No. 9603

UNITED STATES OF AMERICA and BRAZIL

Agreement for co-operation concerning civil uses of atomic energy. Signed at Washington on 8 July 1965

Authentic texts: English and Portuguese.

Registered by the United States of America on 6 June 1969.

ÉTATS-UNIS D'AMÉRIQUE et BRÉSIL

Accord de coopération concernant l'utilisation de l'énergie atomique à des fins civiles. Signé à Washington le 8 juillet 1965

Textes authentiques: anglais et portugais.

Enregistré par les États-Unis d'Amérique le 6 juin 1969.

AGREEMENT 1 FOR COOPERATION BETWEEN THE GOVERNMENT OF THE UNITED STATES OF AMERICA AND THE GOVERNMENT OF THE UNITED STATES OF BRAZIL CONCERNING CIVIL USES OF ATOMIC ENERGY

Whereas the peaceful uses of atomic energy hold great promise for all mankind; and

Whereas the Government of the United States of America and the Government of the United States of Brazil desire to cooperate with each other in the development of such peaceful uses of atomic energy; and

Whereas there is well advanced the design and development of several types of research reactors (as defined in Article IX of this Agreement); and

Whereas research reactors are useful in the production of research quantities of radioisotopes, in medical therapy and in numerous other research activities and at the same time are a means of affording valuable training and experience in nuclear science and engineering useful in the development of other peaceful uses of atomic energy including civilian nuclear power; and

Whereas the Government of the United States of Brazil desires to pursue a research and development program looking toward the realization of the peaceful and humanitarian uses of atomic energy and desires to obtain assistance from the Government of the United States of America and United States industry with respect to this program; and

Whereas the Government of the United States of America, represented by the United States Atomic Energy Commission (hereinafter referred to as the "Commission"), desires to assist the Government of the United States of Brazil in such a program;

The Parties therefore agree as follows:

Article I

A. Subject to the limitations of Article V, the Parties hereto will exchange information in the following fields:

¹ Came into force on 9 November 1966, the date on which each Government had received from the other Government written notification that it had complied with all statutory and constitutional requirements, in accordance with article VIII.

- 1. Design, construction and operation of research reactors and their use as research, development, and engineering tools and in medical therapy.
- 2. Health and safety problems related to the operation and use of research reactors.
- 3. The use of radioactive isotopes in physical and biological research, medical therapy, agriculture, and industry.
- B. The application or use of any information or data of any kind whatsoever, including design drawings and specifications, exchanged under this Agreement shall be the responsibility of the Party which receives and uses such information or data, and it is understood that the other cooperating Party does not warrant the accuracy, completeness, or suitability of such information or data for any particular use or application.

Article II

- The Commission will transfer to the Government of the United States of Brazil uranium enriched in the isotope U-235, subject to the terms and conditions provided herein, as may be required as initial and replacement fuel in the operation of research reactors which the Government of the United States of Brazil, in consultation with the Commisssion, decides to construct and as required in agreed experiments related thereto. Also, the Commission will transfer to the Government of the United States of Brazil uranium enriched in the isotope U-235, subject to the terms and conditions provided herein, as may be required as initial and replacement fuel in the operation of such research reactors as the Government of the United States of Brazil may, in consultation with the Commission, decide to authorize private individuals or private organizations under its jurisdiction to construct and operate, provided the Government of the United States of Brazil shall at all times maintain sufficient control of the material and the operation of the reactor to enable the Government of the United States of Brazil to comply with the provisions of this Agreement and the applicable provisions of the transfer arrangement.
- B. The quantity of uranium enriched in the isotope U-235 transferred by the Commission under this Article and in the custody of the Government of the United States of Brazil shall not at any time be in excess of fifteen (15) kilograms of contained U-235 in uranium enriched up to a maximum of twenty percent (20%) U-235, plus such additional quantity as, in the opinion of the Commission, is necessary to permit the efficient and continuous operation of the reactor or reactors while replaced fuel elements are radioactively cooling in Brazil or while fuel elements are in transit, it being the intent of the Commission to make possible the maximum usefulness of the fifteen (15) kilograms of said material.

