

No. 6114

**INTERNATIONAL ATOMIC ENERGY AGENCY,
UNITED STATES OF AMERICA
and
PAKISTAN**

Contract for the transfer of enriched uranium and plutonium for a research reactor. Signed at Vienna, on 5 March 1962

Official text: English.

Registered by the International Atomic Energy Agency on 9 April 1962.

**AGENCE INTERNATIONALE DEL'ÉNERGIE ATOMIQUE,
ÉTATS-UNIS D'AMÉRIQUE
et
PAKISTAN**

Contrat pour la cession d'uranium enrichi et de plutonium destinés à un réacteur de recherche. Signé à Vienne, le 5 mars 1962

Texte officiel anglais.

Enregistré par l'Agence internationale de l'énergie atomique le 9 avril 1962.

No. 6114. CONTRACT¹ BETWEEN THE INTERNATIONAL ATOMIC ENERGY AGENCY, THE GOVERNMENT OF THE UNITED STATES OF AMERICA AND THE GOVERNMENT OF PAKISTAN FOR THE TRANSFER OF ENRICHED URANIUM AND PLUTONIUM FOR A RESEARCH REACTOR. SIGNED AT VIENNA, ON 5 MARCH 1962

WHEREAS the Government of Pakistan (hereinafter called "Pakistan"), desiring to set up a project consisting of a research reactor for peaceful purposes, has requested the assistance of the International Atomic Energy Agency (hereinafter called the "Agency") in securing, among other things, the special fissionable material necessary for this purpose ;

WHEREAS the Board of Governors of the Agency has approved the project on 27 February 1962 ;

WHEREAS the Agency and the Government of the United States of America (hereinafter called the "United States") on 11 May 1959 concluded an Agreement for Co-operation² (hereinafter called the "Co-operation Agreement"), under which the United States undertook to make available to the Agency pursuant to the Statute of the Agency³ certain quantities of special fissionable material ;

WHEREAS the Agency and Pakistan are this day concluding an agreement for the provision by the Agency of the assistance requested by Pakistan⁴ (hereinafter called the "Project Agreement") ;

WHEREAS Pakistan has made arrangements with a supplier in the United States of America (hereinafter called the "Supplier") for the supply of fuel elements containing enriched uranium for the reactor and for the provision therefor of a plutonium-beryllium neutron source ;

NOW THEREFORE the Agency, Pakistan and the United States Atomic Energy Commission (hereinafter called the "Commission"), acting on behalf of the United States, hereby agree as follows :

¹ Came into force on 5 March 1962, upon signature, in accordance with article VI.

² United Nations, *Treaty Series*, Vol. 339, p. 359,

³ 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, and Vol. 416, p. 342.

⁴ See p. 17 of this volume.

Article I

TRANSFER OF ENRICHED URANIUM AND PLUTONIUM

Section 1. Subject to the provisions of the Co-operation Agreement, the Commission shall transfer to the Agency and the Agency shall accept from the Commission :

- (a) Approximately 5775 grammes of uranium enriched to approximately 90% by weight in the isotope U^{235} (hereinafter called the "fuel material"), the precise quantities to be determined pursuant to section 3 (b), contained in fuel elements for a 5-megawatt AMF pool-type research reactor (hereinafter called the "reactor") ;
- (b) Approximately 112 grammes of plutonium (hereinafter called the "neutron source material"), the precise quantities to be determined pursuant to section 3 (d), contained in a 7 curie plutonium-beryllium neutron source for the reactor.

Section 2. The Agency shall transfer to Pakistan and Pakistan shall accept from the Agency the fuel material and the neutron source material.

