

Table 1: Japan Atomic Energy Agency's Research and Development Plutonium Utilization Plan (Fiscal Year 2008)

(Japan Atomic Energy Agency, 7 March 2008)

Owner	quantity of Spent Nuc. Fuel planned to be reprocessed in FY08 (tons U)	quantity held *1 (tons Puf) *2			purpose of use *7		
		projected quantity of Pu held at end FY07 *4	projected quantity of Pu to be recovered in FY08	projected quantity of Pu held at end FY08 *5	research and development of fast breeder reactor etc.		
					location of use	projected quantity to be used annually *7 (tons Puf/year) *2	time planned to start using, and approximate time required to use Pu
Japan Atomic Energy Agency	- *3	3.6 (0.6) *6	- *3	3.6 (0.6) *6	Experimental FR "Joyo"	0.1	about 6 years equivalent *9
					Prototype FBR "Monju"	0.5	From 2008 about 6 years equivalent *10

*1. In regard to plutonium recovered at the Tokai Reprocessing Facility based on a service contract with utilities, some of this has not yet been transferred by the utilities. This plutonium will be transferred in future by the utilities and it is planned that it will be used in 'Joyo' and 'Monju'. This is included in the above holdings. In regard to plutonium recovered at the Rokkasho Reprocessing Plant, it is planned that [some] will be transferred by the utilities and utilized. After the specific quantities have been decided they will be recorded and published in this use plan.

*2. The plutonium figures shown under "quantity held" and "projected quantity to be used" are the fissile component of the plutonium (Puf).

*3. There is no plan to recover plutonium at the Tokai Reprocessing Facility in 2007, because priority is being given to measures to increase earthquake resistance, which are being taken in parallel with an earthquake safety assessment following the Niigata Prefecture Chuetsu-oki earthquake.

*4. The 3.6 ton Puf figure is derived by subtracting approximately 0.4 ton Puf that will be used for research and development in fast reactor critical experiment equipment from the total of approximately 4.0 tons Puf of separated plutonium that JAEA expects to hold at the end of FY2007. This figure reflects the change announced on 28 September 2007 in the "Report of Variation to Tokai Reprocessing Facility Utilization Plan", which changed the projected quantity of spent fuel to be reprocessed from 13 tonU to 3 tonU. Hence, it differs from the "projected quantity of Pu held at end FY07" shown in "Japan Atomic Energy Agency's Research and Development Plutonium Utilization Plan (Fiscal Year 2007)".

*5. Includes proposed use in FY 2008.

*6. The figure in brackets () is the projected quantity of separated plutonium expected to be held in the form of new fuel products (completed fuel assemblies) within the total projected quantity held. Also, 0.0 ton Puf of new fuel (7 fabricated assemblies) planned to be fabricated for 'Joyo' is included in the projected quantity of plutonium held at the end of FY 2008. (The figure of 0.0 ton Puf results from rounding to the first decimal place.)

*7. At JAEA, besides use as fuel for reactors listed in table 1, there are also cases where plutonium is used for permitted research and development purposes within the limits of quantities authorized for JAEA's research and development facilities.

*8. The "projected amount to be used annually" shows the amount of plutonium contained in MOX fuel to be loaded into the 'Joyo' and 'Monju' reactors during normal operation, adjusted to a yearly basis.

*9. 'Joyo' is undergoing checks related to partial obstruction of the rotating plug fuel replacement function. The obstruction was confirmed in November 2007 and was caused by interference from experiment equipment with measurement wires attached. From May to June this year, monitoring will be undertaken using newly produced reactor core monitoring equipment and judgements will be made about restoration measures, process and timing of recommencement of plutonium utilization.

*10. It is planned to carry out performance testing of 'Monju' after obtaining local understanding. From FY 2008, the plan is to use 0.5 ton of plutonium each year. The time required and the estimated annual use may change depending on progress of research and development.