



THE TEXTS OF THE INSTRUMENTS RELATING TO A PROJECT  
FOR A JOINT AGENCY-NORWEGIAN PROGRAM OF RESEARCH  
WITH THE ZERO POWER REACTOR "NORA"

1. The text of the Supply Agreement between the Agency and the Governments of Norway and of the United States of America, and the text of the related Project Agreement between the Agency and the Government of Norway concerning an Agency project for cooperation in carrying out a joint program of research in reactor physics with the zero power reactor "NORA", are reproduced in this document for the information of all Members of the Agency.

2. The Supply Agreement was signed for the United States Atomic Energy Commission on behalf of the Government of the United States on 16 March 1961, and both Agreements were signed for the Agency and for the Government of Norway on 10 April 1961; they entered into force on 15 June 1961, the date of receipt by the Agency of the written notification that the Agreements had been approved by the Norwegian Storting, as required by the reservation attached to the Norwegian signatures. The Project Agreement, excepting Article V, had been applied on a provisional basis from 10 April 1961, in accordance with an exchange of letters on that date.

## I. SUPPLY AGREEMENT

## CONTRACT FOR THE LEASE OF ENRICHED URANIUM

WHEREAS the Government of Norway (hereinafter called "Norway") has proposed to the International Atomic Energy Agency (hereinafter called the "Agency") the carrying out of a joint program of research in reactor physics with the zero power reactor "NORA";

WHEREAS Norway, desiring to set up a project for the peaceful development of atomic energy in connection with the proposed joint research program, has requested the assistance of the Agency in securing from the Government of the United States of America (hereinafter called the "United States") an additional supply of enriched uranium for the joint research program;

WHEREAS the Board of Governors of the Agency, on 3 February 1961, has agreed to the participation of the Agency in the joint research program and has approved the project proposed by Norway;

WHEREAS the Agency and the United States on 11 May 1959 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 certain quantities of special fissionable material; and

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

NOW THEREFORE the Agency, Norway and the United States Atomic Energy Commission (hereinafter called the "Commission"), acting on behalf of the United States, hereby 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, 1000 fuel elements (hereinafter called the "supplied material"), the specifications of which are stated in the Annex to this Contract.

Section 2. The Agency shall lease to Norway, and Norway shall lease from the Agency, the supplied material that the Agency leases from the Commission pursuant to section 1.

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 or before 1 September 1961, 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 inland and overseas transportation and delivery and for storing such material, as well as for physically handling such material 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, and subject to giving thirty days' notice to the Agency and the Commission, Norway shall, at the Agency's request and on its behalf, 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 in the United States. It is understood that 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 inland and overseas transportation and delivery and for storing such material, as well as for physically handling such material 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 Articles 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 Project Agreement; or
- (iv) After consultation with Norway, in case of any increase in the Use or Consumption Charges pursuant to section 15; or
- (v) At the request of Norway, it being understood that the Agency shall 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 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, calculated at a rate of US \$.00137 per day per gram of U<sup>235</sup> contained in the supplied material, as determined in accordance with section 3(a), 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;
- (b) A Consumption Charge for any of the enriched uranium lost, consumed or otherwise not returned, calculated at a rate of US \$12.52 per gram of U<sup>235</sup> contained in the supplied material, 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 schedule of 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 \$200.00 per fuel element, which charge shall be additional to any Consumption and Reprocessing Charges levied in accordance with sections 11(b) and (c);
- (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, under the conditions specified in section 8, to reimburse the Commission for any expense incurred by it prior to receiving notice of the cancellation of this Contract, in reserving the supplied material, in preparing it for shipment and in transporting it to the port of export.

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;
- (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 Agency shall be responsible to the Commission for payment of interest 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 such interest 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 general Commission policies, change the rate of the Use Charge specified in section 11(a) or the Consumption Charge specified in section 11(b) by giving thirty days' prior notice of such change to the Agency and to Norway. Any changes in the rate of the Use or Consumption Charges shall be effective on either July 1 or January 1 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 Transport of Radio-active 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.

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. Norway shall not use the supplied material otherwise than in the zero power reactor "NORA", nor transfer it to any other country, except as agreed by the Agency and the Commission. Norway shall operate the "NORA" reactor in such a manner that no more than a negligible quantity of the U<sup>235</sup> contained in the supplied material will be consumed.

