#### **RUSSIAN-U.S. HEU AGREEMENT**

[Russian-U.S. agreement concerning the disposition of highly enriched uranium extracted from nuclear weapons]

The Governments of United States of America and the Russian Federation, hereafter referred to as the Parties,

Desiring to arrange the safe and prompt disposition for peaceful purposes of highly enriched uranium resulting from the dismantlement of nuclear weapons in Russia, bearing in mind existing agreements in the area of arms control and disarmament, the reduction of nuclear weapons in accordance with existing agreements in the area of arms control and disarmament,

Reaffirming their commitment to ensure that the development and use of nuclear energy for peaceful purposes are carried out under arrangements that will further the objectives of the Treaty on the Non-Proliferation of Nuclear Weapons of July 1, 1968,

Affirming their commitment to ensure that nuclear material transferred for peaceful purposes pursuant to this Agreement will comply with all applicable non-proliferation, material accounting and control, physical protection, and environmental requirements.

Have agreed as follows:

### **ARTICLE I: PURPOSE**

The Parties shall cooperate in order to achieve the following objectives:

- 1. The conversion as soon as practicable of highly enriched uranium (HEU) resulting from dismantlement of nuclear weapons in Russia extracted from nuclear weapons resulting from the reduction of nuclear weapons pursuant to arms control agreements and other commitments of the parties which is currently estimated at approximately 500 metric tons in the Russian Federation, having an average assay of 90 percent or greater of the uranium isotope 235 into low enriched uranium (LEU) for use as fuel in commercial nuclear reactors. For purposes of this Agreement, LEU shall mean uranium enriched to less than 20 percent in the isotope 235; and
- 2. The technology developed in the Russian Federation for conversion of HEU resulting from the reduction of nuclear weapons in the Russian Federation may be used for conversion of United States HEU in the United States of America; and

3. The establishment of appropriate measures to fulfill the non-proliferation, physical security protection, nuclear material accounting and control, and environmental requirements of the Parties with respect to HEU and LEU subject to this Agreement.

#### **ARTICLE II: IMPLEMENTING CONTRACTS AND AGREEMENTS**

- The Parties, through their Executive Agents, shall within twelve six months from entry into force of this Agreement seek to enter into an initial implementing contract to accomplish the objectives set forth in Article I of this Agreement. The Parties may conclude additional implementing contracts or agreements pursuant to this Agreement, as required. For any purchase, the Executive Agents shall negotiate terms (including price), which shall be subject to approval by the Parties.
- 2. It is the intent of the Parties that the initial implementing contract shall provide for, inter alia:

i. The purchase by the United States Executive Agent of HEU, conversion of such HEU to LEU LEU converted from HEU at facilities in the Russian Federation and sale of the LEU for commercial purposes. and/or the purchase by the United States Executive Agent of LEU converted from HEU at facilities in Russia and sale of such LEU for commercial purposes; The United States will provide information to the Russian Federation on all commercial disposition of such LEU;

ii. Initial delivery of HEU or LEU converted from HEU resulting from the dismantlement of nuclear weapons in Russia by October 1993, Initial delivery of LEU converted from HEU extracted from nuclear weapons resulting from the reduction of nuclear weapons pursuant to arms control agreements and other commitments of the parties by October 1993, if possible;

iii. Conversion of no less than 10 metric tons of HEU having an average assay of 90 percent or greater of the uranium isotope 235 in each of the first five years, and, in each year thereafter, conversion of no less than 30 metric tons of HEU having an average assay of 90 percent or greater of the uranium isotope 235; however, specific amounts will be stipulated in the first and subsequent implementing contracts;

iv. The participation of the U.S. private sector and of Russian enterprises;

v. The allocation among the United States of America, private sector firms of the United States of America, the Russian Federation, and Russian enterprises of any proceeds or costs arising out of activities undertaken pursuant to any implementing contract;

vi. The use by the Russian Federation side of a portion of the proceeds from the sale of HEU or LEU converted from HEU for the conversion of defense enterprises, enhancing the safety of nuclear power plants, environmental clean-up of polluted

areas and the construction and operation of facilities in the Russian Federation for the conversion of HEU to LEU,

vii. By agreement of the Parties an equivalent amount of HEU can substitute for the corresponding amount of LEU planned for purchase by the United States Executive Agent.

