

The contravention consists in proposed Russian behaviour which has the potential to undermine the entire disposition effort by making it look foolish. The foolishness, for its part, consists in the spectacle of donors going to great trouble and expense to assist Russia in reducing one pile of plutonium when all along Russia is preparing to amass another pile which is really not that different from the first.

There is a similarity between WGPu and RGPu. If there weren't an overlap in their properties there would be no talk either of converting WGPu to civil reactor use, or of the potential to generate WGPu in the blankets of civil breeder reactors (Albright et al., 1997, p. 21), or of the fact that all separated plutonium is usable in a nuclear explosive device (DOE, 1997, pp. 37-39; Allison et al., 1996, p. 217, who also cite Mark, 1993; Hinton et al., 1996, pp.4-1 to 4-7). What then could be going on in the mind of the donor country who assists Russia to burn down one amount of plutonium when, towards the end of 34 tonnes of WGPu, Minatom intends to start building a stock of RGPu?

Actually, the situation is even stranger. As matters stand, Russia not only has some 33 tonnes of separated civil plutonium on hand, but adds about one tonne annually to this amount (Rybachenkov, 2001, p. 8; Bunn, 2000, p. 53). If this rate of addition were to persist, then by the end of the 30 or so years from now that could be required to burn 34 tonnes of WGPu, Russia could have accumulated more than 60 tonnes of separated RGPu.<sup>2</sup>

The contravention problem is not that Russia might break out of nuclear disarmament by purifying its RGPu up to WGPu. This would not be necessary since even after disposition of 34 tonnes had been accomplished, 80 or more tonnes of weapon-usable plutonium would still be available for military use (Bunn, 2000). The problem is what the perception of concurrent reduction of WGPu and accumulation of RGPu might do to the credibility and therefore the long-term sustainability of an international programme of WGPu disposition in Russia.

If the Russians are going to build an RGPu stockpile, it has to be asked, why are G-8 and other donors working out a phenomenally intricate and expensive procedure for the disposition of a portion of Russia's WGPu? Where is the cost-effectiveness in this? Instead, why not see to it internationally that excess WGPu is securely stored in Russia for 40 years under IAEA inspection and then hand Minatom the key to the vault on the understanding that the stuff is to be blended down to reactor-grade and used commercially? It may be objected that secure storage is very expensive. But, as matters stand, spent-fuel disposition of 34 tonnes, and possibly of additional batches thereafter, requires secure storage right out to the end of the process even as amounts are reduced. Secure storage costs are not something over and above those that must be met in dispositioning 34 tonnes. They are built into the programme's estimates and, with conversion included, amount to \$600 million of roughly \$2 billion required to implement the Agreement (Joint U.S.-Russian Working Group, December 2001, p. x).

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<sup>2</sup> Furthermore, three RBMK reactors whose energy is needed for local electricity and heating (at Seversk and Zheleznogorsk) continue to produce about 1.5 tonnes annually of WGPu in oxide form (Bunn, 2000, p. 51). The United States has sought and is likely to succeed in assisting Russia to convert these reactors or to provide alternative energy sources. But if cooperation did not work out, and if reactor service lives were somehow extended, Russia could still be producing new WGPu around the time international disposition got under way.