

**AGREEMENT FOR COOPERATION
BETWEEN THE GOVERNMENT OF JAPAN
AND THE GOVERNMENT OF
THE UNITED STATES OF AMERICA
CONCERNING PEACEFUL USES OF NUCLEAR ENERGY**

The Government of Japan
and the Government of the United States of
America,

Considering the close cooperation between the two countries in the peaceful uses of nuclear energy pursuant to the Agreement for Cooperation Between the Government of Japan and the Government of the United States of America concerning Civil Uses of Atomic Energy, signed on February 26, 1968, as amended (hereinafter referred to as "the previous Agreement");

Recognizing the importance of research on and development and use of nuclear energy for peaceful purposes;

Desiring to continue and expand cooperation in this field with due respect for their relevant national programs;

Desiring to enter into arrangements in the peaceful uses of nuclear energy on a predictable and reliable basis which take account of the long-term requirements of their nuclear energy programs;

Mindful that both Governments are parties to the Treaty on the Non-Proliferation of Nuclear Weapons (hereinafter referred to as "the Non-proliferation Treaty");

Reaffirming their commitment to ensuring that the international research on and development and use of nuclear energy for peaceful uses are carried out in such a manner as will to the maximum extent further the objectives of the Non-Proliferation Treaty; and

Affirming their support of the objectives of the International Atomic Energy Agency (hereinafter referred to as "the Agency") and their desire to promote universal adherence to the Non-proliferation Treaty;

Have agreed as follows:

Article 1

For the purposes of this Agreement:

(a) "Parties" means the Government of Japan and the Government of the United States of America; "Party" means one of the above "parties";

(b) "Person" means any individual or entity under the territorial jurisdiction of either party, but does not include the parties;

(c) "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;

(d) "Equipment" means any reactor as a complete unit, other than one designed or used primarily for the formation of plutonium, or uranium-233, and any other items specified in Part A of Annex A of this Agreement;

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

(f) "Material" means material for reactors which is specified in Part B of Annex A of this Agreement, but does not include "nuclear material";

(g) "Nuclear material" means (i) "source material", namely, uranium containing the mixture of isotopes occurring in nature; uranium depleted in the isotope 235; thorium; any of the foregoing in the form of metal, alloy, chemical compound, or concentrate; any other substance containing one or more of the foregoing in such concentration as may be agreed to by the parties; and such other substances as may be agreed to by the parties; and (ii) "special fissionable material", namely, plutonium, uranium-233, uranium enriched in the isotope 233 or 235; any substance containing one or more of the foregoing; and such other substances as may be agreed to by the parties. The term "special fissionable material" does not include "source material";

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

(i) "Restricted data" means any data concerning (i) design, manufacture, or utilization of nuclear weapons; (ii) the production of special fissionable material; or (iii) the use of special fissionable material in the production of energy, but does not include data of a party which it has declassified or removed from the category of restricted data;

(j) "Sensitive nuclear technology" means any data which are not available to the public and which are important to the design, construction, fabrication, operation or maintenance of enrichment, reprocessing or heavy water production facilities, or such other data as may be so designated by agreement of the parties.

Article 2

1.

(a) The parties shall cooperate under this Agreement in the peaceful uses of nuclear energy in the two countries in the following ways:

(i) The parties shall encourage cooperation between their respective organizations, public and private, by exchanges of experts. When execution of an agreement or contract pursuant to this Agreement between Japanese and United States organizations requires such exchanges of experts, the parties shall facilitate the entry of the experts to their territories and their stay therein.

(ii) The parties shall facilitate supply and exchange of information on such terms as may be agreed either between themselves, between persons under their territorial jurisdiction or between either party and persons under the territorial jurisdiction of the other party. Subjects that may be covered include health, safety and environmental considerations,

(iii) Either party or its authorized persons may supply to or receive from the other party or its authorized persons material, nuclear material, equipment and components on such terms as may be agreed between the supplier and the recipient.

(iv) Either party or its authorized persons may perform services for or receive services from the other party or its authorized persons on matters within the scope

of this Agreement on such terms as may be agreed between the supplier and the recipient.

(v) The parties may cooperate in other ways as deemed appropriate by them,

(b) Notwithstanding the provisions of sub-paragraph (a) above, restricted data and sensitive nuclear technology shall not be transferred under this Agreement.

2. Cooperation between the parties as specified above shall be subject to the provisions of this Agreement, and the applicable treaties, laws, regulations and license requirements in force in

their respective countries and shall require, in the case of cooperation envisaged in sub-paragraph (a)(iii) of paragraph 1 above, the application of safeguards by the Agency:

(a) with respect to all nuclear material in all nuclear activities within the territory of Japan, under its jurisdiction or carried out under its control anywhere, when the recipient is the Government of Japan or its authorized persons. Implementation of the agreement between the Government of Japan and the Agency in connection with the Non- Proliferation Treaty shall be considered as fulfilling this requirement; and

(b) with respect to all nuclear material in all civil nuclear activities within the territory of the United States of America, under its jurisdiction or carried out under its control anywhere, when the recipient is the Government of the United States of America or its authorized persons. Implementation of the agreement between the United States of America and the Agency for the application of safeguards in the United States of America shall be considered as fulfilling this requirement.

3. Material, nuclear material, equipment and components transferred between the two countries, whether directly or through a third country, shall become subject to this Agreement upon their entry into the territorial jurisdiction of the receiving party, only if the supplying party has notified the receiving party in writing of the intended transfer. Prior to the notified transfer of such items, the supplying party shall obtain from the receiving party a written confirmation that the transferred item will be held subject to this Agreement and that the proposed recipient, if other than the receiving party, will be its authorized person,

4. Material, nuclear material, equipment and components subject to this Agreement shall no longer be subject to this Agreement if:

(a) such items have been transferred beyond the territorial jurisdiction of the receiving party in accordance with the relevant provisions of this Agreement;

(b) in the case of nuclear material, (i) the Agency determines, in accordance with the provisions for the termination of safeguards in the relevant agreement referred to in paragraph 2 of this Article, that the nuclear material has been consumed, or has been diluted in such a way that it is no longer usable for any nuclear activity relevant from the point of view of safeguards, or has become practicably irrecoverable. If either party disputes the Agency determination, the nuclear material will remain subject to this Agreement until the dispute is resolved; or (ii) in the absence of a determination by the Agency, it is agreed by the parties that such nuclear material should no longer be subject to this Agreement; or

(c) in the case of material, equipment and components, it is agreed by the parties.

Article 3

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 nuclear material or equipment so transferred, shall only be stored in a facility to which the parties agree.

Article 4

Material, nuclear material, equipment and components transferred pursuant to this Agreement and special fissionable material produced through the use of such material, nuclear material or equipment may be transferred only to persons authorized by a receiving party or, if the parties agree, beyond the territorial jurisdiction of the receiving party.

Article 5

1. Nuclear material transferred pursuant to this Agreement and special fissionable material used in or produced through the use of material, nuclear material or equipment so transferred may be reprocessed if the parties agree.

2. Plutonium, uranium-233, high enriched uranium and irradiated nuclear material transferred pursuant to this Agreement or used in or produced through the use of material, nuclear material or equipment so transferred may be altered in form or content by irradiation. Such special fissionable material may otherwise be altered in form or content if the parties agree.

