AGREEMENT FOR COOPERATION BETWEEN
THE REPUBLIC OF HUNGARY
AND THE UNITED STATES OF AMERICA
CONCERNING PEACEFUL USES OF NUCLEAR ENERGY

The Government of the Republic of Hungary and the Government of the United States of America;

Mindful of their respective obligations under the Treaty on the Non-Proliferation of Nuclear Weapons ("NPT"), to which both the Republic of Hungary and the United States of America are parties;

Reaffirming their commitment to ensuring that the international development and use of nuclear energy for peaceful purposes are carried out under arrangements which will to the maximum possible extent further the objectives of the NPT;

Affirming their support of the objectives of the International Atomic Energy Agency ("IAEA") and their desire to promote universal adherence to the NPT;

Desiring to cooperate in the development, use and control of peaceful uses of nuclear energy; and

Mindful that peaceful nuclear activities must be undertaken with a view to protecting the international environment from radioactive, chemical and thermal contamination;

Have agreed as follows:

Article 1 - Definitions

For the purposes of this agreement:

(A) "Byproduct material" means any radioactive material (except special nuclear material) yielded in or made radioactive by exposure to the radiation incident to the process of producing or utilizing special nuclear material;

(B) "Component" means a component part of equipment or other item, so designated by agreement of the parties;

(C) "Conversion" means any of the normal operations in the nuclear fuel cycle, preceeding fuel fabrication and excluding enrichment, by which uranium is transformed from one chemical form to another -- for example, from UF6 to U02 or from uranium oxide to metal;

(D) "Equipment" means any reactor, other than one designed or used primarily for the formation of plutonium or uranium 233, or any other item so designated by agreement of the parties;

(E) "High enriched uranium" means uranium enriched to twenty percent or greater in the isotope 235;

(F) "Low enriched uranium" means uranium enriched to less than twenty percent in the isotope 235;

(G) "Major critical component" means any part or group of parts essential to the operation of a sensitive nuclear facility;

(H) "Material" means source material, special nuclear material, byproduct material, radioisotopes other than byproduct material, moderator material, or any other such substance so designated by agreement of the parties;

(I) "Moderator material" means heavy water or graphite or beryllium of a purity suitable for use in a reactor to slow down high velocity neutrons and increase the likelihood of further fission, or any other such material so designated by agreement of the parties;

(J) "Parties" means the Government of the Republic of Hungary and the Government of the United States of America;

(K) "Peaceful purposes" include the use of information, material, equipment and components in such fields as research,

power generation, medicine, agriculture and industry but do not include use in, research on or development of any nuclear explosive device, or any military purpose;

(L) "Person" means any individual or any entity subject to the jurisdiction of either party but does not include the parties to this agreement;

(M) "Reactor" means any apparatus, other than a nuclear weapon or other nuclear explosive device, in which a self-sustaining fission chain reaction is maintained by utilizing uranium, plutonium or thorium or any combination thereof;

(N) "Restricted data" means all data concerning (1) design, manufacture or utilization of nuclear weapons, (2) the production of special nuclear material, or (3) the use of special nuclear material in the production of energy, but shall not include data of a party which it has declassified or removed from the category of restricted data;

(O) "Sensitive nuclear facility" means any facility designed or used primarily for uranium enrichment, reprocessing of nuclear fuel, heavy water production, or fabrication of nuclear fuel containing plutonium;

(P) "Sensitive nuclear technology" means any information (including information incorporated in equipment or an important component) which is not in the public domain and which is important to the design, construction, fabrication, operation or maintenance of any sensitive nuclear facility, or other such information which may be so designated by agreement of the parties;

(Q) "Source material" means (1) uranium, thorium, or any other material so designated by agreement of the parties, or (2) ores containing one or more of the foregoing materials in such concentration as the parties may agree from time to time;

(R) "Special nuclear material" means (1) plutonium, uranium 233, or uranium enriched in the isotope 235, or (2) any other material so designated by agreement of the parties.

Article 2 - Scope of Cooperation

1. The Republic of Hungary and the United States of America shall cooperate in the use of nuclear energy for peaceful purposes in accordance with the provisions of this agreement and with their applicable treaties, national laws, regulations and license requirements.

2. Transfer of information, material, equipment and components under this agreement may be undertaken directly between the parties or through authorized persons. Such transfers shall be subject to this agreement and to such additional terms and conditions as may be agreed by the parties.

Article 3 - Transfer of Information

1. Information concerning the use of nuclear energy for peaceful purposes may be transferred. Transfers of information may be accomplished through various means, including reports, data banks, computer programs, conferences, visits, and assignments of staff to facilities. Fields which may be covered include, but shall not be limited to, the following:
(A) Development, design, construction, operation, maintenance and use of reactors, and reactor experiments.

