# AGREEMENT BETWEEN AUSTRALIA AND THE ARGENTINE REPUBLIC CONCERNING COOPERATION IN THE PEACEFUL USES OF NUCLEAR ENERGY

The Government of Australia and the Government of the Argentine Republic, hereinafter referred to as "the Parties",

REAFFIRMING their commitment to ensuring that the international development and use of nuclear energy for peaceful purposes are carried out under arrangements which will further the objective of the non-proliferation of nuclear weapons,

MINDFUL that both Australia and Argentina are non-nuclear-weapon States which are Parties to the Treaty on the Non-Proliferation of Nuclear Weapons, done at London, Moscow and Washington on 1 July 1968 (hereinafter referred to as "the Treaty"),

CONSCIOUS that both Australia and Argentina are Parties to treaties which establish nuclear weapons free zones, Argentina to the Treaty for the Prohibition of Nuclear Weapons in Latin America and the Caribbean (Treaty of Tlatelolco) of 1967 and Australia to the South Pacific Nuclear Free Zone Treaty (Treaty of Rarotonga) of 1985,

RECOGNIZING that Australia and Argentina have under the Treaty undertaken not to manufacture or otherwise acquire nuclear weapons or other nuclear explosive devices and that they have concluded Agreements with the International Atomic Energy Agency (hereinafter referred to as "the Agency") for the application of safeguards in their countries in connection with the Treaty,

AFFIRMING their support for the objectives and provisions of the Treaty and their desire to promote universal adherence to the Treaty,

CONFIRMING the desire of the Parties to cooperate in the development and application of nuclear energy for peaceful purposes,

RECALLING that Australia and Argentina are parties to the Convention on the Physical Protection of Nuclear Material (1980), the Convention on Early Notification of a Nuclear Accident (1986), the Convention on Assistance in the Case of a Nuclear Accident or Radiological Emergency (1986), the Comprehensive Nuclear Test-Ban Treaty (1996), and the Convention on Nuclear Safety (1994),

BEARING IN MIND that Australia and Argentina have signed the Joint Convention on the Safety of Spent Fuel Management and the Safety of Radioactive Waste Management (1997), and

DESIRING to establish conditions consistent with their commitment to nonproliferation under which nuclear material, material, equipment and technology can be transferred between Australia and Argentina for peaceful non-explosive purposes,

HAVE AGREED as follows:

#### ARTICLE 1

1. The Parties shall cooperate in the peaceful uses of nuclear energy, in accordance with the provisions of this Agreement.

2. This cooperation shall be facilitated as may be necessary by specific agreements or arrangements, which shall be subject to this Agreement and to such additional terms and conditions as may be determined in writing by the Parties.

3. The Parties may designate governmental authorities and natural or legal persons to undertake such cooperation. Such governmental authorities may include:

a) on the Australian side, the Australian Nuclear Science and Technology Organisation (ANSTO), the Australian Safeguards and Non-Proliferation Office (ASNO) and the Australian Radiation Protection and Nuclear Safety Agency (ARPANSA);

b) on the Argentine side, the National Atomic Energy Commission (CNEA) and the Argentine Nuclear Regulatory Authority (ARN); and

c) any other governmental authorities notified by either Party at any time.

#### ARTICLE 2

The Parties agree to facilitate cooperation concerning peaceful uses of nuclear energy. Such cooperation may occur in the following areas:

a) basic and applied research related to the peaceful uses of nuclear energy;

b) research, development, design, construction and operation of nuclear research reactors and other installations of the nuclear fuel cycle; and technology thereof; c) technology on the nuclear fuel cycle, including exploration and exploitation of nuclear ores, the production of nuclear fuel, and the management of irradiated fuel and radioactive wastes;

d) industrial production of components, equipment and materials to be employed in nuclear reactors and their nuclear fuel cycle;

e) nuclear medicine, production of radioisotopes and their application;

f) radiological protection, nuclear safety and regulation, the assessment of the radiological impact of nuclear energy and its nuclear fuel cycle;

g) technology for nuclear safeguards and physical protection;

h) rendering of services in the above-mentioned areas; and

i) other technological aspects of the peaceful uses of nuclear energy which the Parties may deem as a matter of mutual interest.

#### ARTICLE 3

The cooperation agreed upon under Article 2 may be carried out in the following ways:

a) mutual assistance related to education and training of scientific and technical personnel;

b) exchange of experts, scientists, technicians and lecturers;

c) reciprocal consultations on scientific and technological problems;

d) setting up of joint working groups to carry out specific studies and projects on scientific research and technological development;

e) reciprocal deliveries of nuclear material and material, including but not limited to irradiated fuel elements, zircaloy, uranium in any form, equipment and services related to the areas mentioned in Article 2, subject to Articles 11 and 12 of this Agreement;

f) exchange of information and documentation related to the above mentioned areas; and

g) other forms of cooperation determined in writing between the Parties, including those within the framework of the mechanisms under Article 1.

