

No. 24878

**CANADA
and
PHILIPPINES**

**Agreement concerning the peaceful uses of nuclear material,
equipment, facilities and information transferred be-
tween Canada and the Republic of the Philippines (with
annexes). Signed at Manila on 19 June 1981**

Authentic texts: English and French.

Registered by Canada on 16 July 1987.

**CANADA
et
PHILIPPINES**

**Accord concernant l'utilisation à des fins pacifiques des
matières, équipements, installations et renseignements
nucléaires transférés entre le Canada et la République
des Philippines (avec annexes). Signé à Manille le
19 juin 1981**

Textes authentiques : anglais et français.

Enregistré par le Canada le 16 juillet 1987.

AGREEMENT¹ BETWEEN THE GOVERNMENT OF CANADA AND
THE GOVERNMENT OF THE REPUBLIC OF THE PHILIPPINES
CONCERNING THE PEACEFUL USES OF NUCLEAR MATE-
RIAL, EQUIPMENT, FACILITIES AND INFORMATION TRANS-
FERRED BETWEEN CANADA AND THE REPUBLIC OF THE
PHILIPPINES

The Government of Canada and the Government of the Republic of the Philippines,

Recognizing that Canada and the Republic of the Philippines have, under the Treaty on the Non-Proliferation of Nuclear Weapons,² undertaken not to manufacture or otherwise acquire nuclear weapons or other nuclear explosive devices and that both governments have concluded agreements with the International Atomic Energy Agency for the application of safeguards in their respective countries in connection with the Treaty on the Non-Proliferation of Nuclear Weapons;³

Underlining that the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons have undertaken to facilitate, and have the right to participate in, the fullest possible exchange of equipment, materials and scientific and technological information for the peaceful uses of nuclear energy and that Parties to the Treaty on the Non-Proliferation of Nuclear Weapons in a position to do so shall also cooperate in contributing alone or together with other states or international organizations to the further development of the applications of nuclear energy for peaceful purposes;

Recognizing that the Government of Canada and the Government of the Republic of the Philippines are pursuing research and development programs, including the design and construction of power-producing reactors, research and experimental reactors and other peaceful uses of atomic energy;

Recognizing further that the Government of Canada and the Government of the Republic of the Philippines envisage cooperation with each other in the peaceful uses of atomic energy;

Have agreed as follows:

Article I. (1) The cooperation contemplated by this Agreement relates to the peaceful uses of atomic energy and includes:

(a) The supply of information including that relating to:

- (i) Research and development;
- (ii) Health and safety;
- (iii) Equipment and facilities (including the supply of designs, drawings and specifications); and

¹ Came into force on 14 April 1983 by the exchange of the instruments of ratification, which took place at Ottawa, in accordance with article X (2).

² United Nations, *Treaty Series*, vol. 729, p. 161.

³ *Ibid.*, vol. 814, p. 255 and vol. 963, p. 203.

- (iv) Uses of equipment, facilities, materials, source material, special nuclear material and fuel;
- (b) The supply of equipment, facilities, materials, source material, special fissionable material and fuel;
- (c) Transfer of patent rights;
- (d) Access to and use of equipment and facilities;
- (e) Cooperation specific to the various aspects of the nuclear fuel cycle;
- (f) The rendering of technical assistance and services.

(2) The cooperation envisaged in this article may be accomplished through various means including reports, conferences and visits to facilities and shall be effected on terms and conditions to be agreed and in accordance with the laws, regulations and licensing requirements in force in Canada and in the Republic of the Philippines respectively.

(3) Each Party shall be responsible towards the other for ensuring that the provisions of this Agreement are accepted and complied with by all of its governmental enterprises, and by all persons under its jurisdiction.

(4) The Parties shall endeavour to apply their non-proliferation policies to each other on the same basis as to any other state with whom they have nuclear cooperation.

(5) A Party shall not use the provisions of the Nuclear Cooperation Agreement for the purpose of securing commercial advantage nor for the purpose of interfering with the commercial relations of the other Party.

Article II. (1) This Agreement shall apply to items referred to in Annex A to the present Agreement which the appropriate governmental authority of the supplying Party has specified prior to shipment is to be subject to this Agreement.

(2) Items which are listed in Annex B to the present Agreement shall be deemed to have been transferred between the Parties after the entry into force of this Agreement, and shall be subject to all the provisions of this Agreement.