Section 3. The conditions of the transfer of the fuel material and the neutron source material shall be as follows :

- (a) The Commission shall make available to the Supplier or to a properly licensed manufacturer, at a facility of the Commission designated by it, enriched uranium, in the form of uranium hexafluoride, for the fuel material, subject to such terms, charges and licences as the Commission may require.
- (b) The precise quantity and enrichment of fuel material in the fuel elements shall be determined by the Supplier or the manufacturer, and Pakistan shall cause the Supplier to submit to the Agency and to the Commission a written certification of the Supplier's or the manufacturer's determination of the enrichment by weight in the isotope U^{235} and of the quantity of enriched uranium contained in the fabricated fuel elements. This determination may be checked by the Agency, by Pakistan and by the Commission by means of any review or analysis that any of them may deem appropriate, and shall be approved or revised by unanimous agreement of the parties. The quantity and enrichment shown in the agreed determination shall be considered to be the quantity and enrichment of the fuel material actually transferred under sections 1 and 2 and shall be used for the calculation of the payments to be made pursuant to Article II.
- (c) The Commission shall make available to the Supplier or to a properly licensed fabricator, at a facility of the Commission designated by it, plutonium in metallic form for the neutron source, subject to such terms, charges and licences as the Commission may require.
- (d) The precise quantity of neutron source material in the neutron source shall be determined by the Supplier or the fabricator, and Pakistan shall cause the Sup-

- plier to submit to the Agency and to the Commission a written certification of the Supplier's or the fabricator's determination of the quantity of plutonium contained in the neutron source. This determination shall be accepted as conclusive by the parties.
- (e) Upon completion of the fabrication and the preparation for shipment of the fuel material and of the neutron source material, and upon agreement with respect to the determination of the quantity and enrichment of the fuel material and receipt by the parties of the determination concerning the neutron source material, and upon compliance with paragraph 3 of Annex B to the Project Agreement, Pakistan, at the request and on behalf of the Agency, shall arrange for a transporter who, after thirty day's written notice to the Commission and subject to such terms, charges and licences as the Commission may require, shall transport and deliver the fuel material and the neutron source material to the port of export at New York. The Commission, at the request of the Agency, shall thereupon transfer possession to the Agency or, at the Agency's request and on its behalf, to Pakistan at such port of export and authorize the export of such materials. The Agency or, at the Agency's request and on its behalf, Pakistan shall make arrangements for domestic and overseas transportation and delivery and for storing such materials, as well as for physically handling them, and shall pay all costs in connexion therewith, including cost of containers and packaging. The Agency or, at the Agency's request and on its behalf, Pakistan shall accept possession of such materials at such port of export and shall sign an appropriate written receipt therefor.
- (f) Title to the fuel material and to the neutron source material shall vest in the Agency at the time they leave the jurisdiction of the United States of America and shall thereafter immediately and automatically vest in Pakistan.
- (g) If the parties agree, the transactions relating to the fuel material, as detailed in Articles I and II, may be carried out independently of those relating to the neutron source material.

Article II

PAYMENT

Section 4. The Agency shall send an invoice to Pakistan at or subsequent to the time the parties have agreed with respect to the determination pursuant to section 3 (b) and have received the determination pursuant to section 3 (d). Within thirty days from the date of this invoice Pakistan shall pay to the Agency in United States currency a sum equal to that which the Agency will be obliged to pay to the Commission pursuant to section 5. If the Agency does not receive payment within thirty days after the date of invoice, it is entitled to an additional charge at the rate of six per cent per annum on the unpaid amount.

Section 5. The Commission shall send an invoice to the Agency at or subsequent to the time the Commission transfers possession pursuant to section 3 (e). Within sixty days from the date of this invoice the Agency shall pay for the fuel material at the following rates :

<i>Percentage Enrichment by Weight in the Isotope U²³⁵ of the Enriched Uranium</i>	<i>Price US\$/g of Enriched Uranium</i>
85	11.575
90	12.285
95	13.015

If the degree of the U²³⁵ isotopic enrichment of the enriched uranium transferred lies between two successive degrees of enrichment for which charges are set forth, the charges shall be computed by linear interpolation. For the neutron source material the Agency shall pay US\$30.00 per gramme of plutonium. Payment shall be made in United States currency to the Commission or its designated agent or contractor. If payment is not received within sixty days after the date of invoice, the Commission shall be entitled to an additional charge at the rate of six per cent per annum on the unpaid amount.

