

No. 17689

CANADA
and
REPUBLIC OF KOREA

Agreement for co-operation in the development and application of atomic energy for peaceful purposes (with appendices and exchange of notes). Signed at Seoul on 26 January 1976

Authentic texts of the Agreement and appendices: English, French and Korean.

Authentic texts of the exchange of notes: English and French.

Registered by Canada on 11 April 1979.

CANADA
et
RÉPUBLIQUE DE CORÉE

Accord de coopération concernant le développement et l'utilisation de l'énergie nucléaire à des fins pacifiques (avec annexes et échange de notes). Signé à Séoul le 26 janvier 1976

Textes authentiques de l'Accord et des annexes : anglais, français et coréen.

Textes authentiques de l'échange de notes : anglais et français.

Enregistré par le Canada le 11 avril 1979.

AGREEMENT¹ BETWEEN THE GOVERNMENT OF CANADA AND
THE GOVERNMENT OF THE REPUBLIC OF KOREA FOR CO-
OPERATION IN THE DEVELOPMENT AND APPLICATION OF
ATOMIC ENERGY FOR PEACEFUL PURPOSES

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

Conscious of the many benefits, including the increase of energy supplies, the raising of agricultural and industrial production, and the wider availability of knowledge and means to combat disease, which the application of atomic energy to peaceful purposes is providing,

Desiring to accelerate and enlarge the contribution which the development of atomic energy can make to the welfare and prosperity of their peoples,

Recognizing the advantages to them both of effective co-operation in the development and application of atomic energy for peaceful purposes,

Recognizing that the Republic of Korea and Canada are both non-nuclear-weapon States Parties to the Treaty on the Non-Proliferation of Nuclear Weapons,² and, as such have undertaken not to receive the transfer of or control over nuclear weapons or other nuclear explosive devices directly, or indirectly, not to manufacture or otherwise acquire nuclear weapons or other nuclear explosive devices, and not to seek or receive any assistance in the manufacture of nuclear weapons or other nuclear explosive devices, and to accept International Atomic Energy Agency safeguards on all source and special fissionable material in all peaceful nuclear activities within their territories, under their jurisdiction or carried out under their control anywhere, for the exclusive purpose of verifying that such material is not diverted to nuclear weapons or other nuclear explosive devices,

Intending, therefore, to co-operate with one another to these ends,

Have agreed as follows:

Article I. 1. The co-operation contemplated by this Agreement relates solely to the development and application of atomic energy for peaceful purposes and may include:

- (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
 - (iv) Uses of equipment, facilities, material and nuclear material;
- (b) The supply of material, nuclear material, equipment and facilities;
- (c) Licensing arrangements and the transfer of patent rights;
- (d) Access to and use of equipment and facilities;
- (e) The rendering of technical assistance and services;

¹ Came into force on 26 January 1976 by signature, in accordance with article IX (1).

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

- (f) Visits by nuclear scientists from either Party to the other; and
- (g) Technical training.

2. The development, manufacture, acquisition or detonation of nuclear weapons or other nuclear explosive devices shall not be regarded as a use, development or application of atomic energy for peaceful purposes.

3. Material, nuclear material, equipment, facilities and information transferred between Canada and the Republic of Korea after the entry into force of this Agreement shall be deemed to be supplied pursuant to this Agreement.

Article II. 1. The two Parties shall, to such extent as is practicable, assist each other on matters within the scope of this Agreement. They shall encourage and facilitate cooperation between their governmental enterprises and persons under this jurisdiction, on matters within the scope of this Agreement.

2. Subject to the terms of this Agreement, governmental enterprises and persons under the jurisdiction of either Party may, with the prior written approval of their Government:

- (i) Supply to or receive from governmental enterprises or authorized persons under the jurisdiction of the other Party, information, within the scope of this Agreement, on commercial or other terms as may be agreed by the enterprises or persons concerned; and
- (ii) Supply to or receive from governmental enterprises or authorized persons under the jurisdiction of the other Party, material, nuclear material, equipment and facilities, within the scope of this Agreement, on commercial or other terms as may be agreed by the enterprises or persons concerned.

