AGREEMENT BETWEEN THE GOVERNMENT OF JAPAN AND THE GOVERNMENT OF THE RUSSIAN FEDERATION FOR COOPERATION IN THE PEACEFUL USES OF NUCLEAR ENERGY

AGREEMENT

BETWEEN THE GOVERNMENT OF JAPAN
AND THE GOVERNMENT OF THE RUSSIAN FEDERATION
FOR COOPERATION IN THE PEACEFUL USES OF NUCLEAR ENERGY

The Government of Japan and the Government of the Russian Federation (hereinafter referred to as "the Parties");

Desiring to strengthen the friendly relations existing between Japan and the Russian Federation;

Being convinced that expanding cooperation between Japan and the Russian Federation in the peaceful uses of nuclear energy will contribute to the furtherance of friendship and mutual understanding;

Desiring to continue to cooperate in the development of the peaceful uses of nuclear energy;

Considering the close cooperation between Japan and the Russian Federation in the peaceful uses of nuclear energy under the Agreement between the Government of Japan and the Government of the Union of Soviet Socialist Republics for Cooperation in the Field of the Peaceful Uses of Nuclear Energy, done on April 18, 1991 (hereinafter referred to as "the Agreement of 1991");

Mindful that both Japan and the Russian Federation are parties to the Treaty on the Non-Proliferation of Nuclear Weapons, done on July 1, 1968 (hereinafter referred to as "the Non-Proliferation Treaty");

Recognizing that both Japan and the Russian Federation are members of the International Atomic Energy Agency;

Recognizing also the advantages to both countries of effective cooperation in the development of the peaceful uses of nuclear energy; and

Desiring to establish conditions consistent with their commitment to nuclear non-proliferation under which cooperation in the peaceful uses of nuclear energy between Japan and the Russian Federation can be carried out;

Have agreed as follows:

For the purposes of this Agreement:

(1) "Authorized person" means

in the case of Japan, any individual or entity within the jurisdiction of Japan and authorized by the Government of Japan, and, in the case of the Russian Federation, any legal entity within the jurisdiction of the Russian Federation and authorized by the Government of the Russian Federation, to cooperate under this Agreement, including to supply or receive nuclear material, material, equipment and technology, and to perform or receive services, but does not include the Parties;

(2) "Nuclear material" means

- "source material", namely, uranium containing the mixture of isotopes occurring in nature; uranium depleted in the isotope uranium-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 the Board of Governors of the International Atomic Energy Agency may determine under Article XX of the Statute of the International Atomic Energy Agency, done on October 26, 1956 (hereinafter referred to as "the Statute"), and the Parties inform each other, in writing, to accept; and such other substances as the Board of Governors of the International Atomic Energy Agency may determine under Article XX of the Statute, and the Parties inform each other, in writing, to accept;
- "special fissionable material", namely, plutonium other than plutonium with an isotopic concentration of plutonium-238 exceeding eighty percent, uranium-233, uranium enriched in the isotope uranium-233 or uranium-235; any substance containing one or more of the foregoing; and such other substances as the Board of Governors of the International Atomic Energy Agency may determine under Article XX of the Statute, and the Parties inform each other, in writing, to accept. Special fissionable material does not include source material; and
- plutonium with an isotopic concentration of plutonium-238 exceeding eighty percent;
- (3) "Material" means substances for use in a nuclear reactor which are listed in Part A of Annex A to this Agreement, but does not include nuclear material;

- (4) "Equipment" means major items of machinery, plant or instrumentation, or major components thereof, which are specially designed or prepared for use in nuclear activities, and which are listed in Part B of Annex A to this Agreement;
- (5) "Technology" means specific information required for the development, production or use of any nuclear material, material or equipment, excluding such specific information publicly available and without restrictions upon its further dissemination as well as other kinds of information if specified and agreed in writing by the Parties. Technology may take the form of technical data which includes blueprints, plans, diagrams, models, formulae, engineering designs and specifications, manuals and instructions written or recorded on other media or devices such as disk, tape and read-only memories. It may also take the form of technical assistance which includes instruction, skills, training, working knowledge and consulting services;
- (6) "Development" referred to in paragraph (5) of this Article means all phases before production such as design, design research, design analysis, design concepts, assembly and testing of prototypes, pilot production schemes, design data, process of transforming design data into a product, configuration design, integration design and layouts;
- (7) "Production" referred to in paragraphs (5) and (6) of this Article means all activities for producing nuclear material, material or equipment such as construction, production engineering, manufacture, integration, assembly (mounting), inspection, testing and quality assurance;
- (8) "Use" referred to in paragraph (5) of this Article means operation, installation including on-site installation, maintenance, checking, repair, overhaul and refurbishing;
- (9) "Equipment based on technology" means equipment which the Parties agree as produced from the use of technology transferred pursuant to this Agreement;
- (10) "Nuclear material recovered or produced as a by-product" means
- nuclear material derived from nuclear material transferred pursuant to this Agreement;

