

Nuclear power stations

A diagram of a nuclear power station is shown. Uranium is put into a fuel rod and many of these are placed inside the reactor. Energy released from the chain reaction produces a great deal of heat which makes the fuel rods glow red. The heat is removed from the reactor by passing a coolant over the fuel rods. Some power stations use high pressure water as the coolant, others use carbon dioxide gas.

The heat exchanger transfers the heat to water to produce steam which is used to turn the turbine and generator which produces the electricity in the same way as a conventional power station.