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Dr. Mohamed ElBaradei
Director General,
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IAEA Secretariat
Headquarters Offices
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Chairperson,
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Permanent Mission of Japan to the International Organizations in Vienna
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Rokkasho Reprocessing Plant Testing and Operation will Breach Japan's International Commitment Concerning Plutonium

JAPAN ATOMIC ENERGY COMMISSION ACCEPTS FAULTY PLUTONIUM UTILIZATION PLAN OF JAPANESE ELECTRIC UTILITIES

Dear Director General ElBaradei and IAEA Board of Governors:

In our Petition of 5 January and follow-up letter of 11 January, we urged the IAEA Secretariat and Board of Governors to quickly take appropriate action before active testing begins at Japan's Rokkasho reprocessing plant and plutonium is accumulated. This was to ensure that Japan does not breach its international commitment made to the IAEA in 1997 which pledged that "plutonium beyond the amount required to implement the program is not to be held, i.e. the principle of no surplus plutonium."

The Federation of Electric Power Companies (FEPCO) of Japan published its "Utilization Plan for Plutonium Recovered at Rokkasho Reprocessing Plant"^{*1} on 6 January, the day after we sent our petition to you. The Japan Atomic Energy Commission (JAEC) considered the plan and announced its response on 24 January.^{*2}

JAEC's 24 January response is at variance with the commitment made by the Japanese government in 1997. This is because the FEPCO Plan announced on 6 January does not meet the conditions stipulated in the JAEC Decision of 5 August 2003, the "Basic Principles for the Utilization of Plutonium in Japan."^{*3} The Basic Principles were issued to meet Japan's commitment to transparency and "no surplus plutonium."

According to the 2003 JAEC Decision, "The uses of plutonium should specify the quantities of plutonium involved, the places where plutonium will be used, approximate time of start [of] using plutonium, and an

approximate period of time required to use the material.”

The 6 January FEPCO Plan fails to meet the “Basic Principles” of the 2003 JAEC Decision:

- Head of FEPCO, Tokyo Electric, does not say which plant will use the plutonium, yet states that it will consume the plutonium.
- None of the nuclear power plants specified under the FEPCO Plan has approval from local authorities to use plutonium (MOX) fuel.
- Moreover, the Plan includes nuclear power plants for which the utilities have not yet even applied to local authorities for approval.
- The Plan also includes the Ohma “full-MOX” nuclear power plant which does not exist and for which no reactor installation license has been granted.
- The approximate start date for plutonium use is not listed.
- There is no clear indication of by when the plutonium will have been used up.
- The FEPCO Plan is supposed to be about obtaining permission to separate plutonium at Rokkasho and is accordingly titled, “Utilization Plan for Plutonium Recovered at Rokkasho Reprocessing Plant (Fiscal years 2005–2006). The title, however, is misleading since in small print the Plan says, “There are cases where the amount of plutonium to be used includes plutonium recovered overseas.”

In the recent 24 January response, the JAEC effectively admits the FEPCO Plan does not meet JAEC’s Basic Principles, by saying that companies have “not yet reached the stage of producing detailed utilization plans...” Nevertheless it responded that the Plan was appropriate.

A table comparing key elements of Japanese / JAEC documents from 1997, 2003, and 24 January 2006 is appended to this letter.

It appears that, on the strength of JAEC’s response, active testing could begin around April at Japan Nuclear Fuel Limited’s (JNFL) Rokkasho reprocessing plant. The plant would then begin to separate plutonium from spent nuclear fuel. On the basis of JNFL’s reprocessing schedule and FEPCO’s 6 January plutonium utilization plan, it is clear that Japan’s inventory of separated plutonium will grow rapidly.

Our calculations indicate that implementation of current plans for reprocessing at Rokkasho would result in approximately 35 tons surplus plutonium in Japan by 2012.*⁴ (2012 is the earliest date plutonium separated at Rokkasho could be used.)

Since there are also no concrete plans to consume the 43 tons of plutonium Japan has already accumulated in Europe and Japan (37.4 tons in Europe and 5.7 in Japan*⁵), Japanese surplus plutonium may total 78 tons by 2012. This is comparable to the US military inventory (including military excess) of 99.5 tons of separated plutonium, and the UK military and civilian inventory of 77.8 tons.*⁶

Judging from announcements by power companies to date, little if any of the 37 tons of plutonium currently held in Europe will be used before 2012. The pluthermal plans —using plutonium uranium MOX fuel in thermal reactors— of the two largest power companies Tokyo Electric and Kansai Electric are in disarray. Local and prefectural consent was withdrawn for Tokyo Electric’s plans and Kansai Electric reiterated on 31 January that “concrete pluthermal plans are undecided and we continue to not be in a state for discussing the matter.”*⁷ Only four of the smaller power companies have announced plans to use plutonium before 2012, and none of them has yet obtained the consent of local and prefectural authorities.

It is worth noting the historic unreliability of Japanese electric utilities’ (FEPCO) plans concerning plutonium consumption. In June 1993 preceding start-up of THORP (UK), Japanese electric utilities took out full-page advertisements in all major UK newspapers stating that they needed the plutonium THORP would separate.*⁸ To this day, however, not a single gram of plutonium has been consumed. A week preceding the 1993 Japanese

electric utilities' advertisement, our organizations predicted that THORP's operation would result in approximately 39 tons of surplus Japanese plutonium in Europe by 2005,*⁹ and a total 70 tons of surplus Japanese plutonium by 2010.*¹⁰ Our predictions are right on track.

The continued lack of transparency concerning when and where Japan will consume its plutonium for electricity generation is highly disturbing.

We contend that plutonium stocks are a proliferation risk in themselves, regardless of the current intentions of the Japanese government. They undermine international efforts to stem the drift toward nuclear proliferation.

