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by:

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**Submission from the Women's International League for Peace and Freedom
(Australian Section) Inc.**

concerning

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



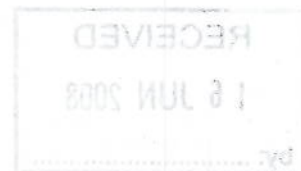
Introduction

The Women's International League for Peace and Freedom (WILPF) was established in Europe in 1915. We were in the first group of non-governmental organisations to receive consultative status with the United Nations' Economic and Social Council (ECOSOC) in 1948 and later with UNESCO. Our organisation has special consultative relations with the Food and Agricultural Organisation, the International Labour Organisation and UNICEF. Internationally and locally, the Women's International League for Peace and Freedom works for social, racial and environmental justice, for human rights and an end to wars as a means of dealing with human conflict. This submission is made on behalf of the Australian Section of our organisation, henceforth referred to as WILPF.

WILPF welcomes this opportunity to convey to the Joint Standing Committee on Treaties our concerns regarding the inadequacies of the *Agreement between the Government of Australia and the Government of the Russian Federation on Cooperation in the Use of Nuclear Energy for Peaceful Purposes* which was signed on 7 September 2007 by the respective Foreign Ministers, Alexander Downer and Sergey Lavrov. We thank the Joint Standing Committee for the opportunity to make this submission. In particular, we are grateful for the extension of time till 16th June 2008.

WILPF wishes to express our very grave concerns about the proposed export of Australian uranium to Russia. Below we outline our particular concerns about exporting Australian Obligated Nuclear Material to Russia. More generally, WILPF believes the entire nuclear fuel cycle to be uniquely hazardous – from uranium mining to the disposition of waste. Radiation is persistent and indiscriminate, damaging our most precious legacy; the core human blueprint stored in our DNA and passed on to future generations. Radiation experts and the global regulation setting agency, the International Commission on Radiological Protection are clear that there is no safe level of radiation exposure.

Where the potential exists for the welfare, health and safety of the entire community to be endangered by exposure to radioactivity, it is unacceptable for government to encourage and assist those few whose primary motive is profit - and who may therefore be motivated by greed - to overlook the welfare of the many for the financial gain of the few. Uranium mining corporations have a clear vested self-interest in advocating the sale of Australian uranium to Russia, and, as a consequence, their capacity to make wise judgments in the interests of the whole community and not just for their own ends and those of their shareholders is highly



questionable. In this situation therefore, it is even more pressing to ensure that the proper role of government to oversight and protect the safety and wellbeing of the whole Australian population and of the Australian environment is not diminished or treated as a consideration subordinate to the generation of wealth for a few. The role of government to exercise judgment in the interests of the whole community needs to be preserved.

The Present State of the Russian Federation

Russia, a nuclear weapon state, has an extremely poor record on nuclear safety. WILPF has grave concerns about the inadequate safeguarding of nuclear materials in Russia as well as Russia's history of unwillingness to be thoroughly open and accountable. From 2001 to 2006, there were 183 reported incidents involving trafficking of nuclear materials in Russia. Many incidents, including major incidents, were only disclosed following months and sometimes *years* of silence and secrecy on the part of government officials in the former USSR. The record of the Russian Federation since then appears to be no better. Additionally, in the face of its treaty obligations under Article 6 of the NPT, Russia retains a nuclear arsenal of approximately 15,000 weapons.

Because Russia's own supplies of uranium are not inconsiderable, it is likely that any Australian uranium received by Russia would be used at the processing plant at Angarsk in order to "downgrade the 700 tonnes of highly enriched uranium stockpiled from the early round of dismantling [of nuclear weapons] for on-selling to the United States where most of it has gone so far, or to Syria or Iran."¹

Russia has an ongoing history of egregious human rights abuses including the use of torture and the use of radiation as a weapon. There were credible allegations in 2006 that Russian covert agencies were involved in the murder by radioactive poisoning in London of the dissident, Alexander Litvinenko. The murder of the Russian journalist, Anna Politkovskaya, is a case that further illustrates the repression and elimination of those within present-day Russia who exercise the right to express opinions different from those of the regime.

The Russian Federation also has a recent history of cruel military invasion and suppression of peoples in neighbouring states.

In short, the credibility of Russian democracy is highly suspect. Precisely because the Russian Federation is so erratic, unreliable and essentially anti-democratic, we believe that it is fair to say that Russia cannot be trusted to observe the terms of an agreement, however well its articles may be formulated.

