

October 14, 1999

FOR: The Commissioners

FROM: Janice Dunn Lee, Director /s/  
Office of International Programs

SUBJECT: PROPOSED LICENSE TO EXPORT SOURCE MATERIAL TO THE RUSSIAN FEDERATION UNDER THE U.S.-RUSSIA HEU AGREEMENT  
(XSOU8767)

## PURPOSE:

To request Commission approval of a license authorizing the U.S. Department of Energy (DOE) to export source material to Russia. The application is being referred to the Commission in accordance with [10 CFR 110.40\(b\)\(5\)](#).

## BACKGROUND:

On June 4, 1999, The U.S. Department of Energy (DOE ~~EXIT~~) applied for a license ([Attachment 1](#)) to export to Russia 135,000,000 kilograms of natural uranium, in the form of uranium hexafluoride, over a 15 year period at an average rate of 9,000,000 kilograms per year. The material will be: (1) used to blend high-enriched uranium (HEU) to low-enriched uranium (LEU); (2) sold outside Russia; or (3) stored for future use or sale.

The natural uranium will be exported pursuant to the Agreement between the U.S. Department of Energy and the Russian Federation Ministry for Atomic Energy Concerning the Transfer of Source Material to Russian Federation, signed in Washington on March 24, 1999 ([Attachment 2](#)).

The agreement was negotiated with several U.S. interests in mind.

- Successful implementation of the U.S.-Russia Agreement on converting Russian weapons-grade HEU to non-weapons-usable LEU is a major U.S. national security goal.
- In accordance with section 3112 of Public Law 104-137, Russia is entitled to the natural uranium component of the LEU delivered to the U.S. on or after January 1, 1997.
- Implementation of the natural uranium provisions of the U.S.-Russia HEU -LEU deal became a President Clinton-President Yeltsin Summit issue in September 1998.
- Congress made \$325 million available to purchase 1997 and 1998 quantities of Russian natural uranium, provided that Russia concludes a long term commercial contract.
- Russia proposed a transfer of the natural uranium component to Russia in a manner supportive of a long-term commercial contract.
- A separate agreement was necessary, in the absence of a Section 123 Agreement for Cooperation between the U.S. and Russia, to assure that the natural uranium to be transferred to Russia would be subject to the non-proliferation conditions and controls mandated by the Atomic Energy Act.

The March 24, 1999 agreement was negotiated by DOE after consultations with the Congress on the need to come to a satisfactory arrangement with Russia and on the emerging consensus within the legal offices of the Executive Branch agencies and the Commission that the Atomic Energy Act allowed an NRC-licensed DOE distribution of natural uranium to Russia without a Section 123 Agreement between the two countries. An exchange of diplomatic notes pertaining to the March 24 Agreement reflects Russia's assurances consistent with the export criteria set forth in section 127 of the AEA and section 402(a) of the Nuclear Nonproliferation Act, including the assurance that source material transferred under the agreement will not be enriched without prior U.S. approval.

## DISCUSSION:

Notice of receipt of DOE's license application was published in the Federal Register and no intervention or hearing requests were filed. In response to NRC's request for views on the proposed export, the Executive Branch, in their letter dated September 16, 1999, recommended that the license be approved ([Attachment 3](#)). The letter contained findings that the export would be subject to all of the non-proliferation conditions and controls required by U.S. law, including those set forth in section 127 of the AEA, and would not be inimical to interests of the United States, including the common defense and security, and would be consistent with the provisions of the Atomic Energy Act. The Executive Branch letter concluded that the export of natural uranium for a nuclear use can be made by DOE as a distribution under NRC license pursuant to section 64 of the AEA without a section 123 agreement for cooperation. The legal theory supporting the issuance of this license was developed by NRC's Office of the General Counsel and shared with Commission offices in a February 1998 briefing of the Commissioners' assistants.

## INTERNATIONAL SAFEGUARDS AND FOREIGN PHYSICAL PROTECTION

Russia is a nuclear weapons state and therefore not subject to full-scope IAEA safeguards under the Non-Proliferation Treaty (NPT). Russia has submitted a separate storage facility in Ehlektrostal to IAEA safeguards under its "Voluntary Offer" agreement.

NRC staff have visited Russia within the past several years as part of the Material Protection Control and Accounting (MPC&A) assistance program but not

for the explicit purpose of evaluating the implementation of physical protection with respect to international recommendations, nor has the staff received a statement from Russia declaring that physical protection measures accord with those recommendations. Russia is, however, actively working to improve the protection of its nuclear materials through the MPC&A program and its work with other countries, and Russian experts have observed implemented physical protection measures in the U.S. and discussed this subject with our specialists. Russia has participated in international consultants meetings, workshops, and conferences addressing enhancements to physical protection measures in IAEA's guidance document, INFCIRC 225.

In any event, physical protection of natural uranium in Russia has not been a concern of the U.S. government, relative to other materials, and does not involve any difficult technical challenges or special risks.

#### REVIEW OF STATE DEPARTMENT TELEGRAMS AND OTHER INFORMATION

OIP has reviewed available telegrams and other information. We have found no basis for calling into question the Russian Federation's commitment to carrying out its undertakings in the March 24, 1999, agreement.

#### CONCLUSION:

The staff concurs with the Executive Branch judgment that the proposed export would not be inimical to the common defense and security of the United States and is consistent with the provisions of the Atomic Energy Act of 1954, as amended by the Nuclear Non-Proliferation Act of 1978. The Office of the Executive Director for Operations concurs. The Office of the General Counsel has no legal objection.

#### RECOMMENDATION:

That the Commission authorize the issuance of the requested license to DOE for 135,000,000 kilograms of natural uranium.

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- Attachments:**
1. 06/04/99 DOE Export License Application
  2. 03/24/99 Agreement Between the United States Department of Energy and the Ministry of the Russian Federation for Atomic Energy Concerning the Transfer of Source Material to the Russian Federation
    - Annex to the Agreement
    - 03/24/99 Administrative Arrangement
    - Finding Of No Significant Impact
    - Supplemental Information
  3. 09/16/99 DOS letter R.J.K.Stratford to J.D.Lee