# ARTICLE 4

For the purposes of this Agreement:

a) "equipment" means the items and major components thereof specified in Part A of Annex A to this Agreement or any other item as may be agreed by the Parties in accordance with Article 18;

b) "material" means <u>any of</u> the non-nuclear materials for reactors specified in Part B of Annex A to this Agreement;

c) "military purpose" means direct military applications of nuclear energy or nuclear materials, such as, but not limited to, nuclear weapons, military nuclear rocket engines and military nuclear reactors, but does not include indirect uses such as power for a military base drawn from a civil power network, or production of radioisotopes which might later be used for diagnosis in a military hospital;

d) "nuclear material" means any "source material" or "special fissionable material" as those terms are defined in Article XX of the Statute of the Agency. Any determination by the Board of Governors of the 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 such amendment;

e) "peaceful purposes" means all uses other than use for a military purpose; and

f) "technology" means technical data in physical form including technical drawings, photographic negatives and prints, recordings, design data and technical and operating manuals designated by the supplying Party after consultations with the recipient Party prior to the transfer, important for the design, construction, operation and maintenance of nuclear facilities or major critical components thereof as may be determined between the Parties, but excluding data available to the public, for example in published books and periodicals, or that which has been made available internationally without restrictions upon its further dissemination.

# 1. This Agreement shall apply to:

a) nuclear material, material, equipment and technology transferred between Australia and Argentina for peaceful purposes whether directly or through a third country from the time such items enter the jurisdiction of the recipient party;

b) all forms of nuclear material prepared by chemical or physical processes or isotopic separation from nuclear material subject to the Agreement; if nuclear material subject to the Agreement is mixed with other nuclear material, the quantity of nuclear material so prepared shall only be regarded as falling within the scope of this Agreement in the same proportion as the quantity of nuclear material used in its preparation, and which is subject to this Agreement, bears to the total quantity of nuclear material so used;

c) all generations of nuclear material produced by neutron irradiation of nuclear material subject to the Agreement; if nuclear material subject to the Agreement is irradiated together with other nuclear material, the quantity of nuclear material so produced shall only be regarded as falling within the scope of this Agreement in the same proportion as the quantity of nuclear material which is subject to this Agreement and which, used in its production, contributes to this production;

d) equipment which the recipient Party, or the supplier Party after consultation with the recipient Party, has designated as being designed, constructed or operated on the basis of or by the use of the technology referred to in clause 1 (a) of this Article, or by the use of technology derived from equipment referred to in clause 1 (a);

e) equipment, the design, construction or operating processes of which are essentially of the same type as equipment referred to in clause 1 (a) of this Article, which is constructed within 20 years of the first operation of the equipment referred to in clause 1 (a) and which the recipient Party, or the supplier Party after consultation with the recipient Party, so designates; and

f) equipment, the first operation of which commences within 20 years from the date of the first operation of equipment which has been designed, constructed or operated on the basis of or by the use of the technology referred to in clause 1 (a) of this Article, and which the recipient Party, or the supplier Party after consultation with the recipient Party, has designated as being equipment whose design, construction or operating processes are essentially of the same type as equipment which has been designed, constructed or operated on the basis of or by the use of the technology referred to in clause 1 (a).

2. Nuclear material, material, equipment and technology referred to in clause 1 of this Article shall be transferred pursuant to this Agreement only to a natural or legal

person identified by the recipient Party to the supplier Party as duly authorized to receive it.

3. Nuclear material, material, equipment and technology specified in clause 1 (a) of this Article shall be subject to this Agreement only if the supplier Party has notified the recipient Party in writing prior to, or as soon as possible after, the transfer.

# ARTICLE 6

1. Nuclear material referred to in Article 5 shall remain subject to the provisions of this Agreement until:

a) it is determined that it is no longer useable; or

b) it is practicably irrecoverable for processing into a form in which it is useable for any nuclear activity relevant from the point of view of safeguards referred to in Articles 8 and 9; or

c) it has been transferred beyond the territorial jurisdiction of Australia or beyond the territorial jurisdiction of Argentina in accordance with clause 1 of Article 11 of this Agreement; or

d) the Parties otherwise agree.

