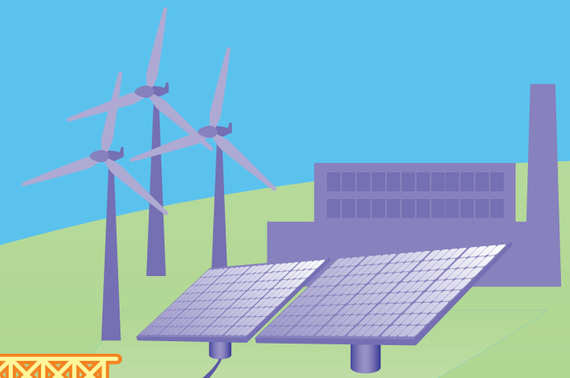
THE PATH OF *electricity*

Electricity often travels long distances before reaching your home or business. Your electric cooperative transports power produced at generating facilities and distributes it through substations and power lines to consumer-members in its system.

Power Generation

Electricity is created at power generating plants by using energy from coal, natural gas, nuclear reaction, wind or water to turn turbines. Fields of photovoltaic solar collectors can also generate electricity. Plants are sometimes located far from population centers.



Step-Up Substation

Substation transformers at generating plants increase electric energy's pressure (voltage) so electricity can efficiently be moved over long distances across transmission lines. Transmission line voltage can be as high as 500,000 volts or more.

High-Voltage Transmission

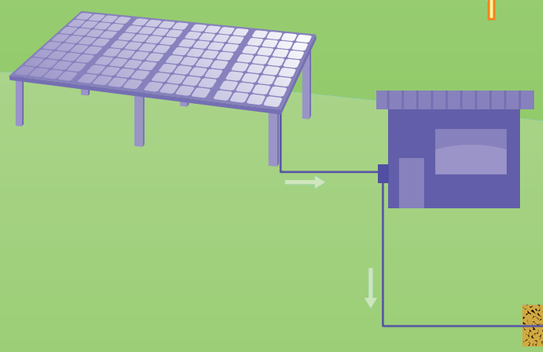
High-voltage transmission lines carry electric energy over long distances. Long strings of porcelain or polymer insulators prevent electricity from contacting the structure and flowing to the ground.

Local Substations

Transformers in local substations reduce the voltage to 34,500, 25,000 or 12,500 volts to be distributed to users throughout the cooperative's service area.

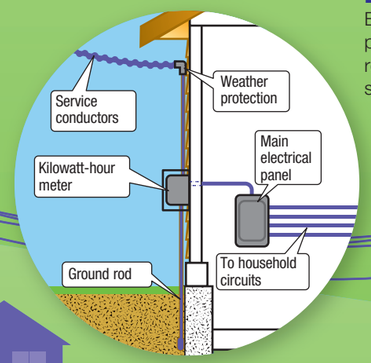
Distribution Lines

Your cooperative's distribution lines carry power from the substation throughout your community. These lines are usually mounted at the top of power poles. Power poles may also hold other important equipment like telephone, internet and TV lines. In some areas distribution lines are buried underground.



Consumer-Owned Generation

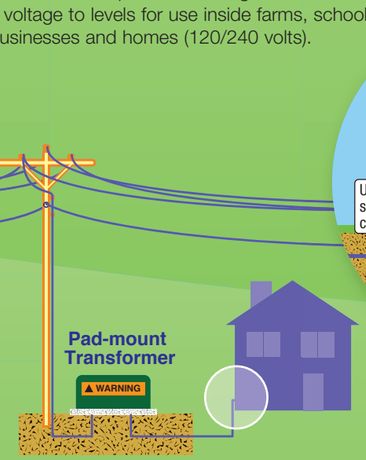
Most electric power is produced by large-scale generating plants located many miles away from consumers. Consumers today can own their own renewable power supply (such as solar or wind) and sell power back to the power company directly, or consumers can use self-generated power to serve their own homes or businesses.

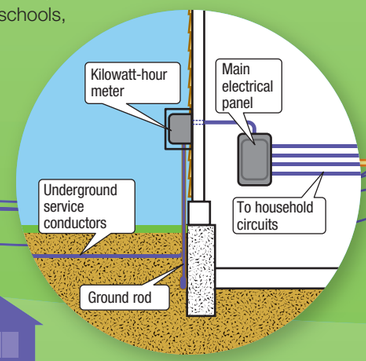


Overhead Service

End-User Delivery

Electric power passes through transformers, located on poles or on concrete pads for underground service, to reduce voltage to levels for use inside farms, schools, small businesses and homes (120/240 volts).





Underground Service