Section 6. In order to assist and encourage research on peaceful uses or for medical therapy, the Commission has offered to distribute to the Agency in each calendar year, free of charge, special fissionable material of a value of up to US\$50 000 at the time of transfer, to be supplied from the amounts specified in Article II. A of the Co-operation Agreement. If the Commission finds the project to which this Contract relates eligible, it shall decide by the end of the calendar year in which this Contract is concluded on the extent, if any, to which the project shall benefit by the gift offer, and shall promptly notify the Agency and Pakistan of that decision. The payments provided in sections 4 and 5 shall be reduced by the value of any free material thus made available.

Article III

RESPONSIBILITY

Section 7. Neither the Agency nor any person acting on its behalf shall at any time bear any responsibility towards Pakistan or any person claiming through Pakistan for the safe handling and the use of the fuel material and the neutron source material.

Section 8. After acceptance of possession pursuant to section 3 (e), the Agency shall assume full responsibility to the Commission for the fuel material and the neutron source material, and Pakistan shall be equally responsible to the Agency ; neither the United States, nor the Commission, nor any person acting on behalf of

the Commission shall bear any responsibility for the safe handling and the use of such materials.

Article IV

OFFICIALS NOT TO BENEFIT

Section 9. No Member of the Congress of the United States of America, or Resident Commissioner of the United States of America shall be admitted to or share any part of this Contract or any benefit that may arise therefrom.

Article V

SETTLEMENT OF DISPUTES

Section 10. If the parties should be unable to reach agreement with respect to the determination provided for in section 3 (b) within thirty days of the submission of such determination to them by the Supplier, any party may request that such a determination be made by a laboratory agreed upon by all the parties. The laboratory may perform any tests or analyses that it may deem necessary, and all parties agree to facilitate its work in every way. The results of the determination by the laboratory shall be considered as final and binding on all parties. The costs of the determination by the laboratory shall be borne equally by the parties, provided that if the determination insisted on by any party or parties is confirmed by the laboratory, such party or parties shall not be obliged to bear any share of the costs.

Section 11. Any other dispute arising out of the interpretation or application of this Contract which is not settled by negotiation or as may otherwise be agreed by the parties concerned shall on the request of any party be submitted to an arbitral tribunal composed as follows :

- (a) If the dispute involves only two of the parties to this Contract, all three parties agreeing that the third is not concerned, the two parties involved shall each designate one arbitrator, and the two arbitrators so designated shall appoint a third, who shall be the Chairman. If within thirty 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 thirty days of the designation or appointment of the second arbitrator the third arbitrator has not been appointed.
- (b) If the dispute involves all three parties to this Contract, each party shall designate one arbitrator, and the three arbitrators so designated shall by unanimous decision appoint a fourth arbitrator, who shall be the Chairman, and a fifth arbitrator. If within thirty days of the request for arbitration any party has not designated an arbitrator, any party may request the President of the International

Court of Justice to appoint the necessary number of arbitrators. The same procedure shall apply if within thirty days of the designation or appointment of the third of the first three arbitrators the Chairman or the fifth arbitrator has not been appointed.

A majority of the members of the arbitral tribunal shall constitute a quorum. Decisions shall be made by majority vote. The procedure of the arbitration shall be fixed by the tribunal. Its decisions, including all rulings concerning procedure, jurisdiction and the division of the expenses of arbitration between the parties, shall be binding on all parties. The remuneration of the arbitrators shall be determined on the same basis as that of *ad hoc* judges of the International Court of Justice under Article 32, paragraph 4, of the Statute of the Court.

Article VI

ENTRY INTO FORCE

Section 12. This Contract shall enter into force upon signature by the Director General of the Agency and the duly authorized representatives of the Commission and Pakistan.

DONE in triplicate in the English language, in Vienna, this 5th day of March 1962.

For the International Atomic Energy Agency :

(Signed) Sigvard EKLUND

For the Government of Pakistan :

(Signed) I. H. USMANI

5/3/62

For the United States Atomic Energy Commission,
on behalf of the Government of the United States of America :

(Signed) Henry DE WOLF SMYTH