

# Boiling Water Reactor (BWR)

In a Boiling Water Reactor (BWR), like the reactor at Perry, the water that cools the reactor fuel is directly transformed into steam and used to spin the turbine.

Very pure water called reactor coolant is pumped through the reactor core where it absorbs heat from the fuel. The resulting steam is sent to the main turbine, causing it and the generator to turn, which makes electricity. The steam then travels to the main condenser, where it is cooled and condensed back into water. The condensed water is then pumped back through the reactor vessel where the steam cycle is repeated.

The water used to cool the steam and condense it back into water is contained in a separate loop of pipes. It does not come into contact with the reactor water and is not radioactive. After cooling the steam, it flows to the cooling tower.

