



Submission No. 3.1
TT 14 May 2008

Ms Siobhan Lane
Committee Secretary
Joint Standing Committee on Treaties
Parliament House
Canberra ACT 2600

18 August 2008

Dear Ms Lane

Agreement between the Government of Australia and the Government of the Russian Federation on Cooperation in the Use of Nuclear Energy for Peaceful Purposes

When I appeared before the Committee on 28 July, I undertook to respond to questions when the transcript of the hearing became available.

I was asked at page TR33 about comments by former Vice-President of the United States, Mr Al Gore, regarding weapons proliferation. I wish to add to my response that, apart from North Korea, the proliferation issues the US dealt with concerned India and Pakistan.

As to the second part of the quote attributed to Mr Gore, the issue to which he appears to be alluding is proliferation risk associated with rapid growth in nuclear power.

Nuclear power, per se, is not the primary source of proliferation risk. The greater risk is that the enrichment technology used to make fuel for civil nuclear purposes could be misused to make weapons material. Constraining the growth of nuclear power generation will not reduce that risk. Managing that risk requires robust non-proliferation arrangements that are improved continuously; and initiatives that limit the risk from the technology for making nuclear fuel.

The development of proliferation policy and practice in the era of growing nuclear power use is a real issue, to which attention is being given. A number of proposals have been suggested to deal with that issue, including the United States' Global Nuclear Energy Partnership and a Russian proposal for an international enrichment facility at Angarsk.

There is merit in the idea that Australia, as potentially the world's largest source of uranium, could seek to take a role in the development of future global proliferation policy and practice. The disarmament commission announced by the Prime Minister may be an avenue through which that ambition could be pursued.

Again at page TR33, I was asked several questions by Ms Parke, including about Russia's commitment to nuclear safety:

In relation to the issue of safety, what of the International Atomic Energy Agency reports that only half of nuclear material in Russia is secured, and that the majority of security incidents are coming from Russia and former USSR states? If Russia is so committed to nuclear safety, why has it not chosen to have IAEA safeguards on all its enrichment facilities?

In relation to the first question, we have been unable to identify the IAEA reports referred to by Ms Parke. If more information were provided about those reports, we would address the question further.

Nevertheless, to assist the Committee we offer the following views about Russian nuclear security:

At a Press Conference on the Nuclear Threat Initiative on 5 October 2005, Dr ElBaradei, Director-General of the IAEA, said in answer to a question about Russian nuclear security: '... I think I can say that nuclear security has improved dramatically in Russia. It is not a perfect situation yet ... We still have a lot of work to do, but we are moving in the right direction. There are a lot of other issues which would not make me sleep, but Russia right now, frankly, is not one of them.'

The transcript of the Press Conference can be found at <http://www.iaea.org/NewsCenter/Transcripts/2005/fns05102005.html>

At the Carnegie Endowment for International Peace on 7 November 2005, Dr ElBaradei was asked the following question: 'At the back end of the fuel cycle, is the IAEA ready to certify repositories for spent fuel -- mined geologic repositories -- and waste forums, either spent fuel itself or vitrified fission product packages, to go into those repositories to enable different countries to offer such repository services?'

Dr ElBaradei replied: 'Yes, we are ... the good news, as I said that Russia is ready to man such a multinational repository. Frankly, the way I see it that we need all to help Russia, you know, doing this by providing the technology, by providing the certification, by providing the safety assets should they need it. We need to establish first-class, you know, center of excellence for managing the spent fuel and find a repository of the waste. So, we would be happy to do that in working with Russia.'

The transcript is to be found at www.iaea.org/NewsCenter/Transcripts/2005/carnegie07112005.pdf

We also refer the Committee to the IAEA's *Nuclear Safety Review for the Year 2007* (www.iaea.org/Publications/Reports/index.html), which was released following consideration of it by the IAEA's Board of Governors in March 2008.

We examined that *Review* and all *Reviews* from 2001. Russia is specifically referred to in all but one of those reviews. In almost every case, the references are to Russian safety improvement initiatives or to cooperative efforts with other countries in nuclear safety.

There are no references to IAEA concerns about nuclear safety in Russia.

That the IAEA offers a quite positive view of the issues raised in Ms Parke's questions is not necessarily an endorsement of all safety aspects of the Russian civil nuclear power industry. However, it is suggestive of a reasonably confident view of Russian nuclear safety and security.

Regarding the second question, what do we make of the claim that 'the majority of security incidents are coming from Russia and former USSR states', we assume this is based on material quoted at page 12 of the submission of the Friends of the Earth.

