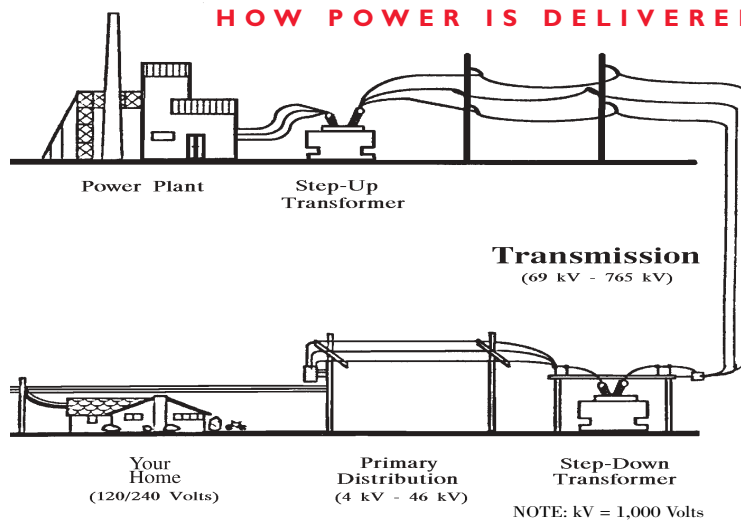


ELECTRIC TRANSMISSION

HOW IT WORKS

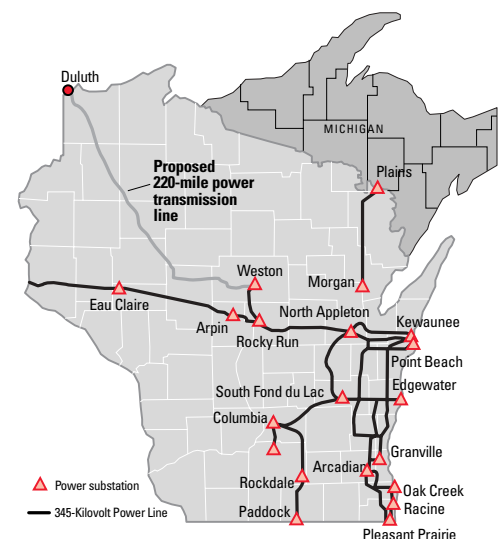
Electricity is delivered to homes, schools, hospitals, businesses and industries through an integrated system of generating plants, power lines and substations. Transmission lines, which consist of heavy cables strung between tall towers, carry power from where it is generated to the point where it is needed. The transmission network enables a large amount of power to travel long distances.



Electricity is generated by utilities and other energy producers at power plants. Electricity is “stepped up” or transformed at substations before it enters the network of high-voltage transmission lines. Electricity from the transmission network is reduced to lower voltages at substations, and distribution companies route the power to homes and businesses.

INTERCONNECTIONS ASSURE RELIABILITY, ECONOMY

Because electricity cannot be stored, it must be generated, transmitted and distributed at the moment it is needed. In the early days of electrification, power plants were small and generated electricity for the immediate area. As demand for electricity increased, utilities built larger, more efficient power plants and developed transmission lines to carry the energy over longer distances. To increase efficiency and reliability, utilities not only connected their own systems, they also connected to neighboring systems. These interconnected systems form a grid that allows power to flow from one region to another, improving reliability and lowering costs by providing alternative power paths.



The high-voltage transmission grid is the vital link between power plants that generate electricity and the people who need it.