- C. The Commission may, upon request and in its discretion, make available all or a portion of the enriched uranium supplied hereunder as material enriched to more than twenty percent (20%) in the isotope U-235 for use in research reactors capable of operating with a fuel load not to exceed eight (8) kilograms of the isotope U-235 contained in such uranium.
- D. The transfer of uranium enriched in the isotope U-235 under this Article shall be at such charges and on such terms and conditions with respect to shipment and delivery as may be mutually agreed and under the conditions stated in Articles VI and VII.
- E. It is agreed that when any source or special nuclear material received from the United States of America requires reprocessing, such reprocessing shall be performed at the discretion of the Commission in either Commission facilities or facilities acceptable to the Commission, on terms and conditions to be later agreed; and it is understood, except as may be otherwise agreed, that the form and content of any irradiated fuel shall not be altered after its removal from the reactor and prior to delivery to the Commission or the facilities acceptable to the Commission for reprocessing.
- F. Special nuclear material produced in any part of fuel leased hereunder as a result of irradiation processes shall be for the account of the Government of the United States of Brazil and after reprocessing as provided in paragraph E of this Article, shall be returned to the Government of the United States of Brazil, at which time title to such material shall be transferred to that Government, unless the Government of the United States of America shall exercise the option, which is hereby granted, to retain, with appropriate credit to the Government of the United States of Brazil, any such special nuclear material which is in excess of the needs of Brazil for such material in its program for the peaceful uses of atomic energy.
- G. With respect to any special nuclear material not subject to the option referred to in paragraph F of this Article and produced in reactors fueled with materials obtained from the United States of America which is in excess of the needs of Brazil for such material in its program or the peaceful uses of atomic energy, the Government of the United States of America shall have and is hereby granted: (a) a first option to purchase such material at prices then prevailing in the United States of America for special nuclear material produced in reactors which are fueled pursuant to the terms of an agreement for cooperation with the Government of the United States of America, and (b) the right to approve the transfer of such material to any other nation or group of nations in the event the option to purchase is not exercised.
- H. Some atomic energy materials which the Commission may provide in accordance with this Agreement are harmful to persons and property

unless handled and used carefully. After delivery of such materials to the Government of the United States of Brazil, the Government of the United States of Brazil shall bear all responsibility, insofar as the Government of the United States of America is concerned, for the safe handling and use of such materials. With respect to any source or special nuclear material or other reactor materials which the Commission may, pursuant to this Agreement, lease to the Government of the United States of Brazil or to any private individual or private organization under its jurisdiction, the Government of the United States of Brazil shall indemnify and save harmless the Government of the United States of America against any and all liability (including third party liability) for any cause whatsoever arising out of the production or fabrication, the ownership, the lease, and the possession and use of such source or special nuclear material or other reactor materials after delivery by the Commission to the Government of the United States of Brazil or to any authorized private individual or private organization under its jurisdiction.

Article III

Subject to the availability of supply and as may be mutually agreed, the Commission will sell or lease through such means as it deems appropriate, to the Government of the United States of Brazil or authorized persons under its jurisdiction such reactor materials, other than special nuclear materials, as are not obtainable on the commercial market and which are required in the construction and operation of research reactors in Brazil. The sale or lease of these materials shall be on such terms as may be agreed.

Article III (A)

Materials of interest in connection with defined research projects related to the peaceful uses of atomic energy undertaken by the Government of the United States of Brazil, or persons under its jurisdiction, including source materials, special nuclear materials, by-product material, other radioisotopes, and stable isotopes, will be sold or otherwise transferred to the Government of the United States of Brazil by the Commission for research purposes in such quantities and other such terms and conditions as may be agreed when such materials are not available commercially. In no case, however, shall the quantity of special nuclear materials under the jurisdiction of the Government of the United States of Brazil, by reason of transfer under this Article, be, at any one time, in excess of 100 grams of contained U-235, 10 grams of U-233, 250 grams of plutonium in the form of fabricated foils and sources, and 10 grams of plutonium in other forms.