Article 6

Uranium transferred pursuant to this Agreement or used in equipment so transferred may be enriched to less than twenty percent in the isotope 235. Such uranium may also be enriched to twenty percent or more in the isotope 235 if the parties agree.

Article 7

Adequate measures of physical protection shall be maintained with respect to nuclear material transferred pursuant to this Agreement and special fissionable material used in or produced through the use of material, nuclear material or equipment so transferred, at levels, as a minimum, comparable to those set out in Annex B of this Agreement.

Article 8

1. Cooperation under this Agreement shall be carried out only for peaceful purposes,
2. Material, nuclear material, equipment and components transferred pursuant to this Agreement and nuclear material used in or produced through the use of such items shall not be used for any nuclear explosive device, for research specifically on or development of any nuclear explosive device, or for any military purpose.

Article 9

1. In order to ensure compliance with the provisions of paragraph 2 of Article 8 of this Agreement:

(a) Nuclear material transferred to the territorial jurisdiction of the Government of Japan pursuant to this Agreement and nuclear material used in or produced through the use of material, nuclear material, equipment or components so transferred shall be subject to the agreement referred to in sub-paragraph (a) of paragraph 2 of Article 2 of this Agreement.

(b) Nuclear material transferred to the territorial jurisdiction of the Government of the United States of America pursuant to this Agreement and nuclear material used in or produced through the use of material, nuclear material, equipment or components so transferred shall be subject to (i) the agreement referred to in sub-paragraph (b) of paragraph 2 of Article 2 of this Agreement and (ii) supplementary measures for substitution, to the extent practicable, or for tracking and accounting for such nuclear material.

2. If either party becomes aware that for any reason the Agency is not or will not be applying safeguards as required by paragraph 1 of this Article, the parties shall forthwith consult to take rectifying measures and, in the absence of such rectifying measures, shall immediately enter into arrangements which conform to safeguards principles and procedures of the Agency and provide effectiveness and coverage equivalent to that intended to be provided by the safeguards required pursuant to paragraph 1 of this Article.

Article 10

If an agreement between either party and another nation or group of nations provides such other nation or group of nations rights equivalent to any or all of those set forth in Article 3, 4, 5, 6 or 12 of this Agreement with respect to any material, nuclear material, equipment or components subject to this Agreement, the parties may, at the request of either of them, agree that the implementation of such rights will be accomplished by such other nation or group of nations.

Article 11

In order to facilitate activities subject to Articles 3, 4 and 5 of this Agreement, the parties shall make, consistent with the objective of preventing nuclear proliferation and with their respective national security interests, and perform in good faith separate arrangements that will satisfy the requirements for mutual agreement set forth in those Articles on a long-term, predictable and reliable basis, and in a manner that will further facilitate peaceful uses of nuclear energy in their respective countries.

Article 12

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

(a) does not comply with the provisions of Article 3, 4, 5, 6, 7, 8, 9 or 11 of this Agreement or the decisions of the arbitral tribunal referred to in Article 14 of this Agreement; or

(b) terminates or materially violates a safeguards agreement with the Agency, the other party shall have the rights to cease further cooperation under this Agreement, terminate this Agreement and require the return of any material, nuclear material, equipment or components transferred pursuant to this Agreement or any special fissionable material produced through the use of such items.

2. If the United States of America detonates a nuclear explosive device using material, nuclear material, equipment or components transferred pursuant to this Agreement or nuclear material used in or produced through the use of such items, the Government of

Japan shall have the same rights as specified in paragraph 1 of this Article.

3. If Japan detonates a nuclear explosive device, the Government of the United States of America shall have the same rights as specified in paragraph 1 of this Article.

4. Before either party takes steps to cease cooperation under this Agreement, to terminate this Agreement, or to require such return, the parties shall consult for the purpose of taking corrective steps and shall carefully consider the economic effects of such actions, baking into account the need to make such other appropriate arrangements as may be required.

5. If either party exercises its rights under this Article to require the return of any material, nuclear material, equipment or components, it shall compensate the other party or the persons concerned for the fair market value thereof,

Article 13

1. The previous Agreement shall terminate on the date this Agreement enters into force.

2. Cooperation initiated under the previous Agreement shall continue under this Agreement. The provisions of this Agreement shall apply to nuclear material and equipment subject to the previous Agreement. Should the separate arrangements called for in Article 11 of this Agreement be suspended with respect to such nuclear material or equipment, they shall be subject to the provisions of this Agreement during the suspension only to the extent covered by the previous Agreement.

Article 14

1. With a view to promoting cooperation under this Agreement, the parties may, at the request of either of them, consult with each other through diplomatic channels or other consultative fora.

2. If any question arises concerning the interpretation or application of this Agreement, the parties shall, at the request of either of them, consult with each other.

3. If any dispute arising out of the interpretation or application of this Agreement is not settled by negotiation, mediation, conciliation or other similar procedure, the parties may agree to submit such dispute to an arbitral tribunal which shall be composed of three arbitrators appointed in accordance with the provisions of this paragraph. Each party shall designate one arbitrator who may be a national of its country and the two arbitrators so designated shall elect a third, a national of a third country, who shall be the Chairman. If, within thirty days of the request for arbitration, either party has not designated an arbitrator, either party may request the President of the international Court of Justice to appoint an arbitrator. The same procedure shall apply if, within thirty days of the designation or appointment of the second arbitrator, the third arbitrator has not been elected, provided that the third arbitrator so appointed shall not be a national of the country of either party. A majority of the members of the arbitral tribunal shall constitute a quorum, and all decisions shall require the concurrence of two arbitrators. The arbitral procedure shall be fixed by the tribunal. The decisions of the tribunal shall be binding on the parties.

Article 15

The Annexes of this Agreement form an integral part of this Agreement. The Annexes may be modified by mutual consent in writing of the parties without amendment of this Agreement.

Article 16

1. This Agreement shall enter into force on the thirtieth day after the date on which the parties exchange diplomatic notes informing each other that their respective internal legal procedures necessary for entry into force of this Agreement have been completed and shall remain in force for a period of thirty years, and shall continue in force thereafter until terminated in accordance with the provisions of paragraph 2 of this Article.

2. Either party may, by giving six months written notice to the other party, terminate this Agreement at the end of the initial thirty-year period or at any time thereafter.

3. Notwithstanding the suspension or termination of this Agreement or any cooperation

hereunder for any reason, Article 1, paragraph 4 of Article 2 and Articles 3, 4, 5, 6, 7, 8, 9, 11, 12 and 14 shall continue in effect to the extent applicable.

4. At the request of either party, the parties shall consult with each other whether to amend this Agreement or to replace it with a new agreement.

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

DONE at Tokyo, this fourth day of November, 1987, in duplicate, in the Japanese and English languages, both texts being equally authentic.

FOR THE GOVERNMENT OF JAPAN

Tadashi Kuranari

FOR THE GOVERNMENT OF THE UNITED STATES OF AMERICA:

Michael J. Mansfield

Annex A

Part A

1. Reactor pressure vessels:

Metal vessels, as complete units or as major shop-fabricated parts therefore, which are especially designed or prepared to contain the core of a reactor and are capable of withstanding the operating pressure of the primary coolant.

2. Reactor fuel charging and discharging machines as complete units:

Manipulative equipment especially designed or prepared for inserting or removing fuel in a reactor capable of on-load operation.

3. Reactor control rods as complete units:

Complete control rod assemblies, including the control rod drive mechanism, especially designed or prepared for the control of the reaction rate in a reactor.

