

Table-1 The Plutonium-Use Plan for Research and Development in the Japan Atomic Energy Agency for Japanese Fiscal Year 2007

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Independent Administrative Institution Japan Atomic Energy Agency

| Holder | Amount of spent fuel to be reprocessed in JFY2007 Weight of spent fuel (tU) | Amount of Pu in possession*1 | | | Purpose of Use*5 | | |
|--------|--|---|--|---|--|--|--|
| | | Amount of Pu to be hold at the end of JFY2006*3 (tPuf)*2 | Amount of Pu to be recovered in JFY2007 (tPuf)*2 | Amount of Pu to be hold at the end of JFY2007*4 (tPuf)*2 | Research and development of fast breeder reactor, etc. | | |
| | | | | | Place of use | Amount of Pu to be used (Rough estimate for annual use)*6 (tPuf/year) | Time to start use and prospects for the period required to consume |
| JAEA | 13 | 3.6 《0.5》*3 | 0.1 | 3.7 《0.6》*4 | Experimental Fast Reactor "JOYO" | 0.1 | JFY2008 forward approximately 6 years*7 |
| | | | | | Prototype Fast Breeder Reactor "MONJU" | 0.5 | JFY2008 forward approximately 6 years*8 |

*1: "Amount of Pu in possession" includes plutonium which was recovered in the Tokai Reprocessing Plant based on the reprocessing service contract with Electric Power Companies (EPC), but not yet transferred from EPC to the JAEA. The reason is that the JAEA plans to use the plutonium for "JOYO" and "MONJU" after transfer from EPC.

The JAEA plans to use a part of plutonium to be recovered at the Japan Nuclear Fuel Ltd. (JNFL) Rokkasho Reprocessing Plant after transfer from EPC. A fixed amount of the plutonium will be announced in this plutonium-use plan after a decision is available in the future.

*2: "tPuf" represents a metric ton of fissile plutonium (Puf) contained in plutonium.

*3: "3.6 tPuf" excludes about 0.4 ton fissile plutonium, which is dedicated to experimental purposes as fuel for a criticality test assembly FCA in the Tokai site from 4.0 tPuf of the "Separated Pu" to be held by JAEA at the end of JFY2006.

The number in parenthesis 《0.5》 tPuf shows the amount of the "separated Pu" already fabricated into fuel assemblies for "JOYO" and "MONJU" and stored at the fuel fabrication facility and those reactors.

*4: The number in parenthesis 《0.6》 tPuf consists of 0.1tPuf "separated Pu" to be fabricated as 40 new fuel assemblies for "Joyo" in JFY2007, and 0.5tPuf "separated Pu" that are expected to be fabricated into fuel assemblies for "JOYO" and "MONJU" by the end of JFY2006.

*5: In addition to plutonium use for "JOYO" and "MONJU," a small amount of plutonium will be used in the JAEA's research and development facilities under a limited-quantity license for specific research and development purposes.

*6: "Rough estimate for annual use" represents an annual average amount of plutonium contained in MOX fuel to be loaded into "JOYO" and "MONJU" during standard reactor operations.

*7: At "JOYO," JAEA is carrying out periodical inspection and preventive maintenance for plant aging, etc. from JFY2007 to JFY2008, and is expected to use about 0.1 ton fissile plutonium every year after JFY 2008. The amount of annual usage and expected period to consume this plutonium will depend on the progress of research and development, and therefore will be subject to change.

*8: At "MONJU," JAEA is carrying out system function tests for verification of improved equipment, and total system function tests for preparation for regular operation in JFY2007. "Monju" is expected to use about 0.5 ton fissile plutonium every year after JFY 2008. As with "JOYO," the amount of annual usage and the expected period to consume the plutonium will depend on the progress of research and development, and therefore, will be subject to change.