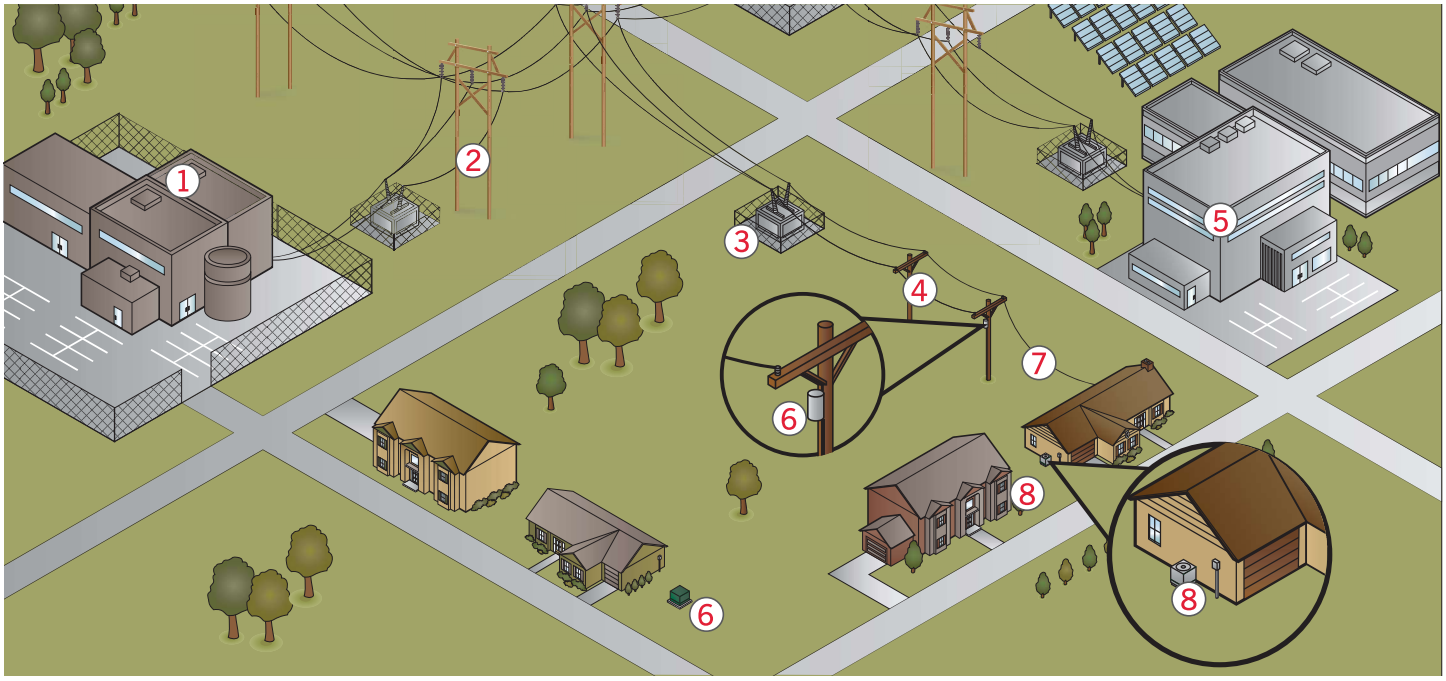
Delivering Electricity to You

Understanding the Electric Delivery System



Electricity — everyone uses it. Power generation is a complex process and delivering electricity to your home or business is dependent on sophisticated distribution systems. Duke Energy wants you to have a general understanding of our electric power production process and how the combination of generating stations, poles and power lines work together to make your days and nights more comfortable and convenient.

Power Generating Stations (1)

Duke Energy produces electricity at our nuclear, fossil-fueled, solar and hydroelectric generation stations.

Transmission Lines (2)

From the generating stations, large amounts of electricity are transported on high-voltage transmission lines to local substations. Duke Energy's transmission lines, rated at volts to 525 kilovolts, extend throughout our service territories and also connect our utilities with surrounding electric utilities to promote greater reliability of the regional grid systems.

Substations (3)

Next, substations — banks of electrical equipment — convert the transmission line voltage to lower levels that are appropriate for use in local communities. Substations also control the flow of electricity and protect the lines and equipment from damage.

Distribution Power Lines (4)

Distribution power lines, which can be installed above or underground, carry between 4 and 25 kilovolts of electricity to your neighborhood.

Your Home or Business (5)

A (6) transformer converts the distribution level voltage to levels that can be used inside your home or business (120 to 480 volts). Voltage is carefully measured to meet the customer's needs. Transformers can be mounted on poles or placed on the ground. This voltage is carried from the transformer through an underground or overhead power line — also referred to as a (7) service drop to (8) individual meters.

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