4. Reactor primary coolant pumps as complete units:

Pumps, including the motor, especially designed or prepared for circulating the primary coolant for a reactor.

Part B

1. Deuterium and heavy water:

Deuterium and any deuterium compound in which the ratio of deuterium to hydrogen exceeds 1:5000 for use in a reactor.

2. Nuclear grade graphite:

Graphite having a purity level better than 5 parts per million boron equivalent and with a density greater than 1.50 grams per cubic centimeter.

Annex B

Levels of physical protection

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

Nuclear 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 authorities. Specific measures

taken in this context should have as their objective the detection and prevention of any assault, unauthorized access or unauthorized removal of the nuclear material concerned.

Transportation under special precautions as identified above for transportation of Category II and III nuclear material and, in addition, under constant surveillance by escorts and under conditions which assure close communication with appropriate response authorities.

TABLE: CATEGORIZATION OF NUCLEAR MATERIAL

Nuclear Material	Form	Category I	Category II	Category III^c
1. Plutonium ^a	Unirradiated ^b	2kg or more	Less than 2kg but more than 500g	500g or less but more than 15g
2. Uranium-235	Unirradiated ^b : -uranium enriched to 20% ²³⁵ U or more	5kg or more	Less than 5kg but more than 1kg	1kg or less but more than 15g
	-uranium enriched to 10% ²³⁵ U but less than 20%	\	10kg or more	Less than 10kg but more than 1kg
	-uranium enriched above natural, but less than 10% ²³⁵ U	\	\	10kg or more
3. Uranium-233	Unirradiated ^b	2kg or more	Less than 2kg but more than 500g	500g or less but more than 15g
4. Irradiated fuel		\	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. Nuclear material not irradiated in a reactor or nuclear material irradiated in a reactor but with a radiation level equal to or less than 100 rads/hour at one meter unshielded.
- c. Quantities not falling in Category III and natural uranium should be protected in accordance with prudent management practice.
- d. Although this level of protection is recommended, it would be open to a party, upon evaluation of the specific circumstances, to assign a different category of physical protection.
- e. Other fuel which by virtue of its original fissile nuclear material content is classified as Category I and II before irradiation may be reduced one category level while the radiation level from the fuel exceeds 100 rads/hour at one meter unshielded'.

AGREED MINUTES

In connection with the Agreement for Cooperation Between the Government of Japan and the Government of the United States of America Concerning Peaceful uses of Nuclear Energy, signed at Tokyo today (hereinafter referred to as "the Agreement"), the undersigned hereby record the following understandings:

1. With reference to sub-paragraph (a)(iii) and (iv) of paragraph 1 of Article 2 of the Agreement, it is confirmed that the Government of the United States of America will take such actions as may be necessary and feasible to ensure a reliable supply of nuclear fuel to Japan, including the export of nuclear material and in particular the furnishing of enrichment services on a timely basis and the maintenance of the availability of the capacity to carry out this undertaking during the period of the Agreement.

2. With reference to sub-paragraph (c) of paragraph 4 of Article 2 of the Agreement, it is confirmed that the parties will consult with each other for the purpose of developing practical means for determining when material, equipment and components are no longer usable for nuclear purposes.

3. With reference to Article 3 and paragraph 2 of Article 5 of the Agreement, it is confirmed that when alteration in form or content or storage of nuclear material subject to the Agreement is authorized within the terms of an export license of the supplying party no further agreement between the parties is required for- such alteration in form or content or storage.

4. With reference to the provisions of Articles 3,4 and 5 of the Agreement, it is confirmed that with respect to special fissionable material produced through the use of nuclear material transferred pursuant to the Agreement and not used in or produced through the use of equipment so transferred, such provisions shall in practice be applied to that proportion of special fissionable material produced which represents the ratio of transferred nuclear material used in the production of the special fissionable material to the total amount of nuclear material so used and similarly for subsequent generations. It is further confirmed that the parties will enter into discussions with each other and with other governments with a view to developing formulations which will reflect the relative contributions of special fissionable material and other nuclear

material to the production of special fissionable material.

5. With reference to the provisions of Articles 3, 4, 5, 6, 7 and 9 of the Agreement, it is confirmed that the said provisions of the Agreement shall be implemented in such a manner as to avoid hampering, delay or undue interference in the nuclear activities in the two countries and so as to be consistent with prudent management practices required for the economic and safe conduct of their nuclear programs. It is further confirmed that the provisions of the Agreement shall not be utilized for the purpose of seeking commercial or industrial advantages, for the purpose of interfering with the nuclear policy of either party or the commercial or industrial interests of either party or its authorized persons or for the purpose of hindering the promotion of the peaceful uses of nuclear energy.

6. With reference to Article 7 of the Agreement, it is confirmed that the physical protection measures as applied in the two countries are at or beyond levels required by the said Article with due regard for the recommendations contained in the document of the International Atomic Energy Agency (hereinafter referred to as "the Agency") INFCIRC/225/Rev. 1 and are therefore adequate.

7. With reference to Article 8 of the Agreement, it is confirmed that peaceful purposes do not include use for any nuclear explosive device, or for research specifically on or development of any nuclear explosive device, inasmuch as it is not possible to differentiate between the technology for nuclear weapons and that for nuclear explosive devices for peaceful purposes,

8.

(a) With reference to the provisions of Article 9 of the Agreement, it is confirmed that for the effective implementation of the said Article the parties shall exchange annually the then current inventories of material, nuclear material, equipment and components subject to the Agreement and, in case of the Government of the United States of America, nuclear material substituted for such nuclear material.

(b) With reference to paragraph 1 of Article 9 of the Agreement, it is confirmed that each party has established and will maintain in accordance with relevant laws and regulations in force in each country a national system of accounting for and control of nuclear material covering all nuclear material subject to the Agreement.

9. It is confirmed that the following measures fulfill the requirements of sub-paragraph (b) (ii) of paragraph 1 of Article 9 of the Agreement:

(a) Pursuant to the agreement referred to in sub-paragraph (b) of paragraph 2 of Article 2 of the Agreement, the Government of the United States of America has undertaken to permit the Agency to apply safeguards on all nuclear material in all facilities within its territorial jurisdiction, excluding only those associated with activities with direct national security significance.

(b) The Government of the United States of America shall provide to the Government of Japan annually the list of facilities which are eligible for the application of safeguards by the Agency and the list of facilities selected by the Agency pursuant to the agreement referred to in sub-paragraph (b) of paragraph 2 of Article 2 of the Agreement and its Protocol.

(c) When nuclear material is to be made subject to the Agreement and is to be located at facilities not selected by the Agency for the application of safeguards, the parties, at the request of either, shall make, through consultations and without delaying the transfer of such nuclear material, mutually satisfactory arrangements including, to the extent practicable, the substitution of nuclear material of the same quantity and equivalent or higher isotopic content in the fissionable isotopes at facilities which the Agency has selected for the application of safeguards.

(d) When nuclear material is to be made subject to the Agreement and is to be located at facilities not on the list of facilities eligible for the application of safeguards by the Agency and substitution in accordance with sub-paragraph (c) above is not practicable, the parties, at the request of either, shall make, through consultations and without delaying the transfer of such nuclear material, mutually satisfactory arrangements including, to the extent practicable, the substitution of nuclear material of the same quantity and equivalent or higher isotopic content in the fissionable isotopes at facilities eligible, but not selected by the Agency, for the application of safeguards.

