From: Paul Grillo,

SUBMISSION TO INQUIRY INTO NUCLEAR NON-PROLIFERATION AND DISARMAMENT

I ask the Joint Standing Committee on Treaties to recommend the cancellation of all of Australia's uranium export treaties, or to recommend major revision of those treaties, because of the following flaws and limitations of the 'safeguards' arrangements and the unacceptable risk of Australia's uranium exports contributing to nuclear weapons proliferation.

Uranium is the only energy source with a direct and repeatedly-demonstrated connection to the proliferation of Weapons of Mass Destruction.

Of the 60 countries which have built nuclear power or research reactors, over 20 are known to have used their 'peaceful' nuclear facilities for covert weapons research and/or production. Of the 10 countries to have built nuclear weapons, five acquired the necessary nuclear facilities and materials through their 'civil' nuclear programs (India, Pakistan, Israel, South Africa, North Korea) and there is also overlap between civil nuclear programs and WMD programs in the five 'declared' nuclear weapons states (US, Russia, UK, France, China).

Al Gore noted in 2006: "For eight years in the White House, every weapons-proliferation problem we dealt with was connected to a civilian reactor program. And if we ever got to the point where we wanted to use nuclear reactors to back out a lot of coal ... then we'd have to put them in so many places we'd run that proliferation risk right off the reasonability scale."

Safeguards are limited and under-resourced.

The uranium industry and its supporters routinely claim that the safeguards system of the International Atomic Energy Agency (IAEA) "ensures" that Australian-Obligated Nucear Materials (AONM - primarily uranium and its by-products) will not be used in nuclear weapons. However, only a fraction of safeguards-eligible nuclear facilities and stockpiles are actually inspected by the IAEA. According to the Director-General of the IAEA, Dr Mohamed El Baradei, the IAEA's basic rights of inspection are "fairly limited", the safeguards system suffers from "vulnerabilities" and "clearly needs reinforcement", and it runs on a "shoestring budget ... comparable to a local police department" (statements posted at: <www.iaea.org/NewsCenter/Statements/index.html>.)

The IAEA safeguards system has no authority or capacity to prevent nuclear weapons proliferation. At best, it can detect diversion of nuclear materials after the event.

In addition to IAEA safeguards, countries buying Australian uranium must sign a bilateral agreement. However, there are no Australian inspections of nuclear stockpiles or facilities using AONM. Australia is entirely reliant on the partial and underfunded inspection system of the IAEA. Moreover, the conditions contained in bilateral agreements count for nothing. Australia retains the right to prohibit the reprocessing of AONM but has never once invoked that right, even when reprocessing leads to the stockpiling of separated, weapons-useable, plutonium as it has in Japan and some European countries.

The scale of the safeguards challenge is ever-increasing

A further difficulty safeguarding AONM is its quantity, the variety of its forms, and the variety of locations and circumstances in which it is held. As at 31/12/07, AONM held overseas comprised:
Depleted Uranium (EU, Japan, South Korea, USA) 87,249 tonnes
Natural Uranium (Canada, EU, Japan, South Korea, USA) 21,475 tonnes
Uranium in Enrichment Plants (EU, Japan, USA) 18,217 tonnes
Low Enriched Uranium (Canada, EU, Japan, Mexico, South Korea, Switzerland, USA) 12,110 tonnes
Plutonium (Canada, EU, Japan, Mexico, South Korea, Switzerland, USA) 114.3 tonnes
Total: 139,165 tonnes

Accounting discrepancies involving AONM are common.

Nuclear accounting discrepancies are commonplace and inevitable due to the difficulty of precisely measuring nuclear materials. The accounting discrepancies are known as Material Unaccounted For (MUF). As the Australian Safeguards and Non-proliferation Office (ASNO) concedes: "Every year inventory reports involving bulk material will include a component of MUF."

This problem of imprecise measurement provides an obvious loophole for diversion of nuclear materials for weapons production. In a large plant, even a tiny percentage of the annual through-put of nuclear material will suffice to build one or more weapons with virtually no chance of detection by IAEA inspections - if indeed the IAEA carries out any inspections at all.

