

No. 7117

**UNITED STATES OF AMERICA
and
INDIA**

**Agreement for co-operation concerning the civil uses of
atomic energy (with annexure). Signed at Washington,
on 8 August 1963**

Official text: English.

Registered by the United States of America on 7 February 1964.

**ÉTATS-UNIS D'AMÉRIQUE
et
INDE**

**Accord de coopération concernant l'utilisation de l'énergie
atomique à des fins civiles (avec annexe). Signé à
Washington, le 8 août 1963**

Texte officiel anglais.

Enregistré par les États-Unis d'Amérique le 7 février 1964.

No. 7117. AGREEMENT¹ FOR CO-OPERATION BETWEEN THE GOVERNMENT OF THE UNITED STATES OF AMERICA AND THE GOVERNMENT OF INDIA CONCERNING THE CIVIL USES OF ATOMIC ENERGY. SIGNED AT WASHINGTON, ON 8 AUGUST 1963

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

Whereas the Government of India has decided to construct and operate a civil atomic power station near Tarapur in Maharashtra State as hereinafter specified ;

Whereas the Government of the United States of America and the Government of India desire to cooperate with respect to the construction and operation of the aforesaid civil atomic power station ;

Now therefore the Parties hereto agree as follows :

Article I

Unclassified information shall be exchanged between the Parties hereto with respect to the development, design, construction, operation, and use of the Tarapur Atomic Power Station, including research and development related thereto and problems of health and safety connected therewith.

Article II

A. During the period of this Agreement the United States Commission will sell to the Government of India and the Government of India will purchase from the United States Commission, as needed, all requirements of the Government of India for enriched uranium for use as fuel at the Tarapur Atomic Power Station, it being understood that the Tarapur Atomic Power Station shall be operated on no other special nuclear material than that made available by the United States Commission and special nuclear material produced therefrom. The enriched uranium, which shall contain no more than twenty per cent (20 %) U-235, will be made available in accordance with the terms, conditions and delivery schedules set forth in a contract to be made between the Parties ; provided, however, that the net amount of U-235 contained in the enriched uranium sold hereunder shall not exceed 14,500 kilograms.

¹ Came into force on 25 October 1963, the date on which both Governments notified each other of compliance with all statutory and constitutional requirements for the entry into force of the Agreement, in accordance with article X.

The net amount of U-235 shall be the gross quantity of U-235 contained in the enriched uranium sold to the Government of India hereunder less the quantity of U-235 contained in recoverable uranium resold or otherwise returned to the Government of the United States of America or transferred to any other nation or group of nations or international organization with the approval of the Government of the United States of America.

B. The net amount of U-235 contained in the enriched uranium to be sold pursuant to Paragraph A of this Article has been agreed upon by the Parties on the basis of estimated requirements for fueling the Tarapur Atomic Power Station. If the construction of the Tarapur Atomic Power Station is not begun by June 30, 1965, the United States shall not be required, unless it is otherwise agreed, to sell enriched uranium for fueling the Tarapur Station under this Agreement.

C. Within the limitations contained in Paragraph A of this Article the quantity of enriched uranium sold by the United States Commission under this Article and held by the Government of India pursuant to this Agreement shall not at any time be in excess of the quantity necessary for the full loading of the Tarapur Atomic Power Station, plus such additional quantity as, in the opinion of the Parties, is necessary to permit the efficient and continuous operation of the Station.

D. The Government of India will retain title to any enriched uranium purchased from the United States Commission.

E. It is agreed that when any special nuclear material utilized in the Tarapur Atomic Power Station requires reprocessing, and recourse is not taken by the Government of India to the provisions of Article VI C of this Agreement, such reprocessing may be performed in Indian facilities upon a joint determination of the Parties that the provisions of Article VI of this Agreement may be effectively applied, or in such other facilities as may be mutually agreed. It is understood, except as may be otherwise agreed, that the form and content of any irradiated fuel elements removed from the reactors shall not be altered before delivery to any such reprocessing facility.

F. With respect to any special nuclear material produced in the Tarapur Atomic Power Station which is in excess of the need of the Government of India for such material in its program for the peaceful uses of atomic energy, the Government of the United States of America shall have the first option to purchase such special nuclear material at the fuel value price of the United States Commission which may be in effect domestically at such time as it may exercise its option. If such option is not exercised, the Government of India may with the approval of the Government of the United States of America transfer such excess special nuclear material to any other nation or group of nations or international organization.