(e) The Government of the United States of America shall provide to the Government of Japan and the Agency, as mutually arranged, a report by facility on an annual basis of inventories, shipments and receipts of nuclear material subject to Article 9 of

the Agreement that is located at facilities eligible for the application of safeguards by the Agency.

(f) The parties shall consult, at the request of either, concerning any of the reports provided under sub-paragraph (e) above, and shall take appropriate measures for resolving any questions concerning such reports.

10.

(a) With reference to paragraph 2 of Article 9 of the Agreement, it is confirmed that the safeguards arrangements referred to therein shall include the following characteristics in accordance with the safeguards principles and procedures of the Agency:

(i) the review in a timely fashion of the design of any equipment transferred pursuant to the Agreement, or of any facility which is to use, fabricate, process or store any nuclear material subject to the said paragraph;

(ii) the maintenance and production of operating records and of relevant reports for the purpose of assisting in ensuring accountability for nuclear material subject to the said paragraph; and

(iii) the designation of personnel acceptable to the safeguarded party, accompanied if either party so requests by personnel designated by the safeguarded party. These personnel shall have access to all places and data, and any equipment or facility referred to in sub-paragraph (a) (i) necessary to account for the nuclear material referred to in sub-paragraph (a) (i) and shall be permitted to use devices in connection with the performance of inspections and to make such independent measurements as may be deemed necessary by the safeguarded party and the Agency (or, where applicable, the safeguarding party) to account for such nuclear material. The safeguarded party shall not unreasonably withhold acceptance of such personnel designated by the Agency or the safeguarding party. The personnel designated by the Agency (or, where applicable, the safeguarding party) shall not, except pursuant to their responsibilities to the Agency (or, where applicable, the safeguarding party), disclose any industrial or other confidential information coming to their knowledge by reason of their official duties.

(b) With reference to paragraph 2 of Article 9 of the Agreement, it is further confirmed that the simultaneous application of safeguards by the Agency and by the other party is not intended; the parties shall as necessary consult with a view to avoiding the simultaneous application of safeguards, and if such an exceptional situation should occur, the parties shall consult with the Agency with a view to removing the simultaneous application of safeguards.

11. With reference to sub-paragraph (b) of paragraph 1 of Article 12 of the Agreement, it is confirmed that while a party's safeguards agreement with the Agency referred to in paragraph 2 of Article 2 of the Agreement remains in force the reference to termination of "a safeguards agreement with the Agency" shall not apply to that party.

12. With reference to paragraph 2 of Article 13 of the Agreement, it is confirmed that:

(a) in order to facilitate the application of the provisions of the Agreement to nuclear material and equipment subject to the previous Agreement, the parties shall establish a list of such items;

(b) items transferred pursuant to the previous Agreement not included on the list established pursuant to sub-paragraph (a) above will not be used for any nuclear explosive device, for research specifically on or development of any nuclear explosive device or for any military purpose, and will not be transferred beyond the territorial jurisdiction of either party without the agreement of the other party. Special fissionable material used in or produced through the use of such items will not be used for any nuclear explosive device, for research specifically on or development of any nuclear explosive device or for any military purpose, and will be subject to safeguards in accordance with the relevant agreements with the Agency referred to in Paragraph 2 of Article 2 of the Agreement; and

(c) the parties are satisfied with the manner in which the guarantees specified in sub-paragraph (b) above have been implemented under the previous Agreement.

13. With reference to Article 14 of the Agreement, it is confirmed that the parties shall consult, at the request of either, on matters related to the application of physical protection measures and safeguards as referred to in Articles 7 and 9 of the Agreement

respectively.

FOR THE GOVERNMENT OF
JAPAN:

Tadashi Kuranari

FOR THE GOVERNMENT OF
THE UNITED STATES
OF AMERICA:

Michael J. Mansfield

**Implementing Agreement
Between the Government of Japan
and the Government of
the United States of America
Pursuant to Article 11
of Their Agreement for
Cooperation Concerning
Peaceful Uses of Nuclear Energy**

WHEREAS the Government of Japan and the Government of the United States of America (hereinafter referred to as "the parties") signed the Agreement for Cooperation Concerning Peaceful Uses of Nuclear Energy on November 4, 1987 (hereinafter referred to as "the Agreement for Cooperation");

WHEREAS Article 3 of the Agreement for Cooperation provides requirements for the storage of certain special fissionable material;

WHEREAS Article 4 of the Agreement for Cooperation provides requirements for the transfer of certain nuclear material;

WHEREAS Article 5 of the Agreement for Cooperation provides requirements for the reprocessing of certain nuclear material and for the alteration in form or content of certain special fissionable material;

WHEREAS Article 11 of the Agreement for Cooperation provides that to facilitate the peaceful uses of nuclear energy, the parties shall make, consistent with the objective of preventing nuclear proliferation and with their respective national security interests, and perform in good faith separate arrangements whereby the requirements for mutual agreement set forth in Articles 3, 4 and 5 will be satisfied on a long-term, predictable and reliable basis;

The parties, in fulfillment of Article 11 of the Agreement for Cooperation, have agreed as follows:

Article 1

1.

(a) The parties hereby agree pursuant to Articles 3, 4 and 5 of the Agreement for Cooperation to the following activities:

(i) reprocessing or alteration in form or content in the facilities within the territorial jurisdiction of either party which are listed in Annex 1;

(ii) storage in the facilities within the territorial jurisdiction of either party which are listed in Annex 1 or 2; and

(iii) transfer beyond the territorial jurisdiction of either party of irradiated nuclear material, except irradiated high enriched uranium and uranium-233, from facilities listed in Annex 1, 2 or 3 to facilities listed in Annex 1.

(b) The parties hereby agree pursuant to Article 4 of the Agreement for Cooperation to the transfer beyond the territorial jurisdiction of either party of unirradiated source material and low enriched uranium to third countries designated in writing by the parties but not for the production of high enriched uranium.

2.

(a) The parties hereby agree pursuant to Articles 3 and 5 of the Agreement for Cooperation to the following activities within each calendar year in each of the facilities within the territorial jurisdiction of either party designated in accordance with procedures agreed to by the parties:

(i) alteration in form or content of plutonium, uranium-233 and high enriched uranium in an aggregate quantity not to exceed 1 effective kilogram of these nuclear materials and of irradiated nuclear material containing plutonium, uranium-233 or high enriched uranium in an aggregate quantity not to exceed 1 effective kilogram of these nuclear materials;

(ii) storage of plutonium and uranium-233 (except as contained in irradiated fuel elements) and high enriched uranium in an aggregate quantity not to exceed 5 effective kilograms of these nuclear materials; and

(iii) reprocessing of irradiated nuclear material containing plutonium or uranium-233 in an aggregate quantity not to exceed 500 grams of these nuclear materials.

(b) The parties hereby agree pursuant to Article 4 of the Agreement for Cooperation to the transfer within each calendar year of unirradiated nuclear material containing plutonium in quantities not to exceed 500 grams to each facility designated in writing by the parties within the territorial jurisdiction of a third country for irradiation and for its subsequent return to the territorial jurisdiction of the transferring party for testing and analysis. The transfer of unirradiated nuclear material shall take place in quantities not to exceed 500 grams of contained plutonium per shipment.

3.

