

## Federation of Electric Power Companies of Japan (23 February 2007)

### Utilization Plan for Plutonium Recovered at Rokkasho Reprocessing Plant (Fiscal Year 2007)

Owner	quantity to be reprocessed *1	quantity held *2			purpose (to be used as fuel for Light Water Reactors) *3		
		projected quantity of Pu held at end FY06 *5 (tons Puf) *6	projected quantity of Pu to be recovered in FY07 *7 (tons Puf) *6	projected quantity of Pu held at end FY07 *8 (tons Puf) *6	reactor(s) to utilize recovered Pu	projected quantity to be used annually *9 (tons Puf/year) *6	time planned to start using Pu *10, and approximate time required to use Pu *11
Hokkaido	-	0.0	0.1	0.1	Tomari N.P.P.	0.2	In or after FY2012 about 0.5 years equivalent
Tohoku	8	0.0	0.1	0.1	Onagawa N.P.P.	0.2	In or after FY2012 about 0.4 years equivalent
Tokyo	184	0.3	0.8	1.0	On the basis of attempting to recover the trust of local residents, plan to utilize 3 to 4 reactors belonging to TEPCO.	0.9-1.6	In or after FY2012 about 0.6 to 1.1 years equivalent
Chubu	34	0.1	0.2	0.2	Hamaoka N.P.P. reactor 4	0.4	In or after FY2012 about 0.5 years equivalent
Hokuriku	-	0.0	0.0	0.0	Shika N.P.P.	0.1	In or after FY2012 about 0.1 years equivalent
Kansai	125	0.2	0.5	0.6	Takahama N.P.P. reactors 3 & 4, plus 1 or 2 reactors at Ohi N.P.P.	1.1-1.4	In or after FY2012 about 0.4 to 0.6 years equivalent
Chugoku	20	0.0	0.1	0.1	Shimane N.P.P. reactor 2	0.2	In or after FY2012 about 0.6 years equivalent
Shikoku	-	0.0	0.1	0.2	Ikata N.P.P. reactor 3	0.4	In or after FY2012 about 0.4 years equivalent
Kyushu	20	0.1	0.3	0.4	Genkai N.P.P. reactor 3	0.4	In or after FY2012 about 1.0 years equivalent
JAPCO	-	0.0	0.1	0.2	Tsuruga N.P.P. reactor 2, Tokai 2 N.P.P.	0.5	In or after FY2012 about 0.4 years equivalent
<b>sub total</b>	<b>392</b>	<b>0.7</b>	<b>2.2</b>	<b>2.9</b>		<b>4.4-5.4</b>	
J-power		Will be transferred from other utilities *12			Ohma N.P.P.	1.1	
<b>Grand Total</b>	<b>392</b>	<b>0.7</b>	<b>2.2</b>	<b>2.9</b>		<b>5.5-6.5</b>	

More details will be added as the pluthermal program proceeds and the MOX fuel fabrication plant comes on line.

\*1. The 'quantity of Spent Nuclear Fuel planned to be reprocessed' is in accordance with the reprocessing plan put together by Japan Nuclear Fuel Limited..

\*2. Listed under the 'quantity of Pu held' are the quantity of plutonium that is projected to be held by each company at the end of FY2006, the quantity projected to be recovered at the Rokkasho reprocessing plant in FY2007, and the total of these two quantities, which is the quantity projected to be held at the end of FY2007. The recovered plutonium will be allocated to each electric power company in proportion to the amount of fissile plutonium contained in the spent nuclear fuel they sent to the Rokkasho Reprocessing Plant. Consequently, plutonium may be allocated to some companies whose plutonium was not actually reprocessed in that year. However, when all spent fuel has been reprocessed, the amount of plutonium allocated to each company will correspond to the amount of fissile plutonium contained in the spent fuel that they sent for reprocessing.

\*3. Besides the amount to be used in LWRs, some plutonium will be transferred to JAEA to be used in their research projects. The amount to be transferred from each power company to JAEA will be announced when it is decided.

\*4. Figures are rounded, so totals do not add up in some places.

\*5. Because actual allocation to each electric power company will take place after active tests are completed, the 'projected quantity of Pu held at end FY06' shown here is an estimate of each company's portion of the projected quantity of plutonium to be recovered and stored from the spent fuel reprocessed at the Rokkasho reprocessing plant in FY2006. The estimate reflects the change made in the 'Variation Report for the Reprocessing Plant Construction Plan' announced by Japan Nuclear Fuel Ltd on 31 January 2007. The quantity to be reprocessed in FY2006 was altered from 238 tons U to 140 tons U. Hence the estimate here differs from the projected allocation for FY2006 (1.4 tons Puf) shown in the 'Utilization Plan for Plutonium Recovered at Rokkasho Reprocessing Plant (Fiscal Years 2005-2006)' published by the Federation of Electric Power Companies on 3 April 2006.

\*6. The 'amount of plutonium to be allocated' is shown in terms of fissile plutonium. The amount allocated to each company is rounded to the first decimal place, so in some cases a value of 0.0 is shown.

\*7. Because the allocation to each electric power company will not be completed in FY2007, the 'projected quantity of Pu to be recovered in FY07' shown here is an estimate of each company's portion of the projected quantity of plutonium to be recovered and stored from the spent fuel reprocessed at the Rokkasho reprocessing plant in FY2007.

\*8. 'Projected quantity of Pu held at end FY07' equals 'projected quantity of Pu held at end FY06' plus 'projected quantity of Pu to be recovered in FY07'. Figures are rounded to the first decimal place, so the totals do not add up in places.

\*9. The 'projected amount to be used annually' shows the amount of plutonium contained in MOX fuel to be loaded according to the plans provided by each electric power company, adjusted to a yearly basis. In some cases the amount of plutonium to be used includes plutonium recovered overseas.

\*10. The 'time planned to start using Pu' is after 2012, when the planned MOX fuel fabrication plant, located next to the Rokkasho Reprocessing Plant, is planned to start operating. Until the MOX plant commences operations, recovered plutonium will be managed and stored at the Rokkasho reprocessing plant in the form of uranium-plutonium mixed oxide powder.

\*11. The 'approximate time required to use Pu' is calculated by dividing the 'projected quantity of plutonium held at end FY07' by the 'projected quantity to be used annually'. (Note that because some plutonium is to be transferred to J-Power and JAEA, and because in some cases 'the quantity to be used' includes plutonium stored overseas, the actual time taken might not match the span shown here.)

\*12. The amount to be transferred from other power companies to J-Power will be announced after it has been decided.