# No. 7320

# INTERNATIONAL ATOMIC ENERGY AGENCY and NORWAY and UNITED STATES OF AMERICA

Contract (with annex) for the lease of enriched uranium for the NORA Reactor. Signed at Vienna, on 8 April 1964

Official text: English.

Registered by the International Atomic Energy Agency on 26 June 1964.

# AGENCE INTERNATIONALE DE L'ÉNERGIE ATOMIQUE et NORVÈGE et ÉTATS-UNIS D'AMÉRIQUE

Contrat (avec annexe) pour la location d'uranium enrichi destiné au réacteur NORA. Signé à Vienne, le 8 avril 1964

Texte officiel anglais.

Enregistré par l'Agence internationale de l'énergie atomique le 26 juin 1964.

No. 7320. CONTRACT<sup>1</sup> BETWEEN THE INTERNATIONAL ATOMIC ENERGY AGENCY, THE GOVERNMENT OB NORWAY AND THE GOVERNMENT OF THE UNITED STATES OF AMERICA FOR THE LEASE OF ENRICHED URANIUM FOR THE NORA REACTOR. SIGNED AT VIENNA, ON 8 APRIL 1964

WHEREAS the International Atomic Energy Agency (hereinafter called the "Agency") and the Government of Norway (hereinafter called "Norway") on 10 April 19612 signed an Agreement Relating to an Agency Project for Cooperation in carrying out a Joint Program of Research in Reactor Physics with the Zero-Power Reactor "NORA" (hereinafter called the "Project Agreement ");

WHEREAS the parties to the Project Agreement are this day concluding an agreement extending the Joint Program;3

WHEREAS Norway, in connection with the extension of the Joint Program, has requested the assistance of the Agency in securing from the Government of the United States of America (hereinafter called the "United States") a new supply of enriched uranium; and

Whereas the Agency and the United States on 11 May 19594 concluded an Agreement for Co-operation (hereinafter called the "Co-operation Agreement"), under which the United States undertook to make available to the Agency pursuant to its Statute<sup>5</sup> certain quantities of special fissionable material;

Now therefore the Agency, Norway and the United States Atomic Energy Commission (hereinafter called the "Commission"), acting on behalf of the United States, agree as follows:

#### Article I

#### LEASE OF ENRICHED URANIUM

Section 1. The Commission, subject to the provisions of the Co-operation Agreement, shall lease to the Agency, and the Agency shall lease from the Commission, approximately 1,200 fuel elements (hereinafter called the "supplied material"), the specifications of which are stated in the Annex to this Contract.

<sup>&</sup>lt;sup>1</sup> Came into force on 8 April 1964, upon signature, in accordance with article XII. <sup>2</sup> United Nations, *Treaty Series*, Vol. 402, p. 255; and p. 360 of this volume.

<sup>See p. 360 of this volume.
United Nations, Treaty Series, Vol. 339, p. 359.
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; Vol. 471, p. 333,</sup> and Vol. 494.

- Section 2. The Agency shall lease to Norway, and Norway shall lease from the Agency, the supplied material.
- Section 3. The conditions of the delivery of the supplied material shall be as follows:
- (a) Prior to delivery the quantity and enrichment by weight in the isotope U<sup>235</sup> of the uranium in the fuel elements shall be determined by the Commission in accordance with its normal practice and shall be communicated to the Agency and Norway. The Agency and Norway, acting on behalf of the Agency, may, subject to Section 28, verify the quantity and enrichment of the supplied material, and test it for conformity to the specifications in the Annex to this Contract.
- (b) The Commission shall pack the supplied material for shipment in containers, approved for this purpose by the Agency and Norway, which containers shall in any case meet Commission requirements.
- (c) The Commission shall transport and deliver, on approximately 1 October 1964 unless otherwise agreed, the supplied material to the port of export at New York. The Commission shall thereupon transfer possession to the Agency or, at the Agency's request and on its behalf, to Norway at the port so specified, and authorize the export of such material. The Agency or, at the Agency's request and on its behalf, Norway shall pay all costs (including, subject to the provisions of Sections 9 and 11 (e), the cost of containers and packaging) for transportation within and outside the United States of America and for delivering and storing such material, as well as for physically handling it in connection with such delivery and transfer; such costs shall not be the responsibility of, nor be borne by the Commission. The Agency or, at the Agency's request and on its behalf, Norway shall accept possession of such material at the designated port of export and shall give an appropriate written receipt therefor.
- Section 4. The conditions of the return of the supplied material shall be as follows:
- (a) The Agency shall be responsible to the Commission for the return of all the supplied material at or before the date of termination of the leases in accordance with Section 8, in the same form and meeting the same specifications in which it was received, except as provided in Section 28.
- (b) At or before such date of termination Norway shall, at the Agency's request or on its behalf, and after giving thirty days' notice to the Agency and the Commission, return the supplied material to the Commission in the same form and meeting the same specifications in which it was received, except as provided in Section 28.

