

## Plans for the Utilization of Plutonium to be Recovered at the Rokkasho Reprocessing Plant in FY2007

Federation of Electric Power Companies of Japan

Owner	Amount of reprocessing *1	Amount of plutonium *2			Purpose of use (used as LWR fuel) *3		
	Amount of spent fuel to be reprocessed in FY2007 (tU)*4	Amount of plutonium expected to be retained by the end of FY2006*5 (tPuf)*6	Amount of plutonium expected to be recovered in FY2007*7 (tPuf)*6	Amount of plutonium expected to be retained by the end of FY2007*8 (tPuf)*6	Place to be used	Estimated annual usage *9 (tPuf per year) *6	Timing of the start of utilization*10 and estimate of the period required for utilization*11
Hokkaido EPCo	–	0.0	0.1	0.1	Tomari Power Station	0.2	After FY 2012 for a period equivalent to 0.2 years
Tohoku EPCo	8	0.0	0.1	0.1	Onagawa Nuclear Power Station	0.2	After FY 2012 for a period equivalent to 0.2 years
Tokyo EPCo	184	0.3	0.8	1.0	Three to four Tokyo EPCo units, based on continued efforts by Tokyo EPCo to regain public trust from local communities at sites	0.9 – 1.6	After FY 2012 for a period equivalent to 0.3-0.6 years
Chubu EPCo	34	0.1	0.2	0.2	Hamaoka Nuclear Power Station Unit 4	0.4	After FY 2012 for a period equivalent to 0.3 years
Hokuriku EPCo	–	0.0	0.0	0.0	Shika Nuclear Power Station	0.1	After FY 2012 for a period equivalent to 0.2 years
Kansai EPCo	125	0.2	0.5	0.6	Takahama Power Station Units 3 and 4; one or two units at Ohi Power Station	1.1 – 1.4	After FY 2012 for a period equivalent to 0.2-0.3 years
Chugoku EPCo	20	0.0	0.1	0.1	Shimane Nuclear Power Station Unit 2	0.2	After FY 2012 for a period equivalent to 0.5 years
Shikoku EPCo	–	0.0	0.1	0.2	Ikata Power Station Unit 3	0.4	After FY 2012 for a period equivalent to 0.3 years
Kyushu EPCo	20	0.1	0.3	0.4	Genkai Nuclear Power Station Unit 3	0.4	After FY 2012 for a period equivalent to 0.5 years
Japan Atomic Power Company (JAPC)	–	0.0	0.1	0.2	Tsuruga Power Station Unit 2; Tokai Daini Power Station	0.5	After FY 2012 for a period Equivalent to 0.2 years
Subtotal	392	0.7	2.2	2.9		4.4 – 5.4	
Electric Power Development Company (EPDC)		Amount to be transferred from other utilities*12			Ohma Nuclear Power Station	1.1	
Total	392	0.7	2.2	2.9		5.5 – 6.5	

The above plans shall be updated and detailed as future progress is made in the pluthermal program, such as the start of operation of Rokkasho MOX fuel fabrication plant, etc..

- \*1 "Amount of reprocessing" is based on JNFL's reprocessing program.
- \*2 "Amount of plutonium" represents the estimated amount of plutonium to be recovered from reprocessing at the RRP by the end of FY2006, in FY2007 and the total amount by the end of FY2007. Recovered plutonium is to be allocated to the utilities in proportion to the amount of fissile plutonium contained in the spent fuel they have delivered to JNFL's RRP. Therefore, plutonium will also be allocated to the utilities whose spent fuel is not actually reprocessed each fiscal year. Eventually, however, plutonium will be allocated in proportion to the amount of fissile plutonium contained in the spent fuel contracted for reprocessing by each utility.
- \*3 In addition to use as LWR fuel, some plutonium may be transferred to JAEA for R&D purposes. Specific amounts of plutonium to be transferred by each utility will be made public once such amounts have been determined.
- \*4 Total amount of spent fuel differs due to rounding to an integer.
- \*5 Because the actual allocation of plutonium to the utilities is to be made after completion of active tests in one lump, the "Amount of plutonium expected to be retained by the end of FY2006" is based on the estimated allocation to the utilities of plutonium to be recovered and retained at the RRP by the end of FY2006. This amount of plutonium is modified to reflect a change in JNFL's reprocessing program in FY2006 (from 238tU to 140tU), which was made public by JNFL as a "Notification of change on the construction plan for the reprocessing plant" on January 31, 2007. Therefore, this amount of plutonium is different from the "Amount of plutonium expected to be allocated in FY2006 (total 1.4tPuf)" in "Plans for the Utilization of Plutonium to be Recovered at the Rokkasho Reprocessing Plant, FY2005 and 2006" that was made public by the Federation of Electric Power Companies of Japan on April 3, 2006.
- \*6 The amount of plutonium is described as the amount of fissile plutonium (Puf). (Total amount of fissile plutonium may differ due to rounding to the first decimal place.)
- \*7 Because not all plutonium will be allocated to the utilities within FY2007, the "Amount of plutonium expected to be recovered in FY2007" is based on the estimated allocation to the utilities of all plutonium to be recovered and retained at the RRP in FY2007.
- \*8 "Amount of plutonium expected to be retained by the end of FY2007" is the sum of the "Amount of plutonium expected to be retained by the end of FY2006" and "Amount of plutonium expected to be recovered in FY2007", but may differ due to rounding to the first decimal place.
- \*9 "Estimated annual usage" represents the annual average amount of plutonium contained in MOX fuel to be loaded into power reactors according to each utility's pluthermal program. In some cases, the estimate may include plutonium recovered from overseas reprocessing.
- \*10 "Timing of the start of utilization" is defined as after FY2012, when the Rokkasho MOX fuel fabrication plant, to be constructed adjacent to the RRP, is scheduled to commence operation. Until then, plutonium will be stored at RRP in the form of uranium-plutonium mixed oxide powder.
- \*11 "Estimate of the period required for utilization" is the "Amount of plutonium expected to be retained by the end of FY2007" divided by the "estimated annual usage." (It does not necessarily reflect the actual period of use, because some of the plutonium is expected to be transferred to EPDC and JAEA, and the "estimated annual usage" may include the use of the plutonium recovered from the overseas reprocessing in some cases.)
- \*12 The specific amount to be transferred to EPDC by the utilities will be made public once it has been determined.