g. Internal components specially designed or prepared for the operation of a nuclear reactor, including core support structures, thermal shields, baffles, core grid plates and diffuser plates;
h. Heat exchangers.

Note:
Each Government will use its discretion in determining whether or not a component is specially designed or prepared for use in connection with a nuclear reactor.

3104. Plants specially designed for the fabrication of nuclear reactor fuel elements and specially designed equipment therefor.

Technical Note:
A plant for the fabrication of nuclear reactor fuel elements includes equipment which:
a. Normally comes into direct contact with or directly processes or controls the production flow of nuclear materials;
b. Seals the nuclear material within the cladding;
*c. Checks the integrity of the cladding or the seal; **and***
d. Checks the finish treatment of the solid fuel.

3105. Plants for the production of heavy water, deuterium or deuterium compounds, and specially designed or prepared equipment and components therefor, as follows:

a. Plants for the production of heavy water, deuterium or deuterium compounds, as follows:
   1. Hydrogen sulphide-water exchange plants;
   2. Ammonia-hydrogen exchange plants;
   3. Hydrogen distillation plants;
b. Equipment and components, as follows, specially designed or prepared for:
   1. Hydrogen sulphide-water exchange process:
      a. Tray exchange towers;
      b. Hydrogen sulphide gas compressors;
   2. Ammonia-hydrogen exchange process:
      a. High-pressure ammonia-hydrogen exchange towers;
      b. High-efficiency stage contactors;
      c. Submersible stage recirculation pumps;
      d. Ammonia crackers designed for pressures of more than 3×10^6 pascal (30 bar);
   3. Hydrogen distillation process:
      a. Hydrogen cryogenic distillation towers and cold boxes designed for operation below 35 K;
      b. Turboexpanders or turboexpander-compressor sets designed for operation below 35 K;
   4. Concentration of heavy water to reactor grade (99.75 weight percent (o/w) deuterium oxide):
      a. Water distillation towers containing specially designed packings;
      b. Ammonia distillation towers containing specially designed packings;
      c. Catalytic burners for conversion of fully enriched deuterium to heavy water;
      d. Infrared absorption analysers capable of on-line hydrogen-deuterium ratio analysis where deuterium concentrations are equal to or more than 90 weight percent (o/w).

3106. Plants for the production of uranium hexafluoride (UF_6) and specially designed or prepared equipment and components therefor, as follows:

a. Plants for the production of UF_6;
b. Equipment and components, as follows, specially designed or prepared for UF_6 production:
   1. Fluorination and hydrofluorination screw and fluid bed reactors and flame towers;
   2. Distillation equipment for the purification of UF_6.

C. Nuclear-related Equipment

3201. Neutron generator systems, including tubes, designed for operation without an external vacuum system and using electrostatic acceleration to induce a tritium-deuterium nuclear reaction and specially designed components therefor.

3202. Power generating or propulsion equipment specially designed for use with military, space, marine or mobile nuclear reactors.

Notes:
1. *3202. does not embargo conventional power generating equipment which, although designed for use in a particular nuclear station, could in principle be used in conjunction with conventional systems.*
2. *Each Government will use its discretion in determining whether or not power generating or propulsion equipment is specially designed for military, space, marine or mobile use.*

3203. Electrolytic cells for the production of fluorine with a production capacity exceeding 250 g of fluorine per hour.

3204. Equipment, as follows, specially designed or prepared for the separation of isotopes of lithium:

a. Packed liquid-liquid exchange columns specially designed for lithium amalgams;
b. Amalgam pumps;
c. Amalgam electrolysis cells;
d. Evaporators for concentrated lithium hydroxide solution.

3205. Equipment specially designed for the production or recovery of tritium.

3206. Equipment for nuclear reactors:

a. Simulators specially designed for nuclear reactors;
b. Ultrasonic or eddy current test equipment specially designed for nuclear reactors.

D. "Software"

3301. "Software" specially designed or modified for the "development", "production" or "use" of equipment or materials embargoed by this List.