3. Subject to the terms of this Agreement, and with the prior written approval of both Parties, governmental enterprises and persons under the jurisdiction of either Party may provide governmental enterprises or persons under the jurisdiction of the other Party with technical training in the application of atomic energy for peaceful purposes, on commercial or other terms as may be agreed by the enterprises or persons concerned.

Article III. 1. The co-operation contemplated by this Agreement shall be effected on terms and conditions to be agreed between the two Parties, and shall be in accordance with the laws, regulations, licensing requirements and policies in force from time to time in Canada and in the Republic of Korea.

2. Subject to paragraph 3 of this article,

- (a) Equipment, material, nuclear material and facilities referred to in paragraph 1 of article V shall not be transferred beyond the jurisdiction of the Party within whose territory such an item is located without the prior consent of the other Party;
- (b) Information obtained pursuant to this Agreement shall not be transferred beyond the jurisdiction of the receiving Party without the prior written consent of the other Party; and
- (c) Nuclear material referred to in paragraph 1 of article V which is within the jurisdiction of either Party shall not be reprocessed or enriched without the prior written agreement of both Parties.

3. The controls established by paragraph 2 of this article may be exercised only if both Parties have agreed in writing, prior to the relevant transfer, that that transfer

shall give rise to the controls and rights provided for in that paragraph. The provisions of this Article shall not be used for the purpose of securing commercial advantage.

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

Article IV. The receiving Party shall take all measures necessary, commensurate with the assessed threat prevailing from time to time, to ensure the physical security of nuclear material referred to in paragraph 1 of article V of this Agreement, and shall in all cases be guided by standards and recommendations established by the International Atomic Energy Agency regarding the protection of nuclear material.

Article V. 1. The two Parties declare and affirm that:

- (i) Equipment, material, nuclear material and facilities supplied pursuant to this Agreement;
- (ii) Equipment, material, nuclear material and facilities used, produced, developed, processed, reprocessed, enriched, fabricated or converted from, by, in or with equipment, material, nuclear material facilities or information supplied or obtained pursuant to this Agreement;
- (iii) Equipment and facilities which are located within the jurisdiction of a Party and which the other Party considers are making use of principles contained in information supplied or obtained from the other Party pursuant to this Agreement;
- (iv) Material and nuclear material used, produced, processed, reprocessed, enriched, fabricated or converted from, by, in or with any of the above-mentioned equipment or facilities; and
- (v) All subsequent generations of material and nuclear material used, produced, processed, reprocessed, enriched, fabricated or converted from, by, in, or with the use of any of the above-mentioned material or nuclear material shall be used for peaceful purposes only and, in particular, shall not be used for the development, manufacture, or acquisition or detonation of nuclear weapons or other nuclear explosive devices; to verify compliance with this undertaking, equipment, material, nuclear material and facilities referred to in this paragraph shall be subject to International Atomic Energy Agency safeguards in connection with the Treaty on the Non-Proliferation of Nuclear Weapons or to the International Atomic Energy Agency's safeguards systems; in the latter case, no substitution may be made for equipment, material, nuclear material or a facility which is required to be subject to safeguards pursuant to this paragraph without the prior written consent of the supplying Party; furthermore, regardless of which of the two safeguards systems is applied, the receiving Party shall inform the Agency of any thefts or other abnormal losses of equipment, material, nuclear material, facilities or information referred to in this paragraph.

2. The two Parties agree to enter into agreements, unilaterally or bilaterally, with the International Atomic Energy Agency for the application of safeguards required by paragraph 1 of this article and to co-operate fully with the Agency and with each other in the application of such safeguards. Furthermore, the Parties agree jointly to request the International Atomic Energy Agency to apply any such agreements between the International Atomic Energy Agency and a Party in accordance with the terms of this Agreement, and to provide both Parties with such reports and

other documentation regarding items referred to in this Agreement, as either Party may consider appropriate.

3. In order to facilitate the application of safeguards required by this article, the Parties shall notify the International Atomic Energy Agency and each other of the shipment and receipt of equipment, material, nuclear material, facilities and information transferred between Canada and the Republic of Korea pursuant to this Agreement. The receiving Party shall inform, and the supplying Party may inform, the International Atomic Energy Agency and the other Party of any equipment, material, nuclear material or facility which is produced or developed from, by, in or with the use of information supplied or obtained pursuant to this Agreement or which is required to be subject to safeguards under subparagraph (iii) of paragraph 1 of this article.