G. Some atomic energy materials which the Government of India may request the United States Commission to 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 India, the Government of India 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.

Article III

Materials needed for use at or in connection with the Tarapur Atomic Power Station, other than source materials or the special nuclear materials required for fueling the reactors, will, when such materials are not available commercially, be transferred by the Government of the United States of America to the Government of India on such terms and conditions and in such amounts as may be mutually agreed ; provided, however, that special nuclear material transfers will be confined to limited quantities.

Article IV

The application or use of any information (including design drawings and specifications) and any material, equipment and devices, exchanged or transferred under this Agreement, shall be the responsibility of the Party receiving it, and the other Party does not warrant the accuracy or completeness of such information and does not warrant the suitability of such information, materials, equipment and devices for any particular use or application.

Article V

It is agreed that the Government of the United States of America will permit persons under its jurisdiction to transfer and export materials, equipment and devices, other than source or special nuclear materials, to, and perform services for, the Government of India and such persons under its jurisdiction as are authorized by the Government of India to receive and possess such materials, equipment and devices, and utilize such services for the Tarapur Atomic Power Station, subject to applicable laws, regulations and license requirements of the Government of the United States of America and the Government of India.

Article VI

A. The Parties to this Agreement emphasize their common interest in assuring that any material, equipment or device made available to the Government of India for use in the Tarapur Atomic Power Station, or in connection therewith, pursuant to this Agreement shall be used solely for peaceful purposes. The Government of India emphasizes, in contrast to the position of the United States, that its agreement to the provisions of this Article in relation to equipment or devices transferred pursuant

to this Agreement has been accorded in consideration of the fact that, as provided in this Agreement, the Tarapur Atomic Power Station will be operated on no other special nuclear material than that furnished by the Government of the United States of America and special nuclear material produced therefrom, in consequence of which the provisions of this Article in relation to equipment or devices in any case ensue from the safeguards on fuel.

B. The following arrangements shall be applicable between the Parties :

1. The Parties have reviewed the design of the Tarapur Atomic Power Station and may review any significant modification in this design for the sole purpose of determining that the arrangements provided in this Article can be effectively applied. For the same purpose, the Parties may review the design of other facilities which will use, fabricate or process any special nuclear material made available pursuant to this Agreement or produced in the Tarapur Atomic Power Station. Such a review of the design of these other facilities will not be required if the Government of India, pursuant to mutually acceptable measurement arrangements, has placed an agreed equivalent amount of the same type of special nuclear material under the scope of this Agreement.
2. The Parties have agreed that a system of records and reports shall be established to assure the complete accountability of any special nuclear material which is made available to the Government of India pursuant to this Agreement or which is produced in the Tarapur Atomic Power Station. This system of records and reports shall be as described in the schedule annexed hereto and marked Annexure "A".¹
3. Any special nuclear material made available pursuant to this Agreement or produced in the Tarapur Atomic Power Station, which is surplus to the current needs of the fuel cycle for the Tarapur Atomic Power Station and which is not transferred by the Government of India pursuant to this Agreement, shall, unless otherwise mutually agreed, be stored at the Tarapur Atomic Power Station.
4. There will be consultations and periodic exchanges of visits between the Parties to give assurance that the objectives set forth in paragraph A of this Article and the provisions of this Agreement concerning transfers are being observed. To the extent relevant to the accomplishment thereof, personnel designated by the Government of the United States of America, following consultation with the Government of India, upon request of the Government of the United States of America, and personnel designated by the Government of India shall have full access to the Tarapur Atomic Power Station and to conversion, fabrication and chemical processing facilities in India at such time as special nuclear material transferred to the Government of India for, or received from, the Tarapur Atomic Power Station is located at such facilities, and at such other times as may be

¹ See p. 36 of this volume.

relevant to the accomplishment of the above-noted objectives. Personnel so designated shall also be afforded access to other places and data, and to persons, to the extent relevant to the accomplishment of those objectives. The personnel designated by either Party, accompanied by personnel of the other Party if the latter so requests, may make such independent measurements as either Party considers necessary; and nothing in this Agreement is intended to impede the ability of either Party to have prompt access to data, places and persons to the extent relevant to accomplish the above-noted objectives. The Government of the United States of America will keep such access to a minimum consistent with the need for effective verification that those objectives are being observed.

