

No. 17192

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**INTERNATIONAL ATOMIC ENERGY AGENCY  
and  
INDIA**

**Agreement for the application of safeguards in connection  
with the supply of heavy water from the Union of Soviet  
Socialist Republics. Signed at Vienna on 17 November  
1977**

*Authentic text: English.*

*Registered by the International Atomic Energy Agency on 20 November 1978.*

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**AGENCE INTERNATIONALE DE L'ÉNERGIE  
ATOMIQUE  
et  
INDE**

**Projet d'accord pour l'application de garanties relatives à la  
fourniture d'eau lourde par l'Union des Républiques  
socialistes soviétiques. Signé à Vienne le 17 novembre  
1977**

*Texte authentique : anglais.*

*Enregistré par l'Agence internationale de l'énergie atomique le 20 novembre 1978.*

AGREEMENT<sup>1</sup> BETWEEN THE INTERNATIONAL ATOMIC ENERGY AGENCY AND THE GOVERNMENT OF INDIA FOR THE APPLICATION OF SAFEGUARDS IN CONNECTION WITH THE SUPPLY OF HEAVY WATER FROM THE UNION OF SOVIET SOCIALIST REPUBLICS

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WHEREAS the Government of India (hereinafter referred to as “India”) made an arrangement in September 1976 (hereinafter referred to as the “arrangement”) for the supply of heavy water by the Union of Soviet Socialist Republics (hereinafter referred to as the “Soviet Union”) to India;

WHEREAS the heavy water supplied by the Soviet Union to India under the arrangement is intended exclusively for peaceful purposes;

WHEREAS India has requested the International Atomic Energy Agency (hereinafter referred to as the “Agency”) to apply safeguards in connection with the supply of heavy water from the Soviet Union to India under the arrangement;

WHEREAS the Agency is authorized by its Statute<sup>2</sup> to apply safeguards, *inter alia*, at the request of the Parties, to any bilateral arrangement;

WHEREAS the Board of Governors of the Agency (hereinafter referred to as the “Board”) acceded to that request on 24 September 1977;

NOW, THEREFORE, India and the Agency have agreed as follows:

DEFINITIONS

*Section 1.* For the purpose of this Agreement:

(a) “Facility” shall mean:

- (i) A principal nuclear facility as defined in paragraph 78 of the Safeguards Document as well as a critical facility or a separate storage installation;
- (ii) A plant for the upgrading of heavy water or a separate storage installation; or
- (iii) Any location where nuclear material in amounts greater than one effective kilogram is customarily used.

(b) “Inspectors Document” shall mean the annex to Agency document GC(V)/INF/39.

(c) “Nuclear material” shall mean any source material or special fissionable material as defined in article XX of the Statute of the Agency.

(d) “Safeguards Document” shall mean Agency document INFCIRC/66/Rev.2.

UNDERTAKINGS BY INDIA AND THE AGENCY

*Section 2.* India undertakes that none of the following items shall be used for the manufacture of any nuclear weapon or to further any other military

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<sup>1</sup> Came into force on 17 November 1977 by signature, in accordance with section 24.

<sup>2</sup> United Nations, *Treaty Series*, vol. 276, p. 3, and vol. 471, p. 334.

purpose and that such items shall be used exclusively for peaceful purposes and shall not be used for the manufacture of any nuclear explosive device:

- (a) Heavy water supplied by the Soviet Union to India under the arrangement;
- (b) The Rajasthan Atomic Power Station, including the RAPP-1 and RAPP-2 reactors;
- (c) Any nuclear material, including subsequent generations of special fissionable material, produced, processed or used by the use of the heavy water supplied by the Soviet Union to India under the arrangement or of any other nuclear material referred to in this section;
- (d) Any nuclear material, including subsequent generations of special fissionable material, produced, processed or used in the Rajasthan Atomic Power Station or in or by the use of any other item referred to in this section; or
- (e) Any other item required to be listed in the Inventory referred to in section 5.

*Section 3.* The Agency undertakes to apply safeguards, in accordance with the terms of this Agreement, to the items referred to in section 2 so as to ensure as far as it is able that no such item is used for the manufacture of any nuclear weapon or to further any other military purpose and that such items are used exclusively for peaceful purposes and not for the manufacture of any nuclear explosive device.

