AGREEMENT

BETWEEN

THE GOVERNMENT OF THE REPUBLIC OF INDONESIA

AND

THE GOVERNMENT OF THE REPUBLIC OF KOREA

ON

COOPERATION IN THE PEACEFUL USES OF NUCLEAR ENERGY

The Government of the Republic of Indonesia and the Government of the Republic of Korea (hereinafter referred to as "the Parties");

Noting that the utilization of nuclear energy for peaceful purposes is an important factor in the promotion of the social and economic development of the two countries;

Desiring to strengthen the friendly relations existing between the two countries;

Recognizing that both countries are Member States of the International Atomic Energy Agency (hereinafter referred to as "the IAEA") and parties to the Treaty on the Non-Proliferation of Nuclear Weapons (hereinafter referred to as "the Treaty");

Reaffirming their intention to give the highest priority to nuclear safety and environmental protection in both countries in the course of implementing their nuclear programs; and

Bearing in mind the common desire of both countries to expand and strengthen their cooperation, on the basis of equality and mutual benefit, for the development and application of nuclear energy for peaceful purposes;

HAVE AGREED AS FOLLOWS:

ARTICLE I
PURPOSES

The Parties shall, on the basis of equality and mutual benefit, encourage and promote cooperation in the peaceful uses of nuclear energy, in accordance with their respective applicable laws and regulations.

ARTICLE II
DEFINITIONS

For the purposes of this Agreement:

(a) "Equipment" means any of the equipment listed in Part A of Annex I to this Agreement;

(b) "Material" means any of the material listed in Part B of Annex I to this Agreement;

(c) "Nuclear material' means any source material or any special fissionable material as these terms are defined in Article XX of the Statute of the IAEA which is attached as Annex II to this Agreement. Any determination by the Board of Governors of the IAEA under Article XX of the IAEA's Statute to amend the list of materials considered to be "source material" or "special fissionable material" shall only have effect under this Agreement when the

Parties have informed each other in writing that they accept such an amendment;

(d) "Persons" means any individual, corporation, firm or company, partnership, association or other entity subject to the jurisdiction of either Party, but does not include the Parties to this Agreement; and

(e) "Technology" means scientific or technical data designated by the supplying Party which is important to the design, construction, operation and maintenance of equipment, but excludes data available to the public.

ARTICLE III
AREAS OF COOPERATION

Subject to this Agreement, the areas of cooperation between the Parties may include:

(a) basic and applied research development with respect to the peaceful uses of nuclear energy;

(b) research, development, design, construction, operation and maintenance of nuclear powers plants, small and medium sized nuclear reactors or research reactors;

(c) manufacture and supply of nuclear fuel elements to be used in nuclear power plants, small and medium sized nuclear reactors or research reactors;

(d) nuclear fuel cycle, from the exploration and exploitation of nuclear ores up to radioactive waste management;

(e) production and application of radioisotopes in industry, agriculture and medicine;

(f) development, supply and use of particle accelerators, and application of accelerator technologies;

(g) nuclear safety, radiation protection and environmental protection;

(h) nuclear safeguards and physical protection;

(i) nuclear policy and manpower development; and

(j) any other areas of cooperation as may be agreed upon by the Parties.

ARTICLE IV
FORMS OF COOPERATION

The cooperation under Article 3 of this Agreement may be undertaken in the following forms:

(a) exchange and training of scientific and technical personnel;

(b) exchange of scientific and technological information and data;

(c) organization of symposia, seminars and working groups;

(d) transfer of nuclear material, material, equipment and technology;

(e) provision of relevant technological consultancy and services;

(f) joint research or projects on subjects of mutual interest; and

(g) any other forms of cooperation as may be agreed upon by the Parties.

ARTICLE V
IMPLEMENTING ARRANGEMENT

1. Cooperation in the peaceful uses of nuclear energy under this Agreement may be implemented by the relevant authorities, which shall be designated by the Parties.

2. The relevant authorities of the Parties may conclude separate arrangements or contracts for the purpose of implementing this Agreement.