(a) Each party shall keep the government of a third country informed of the facilities within the territorial jurisdiction of that government which are listed in Annex 1 or which are designated pursuant to sub-paragraph (b) of paragraph 2 of this Article. Each party shall give the government of the third country its consent if required under its agreement with that government to:

(i) reprocessing, alteration in form or content and storage (in the case of facilities listed in Annex 1) and irradiation (in the case of facilities designated pursuant to sub-paragraph (b) of paragraph 2);

(ii) return of the nuclear material concerned (except recovered plutonium) to the territorial jurisdiction of the other party; and

(iii) return of the recovered plutonium concerned in quantities of two kilograms or more per shipment to the territorial jurisdiction of the other party in accordance with the following procedure: prior to each shipment the receiving party will provide the other party a written notification which shall include a statement advising that the measures arranged for the international transport are in accordance with the guidelines set forth in Annex 5 and a description of such measures.

(b) When the procedure set forth in sub-paragraph (a) (iii) above is not to be followed,

the return of the recovered plutonium may only take place upon consent of the non-receiving party under the applicable agreement.

4. Sub-paragraph (a) of paragraph 1 and paragraphs 2 and 3 above shall apply only where the recovered plutonium concerned is or will be located in a facility listed in Annex 1 or 2 or designated pursuant to paragraph 2 of this Article, unless otherwise accepted in writing by the parties.

5. The additional procedural conditions for this Implementing Agreement are set forth in the Agreed Minutes to this Implementing Agreement.

Article 2

1. Annexes 1, 2, 3 and 4 of this Implementing Agreement may be modified in accordance with the procedures set forth in this Article and Annex 5 of this Implementing Agreement may be modified by agreement of the parties, without amendment of this Implementing Agreement.

2. Unless otherwise agreed by the parties, either party may add to or delete from Annex 1, 2, 3 or 4 a facility within its territorial jurisdiction only after notifying the other party in writing in accordance with the provisions of this Article and receiving a written acknowledgment which shall be limited to a statement that such notification has been received. Such acknowledgment shall be given no later than thirty days after the receipt of the notification.

(a) For an addition to Annex 1 or 2 of a facility listed-in Annex 3 or 4, the notification shall contain;

(i) the name of the owner or operator of the facility, the facility name and the existing or planned capacity:

(ii) the facility location, the type of nuclear material involved, the approximate date of introduction of such nuclear material into the facility and the type of activity;
and

(iii) a statement that a relevant safeguards arrangement (namely, a facility

attachment or, in the case of ad hoc inspection, an arrangement therefore) has been agreed upon with the International Atomic Energy Agency (hereinafter referred to as "the Agency") and that physical protection measures as required by Article 7 of the Agreement for Cooperation will be maintained;

(b) In addition to the information specified in sub-paragraph (a) above, the notification shall contain the following information:

(i) For an addition to Annex 1 of a facility listed in Annex 4, except where sub-paragraph (b) (ii) is applicable, a statement affirming that the safeguards arrangement is in accordance with the relevant safeguards concept that has been agreed upon between the parties and a description of the key elements contained in the safeguards arrangement.

(ii) For an addition to Annex 1 of a facility listed in Annex 4, when safeguards applicable to that facility are already being applied at an Annex 1 facility within the territorial jurisdiction of the notifying party, a statement affirming that the safeguards arrangement will be in all significant respects the same as that being applied at the corresponding facility listed in Annex 1 and a description of the key elements contained in the safeguards arrangement.

(c) To delete a facility from Annex 1, 2, 3 or 4 or to add a facility to Annex 3 or 4 the notification shall contain the facility name and other relevant information available.

3. A facility within the territorial jurisdiction of the government of a third country may be added to or deleted from Annex 1 by agreement of the parties.

4.

(a) When circumstances so require, the parties shall seek to develop as soon as possible a safeguards concept for a facility which is or will be listed in Annex 4 to avoid delaying its operation.

(b) When the Agency cannot administer safeguards in accordance with the safeguards concept that has been agreed upon between the parties with respect to a facility then listed in Annex 4, the parties shall make every effort to ensure that this does not delay the operation of the facility For this purpose consultations shall take place

between the parties or between either party and the Agency. The facility shall be added to Annex 1 pursuant to sub-paragraph (a) of paragraph 2 above on a provisional basis provided that the parties are satisfied that adequate safeguards of the Agency will be applied in the interim. The parties shall make every effort to modify, as may be necessary, the relevant safeguards concept to enable the Agency to administer safeguards in accordance therewith.

Article 3

1. This Implementing Agreement shall enter into force at the same time as the Agreement for Cooperation and shall remain in force in accordance with Article 11 of the Agreement for Cooperation for the same duration. The parties shall, at the request of either of them, consult with each other whether to amend this Implementing Agreement or to replace it with a new agreement.

2. Either party may suspend the agreement it has given in Article 1 of this Implementing Agreement in whole or in part to prevent a significant increase in the risk of nuclear proliferation or in the threat to its national security caused by exceptional cases such as a material breach by the other party of the Treaty on the Non-Proliferation of Nuclear Weapons or withdrawal there from, or a material breach by the other party of its safeguards agreement with the Agency, of this Implementing Agreement or of the Agreement for Cooperation. Any decision on such suspension would only be taken in the most extreme circumstances of exceptional concern from a non-proliferation or national security point of view, would be taken at the highest levels of government, and would be applied only to the minimum extent and for the minimum period of time necessary to deal in a manner acceptable to the parties with the exceptional case.

3. During the period of suspension the parties may agree on a case-by-case basis to the activities specified in Article 1 of this Implementing Agreement. Prior to any suspension the parties shall consult with each other to determine the facts of the matter and to discuss to what extent, if at all, a suspension is necessary. The suspending party shall carefully consider the economic effects of such suspension and shall seek to the maximum extent possible to avoid the disruption of international nuclear trade and the fuel cycle operations under this Implementing Agreement. The parties may agree in

accordance with Article 14 of the Agreement for Cooperation to refer any of these questions to a third party for resolution.

4. The suspending party shall keep under constant review the development of the situation which caused the suspension and shall withdraw the suspension as soon as warranted. The parties shall, at the request of either of them, consult with each other immediately to determine whether there is a basis for the withdrawal of such suspension.

DONE at Tokyo, this fourth day of November, 1987, in duplicate in the English language.

FOR THE GOVERNMENT OF JAPAN:

Tadashi Kuranari

FOR THE GOVERNMENT OF THE UNITED STATES OF AMERICA:

Michael J. Mansfield

Annex 1. Facilities for reprocessing, alteration in form or content and storage

1. Reprocessing Facilities

Name of owner or operator	Facility name	Capacity	Location
Power Reactor and Nuclear Fuel Development Corporation	Tokai Reprocessing Plant	210 t/year	Ibaraki
Power Reactor and Nuclear Fuel Development Corporation	Chemical Processing Facility	7.2 kgs of FBR spent fuel/year	Ibaraki
British Nuclear Fuels Public Limited Company	Sellafield Plant	1,200 t/year	U.K.
Compagnie Générale des Matières Nucléaires	La Hague Plant	1,600 t/year	France

2. Plutonium Conversion Facilities

Name of owner or operator	Facility name	Capacity	Location
Power Reactor and Nuclear Fuel Development Corporation	Tokai Plutonium Conversion Development Facility	10 kgs MOX/day	Ibaraki