Section 28. 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 invoked, the Commission shall similarly make available to the laboratory selected as umpire 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 umpire, the 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 or Delegate to 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 the Contract, be submitted to a laboratory agreed upon by all parties as umpire for such measurements. The umpire may perform any tests or analyses that it may deem necessary, and all parties shall facilitate its work in every way. The results of such measurements by the umpire shall be considered final and binding on all parties. The costs of the measurements by the umpire shall be borne equally by the parties, provided that if the measurements insisted upon by any party or parties are confirmed by the umpire such party or parties shall not be obliged to bear any share of such 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 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 two arbitrators 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 all 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, and all decisions shall be made by majority vote. The procedure of the arbitration shall be fixed by the tribunal. The decisions of the tribunal, 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 XII

### Entry into Force

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



DONE in triplicate in the English language:

For the INTERNATIONAL ATOMIC ENERGY AGENCY:

(signed) Sterling Cole

Vienna

10 April 1961

For the GOVERNMENT OF NORWAY:

With the reservation that the agreement shall enter into force only upon receipt by the Agency of written notification that the agreement has been approved by the Norwegian Storting.

(signed) Torfinn Oftedal

Vienna

10 April 1961

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

(signed) A. A. Wells

Washington, D.C.

16 March 1961

A N N E X

SPECIFICATIONS

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

Over-all length of fuel element	$72 \pm 0.5$ inches
Cladding material	S. A. E. 304 stainless steel
Clad O.D.	$0.500 \pm 0.002$ inches
Cladding thickness	$0.028 \pm 0.004$ inches
Fuel material	UO <sub>2</sub>
Enrichment of uranium in U <sup>235</sup>	$3\% \pm 0.03\%$ by weight
Length of fuel in fuel element	$67 \pm 1$ inches
Weight of fuel in fuel element	$1600 \pm 8$ grams of UO <sub>2</sub>

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 Brookhaven National Laboratory of the Commission.

## II. PROJECT AGREEMENT

### AGREEMENT BETWEEN THE INTERNATIONAL ATOMIC ENERGY AGENCY AND THE GOVERNMENT OF NORWAY RELATING TO AN AGENCY PROJECT FOR CO-OPERATION IN CARRYING OUT A JOINT PROGRAM OF RESEARCH IN REACTOR PHYSICS WITH THE ZERO POWER REACTOR "NORA"

WHEREAS the Government of Norway (hereinafter called "Norway") has proposed to the International Atomic Energy Agency (hereinafter called the "Agency") the carrying out of a joint program of research in reactor physics with the zero power reactor "NORA";

WHEREAS Norway, desiring to set up a project for the peaceful development of atomic energy in connection with the proposed joint research program, has requested the assistance of the Agency in securing from the Government of the United States of America (hereinafter called the "United States") an additional supply of enriched uranium for the joint research program;

WHEREAS the Board of Governors of the Agency, on 3 February 1961, has agreed to the participation of the Agency in the joint research program and has approved the project proposed by Norway;

WHEREAS the Agency and the United States on 11 May 1959 concluded an Agreement for Co-operation, under which the United States undertook to make available to the Agency pursuant to its Statute certain quantities of special fissionable material;

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

WHEREAS the Agency and the Commission are entering into a contract for research in reactor physics, pursuant to which the Commission will make certain payments to the Agency for the conduct of specific research with the reactor "NORA"; and

WHEREAS the Agency and the Norwegian Institutt for Atomenergi (hereinafter called the "Institute") are entering into a contract for research in reactor physics (hereinafter called the "Research Contract"), pursuant to which the Agency will make payments to the Institute for the conduct of specific research with the reactor "NORA", which payments shall be equal to the payments received by the Agency under its research contract with the Commission;

NOW THEREFORE the Agency and Norway hereby agree as follows:

#### ARTICLE I

##### The Joint Program

Section 1. The Agency and Norway, through the Institute, will conduct a joint program of research and advanced training in the field of integral nuclear reactor data (hereinafter called the "Joint Program"). The Joint Program is the project to which this Agreement relates.

#### ARTICLE II

##### Contributions of the Parties

Section 2. For the purpose of the Joint Program Norway, through the Institute, shall:

- (a) Make available the zero power reactor "NORA", situated in the Institute Area, at Kjeller, Norway, together with such fuel, materials, associated facilities and equipment as set forth in Annex A (hereinafter called the "reactor facility"), all of which shall remain Norwegian property.