- nuclear material derived by one or more processes from the use of material or equipment transferred pursuant to this Agreement; and
- nuclear material which the Parties agree as derived from the use of technology transferred pursuant to this Agreement.

- 1. The Parties shall cooperate under this Agreement for the development of the peaceful uses of nuclear energy in Japan and the Russian Federation in conformity with the provisions of this Agreement and the legislation of their respective States in the following ways:
 - (1) exchange of experts;
- (2) exchange of information, including, but not limited to, information relating to nuclear safety, on such terms as may be agreed between the Parties, between authorized persons of the Parties, or, upon the request of either Party, between that Party and authorized persons of the other Party;
- (3) supply from a Party or its authorized persons to the other Party or its authorized persons of nuclear material, material, equipment and technology on such terms as may be agreed between the supplier and the recipient; and
- (4) provision of services by a Party or its authorized persons and receipt of services by 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.
- 2. Cooperation as specified in paragraph 1 of this Article may be undertaken in the following areas:
- (1) exploration and exploitation of uranium resources;
- (2) design, construction and operation of light water reactors;
 - (3) radioactive waste processing and management;
- (4) nuclear safety including radiation protection and environmental monitoring;

- (5) study on and application of radio-isotopes and radiation; and
- (6) other areas as may be agreed in separate written agreements between the Parties.
- 3. Notwithstanding the provisions of paragraphs 1 and 2 of this Article, technology for and equipment for uranium enrichment, spent nuclear fuel reprocessing and production of material including heavy water, and plutonium other than plutonium with an isotopic concentration of plutonium-238 exceeding eighty percent shall not be transferred under this Agreement.

Cooperation between the Parties as specified in Article 2 of this Agreement shall be subject to the provisions of this Agreement and the legislation of their respective States. In respect of cooperation envisaged in sub-paragraph (3) of paragraph 1 of Article 2 of this Agreement, acceptance of the application of safeguards by the International Atomic Energy Agency shall be required and:

- (1) if the recipient is the Government of Japan or its authorized persons, the Agreement between the Government of Japan and the International Atomic Energy Agency in Implementation of Article III. 1 and 4 of the Non-Proliferation Treaty, done on March 4, 1977 as supplemented by an Additional Protocol, done on December 4, 1998 (hereinafter referred to as "the Safeguards Agreement for Japan") shall be implemented; and
- (2) if the recipient is the Government of the Russian Federation or its authorized persons, the Agreement between the Union of Soviet Socialist Republics and the International Atomic Energy Agency for the application of safeguards in the Union of Soviet Socialist Republics, done on February 21, 1985 as supplemented by an Additional Protocol, done on March 22, 2000 (hereinafter referred to as "the Safeguards Agreement for the Russian Federation") shall be implemented and one or more facilities selected by the International Atomic Energy Agency for the application of safeguards provided for in the Safeguards Agreement for the Russian Federation shall exist, for the purpose of ensuring the implementation of Article 5 of this Agreement.

- 1. Cooperation under this Agreement shall be carried out only for peaceful and non-explosive purposes.
- 2. Nuclear material, material, equipment and technology transferred pursuant to this Agreement, equipment based on technology and nuclear material recovered or produced as a by-product 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 5

To ensure the fulfillment of the obligations arising under Article 4 of this Agreement, nuclear material transferred pursuant to this Agreement and nuclear material recovered or produced as a by-product:

- (1) while within Japan, shall be subject to the Safequards Agreement for Japan; and
 - (2) while within the Russian Federation,
- shall be located, in principle, at facilities selected by the International Atomic Energy Agency for the application of safeguards provided for in the Safeguards Agreement for the Russian Federation. Such facilities shall be listed in Part A of Annex B to this Agreement; or
- may be located at facilities eligible, but not selected by the International Atomic Energy Agency, for the application of safeguards provided for in the Safeguards Agreement for the Russian Federation subject to the application of supplementary measures to such safeguards to be agreed in writing between the Parties. Such facilities shall be listed in Part B of Annex B to this Agreement.