C. Notwithstanding anything contained in this Agreement the Government of India shall have the right, upon prior notice to the Government of the United States, to remove from the scope of this Agreement quantities of special nuclear material provided it has, pursuant to mutually acceptable measurement arrangements, placed agreed equivalent quantities of the same type of special nuclear material under the scope of this Agreement.

D. In the event of noncompliance with the guarantees or with the provisions of this Article, and the subsequent failure of the Government of India to fulfill such guarantees and provisions within a reasonable time, the Government of the United States of America shall have the right to suspend or terminate this Agreement and require the return of any equipment and devices transferred under this Agreement and any special nuclear material safeguarded pursuant to this Article.

Article VII

A. The Government of India guarantees that the safeguards in Article VI shall be maintained and that :

1. No material, equipment or device transferred to the Government of India or authorized persons under its jurisdiction pursuant to this Agreement, by sale, lease or otherwise, will be used for atomic weapons or for research on or development of atomic weapons or for any other military purpose, and
2. That no such material, equipment or device will be transferred to unauthorized persons or beyond the jurisdiction of the Government of India except as may be agreed to by the Government of the United States of America and the Government of India, and then only if in the opinion of the United States Commission such transfer falls within the scope of an Agreement for Cooperation between the Government of the United States of America and the other nation or group of nations or international organization.

B. The Government of the United States of America guarantees that no special nuclear material produced at the Tarapur Atomic Power Station and acquired by it, or an equivalent amount of the same type substituted therefor, shall be used for atomic weapons or for research on or development of atomic weapons or for any other military purpose.

Article VIII

A. Recognizing the desirability of making use of the facilities and services of the International Atomic Energy Agency, the Parties agree in principle that, at a suitable time, the Agency will be requested to enter into a trilateral agreement for the implementation of the safeguards provisions of Article VI, in accordance with the following paragraphs. In addition, in accordance with the objectives set forth in the Statute of the International Atomic Energy Agency,¹ the Government of the United States of America is prepared, in principle, to include appropriate provisions in the aforementioned trilateral agreement, for the application of Agency safeguards to such special nuclear material produced in the Tarapur Atomic Power Station as may be received in the United States, or to equivalent material substituted therefor.

B. After the Agency has adopted a system of safeguards for reactors of the size of the Tarapur Atomic Power Station and at a reasonable time to be mutually agreed upon, the Parties will consult with each other to determine whether the system so adopted is generally consistent with the safeguards provisions contained in Article VI. If the system is generally consistent with these provisions, the Parties will request the Agency to enter into a trilateral agreement as referred to in the preceding paragraph. While the Parties recognize that the trilateral agreement should be implemented as soon as practicable, it is agreed, in order to avoid any dislocation or uncertainty during the period of early operation of the Tarapur Atomic Power Station, that the Government of India may specify that the agreement shall not be implemented until the Station has reached reliable full-power operation.

C. In the event the Parties do not reach a mutually satisfactory agreement on the terms of the trilateral arrangement envisaged in this Article, paragraph A, either Party may, by notification, terminate this bilateral agreement. Before either Party takes steps to terminate, the Parties will carefully consider the economic effect of any such termination. Neither Party will invoke its termination rights until the other Party has been given sufficient advance notice to permit arrangements by the Government of India, if it is the other Party, for an alternative source of power and to permit adjustment by the Government of the United States of America, if it is the other Party, of production schedules. The Government of the United States of America will not invoke its termination rights unless there has been widespread accept-

¹ United Nations, *Treaty Series*, Vol. 276, p. 3 ; Vol. 293, p. 359 ; Vol. 312, p. 427 ; Vol. 316, p. 387 ; Vol. 356, p. 378 ; Vol. 394, p. 276 ; Vol. 407, p. 263 ; Vol. 416, p. 342, and Vol. 471, p. 333.

ance, by those nations with whom it has bilateral agreements, of the implementation of safeguards by the Agency or of provisions similar to those contained in this Agreement. In the event of termination by either Party, the Government of India 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 materials 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 India for such returned material at the current schedule of prices then in effect domestically.

Article IX

For the purposes of this Agreement :

(a) "United States Commission" means the United States Atomic Energy Commission.

