

**4104. Plants for the fabrication of fuel elements, and equipment that is specially designed or prepared therefor, including equipment that**

- (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.

**4105. Plants for the production or concentration of deuterium or deuterium compounds and equipment that is specially designed or prepared therefor.**

**4106. Plants and systems, and specially designed or prepared equipment therefor, for the processing of special and other fissionable materials and source materials, including**

- (a) plants and systems for the production of uranium hexafluoride;
- (b) plants and systems for the conversion of plutonium nitrate to plutonium oxide; and
- (c) plants and systems for the production of plutonium metal.

## *Atomic Energy Related Equipment*

**4201. Neutron generator systems, including tubes, that are designed for operation without an external vacuum system and that utilize electrostatic acceleration to induce a tritium-deuterium nuclear reaction.**

**4202. Power-generating or propulsion equipment that is specially designed or prepared for use with military, space, marine or mobile nuclear reactors.**

**4203. Electrolytic cells that are for the production of fluorine and that have a production capacity of greater than 0.25 kg of fluorine per hour.**

**4204. Equipment that is specially designed or prepared for the separation of isotopes of lithium.**

**4205. Plants for the production, recovery, extraction, concentration or handling of tritium and its compounds and mixtures, and specially designed or prepared equipment therefor.**

**4206. Frequency changers, converters or inverters that are specially designed or prepared to supply motor stators for gas centrifuge enrichment, and subassemblies and specially designed components therefor, and that have**

- (a) a multiphase output of 600 to 2 000 Hz;
- (b) a frequency control of better than 0.1 per cent;
- (c) a harmonic distortion of less than 2 per cent; and
- (d) an efficiency of greater than 80 per cent.

**4220. Mass spectrometers that are specially designed or modified for measuring from on-line samples the isotopic composition of feed, product or tails from uranium hexafluoride gas streams and that have**

- (a) a unit resolution for mass greater than 320;
- (b) an ion-source utilizing electron bombardment that is
  - (i) nickel-plated,
  - (ii) constructed of nichrome or monel, or
  - (iii) lined with nichrome or monel; and
- (c) a collector system that is suitable for isotopic analysis.

**4221. Process control instrumentation that is specially designed or modified for monitoring or controlling the processing of irradiated source materials and special and other fissionable materials.**