Article 6

In implementing the provisions of this Agreement, the Parties shall ensure that the provisions of the Convention on Early Notification of a Nuclear Accident, adopted on September 26, 1986, the Convention on Assistance in the Case of a Nuclear Accident or Radiological Emergency, adopted on September 26, 1986, the Convention on Nuclear Safety, done on September 20, 1994 and the Joint Convention on the Safety of Spent Fuel Management and on the Safety of Radioactive Waste Management, done on September 5, 1997 are observed.

- 1. In respect of nuclear material transferred pursuant to this Agreement and nuclear material recovered or produced as a by-product, adequate measures of physical protection shall be maintained according to the criteria which the Parties have respectively adopted and which bring about, as a minimum, protection at levels as specified in Annex C to this Agreement.
- 2. In respect of international transport of nuclear material subject to this Agreement, the Parties shall ensure that the provisions of the Convention on the Physical Protection of Nuclear Material, opened for signature on March 3, 1980 are observed.
- 3. The Parties shall respectively take appropriate measures in accordance with the provisions of the International Convention for the Suppression of Acts of Nuclear Terrorism, opened for signature on September 14, 2005.

Article 8

Nuclear material, material, equipment and technology transferred pursuant to this Agreement, equipment based on technology and nuclear material recovered or produced as a by-product shall not be transferred or retransferred beyond the jurisdiction of the State of the receiving Party, except into the jurisdiction of the State of the supplying Party, unless the prior written consent of the supplying Party is obtained.

Article 9

Nuclear material subject to this Agreement shall not be enriched to twenty percent or more in the isotope uranium-235 or reprocessed within the jurisdiction of the State of the receiving Party without the prior written consent of the supplying Party.

Nuclear material, material, equipment and technology transferred between Japan and the Russian Federation, whether directly or through a third State, shall become subject to this Agreement upon their entry into the jurisdiction of the State of the receiving Party only if the supplying Party has notified the receiving Party in writing and in advance of the intended transfer. Prior to the notified transfer of such nuclear material, material, equipment or technology, the supplying Party shall obtain from the receiving Party a written confirmation that the transferred nuclear material, material, equipment or technology will be held subject to this Agreement and that the proposed recipient, if other than the receiving Party, will be an authorized person of the receiving Party.

Article 11

- 1. Neither Party shall use the provisions of this Agreement for the purpose of seeking commercial or industrial advantages, or for the purpose of interfering with the commercial or industrial interests of the other Party or its authorized persons, or for the purpose of hindering the development of the peaceful uses of nuclear energy.
- 2. Nuclear material subject to this Agreement may be handled based on the principles of fungibility and proportionality when it is used in mixing processes where it loses its identity, or is deemed to lose it, in the process of conversion, fuel fabrication, enrichment or reprocessing.

Article 12

Nuclear material, material, equipment and technology subject to this Agreement shall no longer be subject to this Agreement if:

- (1) such nuclear material, material or equipment has been transferred beyond the jurisdiction of the State of the receiving Party in accordance with the relevant provisions of this Agreement;
- (2) the Parties agree that such nuclear material, material, equipment or technology shall no longer be subject to this Agreement; or

(3) in the case of nuclear material, the International Atomic Energy Agency determines, in accordance with the provisions for the termination of safeguards in the relevant agreements referred to in Article 3 of this Agreement, 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.

Article 13

Information bearing a security classification placed by the Government of Japan or information classified as State Secret by the legislation of the Russian Federation shall not be exchanged under this Agreement.

Article 14

- 1. The Parties shall, at the request of either of them, consult with each other, if any question arises concerning the interpretation or application of this Agreement.
- If any dispute arising out of the interpretation or application of this Agreement is not settled by negotiation, mediation, conciliation or other similar procedure, such dispute shall, at the request of either Party, be submitted 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 State and the two arbitrators so designated shall elect a third, a national of a third State, 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 Japan or of the Russian Federation. A majority of the members of the arbitral tribunal shall constitute a quorum, and all decisions shall require the concurrence of a majority of the members of the tribunal. The arbitral procedure shall be fixed by decisions of the tribunal. The decisions of the tribunal shall be binding on the Parties.

