

Nuclear waste management

Russian experience and new reactor
deals

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Russian industry

- ▶ State nuclear corporation “Rosatom” established in 2007 (owned by the government but its shares can be sold whenever gov’t decides so)/there is national operator for radioactive wastes in the corporation
- ▶ “Rosatom” claims it had a book of orders to the tune of over \$100 billion (27 new reactor orders), predominantly, in developing countries. Usually, “Rosatom” also proposes to take back spent nuclear fuel but not radioactive waste

- ▶ Legal ban on import of radioactive waste from all countries (law on env.protection, law on management of radwaste)
- ▶ Controversial situation with various kinds of radwaste accumulated at dozens of sites (total of 500 mln c.m.)
- ▶ Legally, spent fuel treated separately from radioactive waste/ it can be imported on the condition of reprocessing (and associated storage)

- ▶ Very limited amount of spent fuel (primarily from submarines and old VVER-440s) gets reprocessed - “Mayak” is too old to work at full capacity
- ▶ Waste of reprocessing may be sent back to country the spent fuel came from
- ▶ There is no facility to reprocess VVER-1200s spent fuel
- ▶ Dry storage in Siberia for Russian spent fuel
- ▶ Over 20,000 tons accumulated at reactor sites

- ▶ Although “Mayak” management was continuously repeading it stopped to dump radioactive waste to the environment in late 1960s, criminal case against the director of “Mayak” in 2005 confirmed radwaste still dumped to the river.
- ▶ Russian law on environmental protection forbids the dumping of radioactive waste to the environment. However, “Mayak” is continuing to dump part of radwaste to nearby lake Karachay. Management of “Mayak” avoid responsibility through arguing the Karachay is not natural lake but “technical reservoir” to keep liquid wastes. Radioactive contamination around “Mayak” and in nearby river Techa still exists. Villages not re-settled.
- ▶ Germany reached an agreement with Russia to send limited amount of spent fuel to “Mayak” from the storage in Ahaus in 2010. Decision caused protests from environmentalists and politicians including from Angela Merkel’ own party. Plan was cancelled in late 2010 right before the departure of fuel. Unacceptable safety situation at “Mayak” was stated as main reason.



ВЕСЕЛЫЙ МОЛОЧНИК

секреты производства