



International Atomic Energy Agency

INFORMATION CIRCULAR

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THE TEXTS OF THE INSTRUMENTS CONCERNING THE AGENCY'S ASSISTANCE TO CHILE FOR THE ESTABLISHMENT OF A RESEARCH REACTOR PROJECT

The texts[1] of the Supply Agreement between the Agency and the Governments of Chile and the United States of America, and of the Project Agreement between the Agency and the Government of Chile concerning the Agency's assistance to that Government for the establishment of a research reactor project, are reproduced in this document for the information of all Members. Both Agreements entered into force on 19 December 1969.

^[1] The footnotes to the texts have been added in the present information circular.

I. SUPPLY AGREEMENT

CONTRACT FOR THE LEASE OF ENRICHED URANIUM FOR A RESEARCH REACTOR IN CHILE

WHEREAS the Government of Chile (hereinafter called "Chile"), desiring to establish a research project for peaceful purposes consisting of a HERALD-type reactor (hereinafter called the "reactor"), has requested the assistance of the International Atomic Energy Agency (hereinafter called the "Agency") in securing the special fissionable material necessary for this purpose;

WHEREAS the Board of Governors of the Agency approved the project on 30 September 1969, and the Agency and Chile are this day concluding an agreement (hereinafter called the "Project Agreement")[2] for the provision by the Agency of the assistance requested by Chile;

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-operation (hereinafter called the "Co-operation Agreement")[3], under which the United States undertook to make available to the Agency pursuant to its Statute certain quantities of special fissionable material; and

WHEREAS Chile has made arrangements with a manufacturer in the United Kingdom of Great Britain and Northern Ireland (hereinafter called the "Manufacturer") for the fabrication of enriched uranium into fuel elements for the reactor;

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

ARTICLE I

Definitions

Section 1. As used in this Contract:

(a) The term "base charge" means the United States dollar amount per unit of enriched uranium in standard form and specification in effect as of the time any particular transaction under this Contract takes place, as set forth in schedules published by the Commission in the United States Federal Register from time to time. The base charges in effect on the date of entry into force of this Contract are:

| Percentage Enrichment by Weight in the Isotope $^{235}\mathrm{U}$ of the Enriched Uranium | Price US \$/g of Enriched Uranium in the Form of Uranium Hexafluoride |
|---|---|
| 90 | 10.034 |
| 92 | 10.267 |
| 93 | 10.385 |
| 94 | 10. 503 |

- (b) The term "Commission facility" means a laboratory, plant, office, or other establishment operated by or on behalf of the Commission.
- (c) The term "Commission's established specifications" means the specifications for purity and other physical or chemical properties of enriched uranium, as published by the Commission in the United States Federal Register from time to time.

^[2] Part II of this document.

^[3] INFCIRC/5, part III.

- (d) The term "value" means the United States dollar amount determined by multiplying the applicable Commission base charge by the number of units, or fractions thereof, of enriched uranium involved, whether or not such material is in standard form and specification.
- (e) The term "established Commission pricing policy" means any applicable price or charge in United States dollars in effect at the time any particular transaction under this Contract takes place (i) published by the Commission in the United States Federal Register, or (ii) in the absence of such a published figure, determined in accordance with the Commission's pricing policies. A statement of such pricing policies will be furnished upon request. The Commission's published prices and charges, as well as its pricing policies, may be amended from time to time.
- (f) The term "standard form" means the chemical form of enriched uranium, as published by the Commission in the United States Federal Register from time to time.

ARTICLE II

Lease of Fuel Material

Section 2. Subject to the provisions of the Co-operation Agreement, the Commission shall lease to the Agency and the Agency shall lease from the Commission approximately 10.29 kilograms of uranium enriched to approximately 93 per cent by weight in the isotope uranium-235 (hereinafter called the "leased fuel material"), the precise quantities to be determined pursuant to Section 7(b).

Section 3. The Agency shall lease to Chile and Chile shall lease from the Agency the leased fuel material.

ARTICLE III

Term of Lease, Termination

Section 4. The lease specified in Section 2 shall commence at the time when Chile, acting on behalf of the Agency, takes delivery of the leased fuel material pursuant to Article IV. It shall terminate on 31 December 1970, provided that this lease may be extended by mutual agreement of the parties.

Section 5. Any party may specify an earlier termination date by giving sixty (60) days! notice to the other parties if any obligation of the Co-operation Agreement or of this Contract has not been fulfilled by the other parties thereto. The Agency may specify such earlier termination date:

- (i) Under the conditions specified in Article XII. A. 7 and XII. C of its Statute; or
- (ii) After consultation with or at the request of Chile, in case of any increase, pursuant to Section 12, in the Base or Use Charges above the rates indicated in Sections 1(a) and 10 respectively.

