

Information Circular

INFCIRC/642 Date: 14 April 2005

General Distribution

Original: English and Russian

Agreement among the Government of the Republic of Poland, the Government of the Russian Federation and the International Atomic Energy Agency for Assistance in Securing Nuclear Fuel for a Research Reactor

- 1. The text of the Project and Supply Agreement, which was approved by the Agency's Board of Governors on 6 December 2000, among the Agency and the Governments of the Republic of Poland and the Russian Federation concerning assistance in securing nuclear fuel for a research reactor is reproduced herein for the information of all Members.
- 2. The Agreement entered into force on 04 January 2005, pursuant to Article XII.

AGREEMENT

AMONG THE GOVERNMENT OF THE RUSSIAN FEDERATION, THE GOVERNMENT OF THE REPUBLIC OF POLAND AND THE INTERNATIONAL ATOMIC ENERGY AGENCY FOR ASSISTANCE IN SECURING NUCLEAR FUEL FOR A RESEARCH REACTOR

The Government of the Russian Federation, the Government of the Republic of Poland and the International Atomic Energy Agency (hereinafter the "Parties"). WHEREAS:

The Government of the Republic of Poland desires to secure nuclear fuel for the operation of the Maria Research Reactor (hereinafter the "Project");

The Government of the Republic of Poland has requested the assistance of the International Atomic Energy Agency (hereinafter the "IAEA") in securing the fuel;

The Government of the Republic of Poland has also requested that the IAEA contribute to the Project through its Technical Co-operation Programme;

The Board of Governors of the IAEA (hereinafter the "Board"), on 6 December 2000, approved project number POL/4/014 entitled "Reduced Enrichment Fuel for Maria Research Reactor" that relates to the afore-mentioned request by the Government of the Republic of Poland, as part of the IAEA's Technical Co-operation Programme for 2001-2002;

The Government of the Republic of Poland and the IAEA are in the process of making arrangements with a Russian manufacturer for the supply of the nuclear fuel; and

The Government of the Republic of Poland concluded with the IAEA an agreement for the application of safeguards in connection with the Treaty on the Non-Proliferation of Nuclear Weapons (hereinafter the "Treaty Safeguards Agreement"), which entered into force on 11 October 1972;

hereby agree as follows:

ARTICLE I Definition of the Project

- 1. The Project which is the subject of this Agreement is the supply of nuclear fuel for the operation of the Maria Research Reactor, which is located at the Institute of Atomic Energy (IAE) in Swierk, Republic of Poland.
- 2. This Agreement shall, mutatis mutandis, apply to any additional assistance provided by the IAEA to the Government of the Republic of Poland for the Project.
- 3. The IAEA assumes no obligations or responsibilities insofar as the Project is concerned, except as specified in this Agreement.

ARTICLE II Supply of Nuclear Fuel

- 1. The IAEA shall request the Government of the Russian Federation to permit the supply to the Republic of Poland of approximately 110 kilograms of uranium enriched to approximately 36 per cent by weight in the isotope uranium-235 (hereinafter the "supplied material") contained in fuel assemblies for the Maria Research Reactor.
- 2. The Government of the Russian Federation shall export to the Republic of Poland the supplied material and shall issue the required licenses or permits for that purpose.
- 3. The particular terms and conditions for the transfer of the supplied material, including all charges for, or connected with the supply of, such material, a schedule of deliveries and shipping instructions and arrangements for the export of the supplied material from the Russian Federation, shall be specified in arrangements to be made among the IAEA, the Government of the Republic of Poland and the Russian manufacturer.
- 4. The supplied material and any special fissionable material produced through the use of the supplied material, including subsequent generations of produced special fissionable material, shall be used exclusively in the Maria Research Reactor and shall remain at the IAE, unless the Parties otherwise agree.

5. The supplied material and any special fissionable material produced through the use of the supplied material, including subsequent generations of produced special fissionable material, shall be stored or reprocessed or otherwise altered in form or content only under conditions and in facilities acceptable to the Parties. Such materials shall not be further enriched unless the Parties hereto otherwise agree to the amendment of this Agreement for that purpose.

