

Australian Government



Mr Kelvin Thomson MP Chairman Joint Standing Committee on Treaties Department of House of Representatives PO Box 6021 Parliament House CANBERRA ACT 2600

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Nuclear-based science benefiting all Australians

SUPPLEMENTARY SUBMISSION No.11.1

Nuclear Non-proliferation and Disarmament

Dear Mr Thomson,

I refer to the appearance by ANSTO before the Committee's Inquiry into Nuclear Nonproliferation and Disarmament on 26 March. I attach corrections to the Proof Hansard. Further, although no questions were put on notice at the hearing, I thought it might be useful if I were to provide further information to the Committee.

Firstly, I would like to correct a couple of pieces of evidence to the Committee:

- At pages TR 14 TR 15, I may have implied that Australian safeguards inspectors conduct safeguards inspections at Russian facilities. Given that that agreement has not been ratified, that is obviously not the case. As I noted subsequently, the detailed implementation of Australia's bilateral safeguard agreements is not ANSTO's responsibility, and questions in that regard should be directed to the Australian Safeguards and Non-proliferation Office.
- At page TR 18, I stated that the most recent IAEA inspection of ANSTO's facilities occurred in October or November last year. In fact, the most recent inspection took place in early December 2008, and consisted of a Design Information Verification of the shutdown HIFAR reactor, a Short Notice Random Inspection of the OPAL Reactor and a Complementary Access Request to the OPAL Neutron Beam Guide Hall.

Secondly, I would like to follow up Mr McIntosh's statement at page TR14 that there are no safety inspections under the Joint Convention on the Safety of Spent Fuel Management and on the Safety of Radioactive Waste Management. Although there is no inspection mechanism under that Convention, the IAEA does use a range of peer review mechanisms, details of which can be found at <u>http://www-ns.iaea.org/reviews/default.htm</u>, to assess states' safety management programs first hand. Those mechanisms have been applied in Australia in recent years, and Australian experts have participated in reviews of other states' safety management programs.

Thirdly, I would like to reinforce our statements on the importance of the peaceful uses provision of the NPT and of fuel supply assurances by pointing to some recent statements by international leaders and bodies on the subject:

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 During United States President Obama's 5 April speech on nuclear non-proliferation and disarmament in Prague (<u>http://www.whitehouse.gov/the press office/Remarks-By-President-Barack-Obama-In-Prague-As-Delivered/</u>), he stated:

"Second, together we will strengthen the Nuclear Non-Proliferation Treaty as a basis for cooperation.

The basic bargain is sound: Countries with nuclear weapons will move towards disarmament, countries without nuclear weapons will not acquire them, and all countries can access peaceful nuclear energy...

And we should build a new framework for civil nuclear cooperation, including an international fuel bank, so that countries can access peaceful power without increasing the risks of proliferation. That must be the right of every nation that renounces nuclear weapons, especially developing countries embarking on peaceful programs. And no approach will succeed if it's based on the denial of rights to nations that play by the rules. We must harness the power of nuclear energy on behalf of our efforts to combat climate change, and to advance opportunity for all people."

 During United Prime Minister Brown's 17 March speech on nuclear non-proliferation and disarmament (<u>http://www.number10.gov.uk/Page18631</u>), he stated:

"We have also to help create a new international system to ensure non-nuclear states acquire the new sources of energy that they want to have.

Because whether we like it or not, we will not meet the challenges of climate change without the far wider use of civil nuclear power, but we must invest in all sources of low carbon energy, energy efficiency, renewables, carbon capture and storage and nuclear power. Given the scale of global emission reductions that are required, and the likely cost, no cost-effective low carbon technology must be off limits. The complete life cycle emissions from nuclear power, from uranium mining to waste management, are only between 2 and 6% of those from gas for every unit of electricity generated. And the International Energy Agency estimates we must build 32 nuclear reactors globally every year if we are to halve emissions by 2050.