Section 6. The rights and obligations under this Contract, insofar as not specifically restricted to the period of the lease, shall commence on the entry into force of this Contract and shall, to the extent unfulfilled, extend beyond the termination of the lease.

ARTICLE IV

Delivery of the Leased Material

Section 7. The conditions of the delivery of the leased fuel material shall be as follows:

- (a) In accordance with supply arrangements between the Commission and the Government of the United Kingdom of Great Britain and Northern Ireland, the Commission shall make available enriched uranium in the standard form meeting the Commission's established specifications as of the date of this Contract for fabrication by the Manufacturer of the leased fuel material.
- (b) Upon completion of the fabrication, Chile shall cause the Manufacturer to submit to the Agency and to the Commission a written certification of the Manufacturer's determination of the enrichment by weight in the isotope uranium-235 and of the quantity of enriched uranium in the leased fuel material. This determination may be checked by the Agency, by Chile 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, prior to transfer from the Manufacturer. The quantity and enrichment shown in the agreed determination shall be considered to be the quantity and enrichment of the leased fuel material actually transferred under Article II and shall be used for the calculation of the payments required to be made pursuant to Articles V and VI. Concurrently with the submission of the Manufacturer's determination, Chile acting on behalf of the Agency, and in consultation with the Manufacturer, shall specify in writing to the Commission a date and site for the transfer of the leased fuel material from the Manufacturer.
- (c) Upon the unanimous agreement of the Agency, Chile and the Commission on the quantity and enrichment of the isotope uranium-235 in the leased fuel material, the Commission shall authorize the transfer of the leased fuel material from the Manufacturer to Chile acting on behalf of the Agency. Thereupon Chile shall, on behalf of the Agency and upon compliance with paragraph 3 of Annex B to the Project Agreement, be responsible for transportation of the leased fuel material from the transfer site and for delivering, storing and physically handling such material, and shall pay all costs in connection therewith, including the cost of containers and packaging. At the time of taking possession of the leased fuel material at the transfer site, Chile shall forward a written receipt therefor to the Agency and to the Commission on behalf of the Agency. Transfer of the leased fuel material from the Manufacturer to Chile, acting on behalf of the Agency, shall constitute delivery of the leased fuel material under this lease.

Section 8. Except as otherwise provided herein, title to the leased fuel material shall at all times be vested in the United States.

ARTICLE V

Payment for Material Lost and Consumed

Section 9.

(a) The Agency shall pay the Commission and Chile shall pay the Agency for any loss or consumption of the leased fuel material, whether or not such loss or consumption is due to the fault or neglect of the Agency or Chile, or any other cause occurring from the time the material is made available by the Commission and until such material has been returned to the Commission as provided herein.

- (b) Chile shall make reports semi-annually by 1 November and 1 May to the Agency and the Commission, on forms as prescribed by the Commission, to accurately reflect all losses or consumption of leased fuel material as known to Chile as of the preceding 30 September and 31 March. In reporting leased fuel material as lost or consumed, Chile shall make reasonable effort to accurately reflect the time of such loss or consumption on the basis of a specific occurrence or in accordance with procedures and methods of calculating loss or consumption accepted by the Commission.
- (c) The amount due to the Commission for leased fuel material lost or consumed shall be the value of such material computed in accordance with this Contract, as of the time of such loss or consumption. Upon payment to the Commission of the amount due, title to such material shall pass from the Commission to the Agency and shall thereafter immediately and automatically vest in Chile.

ARTICLE VI

Use-Charge Payment

Section 10. The Agency shall pay the Commission and Chile shall pay the Agency a use-charge for the leased fuel material subject to this Contract, as provided in Article VII. The rate of use-charge shall be the Commission's published rate of annual (365-day basis) use-charge in effect for the period covered by the Commission's invoice. The present rate of use-charge as of 1 November 1969 is 7.5 per cent.

ARTICLE VII

Establishment of Lease Account

Section 11.

- (a) The Commission will establish a lease account to which will be debited, as provided herein, the amount equal to the value of the leased fuel material subject to this Contract. Such account will be credited, as provided herein, with the amount or amounts equal to the value of the leased fuel material returned or paid for, in accordance with this Contract. The daily balance of this account shall be used for computing the amount due to the Commission for use-charges. The value of leased fuel material reflected in this account after credit for the value of leased fuel material returned and for payments for leased fuel material lost or consumed or purchased shall represent the amount due to the Commission for leased fuel material not returned or paid for.
- (b) The lease account will be debited for material furnished as of the date the leased fuel material is transferred to the Agency or, at the Agency's request and on its behalf, to Chile, pursuant to Article IV.
- (c) The lease account will be credited for leased fuel material returned to the Commission only when the material is returned in accordance with Article XI. Except as otherwise provided in this Contract, the lease account will be credited for leased fuel material returned to the Commission as of the date the material is delivered to a location specified by the Commission pursuant to this Contract. Credit for leased fuel material paid for will be made as of the date payment is received by the Commission.