ARTICLE III Payment

- 1. Payment to the Russian manufacturer of all charges for the supplied material or connected with the supply of this material shall be made by the IAEA and the Government of the Republic of Poland in accordance with the arrangements to be made among the IAEA, the Government of the Republic of Poland and the Russian manufacturer.
- 2. The IAEA does not, in extending assistance for the Project, assume any financial responsibility in connection with the transfer of the supplied material from the Russian Federation to the Republic of Poland, except as provided in paragraph 1 of this Article.

ARTICLE IV Transport, Handling, Use and Storage

- 1. The Government of the Russian Federation and the Government of the Republic of Poland shall take all appropriate measures to ensure the safe transport, handling and use of the supplied material. The IAEA does not warrant the suitability or fitness of the supplied material for any particular use or application and shall not at any time bear any responsibility towards the Government of the Republic of Poland, or any person for any claims arising out of the transport, handling and use of the supplied material.
- 2. The Government of the Republic of Poland shall take all measures necessary to ensure the safe and secure storage of the fuel assemblies containing the supplied material prior to their use in the Maria Research Reactor and upon their removal from the reactor core following irradiation.

ARTICLE V Safeguards

- 1. The Government of the Republic of Poland undertakes that the supplied material and any special fissionable material produced through the use of the supplied material, including subsequent generations of produced special fissionable material, shall not be used for the manufacture of any nuclear weapon or any nuclear explosive device, or for research on or the development of any nuclear weapon or any nuclear explosive device, or in such a way as to further any military purpose.
- 2. The safeguards rights and responsibilities of the IAEA provided for in Article XII. A of the Statute of the IAEA (hereinafter the "Statute") are relevant to the Project and shall be implemented and maintained with respect to the Project. The Government of the Republic of Poland shall co-operate with the IAEA to facilitate the implementation of the safeguards required by this Agreement.
- 3. The IAEA safeguards referred to in paragraph 2 of this Article shall, for the duration of this Agreement, be implemented pursuant to the Treaty Safeguards Agreement.
- 4. Article XII.C of the Statute shall apply with respect to any non-compliance by the Government of the Republic of Poland with the provisions of this Agreement.

ARTICLE VI Safety Standards and Measures

The safety standards and measures specified in Annex A to this Agreement shall apply to the Project.

ARTICLE VII IAEA Inspectors

The relevant provisions of the Treaty Safeguards Agreement shall apply to IAEA inspectors performing functions pursuant to this Agreement.

ARTICLE VIII Scientific Information

In conformity with Article VIII.B of the Statute, the Government of the Republic of Poland shall make available to the IAEA without charge all scientific information developed as a result of the assistance provided by the IAEA for the Project.

ARTICLE IX Languages

All reports and other information required for the implementation of this Agreement shall be submitted to the IAEA in one of the working languages of the Board

ARTICLE X Physical Protection

- 1. The Government of the Republic of Poland undertakes that adequate physical protection measures shall be maintained with respect to the supplied material and any special fissionable material produced through the use of the supplied material, including subsequent generations of produced special fissionable material.
- 2. The Parties agree to the levels for the application of physical protection set forth in Annex B to this Agreement, which levels may be modified by mutual consent of the Parties without amendment to this Agreement. The Government of the Republic of Poland shall maintain adequate physical protection measures in accordance with such levels. These measures shall as a minimum provide protection comparable to that set forth in IAEA document "The Physical Protection of Nuclear Material and Nuclear Facilities" (INFCIRC/225/Rev.4), as it may be revised.

ARTICLE XI Settlement of Disputes

1. Any decision of the Board concerning the implementation of Article

- V, VI or VII of this Agreement shall, if the decision so provides, be given effect immediately by the IAEA and the Government of the Republic of Poland pending the final settlement of any dispute.
- 2. Any dispute arising out of the interpretation or implementation of this Agreement shall be settled by consultation or negotiation.

ARTICLE XII Entry into Force and Duration

- 1. This Agreement shall enter into force upon signature by the Parties.
- 2. This Agreement shall continue in effect so long as any material, equipment or facility which was ever subject to this Agreement remains in the territory of the Republic of Poland or under its jurisdiction or control anywhere, or until such time as the Parties agree that such material, equipment or facility is no longer usable for any nuclear activity relevant from the point of view of safeguards.