## ARTICLE III: EXECUTIVE AGENTS

Each Party shall designate an executive agent to implement this Agreement. For the United States side of America the executive agent shall be the Department of Energy, hereinafter referred to as DOE. For the Russian side Federation the Executive Agent shall be the Ministry of the Russian Federation of Atomic Energy. After consultation with the other Party, either Party has the right to change its executive agent upon 30 days written notice to the other Party. If a governmental corporation is established under United States law to manage the uranium enrichment enterprise of the Department of Energy, it is the intention of the United States Government to designate that corporation as the Executive Agent for the United States side.

# **ARTICLE IV: PRIORITY OF AGREEMENT**

In case of any inconsistency between this Agreement and any implementing contracts or agreements, the provisions of this Agreement shall prevail.

### **ARTICLE V: ADDITIONAL MEASURES**

- 1. The Executive Agent of the Russian Federation shall ensure that the quality of HEU LEU derived from HEU subject to this Agreement is such that it is convertible to LEU usable in commercial reactors. Specifications shall be agreed upon in the process of negotiating the initial and subsequent implementing contracts.
- 2. The conversion of HEU subject to this Agreement shall commence as soon as possible after the entry into force of the initial implementing contract.
- 3. The Parties shall, to the extent practicable, seek to arrange for more rapid conversion of HEU to LEU than that provided for in Article II (2) (iii).
- 4. The United States of America shall use HEU and LEU acquired pursuant to this Agreement and its implementing contracts and agreements, when subject to United States jurisdiction and control, for peaceful purposes only.

- 5. HEU and LEU acquired by the United States of America pursuant to this Agreement, and implementing contracts and agreements related to it, shall be subject to safeguards in accordance with the November 18, 1977 Agreement between the United States of America and the International Atomic Energy Agency (IAEA) for the Application of Safeguards in connection with the Treaty for the Non-Proliferation of Nuclear Weapons of July 1, 1968.
- 6. The Parties shall maintain physical protection of HEU and LEU subject to this Agreement. Such protection shall, at a minimum, provide protection comparable to the recommendation set forth in IAEA document INFCIRC/225/REV.2 concerning the physical protection of nuclear material.
- 7. If the Parties enter into an agreement for cooperation concerning the peaceful uses of nuclear energy, nuclear material acquired by the United States of America pursuant to this Agreement and its implementing contracts and agreements, when subject to U.S. jurisdiction or control, shall be subject to the terms and conditions of that Agreement for cooperation.
- 8. The activities of the United States Government of America under this Agreement, or any implementing contract or agreement shall be subject to the availability of United States Government funds.
- 9. In the event the United States Government does not have funds available for implementation of this Agreement, the Executive Agent of the Russian Federation reserves the option to obtain funding for implementation of this Agreement from any private U.S. company.
- 10. Prior to the conclusion of any implementing contract, the Parties shall establish transparency measures to ensure that the objectives of this Agreement are met, including provisions for nuclear material accounting and control and access, from the time that HEU is made available for conversion until it is converted into LEU. Specific transparency measures shall be established in the same time frame as the negotiation of the initial implementing contract, and shall be executed by a separate agreement.
- 11. Prior to the conclusion of any implementing contract, the Parties shall agree on appropriate governing provisions for entry and exit, liability, and status of personnel, exemptions for taxes and other duties, and applicable law.
- 12. The Executive Agent of the United States shall use the LEU converted from HEU in such a manner so as to minimize disruptions in the market and maximize the overall economic benefit for both Parties. This Agreement shall have no effect on contracts between the Russian Federation Russian enterprises and United States companies for the delivery of uranium products which are currently in force and consistent with United States and Russian law.

13. This Agreement places no limitations on the right of the Russian Federation to dispose of LEU derived from HEU resulting from dismantlement of nuclear weapons in Russia extracted from nuclear weapons resulting from the reduction of nuclear weapons pursuant to arms control agreements and other commitments of the Parties beyond the specific commitments set forth herein.

## **ARTICLE VI: ENTRY INTO FORCE, DURATION AND AMENDMENTS**

- 1. This Agreement shall enter into force upon signature and shall remain in force for twenty years until the full amount of HEU provided for in paragraph 1 of Article 1 is converted into LEU, delivered, and supplied to commercial customers. The duration of this Agreement may be extended by the written agreement of the Parties.
- 2. Each Party may propose amendments to this Agreement. Agreed amendments shall enter into force upon signature and shall remain in force so long as this Agreement remains in force.
- 3. Each Party shall have the right to terminate this Agreement upon 12 months written notification to the other Party.

Done at Washington this 18th day of February, 1993, in duplicate in the English and Russian languages, both texts being equally authentic.

For the United States of America: William Burns

For the Russian Federation: Viktor Mikhailov