- (d) Whenever the Commission changes any applicable base charge as provided in Article VIII, the value of leased fuel material recorded in the lease account will be recomputed at the new base charge; provided that the value of leased fuel material lost or consumed or purchased as of the date of such change shall not be recomputed. Subsequent to the effective date of the change in the applicable base charge, the new base charge will be used in determining the value of leased fuel material lost or consumed or purchased and for computing the value of leased fuel material subject to use-charges.
- (e) The Agency and Chile will be notified of the credits made to the lease account as the result of return of leased fuel material, and of any changes in the value of leased fuel material in such account as a result of changes in the applicable base charges. The Agency and Chile will promptly notify the Commission of any disagreement with, discrepancies or errors in, such notices.

ARTICLE VIII

Changes in Rate of Use-Charge, Base Charges, Standard Form and/or Specifications

Section 12. The rate of use-charge, base charges, standard form, and specifications for material furnished under this Contract are subject to change by the Commission in accordance with the United States Atomic Energy Act of 1954, as amended [4].

Section 13. Any increase in base charges or any changes in the standard form or in the Commission's established specifications shall require at least one hundred and eighty (180) days' notice to the Agency and to Chile by publication or otherwise. Any increase in the rate of use-charge shall require at least thirty (30) days' notice to the Lessee by publication or otherwise.

ARTICLE IX

Possible Transfer of Title

Section 14. At any time during the period of the lease, Chile may acquire title to any of the leased fuel material by paying to the Commission, on behalf of the Agency, a sum equal to the base charge for such fuel material. At the end of the month in which the Commission receives such payment, title to the fuel material in question shall automatically vest in the Agency and shall thereafter immediately and automatically vest in Chile.

Section 15. Upon any transfer of title pursuant to Section 14, the lease shall immediately terminate with respect to the fuel material in question and no further charges pursuant to Article VI shall accrue with respect to such fuel material.

ARTICLE X

Use and Transfer

Section 16. Unless otherwise agreed, Chile shall not use any leased fuel material otherwise than in the reactor, nor transfer any such material outside the jurisdiction of the Contracting States.

^[4] Statutes of the United States of America, Vol. 68, Part I, page 919 (Public Law 83-703, approved 1954).

ARTICLE XI

Return of Leased Fuel Material

Section 17. The Agency shall be responsible to the Commission for the return of all leased fuel material subject to this Contract, other than material which has been lost or consumed or to which title has been transferred to the Agency by purchase orgift, at or before the date of termination of the lease in accordance with Section 4.

Section 18. At or before such date of termination Chile shall, at the Agency's request and on its behalf, and after giving fifteen (15) days' notice to the Agency and the Commission, return to the Commission any leased fuel to which it has not obtained title.

Section 19. Except as provided in Section 21, the leased fuel material will be returned directly to the Commission in the standard form and in accordance with the Commission's established specifications in effect as of the date the material is returned after having been reprocessed in facilities acceptable to the Agency and the Commission.

Section 20. Upon receipt of Chile's notice of intention to return the leased fuel material, the Commission will notify the Agency and Chile as to the acceptability of such material pursuant to this Contract, and, if appropriate, as to the Commission facility or location designated for return of the leased fuel material. Chile shall, on behalf of the Agency, at the time of shipment of the leased fuel material, notify the Commission of the facility or other location to which shipment will be made and of the date and method of shipment, and expected date of arrival.

Section 21.

- (a) The Commission may at its sole discretion accept the leased fuel material in a form and specification other than as provided in Section 19. Unless the Commission shall determine that acceptance of the material in its existing form is in the best interests of the United States, the Agency shall pay the Commission's service charge for processing such returned material so as to enable it to satisfy the Commission's established specifications in effect at the time the material is returned and Chile shall pay the Agency an equivalent amount. Such charges shall include the Commission's charge for processing as determined in accordance with the established Commission pricing policy then in effect and an amount, as determined by the Commission, for the value of the leased fuel material consumed during processing. If the leased fuel material, when returned to the Commission, is subject to processing charges under this Section, the Agency shall continue to pay to the Commission and Chile shall continue to pay to the Agency the use-charge on such material until expiration of the processing period as determined by the Commission at the time the material is accepted.
- (b) Unless the Commission shall determine that acceptance of such material is in the best interests of the United States, the Agency shall pay to the Commission and Chile shall pay to the Agency for the leased fuel material returned in a form or specification other than as provided in Section 19 a sum equal to the value of the leased fuel material. In addition, the Agency shall also pay to the Commission and Chile shall also pay to the Agency a special service charge, as determined in accordance with established Commission pricing policy in effect at the time the material is returned for the handling, storage and/or disposal of such material.

