

KEY TERMS

Enrichment	The technology or process that increases the concentration of uranium-235 in uranium fuel. Low enriched uranium (normally between 3 to 5 percent uranium-235) is not weapons-usable. If the concentration of uranium-235 is 20% or more, it is called "highly enriched uranium" (HEU), or "weapons usable" uranium.
Fission	Fission is the process of splitting heavy atoms by bombarding them with neutrons. A nuclear chain reaction releases enormous energy through repeated nuclear fissions. Uranium-235 is the only material in nature that can sustain a nuclear chain reaction.
Plutonium	Plutonium is a uranium derivative that can also be used to fuel a reactor or make an atomic bomb. Plutonium is not naturally-occurring; it is created as a by-product in uranium-fueled nuclear reactors. Plutonium is chain-reacting.
Proliferation	In general, proliferation means growth or multiplication. Nuclear proliferation is the spread of nuclear weapons, weapons-usable materials, and weapons-applicable nuclear technologies such as reprocessing.
Pyro-processing	Pyroprocessing is a generic term for high-temperature electro-metallurgical methods of extracting plutonium and other radionuclides from nuclear fuel waste. This technology is still experimental and is not in general use.
Reprocessing	The technical process of chemically extracting plutonium and other fissile materials from nuclear fuel waste. The PUREX method involves dissolving used fuel in nitric acid and separating plutonium using an organic solvent.
Uranium	The chemical element of atomic number 92, a dense gray radioactive heavy metal used as a fuel in nuclear reactors or as an explosive in atomic bombs.

ACRONYMS and DEFINITIONS

AECL	Atomic Energy of Canada Limited	Federal crown corporation that acts as a pass-through of public funds to privately-owned CNL.
CNL	Canadian Nuclear Laboratories	Private organization owned by SNC Lavalin and two Texas-based nuclear multinationals.
CNSC	Canadian Nuclear Safety Commission	Federal administrative tribunal and court of record that regulates the nuclear industry.
NB Power	New Brunswick Power	Public utility owned by NB taxpayers.
NRCAN	Natural Resources Canada	Federal government department responsible for nuclear policy and industry development.
NWMO	Nuclear Waste Management Organization	Organization formed by utilities in Canada that own high-level nuclear waste (irradiated fuel).
OPG	Ontario Power Generation	Public utility owned by Ontario taxpayers.
SMR / SMNR	Small Modular (Nuclear) Reactor	Industry term for any reactor designed to generate 300 MW of electricity or less, or equivalent heat.