And finally, we note that the Russian Federation has not yet ratified the International Atomic Energy Agency's additional protocol.

In summary, in 2008 in the Russian Federation, it is by no means clear that the rule of law prevails.

¹ From the article, "Throwing caution to the nuclear wind" by Lyn Allison, 7th September 2007

In relation to the treaty instrument under discussion, international human rights lawyer, Robert Amsterdam, speaking at the 2007 Sydney Summit on Russia stated that there is “no way for Australia to keep [Russia] accountable on the deal, given the ... growing disregard for the rule of law in [Russia]”. Mr. Amsterdam went on to say that there is a “genuine danger the uranium would be on-sold to countries such as Iran ...” His friend and compatriot, journalist Grigory Pasko also stated in September 2007 at the same Sydney Summit that Australia should not accept Russia's guarantees at face value.² Incidentally, we believe that the former Foreign Minister, Mr. Downer, was precipitate and naïve in the extreme to dismiss their views.

While their record of human rights abuse and lack of nuclear safety persists, WILPF believes that it is irresponsible on the part of the Australian Government to accept this Agreement for the sale of Australian uranium to the Russian Federation. However punctilious the language of the Agreement, an unaccountable Russia cannot be relied upon to keep their end of any bargain.

The View of the Australian People on the Possible Sale of Australian Uranium to Russia

It is clear that widespread public opposition remains in the Australian community to the nuclear industry which people believe has inherent dangers. *The Age* of 4th September 2007 reported a survey of 1,200 voters undertaken by Research International which found that the majority of the Australian people are against the sale of Australian uranium to Russia. The survey found that 66% of Australians would vote against the sale of Australian uranium to Russia if a referendum were held on the issue. A 30th May 2006 Newspoll survey revealed that 78% of ALP voters don't want any new uranium mines in Australia or want uranium mining stopped altogether, compared to 16% favouring new mines, a ratio of nearly 5:1.

A Global Nuclear Survey sponsored by the International Atomic Energy Agency, 14th December 2005, also identified strong opposition in Australia and indeed worldwide against new nuclear power production:

“A new 18-country opinion survey sponsored by the International Atomic Energy Agency (IAEA) found that “while majorities of citizens generally support the continued use of existing nuclear reactors, most people do not favour the building of new nuclear plants.” Indeed, the findings of the survey, conducted by Globescan Inc. show that “six in ten citizens (62%) overall believe that existing nuclear reactors should continue to be used, yet six in ten (59%) do not favour new nuclear plants being built.”

According to DFAT's National Interest Analysis (2008), the Russian Federation intends to increase from 16% to 23% the share of nuclear power in its electricity market. While the increased sale of Australian uranium to Russia may represent an irresistible lure and business

² Mr Pasko was once jailed for revealing that Russia was illegally dumping radioactive waste into the Sea of Japan.

opportunity to Australian uranium mining interests, we believe that Australia would be better served by encouraging Russia to develop greatly increased renewable non-fossil energy resources from wind, water, biomass, geothermal, and tidal sources rather than to increase the nuclear energy sector.

Nuclear Technology – an Unclean Technology

The proponents of the nuclear industry and of uranium mining have in recent years used the cover of the debate about global warming and climate change to gloss the deficiencies of their industry, often making the spurious claim that their industry is “clean and green” because, in comparison with fossil fuel technologies, it produces fewer greenhouse gas emissions. These claims are bogus.

WILPF remains opposed to the mining, processing, trading and exploitation of uranium because of its radioactive pollution and inherent danger to human life and the human gene pool. As U-238 breaks down over centuries, it creates protactinium-234, which radiates potent beta particles that may cause cancer as well as mutations in body cells that can lead to birth defects. As Drs Rosalie Bertell and Helen Caldicott have stated, these mutations in the human gene pool, unlike cancers which affect individual persons, affect the whole future of the human species as these mutations are permanent and virtually unchangeable for future generations.

While WILPF recognises that the uranium mining lobby is using the cover of the current debate about global warming to make claims for the use of nuclear energy which are extremely misleading, it is even more disturbing that the propaganda of the uranium mining lobby is reproduced by DFAT personnel in their *Frequently Asked Questions* on the Australia-Russia Nuclear Cooperation Agreement, November 2007:

“Diversifying energy sources by using nuclear power will help Russia manage greenhouse gas emission and reduce pollution.”³

While the DFAT document reveals the success of the uranium mining lobby in communicating their agenda to Federal bureaucrats, difficulties with uranium mining remain as they have always been: the industry has found no safe means of dealing with its waste products; and there is an inextricable link between nuclear energy for so-called “peaceful purposes” and nuclear weapons proliferation.