Section 22. The conditions of the return of the leased fuel material shall be as follows:

- (a) Chile shall pack the leased fuel material for shipment in containers approved for this purpose by the Agency and the Commission.
- (b) Chile shall return the leased fuel material in accordance with appropriate health and safety measures prescribed by the Agency and the Commission, to a port of entry in the United States of America designated by the Commission after consultation with the Agency and Chile.
- (c) Upon arrival of the leased fuel material at the port of entry, the Commission shall perform the actions required to authorize the import of such material. Unless otherwise mutually agreed, Chile shall thereafter, on behalf of the Agency, arrange for a carrier, subject to such terms, charges and licences as may be required, to transport such material by commercial conveyance to the Commission. The Commission shall take possession of the leased fuel material at its specified facility or location and shall give an appropriate written receipt therefor, a certified copy of which Chile shall transmit to the Agency.
- (d) Chile shall, on behalf of the Agency, pay all costs including costs of containers and necessary packaging for transportation within and outside the United States of America and for transferring and storing the leased fuel material, as well as for physically handling it in connection with the return; such costs shall not be the responsibility of, nor be borne by, the Commission.
- (e) The parties may agree that the leased fuel material be returned in more than one shipment, in which case the provisions of this Contract shall apply, as appropriate, to each shipment.

ARTICLE XII

Performance of the Commission's Obligations; Billing Section 23.

- (a) The Commission may fulfil its obligations under this Contract through the operator of any of its facilities. No such operator is authorized to modify the terms of this lease, waive any requirement thereof, or settle any claim or dispute arising hereunder.
- (b) Billings for amounts due to the Commission under this Contract will ordinarily be made (1) following receipt of notice of loss or consumption or following purchase of the material subject to this lease, and (2) semi-annually for use-charge.
- (c) All bills rendered by or on behalf of the Commission are due sixty (60) days from the date of invoice and shall be paid in currency of the United States of America. On all amounts not received by the Commission within sixty (60) days from the date of invoice, the Agency shall pay interest at the per-annum rate (365-day basis) established from time to time by the Commission, such interest to commence on the sixty-first (61st) day from the date of invoice.

ARTICLE XIII

Procedure of Payment

Section 24. Payment shall be made by Chile to the Agency and by the Agency to the Commission or its designated agent or contractor, in United States currency. Chile shall pay the Agency within thirty (30) days after receipt of the Agency's invoice, to be dispatched after receipt of the Commission's invoice, and Chile shall reimburse the Agency for, or, at the Agency's request and on its behalf, Chile shall pay directly to the Commission, any additional interest charge.

ARTICLE XIV

Disclaimer, Responsibility and Liability

Section 25. Neither the Agency, the United States, the Commission, nor persons acting on behalf of the Commission warrant that the leased fuel material (a) will not result in injury or damage when used for any purpose, or is (b) of merchantable quality, or (c) fit for any particular purpose.

Section 26. Neither the Agency nor the Commission shall be liable for any failure to transport and deliver the leased fuel material in accordance with the date specified in Section 7(b).

Section 27. The Agency shall assume full responsibility to the Commission, during the period of the lease for the leased fuel material, including any loss, destruction, contamination or consumption thereof. Chile shall be equally responsible to the Agency.

Section 28. Neither the Agency nor any person acting on its behalf shall at any time bear any responsibility towards Chile or any person claiming through Chile for the safe handling and the use of the leased fuel material.

Section 29. 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 the leased fuel material before its return in accordance with Article XI.

Section 30. The Agency shall hold harmless the Commission and Chile shall hold harmless the Agency against any liability from any cause arising in connection with the leased fuel material during the period of the lease.

Section 31. Unless expressly waived in writing by the Agency and the Commission, Chile agrees to indemnify the Agency, the United States, the Commission, or any person acting on behalf of the Agency or the Commission, against liability, and resultant costs and expenses incurred, for infringement of any patent occurring in the utilization by Chile of the leased fuel material.

ARTICLE XV

Determination of Quantities and Properties of Leased Fuel
Material Returned to the Commission;
Resolution of Measurement Differences

Section 32.

(a) The following provisions and procedures shall apply to the determination of quantities and properties of material, and the resolution of measurement differences resulting from such determination with respect to leased fuel material which is returned directly to a Commission facility. For the purposes

of this Article, the terms "shipper" and "receiver" shall refer respectively to Chile acting on behalf of the Agency and to the Commission. The shipper will promptly furnish the receiver a statement of the quantities and properties of the material transferred including a statement of the gross weight of the container plus material and the tare weight of such container.