4. If, for any reason or at any time, the International Atomic Energy Agency is not administering the safeguards required by paragraph 1 of this article in [the jurisdiction of] a Party, the other Party shall be entitled immediately to apply such safeguards and for this purpose the other Party shall be entitled to and shall enjoy all the rights which would be conferred on the International Atomic Energy Agency under the International Atomic Energy Agency's safeguards system.

5. If any nuclear material referred to in paragraph 1 of this article is found to be furthering a non-peaceful purpose as set out in paragraph 1 of this article, the supplying Party shall have the right to call upon the other Party to take corrective steps, and, if such steps are not taken within a reasonable time, the supplying Party shall have the right:

- (a) To require the cessation of use and the immediate return to the supplying Party of any or all:
 - (i) Equipment, material, nuclear material, facilities and information supplied or obtained pursuant to this Agreement;
 - (ii) Material and nuclear material used, produced, processed, reprocessed, enriched, fabricated or converted from, by, in or with any of the foregoing; and
 - (iii) Subsequent generations of material and nuclear material used, produced, processed, reprocessed, enriched, fabricated or converted from, by, in or with the use of any of the above-mentioned material or nuclear material which are under the control or within the jurisdiction of the other Party;
- (b) To notify the International Atomic Energy Agency of the action it has taken; and
- (c) To disclose publicly its action under subparagraphs (a) and (b) of this paragraph.

Article VI. Notwithstanding article V, if both Parties agree, safeguards may be terminated with respect to material or nuclear material which is to be used in non-nuclear activities.

Article VII. The Parties shall consult annually or at any other time at the request of either Party to ensure the effective implementation of this Agreement. To this end, each Party shall, *inter alia*, provide the other Party with such reports and access to such other data as the other Party may consider appropriate in order to satisfy the other Party that items referred to in this Agreement are being used and disposed of in accordance with the provisions of this Agreement.

Article VIII. For the purpose of this Agreement:

(a) "Equipment" means any item listed in appendix A to this Agreement.

(b) "Facility" means any plant, building or structure using, incorporating or containing equipment or material as defined in paragraphs (a) and (c) of this article, respectively.

(c) "Material" means any item listed in appendix B to this Agreement.

(d) "Nuclear material" means any source material or any special fissionable material as these terms are defined in article XX of the Statute of the International Atomic Energy Agency¹ which is attached as appendix C to this Agreement. Any determination by the Board of Governors of the International Atomic Energy Agency under article XX of the Agency's Statute which amends the list of materials considered to be "source material" or "special fissionable material" shall only have effect under this Agreement when both Parties to this Agreement have informed each other in writing that they accept that amendment.

(e) "Government enterprise" means an enterprise under the jurisdiction of a Party which that Party has informed the other Party in writing shall be considered a governmental enterprise.

(f) "Persons" means individuals, firms, corporations, companies, partnerships, associations and other entities private or governmental and their respective agents and local representatives; but the terms "persons" shall not include "governmental enterprises" as defined in paragraph (e) of this article.

(g) "Information" means technical data in physical form 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, facilities, nuclear material or material except data available to the public, i.e., in published books and periodicals, and which the supplying Party has informed the receiving Party is to be regarded as information for the purposes of this Agreement.

(h) "Technical training" means the training in the application of atomic energy to peaceful purposes rendered to the other Party's scientists, engineers and technicians under this Agreement.

(i) "International Atomic Energy Agency safeguards in connection with the Treaty on the Non-Proliferation of Nuclear Weapons" means the safeguards system described in the International Atomic Energy Agency's document INFCIRC/153 or subsequent revisions thereto.

(j) "The International Atomic Energy Agency's safeguards system" means the safeguards system described in the International Atomic Energy Agency's document INFCIRC/66/Rev.2 and all subsequent revisions thereto.

Article IX. 1. The present Agreement shall enter into force upon signature by both Parties.