3. The arrangements or contracts referred to in paragraph 2 of this Article shall specify the terms and conditions of particular cooperative programs and projects, the procedures to be followed, financial arrangement, intellectual property rights matters and other appropriate issues, in accordance with the respective laws and regulations of the Parties.

ARTICLE VI
RETRANSFERS

Nuclear material, material, equipment and technology transferred pursuant to this Agreement, and special fissionable material produced through the use of nuclear material, material or equipment transferred pursuant to this Agreement, shall not be transferred beyond the jurisdiction of the receiving Party to a third party unless otherwise agreed by the Parties.

ARTICLE VII
ENRICHMENT AND REPROCESSING

1. Uranium transferred pursuant to this Agreement shall not be enriched to twenty (20) percent or more in the isotope U-235 unless otherwise agreed by the Parties.

2. Nuclear material transferred pursuant to this Agreement and nuclear material produced through the use of nuclear material, material or equipment so transferred shall not be reprocessed unless otherwise agreed by the Parties.

3. Such agreement under paragraphs 1 and 2 of this Article shall describe the conditions under which the resultant plutonium or uranium enriched to twenty (20) percent or more may be stored and used.

ARTICLE VIII
NO EXPLOSIVE OR MILITERY APPLICATION

1. The cooperation pursuant to this Agreement shall be carried out only for peaceful purposes.

2. Nuclear material, material, equipment and technology transferred pursuant to this Agreement and special fissionable material used in or produced through the use of nuclear material, material or equipment so transferred shall not be used for the development or the manufacture of nuclear weapons or any nuclear explosive devices, or for any military purpose.

ARTICLE IX
SAFEGUARDS

1. With respect to nuclear material, the commitment under Article VIII of this Agreement shall be verified pursuant to the safeguards agreement between either Party and the IAEA, in connection with the Treaty.

2. If, for any reason or at any time, the IAEA is not administering such safeguards within the jurisdiction of one Party, that Party shall forthwith enter into an agreement with the other Party for the establishment of a safeguards system which conforms to the IAEA safeguards principles and procedures for the application of safeguards to nuclear material transferred pursuant to this Agreement.

ARTICLE X
INFORMATION AND INTELLECTUAL PROPERTY

1. The Parties may freely use any information received under this Agreement unless the supplying Party notifies the receiving Party in writing in advance of any restrictions or reservations concerning its use and dissemination.

2. Information obtained pursuant to this Agreement shall not be transferred beyond the jurisdiction of the receiving Party to a third party without the prior written consent of the supplying Party.

3. The Parties shall take all appropriate measures in accordance with their respective laws and regulations to preserve the restrictions and reservations of information and to protect intellectual property rights, including trade secrets transferred between authorized persons within the jurisdiction of either Party.

4. The Parties, their competent agencies and designated organizations may incorporate into separate agreements, arrangements and contracts on particular programs and projects provisions regarding the protection and allocation of

intellectual property rights, which shall be in accordance with their domestic laws and regulations and international agreements to which the Parties are party.

5. For the purpose of this Agreement, "intellectual property" is understood to have the meaning given in Article 2 of the Convention Establishing the World Intellectual Property Organization, signed at Stockholm on 14 July 1967.

ARTICLE XI
PHYSICAL PROTECTION

The Parties shall maintain adequate physical protection measures, in accordance with the levels set forth in Annex III to this Agreement, with respect to nuclear material and equipment transferred and nuclear material produced through the use of nuclear material, material or equipment so transferred pursuant to this Agreement within their respective jurisdictions. These measures shall as a minimum provide protection comparable to the recommendations set forth in the IAEA document INFCIRC/225/Rev.3 concerning the physical protection of nuclear material, or in any revision of that document agreed to by the Parties.

ARTICLE XII
NUCLEAR SAFETY AND ENVIRONMENTAL PROTECTION

The Parties shall consult, with regard to activities under this Agreement, to identify safety and international environmental implications arising from such activities and shall cooperate in preventing nuclear accidents arising from nuclear facilities transferred pursuant to this Agreement and in protecting the international environment from radioactive, chemical or thermal contamination arising from such activities under this Agreement.