- (1) The Commission samples obtained at a Commission facility using the Commission's procedures will be the official samples and shall be binding upon the Commission, the shipper and the umpire unless the Commission and the shipper agree upon the use of other samples, procedures or sampling locations.
- The following provisions and procedures apply to the determination of the net weight of material transferred as determined by the gross weight of the container plus material less the tare weight of such container. The net weight of material transferred shall be determined prior to acceptance of delivery by the Commission at a Commission facility using the Commission's procedures and facilities unless the Commission and the shipper agree upon other procedures or facilities. Upon written request the shipper shall be given an opportunity to observe, at the shipper's expense, the weighing of the container and the container plus material and the taking of official samples by the Commission, by the Commission's notifying the shipper of the dates and places for observance of such events. The net weight of material transferred shall be as determined by the results of such weighings and shall not be subject to the provisions of sub-paragraphs (3) and (4) below.
- If, after determination pursuant to sub-paragraph (2) above of the net (3) weight of the material transferred, the receiver does not accept the shipper's statement of the other quantities and properties of the material transferred, the receiver shall within sixty (60) days after the receipt of the material or the shipper's statement of quantities and properties, whichever is later, submit a notice of disagreement in writing to the shipper. The notice of disagreement shall include measurement and/or analysis data supporting the disagreement. If such notice of disagreement is not submitted within such sixty (60) days, the shipper's measurements will be final and binding upon both parties. If the disagreement is solely with respect to quantitative determinations within specification limits, the receiver may use or dispose of the material prior to resolution of the disagreement. If the disagreement is with respect to whether the material is within specification limits, the receiver may handle the material as necessary for storage or protection against health and safety hazards; provided, however, should the receiver further use or dispose of the material, the shipper's measurements will be final and binding on both parties.
- (4) In the case of a disagreement concerning results obtained from analysis of a sample which is not resolved by mutual agreement, an official sample shall be submitted to an umpire mutually agreed upon for analysis.

 The umpire's results shall be conclusive on both parties.
 - (i) In the case of a disagreement with respect to whether or not the material is within specification limits, the receiver will pay the umpire cost if the umpire's result is within specification limits, and the shipper will pay the umpire cost if the umpire's result is not within specification limits.

- (ii) In the case of a disagreement with respect to quantitative determinations within specification limits, the party whose result is furthest from the umpire's result will pay the umpire cost; provided that in the event the umpire's result is equidistant between the shipper's and the receiver's results, the parties will each bear one half of the umpire cost.
- (iii) As used in this sub-paragraph (4), the phrase "umpire cost" means the umpire's charges plus the additional cost, if any, of the packaging, handling and transporting of the official sample to and from the umpire. In the event that the umpire is to employ an official sample for more than one determination, the foregoing umpire costs shall be allocated as mutually agreed by the parties prior to the furnishing of the sample to the umpire, or, in the absence of such agreement, as determined by the umpire.
- (b) The quantity and properties of irradiated material subject to this Contract and returned directly to the Commission under a contract providing for chemical processing and financial settlement will be determined in accordance with the provisions and procedures agreed upon in such contract.

ARTICLE XVI

Adjustment of Use-Charges; Resolution of Differences

Section 33. The period of time during which use-charges shall accrue under this Contract with respect to returned leased fuel material subject to a measurement disagreement hereunder shall be adjusted as follows:

- (a) No use-charge shall accrue between the date of receipt of the shipment and the shipper's receipt of notice of disagreement. Use-charges shall accrue between shipper's receipt of notice of disagreement and the date of resolution or the date of use or disposition of the material by the Commission (when mutually agreed upon), whichever occurs first, unless the disagreement is resolved in favour of the shipper.
- (b) Where an umpire is used and the umpire's results are equidistant from those of the parties, no use-charge shall accrue for one half of the period between the date of receipt of notice of disagreement and the date of resolution or the date of use or disposition of the material by the Commission (when mutually agreed upon), whichever occurs first.
- (c) Where the disagreement is resolved by mutual agreement, the period of use-charge shall be included in and settled by mutual agreement.

The above use-charges shall apply to the total of the material whose quantity or other characteristics are involved, and not to the amount represented by any difference of the measurements.

ARTICLE XVII

Officials not to Benefit

Section 34. 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 XVIII

Assignment of Rights and Interests

Section 35. Neither the Agency nor Chile may transfer any right or interest under this Contract to any third State.

ARTICLE XIX

Waiver of Rights by Commission

Section 36.

