

4/9/2025

The Concord Municipal Light Plant Net Metering Policy is under development. For information purposes, you can find the old policy below. The new policy will be available soon.

You can find more information by contacting Customer Service at (978) 318-3101.

SUPERSEDED
Effective 4/9/2025



**CONCORD
MUNICIPAL
LIGHT PLANT**

ELECTRIC | BROADBAND | ENERGY MANAGEMENT

**Residential Solar PV
Net Metering Policy
Acknowledgement**

Definition

"Net metering" means a system of metering electricity in which the Concord Municipal Light Plant (CMLP) provides credits on the Customer's bill for electricity generated on the Customer's property which migrates to (i.e. is received by) the CMLP distribution system when generation is greater than consumption at the Customer location.

Applicability

This policy is for customers with residential electric accounts installing solar arrays. CMLP offers net metering to customers generating electricity on the Customer's side of the meter provided that the Customer's generating capacity does not exceed 167 kW (AC).

CMLP calculates the solar PV capacity in kW (AC) as follows:

$$((\# \text{ of panels}) * (\text{PTC per CA Energy Commission})) / (1,000 \text{ W} / \text{kW}) = \text{ ____ kW (AC)}$$

Source data for California Energy Commission's PTC number is here:

<https://solarequipment.energy.ca.gov/Home/PVModuleList>

Engineering Review

Before net metering will be permitted, installations are subject to review by CMLP's engineering division to ensure that the amount of electricity projected to migrate to the distribution system does not exceed the capacity of the transformer serving the Customer or adversely impact CMLP's distribution system in any other way.

Energy Storage System Requirements

CMLP Paired Equipment Requirements		
For NEW solar installations bringing site's TOTAL solar capacity in kW (AC) to:		
0	25	50
← ----- → Export Limiter and/or Batteries Not Required	← ----- → Export Limiter and/or Batteries May be Required Decisions made on case-by-case basis per CMLP Engineering review	← ----- → Export Limiter and/or Batteries Required

As shown in the graphic above, if solar is added to a site whose prior solar capacity is under 50 kW(AC), an export limiter and/or battery **must** be paired with any solar capacity beyond 50 kW. The battery must be capable of storing 4 hours of peak electric production for the portion of the solar array over 50 kW. If solar is added at a site with prior solar capacity over 50 kW(AC), an export limiter and/or storage **must** be paired with any additional solar capacity. The battery must be sized to store 4 hours of peak production potential (AC) from the new solar capacity. If a site's prior solar capacity is less than 25 kW(AC) and solar capacity is added, an export limiter and/or battery capacity ***may*** be required to pair with any solar capacity exceeding 25 kW. The battery capacity must be capable of storing 4 hours of electricity produced by any solar capacity that exceeds 25 kW, at its peak solar production potential (AC). In all scenarios, CMLP must be able to control battery charge and discharge times on predicted peak demand days. Export limiters must be set for no export beyond 50 kW(AC).

Metering

CMLP's advanced meters record the amount of electricity delivered to the customer by CMLP as well as any solar electricity that migrates to CMLP's distribution system because it is not needed on the property at a given moment.

Net Metering Credits

Each month, any solar electricity (in kilowatt-hours) that migrates through the Customer's meter to CMLP's distribution system is subtracted from the electricity (in kilowatt-hours) that the Customer purchases from CMLP at the Residential Service Rate. The Customer is billed for the net amount of electricity at the applicable rate for Residential Service, to the extent that the solar electricity that migrates to CMLP's distribution system does not exceed the Customer's purchases from CMLP.

Any solar electricity migrating through the Customer's advanced utility meter to CMLP's distribution system that exceeds electricity purchases from CMLP that month are credited at the price CMLP pays New England's Independent System Operator for electricity on the Spot Market. The "9-4 Spot Market" price is defined as the average Real Time locational marginal price for all hours between 9am and 4pm in the month the migration occurs.

The 9-4 Spot Market price fluctuates based on market conditions. From the start of 2024 through early 2025, it ranged between \$0.02 and \$0.12 per kilowatt-hour (kWh). On average, kWhs of solar electricity credited at the 9-4 Spot Market price will provide less financial benefit to the customer than kWhs of solar electricity that are subtracted from the billing units to which the Residential Service Rate is applied. The 2025 R-1 Residential Service Rate has 3 tiers that range from \$0.20173 to \$0.23999 per kWh, depending on the net amount of electricity delivered to the Customer by CMLP in that billing cycle.

Customers receive lower compensation for solar production that exceeds consumption in that month. At the end of each billing cycle CMLP tallies the total solar kWhs sent by the Customer to the grid that month. The solar kWhs are subtracted from the total grid kWhs delivered by CMLP to the Customer that month. Therefore, the financial value of those solar kWhs is equivalent to the Customer's R-1 Residential Service Rate. Any excess solar kWhs that remain are credited at that month's 9-4 Spot Market price. Therefore, the financial value of those solar kWhs is less than the Customer's R-1 Residential Service Rate.

If the Customer has controlled electric water heating and low overall electricity consumption, the financial benefit due to solar electricity production may be diminished.

Distribution Charges

All residential net metering customers will also be assessed a monthly Distribution Charge on their electric bill, based on the size of their solar PV system:

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

The Distribution Charge ensures that the costs of maintaining the local electrical distribution system and running CMLP are shared fairly among all CMLP customers, including those who have reduced their financial contribution towards maintaining these services by replacing some of the electricity they had purchased from CMLP with electricity generated by their solar PV system. Customers with solar PV systems continue to receive all the services provided by the electricity distribution system in Town and by CMLP. Customers' adoption of solar does not reduce CMLP's costs for maintaining local infrastructure and providing services.

Customer Acknowledgment

The Customer acknowledges that if the solar PV system is sized so that more electricity migrates to CMLP's distribution system than the Customer purchases from CMLP in a month, the excess electricity will be credited at the substantially lower 9-4 Spot Market price, rather than subtracted from the billing units to which the higher R-1 Residential Service Rate applies.

The Customer also acknowledges that the Distribution Charge is a condition of receiving net metering credits from CMLP. This Solar PV Net Metering Policy Acknowledgement references CMLP's Residential Service Rider - Net Metering with Banking Rate, available on CMLP's website at <https://concordma.gov/DocumentCenter/View/1205/Net-Metering-with-Banking-Rate-PDF>. The Net Metering Rate, including the Distribution Charges, is subject to change.

Customer Signature

Customer Address

Customer Name

Date