
[pcady@concordma.gov](mailto:pcady@concordma.gov)

Step 2  
→

CMLP Engineer gives Approval to Install \*

Occasionally a site visit is necessary

Step 3  
→

CMLP Director gives Approval to Install

Step 4  
→

CMLP notifies installer & property owner of Approval to Install via email

Step 5  
→

Panels Installed on property

Step 6  
→

Town Building Dept. Electrical Inspector visits site for wiring approval

Step 7  
→

CMLP Electrician installs send & receive meter

Meter installed next to solar meter

Brief power outage usually required

Property owner not needed on site

Step 8  
→

Engineer gives Approval to Operate\*\*

on site visit not usually needed

CMLP notifies installer & property owner of Approval to Operate via email

Step 9  
→

Property owner begins generating their own power!

Finish!  
→

Property owner receives one-time CMLP rebate in approximately 4-6 weeks

Customers in good standing may choose check  
All customers may choose bill credit

### \* Approval to Install:

Please be aware that all PV systems should not be installed on the property until CMLP has sent the final approval to install documents via email. CMLP requires this step because:

- It financially protects the homeowner so they don't have to pay extra money to change, for instance, the location of the meter if it is not within the required distance to the utility disconnect
- CMLP will confirm that nearby cables and transformers on our electric grid will not be overloaded by the addition of the PV system
- CMLP will assure that our electric grid lines will remain balanced with the increase in electricity they will carry during sunlight hours

### \*\* Approval to Operate:

Please be aware that all PV systems should not be switched on until CMLP has sent the final approval to operate documents via email. CMLP requires this step because:

- It is a potential operational safety hazard for our line crews working on our electric grid if the PV system begins operating before we are aware of it
- If a PV system begins operating before we install the net meter, any power generated by the system with the old meter in place is automatically calculated as energy CMLP sent to the customer rather than vice-versa (because the old meter can only run in one direction). This leads to billing problems.