Article IV

It is contemplated that, as provided in this Article, private individuals and private organizations in either the United States or Brazil may deal directly with private individuals and private organizations in the other country. Accordingly, with respect to the subjects of agreed exchange of information as provided in Article I, the Government of the United States of America will permit persons under its jurisdiction to transfer and export materials, including equipment and devices, to, and perform services for, the Government of the United States of Brazil and such persons under its jurisdiction as are authorized by the Government of the United States of Brazil to receive and possess such materials and utilize such services, subject to:

- A. Limitations in Article V.
- B. Applicable laws, regulations and license requirements of the Government of the United States of America and the Government of the United States of Brazil.

Article V

Restricted Data shall not be communicated under this Agreement, and no materials or equipment and devices shall be transferred and no services shall be furnished under this Agreement to the Government of the United States of Brazil or authorized persons under its jurisdiction if the transfer of any such materials or equipment and devices or the furnishing of any such services involves the communication of Restricted Data.

Article VI

- A. The Government of the United States of America and the Government of the United States of Brazil emphasize their common interest in ensuring that any material, equipment, or device made available to the Government of the United States of Brazil pursuant to this Agreement shall be used solely for civil purposes.
- B. Except to the extent that the safeguards provided for in this Agreement are supplanted, as provided in Article VII (A), by safeguards of the International Atomic Energy Agency, the Government of the United States of America, notwithstanding any other provisions of this Agreement, shall have the following rights:
- (1) With the objective of ensuring design and operation for civil purposes and permitting effective application of safeguards, to review the design of any
 - (a) reactor and
 - (b) other equipment and devices the design of which the Commission determines to be relevant to the effective application of safeguards,

which are to be made available to the Government of the United States of Brazil or persons under its jurisdiction by the Government of the United States of America or any person under its jurisdiction, or which are to use, fabricate, or process any of the following materials so made available: source material, special nuclear material, moderator material, or other material designated by the Commission;

- (2) With respect to any source or special nuclear material made available to the Government of the United States of Brazil or any person under its jurisdiction and any source or special nuclear material utilized in, recovered from, or produced as a result of the use of any of the following materials, equipment, or devices so made available:
- (a) source material, special nuclear material, moderator material, or other material designated by the Commission,
- (b) reactors,
- (c) any other equipment or device designated by the Commission as an item to be made available on the condition that the provision of this subparagraph B(2) will apply,
 - (i) to require the maintenance and production of operating records and to request and receive reports for the purpose of assisting in ensuring accountability for such material; and
 - (ii) to require that any such material in the custody of the Government of the United States of Brazil or any person under its jurisdiction be subject to all of the safeguards provided for in this Article and the guaranties set forth in Article VII;
- (3) To require the deposit in storage facilities designated by the Commission of any of the special nuclear material referred to in subparagraph B(2) of this Article which is not currently utilized for civil purposes in Brazil and which is not purchased or retained by the Government of the United States of America pursuant to Article II, paragraph F and paragraph G(a) of this Agreement, transferred pursuant to Article II, paragraph G(b) of this Agreement, or otherwise disposed of pursuant to an arrangement mutually acceptable to the Parties;
- (4) To designate, after consultation with the Government of the United States of Brazil, personnel who, accompanied, if either Party so requests, by personnel designated by the Government of the United States of Brazil, shall have access in Brazil to all places and data necessary to account for the source and special nuclear materials which are subject to subparagraph B(2) of this Article to determine whether there is compliance with this Agreement and to make such independent measurements as may be deemed necessary;
- (5) In the event of non-compliance with the provisions of this Article, or the guaranties set forth in Article VII, and the failure of the Government

of the United States of Brazil to carry out the provisions of this Article within a reasonable time, to suspend or terminate this Agreement and require the return of any materials, equipment, and devices referred to in subparagraph B(2) of this Article;

- (6) To consult with the Government of the United States of Brazil in the matter of health and safety.
- C. The Government of the United States of Brazil undertakes to facilitate the application of the safeguards provided for in this Article.

