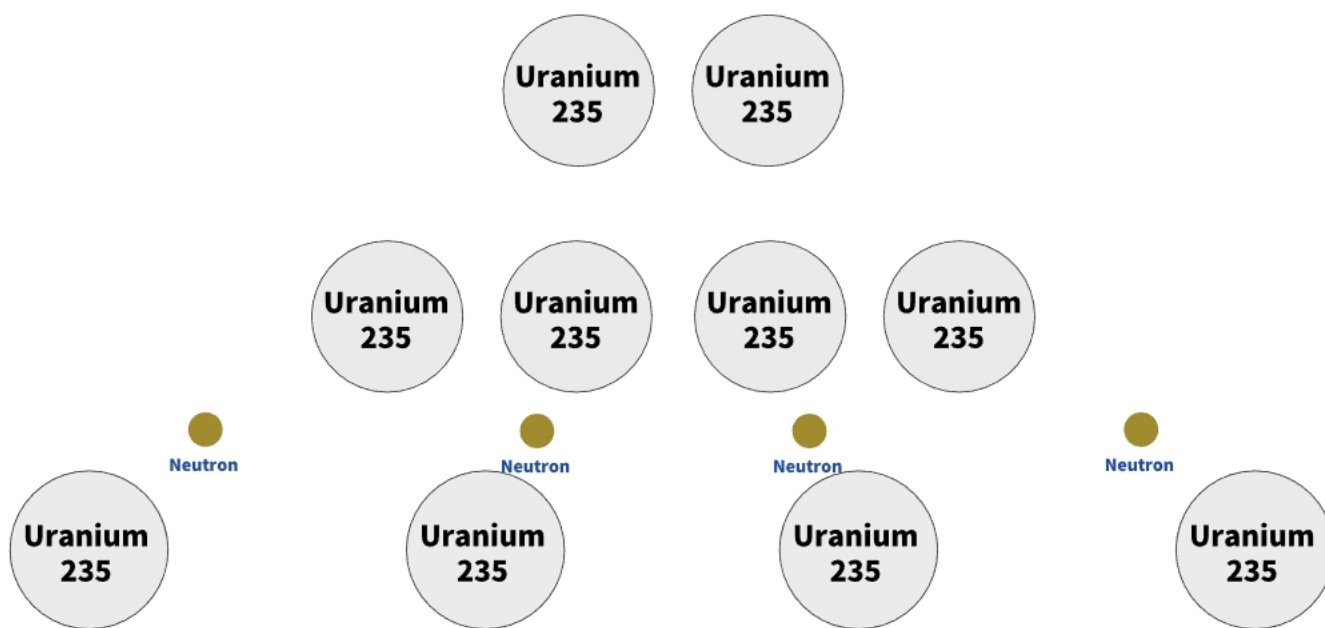


How nuclear fission works



All of the substances that surround us are made up of “atoms”. At the center of each atom is an atomic nuclei, made up of many protons and neutrons. The phenomenon in which an atomic nuclei splits into several parts is referred to as “nuclear fission,” and “uranium” is a substance that easily undergoes this fission.

When a uranium nuclei collides with a “neutron,” the nuclei splits into two and generates a large amount of energy. At this time, two or three neutrons are released, colliding with other nuclei and causing a chain reaction of nuclear fission. Nuclear power generation harnesses the immense thermal energy produced through this chain reaction of nuclear fission to produce electricity.

Naturally occurring uranium only contains 0.7% of “uranium 235,” an uranium isotope that is prone to nuclear fission. The majority of uranium deposits are made up of “uranium 238,” which is less prone to fission.

In nuclear power generation, the content of “uranium 235” in uranium fuel has increased to 3-5 % of the total.