Article III. (1) Equipment, material, nuclear material and facilities referred to in Annex A to the present Agreement shall be transferred beyond the jurisdiction of a Party only with the prior written concurrence of the appropriate governmental authority of the other Party. Information shall be transferred beyond the jurisdiction of the receiving Party only with the prior written concurrence of the appropriate governmental authority of the supplying Party. Nuclear material referred to in Annex A to the present Agreement shall be enriched beyond 20% in the isotope U-235, or reprocessed only as agreed in writing between the Parties.

(2) If a Party considers that it is unable to agree with respect to a matter referred to in paragraph 1 of this article, that Party shall provide the other Party with an immediate opportunity for full consultations regarding that issue.

Article IV. (1) Nuclear material referred to in Annex A to the present Agreement shall not be used for or diverted to nuclear weapons or other nuclear explosive devices.

(2) If for any reason or at any time the International Atomic Energy Agency is not administering safeguards in a Party in accordance with the Agreement

between that Party and the International Atomic Energy Agency for the Application of Safeguards in Connection with the Treaty on the Non-Proliferation of Nuclear Weapons, that Party undertakes to accept safeguards as set forth in an agreement to be concluded with the International Atomic Energy Agency in accordance with the Statute of the Agency¹ and the Agency's Safeguards System then in force, for the purpose of verifying that nuclear material within the jurisdiction of that Party is neither used for nor diverted to nuclear weapons or other nuclear explosive devices.

(3) For the fulfilment of the obligations under paragraph 2 of this article the following procedure shall apply:

(A) The Party referred to in paragraph 2 of this article shall enter into an agreement, satisfactory to the other Party, with the International Atomic Energy Agency for the application of the Agency's Safeguards System with respect

- (a) To all nuclear material within the jurisdiction of such a Party, or
- (b) To all items included in a list to be jointly prepared by the Parties; or

(B) The Parties shall jointly request the Agency to enter into an agreement for the application of the Agency's Safeguards System with respect to the items included in a list to be jointly prepared by the Parties.

(4) However, during any period when:

- (A) The International Atomic Energy Agency is not administering safeguards in a Party either in connection with the Treaty on the Non-Proliferation of Nuclear Weapons or pursuant to any safeguards agreement referred to above, and
- (B) There is not being administered in a Party a safeguards agreement which is satisfactory to both Parties,

the other Party shall have the right to administer in the Party in which such safeguards are no longer being administered, safeguards based on the procedures provided for in the Agency's Safeguards System, with respect to the items included in a list to be jointly prepared by the Parties, for the exclusive purpose of verifying that there is compliance with paragraph 1 of this article. The two Parties shall consult and assist each other in the application of such safeguards. Each Party shall bear all costs associated with the application of such safeguards within its jurisdiction.

(5) The Parties shall jointly prepare the list referred to in paragraph 3(A), (b), 3(B) and 4 of this article on the basis of the latest inventory to be made under the provisions of the administrative arrangement stipulated under article VI of the present Agreement.

Article V. The Parties agree to take such measures as are necessary to ensure the physical protection of nuclear material referred to in Annex A to the present Agreement which is within their respective jurisdictions, and agree as a minimum to apply the measures of physical protection set out in Annex C to the present Agreement. The Parties shall consult at the request of either Party concerning matters relating to physical security.

¹ United Nations, *Treaty Series*, vol. 276, p. 3, and vol. 471, p. 334.

Article VI. (1) The appropriate governmental authorities of both Parties shall consult annually, or at any other time at the request of either Party, to ensure the effective fulfilment of the obligations of the present Agreement. Either Party may invite the International Atomic Energy Agency to participate in such consultations.

(2) The appropriate governmental authorities of both Parties shall also establish an administrative arrangement to ensure the effective fulfilment of the obligations of the present Agreement.

Article VII. The present Agreement may be amended with the agreement of both Parties.

Article VIII. Any dispute arising out of the interpretation or application of the present Agreement which is not settled by negotiation or as may otherwise be agreed by the Parties concerned shall, on the request of either Party, be submitted to an arbitral tribunal which shall be composed of three arbitrators. Each Party shall designate one arbitrator and the two arbitrators so designated shall elect a third, who shall be the Chairman. If within thirty (30) days of the request for arbitration either Party has not designated an arbitrator, either Party to the dispute may request the President of the International Court of Justice to appoint an arbitrator. The same procedure shall apply if, within thirty (30) days of the designation or appointment of the second arbitrator, the third arbitrator has not been elected. A majority of the members of the arbitral tribunal shall constitute a quorum, and all decisions shall be made by majority vote of all the members of the arbitral tribunal. The arbitral procedure shall be fixed by the tribunal. The decisions of the tribunal, including all rulings concerning its constitution, procedure, jurisdiction and the division of the expenses of arbitration between the Parties shall be binding on both Parties and shall be implemented by them, in accordance with their respective constitutional procedures. The remuneration of the arbitrators shall be determined on the same basis as that for *ad hoc* judges of the International Court of Justice.