(B) The use of material in physical and biological research, medicine, agriculture and industry;

(C) Fuel cycle studies of ways to meet future world-wide civil nuclear needs, including multilateral approaches to guaranteeing nuclear fuel supply and appropriate techniques for management of nuclear wastes;

(D) Safeguards and physical protection of materials, equipment and components;

(E) Health, safety and environmental considerations related to the foregoing; and

(F) Assessing the role nuclear power may play in national energy plans.

2. This agreement does not require the transfer of any information which the parties are not permitted to transfer under their respective treaties, national laws, and regulations.

3. Restricted data shall not be transferred under this agreement.

4. Sensitive nuclear technology shall not be transferred under this agreement unless provided for by an amendment to this agreement.

Article 4 - Transfer of Material, Equipment and Components

1. Material, equipment and components may be transferred for applications consistent with this agreement. Any special

nuclear material transferred to the Republic of Hungary under this agreement shall be low enriched uranium, except as provided in paragraph 4. Sensitive nuclear facilities and major critical components thereof shall not be transferred under this agreement.

2. Low enriched uranium may be transferred for use as fuel in reactor experiments and in reactors, for conversion, for fabrication of reactor fuel, or for such other purposes as may be agreed by the parties.

3. The quantity of special nuclear material transferred under this agreement shall not at any time be in excess of quantities the parties agree are necessary for any of the following purposes: use in reactor experiments or the fueling of reactors, the efficient and continuous conduct of such reactor experiments or operation of reactors, and the accomplishment of other purposes as may be agreed by the parties.

4. Small quantities of special nuclear material may be transferred for use as samples, standards, detectors, targets and for such other purposes as the parties may agree. Transfers pursuant to this paragraph shall not be subject to the quantity limitations in paragraph 3.

5. The United States of America shall endeavor to take such actions as are necessary to ensure a reliable supply of nuclear fuel to the Republic of Hungary, including the export of nuclear material on a timely basis and the availability of the capacity to carry out this undertaking during the period of this agreement.

Article 5 - Storage and Retransfers

1. Plutonium and uranium 233 (except as contained in irradiated fuel elements), and high enriched uranium, transferred pursuant to this agreement or used in or produced through the use of material or equipment so transferred shall only be stored in facilities to which the parties agree.

2. Material, equipment and components transferred pursuant to this agreement and any special nuclear material produced through the use of any such material or equipment shall not be transferred to unauthorized persons or, unless the parties agree, beyond the recipient party's territorial jurisdiction.

Article 6 - Reprocessing and Enrichment

1. Material transferred pursuant to this agreement and material used in or produced through the use of material or

equipment so transferred shall not be reprocessed unless the parties agree.

2. Plutonium, uranium 233, high enriched uranium and irradiated source or special nuclear material, transferred pursuant to this agreement or used in or produced through the use of material or equipment so transferred, shall not be altered in form or content, except by irradiation or further irradiation, unless the parties agree.

3. Uranium transferred pursuant to this agreement or used in any equipment so transferred shall not be enriched after transfer unless the parties agree.

Article 7 - Physical Protection

1. Adequate physical protection shall be maintained with respect to source or special nuclear material and equipment transferred pursuant to this agreement and special nuclear material used in or produced through the use of material or equipment so transferred.

2. The parties agree to the levels for the application of physical protection set forth in the Annex to this agreement,

which may be modified by mutual consent of the parties without amending this agreement. The parties shall maintain adequate physical protection measures in accordance with these levels. These measures shall as a minimum provide protection comparable to the recommendations set forth in IAEA Document INFCIRC/225/Rev. 2 concerning the physical protection of nuclear material, or in any revision of that document agreed to by the parties.

3. The adequacy of physical protection measures maintained pursuant to this article shall be subject to review and consultations by the parties periodically and whenever either party is of the view that revised measures may be required to maintain adequate physical protection.

4. Each party shall identify those agencies or authorities having responsibility for ensuring that levels of physical protection for nuclear material in its territory or under its jurisdiction or control are adequately met and having responsibility for coordinating response and recovery operations in the event of unauthorized use or handling of material subject to this article. Each party shall also designate points of contact within its national authorities to cooperate on matters of out-of-country transportation and other matters of mutual concern.

5. The provisions of this article shall be implemented in such a manner as to avoid undue interference in the parties' nuclear activities and so as to be consistent with prudent management practices required for the economic and safe conduct of their nuclear programs.

