Like many others, I am sceptical that nuclear energy could be a solution, or even a part-solution, to the growing problem of greenhouse gas emissions and global warming. The most compelling reasons are that

- electricity generation accounts for only approximately one-third of greenhouse gas emissions.
- at least 1000 nuclear reactors of at least 1000 Mw each would have to be constructed, beginning immediately, to make any dent on the contribution power generation makes to global warming.
- these would in turn generate enormous quantities of hydrocarbon emissions in the mining and enrichment of the additional uranium, rapidly exhaust economically significant deposits of uranium, and significantly increase the problems of disposal of spent nuclear fuel.

But other witnesses will have advised the Committee of these things. I wish to concentrate on the claims made by a succession of Australian governments that Australia’s bilateral safeguards are among the best in the world, and that together with an effective international safeguards system, they will prevent Australian uranium from being diverted into nuclear weapons programs.

Adequacy of Australia’s Bilateral Safeguards on Uranium Exports

Origins of Bilateral Safeguards

In July 1975, Prime Minister Gough Whitlam commissioned Mr Justice Russell Walter Fox, senior judge of the ACT Supreme Court, to conduct what was and remains Australia’s most comprehensive environmental report – an examination of the effects of mining and exporting uranium from the Northern Territory. Fox gave highly-conditional approval for mining and sales, subject to the strictest safeguards.

In August 1977, Prime Minister Fraser announced these safeguards. They included

- Candidate states must be signatories to the NPT
• Govt-to-govt safeguards agreements must be concluded before the negotiation of commercial contracts

• Australian uranium must be in a form to attract full-scope IAEA safeguards by the time it leaves Australian ownership, and all facilities using Australian uranium must be accessible to IAEA and Australian inspectors

• There must be no transfer, enrichment beyond 20% U235, or re-processing of any Australia uranium without express prior Australian government consent

• Every commercial contract must acknowledge that the transaction would be subject to the bilateral safeguards agreement.

With a moralistic flourish, Mr Fraser declared Australia was only selling uranium to give Australia capacity to influence peaceful nuclear technology and discourage the development of nuclear weapons. His Trade Minister, Mr Doug Anthony, added that under the terms of the NPT, Australia had a legal obligation to sell it.

Neither claim was true. Commercial considerations governed the whole deal, and the Treaties Section of DFAT determined that Article IV of the NPT did not obligate Australia to sell its uranium to a particular customer, or at all.

Modification of Our Safeguards

In fact, because of commercial considerations, Fraser’s idealistic package of safeguards was gutted of its potency over the following ten years.

• In June 1977, sales were allowed to France, which had not signed the NPT

• In October 1977, Australian uranium no longer had to attract IAEA safeguards when leaving Australian ownership (this was because we could only ship it as uranium oxide, or U3O8, which did not attract IAEA safeguards, rather than as uranium hexafluoride, or UF6, which did)

• By October 1977, we told Japan that we wouldn’t insist that uranium contracted for supply before May 1977 must be subject to the prior consent rule on transfer, enrichment or re-processing, and then in January 1981 dropped the provision altogether in favour of a ‘program’ or ‘toll’ approach

• In January 1979, the government overrode the objections of DFAT to allow contracts to be negotiated before the negotiation of bilateral safeguards agreements (DFAT argued that to allow commercial contracts to precede bilateral safeguards weakened our capacity to negotiate the latter according to Australian requirements)

• By November 1982, we were allowing sales of uranium from off-shore warehouses outside Australian jurisdiction and through off-shore brokers
The Fraser and Hawke governments also rejected leasing fuel rods, or supporting a German proposal to establish an international plutonium storage facility.

The Hawke government indulged in more sophistry that weakened the identity of Australian uranium held abroad, and thus Australian ability to ensure that our safeguards continued to attach to it.

- In May 1986, he introduced the principle of ‘equivalence’ by which Australian uranium could in practice be used in all manner of unauthorised ways, provided only that an amount of uranium equivalent to the original shipment from Australia could be seen to be used in only approved activities.

- In late 1986, the Hawke government introduced the concept of ‘flag swaps’ or ‘book transfers’, by which Australian originating uranium could become American or French or some other nationality to save transport costs. Thus, an amount of French uranium held in the US for enrichment could have Australia safeguards attached to it, while an equivalent amount of Australian uranium in France lost its Australian identity, thus obviating the necessity of shipping the original Australian uranium in France to the US.

I mention these facts because the erosion of our safeguard standards has increased the likelihood that AONM will find its way into nuclear weapons in a world where such weapons have increasing appeal to more and more countries.

Consider first that thousands of tonnes of Australian uranium are now held around the world in various enriched and unenriched forms, and with various degrees of security or lack thereof.

Other Developments

Then consider the following:

- the legitimisation of India’s and Pakistan’s illegal nuclear weapons programs by the United States.

- the goading of North Korea by the United States into making its own nuclear weapons.

- the possibility that Japan, South Korea and maybe Taiwan will soon build and declare the existence of their own nuclear weapons.

- the failure of the NPT Review Conference in New York in May 2005 to reach any substantial agreement about anything – including, in particular, agreement about realizing the bargain inherent in Article VI of the NPT, viz: that we the NWS will promise to begin the process of reducing our nuclear arsenals if you the non-nuclear weapons states (NNWS) promise never to develop or obtain nuclear weapons of your own.

- Iran’s insistence on completing its enrichment plant, which, it argues with some justification, is legal under the terms of the NPT of which it remains a signatory.
Like the Fraser, Hawke and Keating governments before it, the Howard government (and some elements in the Parliamentary Labor Party) appears to be ready to allow the seductive expectation of vast profits from Australian uranium exports to override what it must objectively concede are very dangerous times to flood the international market with fresh supplies of uranium.

These expectations are fuelled by highly exaggerated claims being fashioned by the uranium miners and their backers that there will be a sudden surge of reactor construction around the world, and that this will save the planet from global warming due to hydrocarbon emissions.

Richard Broinowski