In this context where DFAT staff are producing documents containing such tendentious language, WILPF has reservations even about making our submission. It is our sincere hope nevertheless that the Joint Standing Committee members will be able to take into account the longer-term implications of a greatly increased volume of sales of Australian uranium to Russia and take this opportunity to explain why DFAT is simply wrong in equating nuclear power with managing greenhouse gas emission and pollution reduction:

³ In answer to Question number 1: “*Why is Russia interested in Australian uranium?*”

Fact 1: Nuclear is not carbon emission free. The mining, processing and extensive transportation of uranium and nuclear fuel, and the building and maintenance of nuclear power plants releases a great deal of carbon dioxide. The German Environment Ministry goes so far as to say that gas is a 'climate friendlier' option when considering how dirty and dangerous the mining and processing uranium really is (March 2006).⁴

Fact 2: Nuclear energy is too slow to build to effect action in the next decade, the crucial time frame we have to reduce dangerous climate change. About 440 nuclear power stations provide approximately 6% of the global primary energy mix, as calculated by the IEA.⁵ To even double this figure, over 1000 nuclear reactors would have to be on constructed within 25 years,⁶ **requiring approximately one reactor to be put into operation each one or two weeks,** assuming to be starting this year – clearly not a feasible schedule. Each reactor would require a construction time of 5 to 9 years. Nuclear reactors last about 40 years, and then they have to be decommissioned. The world-wide supply of reactor pressure vessels is 4-12 TOTAL per year.

Fact 3: Nuclear is a misplaced investment to effect greenhouse gas emission reduction. Investments of human and economic resources are far better placed into energy efficiency and the numerous renewable technologies available to guarantee the right to safe, clean and affordable energy. In diverting resources from sustainable and renewable energy, investment in nuclear energy and associated subsidies would erect obstacles to sustainable energy. **Nuclear energy has never been able to compete on the open market,** and has never been commercially viable anywhere without massive public taxpayer subsidies. This is a crucial piece of information when it is posed as a solution in the climate crisis context. Nuclear energy cannot compete with energy efficiency or wind; a dollar invested in energy efficiency in the United States has been estimated to displace nearly seven times as much carbon dioxide as a dollar invested in nuclear power,⁷ and nuclear power saves as little as half as much carbon per dollar as wind power and cogeneration.⁸ New-build nuclear power has been estimated to cost about US 8 c /kWh, (the NEI claims this even though reactors have gone up 200% in the last two years – The

⁴ <http://www.erneuerbare-energien.de/inhalt/2715/4592/>

⁵ See Greenpeace, *Nuclear Energy No Solution to Climate Change*, at <http://archive.greenpeace.org/comms/no.nukes/nenstcc.html>. Nuclear power's share is expected to decline, while renewables are growing faster than any other energy source: *World Energy Outlook 2005*, at <http://www.worldenergyoutlook.org>.

⁶ In absolute terms, world energy demand is expected to increase by at least one half in the next 25 years. To double nuclear energy's share in the "business as usual" scenario, would in fact require not a doubling, but a tripling, of the number of reactors. Not 440 but about 1,100 nuclear reactors would have to be on the grid in 25 years' time. Assuming an 85% load factor, something in the order of 1031 new reactors of 1000 MWe would need to be built and producing electricity by 2030 in order to double the existing percentage of electricity supplied by nuclear energy, taking into account the older nuclear facilities that would need to be decommissioned in the meantime. Calculations by Greenpeace and for a similar estimate see Greenpeace, *Nuclear Energy No Solution to Climate Change*.

⁷ Dave Reed, "Return of the Nuclear Salesmen: Global Warming Gives Them a New Sales Pitch," Rocky Mountain Institute, at <http://www.rmi.org/sitepages/pid642.php>, W. Keepin and G. Kats, "Greenhouse Warming: Comparative Analysis of Nuclear and Efficiency Abatement Strategies", *Energy Policy*, pp 538-561, 1988, December, and Bill Keepin's evidence to the US House of Representatives hearing in 1988 at http://www.rmi.org/images/other/Energy/E8828_GreenhouseWmg.pdf.

