## No. 3300

# UNITED STATES OF AMERICA and BRAZIL

# Agreement for co-operation concerning civil uses of atomic energy. Signed at Rio de Janeiro, on 3 August 1955

Official texts: English and Portuguese. Registered by the United States of America on 25 April 1956.

# ÉTATS-UNIS D'AMÉRIQUE et BRÉSIL

## Accord de coopération concernant l'utilisation de l'énergie atomique dans le domaine civil. Signé à Rio-de-Janeiro, le 3 août 1955

Textes officiels anglais et portugais. Enregistré par les États-Unis d'Amérique le 25 avril 1956. No. 3300. AGREEMENT<sup>1</sup> FOR CO-OPERATION BETWEEN THE GOVERNMENT OF THE UNITED STATES OF AMERICA AND THE GOVERNMENT OF THE UNITED STATES OF BRAZIL CONCERNING CIVIL USES OF ATOMIC ENERGY. SIGNED AT RIO DE JANEIRO, ON 3 AUGUST 1955

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 X 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

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

<sup>&</sup>lt;sup>1</sup> Came into force on 3 August 1955, in accordance with article VIII.

A. Design, construction and operation of research reactors and their use as research, development, and engineering tools and in medical therapy.

B. Health and safety problems related to the operation and use of research reactors.

C. The use of radioactive isotopes in physical and biological research, medical therapy, agriculture, and industry.

#### Article II

The Commission will lease to the Government of the United States of Α. 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 Commission, decides to construct and as required in agreed experiments related thereto. Also, the Commission will lease 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 lease arrangement.

B. The quantity of uranium enriched in the isotope U-235 transferred by the Commission and in the custody of the Government of the United States of Brazil shall not at any time be in excess of six (6) 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 radio-actively 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 six (6) kilograms of said material.

C. When any fuel elements containing U-235 leased by the Commission require replacement, they shall be returned to the Commission and, except as may be agreed, the form and content of the irradiated fuel element shall not be altered after their removal from the reactor and prior to delivery to the Commission.

D. The lease 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.

#### 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 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 Brazil agrees to maintain such safeguards as are necessary to assure that the uranium enriched in the isotope U-235 leased from the Commission shall be used solely for the purpose agreed in accordance with this Agreement and to assure the safekeeping of this material.

B. The Government of the United States of Brazil agrees to maintain such safeguards as are necessary to assure that all other reactor materials, including equipment and devices, purchased in the United States of America under this Agreement by the Government of the United States of Brazil or authorized persons under its jurisdiction, shall be used solely for the design, construction, and operation of research reactors which the Government of the United States of Brazil decides to construct and operate and for research in connection therewith, except as may otherwise be agreed.

C. In regard to research reactors constructed pursuant to this Agreement the Government of the United States of Brazil agrees to maintain records relating to power levels of operation and burnup of reactor fuels and to make annual reports to the Commission on these subjects. If the Commission requests, the Government of the United States of Brazil will permit Commission representatives to observe from time to time the condition and use of any leased material and to observe the performance of the reactor in which the material is used.

## 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 VIII

This Agreement shall enter into force on August 3, 1955 and remain in force until August 2, 1960, inclusively, 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.

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### Article IX

It is the hope and expectation of the Parties that this initial Agreement for Cooperation will lead to consideration of further cooperation extending to the design, construction, and operation of power producing reactors. Accordingly, the Parties will consult with each other from time to time concerning the feasibility of an additional agreement for cooperation with respect to the production of power from atomic energy in Brazil.

### Article X

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 weapon", and "special nuclear material" are used in this Agreement as defined in the United States Atomic Energy Act of 1954.

IN WITNESS WHEREOF, the Parties hereto have caused this Agreement to be executed pursuant to duly constituted authority.

DONE at Rio de Janeiro in duplicate this third day of August, 1955.

For the Government of the United States of America :

James Clement DUNN Ambassador of the United States

Alfonso TAMMARO Representative, United States Atomic Energy Commission

For the Government of the United States of Brazil :

Raul FERNANDES Minister of Foreign Affairs