3. Plutonium Fuel Fabrication Facilities

Name of owner or operator	Facility name	Capacity	Location
Power Reactor and Nuclear Fuel Development Corporation	Tokai Plutonium Fuel Fabrication Facility (PFFF)	11 t MOX/ year	Ibaraki

4. Independent Plutonium Storage Facilities

NIL

5. Other Facilities

NIL

Annex 2. Additional Facilities where plutonium is located

1. ATR/Heavy Water-Moderated, Light Water-Cooled

Name of owner or operator	Facility name	Capacity	Location
Power Reactor and Nuclear Fuel Development Corporation	Fugen	165 MWe	Fukui

2. FBR/Sodium-Cooled

Name of owner or operator	Facility name	Capacity	Location
Power Reactor and Nuclear Fuel Development Corporation	Joyo	100 MWt	Ibaraki

3. LWRs

Name of owner or operator	Facility name	Capacity	Location
Kansai Electric Power Co., Inc.	Mihama Station(1)	340 MWe	Fukui
Japan Atomic Power Company	Tsuruga Station(1)	357 MWe	Fukui

4. Other Facilities

Critical Assemblies

Name of owner or operator			Facility name	Capacity	Location
Japan Research Institute	Atomic Energy		Tank Type Critical Assembly (TCA)	200 Wt	Ibaraki
Japan Research Institute	Atomic Energy		Fast Critical Assembly (FCA)	2,000 Wt	Ibaraki
Power Reactor and Fuel Development Corporation	Nuclear		Deuterium Critical Assembly (DCA)	1,000 Wt	Ibaraki

Annex 3. Additional Facilities relevant to Article 1 of this Implementing Agreement

1. LWRs and GCR

Name of owner or operator	Facility name (Unit number)	Reactor type	Capacity	Location
Japan Atomic Power Company	Tokai Station	GCR	166 MWe	Ibaraki
Japan Atomic Power Company	Tokai No.2 Station	BWR	1,100 MWe	Ibaraki
Japan Atomic Power Company	Tsuruga Station (2)	PWR	1,160 MWe	Fukui
Tohoku Electric Power Co., Inc.	Onagawa Station (1)	BWR	524 MWe	Miyagi
Tokyo Electric Power Co., Inc.	Fukushima No.1 Station (1)	BWR	460 MWe	Fukushima
Tokyo Electric Power Co., Inc.	Fukushima No.1 Station (2)	BWR	784 MWe	Fukushima

Tokyo Electric Power Co., Inc.	Fukushima No.1 Station (3)	BWR	784 MWe	Fukushima
Tokyo Electric Power Co., Inc.	Fukushima No.1 Station (4)	BWR	784 MWe	Fukushima
Tokyo Electric Power Co., Inc.	Fukushima No.1 Station (5)	BWR	784 MWe	Fukushima
Tokyo Electric Power Co., Inc.	Fukushima No.1 Station (6)	BWR	1,100 MWe	Fukushima
Tokyo Electric Power Co., Inc.	Fukushima No.2 Station (1)	BWR	1,100 MWe	Fukushima
Tokyo Electric Power Co., Inc.	Fukushima No.2 Station (2)	BWR	1,100 MWe	Fukushima
Tokyo Electric Power Co., Inc.	Fukushima No.2 Station (3)	BWR	1,100 MWe	Fukushima
Tokyo Electric Power Co., Inc.	Fukushima No.2 Station (4)	BWR	1,100 MWe	Fukushima
Tokyo Electric Power Co., Inc.	Kashiwazaki-Kariwa Station (1)	BWR	1,100 MWe	Niigata
Chubu Electric Power Co., Inc.	Hamaoka Station (1)	BWR	540 MWe	Shizuoka
Chubu Electric Power Co., Inc.	Hamaoka Station (2)	BWR	840 MWe	Shizuoka
Chubu Electric Power Co., Inc.	Hamaoka Station (3)	BWR	1,100 MWe	Shizuoka
Kansai Electric Power Co., Inc.	Mihama Station (2)	PWR	500 MWe	Fukui
Kansai Electric Power Co., Inc.	Mihama Station (3)	PWR	826 MWe	Fukui
Kansai Electric Power Co., Inc.	Takahama Station (1)	PWR	826 MWe	Fukui
Kansai Electric Power Co., Inc.	Takahama Station (2)	PWR	826 MWe	Fukui
Kansai Electric Power Co., Inc.	Takahama Station (3)	PWR	870 MWe	Fukui
Kansai Electric Power Co., Inc.	Takahama Station (4)	PWR	870 MWe	Fukui

Kansai Electric Power Co., Inc.	Ohi Station (1)	PWR	1,175 MWe	Fukui
Kansai Electric Power Co., Inc.	Ohi Station (2)	PWR	1,175 MWe	Fukui
Chugoku Electric Power Co., Inc.	Shimane Station (1)	BWR	460 MWe	Shimane
Shikoku Electric Power Co., Inc.	Ikata Station (1)	PWR	566 MWe	Ehime
Shikoku Electric Power Co., Inc.	Ikata Station (2)	PWR	566 MWe	Ehime
Kyushu Electric Power Co., Inc.	Genkai Station (1)	PWR	559 MWe	Saga
Kyushu Electric Power Co., Inc.	Genkai Station (2)	PWR	559 MWe	Saga
Kyushu Electric Power Co., Inc.	Sendai Station (1)	PWR	890 MWe	Kagoshima
Kyushu Electric Power Co., Inc.	Sendai Station (2)	PWR	890 MWe	Kagoshima
Japan Atomic Energy Research Institute	Mutsu*	PWR	36 MWt	

2. Other Facilities

NIL

* Mutsu will not be added to Annex 2

Annex 4. Facilities which are planned or under construction within the territorial jurisdiction of either party and which are intended to be added to Annex 1,2 or 3 when so needed

1. Reprocessing Facilities

Name of owner or operator	Facility name	Capacity	Location
Japan Nuclear Fuel Service Co., Ltd.	Rokkasho Commercial Reprocessing Facility	800 t/year	Aomori

2. Plutonium Conversion Facilities

NIL

3. Plutonium Fuel Fabrication Facilities

Name of owner or operator	Facility name	Capacity	Location
Power Reactor and Nuclear Fuel Development Corporation	Tokai Plutonium Fuel Production Facility (PFPF)	45t MOX/year	Ibaraki

4. Independent Plutonium Storage Facilities

NIL

5. Reactors

(a) ATR/Heavy Water-Moderated, Light Water-Cooled

Name of owner or operator	Facility name	Capacity	Location
Electric Power Development Co., Ltd.	Ohma	606 MWe	Aomori

(b) FBR/Sodium-Cooled

Name of owner or operator	Facility name	Capacity	Location
Power Reactor and Nuclear Fuel Development Corporation	Monju	280 MWe	Fukui

