



How power gets to you



Generation source

Puget Sound Energy's electric system starts at a generation source. Examples of our power generation facilities include hydroelectric dams, coal-fired generation, wind facilities and solar energy systems. Combustion turbines fueled by natural gas are also used to support times of peak load. Electric energy from generation sources is carried to substations by transmission lines.

Transmission line

A transmission line is a high-voltage (55 to 230 kilovolt (kV)) overhead line that transports power from generation plants to substations.

Substation

A substation is a power distribution center with transformers that step down transmission voltages (55 – 230 kV) to our primary distribution voltage (12.5 kV).

Distribution line

A distribution line is an overhead or underground medium-voltage (12.5 kV) line that carries power from a substation to customers. Roughly half of PSE's distribution lines are underground. Distribution voltage is stepped down to service voltage through smaller transformers located along distribution lines.

Service line

A service line is a lower-voltage (120 to 480 volts) overhead or underground line that is the last connection from PSE to the meter on customer homes or businesses.

Transformer

A transformer is a device that steps voltage down from a higher voltage, or steps it up to a higher voltage, depending on use. Typically it steps voltage down from a distribution voltage to 120/240 volts for customers' residential use. Transformers are the green boxes in some residences' front yard or the barrel-like canisters on utility poles.

