

Glossary

AMPACITY Current-carrying capacity measured in amperes.

ASSOCIATED EQUIPMENT In discussions of metering equipment, the term includes the meter socket, instrument enclosures, test switches, and other equipment.

BALANCED When loads or phase currents on a three phase circuit are equal.

BOLTED FAULT A short circuit that has zero or near zero resistance between faulted conductors.

BRIDLED SERVICE An overhead service wire originating from one Utility pole that uses a guy wire from an adjacent pole to change the route of the service drop to the service entrance attachment point.

BUS BARS An electrical conductor in the form of rigid bars that serve as a common connection for 2 or more electrical circuits.

CABINET An enclosure designed for surface or flush mounting and provided with a frame, mat or trim, and swinging doors. Cabinets are usually employed to contain panel boards.

COLLECTOR BUS A device that connects Seattle City Light's service conductors to the customer's service entrance conductors.

COMMERCIAL Use of electricity by a customer in other than a single-family residence or duplex.

CONDUCTOR A material that allows electricity to move through it easily. A wire, cable, bar, rod or tube which serves as a path for electricity to flow. The most common conductor used by the utility is overhead wire.

CONDUIT A UL-labeled wireway with a smooth interior surface that permits easy drawing in of the electrical conductors

CROSS ARM An attachment that is mounted horizontally on a Utility pole to support wires and associated hardware.

CURRENT The electrical current is simply a measure of how much electricity passes a given point in a fixed amount of time. It is measured in amperes.

CURRENT TRANSFORMER CT
A transformer used in instrumentation to assist in measuring current.

CUSTOMER Any person, firm, corporation, government agency, or other entity that uses, has used, or has contracted for electric service from Seattle City Light.

DE ENERGIZATION To shut off power.

DEMAND The amount of electricity drawn from an electrical system at a given time, measured in kW's; The amount of power required to meet the customer's load at a given instant or averaged over any designated interval of time, expressed in kilowatts or megawatts.

DIRECT BURIAL The installation of electric conductors in a trench without the use of a conduit. Direct burial installations are no longer accepted by SCL.

DRIP LOOP A downward loop in the customer's conductors, near where the customer's conductors attach to the Utility's overhead conductors, to prevent water from entering the service at the weatherhead.

EASEMENT See Service Easement.

ELECTRIC SERVICE All service conductors (primary and secondary), transformers, and distribution system equipment for delivering electric energy from the Seattle City Light's supply system to the wiring system of the premises.

ENERGY The capacity for doing work. In the context of electricity rates and services, the word "energy" refers to electrical energy. In this sense, energy is a measure of the quantity of units of electricity used in a given time period, measured in kilowatt-hours.

ESE Electric Service Engineer works with identified major commercial and industrial customers to facilitate their electrical service installations.

FAR SIDE SERVICE Electrical Service is served from the distribution system which is located on the opposite side of a public street, thoroughfare, or right-of-way from the customer's premises.

FAULT CURRENT A current that flows between conductors or between a conductor and a ground because of an abnormal connection between the two.

FAULT CURRENT MAXIMUM
The highest current a customer may expect to be supplied from Seattle City Light's system to equipment (switchboard) during a bolted fault.

GROUND ROD An approved metal rod or pipe placed in the ground to which electric connection can be made in order to maintain earth potential on equipment.

GROUP INSTALLATION An installation that includes more than one electrical device such as panels, meters, motors, etc., connected together by a common electric circuit.

GUTTER See "wiring gutter"

GUYING FACILITY Cables or braces used to relieve stress on masts and poles.

HANDHOLE A permanently installed protective enclosure (usually below grade), which is used for gaining access to electrical conductors for the purpose of pulling, splicing, or terminating.

HERTZ HZ A unit of frequency equal to one cycle per second; refers to the frequency of alternating current (AC).

HIGH LEG In a four-wire Delta service, the phase leg that is at higher potential/voltage to ground than the other two-phase legs. Also called the wild leg or the delta leg.

INDUSTRIAL Use of electricity for manufacturing, processing, refining, or freezing.

Glossary (continued)

INSTRUMENT TRANSFORMER

Current and/or voltage transformers used in connection with metering and control devices.

JUNCTION BOX Box, which may be metallic or non-metallic, that has openings in the sides and back and is used to protect and support electrical wire connections or conductor splices.

kcmil One thousand circular mils; a measurement for wire.

KEYBOX A permanently-installed lock box with keys enclosed. Keyboxes allow Seattle City Light personnel to gain access to a customer's premises for the purpose of reading, installing, servicing, or removing SCL system components.

KILOWATT KW One thousand watts, a standard measure of demand for power or capacity

KILOWATT HOUR KWH

The standard unit of measure for electric energy. One kilowatt-hour is one kilowatt of electricity supplied for one hour.

KVA Kilovolt Ampere rating designates the output which a transformer can deliver at rated voltage and frequency without exceeding a specified temperature rise.

LANDING PADS Hardware upon which current transformers are mounted in the CT can.

LINE ANGLE STRUCTURE A corner pole of structure on a dock where the dock and distribution system change direction.

LOAD CENTER The equipment which is the main control used for disconnecting the customer's electric service. This equipment includes circuit breakers, fuses, or switches located near the entrance of the supply conductors.

LOCAL AUTHORITY Refers to the local jurisdiction which permits and inspects electrical services. In the City of Seattle, this is the Department of Planning and Development (DPD).

LOCAL IMPROVEMENT DISTRICT LID

A project undertaken by property owners within a specific geographic area inside Seattle to accomplish a specific improvement project.

LOCKED ROTOR CURRENT Steady-state current drawn by a motor with the rated voltage and frequency applied and the rotor locked in a stationary position. This is the maximum current the motor will draw.

MANDREL A tapered or cylindrical spindle inserted into, and pulled through the distance of, the installed conduit run for clearing the conduit run of foreign material.

MASTER METER Any single meter that measures the electrical consumption of all units or subdivisions of a building.

METER BASE A receptacle for the installation of an electric meter. Also referenced as meter socket.

METER TOTALIZING Totalized Metering (Adjacent or Remote) is the measurement for billing purposes on the appropriate rate, through one meter, of the simultaneous demands and energy of a customer.

METERING EQUIPMENT

Any equipment used to measure electrical energy.

MOTOR PROTECTIVE DEVICE

A device responsive to motor current and temperature that protects the motor against dangerous overheating due to overload, failure to start, or single-phasing (in the case of three-phase motors).

MOTOR STARTING LIMITATIONS

Limits placed by Seattle City Light on maximum starting current of electric motors.

MULTIPLE DWELLING BUILDING

Any building or any portion of the building which contains three or more dwelling units, occupied with provisions for living, sleeping, cooking, and sanitation.

NEARSIDE SERVICE Electrical Service that is served from the distribution system located adjacent to the customer's property.

NEC National Electric Code

NEMA STANDARD Any standard recommended by the National Electrical Manufacturers Association.

NET METERING A method of crediting customers for electricity that they generate on site in excess of their own electricity consumption. Customers with their own generation offset the electricity they would have purchased from their utility. If such customers generate more than they use in a billing period, their electric meter turns backwards to indicate their net excess generation.

NETWORK A complex underground distribution system that has multiple primary feeds that are connected on the secondary side, and has redundant distribution components to provide enhanced system reliability. Network systems exist in downtown Seattle, First Hill and the University District.

NEUTRAL The grounded conductor of a single-phase, 3-wire or 3-phase, 4-wire system. The identified conductor that is at zero potential/voltage to ground.

NON INDUCTIVE LOAD

An electrical load consisting entirely of resistance.

OVERCURRENT An overcurrent is a current exceeding the rated current. An overcurrent can be due to overloading a circuit, a fault or a short circuit.

OXIDE INHIBITOR A compound used to retard oxidation on electrical connections where aluminum conductors are used.

PANIC BAR A device that allows a door to be pushed open from the inside without using a key.

PEDESTAL A free-standing structure used exclusively to support or contain electrical metering equipment and/or customer service equipment.

POINT OF ATTACHMENT The point at which Seattle City Light's service conductors are attached to a structure by an approved service bracket.

POTENTIAL TRANSFORMER
Obsolete term for voltage transformer.

POWER FACTOR The ratio of true power (kilowatts) to the apparent power (kilovolt-amperes) for any given load and time.

PRIMARY SERVICE Service voltage greater than 600 volts.

PRIVATE PROPERTY Land owned in fee-simple title by an individual, individuals, or corporations.

PUBLIC RIGHT OF WAY Lands set aside and designated for use by the general public for common access and Seattle City Light functions, such as streets, alleys, boulevards, and walkways.

PUBLIC STREET Land acquired and/or dedicated by or to a governmental agency for public use, for general public access and utilities. Public right-of-way includes any land open to the public that the City owns or controls through easement. Street right-of-way includes all property from the street center to the adjacent property line, including planting areas and sidewalks.

PULLING HANDLINE A rope or string that is installed in conduit in order to assist the pulling of the wire through the conduit.

RACEWAY An enclosed channel for holding wires or cables.

RECLOSURE A complex form of circuit breaker which protects electrical systems from temporary voltage surges and other unfavorable conditions. In addition to preventing electrical overloads from passing through a circuit, reclosures can automatically "reclose" the circuit and restore normal power transmission once the problem is cleared.

RESIDENCE A single-family dwelling.

RESISTANCE A material's opposition to the flow of electric current; measured in ohms

ROAD IMPROVEMENT DISTRICT RID
A project undertaken by property owners within a specific geographic area outside Seattle to accomplish a specific improvement project.

SALVAGEABLE Materials having a value to Seattle City Light.

SCL Seattle City Light

SECONDARY SERVICE Service voltage of 600 volts or less.

SERVICE BRACKET Approved insulators installed by the customer to provide a mechanical termination for the overhead service wires from Seattle City Light's distribution system to the customer's structure.

SERVICE CONDUCTORS Extend from Seattle City Light's distribution system to the point of service connection at the customer's property or facility.

SERVICE CONTRACT An agreement between the customer and Seattle City Light.

SERVICE DROP CONDUCTORS
SERVICEDROP The overhead conductors from Seattle City Light's pole to the customer's point of attachment.

SERVICE EASEMENT A right acquired by Seattle City Light to construct, operate, maintain, reconstruct, and alter overhead or underground electric facilities on private property, including property owned by another public agency.

SEAL A locking device to secure a meter or other service equipment.

SERVICE ENTRANCE CAPACITY
The rating in amperes of the customer's service equipment

SERVICE ENTRANCE CONDUCTORS, OVERHEAD The service conductors between the terminals of the service equipment and a point usually outside the building, clear of walls, where joined by tap or splice to the Utility's service drop.

SERVICE ENTRANCE CONDUCTORS, UNDERGROUND The service conductors between the terminals of the service equipment and the point of connection to the service lateral.

SERVICE ENTRANCE EQUIPMENT
Service conduit, conductors, weatherhead, meter base, and load center.

SERVICE LATERAL An underground service tap from Seattle City Light's distribution system to the customer's point of service connection.

SERVICE MAST For overhead service, the conduit above the meter used to provide mechanical protection for the customer's service conductors, and to support the service drop from Seattle City Light's distribution system.

SERVICE POLE A pole necessary to provide adequate clearance and support of the service drop.

SERVICE RATING The size in amps of the service entrance equipment

SERVICE STRIKE The overhead point of attachment for the utility's service drop to be attached to the customer's conductors.

SERVICE STUB An underground conduit to be used in the future to pull conductors to the customer's property.

SERVICE TERMINAL BOX A metal box used exclusively to terminate Seattle City Light's service laterals and provide a connection to the customer's service entrance conductors.

SHORT PLAT A short subdivision; a division of land into two to nine lots. See Chapter 23.24 of the Seattle Municipal Code.

Glossary (continued)

SINGLE PHASE, THREE WIRE SERVICE Typically 120/240V AC is carried between two wires: hot and neutral and a third ground wire for safety. Single-phase power is used to power all typical home electrical appliances; it is used in residential outlets.

SPACE CHECK In new construction, a field check is performed by SCL to verify that the metering designations assigned by the contractor are correct as to which unit each meter is serving.

SPAN A length of conductor or cable between supports.

SPLICING VAULT A concrete chamber in an underground system which Seattle City Light's workers may enter for the purpose of installing and maintaining electrical equipment. A splicing vault does not contain transformers.

SPOT NETWORK LOADING A spot network is a network service comprised of three or four primary circuits in a vault that are connected together on the secondary side of the transformers and is not interconnected with a distributed grid outside the vault

STEP DOWN TRANSFORMER A device that lowers voltages: the high voltage winding is connected to the input or power source and the low voltage winding to the output or load.

SUBSTATION A facility in which transformers are located that change transmission voltages to distribution voltage.

SWITCHGEAR The switches, fused switches, or circuit breakers used for disconnecting an electrical circuit.

TEMPORARY SERVICE A customer's service panel energized by Seattle City Light on a temporary basis for construction purposes.

TERMINAL CAN An enclosure in which the Utility's wires meet the customer's NEC rated wires. It is used as a termination point for the Utility's service lateral.

THREE PHASE, FOUR WIRE SERVICE Voltage is carried through three conductors 120° out of phase with the other two. Three-phase power provides a more efficient means of supplying large electrical loads like motors, and is used in industrial areas and in large buildings.

TRANSFORMER Referring to a voltage transformer; a stationary device that increases or decreases the voltage in an electrical system, through the use of primary and secondary coils.

TRANSPORTATION AGREEMENT A legal agreement that is required in cases where the utility cannot access the in-building vault to install and remove its transformers. The building owner assumes the responsibility for moving the transformers.

UNDERGROUND RESIDENTIAL AREA A residential area supplied by an underground distribution system.

UNIT LOT SUBDIVISION Subdivision of land to build townhouses, cottage housing developments, and single family residences where such uses are permitted. The development as a whole, i.e., the parent lot, meets applicable development standards. As a result of the subdivision, the unit lot developments are allowed to be non-conforming to some developmental standards. See Seattle Municipal Code 23.22.062.

UTILITY Seattle City Light

VAULT An approved chamber for electrical equipment. Vaults must meet Seattle City Light's construction requirements.

VOLTAGE The pressure behind the flow of electricity, measured in terms of volts.

VOLTAGE TRANSFORMER VT A transformer that is designed to have its primary winding connected parallel with a circuit and used for transforming voltage to a value suitable for measurement or control.

WAC Washington Administrative Code.

WATT A unit of measure of electric power

WEATHERHEAD Rain tight conduit fitting installed on the top of the overhead service mast, where the service drop is attached to the service entrance equipment.

WIRING GUTTER A box with a removable face for electrical wires to run through. Wire gutters are used when a single large cable serves several electrical meters. The cable entering the wiring gutter is distributed and connected to the other services. The box is lockable and sealed by the utility.

WIRE TROUGH A factory fabricated wireway; an open cable wire enclosure in which several cables are housed.

WORKING PLATFORM A safe, clear, unobstructed floor area with safe access to all electric equipment, protected according to WAC Standard 296-24-75007.

WORKING SPACE An area free of any obstructions in front of meters, service panels, and electric equipment for providing safe access to install, remove, or repair all electrical devices. A safe working space must meet the requirements of the National and City Electrical Codes.