

Glossary

Abutter(s)

Person(s) or business(es) that own(s) property directly next to a project area (transmission corridor, right of way, substation, distribution poles, etc); or who may have an easement on their property; or may be affected directly by a project.

Aggregator

An electric aggregator gathers consumers for the purpose of negotiating the rate for generation service from an electric supplier. An electric aggregator must negotiate with suppliers on behalf of the customers it represents.

Alternating Current (AC) Power

A type of electrical current that can change direction periodically. It is the standard electricity format that is used in homes and businesses.

Array (solar)

A collection of solar panels in one location.

Community Solar

Electricity that is produced from the sun's rays onto photovoltaic solar panels at a site that is supported by residential and/or non-residential customers through participation or subscriptions in exchange for credits on their utility bills. Each "community" solar array is designed by the developer to generate a specific amount of power, typically between 2 to 5 megawatts of electricity.

Business

The entity that is developing (building) a distributed generation facility (such as community solar); or, a CMP commercial or industrial customer.

Community Generation

Electricity produced by a renewable energy company such as solar, wind, hydro, or biomass at a facility (site) that is supported by residential and/or non-residential consumers through participation or subscriptions in exchange for credits on their utility bills. The solar business provides CMP with the earned credit allocations that are to be factored onto CMP utility bills.

Community Generation is a subset of Distributed Generation in terms of how the electricity is produced and connected to a distribution line

Competitive Energy Provider

A supplier, marketer, broker, aggregator, or any other entity selling electricity supply to the public at retail in Maine. The standard offer provider is a competitive energy provider.

Consumer

Someone who is using electricity/energy.

Credits

A form of reimbursement that subscribers or participants of community generation programs receive on their utility bills. For example, in some community solar programs subscribers agree to purchase a percentage or allocation of generation from a community solar business that in turn provides kwh credits or financial credits or offsets on their CMP utility bill. The generator will send the credits to CMP.

Customer-Funded Projects

Generation projects (typically renewable energy) that are entirely funded or paid for by the developer and/or their related entities such as project sponsors, financiers, etc.

These projects are not CMP projects as we do not generate electricity. CMP works towards getting Customer-Funded projects connected to our energy grid, and the interconnection costs generally are paid by the developer.

Customer-Funded Projects (Types of)

Small and large not only in size but also electricity generation output (from kilowatts to megawatts); includes solar, wind, hydro, and biomass.

Customers

The people and businesses that receive a product or service in exchange for a payment or credit.

Developer

An entity (such as a business, limited liability corporation, or person) that undertakes the process to build a renewable energy generation facility on a plot of land or a building with the intent to connect it to CMP's energy grid.

Developers identify and analyze sites, build financial models, secure funding, and hire staff or contractors to engineer, construct/install, energize, and sign up customers. To get the electricity generation onto the energy grid, developers apply for an Interconnection Agreement with CMP, which includes numerous system-related studies and design reviews, and a Net Billing agreement.

Some developers may hire an experienced service company to inform and educate potential subscribers about the projects and provide customer management processes such as customer service, billing, and payment processing.

Direct Current (DC) Power

An electrical current whose magnitude and direction stay constant. The photovoltaic cells on solar panels capture energy from sunlight and create DC which must be converted to AC power for use in grid-connected applications.

Distributed Energy Resources (DERs)

Small-scale generation resources, storage, and other physical and virtual grid assets that are dispersed across the electric grid.

Distributed Generation (DG) (Projects)

Power that is produced by renewable energy sources such as solar, wind, hydro, biomass and waste close to the point of interconnection to the energy grid or where the power will be used. It's called distributed generation because the facilities connect to distribution lines that lead to substations and not onto the transmission line system as traditional power generators do.

Electricity

A fundamental form of energy observable in positive and negative forms that occurs naturally (as in lightning) or is produced (as in a generator) and that is expressed in terms of the movement and interaction of electrons. (Merriam-Webster Dictionary)

Energy

Power derived from the utilization of resources to provide a source of fuel (such as electricity) to light, heat, move machinery, and other uses.

Generator

An energy producer.

Grid

The interconnecting transmission and distribution system of poles, lines/wires, and substations that together efficiently delivers reliable and safe energy to customers.

Infrastructure

The physical network of poles, lines, conductors, substations and other related equipment that makeup CMP's energy grid.

Installation

The act of locating or placing something into or onto a place, such as solar panels onto a roof or in a field.

