

Senate Standing Committee on Economics
ANSWERS TO QUESTIONS ON NOTICE
Innovation, Industry, Science and Research Portfolio
Budget Estimates Hearing 2011-12
30 May 2011

AGENCY/DEPARTMENT: AUSTRALIAN NUCLEAR SCIENCE AND TECHNOLOGY ORGANISATION

TOPIC: HIFAR Reactor

REFERENCE: Question on Notice (Hansard 30 May 2011, E10)

QUESTION No.: BI-4

Senator LUDLAM: Will that contaminated material, in particular, be moved for storage also into a future national radioactive waste repository?

Dr Paterson: That is the international best practice.

Senator LUDLAM: Is that because a large number of other countries have already cut up reactors and dumped them at national or centralised storage sites? When you say international best practice

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Dr Paterson: There is quite a lot of international experience in terms of reactor decommissioning, of both research reactors and power reactors. We could supply information about sites that have been returned to greenfield conditions and the appropriate waste management practices associated with that.

Senator LUDLAM: Yes, that would be helpful. I would appreciate that, in terms both of what happens at the site of origin and of what happens at the site of the final destination of the material.

Dr Paterson: I think it would be useful for us to provide that on notice.

ANSWER

A comprehensive summary of decommissioning activities around the world can be found in Annex IV to the International Atomic Energy Agency (IAEA) *Nuclear Technology Review 2010* (<http://www.iaea.org/Publications/Reports/ntr2010.pdf>). That document includes discussion of decommissioning strategies and disposal practices. It indicates that at the end of 2009, 123 power reactors had been shut down. Of these, 15 reactors had been fully dismantled, 51 were in the process of being dismantled, 48 were being kept in a safe enclosure mode, three were entombed, and for six more, decommissioning strategies had not yet been specified.

As to research reactors, the IAEA's International Decommissioning Network (IDN) provides information on the status of research reactor decommissioning (http://www.iaea.org/OurWork/ST/NE/NEFW/wts_IDN_researchreactors.html). That information shows that 255 research reactors have been finally decommissioned to unrestricted site use.