- (c) In carrying out its responsibilities as provided in Section 4(b):
  - (i) Norway shall pack the supplied material for shipment in the containers in which it had been delivered or in such other containers as may be approved for this purpose by the Agency and the Commission; and
  - (ii) Norway shall return the supplied material to a port of entry in the United States of America designated by the Commission after consultation with the Agency and Norway.
- (d) Upon arrival of the supplied material at the port of entry the Commission shall authorize the import of such material and accept possession thereof from the Agency or Norway, acting at the request of and on behalf of the Agency, giving an appropriate written receipt therefor.
- (e) Prior to return of the supplied material the Agency and the Commission shall, after consultation with each other and with Norway, make arrangements regarding its inland transportation within the United States of America. The Agency or, at the Agency's request and on its behalf, Norway shall pay all costs (including, subject to the provisions of sections 9 and 11 (e), the cost of containers and packaging), for transportation within and outside the United States of America and for delivering and storing such material, as well as for physically handling it in connection with such delivery and transfer; such costs shall not be the responsibility of, nor be borne by the Commission.
- Section 5. Title to the supplied material shall at all times be vested in the United States.
- Section 6. The parties may agree that the supplied material be delivered or returned in more than one lot of fuel elements, in which case the provisions of this Contract shall apply, as appropriate, to each such lot separately.

#### Article II

# PERIOD OF LEASES

Section 7. The leases specified in Sections 1 and 2 shall commence at the time when, pursuant to Section 3, the Agency or, at the Agency's request and on its behalf, Norway accepts possession of the supplied material and they shall terminate at the time when, pursuant to Section 4, the Commission accepts possession upon return of the supplied material. The rights and obligations under this Contract, insofar as not specifically restricted to the period of the leases, shall commence on the entry into force of this Contract and shall, to the extent unfulfilled, extend beyond the termination of the leases.

Section 8. The leases shall extend for a period of two-and-one-half years, unless otherwise mutually agreed by the parties, except that the leases may be terminated, as provided in Section 7, at an earlier date by and at the initiative of:

# (a) The Agency:

- (i) Under the conditions specified in Article XII. A. 7 and XII. C of its Statute; or
- (ii) If any obligation of the Co-operation Agreement or of this Contract is not fulfilled by the other parties thereto; or
- (iii) Upon termination of the extended Project Agreement; or
- (iv) After consultation with Norway, in case of any increase, pursuant to Section 15, in the Use or Consumption Charges above the rates indicated in Sections 11 (a) and (b) respectively; or
- (v) At the request of Norway, it being understood that the Agency shal comply with such a request if made under conditions corresponding to those in subparagraphs (ii), (iii) or (iv) above.

# (b) The Commission:

- (i) If any obligation of the Co-operation Agreement or of this Contract is not fulfilled by the other parties thereto; or
- (ii) Upon termination of the extended Project Agreement.

The Agency after consultation with Norway may cancel this Contract before acceptance of possession of any of the supplied material, provided that it notifies the Commission and makes provision for the payment of any Cancellation Charge pursuant to Section 11(f).

# Article III

#### CONTAINERS

Section 9. The Commission and the Agency or Norway, acting on behalf of the Agency, may enter into supplementary arrangements concerning the provision of the containers mentioned in Sections 3 (b) and 4 (c). Unless otherwise agreed, the containers shall be supplied by Norway acting on behalf of the Agency.

#### Article IV

#### Provision of Information

Section 10. The Commission shall provide the Agency and Norway with unclassified scientific and technical data available to it concerning the supplied material.

#### Article V

#### PAYMENT

Section 11. Norway shall pay the Agency and the Agency shall pay the Commission the following amounts, on the terms specified below:

- (a) A Use Charge for the supplied material, levied for the period of the leases or until it has been determined, in accordance with Section 12 (b), that it is impossible to return the supplied material, and calculated in accordance with the Commission's lease provisions and its schedule of charges for enriched uranium published in the *United States Federal Register* (hereinafter called the "Commission's published charges") and in effect during the appropriate period (at present US \$0.0011 per day per gram of contained U<sup>235</sup>);
- (b) A Consumption Charge for any of the enriched uranium lost, consumed or otherwise not returned, calculated in accordance with the Commission's published charges in effect at the time of the determination called for by Section 12 (b) (at present US \$8.4633 per gram of contained U<sup>235</sup>); and a Consumption Charge calculated at an appropriately lower rate as determined by the Commission for any enriched uranium returned with an enrichment less than that of the material received;
- (c) A Reprocessing Charge for the chemical reprocessing of any enriched uranium contained in the supplied material which is contaminated in accordance with Section 28 or otherwise, at a rate not to exceed the Commission's published charges for chemical processing and conversion of spent fuels; provided that if the Reprocessing Charge exceeds the Consumption Charge for the U<sup>235</sup> contained in such contaminated material, the Agency or, at the Agency's request and on its behalf, Norway may elect to pay the Commission a sum equal to said Consumption Charge in lieu of such a Reprocessing Charge, together with a Service Charge for the handling, storage and/or disposal of such contaminated material;
- (d) A Refabrication Charge for any fuel elements destroyed or damaged in accordance with Section 28 or otherwise, at a rate of US \$200 per fuel element, which charge shall be additional to any Consumption and Reprocessing Charges levied in accordance with Sections 11 (b) and (c), provided that, if in accordance with Section 28 the parties to this Contract agree to the disassembly of certain fuel elements in furtherance of the Joint Program, a lower Refabrication Charge may be agreed to;