Article IX. For the purpose of this Agreement:

(a) "The Agency's Safeguards System" means the safeguards system set out in the International Atomic Energy Agency document INFCIRC/66 Rev.2 as well as any subsequent amendments thereto.

(b) "Appropriate governmental authority" means in the case of Canada, the Atomic Energy Control Board, and in the case of the Republic of the Philippines, the Philippine Atomic Energy Commission.

(c) "Equipment" means the items and major components thereof referred to in Part A of Annex B of the present Agreement.

(d) "Information" means technical data in all forms in which such data can be transferred, including but not limited to, technical drawings, photographic negatives and prints, recordings, design data and technical and operating manuals that can be used in the design, production, operation or testing of equipment, nuclear material or material, except data available to the public (for example, published in books or periodicals) which is transferred between the Parties. It shall include technical data derived from equipment transferred between the Parties.

(e) "Material" means the items referred to in Part B of Annex B of the present Agreement.

(f) “Nuclear Material” means any source or special fissionable material as defined in article XX of the Statute of the International Atomic Energy Agency. The term source material shall not be interpreted as applying to ore or ore residue. Any determination by the Board of Governors of the IAEA under article XX of the Statute after the entry into force of this Agreement which adds to the materials considered to be source material or special fissionable material shall have effect under this Agreement only when the Parties to this Agreement have notified each other in writing that they accept such determination.

(g) “Party” means in the case of Canada, the Government of Canada, and in the case of the Republic of the Philippines, the Government of the Republic of the Philippines. “Supplying Party” means the Government from whose jurisdiction the item in question is being transferred and “Recipient Party” means the Government in whose jurisdiction the item in question has been received. “Transferred between the Parties” means transferred between the jurisdictions of the Parties whether between the governments, their governmental enterprises or other persons under their respective jurisdictions.

Article X. (1) The present Agreement shall be ratified and the exchange of the instruments of ratification shall be held at Ottawa as soon as possible.

(2) The present Agreement shall enter into force upon the date of the exchange of the instruments of ratification.

(3) The present Agreement shall remain in force so long as any item referred to in Annex A to the present Agreement is in existence or it is otherwise agreed between the Parties.

(4) In all cases the provisions of articles II to X of the present Agreement shall remain in force so long as any nuclear material, equipment, material or facility referred to in Annex A to the present Agreement is in existence or it is otherwise agreed between the Parties.

[For the testimonium and signatures, see p. 168 of this volume.]

IN WITNESS WHEREOF, [the undersigned, duly] authorized thereto by their [respective Governments, have] signed this Agreement.

DONE in two copies at Manila this 19th day of June 1981 in the English and French languages, each version being equally authentic.

EN FOI DE QUOI les soussignés, dûment autorisés à cet effet par leurs Gouvernements respectifs, ont signé l'Accord.

FAIT en deux exemplaires à [Manille] ce [19^e] jour de [juin 1981] en français et en anglais, chaque version faisant également foi.

[Signed — Signé]

MARK MACGUIGAN

For the Government of Canada
Pour le Gouvernement du Canada

CARLOS P. ROMULO

[Signed — Signé]

For the Government of the Republic of the Philippines
Pour le Gouvernement de la République des Philippines

ANNEX A

PART A

(i) Information, equipment, nuclear material and material transferred between the Parties;

(ii) Equipment and facilities which the recipient Party, or the supplying Party after consultations with the recipient Party, has designated as being designed, constructed or operated on the basis of or by the use of the information referred to above, or information derived from equipment referred to above;

(iii) Material and nuclear material that is produced, processed, or used by or with the use of any equipment or facility referred to in (i) or (ii) above;

(iv) Nuclear material that is produced, processed, or used by or with the use of any nuclear material or material which is referred to above;

(v) All subsequent generations of nuclear material produced on the basis of or by the use of nuclear material referred to in paragraphs (i), (iii) and (iv) above.

PART B

Without restricting the generality of Part A above in the case of significant transfers of information or equipment related to the enrichment or reprocessing of nuclear material or the production of heavy water, and upon notification of such significant transfers by the supplying Party, for a period of twenty years from the first operation of such equipment or of equipment or facilities using such information, that equipment in any facility whose design, construction or operating processes are of the same or similar type as the facility designed, constructed, fabricated or operated on the basis of or by the use of such information or equipment shall be deemed to be equipment referred to in paragraph (iii) of Part A above.