ARTICLE X III
DURATION OF APPLICATION

1. Nuclear material, material, equipment and special fissionable material shall remain subject to this Agreement until:

   (a) such items have been transferred beyond the jurisdiction of the receiving Party in accordance with Article VI of this Agreement;

   (b) in the cases of nuclear material and special fissionable material, a determination is made that it is no longer usable nor practicably recoverable for processing into a form in which it is usable for any nuclear activity relevant from the point of view of safeguards referred to in Article IX of this Agreement. Both Parties shall accept a determination made by the IAEA in accordance with the provisions for the termination of safeguards of the relevant safeguards agreement to which the IAEA is a party, or

(c) otherwise agreed upon in writing by the Parties.

2. Information transferred under this Agreement shall remain subject to this Agreement until otherwise agreed upon by the Parties.

ARTICLE XIV
CESSATION OF COOPERATION

Each Party shall have the right to cease further cooperation under this Agreement and to suspend or terminate this Agreement if, at any time following the entry into force of this Agreement, the other Party:

a) does not comply with the provisions of Article VI, VII, VIII, IX, X, or XI; or
b) terminates or materially violates a safeguards agreement with the IAEA.

ARTICLE XV
CONSULTATIONS

The Parties shall meet and consult with each other, at the request of either Party, to review the operation of this Agreement or to consider matters arising from its implementation.

ARTICLE XVI
SETTLEMENT OF DISPUTES

Any dispute between the Parties concerning the interpretation or application of this Agreement shall be settled amicably through consultation and negotiation.

ARTICLE XVII
AMENDMENT

This Agreement may be amended by mutual consent of the Parties through an Exchange of Notes between the Parties and such amendment shall come into force on the date as may be agreed upon by the Parties.

ARTICLE XVIII
ANNEXES

Annexes I, II and III shall form an integral part of this Agreement. They may be amended by mutual consent of the Parties through an Exchange of Notes between the Parties and such amendment shall enter into force on the date as may be agreed upon by the Parties.

ANNEX I
Part A: Equipment

(1) 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) 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 nuclear reactor as defined in paragraph (1) above and are capable of withstanding the operating pressure of the primary coolant.

(3) 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 capable of on-load operation or employing technically sophisticated positioning or alignment features to allow complex off-load fuelling operations such as those in which direct viewing of or access to the fuel is not normally available.

(4) Reactor control rods: Rods especially designed or prepared for the control of the reaction rate in a nuclear reactor as defined in paragraph (1) above.

(5) Reactor pressure tubes: Tubes which are especially designed or prepared to contain fuel elements and the primary coolant in a 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 per year, especially those designed or prepared for use in a reactor as defined in paragraph (1) above, and in which the relationship 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 nuclear reactor as defined in paragraph (1) above.

(8) Plants for the processing of irradiated fuel elements, and equipment especially designed or prepared therefore: Plants for the reprocessing of irradiated fuel elements includes the equipment and components which normally come in direct contact with and directly control the irradiated fuel and the major nuclear material and fission product processing streams.

(9) Plants for the fabrication of fuel elements: Plants for the fabrication of fuel elements include the equipment which normally comes into direct contact with, or directly processes, or controls, the production flow of nuclear material, or the equipment which seals the nuclear material within the cladding.

(10) Plants for the separation of isotopes of uranium and equipment, other than analytical instruments, especially designed or prepared therefore.

(11) Plants for the production of heavy water, deuterium and deuterium compounds and equipment especially designed or prepared therefore.

(12) Plants for the conversion of uranium and equipment especially designed or prepared therefore.

(13) Particle Accelerators for scientific research, industrial application, medical treatment, or radioisotope production.

(14) Other non reactor-related devices, such as those for industrial processes, healthcare, agriculture, and environment.

Part B: Material

(1) Deuterium and heavy water: Deuterium, heavy water (deuterium oxide) and any deuterium compound in which the ratio deuterium to hydrogen exceeds 1:5000 for use in a nuclear reactor, as defined in paragraph (1) of Part A to this Annex, in quantities exceeding 200kg 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/cm^3 for use in a nuclear reactor, as defined in paragraph (1) of Part A to this Annex, in quantities exceeding 30 metric tons in any period of 12 months.