Interconnection

The process of incorporating or linking a source of electric power generation, like a solar array or wind farm, to the power grid.

Inverter

A device at a distributed generation facility that converts direct current (DC) electricity, which is what a solar panel generates, to alternating current (AC) electricity, which the electrical grid uses. Grid-tied inverters automatically shut down the release of power to a grid if there is an outage.

Landowners (property owners)

The person or business that owns property directly next to a project area (transmission corridor, right of way, substation, distribution poles, etc); who may have an easement on their property; or may be affected directly by a project. See "abutters."

A business that actively promotes a community generation program to subscribe (enrolls/signs up) energy consumers to a community generation project, such as community solar. The developer and the marketer could be two or more separate entities, and the marketer is hired or contracted by the developer or project sponsor.

Net Energy

The difference between the kilowatt-hours consumed by a customer or shared financial interest customers and the kilowatt-hours generated by the customer's or shared financial interest customers' eligible facility over a billing period.

Net Energy Billing (NEB)

A process that provides credits for excess generation from distributed energy resources (DERs) that is not consumed on site but instead provided to the energy grid. NEB is available for residential, commercial, and industrial customers. Generators fill out a NEB application with CMP as one part of the interconnection application process.

Net Energy Billing (NEB) – Types

KWh: Participants receive a credit for every kWh provided to the grid from their solar array. These credits can be used to offset future charges on a one-to-one basis during billing periods when the participant uses more energy than their solar array generates. Any unused credits expire after 12 months. Available to all electric utility customers through distributed energy generators.

Tariff Rate: Available to non-residential electric utility customers, participants receive dollar credits at a rate determined annually by the Maine Public Utilities Commission (PUC). These bill credits cannot cause a customers' utility bill to decrease below \$0 in any given billing period. Any unused credits expire after 12 months.

Project (Development)

An all-encompassing process that includes the acquisition, study and design, construction, installation, and other addition or improvement of a structure, facility, building, or other tangible thing.

Project (Solar)

The development and/or construction of a distributed generation facility at an installation or area of land in which many solar panels are set up to generate renewable electricity. See Array.

Property owners

See Landowners or Abutters.

Project Sponsor

An entity or its successor or assignee that develops, markets, owns, manages, operates or is otherwise responsible for: 1) a shared distributed generation resource on behalf of subscribers; or, 2) a commercial or institutional distributed generation resource.

Renewable Energy

Energy that is released or can be produced from replenishing, natural sources such as solar, hydro (water), wind and biomass.

Rooftop Solar

An installation of solar panels installed on building or residential rooftops, carports or garages, or any other similar structure to generate renewable electricity for the property owner.

Shared Generation

A distributed generation resource for which the value of the output is owned by, allocated to, or otherwise shared by customers through participation in or subscription to a project. See Community Generation.

Site

The physical location where a distributed generation project will be installed or constructed to produce energy.

Smart Grid

An intelligent electric power system that regulates the two-way flow of electricity and information between power plants and consumers to control grid activity. Its "intelligence" is attributable to digital technology, automation, controls, among others.

Solar

Electromagnetic energy produced using the sun's rays.

Standard Offer

Electric consumers that are not served by a competitive electricity provider automatically have their electricity supplied by the "Standard Offer," a supply rate set by the Maine Public Utilities Commission through a bidding process.

Subscriber

A retail customer of a community generation business that agrees to participate in or subscribe to a portion of the electricity generated at its site. The customer has an identified account for the subscription. Subscribers can be individual households, businesses, or institutions, depending on the project and subscription/participation program terms.

Subscription

The proportioned capacity that any one subscriber (customer) is allocated in a community generation project. The subscription is measured in kW.

Substation

Part of an energy grid system, these facilities are comprised of components such as circuits, transformers, lines, breakers, and others that transform voltage from high to low or low to high levels. The energy is brought to the substation from transmission or distribution lines.

Transmission

The part of energy delivery grid that moves bulk electricity from the generation sites over long distances to substations closer to areas of demand for electricity. Transmission systems are identifiable as the larger, taller poles or towers (structures) with conductors and lines. CMP's transmission grid is marked by sections and each structure within that section also has a number.

Utility

A regulated business that serves an important public service by suppling customers (residential, commercial, and industrial/institutional) with electricity through its energy grid. Other types of utilities are water, sewer and telephones.

Sources: CMP guides, Edison Electric Institute (EEI), Energy.gov (US Dept. of Energy); Maine Governor's Energy Office, and other sites