- (e) The expenses incurred by the Commission in preparing the containers for shipment and the expense of inland transportation in the United States pursuant to Sections 3 and 4;
- (f) A Cancellation Charge to reimburse the Commission for any expense incurred by it, in reserving the supplied material, in preparing it for shipment and in transporting it to the port of export, prior to receiving notice of the cancellation of this Contract pursuant to the final sentence of Section 8.
- Section 12. The Commission shall bill the Agency and the Agency shall thereupon bill Norway as follows:
- (a) For the Use Charge, at the end of June and December each year and on acceptance of possession upon return of the supplied material;
- (b) For the Consumption Charge, as soon as a determination has been made and agreed to by the parties that any enriched uranium has been depleted, lost, consumed or that a failure to or impossibility of return has occurred;
- (c) For the Reprocessing Charge, within sixty days after the return of any supplied material which has been contaminated;
- (d) For the Refabrication Charge, at the time when the Commission accepts the return of any destroyed or damaged fuel element;
- (e) For the expenses incurred by the Commission in preparing the containers for shipment, at the time of commencement of the leases;
- (f) For the expenses of inland transportation in the United States, at the time they are incurred by the Commission; and
- (g) For the Cancellation Charge, after receiving notice of the cancellation of this Contract.
- Section 13. At the request of the Commission Norway shall provide the Agency and the Commission with such information concerning the supplied material as may be required for the Commission to prepare its billings in accordance with Section 12.
- Section 14. Payment shall be made by Norway to the Agency and by the Agency to the Commission or its designated agent or contractor, in United States currency. The Commission shall be entitled to an additional charge at the rate of 6% per annum on all amounts due and not paid within sixty days after the receipt by the Agency of the Commission's invoice. Norway shall pay the Agency within thirty days after receipt of the Agency's invoice, to be dispatched after receipt of the Commission's invoice, and Norway shall reimburse the Agency for or, at the Agency's request and on its behalf, Norway shall pay directly to the Commission any additional charge if the delay beyond the sixty-day period was due to the fault or negligence of Norway.

Section 15. The Commission may, in accordance with its general policies, change its published charges on which are based the Use Charge specified in Section 11 (a) and the Consumption Charge specific in Section 11 (b), by giving thirty days' prior notice of such change to the Agency and to Norway. Any such change shall be effective on either 1 July or 1 January as stated in the notice of change furnished by the Commission.

#### Article VI

# SHIPMENT OF THE SUPPLIED MATERIAL

- Section 16. Any shipment of the supplied material arranged for by Norway while the supplied material is in its possession shall be in the custody of a licensed public carrier selected for that purpose by Norway, or shall be accompanied by a responsible person designated by Norway.
- Section 17. In arranging for shipment of the supplied material, Norway shall ensure, as far as possible, the observance of the Agency's Regulations for the Safe Transport of Radioactive Materials.\*

#### Article VII

#### WARRANTY, RESPONSIBILITY AND LIABILITY

- Section 18. Neither the Agency nor the Commission make any warranty either express, implied, statutory or otherwise with regard to the supplied material or to the scientific and technical data provided pursuant to Section 10.
- Section 19. If any of the fuel elements delivered by the Commission pursuant to this Contract do not conform to the specifications in the Annex to this Contract, the Agency's and the Commission's sole responsibility and liability shall be, upon return of such defective elements, to arrange for the delivery to Norway, acting on behalf of the Agency, of elements available to the Commission that do conform to such specifications. The Commission shall pay or assume all costs and charges provided for in Sections 3 (c), 4 (c) and 4 (e) with respect to the return of such defective elements.
- Section 20. Neither the Agency nor the Commission shall be liable for any failure to transport and deliver the supplied material in accordance with the date specified in Section 3 (c).
- Section 21. During the period of the leases the Agency shall assume full responsibility to the Commission for the supplied material, including any loss, destruction, depletion, contamination or consumption thereof, and Norway shall be equally responsible to the Agency.