ANNEX B

PART A

(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.

A "nuclear reactor" basically includes the items within or attached directly to the reactor vessel, the equipment which controls the level of power in the core, and the components which normally contain or come in direct contact with or control the primary coolant of the reactor core.

It is not intended to exclude reactors which could reasonably be capable of modification to produce significantly more than 100 grams of plutonium per year. Reactors designed for sustained operation at significant power levels, regardless of their capacity for plutonium production, are not considered as "zero energy reactors".

(2) Reactor pressure vessels: metal vessels, as complete units or as major shop-fabricated parts therefor, 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.

A top plate for a reactor pressure vessel is a major shop-fabricated part of a pressure vessel.

(3) Reactor internals (e.g. support columns and plates for the core and other vessel internals, control rod guide tubes, thermal shields, baffles, core grid plates, diffuser plates, etc.).

(4) 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.

(5) 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.

This item includes, in addition to the neutron absorbing part, the support or suspension structures therefor if supplied separately.

(6) 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.

(7) Zirconium tubes: zirconium metal and alloys in the form of tubes or assemblies of tubes, and in quantities exceeding 500 kg per year especially 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.

(8) Plants for the reprocessing of irradiated fuel elements, and equipment especially designed or prepared therefor.

A "plant 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. In the present state of technology only two items of equipment are considered to fall within the meaning of the phrase "and equipment especially designed or prepared therefor". These items are:

(a) Irradiated fuel element chopping machines: remotely operated equipment especially designed or prepared for use in a reprocessing plant as identified above and intended to cut, chop or shear irradiated nuclear fuel assemblies, bundles or rods; and

(b) Critically safe tanks (e.g. small diameter, annular or slab tanks) especially designed or prepared for use in a reprocessing plant as identified above, intended for dissolution of irradiated nuclear fuel and which are capable of withstanding hot, highly corrosive liquid, and which can be remotely loaded and maintained.

(9) Plants for the fabrication of fuel elements: A "plant for the fabrication of fuel elements" includes the equipment:

(a) Which normally comes in direct contact with or directly processes, or controls, the production flow of nuclear material; or

(b) Which seals the nuclear material within the cladding.

The whole set of items for the foregoing operations, as well as individual items intended for any of the foregoing operations and for other fuel fabrication operations, such as checking the integrity of the cladding or the seal, and the finish treatment to the sealed fuel.

(10) Equipment, other than analytical instruments, especially designed or prepared for the separation of isotopes of uranium: "Equipment, other than analytical instruments, especially designed or prepared for the separation of isotopes of uranium" includes each of the major items of equipment especially designed or prepared for the separation process. Such items include:

— Gaseous diffusion barrier

— Gaseous diffusion housings

- Gas centrifuge assemblies, corrosion resistant to UF₆
- Large UF₆ corrosion resistant axial or centrifugal compressors
- Special compressor seals for such compressors.

(11) Plants for the production of heavy water: A “plant for the production of heavy water” includes the plant and equipment specially designed for the enrichment of deuterium or its compounds, as well as any significant fraction of the items essential to the operation of the plant.

PART B. NON-NUCLEAR MATERIALS FOR REACTORS

(1) Deuterium and deuterium compounds: Deuterium and any deuterium compound in which the ratio of deuterium to hydrogen exceeds 1:5,000 for use in a nuclear reactor, as defined in paragraph 1 of Part A of this Annex 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 1.50 grams per cubic centimetre in quantities exceeding 30 metric tons in any period of 12 months.

ANNEX C

AGREED LEVELS OF PHYSICAL PROTECTION

The agreed levels of physical protection to be ensured by the appropriate governmental authorities in the use, storage and transportation of the materials of the attached table shall as a minimum include protection characteristics as follows:

Category III

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

Transportation under special precautions including prior arrangement between sender, recipient and carrier, and prior agreement between States 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 arrangement between sender, recipient and carrier, and prior agreement between States in case of international transport specifying time, place and procedures for transferring transport responsibility.

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

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 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 of escorts and under conditions which assure close communication with appropriate response forces.

TABLE: CATEGORIZATION OF NUCLEAR MATERIAL

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

^a As identified in the Statute of the IAEA.

^b Material not irradiated in a reactor or material irradiated in a reactor but with a radiation level equal to or less than 100 rads/hour at one meter unshielded.

^c Less than a radiologically significant quantity should be exempted.

^d Natural uranium, depleted uranium and thorium and quantities of uranium enriched to less than 10% not falling in Category III should be protected in accordance with prudent management practice.

^e 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 when the radiation level from the fuel exceeds 100 rads/hour at one meter unshielded.