2. For the purpose of determining when nuclear material subject to this Agreement is no longer useable or is practicably irrecoverable for processing into a form in which it is useable for any nuclear activity relevant from the point of view of the safeguards referred to in Articles 8 and 9 both Parties shall accept a determination made by the Agency. For the purpose of this Agreement such determination shall be made by the Agency in accordance with the provisions for the termination of safeguards of the relevant safeguards agreement between the Party concerned and the Agency.

3. Material and equipment referred to in Article 5 shall remain subject to the provisions of this Agreement until:

a) it has been transferred beyond the jurisdiction of the recipient Party in accordance with the provisions of Article 11; or

b) otherwise jointly determined by the Parties.

4. Technology referred to in Article 5 shall remain subject to the provisions of this Agreement for a period jointly determined by the Parties.

1. Nuclear material, material, equipment or technology subject to this Agreement shall not be used for, or diverted to, the manufacture of nuclear weapons or other nuclear explosive devices, research on or development of nuclear weapons or other nuclear explosive devices, or be used for any military purpose.

2. Nuclear material, material, equipment or technology subject to this Agreement shall not be used for military nuclear propulsion or depleted uranium munitions.

# ARTICLE 8

1. Where Australia is the recipient, compliance with Article 7 of this Agreement shall be ensured by safeguards applied by the Agency in accordance with the Safeguards Agreement concluded on 10 July 1974 between Australia and the Agency in connection with the Treaty.

2. Where Argentina is the recipient, compliance with Article 7 of this Agreement shall be ensured by safeguards applied by the Agency in accordance with the Agreement between Argentina, Brazil, the Brazilian Argentine Agency for Accounting and Control of Nuclear Materials (ABACC), and the Agency for the Application of Safeguards, known as the Quadripartite Agreement, which entered into force on 18 March 1994, in connection with the Treaty.

# ARTICLE 9

1. The Parties shall cooperate in support of the Treaty on the Non-Proliferation of Nuclear Weapons and of the International Atomic Energy Agency and its safeguards activities.

2. If, notwithstanding the efforts of both Parties to support the Treaty and the Agency, the Agency, for whatever reason at any time, is not administering safeguards referred to in Article 8 of this Agreement in the territory of one or other Party, in which nuclear material, material, equipment or technology subject to this Agreement is present, the Parties shall immediately consult on other safeguards arrangements to replace those referred to in Article 8 of this Agreement.

3. In order to ensure effective continuity of safeguards the Parties shall immediately enter into arrangements with the Agency or between themselves which conform with the Agency safeguards principles and procedures and which provide assurance equivalent to that intended to be secured by the system they replace.

1. Each Party shall take measures to ensure adequate physical protection of nuclear material within its jurisdiction.

2. In addition to its obligations under the Convention on the Physical Protection of Nuclear Material, each Party shall apply, as a minimum, physical protection measures which provide protection equivalent to the recommendations of Agency document INFCIRC/225/Rev.4 entitled, "The Physical Protection of Nuclear Material and Nuclear Facilities", as updated from time to time, or any subsequent document replacing INFCIRC/225/Rev.4.

3. Any alteration to or replacement of document INFCIRC/225/Rev.4 shall have effect under this Agreement only when the Parties have informed each other in writing that they accept such alteration or replacement.

# ARTICLE 11

1. Nuclear material, material, equipment or technology subject to this Agreement shall not be transferred beyond the territorial jurisdiction of the recipient Party without the prior written consent of the supplier Party.

2. Without the prior written consent of the supplier Party, nuclear material subject to this Agreement shall not be:

a) enriched to 20% or greater in the isotope uranium-235; or

b) reprocessed.

3. In applying clauses 1 and 2 of this Article, the supplier Party shall take into account non-proliferation considerations, international nuclear fuel cycle developments, the management of materials contained in irradiated fuel, and the energy requirements of the recipient Party.

4. If the supplier Party considers that it may have objections to the recipient Party's carrying out any of the activities referred to in clause 1 or 2 of this Article, it should advise in writing its consideration to the recipient Party. The supplier Party will provide the other Party with an immediate opportunity for full consultation on the issue.

5. In any event, the supplier Party shall not withhold consent for the purpose of securing commercial advantage.

1. When fuel is irradiated in a research reactor supplied by Argentina to Australia:

a) if so requested, Argentina shall ensure that such fuel is processed or conditioned under appropriate arrangements in order to make it suitable for disposal in Australia;

b) Australia may give prior written consent for reprocessing in order to recover nuclear material for further use in accordance with the provisions of this Agreement; and

c) Australia shall permit the subsequent return to Australia of all conditioned fuel and all radioactive wastes resulting from processing, conditioning, or reprocessing pursuant to clauses 1 (a) and (b) of this Article.