Article VII

GUARANTIES PRESCRIBED BY THE UNITED STATES
ATOMIC ENERGY ACT OF 1954

The Government of the United States of Brazil guaranties that:

- A. Safeguards provided in Article VI shall be maintained.
- B. No material, including equipment and devices, transferred to the Government of the United States of Brazil or authorized persons under its jurisdiction, pursuant to this Agreement, by lease, sale, or otherwise will be used for atomic weapons or for research on or development of atomic weapons or for any other military purposes, and that no such material, including equipment and devices, will be transferred to unauthorized persons or beyond the jurisdiction of the Government of the United States of Brazil except as the Commission may agree to such transfer to another nation and then only if in the opinion of the Commission such transfer falls within the scope of an agreement for cooperation between the United States of America and the other nation.

Article VII (A)

A. The Government of the United States of America and the Government of the United States of Brazil, recognizing the desirability of making use of the facilities and services of the International Atomic Energy Agency agree that the Agency will be requested to assume responsibility for applying safeguards to materials and facilities subject to safeguards under this Agreement for Cooperation. It is agreed that the necessary arrangements will be effected without modification of this Agreement, through an agreement to be concluded between the Parties and the Agency by August 2, 1965, or as soon thereafter as the Parties and the Agency are in a position to enter into an agreement reflecting the revised Agency safeguards system provisionally approved by the Agency Board of Governors on February 24, 1965. The agreement may include provisions for suspension of the safeguard rights accorded the Commission by Article VI, paragraph B, of this Agreement

during the time and to the extent that the Agency's safeguards apply to such materials and facilities.

B. In the event the Parties do not reach a mutually satisfactory agreement on the terms of the trilateral arrangement envisaged in paragraph A of this Article, either Party may by notification terminate this Agreement. In the event of termination by either Party, the Government of the United States of Brazil shall, at the request of the Government of the United States of America, return to the Government of the United States of America all special nuclear material received pursuant to this Agreement and in its possession or in the possession of persons under its jurisdiction. The Government of the United States of America will compensate the Government of the United States of Brazil for such returned material at the current United States Commission's schedule of prices then in effect domestically.

Article VIII

This Agreement shall enter into force on the date on which each Government shall have received from the other Government written notification that it has complied with all statutory and constitutional requirements for the entry into force of such Agreement and shall remain in force until August 2, 1975, and shall be subject to renewal as may be mutually agreed.

At the expiration of this Agreement or an extension thereof the Government of the United States of Brazil shall deliver to the United States of America all fuel elements containing reactor fuels leased by the Commission and any other fuel material leased by the Commission. Such fuel elements and such fuel materials shall be delivered to the Commission at a site in the United States of America designated by the Commission at the expense of the Government of the United States of Brazil, and such delivery shall be made under appropriate safeguards against radiation hazards while in transit.

Article IX

For the purposes of this Agreement:

- A. "Commission" means the United States Atomic Energy Commission or its duly authorized representatives.
- B. "Equipment and devices" means any instrument or apparatus, and includes research reactors, as defined herein, and their component parts.
- C. "Research reactor" means a reactor which is designed for the production of neutrons and other radiations for general research and development purposes, medical therapy, or training in nuclear science and engineering. The term does not cover power reactors, power demonstration reactors, or reactors designed primarily for the production of special nuclear materials.

D. The terms "Restricted Data", "atomic weapons", and "special nuclear material" are used in this Agreement as defined in the United States Atomic Energy Act of 1954.

In witness whereof, the undersigned, duly authorized, have signed this Agreement.

DONE at Washington, in duplicate, this eighth day of July, 1965.

For the Government of the United States of America:
Robert M. Sayre
Glenn T. Seaborg

For the Government of the United States of Brazil:

Juracy Magalhães

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