

Plans for the Utilization of Plutonium to be Recovered at the Rokkasho Reprocessing Plant (RRP), FY2010

The Federation of Electric Power Companies of

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 FY2010 (tU)*4	Amount of plutonium expected to be retained by the end of FY2009 (tPuf)*5	Amount of plutonium expected to be recovered in FY2010 (tPuf)*5	Amount of plutonium expected to be retained by the end of FY2010*6 (tPuf)*5	Place to be used	Estimated annual usage *7 (tPuf per year) *5	Timing of the start of utilization*8 and estimate of the period required for utilization*9
Hokkaido EPCo	14	0.1	0.0	0.1	Tomari Power Station Unit 3	0.2	After FY 2015 for a period equivalent to 0.4 years
Tohoku EPCo	-	0.1	0.0	0.1	Onagawa Nuclear Power Station Unit 3	0.2	After FY 2015 for a period equivalent to 0.5 years
Tokyo EPCo	13	0.7	0.1	0.9	Three to four Tokyo EPCo units including Fukushima Daiichi Nuclear Power Station Unit 3, based on continued efforts by Tokyo EPCo to regain public trust from local communities at sites	0.9 – 1.6	After FY 2015 for a period equivalent to 0.6-1.0 years
Chubu EPCo	-	0.2	0.0	0.2	Hamaoka Nuclear Power Station Unit 4	0.4	After FY 2015 for a period equivalent to 0.5 years
Hokuriku EPCo	-	0.0	0.0	0.0	Shika Nuclear Power Station	0.1	After FY 2015 for a period equivalent to 0.1 years
Kansai EPCo	-	0.6	0.1	0.7	Takahama Power Station Units 3 and 4; one or two units at Ohi Power Station	1.1 – 1.4	After FY 2015 for a period equivalent to 0.5-0.6 years
Chugoku EPCo	17	0.1	0.0	0.1	Shimane Nuclear Power Station Unit 2	0.2	After FY 2015 for a period equivalent to 0.5 years
Shikoku EPCo	18	0.1	0.0	0.2	Ikata Power Station Unit 3	0.4	After FY 2015 for a period equivalent to 0.4 years
Kyushu EPCo	-	0.3	0.1	0.4	Genkai Nuclear Power Station Unit 3	0.4	After FY 2015 for a period equivalent to 0.9 years
Japan Atomic Power Company (JAPC)	18	0.1	0.0	0.2	Tsuruga Power Station Unit 2; Tokai Daini Power Station	0.5	After FY 2015 for a period Equivalent to 0.3 years
Subtotal	80	2.3	0.5	2.8		4.4 – 5.4	
Electric Power Development Company (EPDC)		Amount to be transferred from other utilities*10			Ohma Nuclear Power Station	1.1	
Total	80	2.3	0.5	2.8		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 the 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 FY2009 (including plutonium that has not been delivered to each electric power company), in FY2010 and the total amount by the end of FY2010. 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 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.)
- *6 "Amount of plutonium expected to be retained by the end of FY2010" is the sum of the "Amount of plutonium expected to be retained by the end of FY2009" and "Amount of plutonium expected to be recovered in FY2010", but may differ due to rounding to the first decimal place.
- *7 "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.
- *8 "Timing of the start of utilization" is defined as after FY2015, 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.
- *9 "Estimate of the period required for utilization" is the "Amount of plutonium expected to be retained by the end of FY2010" 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.)
- *10 The specific amount to be transferred to EPDC by the utilities will be made public once it has been determined.