



The Power of Water

It can take almost 16 gallons of water to power a 60-watt light bulb for 12 hours. Water is heated to provide the medium to convert thermal energy into electrical energy in a power plant by driving the turbines that generate electricity.

Feedwater from various sources ranging from natural to municipal, is purified and used as make up water to the boiler inside the power plant.

The water is purified with several technologies including DOWEX™ MONOSPHERE™, AMBERLITE™, or AMBERJET™ ion exchange resins from Dow Water & Process Solutions

Ninety five percent of the water in a power plant is reused. However, it is **vital for the reliability of the plant** that both the feedwater and recycled steam are purified to prevent scale and corrosion in the steam water circuit.

The generators provide electricity to substations and power lines which then distribute the electricity and carry it to our homes and businesses.

The water is heated to steam, which drives the turbines that are used to generate electricity.

- ⚡ Electricity cannot be efficiently stored; therefore, continuous supply of electricity must be produced to meet the customer's demand.
- ⚡ Recycling water internally at a power plant saves the water use daily need for 180,000 people.
- ⚡ The recycled water, as a result of Dow's ion exchange technology, is about 30 times that, or 18,000,000.