Australia's uranium has resulted in the production of over 114 tonnes of plutonium - sufficient for over 11,000 nuclear weapons. If just 0.1% of this plutonium is written off as Material Unaccounted For, that is sufficient for 11 plutonium bombs similar to that which destroyed Nagasaki. Government agencies refuse to release MUF figures; for plutonium, it may well be significantly greater than 0.1%.

Australia exports uranium to countries with unacceptable proliferation/disarmament records.

Australia has uranium export agreements with:
* four of the 'declared' nuclear weapons states (USA, UK, China, France), none of which are complying with their disarmament obligations under the Nuclear Non-Proliferation Treaty (NPT);

* countries with a history of weapons-related research based on their civil nuclear programs (such as South Korea and Taiwan)
* countries blocking progress on the Comprehensive Test Ban Treaty (e.g. the USA) and the proposed Fissile Material Cut-Off Treaty.

Coalition/Labor support and approval for uranium sales to China sets another precedent: uranium sales to undemocratic, secretive states with appalling human rights records.

The government has not ruled out uranium sales to Russia despite the fact that there have been no IAEA safeguards inspections in Russia since 2001; Russia is undemocratic and secretive and human rights abuses are widespread; incidents of theft/smuggling from Russian nuclear sites are common; and Russia is in violation of its disarmament obligations under the NPT.

Australia's uranium exports are shrouded in secrecy.

Some example is indefensible secrecy by ASNO include the refusal to publicly release:
* country-by-country information on the separation and stockpiling of Australian-obligated plutonium;
* 'Administrative Arrangements' which contain vital information about the safeguards arrangements required by Australia; and
* information on nuclear accounting discrepancies (Material Unaccounted For) including the volumes of nuclear materials, the countries involved, and the reasons given to explain accounting discrepancies.

Australia does not require that all nuclear facilities processing AONM be subject to IAEA inspections.

Only a fraction of the facilities which are safeguards-eligible are inspected by the IAEA, and worse still Australia allows the processing of Australian uranium in facilities which are not covered by IAEA safeguards at all.

While AONM is meant to be subject to IAEA safeguards from the enrichment stage onwards, ASNO is willing to make exceptions; for example ASNO has recommended that the Australian government agree to the processing of Australian uranium in an unsafeguarded enrichment plant in Russia.

The Australian Safeguards and Non-proliferation Office is dishonest and unprofessional

The Australian Safeguards and Non-proliferation Office has established a track record of dishonest and unprofessional behaviour. Last year, ASNO misled the Joint Standing Committee on Treaties with claims that safeguards will "ensure" that Australian uranium is not used for weapons production in Russia even though there have been no safeguards inspections in Russia since 2001 (a fact which ASNO conspicuously failed to provide to the Committee).

ASNO's falsely claims that nuclear power does not present a weapons proliferation risk; that Australia sells uranium only to countries with "impeccable'' non-proliferation credentials; and that all AONM is "fully accounted for''.

The Joint Standing Committee on Treaties should recommend an independent public inquiry into ASNO's dishonest and unprofessional behaviour as per the recommendation of the EnergyScience Coalition (<www.energyscience.org.au>, Briefing Paper #19).

The benefits of the uranium industry are overstated.

Uranium accounts for just one-third of 1% of Australia's export revenue (0.32% in 2005, 0.25% in 2006, and an estimated 0.35% in 2007).

The industry makes an even smaller contribution to employment in Australia - much less than 0.1%.

Claims about the greenhouse 'benefits' of nuclear power typically ignore more greenhouse-friendly renewable energy sources and the use of several types of renewables to supply reliable base-load power (e.g. geothermal, bioenergy, solar thermal with storage, and sometimes hydro).

Thankyou for taking the time to hear this submission,
I look forward to hearing the outcomes of the committee.

Yours Sincerely

Paul Grillo