2. The present Agreement shall remain in force for the operating life of any facility supplied or obtained pursuant to this Agreement or for a period of ten years, whichever is longer. If neither Party has notified the other at least six months prior to the expiry of such period, the Agreement shall continue in force thereafter until six months after notice of termination has been given by either Party to the other; pro-

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

vided, however, that notwithstanding termination of this Agreement whether in accordance with the provisions of this article or for any other reason the provisions of article III, article IV, article V, and article VII shall remain in force until it has been agreed between the two Parties that items referred to in these articles, whether such items are in existence at the time of termination or come into existence subsequently, can no longer be used in such a way as to further any non-peaceful purpose or it is otherwise agreed.

IN WITNESS WHEREOF, the undersigned, being duly authorized by their respective Governments, have signed the present Agreement.

DONE, in duplicate, at Seoul on January 26, 1976 in the English, French and Korean languages, each language version being equally authentic.

EN FOI DE QUOI les soussignés, dûment autorisés à cet effet par leurs gouvernements respectifs, ont signé le présent Accord.

FAIT en deux exemplaires à Séoul, en langues française, anglaise et coréenne, chaque version faisant également foi, ce 26 janvier 1976.

J. A. STILES

For the Government of Canada
Pour le Gouvernement du Canada

TONG-JIN PARK

For the Government of the Republic of Korea
Pour le Gouvernement de la République de Corée

(b) Criticality safety tanks (e.g. small diameter, annular or slab tanks) especially designed or prepared for use in a reprocessing plant as identified above, and 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.

Other items within the functionally defined boundary.

10. *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 solid fuel.

11. *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.

12. *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.

13. Major components of Items 1 to 12 above.

APPENDIX B

NON-NUCLEAR MATERIALS FOR REACTORS

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 nuclear reactor, as defined in paragraph 1 of appendix A, 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.

APPENDIX C

ARTICLE XX

Definitions

As used in this Statute:

1. The terms “special fissionable material” means plutonium-239; uranium-233; uranium enriched in the isotopes 235 or 233; and 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.

APPENDIX 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, 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. *Primary coolant pumps.* Pumps especially designed or prepared for circulating heavy water as primary coolant for nuclear reactors as defined in paragraph 1 above.

9. *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

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.

EXCHANGE OF NOTES

I

Seoul, 26 January 1976

Excellency,

I have the honour to refer to paragraph 2 of article III of the Agreement between the Government of Canada and the Government of the Republic of Korea for co-operation in the development and application of atomic energy for peaceful purposes. The Government of Canada would be grateful for confirmation that the Government of the Republic of Korea agrees that the provisions of paragraph 2 of article III of the Agreement between the Government of Canada and the Government of the Republic of Korea for co-operation in the development and application of atomic energy for peaceful purposes shall apply to all equipment, material, nuclear material, facilities and information supplied from Canada to the Republic of Korea as well as to all items derived therefrom which are referred to in paragraph 2 of article III of the Agreement. I have the further honour to inform Your Excellency that, without prejudice to the general requirements for written consent respecting the activities referred to in paragraph 2 of article III of the Agreement, the Government of Canada would not be prepared, at this time, to agree to the reprocessing of nuclear material referred to in paragraph 1 of article V of the Agreement.

Accept, Excellency, the assurances of my highest consideration.

J. A. STILES
Ambassador

His Excellency Park Tong-jin
Minister of Foreign Affairs
Republic of Korea, Seoul

II

Seoul, January 26, 1976

Excellency,

I have the honour to refer to Your Excellency's Note of January 26, 1976, concerning paragraph 2 of article III of the Agreement between the Government of the Republic of Korea and the Government of Canada for co-operation in the development and application of atomic energy for peaceful purposes. The Government of the Republic of Korea agrees that the provisions of paragraph 2 of article III of the Agreement between the Government of the Republic of Korea and the Government

of Canada for cooperation in the development and application of atomic energy for peaceful purposes shall apply to all equipment, material, nuclear material, facilities and information supplied from Canada to the Republic of Korea as well as to all items derived therefrom which are referred to in paragraph 2 of article III of the Agreement. In addition, the Government of the Republic of Korea takes note of the information concerning reprocessing set out in Your Excellency's said Note.

Accept, Excellency, the assurances of my highest consideration.

TONG-JIN PARK
Minister of Foreign Affairs

His Excellency John A. Stiles
Ambassador of Canada to the Republic of Korea