(b) "Tarapur Atomic Power Station" means an electrical generating power plant consisting of two boiling water reactors and associated equipment with a combined net output of approximately 380 MWe, to be located near Tarapur, Maharashtra State, India.

(c) "Equipment and devices" and "equipment or device" means any instrument, apparatus, or facility and includes any facility, except an atomic weapon, capable of making use of or producing special nuclear material, and component parts thereof.

(d) "Person" means any individual, corporation, partnership, firm, association, trust, estate, public or private institution, group, government agency, or government corporation, but does not include the Parties to this Agreement.

(e) "Reactor" means an apparatus, other than an atomic weapon, in which a self-supporting fission chain reaction is maintained by utilizing uranium, plutonium, or thorium.

(f) "Atomic weapon" means any device utilizing atomic energy, exclusive of the means for transporting or propelling the device (where such means is a separable and divisible part of the device), the principal purpose of which is for use as, or for development of, a weapon, a weapon prototype, or a weapon test device.

(g) "Special nuclear material" means (1) plutonium, uranium enriched in the isotope 233 or in the isotope 235 and any other material which the United States Commission pursuant to the United States Atomic Energy Act determines to be special nuclear material ; or (2) any material artificially enriched by any of the foregoing.

(h) "Source material" means (1) uranium, thorium or any other material which is determined by either Party to be source material; or (2) ores containing one or more of the foregoing materials in such concentration as either Party may determine from time to time.

(i) "Parties" means the Government of the United States of America and the Government of India, including the United States Commission on behalf of the Government of the United States of America. "Party" means one of the above-mentioned "Parties".

(j) "Reliable full power operation" shall be deemed to have been reached one year after the Tarapur Atomic Power Station has first operated continuously for one hundred hours at full power. In computing this one-year period, periods during which either reactor is not in operation for more than four consecutive weeks will be excluded.

Article X

This Agreement shall enter into force on the date on which both Governments have notified each other of compliance with all statutory and constitutional requirements for entry into force of such Agreement and shall remain in force for a period of thirty (30) years.

IN WITNESS WHEREOF, the undersigned, duly authorized, have signed this Agreement.

DONE at Washington, in duplicate, this eighth day of August 1963.

For the Government of the United States of America :

Phillips TALBOT

Glenn T. SEABORG

For the Government of India :

Braj Kumar NEHRU

ANNEXURE "A"

The Parties have agreed that the system of records and reports for the Tarapur Atomic Power Station will consist of the following elements :

A. With respect to records, information covering the following will be included :

1. receipts of all nuclear materials,*
2. internal movements of all nuclear materials,

* The term "nuclear material" as used in this Annexure means both source materials and special nuclear materials as they are defined in Article IX of this Agreement.

3. any removal of nuclear materials, including shipments, known losses, and unaccounted for quantities,
4. inventories of all nuclear materials on hand at the end of each accounting period, showing form, quantity, and location, and
5. reactor-operating data necessary for determining and reporting on the production and consumption of any nuclear materials and the use of the Tarapur Atomic Power Station.

B. With respect to reports, information covering the following will be included :

1. all receipts and removals of nuclear materials,
2. any production and consumption of nuclear materials,
3. any known losses and unaccounted-for nuclear materials,
4. all inventories of nuclear materials, and
5. the operation of the Tarapur Atomic Power Station, including unusual incidents ; and significant modifications made or to be made in the plant or in the fueling program.

Routine reports covering the foregoing elements shall be submitted to the Government of the United States of America and the Government of India on a monthly basis. Any losses of nuclear materials, however, or any unusual incidents or major changes in the fueling program will be reported as soon as the loss has been discovered or the change has been scheduled.

The Parties further agree that if any special nuclear material which is made available to India pursuant to this Agreement or produced in the Tarapur Atomic Power Station is placed, in accordance with this Agreement, in any facilities in India other than the Tarapur Atomic Power Station, then the principles of the agreed-upon system referred to in Paragraph B.2 of Article VI of this Agreement and set forth in this Annexure will be applied to such a situation.

The records and reports will include such details as may be relevant to the achievement of the objectives of Article VI and may be modified by mutual agreement.

In the event of unusual incidents, special reports may be requested, including such amplifications and elucidations as each party considers relevant to the achievement of the objectives of Article VI.