*Section 4.* India undertakes to co-operate with the Agency in the application of the safeguards provided for in this Agreement.

#### ESTABLISHMENT AND MAINTENANCE OF INVENTORY

*Section 5.* The Agency shall establish and maintain an Inventory which shall be divided into three parts:

(a) The Main Part of the Inventory shall list:

- (i) Heavy water supplied by the Soviet Union to India under the arrangement;
- (ii) Any nuclear material, including subsequent generations of special fissionable material, produced, processed or used by the use of the heavy water supplied by the Soviet Union to India under the arrangement or of any other nuclear material referred to in this section;
- (iii) Any nuclear material, including subsequent generations of special fissionable material, produced, processed or used in the Rajasthan Atomic Power Station or in or by the use of any other item required to be listed in the Subsidiary Part of the Inventory;
- (iv) Any nuclear material substituted in accordance with paragraph 25 or 26(d) of the Safeguards Document for nuclear material listed in the Main Part of the Inventory;
- (v) Any heavy water substituted in accordance with section 11(b) for heavy water supplied by the Soviet Union to India under the arrangement.

(b) The Subsidiary Part of the Inventory shall list:

—Any facility while containing, using or processing any of the heavy water or any nuclear material referred to in the Main Part of the Inventory.

(c) The Inactive Part of the Inventory shall list any nuclear material or heavy water which would normally be listed in the Main Part of the Inventory but which is not so listed because:

- (i) It is exempt from safeguards in accordance with the provisions of paragraph 21, 22 or 23 of the Safeguards Document; or
- (ii) Safeguards thereon are suspended in accordance with the provisions of paragraph 24 or 25 of the Safeguards Document;
- (iii) Any heavy water exempt from safeguards or with respect to which safeguards have been suspended in accordance with section 10(b) of this Agreement.

The Agency shall send a copy of the Inventory to India every 12 months and also at any other times specified by India in a request communicated to the Agency at least two weeks in advance. The Agency may communicate information with respect to the disposition and use of the heavy water to the Soviet Union, if so requested by the Soviet Union, and shall transmit a copy of any such communication to India.

#### NOTIFICATIONS

*Section 6.* (a) India shall notify the Agency of the receipt of any of the heavy water from the Soviet Union within two weeks of its arrival in India. The notification of transfer may also be made by the Soviet Union, or by the Soviet Union jointly with India. The Agency may also request information from the Soviet Union in connection with transfers of heavy water.

(b) Upon receipt of the notification from India, or upon confirmation by India of the receipt of heavy water notified to the Agency by the Soviet Union, the Agency shall list the heavy water in the Main Part of the Inventory and shall inform India and the Soviet Union accordingly.

(c) Each notification shall include the quantity and composition of the supplied heavy water as per shipper's data, the date of shipment, the date of receipt, the identity of the consignor and the consignee and any other relevant information as may be specified in the Subsidiary Arrangements. This notification shall be followed by a confirmation of the exact quantity and composition of the supplied heavy water as jointly determined by India and the Soviet Union. India shall inform the Agency in advance, so that it may be represented at the joint determination.

(d) Upon receipt of the confirmation referred to in (c) above, the Agency shall correct the Inventory accordingly and so inform India and the Soviet Union.

*Section 7.* (a) India shall notify the Agency of the use, disposition and any losses of the heavy water supplied by the Soviet Union to India under the arrangement, by means of reports to be specified in the Subsidiary Arrangements.

(b) India shall notify the Agency by means of its reports pursuant to the Safeguards Document of any nuclear material produced, processed or used during the period covered by the report by the use of any of the items referred to in section 5(a) or (b), and accordingly required to be listed in the Main Part of the Inventory. Upon receipt by the Agency of the notification, such nuclear material shall be listed in the Main Part of the Inventory.

### TRANSFERS

*Section 8. (a)* Whenever India intends to transfer heavy water or nuclear material listed in the Main Part of the Inventory to a facility within its jurisdiction which is not yet listed in the Inventory, it shall so notify the Agency before the transfer is effected. India may make the transfer to the facility only after the Agency has confirmed that it has made arrangements to apply safeguards with respect to the facility in question.