2. Any transfer of irradiated fuel under this Article shall be subject to Article 11 of this Agreement.

# ARTICLE 13

1. The Argentine Nuclear Regulatory Authority (ARN) and the Australian Safeguards and Non-Proliferation Office (ASNO) or such other authority as the Party concerned may from time to time notify the other Party, shall establish an administrative arrangement to ensure the effective fulfillment of the obligations of this Agreement. An administrative arrangement established pursuant to this Article may be changed with the mutual consent in writing of the authorities of both Parties designated under this Article.

2. If nuclear material, material, equipment or technology subject to this Agreement is present in the territory of a Party, that Party shall, upon the request of the other Party, provide the other Party in writing with the conclusions which the Agency has drawn from its verification activities, insofar as they relate to nuclear material, material, equipment or technology subject to this Agreement.

3. The Parties shall take all appropriate precautions to protect any confidential information, including matters of commercial or industrial confidentiality, received as a result of the operation of this Agreement.

# ARTICLE 14

1. The Parties shall consult regularly, or at any time at the request of either Party, in order to ensure the effective implementation of this Agreement, or to review matters relating to the peaceful uses of nuclear energy.

2. The Parties may jointly invite the Agency to participate in such consultations.

In the event of non-compliance by the recipient Party with any of the provisions of this Agreement, or non-compliance with Agency safeguards obligations by the recipient Party, which latter non-compliance shall be determined in consultation with the Agency, the supplier Party shall have the right to suspend or cancel further transfers of nuclear material, material, equipment and technology and to require the recipient Party to take corrective steps. If following consultations between the Parties such correctives steps are not taken within a reasonable time, the supplier Party shall thereupon have the right to require the return of nuclear material, material, equipment and technology subject to this Agreement. Both Parties agree that a detonation of a nuclear explosive device by either Party would constitute non-compliance with the provisions of Article 8 of this Agreement.

#### ARTICLE 16

Unless otherwise specified at the time of transfer, nothing in this Agreement shall be interpreted as imposing any responsibility on the Parties with regard to the suitability for any particular use of nuclear material, material, equipment or technology supplied pursuant to commercial contracts.

# ARTICLE 17

1. Any dispute arising out of the interpretation or application of this Agreement which is not settled by negotiation 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 Article. Each Party shall designate one arbitrator who may be its national and the two arbitrators so designated shall appoint a third, a national of a third State, who shall be the Chairman. If, within 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 30 days of the designation of appointment of the second arbitrator, the third arbitrator has not been appointed. A majority of the members of the tribunal shall constitute a quorum.

2. 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. All decisions and rulings of the tribunal shall be binding on the Parties and shall be implemented by them.

3. Each Party shall cover the expenses of the arbitrator designated by itself, as well as the expenses of its legal representation. The expenses of the Chairman and other expenses shall be evenly distributed between the Parties.

#### ARTICLE 18

1. This Agreement may be amended or revised by agreement between the Parties.

2. Any amendment or revision shall enter into force on the date the Parties, by exchange of diplomatic notes, specify for its entry into force.

#### **ARTICLE 19**

The Annex to this Agreement forms an integral part of this Agreement.

#### **ARTICLE 20**

This Agreement shall enter into force on the date of the last notification by which the Parties communicate to each other that their constitutional or other domestic requirements to give effect to this Agreement have been completed, and shall remain in force indefinitely unless it is otherwise agreed by the Parties.

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

DONE at Canberra, on August, 2001, in two originals in the English and Spanish languages, being both equally authentic.

FOR THE GOVERNMENT OF AUSTRALIA

FOR THE GOVERNMENT OF THE ARGENTINE REPUBLIC

# ANNEX A

# PART A

1. Nuclear reactors capable of operation so as to maintain a controlled selfsustaining 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" 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 shopfabricated parts therefor, which are especially designed or prepared to contain the core of a nuclear reactor as defined in clause 1 of Part A of this Annex 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 (including but not limited to support columns and plates for the core and other vessel internals, control rod guide tubes, thermal shields, baffles, core grid plates, diffuser plates).

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 clause 1 of Part A of this Annex capable of on-load operation or employing technically sophisticated positioning or alignment features to allow complex off-load fueling operation 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 clause 1 of Part A of this Annex.

This item includes, in addition to the neutron absorbing part, the support or suspension structures thereof 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 clause 1 of Part A of this Annex 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 clause 1 of Part A of this Annex and in which the relationship of hafnium to zirconium is less than 1:500 parts by weight.

# 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 1:5000 for use in a nuclear reactor, as defined in clause 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 five parts per million boron equivalent and with a density greater than 1.50 grams per cubic centimeter in quantities exceeding 30 metric tons in any period of 12 months.