(c) LWRs

Name of owner or operator	Facility name (Unit number)	Reactor type	Capacity	Location
Hokkaido Electric Power Co., Inc.	Tomari Station (1)	PWR	579	Hokkaido
Hokkaido Electric Power Co., Inc.	Tomari Station (2)	PWR	579	Hokkaido
Tohoku Electric Power Co., Inc.	Maki Station (1)	BWR	825	Niigata
Tohoku Electric Power Co., Inc.	Onagawa Station (2)	BWR	825	Miyagi
Tokyo Electric Power Co., Inc.	Kashiwazaki-Kariwa Station (2)	BWR	1,100	Niigata
Tokyo Electric Power Co., Inc.	Kashiwazaki-Kariwa Station (3)	BWR	1,100	Niigata
Tokyo Electric Power Co., Inc.	Kashiwazaki-Kariwa Station (4)	BWR	1,100	Niigata
Tokyo Electric Power Co., Inc.	Kashiwazaki-Kariwa Station (5)	BWR	1,100	Niigata
Chubu Electric Power Co., Inc.	Hamaoka Station (4)	BWR	1,137	Shizuoka
Hokuriku Electric Power Co., Inc.	Noto Station (1)	BWR	540	Ishikawa
Kansai Electric Power Co., Inc.	Ohi Station (3)	PWR	1,180	Fukui
Kansai Electric Power Co., Inc.	Ohi Station (4)	PWR	1180	Fukui

Chugoku Electric Power Co., Inc.	Shimane Station (2)	BWR	820	Shimane
Shikoku Electric Power Co., Inc.	Ikata Station (3)	PWR	890	Ehime
Kyushu Electric Power Co., Inc.	Genkai Station (3)	PWR	1,180	Saga
Kyushu Electric Power Co., Inc.	Genkai Station (4)	PWR	1,180	Saga

6. Other Facilities

Name of owner or operator	Facility name	Capacity	Location
Japan Atomic Energy Research Institute	Nuclear Fuel Cycle Safety Engineering Research Facility (NUCEF)		Ibaraki
Power Reactor and Nuclear Fuel Development Corporation	FBR Fuel Recycling Pilot Plant		Ibaraki

Annex 5.

Guidelines for the International Transportation of Recovered Plutonium

1. Transportation will be carried out by dedicated cargo aircraft from an airport in the United Kingdom or France to an airport in Japan via the polar route or another route selected to avoid areas of natural disaster or civil disorder.

2. Prior to each shipment a transportation plan will be prepared to document the specific arrangements to be implemented for a particular shipment. The plan will be established through coordination among the sender, recipient and carrier, and with the cooperation and assistance of the parties, the transferring government and the countries enroute, which will be secured in advance through appropriate liaison and consultation with relevant authorities. The transportation plan will include the following measures.

(a) The shipment will be accompanied by armed escorts, independent of the aircrew, responsible for maintaining constant surveillance of the cargo and for its protection, acting in accordance with the laws and regulations of each country concerned.

(b) Determinations of trustworthiness will be made for individuals having key responsibilities for the shipment, such as the aircrew, the escorts and the ground personnel in the operations center.

(c) At all airports isolation of the aircraft will be ensured to the maximum extent feasible by controlling access to the aircraft, with the cooperation of relevant authorities including police or by use of other armed personnel to protect against theft or sabotage.

(d) Shipment casks will be designed and certified to maintain their integrity even in a crash of the aircraft, and these casks will be stowed in locked or sealed containers which impede access to the nuclear material by unauthorized persons. Individual transport containers will be equipped with transponders or transmitters to facilitate location in the event of a crash.

(e) The aircraft will be equipped with a reliable communications system, utilizing advanced technology as practical, independent of standard civil aviation

communications equipment, which will include the capability

(i) to transmit location and identification information automatically from the aircraft to the operations center, and (ii) for communications between the escorts and the operations center, independent of the aircrew.

(f) An operations center will be established with responsibility for continuous monitoring, consistent with the advanced technology available, of the location and status of the aircraft from departure to arrival. Channels of communication will be established between the operations center and points of contact within response authorities of the parties, the transferring government and the countries enroute.

(g) Detailed contingency plans will be established in advance. These plans will identify possible emergency situations and the actions to be taken in such situations by the aircrew, the escorts and the operations center personnel. The plans will identify the points of contact within and the demarcation of responsibilities among the response authorities of the parties, the transferring government and the countries enroute.

(h) Confirmation will be obtained from each response authority that necessary specific plans have been prepared, through consultation as appropriate with other response authorities and close contact with the sender, recipient and carrier to ensure effective implementation of the security measures described above.

AGREED MINUTES

In connection with the Implementing Agreement Between the Government of Japan and the Government of the United States of America Pursuant to Article 11 of Their Agreement for Cooperation Concerning Peaceful Uses of Nuclear Energy, signed at Tokyo today (hereinafter referred to as "the Implementing Agreement"), the undersigned hereby record the following understandings:

1.

(a) it is confirmed that each party will provide the other party with information regarding activities specified in Article 1 of the Implementing Agreement, including notification of each international transfer prior to shipment or as soon thereafter as possible.

(b) It is confirmed that prior to the shipment of nuclear material referred to in sub-paragraph (a)(iii) and sub-paragraph (b) of paragraph 1 and sub-paragraph (b) of paragraph 2 of Article 1 of the Implementing Agreement, the transferring party will provide a written notification to the government of the third country concerned that the nuclear material is being transferred pursuant to the Implementing Agreement.

(c) With reference to sub-paragraph (a) (iii) of paragraph 3 of Article 1 of the Implementing Agreement, it is confirmed that, following a written notification as provided for in the said paragraph, the notifying party will, prior to shipment, provide a written notification to the government of the third country concerned that such a notification has been completed.

2. It is confirmed that the agreement in sub-paragraph (a)(iii) of paragraph 1 of Article 1 of the Implementing Agreement is given on the condition that the nuclear material concerned upon transfer will be subject to an agreement for cooperation between the non-transferring party and the government of the third country. It is further confirmed by the transferring party that procedures will be in effect to ensure that while in that third country the plutonium recovered through reprocessing will be located at a facility listed in Annex 1 unless otherwise agreed by the parties. It is also confirmed that uranium recovered through reprocessing as envisaged in sub-paragraph (a) (iii) of paragraph 1 of Article 1 of the Implementing Agreement may thereafter be enriched to less than twenty percent in the third country. It is also confirmed that, with respect to

paragraph 3 of Article 1 of the Implementing Agreement, upon its return to the territorial jurisdiction of the transferring party the nuclear material concerned will be subject to the Agreement for Cooperation Between the Government of Japan and the Government of the United States of America Concerning Peaceful Uses of Nuclear Energy, signed at Tokyo today (hereinafter referred to as "the Agreement for Cooperation").

3. It is confirmed that the agreement in sub- paragraph (b) of paragraph 1 and sub-paragraph (b) of paragraph 2 of Article 1 of the Implementing Agreement is given on the condition that the nuclear material concerned upon transfer will be subject to an agreement for cooperation between the non-transferring party and the government of the third country. It is further confirmed that the nuclear material concerned will be subject to the Agreement for Cooperation upon its return to the territorial jurisdiction of the transferring party.

4. With reference to Article 2 of the Implementing Agreement, it is confirmed:

(a) that a change in corporate names and other forms of identification of a facility in Annex 1, 2, 3 or 4, or a change in capacity of a facility in Annex 1 which does not call for essential changes in the safeguards arrangements, may be reflected by modification of the relevant Annexes through an exchange of Notes Verbale;

(b) that the parties shall endeavor, as necessary, to enable the Agency to adopt the safeguards concepts that have been agreed upon between the parties and apply safeguards in accordance therewith; and

(c) that, when the need arises for modifying such safeguards concepts, the parties shall promptly consult to modify them by mutual agreement.