*(b)* India shall notify the Agency of any transfer of heavy water or of nuclear material listed in the Main Part of the Inventory to a recipient which is not under the jurisdiction of India. Such heavy water or nuclear material may be transferred and shall thereupon be deleted from the Inventory only after the Agency has confirmed that it has made arrangements to apply safeguards in respect of the heavy water or nuclear material in question after the transfer. Safeguards shall not be required in respect of retransfers of heavy water to the Soviet Union.

*Section 9.* The notifications referred to in section 8 above shall be made to the Agency sufficiently in advance to enable it to make the arrangements required by that section before the transfer is effected. The Agency shall promptly take any necessary action. The time limits for and the contents of these notifications shall be laid down in the Subsidiary Arrangements referred to in section 13(b).

### EXEMPTION AND SUSPENSION

*Section 10. (a)* The Agency shall exempt from safeguards nuclear material under the conditions specified in paragraph 21, 22 or 23 of the Safeguards Document and shall suspend safeguards with respect to nuclear material under the conditions specified in paragraph 24 or 25 of the Safeguards Document.

*(b)* The Agency shall exempt from safeguards and shall suspend safeguards with respect to heavy water supplied by the Soviet Union to India under the arrangement under conditions to be specified in the Subsidiary Arrangements.

### TERMINATION

*Section 11. (a)* Nuclear material shall be deleted from the Inventory and Agency safeguards thereon shall be terminated as provided in paragraphs 26 and 27 of the Safeguards Document.

*(b)* Heavy water shall be deleted from the Inventory and safeguards thereon shall be terminated:

- (i)* On India placing under safeguards as substitute the same amount of heavy water of equivalent or better heavy water concentration; or
- (ii)* After India and the Agency have jointly determined, by procedures to be specified in the Subsidiary Arrangements, that it is no longer usable for any nuclear activity relevant from the point of view of safeguards or that the heavy water has been consumed, lost or diluted to such an extent that it is not recoverable.

*(c)* Safeguards shall be terminated on a reactor after India and the Agency have jointly determined that the reactor is no longer usable for any nuclear activity relevant from the point of view of safeguards.

*(d)* The Agency shall also terminate safeguards under the Agreement with respect to any item deleted from the Inventory in accordance with section 8(b).

### SAFEGUARDS PROCEDURES AND SUBSIDIARY ARRANGEMENTS

*Section 12.* In applying safeguards, the Agency shall observe the principles set forth in paragraphs 9 through 14 of the Safeguards Document.

*Section 13. (a)* The safeguards procedures to be applied by the Agency are those specified in the Safeguards Document, as well as such additional procedures as result from technological developments and as may be agreed to between the Agency and India. If nuclear material or heavy water subject to safeguards under this Agreement is to be transferred to a facility under construction, the Agency shall have the right to obtain in respect of that facility the information referred to in paragraph 41 of the Safeguards Document and to make the inspection referred to in paragraphs 51 and 52 of the Safeguards Document.

*(b)* The Agency shall make Subsidiary Arrangements with India concerning the implementation of the safeguards procedures referred to in *(a)* above. The Subsidiary Arrangements shall also include any necessary arrangements for the application of safeguards to heavy water and other items subject to this Agreement, and for such containment and surveillance measures as are required for the effective implementation of safeguards. The Subsidiary Arrangements shall enter into force within three months of the entry into force of this Agreement, but in any event before any of the heavy water is introduced into a facility.

### AGENCY INSPECTORS

*Section 14.* The provisions of paragraphs 1 to 10 and 12 to 14 inclusive, of the Inspectors Document shall apply to Agency inspectors performing functions pursuant to this Agreement. However, paragraph 4 of the Inspectors Document shall not apply with regard to any facility or to nuclear material or heavy water to which the Agency has access at all times. The actual procedures to implement paragraph 50 of the Safeguards Document shall be agreed to between the Agency and India before such a nuclear facility or nuclear material is listed in the Inventory.

*Section 15.* India shall apply the relevant provisions of the Agreement on the privileges and immunities of the Agency<sup>1</sup> to the Agency, its inspectors performing functions under this Agreement and to any property of the Agency used by them for the performance of their functions under this Agreement.

