

GREENPEACE RUSSIA

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To: The Secretary
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11 June 2008

Re: GP submission on the proposed Agreement between the Government of Australia and the Government of the Russian Federation on Cooperation in the Use of Nuclear Energy for Peaceful Purposes

Dear Secretary,

We would like to emphasize some worrying aspects regarding the proposed Agreement between the Government of Australia and the Government of the Russian Federation on Cooperation in the Use of Nuclear Energy for Peaceful Purposes (hereinafter The Agreement).

We very concern about proliferation, safety and social aspects connected with The Agreement and managing Uranium in Russian Federation and would like these concerns to be taken into consideration before making decision on The Agreement. We also would like to obtain answers on questions on these issues from Your Committee.

1. First of all we worry about the purpose of the Australian Uranium in Russia. Formally the Uranium is going to be enriched at International Enrichment Center in Angarsk – former military facility (still almost closed for public). The Uranium is going to be used for third states like Iran famous with its political instability. The irradiated Uranium (so called Spent Nuclear Fuel) containing plutonium could be technically used for military purpose as it is proved that so called “energy plutonium” presented mostly by isotope Pu-240 is nuclear explosive material. Existing international nonproliferation regime can't guarantee prevention of countries like Iran to escape from the non proliferation control. The sample of Northern Korea showed very clear that such scenario is very possible and the best guarantee to avoid proliferation of uranium from Australia would be absence of Australian Uranium reprocessed in Russia.

In Russia there is no chain-of-custody system to trace the Uranium from different sources which could guarantee that Australian Uranium goes only to stable states (beside Angarsk Center there are 3 other enrichment facilities which are recognized as military sites out of IAEA control). In November 2007 Dutch Parliament asked Dutch Government if the Government guarantees “that the uranium that is sent back originates from the reprocessing of the 3700 ton depleted uranium that The Netherlands sends yearly to Russia”. According to answer of the Dutch government “*The uranium sent back to The Netherlands does not originate of necessity from the same lot of uranium that is sent by Urenco to Russia*”. (See the original answers at <http://parlando.sdu.nl/cgi/login/anonymous>)

2. We worry about low level physical safeguard of uranium transportation in Russian Federation. It's mainly connected with the fact that Russian Concern “Rosatom” (former Russian Atomic Agency) establishments thrift on the radiation safety in order to diminish nuclear production cost value, in this case

the cost of enriched uranium. Thus, in July 2006 Greenpeace activists detected radiation from a train with uranium hexafluoride without any guard near St. Petersburg. The gamma radiation level near the train attained 800 microRem/hour (8 microSievert/hour) which is 40 folds higher than natural background. The train photos you can see here:

<http://www.greenpeace.org/russia/ru/photosvideos/slideshows/1317415?page=10>

We're not inclined concerning Russian government statements on reliable physical protection of uranium on the Russian Federation territory.

3. During enrichment process there is produced a great amount of depleted uranium hexafluoride (DUHF). An approximate ratio of DUHF received during the process of natural uranium enrichment, looks like following: of 8 kg of initial raw materials (natural uranium) 1 kg goes to enriched Uranium for civilian reactors usage and 7 kg (87%) get into so-called "tailings" as depleted uranium hexafluoride which is recognized as very toxic material.

Keeping uranium hexafluoride in the storage also doesn't meet safety requirements. The problem of keeping is adjudged by Russian Technical Control (RSC) – the federal body in charged for nuclear objects supervision. The RSC position shows clearly that conditions of safe uranium hexafluoride keeping are not abode, see <http://www.greenpeace.org/russia/en/stop-import-of-nuclear-waste/condition-of-uf6-storage-in-ru>

The Concern Rosatom is also serious about problem of uranium hexafluoride keeping. On the meeting with public on April 12, 2006 the Concern Rosatom head Sergey Kirienko, answering the question about destiny of uranium hexafluoride deposits, said approximately the following: *now we are regarding three variants of treatment with uranium hexafluoride deposits, among them is a technology of a firm "Cogema" and Russian technology. If we are not able to decide this question concerning the utilization of impoverished uranium hexafluoride, I'm ready to make decision about stopping importation of foreign impoverished uranium hexafluoride.*

Be it known to you that in Russia there are no implemented domestic technologies of uranium hexafluoride conversion and there are no reserved funds for financing the transfer of uranium hexafluoride into a form safe for storage and burial. The domestic technology ("Kedr") which is under development is not 100% sure to be effective even if it would be launched.

