

# NON-CONVENTIONAL SOURCES- HYDROELECTRIC

## WHAT IS HYDROELECTRIC?

It's a form of energy ... a renewable resource. Other renewable resources include geothermal, wave power, tidal power, wind power, and solar power. Hydroelectric powerplants do not use up resources to create electricity nor do they pollute the air, land, or water, as other powerplants may. Hydroelectric power has played an important part in the development of this Nation's electric power industry. Both small and large hydroelectric power developments were instrumental in the early expansion of the electric power industry. .

## HISTORY-

People have used this force for millennia. Over two thousand years ago, people in Greece used flowing water to turn the wheel of their mill to ground wheat into flour.

## HOW DOES HYDROELECTRIC ENERGY WORK?

Most hydroelectric power plants have a reservoir of water, a gate or valve to control how much water flows out of the reservoir, and an outlet or place where the water ends up after flowing downward. Water gains potential energy just before it spills over the top of a dam or flows down a hill. The potential energy is converted into kinetic energy as water flows downhill. The water can be used to turn the blades of a turbine to generate electricity, which is distributed to the power plant's customers.



The Three Gorges Dam in China, which holds back the Yangtze River, is the largest hydroelectric dam in the world, in terms of electricity production. The dam is 2,335 meters (7,660 feet) long and 185 meters (607 feet) tall and has enough generators to produce 22,500 megawatts of power.