1. If either Party:

- (1) fails to ensure observance of the provisions of Article 4, 5, 6, 7, 8 or 9 of this Agreement or the decisions of the arbitral tribunal referred to in Article 14 of this Agreement; or
- (2) terminates or materially violates its Safeguards Agreement with the International Atomic Energy Agency referred to in Article 3 of this Agreement,

the other Party shall have the right to suspend further cooperation under this Agreement in whole or in part, or to terminate this Agreement and to require the return of any nuclear material, material and equipment transferred pursuant to this Agreement.

- 2. If the Russian Federation detonates a nuclear explosive device using any nuclear material, material, equipment or technology transferred from Japan whether directly or through a third State pursuant to this Agreement, equipment based on technology or nuclear material recovered or produced as a by-product, the Government of Japan shall have the right specified in paragraph 1 of this Article.
- 3. If Japan detonates a nuclear explosive device, the Government of the Russian Federation shall have the right specified in paragraph 1 of this Article.
- 4. Before either Party takes steps to suspend cooperation under this Agreement in whole or in part or to terminate this Agreement, or to require such return, the Parties shall consult for the purpose of taking corrective measures and shall, where appropriate, carefully consider the following, taking into account the need to make such other appropriate arrangements as may be required:
 - (1) the effects of taking such steps; and
- (2) whether the facts which gave rise to considering such steps were caused deliberately.
- 5. The right under this Article shall be exercised by either Party only if the other Party fails to take corrective measures within an appropriate period of time following the consultations referred to in paragraph 4 of this Article. In exercising this right, either Party shall notify the other Party in writing of the date of the suspension of cooperation under this Agreement in whole or in part or the termination of this Agreement.

6. If either Party exercises its right under this Article to require the return of any nuclear material, material and equipment transferred pursuant to this Agreement, it shall compensate the other Party or the persons concerned for the fair market value thereof.

Article 16

The Parties shall ensure the adequate and effective protection of intellectual property and technology created or transferred pursuant to the cooperation under this Agreement in accordance with the relevant international agreements to which Japan and the Russian Federation are parties and the legislation of their respective States.

Article 17

The Annexes to this Agreement shall form an integral part of this Agreement. This Agreement may be amended by written agreement of the Parties. Amendments to this Agreement, except for those made exclusively to the Annexes to this Agreement, shall be approved by each Party in accordance with its internal procedures required for such amendments. Amendments made exclusively to the Annexes shall require only a written agreement of the Parties.

Article 18

- 1. This Agreement shall enter into force on the thirtieth day after the date on which the Parties inform each other through diplomatic channels that their respective internal procedures required for its entry into force have been completed.
- 2. This Agreement shall remain in force for a period of twenty five years, and shall continue in force thereafter until terminated in accordance with the provisions of paragraph 3 of this Article.
- 3. Without prejudice to the provisions of paragraph 5 of Article 15 of this Agreement, either Party may, by giving six months written notice to the other Party, terminate this Agreement at the end of the initial twenty five year period or at any time thereafter.
- 4. The Agreement of 1991 shall terminate in relations between the Parties on the date this Agreement enters into force.

5. Notwithstanding the suspension of cooperation under this Agreement or termination of this Agreement, Article 1, Articles 4 to 9, and Articles 12, 14 and 15 of this Agreement shall continue in effect.

In witness whereof the undersigned, being duly authorized by their respective Governments, have signed this Agreement.

Done at Tokyo on the twelfth day of May, 2009, in duplicate, in the Japanese, Russian and English languages, all texts being equally authentic. In case of any divergence of interpretation, the interpretation shall be made in accordance with the English text.

For the Government of Japan

中曽根弘文

For the Government of the Russian Federation

С.В.Кириенко

Annex A

Part A

1. Deuterium and heavy water:

Deuterium, heavy water (deuterium oxide) and any other deuterium compound in which the ratio of deuterium to hydrogen atoms exceeds 1:5000 for use in a nuclear reactor as defined in paragraph 1 of Part B below, in quantities exceeding 200 kg of deuterium atoms in any period of 12 months.

2. Nuclear grade graphite:

Graphite having a purity level better than 5 parts per million boron equivalent and with a density greater than 1.50g/cm3 for use in a nuclear reactor as defined in paragraph 1 of Part B below, in quantities exceeding 30 metric tons in any period of 12 months.

Part B

1. Complete nuclear reactors:

Nuclear reactors capable of operation so as to maintain a controlled self-sustaining fission chain reaction, excluding zero energy reactors, the latter being defined as reactors with a designed maximum rate of production of plutonium not exceeding 100 grams per year.