Article 8 - No Explosive or Military Application

Material, equipment and components transferred pursuant to this agreement and material used in or produced through the use of any material, equipment or components so transferred shall not be used for any nuclear explosive device, for research on or development of any nuclear explosive device, or for any military purpose.

Article 9 - Safeguards

1. Cooperation under this agreement shall require the application of IAEA safeguards with respect to all nuclear activities within the territory of the Republic of Hungary, under its jurisdiction or carried out under its control anywhere.

2. Source or special nuclear material transferred to the Republic of Hungary pursuant to this agreement and any source

or special nuclear material used in or produced through the use of material, equipment or components so transferred shall be subject to safeguards in accordance with the agreement between the Republic of Hungary and the IAEA for the application of safeguards in connection with the NPT, signed on March 6, 1972, entered into force March 30, 1972. The implementation of this safeguards agreement shall be considered to fulfill the requirement of paragraph 1 of this Article.

3. Source or special nuclear material transferred to the United States pursuant to this agreement and any source or special nuclear material used in or produced through the use of any material, equipment or components so transferred shall be subject to the agreement between the United States of America and the IAEA for the application of safeguards in the United States of America, done at Vienna November 18, 1977, entered into force on December 9, 1980.

4. If the Republic of Hungary or the United States of America becomes aware of circumstances which demonstrate that the IAEA for any reason is not or will not be applying safeguards in accordance with the agreement as provided for in paragraph 2 or paragraph 3, to ensure effective continuity of safeguards the parties shall consult and immediately enter into arrangements

with the IAEA or between themselves which conform with IAEA safeguards principles and procedures, which provide assurance equivalent to that intended to be secured by the system they replace, and which conform with the coverage required by paragraph 2 or 3.

5. Each party shall take such measures as are necessary to maintain and facilitate the application of safeguards provided for under this Article.

6. Each party shall establish and maintain a system of accounting for and control of source and special nuclear material transferred pursuant to this agreement and source and special nuclear material used in or produced through the use of any material, equipment or components so transferred. The procedures for this system shall be comparable to those set forth in IAEA Document INFCIRC/153 (corrected), or in any revision of that document agreed to by the parties.

7. Upon the request of either party, the other party shall report or permit the IAEA to report to the requesting party on all inventories of material subject to this agreement.

8. The provisions of this article shall be implemented in such a manner as to avoid undue interference in the parties' nuclear activities and so as to be consistent with prudent management practices required for the economic and safe conduct of their nuclear programs.

Article 10 - Multiple Supplier Controls

If any agreement between either party and another nation or group of nations provides such other nation or group of nations with rights equivalent to any or all of those set forth under Article 5 or 6 with respect to material, equipment or components subject to this agreement, the parties may, upon request of either of them, agree that the implementation of any such rights will be accomplished by such other nation or group of nations.

Article 11 - Cessation of Cooperation

1. If either party at any time following entry into force of this agreement:

(A) does not comply with the provisions of Article 5, 6, 7, 8, or 9; or

(B) terminates, abrogates or materially violates a safeguards agreement with the IAEA;

the other party shall have the right to cease further cooperation under this agreement and to require the return of any material, equipment and components transferred under this agreement and of any special nuclear material produced through their use.

2. If the Republic of Hungary at any time following entry into force of this agreement detonates a nuclear explosive device, the United States of America shall have the same rights as specified in paragraph 1.

3. If either party exercises its rights under this article to require the return of any material, equipment or components, it shall, after removal from the territory of the other party, reimburse the other party for the fair market value of such material, equipment or components.

Article 12 - Consultations and Environmental Protection

1. The parties undertake to consult at the request of either party regarding the implementation of this agreement and the development of further cooperation in the field of peaceful uses of nuclear energy.

2. The parties shall consult, with regard to activities under this agreement, to identify the international environmental implications arising from such activities and shall cooperate in protecting the international environment from radioactive, chemical or thermal contamination arising from peaceful nuclear activities under this agreement and in related matters of health and safety.

Article 13 - Entry Into Force and Duration

1. This agreement shall enter into force on the date on which the parties exchange diplomatic notes informing each other that they have completed all applicable requirements for its entry into force, and shall remain in force for a period of 30 years. This term may be extended for such additional periods as may be agreed between the parties in accordance with their applicable requirements.

2. Notwithstanding the suspension, termination or expiration of this agreement or any cooperation hereunder for any reason, Articles 5, 6, 7, 8, 9, and 11 shall continue in effect so long as any material, equipment or components subject to these Articles remains in the territory of the party concerned or under its jurisdiction or control anywhere, or until such time

as the parties agree that such material, equipment or components are no longer useable for any nuclear activity relevant from the point of view of safeguards.