DONE in triplicate in the Russian and English languages, the texts of which are equally authentic.

For the GOVERNMENT OF THE RUSSIAN FEDERATION:

(signed)

Mr. Aleksandr Yur'evich Head of Federal Atomic Energy Agency Moscow, 2004 December 23

For the GOVERNMENT OF THE REPUBLIC OF POLAND:

(signed)

Mr. Jerzy Niewodniczański President of the National Atomic Energy Agency Warsaw, 2005 January 3

For the INTERNATIONAL ATOMIC ENERGY AGENCY:

(signed)
Mohamed ElBaradei
Director General
Vienna, 2005 January 4

ANNEX A

SAFETY STANDARDS AND MEASURES

- 1. The safety standards and measures applicable to the Agreement among the Government of the Russian Federation, the Government of the Republic of Poland and the International Atomic Energy Agency for Assistance in Securing Nuclear Fuel for a Research Reactor shall be those defined in IAEA document INFCIRC/18/Rev.l (hereinafter the "Safety Document") or in any subsequent revision thereof and as specified below.
- 2. The Government of the Republic of Poland shall, inter alia, apply the International Basic Safety Standards for Protection Against Ionizing Radiation and for the Safety of Radiation Sources (IAEA Safety Series No. 115), and the relevant provisions of the IAEA's Regulations for the Safe Transport of Radioactive Materials (IAEA Safety Standard Series, ST-1 Revised) as they may be revised from time to time, and as far as possible the Government of the Republic of Poland shall apply them also to any shipment of the supplied material outside the jurisdiction of the Republic of Poland. The Government of the Republic of Poland shall, inter alia, ensure safety conditions as recommended in the Code on the Safety of Nuclear Research Reactors: Design (IAEA Safety Series No. 35-S1) and the Code on the Safety of Nuclear Research Reactors: Operation (IAEA Safety Series No. 35-S2) and other relevant IAEA Safety Standards.
- 3. The Government of the Republic of Poland shall arrange for the submission to the IAEA, at least thirty (30) days prior to the proposed transfer of any part of the supplied material to the jurisdiction of the Republic of Poland, of a detailed safety analysis report containing the information specified in paragraph 4.7 of the Safety Document and as recommended in the relevant sections of the IAEA's Guides on the Safety Assessment of Research Reactors and Preparation of the Safety Analysis Report (IAEA Safety Series No. 35-G1) and the Safety in the Utilization and Modification of Research Reactors (IAEA Safety Series No. 35-G2), including particular reference to the following types of operations, to the extent that the relevant information is not yet available to the IAEA:
 - (a) Receipt and handling of the supplied material;
 - (b) Loading of the supplied material into the reactor;

- (c) Start-up and pre-operational testing of the reactor with the supplied material;
- (d) Experimental program and procedures involving the reactor;
- (e) Unloading of the supplied material from the reactor; and
- (f) Handling and storage of the supplied material after unloading from the reactor.
- 4. Once the IAEA has determined that the safety measures provided for the Project are adequate, the IAEA shall give its consent for the start of the proposed operations. Should the Government of the Republic of Poland desire to make substantial modifications to the procedures with respect to which information has been submitted, or to perform any operations with the reactor or the supplied material with respect to which operations no information has been submitted, the Government of the Republic of Poland shall submit to the IAEA all relevant information as specified in paragraph 4.7 of the Safety Document, on the basis of which the IAEA may require the application of additional safety measures in accordance with paragraph 4.8 of the Safety Document. Once the Government of the Republic of Poland has undertaken to apply the additional safety measures requested by the IAEA, the IAEA shall give its consent for the aforementioned modifications or operations envisaged by the Government of the Republic of Poland.
- 5. The Government of the Republic of Poland shall arrange for submission to the IAEA, as appropriate, of the reports specified in paragraphs 4.9 and 4.10 of the Safety Document.
- 6. The IAEA may, in agreement with the Government of the Republic of Poland, send safety missions for the purpose of providing advice and assistance to the Government of the Republic of Poland in connection with the application of adequate safety measures to the Project, in accordance with paragraphs 5.1 and 5.3 of the Safety Document. Moreover, special safety missions may be arranged by the IAEA in the circumstances specified in paragraph 5.2 of the Safety Document.
- 7. Changes in the safety standards and measures laid down in this Annex may be made by mutual consent between the IAEA and the Government of the Republic of Poland in accordance with paragraphs 6.2 and 6.3 of the Safety Document.

