

General Energy and Community Power Definitions

Aggregation: The process of selecting a mix of energy sources available on the wholesale electricity market to make available sufficient energy to meet the needs of a group of retail customers. The mix of sources allows for control of availability, renewable energy content and cost. [Enabling Legislation 53-E \(1996\)](#), [NH Code of Administrative Rules \(2002\)](#).

Aggregator: Any person or entity, other than a utility, that aggregates electric load or serves as a **Broker** on behalf of a **Competitive Electric Power Supplier**, an individual customer, a group of customers, or any combination thereof (such as Jaffrey Community Power). An aggregator does not take ownership of the electricity. [List of NH Aggregators](#).

All-Requirements Electricity or All-Requirements Electricity Supply Service: Electricity and everything else that is needed to provide it reliably to the customer (such as **Capacity**, ancillary services, transmission services, transmission and distribution losses, congestion management) while also meeting all the regulatory requirements, especially the state's **Renewable Portfolio Standard (RPS)**. The RPS is met by either acquiring Renewable Energy Certificates or making Alternative Compliance Payments.

Alternative Compliance Payments (ACP): See **Renewable Energy Fund**.

Broker: Energy brokers are intermediaries between **Competitive Electric Power Suppliers** and their clients. Brokers do not own or distribute energy and they are not allowed to sell energy directly to you. They simply present the rates of a wholesaler, or supplier.

Capacity: The ability to generate electricity and provide Electric Power to the distribution grid. There is market for capacity in New England, in addition to the electric energy market. Capacity costs are part of **All-Requirements Electricity** and are reflected in the electricity supply rates.

Community Choice Aggregator (CCA) aka Community Power: Recently allowed in New Hampshire as an alternative to utility-supplied electricity, Community Power allows towns to acquire electricity (with the help of an **Aggregator**) and supply it to their residential and commercial customers. The utility (in our case, Eversource) continues to be responsible for distributing the electricity and maintaining the power lines. Enabling legislation: [NH RSA 53-E](#).

Community Power Coalition of New Hampshire (CPCNH): A nonprofit **Joint Powers Agency** that was formed in 2021 to jointly implement and operate **Community Power** programs. CPCNH membership now comprises 19 towns/cities plus one county. *The CPCNH is a forceful advocate for Community Power in New Hampshire and intends to act as an aggregator for its members.*

Competitive Electric Power Supplier (CEPS): An entity that sells or offers to sell **All-Requirements Electricity** to retail customers, including **Net Meter** customers, using the transmission or distribution facilities of a utility. These entities are one type of **Load Serving Entities (LSEs)** that are market participants in the regional wholesale electricity market administered by **ISO New England**.

Demand: The level of electricity consumption, measured in kilowatts (kW) or megawatts (MW) at

any given time (see Load).

Electricity Supply Agreement (ESA): Also known as “Electricity Service Agreement”, “Electric Supply Agreement”, or “Energy Supply Agreement” (all used interchangeably). An ESA is an agreement which commits the energy supplier to provide **All-Requirements Electricity**.

Energy Supplier: Anyone who supplies electricity to customers, such as the actual electricity generators (owners of power generation), **brokers, aggregators**, and pools that arrange for the supply of electricity generation to meet retail customer demand, which may be municipal or county entities. *Jaffrey Community Power will be the Energy Supplier listed on your Eversource Bill.*

Grid: The network of the transmission lines, substations, and associated equipment of an electric power system which enables the delivery of electric energy to the customer. The operation of the grid in New England is by ISO-New England. The grid has an additional property, that of **Capacity**, which is the ability to generate and supply power to the grid. There are markets for both Energy and Capacity. In addition, utilities (like Eversource) and **LSEs** must acquire sufficient **Renewable Energy** to meet the **Renewable Portfolio Standard (RPS)** with **Renewable Energy Certificates (REC)** or pay into the **Renewable Energy Fund (RPS)**.

Group Net Metering: Provides the ability of a net-metered “host” to share the proceeds of the self-generated power with non-net metered customers (a “group”), if they all belong to the same utility. A group can be a single person, multiple customers, or even a low to moderate income community solar project. [PUC Group Net Metering Page](#) [Net Metering Tariff Overview](#)

ISO New England: An independent, not-for-profit company authorized by the Federal Energy Regulatory Commission (FERC) ensuring the constant availability of competitively priced wholesale electricity by managing the transmission lines in Connecticut, Rhode Island, Massachusetts, Vermont, New Hampshire, and most of Maine. *Aggregators go to the wholesale market overseen by ISO New England to buy the mix of energy they need for their clients.*

Joint Powers Agency: A new governmental body created when separate governmental agencies (such as towns, counties, school districts, water districts, etc.) contract with each other for the purpose of joint cooperative action. [NH Rev Stat § 53-A:3 - Joint Exercise of Power](#). *The Community Power Coalition of New Hampshire (CPCNH) is a Joint Powers Agency formed for the purpose of providing community power service to its members.*

Load: Electrical “Load” is defined as the level of electric power required from the distribution **grid**, as measured in kilowatts (kW) or megawatts (MW), to be used by end customers.