- (a) Nothing in this Contract shall require the Agency or Chile to pay any charges or observe any provisions of, or established pursuant to, this Contract if the Commission, in accordance with statutory or other authority available to it, determines that such charges or provisions are not applicable.
- (b) In order to assist and encourage research on peaceful uses or for medical therapy, the Commission has in each calendar year offered to distribute to the Agency, free of charge, special fissionable material of a value 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 Chile of that decision. The obligations of the Agency and Chile under this Contract shall be reduced in accordance with the value of any free material thus made available.

ARTICLE XX

Settlement of Disputes

Section 37. If the parties should be unable to reach agreement with respect to the determination provided for in Section 7(b) within thirty (30) days of the submission of such determination to them by the Manufacturer, any party may request that such a determination be made by a laboratory agreed upon by all 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 38. Any other dispute arising out of the interpretation or application of this Contract, excepting a dispute involving a determination of quantities and properties of returned leased fuel material, 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 elect a third, who shall be the Chairman. If within thirty (30) 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 (30) days of the designation or appointment of the second arbitrator, the third arbitrator has not been elected.

(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 elect a fourth arbitrator, who shall be the Chairman, and a fifth arbitrator. If within thirty (30) 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 (30) days of the designation or appointment of the third of the first three arbitrators, the Chairman or the fifth arbitrator has not been elected. A majority of the members of the arbitral tribunal shall constitute a quorum, and all decisions shall be made by majority vote. The arbitral procedure shall be established by the tribunal, whose decisions, including all rulings concerning its constitution, 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 XXI

Notices

Section 39.

(a) Any notice required under this Contract to be submitted to the Commission shall be addressed to:

The Director Division of International Affairs United States Atomic Energy Commission Washington, D.C. 20545

(b) Any notice required under this Contract to be submitted to the Agency shall be addressed to:

The Director Division of Nuclear Power and Reactors International Atomic Energy Agency A-1010 Vienna

(c) Any notice required under this Contract to be submitted to Chile shall be addressed to:

Comision Chilena de Energia Nuclear Miraflores 138-Casilla 188D Santiago de Chile

ARTICLE XXII

Entry into Force

Section 40. This Agreement shall enter into force upon signature by or for the Director General of the Agency and by the authorized representatives of the Commission and Chile.

DONE in Vienna, on the nineteenth day of December 1969, in triplicate in the English language.

For the INTERNATIONAL ATOMIC ENERGY AGENCY:

(signed) Sigvard Eklund

For the GOVERNMENT OF CHILE:

(signed) Miguel Serrano Fernández

For the UNITED STATES ATOMIC ENERGY COMMISSION on behalf of the GOVERNMENT OF THE UNITED STATES OF AMERICA:

(signed) Verne B. Lewis

II. PROJECT AGREEMENT

AGREEMENT BETWEEN THE INTERNATIONAL ATOMIC ENERGY AGENCY AND THE GOVERNMENT OF CHILE FOR ASSISTANCE BY THE AGENCY TO CHILE IN ESTABLISHING A RESEARCH REACTOR PROJECT

WHEREAS the Government of Chile (hereinafter called "Chile"), desiring to establish a project for research on, and development and practical application of, atomic energy for peaceful purposes, has requested the assistance of the International Atomic Energy Agency (hereinafter called the "Agency") in securing the special fissionable material necessary for a HERALD-type reactor;

WHEREAS the Board of Governors of the Agency approved the project on 30 September 1969;

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-operation (hereinafter called the "Co-operation Agreement")[3], under which the United States undertook to make available to the Agency pursuant to its Statute certain quantities of special fissionable material; and

WHEREAS the Agency, Chile and the United States Atomic Energy Commission, acting on behalf of the United States, are this day concluding a contract (hereinafter called the "Supply Agreement") [5] for the lease of enriched uranium for the reactor;

NOW, THEREFORE, the Agency and Chile hereby agree as follows:

ARTICLE I

Definition of the Project

Section 1. The project to which this Agreement relates is the establishment of a HERALD-type five-megawatt research reactor (hereinafter called the "reactor"), to be operated by the Chilean Nuclear Energy Commission at Santiago.

ARTICLE II

Supply of Special Fissionable Material

Section 2. The Agency hereby allocates to the project described in Article I, and provides to Chile enriched uranium (hereinafter called the "supplied material") pursuant to the terms of the Supply Agreement, which constitutes an integral part of this Agreement to the extent that it creates rights and obligations between the Agency and Chile.

ARTICLE III

Shipment of the Supplied Material

Section 3. Any part of the supplied material, the shipment of which is arranged by Chile while the material is in its possession, shall be entrusted to a licensed public carrier selected by Chile or shall be accompanied by a responsible person designated by Chile.

