Federation of Electric Power Companies of Japan (6 March 2009)

Utilization Plan for Plutonium Recovered at Rokkasho Reprocessing Plant (Fiscal Year 2009)							
Owner	quantity to be reprocessed *1	quantity held *2			purpose (to be used as fuel for Light Water Reactors) *3		
	quantity of Spent Nuc. Fuel planned to be reprocessed in FY09 (tons U) *4		projected quantity of Pu to be recovered in FY09 (tons Puf) *6	projected quantity of Pu held at end FY09 *7 (tons Puf) *6	reactor(s) to utilize recovered Pu	projected quantity to be used annually *8 (tons Puf/year) *6	time planned to start using Pu *9, and approximate time required to use Pu *10
Hokkaido	14	0.1	0.0	0.1	Tomari N.P.P. reactor 3	0.2	In or after FY2012 about 0.5 years equivalent
Tohoku	-	0.1	0.0	0.1	Onagawa N.P.P. reactor 3	0.2	In or after FY2012 about 0.5 years equivalent
Tokyo	61	0.8	0.3	1.1	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 0.7 to 1.2 years equivalent
Chubu	16	0.2	0.1	0.2	Hamaoka N.P.P. reactor 4	0.4	In or after FY2012 about 0.6 years equivalent
Hokuriku	3	0.0	0.0	0.0	Shika N.P.P.	0.1	In or after FY2012 about 0.1 years equivalent
Kansai	12	0.5	0.2	0.7	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 0.5 to 0.7 years equivalent
Chugoku	11	0.1	0.0	0.1	Shimane N.P.P. reactor 2	0.2	In or after FY2012 about 0.6 years equivalent
Shikoku	19	0.1	0.0	0.2	Ikata N.P.P. reactor 3	0.4	In or after FY2012 about 0.4 years equivalent
Kyushu	18	0.3	0.1	0.5	Genkai N.P.P. reactor 3	0.4	In or after FY2012 about 1.1 years equivalent
JAPCO	5	0.1	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
sub total	160	2.3	0.9	3.2		4.4-5.4	
J-power		Will be tranferred from other utilities *11			Ohma N.P.P.	1.1	
Grand Total	160	2.3	0.9	3.2		5.5-6.5	

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 (JNFL)..
- *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 FY2008, the quantity projected to be recovered at the Rokkasho reprocessing plant in FY2009, and the total of these two quantities, which is the quantity projected to be held at the end of FY2009. 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. On 29 May 2008, JNFL released a "Report concerning revised work plan for the reprocessing facility". Based on acutal results, the quantity of spent fuel reprocessed in FY 2007 was reduced from 210 tons U to 181 tons U. Then on 25 November 2008, JNFL released another "Report concerning revised work plan for the reprocessing facility" in which the quantity to be reprocessed in FY 2008 was reduced from 395 tons U to 150 tons U. On 29 January 2009, JNFL released another "Report concerning revised work plan for the reprocessing facility", which reduced the quantity from 150 tons U to 104 tons U. The figure shown here reflects these revisions. Therefore, the figure differs from the figure shown in the Federation of Electric Power Companies' 7 March 2008 "Utilization Plan for Plutonium Recovered at Rokkasho Reprocessing Plant (Fiscal Year 2008)" shown in for "projected quantity of Pu held at end FY08" (3.9 tons Puf).
- *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. 'Projected quantity of Pu held at end FY09' equals 'projected quantity of Pu held at end FY08' plus 'projected quantity of Pu to be recovered in FY09'. Figures are rounded to the first decimal place, so the totals do not add up in places.
- *8. 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.
- *9. 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.
- *10. The 'approximate time required to use Pu' is calculated by dividing the 'projected quantity of plutonium held at end FY09' 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.
- *11. The amount to be transferred from other power companies to J-Power will be announced after it has been decided.