ANNEX B

LEVELS OF PHYSICAL PROTECTION

Pursuant to Article X of the Agreement among the Government of the Russian Federation, the Government of the Republic of Poland and the International Atomic Energy Agency for Assistance in Securing Nuclear Fuel for a Research Reactor, the agreed levels of physical protection to be ensured by the competent national authorities in the use, storage and transportation of nuclear material listed in the attached table shall as a minimum include protection characteristics as follows:

CATEGORY III

Use and storage within an area to which access is controlled.

<u>Transportation</u> under special precautions including prior arrangements between sender, recipient and carrier, and prior agreement between entities subject to the jurisdiction and regulation of the supplier State and the recipient State, respectively, in case of international transport, specifying time, place and procedures for transferring transport responsibility.

CATEGORY II

<u>Use and storage</u> within a protected area to which access is controlled, i.e. an area under constant surveillance by guards or electronic devices, surrounded by a physical barrier with a limited number of points of entry under appropriate control, or any area with an equivalent level of physical protection.

<u>Transportation</u> under special precautions including prior arrangements between sender, recipient and carrier, and prior agreement between entities subject to the jurisdiction and regulation of the supplier State and the recipient State, respectively, in case of international transport, specifying time, place and procedures for transferring transport responsibility.

CATEGORY I

Materials in this category shall be protected with highly reliable systems against unauthorized use as follows:

<u>Use and storage</u> within a highly protected area, i.e. a protected area as defined for Category II above, to which, in addition, access is restricted to

persons whose trustworthiness has been determined, and which is under surveillance by guards who are in close communication with appropriate response forces. Specific measures taken in this context should have as their objective the detection and prevention of any assault, unauthorized access or unauthorized removal of material.

<u>Transportation</u> under special precautions as identified above for transportation of Category II and III materials and, in addition, under constant surveillance by escorts and under conditions which assure close communication with appropriate response forces.

TABLE: CATEGORIZATION OF NUCLEAR MATERIAL

Material		Form	Category I			Category II	Category III ^c		
1.Pluto	nium ^a	Unirradiated ^b	2 k more	_	or	Less than 2 kg but more than 500 g	500 g or more than 15		but
2.Urani 235		Unirradiated ^b - uranium enriched to 20% ²³⁵ U or more - uranium enriched to 10% ²³⁵ U but less than 20% ²³⁵ U - uranium enriched above natural, but less than 10% ²³⁵ U	-5 k more	кg	or	-Less than 5 kg but more than 1 kg -10 kg or more	-1 kg or more than 15 have than 1 have than 1 have than 1	5g 10kg kg	
3. U 233	Iranium-	Unirradiated ^b	2 k more	g	or	Less than 2 kg but more than 500 g	500 g or more than 15		but
4. Irr Fuel	radiated					Depleted or natural uranium, thorium or low- enriched fuel (less than 10% fissile content) ^{d/e}			

- a All plutonium except that with isotopic concentration exceeding 80% in plutonium-238.
- b Material not irradiated in a reactor or material irradiated in a reactor but with a radiation level equal to or less than 1 Gy/hr (100 rad/hr) at one meter unshielded.
- c Quantities not falling in Category III and natural uranium, depleted uranium and thorium should be protected at least in accordance with prudent management practice.
- d Although this level of protection is recommended, it would be open to States, upon evaluation of the specific circumstances, to assign a different category of physical protection.
- e Other fuel which by virtue of its original fissile material content is classified as Category I or II before irradiation may be reduced one category level while the radiation level from the fuel exceeds 1 Gy/hr (100 rad/hr) at one meter unshielded.