^[5] Part I of this document.

ARTICLE IV

Agency Safeguards

- Section 4. Chile undertakes that the reactor and the supplied material, and any special fissionable material produced by their use, as well as any other material or facility while listed in the Inventory established pursuant to Annex A, shall not be used in such a way as to further any military purpose.
- Section 5. It is specified that the safeguards rights and responsibilities of the Agency provided for in paragraph A of Article XII of its Statute are relevant to the project and shall be implemented in accordance with Annex A to this Agreement.

ARTICLE V

Health and Safety Measures

Section 6. The health and safety measures specified in Annex B to this Agreement shall be applied to the project.

ARTICLE VI

Agency Inspectors

- Section 7. The provisions set forth in the Annex to Agency document GC(V)/INF/39 (which Annex is hereinafter called 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 to which the Agency has access at all times; the actual procedures for implementing paragraph 50 of Agency document INFCIRC/66/Rev. 2 (hereinafter called the "Safeguards Document") shall be agreed by the Agency and Chile in an agreement supplementing this Agreement, before such facility or material is listed in the Inventory.
- Section 8. The relevant provisions of the Agreement on the Privileges and Immunities of the Agency[6] shall apply to the Agency, its inspectors and its property used by them in performing their functions pursuant to this Agreement.
- Section 9. Chile 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 Chile.

ARTICLE VII

Information and Rights to Inventions and Discoveries

Section 10. In conformity with paragraph B of Article VIII of the Statute of the Agency, Chile shall make available to the Agency without charge all scientific information developed as a result of the assistance extended by the Agency.

^[6] INFCIRC/9/Rev. 2.

ARTICLE VIII

Languages

Section 11. Reports and other information should be submitted to the Agency in one of the working languages of the Board of Governors of the Agency.

ARTICLE IX

Settlement of Disputes

Any dispute concerning the interpretation or application of this Agreement, which is not settled by negotiation or as may otherwise be agreed, shall be settled in accordance with Article XX of the Supply Agreement.

Decisions of the Board of Governors of the Agency concerning the Section 13. implementation of Article IV, V or VI shall, if they so provide, be given effect immediately by the Agency and Chile, pending the final settlement of any dispute.

ARTICLE X

Entry into Force

This Agreement shall enter into force upon signature by or for the Section 14. Director General of the Agency and by the authorized representative of Chile.

DONE in Vienna, on the English language.

19 December 1969, in duplicate in the

For the INTERNATIONAL ATOMIC ENERGY AGENCY:

(signed) Sigvard Eklund

For the GOVERNMENT OF CHILE:

(signed) Miguel Serrano Fernández

ANNEXA

AGENCY SAFEGUARDS

A. Inventory of Items subject to Safeguards

- 1. The Agency shall establish, in accordance with paragraph 2 below, an inventory (hereinafter called the "Inventory") of all nuclear material and facilities subject to safeguards under this Agreement. The Inventory shall be maintained on the basis of the reports received from Chile pursuant to the procedures provided for in paragraph 6 below and of other decisions, determinations and arrangements made pursuant to this Annex. Nuclear material referred to in sub-paragraph 2(a)(ii) below shall be considered as being listed in the Inventory from the time that it is produced, processed or used within the meaning of that sub-paragraph. The Agency shall send copies of the Inventory to Chile every twelve months and also at any other time specified by Chile in a request communicated to the Agency at least two weeks in advance.
- 2. The following nuclear material and facilities shall be listed in the indicated parts of the Inventory:

(a) Main Part:

- (i) The reactor and the supplied material, and nuclear material substituted in accordance with paragraph 25 or 26(d) of the Safeguards Document for any nuclear material listed in accordance with this sub-paragraph;
- (ii) Nuclear material that is being or has been produced, processed or used in the reactor or produced in or by the use of any nuclear material listed in the main part of the Inventory, and nuclear material substituted in accordance with paragraph 25 or 26(d) of the Safeguards Document for any nuclear material listed in accordance with this sub-paragraph;
- (b) Subsidiary Part: Any facility while it contains any nuclear material listed in the main part of the Inventory;

(c) Inactive Part:

- (i) Nuclear material which has been exempted from safeguards pursuant to paragraph 3 below;
- (ii) Nuclear material with regard to which safeguards have been suspended pursuant to paragraph 3 below.
- 3. The Agency shall exempt nuclear material from safeguards 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. Upon such exemption or suspension, the nuclear material affected shall be transferred from the main to the inactive part of the Inventory.
- 4. The Agency shall terminate safeguards with respect to nuclear material under the conditions specified in paragraph 26 of the Safeguards Document and may make arrangements with Chile to terminate safeguards pursuant to paragraph 27. Upon such termination, the nuclear material affected shall be removed from the Inventory.