JAEC's recent judgment shows that it does not fully comprehend the nuclear proliferation implications and transparency problems of beginning active tests at Rokkasho.*¹¹*¹² The JAEC's failure to live up to its commitment to "no surplus plutonium" threatens to undermine international confidence in Japan's oft-repeated claim that the development and utilization of nuclear energy in Japan "is strictly limited to peaceful purposes."

We therefore urge the IAEA to discuss this matter and to inform the Japanese government that it is not appropriate to begin active tests at Rokkasho.

Yours sincerely,

伴 英幸

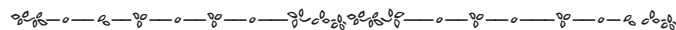
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Enclosures:

Citizens' Nuclear Information Center, Green Action, Greenpeace Japan, Chart: "Comparison of 3 Japanese Government / Atomic Energy Commission (JAEC) Decisions Regarding the Use of Plutonium," compiled 3 February 2006.

Japanese Government, Letter to the IAEA: "Plutonium Utilization Plan of Japan," December 1997.
Available at: <http://www.iaea.org/Publications/Documents/Infcircs/1998/infcirc549a1.pdf>

Atomic Energy Commission of Japan, Decision: "Basic Principles for the Utilization of Plutonium in Japan" (Provisional Translation), 5 August 2003. (Personal translation by or for then JAEC commissioner Tetsuya Endo. Sent by JAEC to Green Action.)

Federation of Electric Power Companies of Japan (FEPCO), "Utilization Plan for Plutonium Recovered at Rokkasho Reprocessing Plant (Fiscal 2005-2006)," 6 January 2006. (CNIC translation.)
Available at: <http://cnic.jp/english/topics/cycle/MOX/pluplanFEPCO6Jan06.html>

Japan Atomic Energy Commission (JAEC), "Appropriateness of the Purpose of Use Specified in the Plutonium Utilization Plans Announced by Electric Power Companies et al," 24 January 2006. (CNIC translation.)

- *1. Federation of Electric Power Companies of Japan (FEPCO), “Utilization Plan for Plutonium Recovered at Rokkasho Reprocessing Plant (Fiscal 2005–2006),” 6 January 2006. English translation by Citizens’ Nuclear Information Center available at: <http://cnic.jp/english/topics/cycle/MOX/pluplanFEPCO6Jan06.html>
- *2. Japan Atomic Energy Commission (JAEC), “Appropriateness of the Purpose of Use Specified in the Plutonium Utilization Plans Announced by Electric Power Companies et al,” 24 January 2006. (Translation by Citizens’ Nuclear Information Center.)
- *3. Atomic Energy Commission of Japan, Decision: “Basic Principles for the Utilization of Plutonium in Japan,” 5 August 2003. (The English is a personal translation by or for then JAEC commissioner Tetsuya Endo.) Green Action has been told by JAEC that it understands commissioner Endo sent the English translation to the IAEA.
- *4. Based on JNFL’s 1 September 2005 announcement regarding the amount of spent fuel to be separated from FY2005 – FY2012.
- *5. Japan Atomic Energy Commission 2005 plutonium inventory figures.
Available at: <http://aec.jst.go.jp/jicst/NC/iinkai/teirei/siry02005/siry034/tei-si34.htm> (In Japanese.)
- *6. Institute for Science and International Security, Global Stocks of Nuclear Explosive Materials: Summary Tables and Charts (July 12, 2005, Revised September 7, 2005), Table 2, Plutonium and HEU Holdings by Country, end 2003 in tonnes.
- *7. Statement made to Green Action and Mihama-no-Kai by Kansai Electric on 31 January 2006.
- *8. The Ten Japanese Electric Power Companies, “Let’s be clear about it. The ten Japanese utility companies want THORP.” Full page advertisement in major UK newspapers including The Times (23 June 1993).
- *9. Japanese Citizens Concerned About Plutonium, “Why Start THORP If Japan Has No Use For It Anymore?” Advertisement in UK parliament’s House Magazine (14 June 1993.) Signers include Jinzaburo Takagi then director of CNIC and Aileen Mioko Smith, director of Green Action.
- *10. Letter dated 15 June 1993 to UK Prime Minister John Major from Aileen Mioko Smith (director of Green Action [former organization name Plutonium Action Network – Kyoto]), Yurika Ayukawa (director for International Relations, Citizens’ Nuclear Information Center), and Consumers’ Union of Japan. Letter states, “Japan’s plutonium utilization programme is severely behind schedule. Major problems and chronic delays in the programme will result in an approximate 70 tonne (70,000 kg) gap between actual demand and supply of Japanese plutonium by the year 2010 if current supplies continue.”
- *11. “A Call on Japan to Strengthen the NPT by Indefinitely Postponing Operation of the Rokkasho Spent Fuel Reprocessing Plant.” (May 5, 2005) Statement by 27 eminent scientists, former policy makers and analysts, including four Nobel laureates in physics and two former US Secretaries of Defense. They said, “At a time when the nonproliferation regime is facing its greatest challenge, Japan should not proceed with its current plans for the start-up of the Rokkasho reprocessing plant.” See press release and statement on the following page:
http://www.ucsusa.org/news/press_release/japanese-plutonium-program-threatens-nonproliferation-regime-warn-nobel-laureates-and-other-experts.html
- *12. Letter sent to the Japanese Ambassador by six Democrat members of the US Congress calling on Japan “to suspend plans to conduct active testing of Rokkasho...as part of a global initiative to reduce world-wide stockpiles of weapons-usable fissile materials.”
See press release and letter on the following page:
<http://markey.house.gov/index.php?option=content&task=view&id=1088&Itemid=125>