

However they do it, the G-8 have to address the issue of hedging if their sponsorship of irreversibility and, indeed, disposition is to be credible in the long haul.

In addition to hedging, the prospect of **burning down and breeding up** in Russia needs attention. Previously mentioned, let's now call this the B&B problem and consider what an attempt to do something about it might mean for the variants on disposition now being suggested by the United States.

Anything much on the subject of B&B and irreversibility is sure to read like an excursion into theology for those who want to get on with things. My reply is that the proactive disposition planner will try to get the theology right. This is absolutely essential for success in dealing with a Russia which has its own theology. To the degree we fail to get the theology right at the outset, the entire enterprise of disposition is less likely to hold under stress.

The concept of irreversible disposition, and of the spent-fuel standard as a measure of it, originated in a society with excess WGPu and no plans for the civil use of plutonium. Spent-fuel disposition was devised for purposes of national and international security, namely to take military plutonium out of circulation irrevocably. The Russians, for their part, were and are acutely aware of the interaction between military and civil plutonium, and of the potential to use WGPu disposition in creating financial and technological preconditions for greatly increased reliance on civil plutonium towards the middle of the twenty-first century (Minatom, 2000). For Moscow, the chief aim of disposition was and is to make the most of the linkages between civil and military plutonium over the long haul. Consistent with the U.S. aim to put excess military plutonium permanently out of reach, the September 2000 Agreement goes quite far in curtailing and postponing Russia's ability to reprocess spent fuel made from excess WGPu. It also places significant constraints on breeder-reactor use, and on the accumulation of civil plutonium holdings in Russia even after termination of the arrangement.⁵ But none of this is conclusive.

Way out there, around 2040, Minatom or its successor could be moving vigorously into an electricity sector based on separated civil plutonium, on the closed fuel cycle, and at least in part on G-7 and other foreign support. If this is what the donors are to assist in, why not say so now and give a hand to Russia's long-term nuclear power strategy rather than curtail it? And if

⁵ It may be useful to make clear what the Agreement does to inhibit simultaneous WGPu disposition and accumulation of RGPu by the Russian Federation. Pu is not to be separated from spent military MOX until disposition of 34 tonnes of WGPu is complete (Article VI, para 2), and agreed international monitoring measures are in place (XIII: 7). Although Article XIII: 6, in raising the possibility of failure to agree on international monitoring, suggests that Pu could be separated from spent MOX by Russia on termination of the Agreement, it would be done with obligatory inspection by the United States. A less wrought-up scenario is suggested by provisions which allow Pu to be separated by mutual assent once the Agreement is terminated (XIII: 5c), although the Federation is to key separation to demand in the civil sector in order to avoid unnecessary accumulation of civil Pu holdings (Joint Statement). Further, if additional amounts beyond 34 tonnes are committed, termination of the Agreement will await disposition of the further amount (XIII: 4), thereby deferring separation of plutonium from spent military MOX. Meanwhile, the blanket in the BN-600 is to be removed in stages, but reprocessing of spent BN-600 fuel containing WGPu is allowed under agreed international monitoring (Joint Statement).