B. Safeguards Procedures

5. In applying safeguards, the Agency shall observe the principles set forth in paragraphs 9-14 of the Safeguards Document.

- 6. The procedures for the application of safeguards by the Agency under this Agreement shall be those set forth in Part III of the Safeguards Document. The Agency shall make arrangements with Chile concerning the detailed implementation of those procedures.
- 7. The Agency may request the information referred to in paragraph 41 of the Safeguards Document and make an initial inspection in accordance with paragraphs 51 and 52 of the Document.
- 8. Chile shall inform the Agency of its intention to transfer any nuclear material listed in the main part of the Inventory to a facility within its jurisdiction in connection with which the Agency is not applying safeguards, and shall provide to the Agency sufficient information to enable it to determine whether, and under what conditions, it can apply safeguards in connection with the facility. The material may only be transferred when all necessary arrangements with the Agency have been concluded for the application of safeguards in connection with the facility.
- 9. Nuclear material listed in the main part of the Inventory may only be transferred beyond the jurisdiction of Chile in accordance with the provisions of paragraph 28 of the Safeguards Document. The reactor may only be so transferred in accordance with such provisions, mutatis mutandis. If any material or the reactor is transferred in accordance with this Section, it shall thereupon be removed from the Inventory.
- 10. If the Board of Governors of the Agency determines that there has been any non-compliance with this Agreement, the Board shall call upon Chile to remedy such non-compliance forthwith, and shall make such reports as it deems appropriate. If Chile fails to take fully corrective action within a reasonable time, the Board may take any measures provided for in Article XII. C of the Statute of the Agency.

C. Interpretation and Amendment

- 11. This Annex shall be interpreted in the light of the Agency's safeguards system, as set forth in the Safeguards and Inspectors Documents.
- 12. If the Board of Governors of the Agency decides to make any change in the Safeguards or Inspectors Documents, this Agreement shall be amended, at the request of Chile, to take account of such change.

ANNEX B

HEALTH AND SAFETY MEASURES

- 1. The health and safety measures applicable to the project shall be those set forth in Agency document INFCIRC/18 (hereinafter called the "Health and Safety Document"), as specified below.
- 2. Chile shall apply the Agency's Basic Safety Standards [7] and relevant provisions of the Agency's Regulations for the Safe Transport of Radioactive Materials [8] as these Standards and Regulations are revised from time to time, and shall as far as possible apply them also to any shipment of supplied material outside Chile. Chile shall endeavour to ensure safety conditions as recommended in the relevant parts of the Agency's codes of practice.
- 3. Chile shall arrange for the submission to the Agency, at least 60 days prior to the proposed transfer of any of the supplied material to the jurisdiction of Chile, of a detailed health hazards report containing the information specified in paragraph 29 of the Health and Safety Document, with particular reference to the following types of operations, to the extent that such information is relevant and not yet available to the Agency:
 - (a) Receipt and handling of the supplied material;
 - (b) Loading of fuel into the reactor;
 - (c) Start-up and pre-operational testing of the reactor with the supplied material;
 - (d) Experimental programme and procedure involving the reactor;
 - (e) Unloading of fuel from the reactor;
 - (f) Handling and storage of fuel after unloading.

The transfer shall not take place until the Agency has determined that the safety measures, as described in the report, are acceptable. The Agency may require further safety measures in accordance with paragraph 30 of the Health and Safety Document. Should Chile desire to make substantial modifications to the procedures with respect to which information was submitted, or to perform any operations with the reactor (including finally closing it down) or with the supplied material as to which operations no such information was submitted, it shall submit to the Agency all relevant information as specified in paragraph 29 of the Health and Safety Document in sufficient time to enable the Agency to perform its task in accordance with paragraph 30 of the Document before such modified procedures or additional operations are carried out.

- 4. Chile shall arrange for the submission of the reports specified in paragraph 25 of the Health and Safety Document, the first report to be submitted not later than twelve months after the entry into force of this Agreement. In addition, the reports specified in paragraphs 26 and 27 of the Document shall be submitted.
- 5. The Agency may inspect the reactor, in accordance with paragraphs 33 to 35 of the Health and Safety Document, at the time of initial start-up with the supplied material, once during the first year of operation, and thereafter not more than once a year, provided that special inspections may be carried out in the circumstances specified in paragraph 32 of the Document.
- 6. Changes may be made in the safety standards and measures laid down in this Annex, in accordance with paragraphs 38 and 39 of the Health and Safety Document.

^[7] Safety Series No. 9, 1967 Edition (STI/PUB/147).

^[8] Ibid., No. 6, 1967 Edition (STI/PUB/148).