5. With reference to sub-paragraph (a) of paragraph 2 of Article 2 of the Implementing Agreement, it is confirmed that, although the Agreement for Cooperation does not require mutual agreement of the parties for irradiation of nuclear material, the following arrangements will apply in order to facilitate the application of the Implementing Agreement: For an addition to Annex 2 of

(a) a facility for the irradiation of plutonium listed in section 5 (b) of Annex 4, or

(b) a reactor which is not of the design of an LWR or ATR listed in Annex 2 and whose design features require a safeguards approach different from that of any of the reactors listed in Annex 2,

the notification shall contain the following information in addition to the information specified in sub-paragraph (a) of paragraph 2 of Article 2 of the Implementing Agreement:

(i) a statement affirming that the safeguards arrangement is in accordance with the relevant safeguards concept accepted in writing by the parties; and

(ii) a description of the key elements contained in the safeguards arrangement.

6. With reference to paragraph 2 of Article 2 of the Implementing Agreement, it is confirmed that the procedures for an acknowledgment of notification referred to in the said paragraph will not be modified unless by agreement of the parties.

7. With reference to paragraph 2 of Article 3 of the Implementing Agreement, it is confirmed that should a significant increase in the risk of nuclear proliferation or in the threat to the national security of the suspending party pertain solely to a particular facility or activity, the agreement given in Article 1 of the Implementing Agreement may only be suspended for that facility or activity. It is further confirmed that actions of governments of third countries or events beyond the territorial jurisdiction of a party may not be invoked as grounds for suspension of the agreement given in Article 1 of the Implementing Agreement to activities or facility operations within that party's territorial jurisdiction unless due to such actions or events those activities or facility operations would clearly result in a significant increase in the risk of nuclear proliferation or in the threat to the national security of the suspending party.

8. It is confirmed that should either party need to conclude a long-term arrangement for other transfers of nuclear material beyond its territorial jurisdiction to a facility in a third country for the performance of fuel cycle services and for subsequent return to the territorial jurisdiction of the transferring party for use in its nuclear energy program, the parties will consult for the purpose of arriving at a mutually satisfactory arrangement consistent with the provisions of Article 11 of the Agreement for

Cooperation.

9. For the purposes of the Implementing Agreement the terms "the government of a third country" and "third country" may include the European Atomic Energy Community, it being understood that the term "the European Atomic Energy Community" means the legal person created by the Treaty establishing the European Atomic Energy Community or the territories to which the said Treaty applies, where applicable.

FOR THE GOVERNMENT
OF JAPAN:

Tadashi Kuranari

FOR THE GOVERNMENT
THE UNITED STATES
OF AMERICA:

Michael J.Mansfield

(Japanese Note)

Washington, October 18, 1988

Excellency,

I have the honor to refer to paragraph 1 of Article 2 of the Implementing Agreement Between the Government of Japan and the Government of the United States of America Pursuant to Article 11 of Their Agreement for Cooperation Concerning Peaceful Uses of Nuclear Energy (hereinafter referred to as "the Implementing Agreement¹"), and to Annex 5 of the Implementing Agreement, entitled "Guidelines for the International Transportation of Recovered Plutonium. "

Pursuant to paragraph 1 of Article 2 of the Implementing Agreement, I have further the honor to propose, on behalf of the Government of Japan, that Annex 5 of the Implementing Agreement be modified as follows:

"Before paragraph 1 of Annex 5 of the Implementing Agreement, "A. Air Shipment" shall be inserted.

After sub-paragraph (h) of paragraph 2 of Annex 5 of the Implementing Agreement, the following shall be inserted.

"B. Sea Shipment

1. Transportation will be carried out by dedicated transport ship from a port in the United Kingdom or France to a port in Japan via a route selected to avoid areas of natural disaster or civil disorder and to ensure the security of the cargo and the transport ship. The transport ship will not make scheduled port calls enroute. Emergency port calls will only be made in conformance with procedures set forth in the transportation plan provided for in paragraph 2 below.

2. Prior to each shipment a transportation plan documenting the specific arrangements to be implemented for the shipment will be prepared to assure, inter alia, adequate physical protection of the nuclear material to be transported. The plan will be established through coordination among the sender, recipient, and carrier, and with the cooperation and assistance of the parties, the transferring government and, if necessary, any other government, which will be secured in advance through appropriate liaison

and consultation with relevant authorities. The transportation plan will include the following measures.

(a)

(i) Escorts, armed and equipped, and independent of the transport ship crew, will be aboard the transport ship. The on-board escorts will be responsible for maintaining constant surveillance of the cargo and for its protection, acting in accordance with the laws and regulations of each country concerned.

(ii) The transport ship will be escorted from departure to arrival by an armed escort vessel unless alternative security measures, documented in the transportation plan, effectively compensate for any absence of an armed escort vessel.

(b) Determinations of trustworthiness will be made for individuals having key responsibilities for the shipment, such as the transport ship crew, the escorts on board the transport ship and the personnel in the operations center.

(c) At all ports access to the transport ship will be controlled with the cooperation of relevant authorities including police or by use of other armed personnel to protect against theft or sabotage.

(d) Measures will be taken to impede removal of the cargo at sea, including rendering inoperable the hatch removal mechanisms and the on-board derricks or cranes. Shipment casks or transport containers will be locked and sealed in order to impede access to the nuclear material by unauthorized persons. Individual shipment casks or transport containers will be equipped with transponders or transmitters to facilitate location in the event of an accident.

(e) The transport ship will be equipped with a reliable communications system, utilizing advanced technology as practical, independent of standard navigation communications equipment, which will include the capability (i) for secure transmission of transport ship location and cargo status information automatically from the transport ship to the operations center, and (ii) for separate and secure communications between the on-board escorts and the operations center, independent of the transport ship crew.

(f) An operations center will be established with responsibility for continuous monitoring, consistent with the advanced technology available, of the transport ship location and cargo status from departure to arrival. Channels of communication will be established between the operations center and points of contact within the response authorities designated in the transportation plan.

(g) Detailed contingency plans will be established in advance. These plans will identify possible emergency situations and the actions to be taken in such situations by the transport ship crew, the on-board escorts, any escort vessel, and the operations center personnel. The plans will identify the points of contact within and the demarcation of responsibilities among the response authorities designated in the transportation plan.

(h) Confirmation will be obtained from each designated response authority that necessary specific plans have been prepared, through consultation as appropriate with other response authorities, and close contact with the sender, recipient and carrier to ensure effective implementation of the security measures described above.

I have further the honor to propose that the present Note and Your Excellency's Note in reply confirming acceptance of the foregoing proposal on behalf of the Government of the United States of America shall be regarded as constituting an Agreement between the two Governments, which will enter into force on the date of Your Excellency's reply.

I avail myself of this opportunity to renew to Your Excellency the assurances of my highest consideration.

(Signed) Nobuo Matsunaga
Ambassador Extraordinary and
Plenipotentiary of Japan

His Excellency
George p. Shultz
The Secretary of State

(U.S. Note)

Washington, October 18, 1988

Excellency,

I have the honor to acknowledge the receipt of Your Excellency's Note of today's date, which reads as follows:

"(Japanese Note)"

I have further the honor to confirm the acceptance of the foregoing proposal on behalf of the Government of the United States of America and to agree that Your Excellency's Note and this Note shall be regarded as constituting an Agreement between the two Governments, which will enter into force on the date of this reply.

Accept, Excellency, the renewed assurances of my highest consideration.

For the Secretary of State

“(Signed) Richard T. Kennedy

His Excellency
Nobuo Matsunaga
Ambassador of Japan