The Angarsk center is situated near Lake Baikal, the World Heritage Site, which contains 80% of surface fresh water of Russia and 25% of fresh water supplies of the World. Realization large scale international project in Angarsk threaten World Heritage site and the water resource of the Planet as if the accident takes place both during transportation near the shore or storage (90 km far from the shore) huge amount of Uranium could rich the unique lake.

4. In Russia there are no any funds for financing the conversion of uranium hexafluoride – a by-product of natural Uranium enrichment - into uranium oxide, or other safe forms for keeping and/or burial depleted Uranium. Also there are not any political guaranties that such installation and work will be financed and completed. To let you know in Russia there still isn't any law about radioactive wastes.

Existing stocks of uranium hexafluoride in Russian Federation exceeds 800 000 tons. The utilization cost of 800 000 tonnes uranium hexafluoride constitutes billions euro. As for International Enrichment Center it is known that reprocess 1,000 tons of uranium per year produce 1,300 tons of depleted uranium hexafluoride a year. The cost of utilization through burial of every 1,000 ton of depleted uranium hexafluoride is about \$5 mln of which about \$0.6 mln for conversion into stable form. In spite the importance of utilization of depleted uranium hexafluoride neither procedure, nor sources of financing for the conversion and utilization have been established.

As the LES company which is a subsidiary of the West-European URENCO company applied for acquisition of a license for construction of an uranium enrichment plant in 2004 in Lea County, USA, which capacity was similar to the capacity of the planned Center based upon the Angarsk Center, it noted reservation of \$731 mln for utilization of depleted uranium hexafluoride (in opinion of some experts, this

figure is definitely underestimated). It should be mentioned that it was the fourth attempt of the LES Company, as the previous attempts to build a uranium enrichment plant in other places failed because of public opposition. The main cause of local population's concerns was namely the problem of storage and utilization of depleted uranium hexafluoride.

The approach chosen by the LES company clearly shows that population does not believe that enrichment plants will ensure safe storage and utilization of depleted uranium hexafluoride. It is well illustrated by the depleted uranium hexafluoride stock accumulated in the USA. The public discussion around the depleted uranium hexafluoride in Russia repeats the situation with the US activities of the LES Company.

5. The overwhelming part of Russia population – 92% - is against import of radioactive materials from abroad for storage and dumping. The deal with Australia as you could see above would mean storage and dumping up to 87% of initial volume of imported Uranium from abroad.

There is obvious public resistance around Uranium import and creating Uranium enrichment center in Russia. In 2007 13 000 people in Angarsk and Irkutsk (capital of the province where the Angarsk center situated) signed the petition against transportation Uranium from Western European companies.

As result of confrontation in July 2007 during a peaceful protest camp against uranium hexafluoride transportation and against creating the International Enrichment Centre in Angarsk, one of the activists was atrociously killed.

It will be extremely sad if the Australian government will continue to contribute to what is happening in Russia now.

We would like you to answer the following questions:

- What will be reaction of the Australian government if Iran or other third state would use Australian Uranium enriched in Russia for military purpose?
- Does the Australian government know about real situation in connection with uranium transportation of uranium hexafluoride in Russia?
- Does the Australian government know about real situation in connection with storage of uranium hexafluoride in Russia?
- Does the Australian government know about the fact, that in Russia there is no technologies mean for all uranium hexafluoride stock conversion into stable form?
- Does the Australian government know about the fact, that in Russia there is no financial means for all uranium hexafluoride stock conversion and utilization?
- Does the Dutch government know about public opposition in Russia which exists in connection with uranium deals with other states?

Sincerely Yours,



Vladimir Chuprov
Energy Unit Head
Greenpeace Russia