(3) Non reactor material related to the Areas of Cooperation described in Article III of this Agreement.

ANNEX II

Article XX of the Statute of the International Atomic Energy Agency

As used in this Statute:

(1) The term "special fissionable material" means plutonium-239; uranium- 233; uranium enriched in the isotopes 235 or 233; any material containing one or more of the foregoing; and such other fissionable material as the Board of Governors shall from time to time determine; but the term "special fissionable material" does not include source material.

(2) The term "uranium enriched in the isotopes 235 or 233" means uranium containing the isotopes 235 or 233 or both in an amount such that the abundance ratio of the sum of these isotopes to the isotope 238 is greater than the ratio of the isotope 235 to the isotope 238 occurring in nature .

(3) The term "source material" means 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 material containing one or more of the foregoing in such concentration as the Board of Governors shall from time to time determine; and such other material as the Board of Governors shall from time to time determine.

ANNEX III

Levels of Physical Protection Measures

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

Category III

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

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

Category I

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

Use and storage within a highly protected area, i.e., a protected area as defined for Category II above, to which, in addition, access is restricted to persons whose trustworthiness has been determined, and which is under surveillance by guards who are in close communication with appropriate response forces. Specific measures taken in this context should have as their objective the detection and prevention of any assault, unauthorized access or unauthorized removal of material.

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

Table: Categorization of Nuclear Material

Material	Form	Category		
		I	II	III[c/]
1. Plutonium[a/]	Unirradiated[b/]	2 kg or more	Less than 2 kg but more than 500 g	500 g or less but more than 15 g
2. Uranium-235	Unirradiated[b/]			
	- uranium enriched to 20% ^{235}U or more	5 kg or more	Less than 5 kg but more than 1 kg	1 kg or less but more than 15 g
	- uranium enriched to 10% ^{235}U but less than 20%		10 kg or more	Less than 10 kg but more than 1 kg
	- uranium enriched above natural, but less than 10% ^{235}U			10 kg or more
3. Uranium-233	Unirradiated[b/]	2 kg or more	Less than 2 kg but more than 500 g	500 g or less but more than 15 g
4. Irradiated fuel			Depleted or natural uranium, thorium or low-enriched fuel (less than 10% fossil content)[d/e/]	

[a/] All plutonium except that with isotopic concentration exceeding 80% in plutonium-238.

[b/] Material not irradiated in a reactor or material irradiated in a reactor but with a radiation level equal to or less than 1 Gy/hr (100 rd/h) at one metre unshielded.

[c/] Quantities not falling in Category III and natural uranium, depleted uranium and thorium should be protected 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 and II before irradiation may be reduced one category level while the radiation level from the fuel exceeds 1 Gy/hr (100 rd/h) at one metre unshielded.

ARTICLE XIX
ENTRY INTO FORCE, DURATION AND TERMINATION

1. This Agreement shall enter into force on the date of the receipt of the last notification that informs each other through diplomatic channels by which the Parties inform each other that their internal requirements for the entry into force of this Agreement have been fulfilled.

2. This Agreement shall remain in force for a period of five (5) years, and shall be automatically extended for additional periods of five (5) years, unless either Party notifies the other Party in writing of its intention to terminate this Agreement at least six (6) months before the expiration date.

3. Notwithstanding the expiration or termination of this Agreement, the obligations contained in Article VI, VII, VIII, IX, X, XI and XIII of this Agreement shall remain in force until otherwise agreed upon by the Parties.

4. Termination of this Agreement shall not affect the ongoing programmes, activities, contracts or projects undertaken under this Agreement until their completion, unless the Parties agree otherwise.

IN WITNESS WHEREOF, the undersigned, have signed this Agreement.

DONE in duplicate at Jakarta on this 4th day of December 2006, in the Indonesian, Korean and English Languages, all texts being equally authentic. In case of any divergence of interpretation, the English text shall prevail.

FOR THE GOVERNMENT OF THE REPUBLIC OF INDONESIA	**FOR THE GOVERNMENT OF THE REPUBLIC OF KOREA**

CERTIFIED TRUE COPY
DEPARTMENT OF FOREIGN AFFAIRS
REPUBLIC OF INDONESIA