Any security incident is worrying and the Committee should take the data into account, on the basis that the data are unofficial, were reported in 2002, combine incidents that are said to have occurred in both Russia and former USSR states (the former USSR States not being subject of this treaty) and do not appear to express any qualifications based on the nature and seriousness of the incidents or contain a comparison with incidents elsewhere.

Regarding the third question, that appears to have been addressed by ASNO and we are prepared to rely on ASNO's response.

Broadly, the issue Ms Parke raises with these questions is level of confidence the Committee can have in the safety and security of the Russian civil nuclear power industry. On that issue, we refer to our primary submission.

Ms Parke also asked me about some human rights issues including about the impact in Russia of the World Nuclear Association's uranium stewardship principles.

Those principles have been developed over the last 18 months and it would be premature to draw any conclusions about how those principles have affected behaviours within the Russian nuclear industry.

However, we argue that the principles are indicative of the global nuclear industry's commitment to best practice and of the good will and good intentions of the parties to the principles; and should be given weight appropriate to that.

I was asked a related question by Mr Forrest at TR37, in regard to the future activities of the World Nuclear Association's uranium stewardship working group.

The approach planned by the WNA is as follows:

- By September 2009, the WNA uranium stewardship working group plans to have documented the main risks in the nuclear fuel cycle and the systems needed to manage them
- By September 2010, that analysis will have been cascaded throughout the global nuclear industry
- By September 2011, a verification exercise on the status of those systems will have been completed.

At TR36 of transcript, I was asked whether the Association had available any modelling on the cost of waste management.

There is a considerable amount of research and other material available, especially on the web, about the economics of nuclear waste management. The available material tends to be either estimates of the cost of waste management in the context of a specific proposal for construction of a new nuclear power plant; or costing exercises about nuclear power in the abstract. Estimates of costs can vary greatly depending on the assumptions built into the modelling.

The material below is sourced from the World Nuclear Association's website and summarises, at a high level, what currently happens in practice to fund waste management:

'Financial provisions are made for managing all kinds of civilian radioactive waste. The cost of managing and disposing of nuclear power plant wastes represents about 5% of the total cost of the electricity generated.

Most nuclear utilities are required by governments to put aside a levy (eg 0.1 cents per kilowatt hour in the USA, 0.14 c/kWh in France) to provide for management and disposal of their wastes. So far some US\$ 28 billion had been committed to the US waste fund by electricity consumers.

The actual arrangements for paying for waste management and decommissioning also vary. The key objective is however always the same: to ensure that sufficient funds are available when they are needed.

There are three main approaches:

Provisions on the Balance Sheet

Sums to cover the anticipated costs of waste management and decommissioning are included on the generating company's balance sheet as a liability. As waste management and decommissioning work proceeds, the company has to ensure that it has sufficient investments and cash flow to meet the required payments.

Internal Fund

Payments are made over the life of the nuclear facility into a special fund that is held and administered within the company. The rules for the management of the fund vary, but many countries allow the fund to be re-invested in the assets of the company, subject to adequate securities and investment returns.

External Fund

Payments are made into a fund that is held outside the company, often within Government or administered by a group of independent Trustees. Again, rules for the management of the fund vary. Some countries only allow the fund to be used for waste management and decommissioning purposes, others allow companies to borrow a percentage of the fund to reinvest in their business.'

Finally, the Association draws the Committee's attention to a clarification Dr Green, representing the FOE, gave at TR23:

'I do not think the claim from the Friends of the Earth and the NGOs is that Australian uranium will be diverted. I think the claim is that it **could** (emphasis added) be diverted.'

This statement sums up most of the arguments presented against the treaty. The principal argument is that various outcomes *could* ensue. That argument is not supported by submissions about the likelihood or probability of those outcomes ensuing; only that they *could*.

In our submission, it is not good enough for a Joint Committee of the Australian Parliament to have to rely on the vague submission that some event *could* ensue. We argue that those who make claims that Australian uranium exported to Russia *could* be diverted to non-peaceful purposes should justify their positions with better than assertions, with better than a '*could*'.

At the very least, those who argue against the treaty should say whether the risk of diversion is at the high end of the scale of risk or at the low end; and to justify that position with argument.

To the extent they are unable to do so, their submissions should be given commensurately less weight.

The Association would be pleased to answer any further questions the Committee may have and to supply any further material the Committee might require.

Yours sincerely



Michael Angwin
Executive Director