

*CANDU® Nuclear Power System

*CANada Deuterium Uranium

Steam Generator

Heat from the hot Heavy Water turns ordinary water into Steam

Turbine

Uses the power of the steam to turn the Generator

Generator

Produces electricity

Condenser

Turns the steam back into water & returns it to the Steam Generator

Lake Cooling Water

Pump

These large Heat Transport Pumps circulate the hot Heavy Water from the reactor to the Steam Generators

Fuel Bundle

The fuel is made from uranium that is naturally radioactive. Uranium atoms are split under controlled conditions to produce what is known as a chain reaction. A small amount of uranium produces large amounts of energy in the form of heat. Hot heavy water from the reactor is transferred to the steam generators where it is used to produce steam. The steam turns turbines and turbines turn electrical generators to produce clean electricity.

Calandria

A large tank filled with Heavy Water. The pressure tubes containing the fuel bundles run through the calandria

Fuel Channel

Twelve fuel bundles are placed in each fuel channel.
CANDU 6 reactors have 380 channels, and CANDU 9 reactors have 480 channels