### PHYSICAL PROTECTION

*Section 16.* India shall take suitable measures for the physical protection of the heavy water supplied by the Soviet Union to India under the arrangement. India shall also take suitable measures for the physical protection of nuclear material subject to this Agreement, taking into account the recommendations made in Agency's document INFCIRC/225 (corrected).

### FINANCE

*Section 17.* India and the Agency shall each bear any expense incurred in the implementation of their responsibilities under this Agreement. The Agency shall reimburse India for any special expenses, including those referred to in paragraph 6 of the Inspectors Document, incurred by India or persons under its jurisdiction at the written request of the Agency, if India notified the Agency before

<sup>1</sup> United Nations, *Treaty Series*, vol. 374, p. 147.

the expense was incurred that reimbursement would be required. These provisions shall not prejudice the allocation of expenses attributable to a failure by either India or the Agency to comply with this Agreement.

*Section 18.* India shall ensure that any protection against third-party liability, including any insurance or other financial security, in respect of a nuclear incident occurring in a nuclear installation under its jurisdiction shall apply to the Agency and its inspectors when carrying out their functions under this Agreement as that protection applies to nationals of India.

#### NON-COMPLIANCE

*Section 19.* If the Board determines that there has been any non-compliance by India with this Agreement, the Board shall call upon India to remedy such non-compliance forthwith, and shall make such reports as it deems appropriate. In the event of failure by India to take fully corrective action within a reasonable time, the Board may take any other measures provided for in article XII.C of the Statute. The Agency shall promptly notify India in the event of any determination by the Board pursuant to this section.

#### INTERPRETATION AND APPLICATION OF THE AGREEMENT AND SETTLEMENT OF DISPUTES

*Section 20.* At the request of either India or the Agency there shall be consultations about any question arising out of the interpretation or application of this Agreement.

*Section 21.* (a) India and the Agency shall endeavour to settle by negotiation any dispute arising from the interpretation or application of this Agreement.

(b) Any dispute arising out of the interpretation or application of this Agreement which is not settled by negotiation or as may otherwise be agreed to by India and the Agency shall, on the request of either India or the Agency, be submitted to an arbitral tribunal composed of three persons as follows:

India and the Agency shall each designate one arbitrator and the two arbitrators so designated shall elect a third, who shall be the Chairman. If within thirty days of the request for arbitration either Party has not designated an arbitrator, the other Party may request the President of the International Court of Justice to appoint such an arbitrator. The same procedure shall apply if, within thirty days of the designation or appointment of the second arbitrator, the third arbitrator has not been elected.

(c) Two members of the arbitral tribunal shall constitute a quorum, and all decisions shall require the concurrence of at least two members. The arbitral procedure shall be fixed by the tribunal. The decisions of the tribunal, including all rulings concerning its constitution, procedure, jurisdiction and the division of the expenses of arbitration between India and the Agency, shall be binding on India and the Agency. The remuneration of the arbitrators shall be determined on the same basis as that for *ad hoc* judges of the International Court of Justice.

*Section 22.* Decisions of the Board concerning the implementation of this Agreement, except such as relate only to sections 17 and 18 shall, if they so provide, be given effect immediately by India and the Agency, pending the final settlement of any dispute.

## FINAL CLAUSES

*Section 23.* India and the Agency shall, at the request of either of them, consult about amending this Agreement. If the Board modifies the Safeguards Document or the scope of the safeguards system, this Agreement shall be amended if India so requests to take account of such modifications. If the Board modifies the Inspectors Document, this Agreement shall be amended if India so requests to take account of such modifications.

*Section 24.* This Agreement shall enter into force upon signature by or for the Director General of the Agency and by the authorized representative of India.

*Section 25.* The application of safeguards under this Agreement to the Rajasthan Atomic Power Station shall commence only upon introduction into the heavy water system of the Rajasthan Atomic Power Station of any of the heavy water supplied by the Soviet Union to India under the arrangement.

*Section 26.* This Agreement shall remain in force until, in accordance with its provisions, safeguards have been terminated on all items referred to in section 2, or until terminated by mutual agreement of the Parties to this Agreement.

DONE in Vienna this 17th day of November 1977, in duplicate, in the English language.

For the International Atomic Energy Agency:  
SIGVARD EKLUND

For the Government of India:  
AMRIK S. MEHTA

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