<sup>\*</sup> Agency's Safety Series No. 6 (STI/PUB/40).

- Section 22. Neither the Agency nor any person acting on its behalf shall at any time bear any responsibility towards Norway or any person claiming through Norway for the safe handling and the use of the supplied material.
- Section 23. During the period of the leases 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 supplied material.
- Section 24. The Agency shall hold harmless the Commission and Norway shall hold harmless the Agency against any liability from any cause arising in connection with the supplied material during the period of the leases.
- Section 25. Unless expressly waived in writing by the Agency and the Commission, Norway agrees to indemnify the Agency, the United States, the Commission, or persons 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 Norway of the supplied material.

# Article VIII

# ASSIGNMENT, USE AND RETRANSFER

- Section 26. Neither the Agency nor Norway may transfer any right or interest under this Contract to any third State.
- Section 27. Unless otherwise agreed, Norway shall not use the supplied material otherwise than in the zero-power reactor "NORA", nor transfer it to any other country, nor shall it operate the NORA reactor in such a manner that more than a negligible quantity of the U<sup>235</sup> contained in the supplied material will be consumed.
- Section 28. Unless otherwise agreed, neither the Agency nor Norway shall disassemble or otherwise destroy any fuel element leased pursuant to this Contract, except that for the purpose of accomplishing the verifications provided for in Section 3 (a) the Agency and Norway, acting on behalf of the Agency, may perform such tests as they may consider necessary on no more than a total of ten fuel elements leased hereunder, provided that they do not thereby unnecessarily contaminate or deplete the enriched uranium contained therein, that the fuel elements thus tested and the enriched uranium contained therein are returned to the Commission in accordance with Section 4, and that the payments required by Sections 11 (b), (c) and (d) be made with respect to all such elements, except that Norway shall be relieved of its obligation for such payments for any elements tested by the Agency. The Commission shall, sufficiently before the date specified in Section 3 (c), make available to the Agency and to Norway,

if the Agency or Norway, acting on behalf of the Agency, so requests, sample fuel elements, selected pursuant to mutually agreed procedures within the numerical limits stated above, and, on request of the Agency, arrange for the transfer of possession and the export of such elements in accordance with Sections 3(b) and (c). If the procedure for the settlement of disputes set forth in Section 31 is evoked, the Commission shall similarly make available to the agreed laboratory sample fuel elements in such quantities and selected according to such procedures as may be agreed by the parties, and in the absence of such agreement as may be determined by the laboratory, the Use, Consumption, Reprocessing and Refabrication Charges for which shall be borne in accordance with Section 31.

## Article IX

#### OFFICIALS NOT TO BENEFIT

Section 29. 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 X

#### WAIVER OF RIGHTS BY COMMISSION

Section 30. Nothing in this Contract shall obligate the Agency or Norway 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 other provisions are not applicable.

#### Article XI

#### SETTLEMENT OF DISPUTES

Section 31. Any question or dispute concerning the quantity or the enrichment of the supplied material or concerning its conformity to the specifications in the Annex to this Contract shall, at the request of any party to this Contract, be submitted to 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 such measurements by the laboratory shall be considered final and binding on all parties. The costs of the measurements by the laboratory shall be borne equally by the parties, provided that if the measurements insisted upon by any party or parties are confirmed by the laboratory such party or parties shall not be obliged to bear any share of the costs.

- Section 32. 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 elect 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 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 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 such 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 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 XII

#### ENTRY INTO FORCE

Section 33. This Contract shall enter into force upon signature by or for the Director General of the Agency and by the authorized representatives of the Commission and Norway.

DONE in Vienna, this 8th day of April 1964, in triplicate in the English language.

For the International Atomic Energy Agency:

(Signed) Sigvard EKLUND

For the Government of Norway:

(Signed) Torfinn Oftedal

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

(Signed) Frank K. HEFNER

#### ANNEX

#### SPECIFICATIONS

The specifications of the fuel elements to be leased pursuant to this Contract are as follows:

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Geometry	•	٠	٠	٠	٠	•	•	Rou
Over-all length of fuel element								60-63 inches
Cladding material								S.A.E. 308 stainless steel
Clad O.D								$0.5439 \pm 0.0007$ inches
Cladding thickness								$0.018 \pm 0.001$ inches
Fuel material								$UO_2$
Enrichment of uranium in U <sup>235</sup>								$3.41\% \pm 0.02\%$ by weight
Length of fuel in fuel element								$48 \pm 0.25$ inches
Weight of fuel in fuel element								$1598 \pm 15$ grams of $UO_2$

Each fuel element is to be identified by a number engraved on its surface.

The fuel elements are to be shipped from existing stocks at the Commission's critical assembly fuel element exchange storage facility at Hartford, Connecticut.

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