Load Serving Entities (LSEs): Organizations that directly supply retail customers with electricity. Most LSEs in New Hampshire are **Competitive Electric Power Suppliers (CEPS)**. LSEs typically are responsible not only for procuring **All-Requirements Electricity** for their retail customers, but also the **Capacity** necessary to guarantee a reliable electricity supply.

Net Energy Metering (NEM): Net Energy Metering is a program using a special bi-directional **Net Meter** that measures how much energy produced by your electric generating equipment (solar, wind, hydro) is sent back onto the grid and how much electricity is pulled from the grid for your use.

The NEM rate schedule (tariff) determines how much you are paid for the electricity you sold to the grid. PV systems installed after 2017 have different, less generous, compensation (NEM 2) from those installed before 2017 (NEM 1) **.

*[PUC Net Metering Page](#) **[Net Metering Tariff Overview](#)

Net Energy Metering, Standard (NEM 1.0): A rate schedule for owners of solar arrays (or other renewable energy sources) that compensates the customer for excess energy that is sent back to the grid. NEM 1.0 is for installations brought online before September 1, 2017, and sets the rate to include the full retail value of the energy, distribution, transmission, system benefit charge and stranded cost charge. Excess kWh could be banked (in summer when production is higher) and used later to offset usage when production is lower (winter).

Net Energy Metering, Alternative (NEM 2.0): A rate schedule for owners of solar arrays (or other renewable energy sources) that compensates the customer for excess energy that is sent back to the grid. NEM 2.0 is for installations brought online on September 1, 2017, or later and sets the rate to include the full retail value of the energy and transmission charges, 25% of distribution and 0% of system benefit charge and stranded cost charge. Excess production is not banked for later use but is converted to monetary credit that can be carried forward.

Net meter, bi-directional: Used in conjunction with a solar array (or other renewable energy system), a net meter is an advanced electric meter capable of measuring electricity flowing both from the grid and excess energy production back to the grid. It is used to record how much electricity has been “purchased” from the grid as well as the customer’s “sales” of renewable electricity to the utility. Older bi-directional meters had wheels that would “spin backwards” (to the left) when the PV panels were producing excess energy. Modern electronic meters have replaced the mechanical wheel with a simulated animation, and some models may also be capable of recording values and the time of day, making possible enhanced time-of-use rate schedules.

New England Power Pool Generation Information System (NEPOOL GIS): Issues and tracks **Renewable Energy Certificates (RECs)** for all MWh of generation and consumption of renewable energy in the ISO New England control area, as well as imported MWh from adjacent control areas. *There were over 22 million RECs issued by NEPOOL GIS in 2021.*

Public Utility Commission (PUC): Public Utility Commissions are governmental bodies created to regulate the rates, quality of service, finance, accounting, and safety provided by utilities that provide electricity, natural gas, water, and sewer. The PUC sets the rules under which utilities operate. “[NHPUC’s mission](#) is to ensure that customers of regulated utilities receive safe, adequate and reliable service at just and reasonable rates.”

Renewable energy: Energy that is created from an energy source that is renewed through a natural process. Solar (both photovoltaic and solar-thermal), wind (terrestrial and off-shore), hydropower, geothermal, and biomass (including renewable natural gas) are considered renewable. Coal, petroleum, natural gas, and nuclear are considered non-renewable energy sources.

Renewable Energy Fund: “Electric service providers who cannot obtain sufficient quantities of RECs for a given compliance year are required to make Alternative Compliance Payments, or ACPs. ACPs provide the funding for the Renewable Energy Fund, the purpose of which is to support thermal and electrical renewable energy initiatives.” [Source](#). The Renewable Energy Fund,

administered by the NHPUC, distributes funds through rebate programs or competitive grant solicitations for a variety of residential, commercial, industrial, or community solar projects. See info at [NHPUC](#) and the [2021 REF Annual Report](#).

Renewable Portfolio Standard (RPS): Utilities are required to provide electricity (in a “portfolio” of renewable and non-renewable sources) with a minimum percentage of Renewable Energy. Since 2008, the RPS has risen from 4% renewable to 22.5% in 2022. The maximum required percentage of renewable energy will be reached in 2025 (and beyond) at 25.2%. [RSA 362-F](#), [NHPUC-RPS info](#).

Renewable Energy Certificate (REC): To meet the **Renewable Portfolio Standard**, utilities must acquire Renewable Energy Certificates representing the amount of energy supplied to their customers (one Certificate = 1 MWh). Residential solar arrays also can generate RECs if the owner registers the system with NEPOOL GIS. Unregistered private energy production can be “claimed” by utilities without compensation, which lowers the value of all RECs. *Since electrons don’t have tags to prove they were created from renewable sources, RECs are issued to the generators when they add electricity to the grid, and then transferred to utilities or aggregators when they draw it for distribution to their customers.*

REC meter: An electric meter that is placed to measure the output of a solar array or other renewable energy generation source and is installed in a manner compliant with utility requirements. ([Eversource info on RECs](#)) *Home and business owners could make money from RECs by registering their solar arrays with NEPOOL GIS, in addition to monetary value obtained from **Net Metering**.*