So however we look at it we will not secure the supply of sustainable energy on which the future of our planet depends without a role for civil nuclear power. We simply cannot avoid the real and pressing challenge that presents, from the safety and security of fissile material to the handling of waste, a comprehensive multilateral strategy to allow nations safe and secure access to civil nuclear power is essential...

I believe [the NPT] is a fair and even-handed bargain that contains two central elements: that we enshrine the right for all nations to acquire civil nuclear power safely, securely and subject to proper multilateral verification, processes with tougher sanctions brought to bear on those who break the rules; and that nuclear weapon states must set out much more clearly the responsibilities that we too must discharge.

So what does that mean in practice? In the first place we must give every nation the right of access, what President Eisenhower once memorably called atoms for peace. But in doing so we must as an international community be completely confident that we are able to ensure there are appropriate mechanisms for multilateral control of the entire fuel cycle ...

I am committed that the UK will also lead on bringing forward proposals internationally for multilateral control of the fuel cycle. We will seek an innovative partnership between industry, academia and government for further research and development to tackle the technical challenges that you know are involved in developing a proliferation-proof nuclear fuel cycle.

There are a number of proposals, as you know, that are already being considered. The UK's proposal for a nuclear fuel assurance, or uranium enrichment bond, is an important contribution to resolving this important matter. However, most of the options proposed are aimed at the front half of the fuel cycle - enrichment and fuel provision. I believe we should now go further in considering all the options, including those that can address the challenges of handling spent fuel in a more secure way. As countries already operating civil nuclear programmes know, establishing a civil nuclear programme carries both significant cost and technological challenges..."

European Commission Communication COM (2009) 143 of 26 March (<u>http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=COM:2009:0143:FIN:EN:PDF</u>) notes:

Rising energy demand at global level, coupled with concerns on security of supply and the recognition that there is a general need to reduce CO2 emissions in order to mitigate the effects of climate change, prompts a renewed interest in nuclear energy worldwide.

From the outset it should be stated that the international Non-Proliferation Treaty acknowledges the right of all NPT Parties to develop and use nuclear energy for peaceful purposes.

The proliferation risk from the use of nuclear energy essentially may come from two specific nuclear activities, namely enrichment of uranium and the reprocessing of spent nuclear fuel. These activities require very complex and costly technologies which can only be economically justified if a market demand exists from a large number of nuclear power plants...

The reduction of the proliferation risk requires a strict control of the nuclear fuel cycle. At the same time, it is important to grant legitimate access to nuclear fuel to countries willing to develop nuclear energy under safe and secure conditions. In this context various proposals, including from Member States, have been made concerning guaranteed supply of nuclear fuel for countries that forego having their own nuclear fuel cycle facilities.

 Lastly, Shyam Saran, Special Envoy of the Indian Prime Minister for Nuclear Issues and for Climate Change, told the Brookings Institution in Washington on 23 March (<u>http://www.brookings.edu/events/2009/~/media/Files/events/2009/0323 india/20090323 i</u> ndia.pdf):

> "[R]estricting the expansion of sensitive nuclear fuel cycle facilities that are capable of producing bomb grade plutonium and uranium... could take the form of creating regional or international nuclear fuel banks to meet the nuclear fuel needs of countries that do not possess the processing or enrichment facilities.

India has developed indigenously a robust nuclear program covering the complete nuclear fuel cycle. Nevertheless, in practical terms, we are already committed in the U.S. joint statement of July 18, 2005 to not transferring reprocessing enrichment technologies and equipment to states that do not possess them. Furthermore, we have expressed our willingness to our – host, a regional or multilateral fuel bank, to supply nuclear fuel to other states under appropriate – safeguards.

We would be prepared as a supplier nation to participate in an international fuel bank, which may be located in a third country. It may, however, be difficult for India to endorse a view that there ought to be a discriminatory legal regime put in place which would allow only some states to possess reprocessing or enrichment facilities, but not others.

Therefore, while reserving our position on a question of principle, we would be prepared to work together with the U.S. and other friendly countries on practical steps to discourage proliferation."

I hope that this information is of assistance to the Committee.

Yours sincerely

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DR RON CAMERON Chief of Operations

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