⁸ Amory Lovins, "Nuclear power: economics and climate-protection potential," (2005), at <http://www.rmi.org/sitepages/pid171.php>, 15.

Florida Power and Light has gone on the record saying 12-18 billion for 2 units south of Miami (at Turkey Point) while wind power, other renewable sources and energy efficiency are getting cheaper, as low as 3 cents a kilowatt hour - less than one half of the cost.⁹ See "A Solar Grand Plan" by the *Scientific American* that spells out the much reduced costs of solar.¹⁰

Fact 4: Nuclear power stations are highly capital intensive and take years to construct: Wind farms are much quicker and cheaper to construct. A 1000-megawatt light water reactor plant can cost from US \$2-3 billion¹¹ or more or up to US \$2,000/kW.¹² Nuclear power plants have routinely taken longer than estimated to build and have been subject to many unforeseen technical problems; running costs have been much less predictable than projected, and the costs of increased safety demands exceeded expectations. Current estimates range from 5-9 years.¹³ All these factors are compounded by the enormously expensive cost of dealing with nuclear waste, the escalating cost of decommissioning nuclear power stations and the difficulty of estimating the costs of a nuclear accident.¹⁴

Fact 5: Nuclear energy relies on subsidies, including underwriting for construction cost or caps on construction costs, operating performance, non-fuel operations and maintenance cost, nuclear fuel cost and decommissioning cost, **government administered insurance programmes**, liability caps and guarantees that the output will be purchased at a guaranteed price. Usually absent from consideration are decommissioning costs, the long-term costs of dealing with waste and external costs such as environmental damage, effects on human health and social costs.

Fact 6: Nuclear does not increase energy security and in fact creates grave security problems. Each and every nuclear power plant is a pre-deployed radiological weapon waiting to be detonated by an enemy; each and every nuclear power plant creates more of the materials required for nuclear weapons. Each and every nuclear reactor requires vast quantities of cold water. In the summer of 2003, France experienced a serious heat wave and the security issues relating to the country's CIVILIAN nuclear facilities were of paramount concern, because enough water was not available. The water link to climate change also relates to the fact that many civilian nuclear reactors are by the ocean and if the sea rises, obvious plutonium poisoning problems will also arise. Nuclear energy creates waste that will last for 11,000 human generations. Plutonium lasts for 250,000 years until it become lead. In addition, plutonium is impossible to secure from theft.

⁹ Amory Lovins, "Nuclear power: economics and climate-protection potential," (2005), at <http://www.rmi.org/sitepages/pid171.php>, p. 47

¹⁰ <http://www.sciam.com/article.cfm?id=a-solar-grand-plan>

¹¹ Britain's 1188 MW Sizewell B, completed in 1995, was estimated to have cost about £3 billion, or about £2900 /kW. See UK Sustainable Development Commission, "Paper 4: The economics of nuclear power", p.17.

¹² J. Deutsch & E.J. Moniz (Co-Chairs), *The Future of Nuclear Power*, MIT, 2003 ("MIT"), page 39-40, at <http://web.mit.edu/nuclearpower>. The UK Sustainable Energy Commission cites various costs including DTI's £10701,400 /kW: Paper 4, p. 19.

¹³ UK Sustainable Development Commission, "Paper 4: The economics of nuclear power", p.16.

¹⁴ The IAEA has noted that the costs of decommissioning nuclear plants or the costs of long-term storage of nuclear waste can be estimated, but potential costs from accidents are difficult to factor into the equations. IAEA Nuclear Technology Review 2004, page 88. See also Greenpeace, "Nuclear Energy No Solution to Climate Change: A background paper", <http://archive.greenpeace.org/comms/no.nukes/nenstcc.html>.

In short, nuclear power will never solve any crisis – nuclear energy IS a crisis.

The accumulating stockpile of radioactive waste is already a world problem. U-234 has a half-life of 244,000 years, U-235 714 million years and U-238, the great percentage of all uranium, a half-life of 4.5 billion years. Consequently the mining of uranium results in a huge burden of toxic legacy for many, many generations of humans into the future. In addition, there are many possible scenarios (such as nuclear theft and terrorism) which would render impossible the operation of the safeguards as envisaged in the treaty document under discussion.

The Australia-Russia Nuclear Cooperation Agreement is intended to remain in force for an initial period of thirty years and can be terminated by either party before that date:

“This Agreement shall remain in force for an initial period of 30 years and shall terminate upon expiry of the initial period if either Party notifies the other Party in writing through diplomatic channels of its intention to terminate at least 180 days prior to the expiry of the initial period.”¹⁵

The Australia-Russia Nuclear Cooperation Agreement is thus an extremely poor and inefficient instrument for dealing with substances which remain radioactive and toxic to humans for their half-lives of millions, even billions, of years.

The Inextricable Link between “Peaceful” Nuclear Energy and Nuclear Proliferation

The link between the uranium mining and nuclear energy industries and the proliferation of nuclear weapons remains inextricable. India, South Africa and North Korea are all countries that have already used nuclear programs that were ostensibly for “peaceful, non-military purposes” in order to develop arsenals of nuclear weapons.

It is ironical that so much effort has been expended by DFAT personnel on developing language in the Australia-Russia Nuclear Cooperation Agreement to distinguish between the development of nuclear energy “for military purpose” and the development of nuclear energy “for peaceful purpose” when the diversion of nuclear material to produce nuclear weapons can so easily be achieved. Tagging of uranium to identify its origin is impossible - it all looks the same. Indigenous Russian uranium, of which there are large amounts, can be diverted to produce a greatly increased number of nuclear weapons while the newly increased quantities of imported Australian material can be amply substituted for the purpose of non-military energy production where the indigenous supply may have once been dedicated. To quote Robert Amsterdam again: “If the Australian uranium is only going to be used for civilian purposes, then what you're doing is you're freeing up the Russian uranium to be used, to be sold on, to Iran.” Or as Steve Shalhorn, chief executive of the Australian arm of Greenpeace, observed, even if Russia keeps its promise not to use the uranium for warlike purposes “the primary danger is that supplying Australian uranium to Russian nuclear plants, it frees up Russia to do whatever it pleases with its own deposits”.

¹⁵ Agreement between the Government of Australia and the Government of the Russian Federation on Cooperation in the Use of Nuclear Energy for Peaceful Purposes done at Sydney, 7 September 2007, article XVIII

Another point to consider is that the five declared nuclear weapons states - the US, the UK, Russia, France, and China - routinely transfer personnel from their "peaceful" nuclear programs to their WMD programs. Russia's nuclear power plants can easily be adapted to process their residual material for military purposes including nuclear propulsion for military non-nuclear applications, and munitions, including depleted uranium munitions.

A final irony of all the careful energy and effort expended upon the development of these treaty instruments is that Dr Mahamed El Baradei, Director General of the International Atomic Energy Agency has publicly stated that the basic safeguards system is "fairly limited" and efforts to improve it have been "half hearted" because of the IAEA's "shoestring budget."

We leave the final word to Robert Amsterdam who wrote in his blog of 7 September 2007:

"But For Russia, the [Australian] uranium deal is key; a core component of their strategy to further project their power and influence globally through energy relations – the goal is the generation of energy dependence leading back to an ever-shrinking group of decision makers not accountable to a voting public. Russia is currently in discussions to build and run nuclear power plants in China, India, Egypt, Morocco, Namibia, and Vietnam – not to mention their ongoing work at the Bushehr plant in Iran. Combined with gas and oil exports snaking through their pipelines to Europe, and soon to come LNG tankers supplying global markets, the extension of a nuclear power system across various nations will provide Russia with even further clout."

Conclusion

As a nuclear supplier, Australia has responsibilities that go beyond the mere formulation of a punctilious treaty instrument. No matter how watertight the wording of the Agreement, Australia must ensure that the state party with whom the agreement is made is capable of genuinely meeting the treaty's terms and conditions. This is not the case with the Russian Federation as it stands at present. Russia is a corrupt, secretive and duplicitous state, a nation state with an egregious record on human rights and press freedoms, an appalling record of military export and invasion and an extremely poor record on nuclear safety. No treaty instrument is capable of satisfactorily ensuring that uranium exported from Australia may not find its way into secretive military programs either within Russia itself or in third countries.

The Australian Government has a clear responsibility to protect the health of its citizens and the environment in the interests of the majority of Australians who, as polls show, oppose the sale of Australian uranium to Russia. WILPF therefore recommends that this Agreement be repudiated.

*Submission prepared by Felicity Hill and Cathy Picone
for Women's International League for Peace and Freedom (Australian Section) Inc.
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