2. Nuclear reactor vessels:

Metal vessels, or major shop-fabricated parts therefor, especially designed or prepared to contain the core of a nuclear reactor as defined in paragraph 1 above, as well as relevant nuclear reactor internals as defined in paragraph 8 below.

3. Nuclear reactor fuel charging and discharging machines:

Manipulative equipment especially designed or prepared for inserting or removing fuel in a nuclear reactor as defined in paragraph 1 above.

4. Nuclear reactor control rods and equipment:

Especially designed or prepared rods, support or suspension structures therefor, rod drive mechanisms or rod guide tubes to control the fission process in a nuclear reactor as defined in paragraph 1 above.

5. Nuclear reactor pressure tubes:

Tubes which are especially designed or prepared to contain fuel elements and the primary coolant in a nuclear reactor as defined in paragraph 1 above at an operating pressure in excess of 50 atmospheres.

6. Zirconium tubes:

Zirconium metal and alloys in the form of tubes or assemblies of tubes, and in quantities exceeding 500 kg in any period of 12 months, especially designed or prepared for use in a nuclear reactor as defined in paragraph 1 above, and in which the relation of hafnium to zirconium is less than 1:500 parts by weight.

7. Primary coolant pumps:

Pumps especially designed or prepared for circulating the primary coolant for a nuclear reactor as defined in paragraph 1 above.

8. Nuclear reactor internals:

Nuclear reactor internals especially designed or prepared for use in a nuclear reactor as defined in paragraph 1 above, including support columns for the core, fuel channels, thermal shields, baffles, core grid plates and diffuser plates.

9. Heat exchangers:

Heat exchangers (steam generators) especially designed or prepared for use in the primary coolant circuit of a nuclear reactor as defined in paragraph 1 above.

10. Neutron detection and measuring instruments:

Especially designed or prepared neutron detection and measuring instruments for determining neutron flux levels within the core of a nuclear reactor as defined in paragraph 1 above.

- 11. Plants for the fabrication of nuclear reactor fuel elements, and equipment especially designed or prepared therefor.
- 12. Plants for the conversion of uranium and plutonium for use in the fabrication of fuel elements and the separation of uranium isotopes, and equipment especially designed or prepared therefor.

Annex B List of facilities in the Russian Federation

Part A:

Facilities selected by the International Atomic Energy Agency for the application of safeguards provided for in the Safeguards Agreement for the Russian Federation.

1. Facilities where nuclear material, material and equipment transferred to the Russian Federation pursuant to this Agreement, equipment based on technology and nuclear material recovered or produced as a by-product are to be located are as follows:

NIL

2. Facilities where technology transferred to the Russian Federation pursuant to this Agreement is to be used are as follows:

NTT

Part B:

Facilities eligible, but not selected by the International Atomic Energy Agency, for the application of safeguards provided for in the Safeguards Agreement for the Russian Federation.

1. Facilities where nuclear material, material and equipment transferred to the Russian Federation pursuant to this Agreement, equipment based on technology and nuclear material recovered or produced as a by-product are to be located are as follows:

Angarsk International Uranium Enrichment Center

2. Facilities where technology transferred to the Russian Federation pursuant to this Agreement is to be used are as follows:

NTT

Annex C Levels of physical protection

CATEGORY III (as defined in the attached table)

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 (as defined in the attached table)

Use and storage within a protected area to which the 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 (as defined in the attached table)

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	1
2.	Uranium-235	Unirradiated (b) - uranium enriched to 20% 235 _U or more - uranium enriched to 10% 235 _U but less than 20% 235 _U - uranium enriched above natural, but less than 10% 235 _U	- 5kg or more	- Less than 5kg but more than 1kg - 10kg or more	- 1kg or less but more than 15g - Less than 10kg but more than 1kg - 10kg or more
3.	Uranium-233	Unirradiated ^(b)	2kg or more	Less than 2kg but more than 500g	1 - 1
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 1 Gy/hr (100 rads/hr) at one meter unshielded.
- (c) Quantities not falling in Category III and natural uranium, depleted uranium and thorium should be protected at least in accordance with prudent management practice.
- (d) Although this level of protection is recommended, it would be open to the Parties, upon evaluation of the specific circumstances, to assign a different category of physical protection.
- (e) Other fuel which by virtue of its original fissile material content is classified as Category I or II before irradiation may be reduced one category level while the radiation level from the fuel exceeds 1 Gy/hr (100 rads/hr) at one meter unshielded.