IN WITNESS WHEREOF, the undersigned, being duly authorized, have signed this Agreement.

DONE at Vienna, this 11th day of June, 1991, in duplicate, in the Hungarian and English languages, each text being equally authentic.

FOR THE GOVERNMENT OF THE REPUBLIC OF HUNGARY:

FOR THE GOVERNMENT OF THE UNITED STATES OF AMERICA:

ANNEX

Pursuant to paragraph 2 of Article 7, the agreed levels of physical protection to be ensured by the competent national authorities in the use, storage and transportation of the materials listed in the attached table shall as a minimum include protection characteristics as below:

Category III

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

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

Category II

Use and storage 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.

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

Category I

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

Use and storage 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.

Transportation under special precautions as identified above for transportation of categories 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[e]

Material	Form	Category I	Category II	Category III
1. Plutonium [a, f]	Unirradiated [b]	2 kg or more	Less than 2 kg but more than 500 g	500 g or less [c]
2. Uranium-235 [d]	Unirradiated [b]			
	- uranium enriched to 20% ^{235}U or more	5 kg or more	Less than 5 kg but more than 1 kg	1 kg or less [c]
	- uranium enriched to 10% ^{235}U but less than 20%		10 kg or more	Less than 10 kg [c]
	- uranium enriched above natural, but less than 10% ^{235}U			10 kg or more
3. Uranium-233	Unirradiated [b]	2 kg or more	Less than 2 kg but more than 500 g	500 g or less [c]

[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 100 rads/hour at one meter unshielded.
[c] Less than a radiologically significant quantity should be exempted.
[d] Natural uranium, depleted uranium and thorium and quantities of uranium enriched to less than 10% not falling in Category III should be protected in accordance with prudent management practice.
[e] Irradiated fuel should be protected as Category I, II or III nuclear material depending on the category of the fresh fuel. However, fuel which by virtue of its original fissile material content is included as Category I or II before irradiation should only be reduced one Category level, while the radiation level from the fuel exceeds 100 rads/h at one meter unshielded.
[f] The State's competent authority should determine if there is a credible threat to disperse plutonium malevolently. The State should then apply physical protection requirements for category I, II or III of nuclear material, as it deems appropriate and without regard to the plutonium quantity specified under each category herein, to the plutonium isotopes in those quantities and forms determined by the State to fall within the scope of the credible dispersal threat.

AGREED MINUTE

During the negotiation of the Agreement for Cooperation between the Republic of Hungary and the United States of America Concerning Peaceful Uses of Nuclear Energy ("Agreement") signed today, the following understandings, which shall be an integral part of the Agreement, were reached:

Coverage of Agreement

Material, equipment and components transferred from the territory of one party to the territory of the other party, whether directly or through a third country, will be regarded as having been transferred pursuant to the Agreement only upon confirmation, by the appropriate government authority of the recipient party to the appropriate government authority of the supplier party, that such material, equipment or components will be subject to the Agreement.

For the purposes of implementing the rights specified in Articles 5 and 6 with respect to special nuclear material produced through the use of nuclear material transferred pursuant to the Agreement, and not used in or produced through the use of equipment transferred pursuant to the Agreement, such rights shall in practice be applied to that proportion of special nuclear material produced which represents the ratio of transferred material used in the production of the special

nuclear material to the total amount of material so used, and similarly for subsequent generations. *

Safeguards

If either party becomes aware of circumstances referred to in paragraph 4 of Article 9, either party shall have the rights listed below, which rights shall be suspended if both parties agree that the need to exercise such rights is being satisfied by the application of IAEA safeguards under arrangements pursuant to paragraph 4 of Article 9:

(1) To review in a timely fashion the design of any equipment transferred pursuant to the Agreement, or of any facility which is to use, fabricate, process, or store any material so transferred or any special nuclear material used in or produced through the use of such material or equipment;

(2) To require the maintenance and production of records and of relevant reports to assist in ensuring accountability for

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* "Subsequent generations" means subsequent recycles of nuclear material following reprocessing.

material transferred pursuant to the Agreement and any source material or special nuclear material used in or produced through the use of any material, equipment or components so transferred; and

(3) To designate personnel, in consultation with the other party, who shall have access to all places and data necessary to account for the material in paragraph 2, to inspect any equipment or facility referred to in paragraph 1, and to install any devices and make such independent measurements as may be deemed necessary to account for such material. Such personnel shall, if either party so requests, be accompanied by personnel designated by the other party.

FOR THE GOVERNMENT OF THE REPUBLIC OF HUNGARY:

FOR THE GOVERNMENT OF THE UNITED STATES OF AMERICA: