

GENERATING PLANT

A generating plant is where electricity is produced. In the generation of electricity, most plants use boilers in which fuel is burned to produce heat. The heat changes the water to steam, which turns a turbine. The turbine then spins the generator rotor to produce electricity. The generators use fossil fuels (oil, coal and natural gas), or nuclear fuel to produce electricity.

TRANSMISSION LINE

A transmission line carries high voltage electricity from the generating plants to the substations and individual service areas.

SUBSTATION

A substation is an area where incoming transmission line high voltage is reduced, by step-down transformers, to a voltage suitable for distribution. Substations are equipped with many devices for switching, regulating and protecting several outgoing primary electrical lines called Feeders.

FEEDER

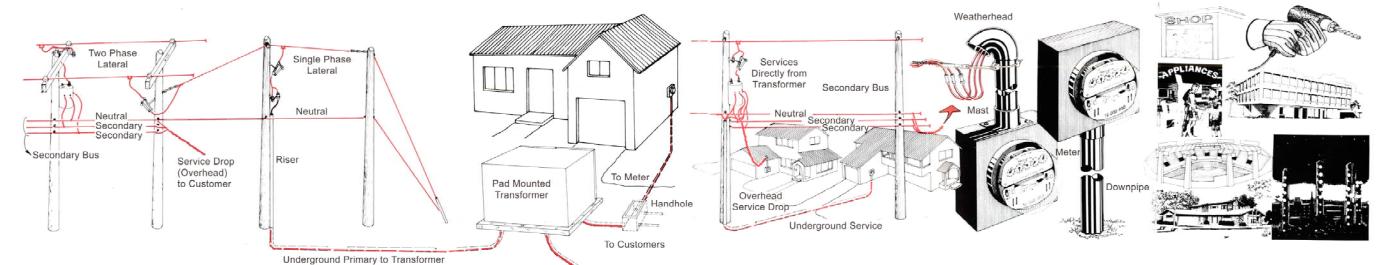
A feeder carries primary distribution voltage from the substation to the service area. Typically, a primary feeder consists of three individual phase wires and a grounded neutral, which are either buried underground or strung overhead. The sections of a feeder are connected together by disconnect switches.

LATERAL

A lateral is usually a smaller electrical wire that originates from a feeder. A lateral carries primary distribution voltage from a feeder to portions of a service area. A lateral is connected to a feeder by a fuse switch or switches. A lateral can be one, two, or three phases and a neutral.

TRANSFORMER

A transformer is a device used for reducing primary distribution voltage to a secondary voltage suitable for customer utilization. Transformers can be mounted overhead on utility poles (Aerial Type), or mounted at grade level on concrete pads (Pad Mounted Type). A transformer can also be located inside a customer's building for FPL.



SECONDARY BUS

A secondary bus consists of circuits operating at low voltage to distribute electricity from the transformer to the customer.

RISER

A riser is a conduit used to provide a transition between overhead primary or secondary conductors and underground primary or secondary conductors.

SERVICE

The service is an electrical connection of conductors from the utility which connect the customer's service entrance conductors at their structure. The service is carried either overhead or underground to the customer.

OVERHEAD SERVICE DROP/ UNDERGROUND SERVICE

The service drop is the overhead conductor which connects to the customer's service entrance conductors. The underground service is the underground conductor that connects from FPL to the customer's point of delivery.

WEATHERHEAD/MAST METER/DOWNPIPE

The weatherhead is a device that attaches to the service mast that prevents water from entering the mast and the metercan. The weatherhead is also the point where the overhead service drop attaches to the customer's service entrance conductors.

The electric meter is the device that registers electric consumption.

The downpipe is a metal or plastic pipe that contains the underground service lateral from the meter to below the ground.

CLASSES OF CUSTOMERS

We provide electricity to several classes of customers. The three basic classes include residential, commercial and industrial customers.



Purpose:

To Provide A Brief Description Of The Basic Electric Facilities Used To Distribute Electricity From The Generating Plant To Our Customers.