- (b) Provide the services of four to six scientists and six technicians, together with such other personnel as may be required for the administration of the reactor facility. These shall constitute the permanent staff of the reactor facility and shall be considered part of the Institute.
- (c) Pay all expenses connected with the operation and maintenance of the reactor facility, including the salaries of the permanent staff.

Section 3. For the purpose of the Joint Program the Agency shall:

- (a) Arrange for the provision to Norway of an additional supply of enriched uranium, in accordance with the Supply Agreement.
- (b) Pay to the Institute a contribution in accordance with the Research Contract.
- (c) Pay, or appropriately arrange for the payment of, all expenses connected with the scientists approved in accordance with Article IV.

ARTICLE III

Administration of the Joint Program

Section 4. The NORA Committee

- (a) There shall be set up a Joint Scientific Program Committee (hereinafter called the "NORA Committee") composed of two members appointed by the Agency and two members appointed by Norway and of a fifth member, who shall be the Chairman, to be appointed by mutual agreement of the Agency and Norway.
- (b) The functions of the NORA Committee shall be:
  - (i) To approve scientists, in accordance with Article IV.
  - (ii) To approve the Project Manager appointed by the Institute.
  - (iii) To designate the Head of Research from among the scientists attached to the Joint Program.
  - (iv) To evaluate and approve each year, on the basis of a proposal submitted to it by the Project Manager, a detailed annual research plan, in conformity with a preliminary research program agreed to by the parties and within such budgetary limits as Norway may establish and announce to the NORA Committee.
  - (v) To consider periodic reports submitted to it in accordance with section 5(e) and to make recommendations based thereon.
  - (vi) To consider any other matters affecting the Joint Program.
- (c) The NORA Committee shall meet at least twice a year and shall take decisions by majority vote.
- (d) The expenses incurred by the members of the NORA Committee shall be borne by the party appointing them. The expenses incurred by the Chairman and any other expenses of the NORA Committee shall be divided equally between the parties.

Section 5. The Project Manager shall:

- (a) Be responsible for the operation of the reactor facility, subject to rules issued by the Institute (including health and safety regulations consistent with those established in accordance with Article VII).
- (b) Be responsible for the preparation of a proposal for the detailed annual research plan for the following year and for the submission thereof to the NORA Committee.

- (c) Be responsible for the implementation of the detailed annual research plan approved by the NORA Committee.
- (d) Inform the NORA Committee from time to time of the plans for the implementation of the Joint Program, including a time schedule and an organizational scheme.
- (e) Submit to the NORA Committee twice a year progress reports on the Joint Program, drawn up with the assistance of the Head of Research.

Section 6. The Head of Research will be the principal scientific assistant to the Project Manager in all matters concerning the research.

Section 7. The operation of the reactor facility will be carried out under the responsibility of Norway by the Institute in accordance with the Joint Program and subject to the relevant laws and treaties of Norway.

#### ARTICLE IV

##### Selection of Scientists

Section 8. Based upon proposals made by the Institute the NORA Committee shall determine from time to time the number and the qualifications of scientists, other than those belonging to the permanent staff, to perform research or to receive advanced training in connection with the Joint Program.

Section 9. The Agency, in consultation with the Institute, will nominate scientists from any Member State.

Section 10. The NORA Committee shall approve scientists from among those nominated pursuant to section 9, having regard to the paramount necessity of securing the highest standards of efficiency, technical competence, integrity and knowledge of one of the working languages of the Institute, and, subject thereto, to the importance of making appointments on as wide a geographical basis as possible.

Section 11. The scientists shall be subject to the authority of the Institute.

Section 12. Scientists shall not, by reason of their nomination by the Agency, be considered as members of the staff of the Agency.

#### ARTICLE V

##### Supply of Special Fissionable Material

Section 13. The Agency hereby allocates to the Joint Program, and provides to Norway enriched uranium (hereinafter called the "supplied material") pursuant to the terms (including those relating to method of transfer) 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 Norway.

#### ARTICLE VI

##### Agency Safeguards against Diversion

Section 14. Norway agrees that the supplied material shall not be used in such a way as to further any military purpose.

Section 15. The relevant Agency safeguards against diversion are specified in Annex B and shall be applied to the Joint Program. They are based on the scope of the Joint

Program as stated in this Agreement, on the quantities of nuclear material specified in the Supply Agreement and on the limitations on the use of the supplied material stated therein. In the event of any significant change in these bases or in the event of the production of more than a negligible amount of special fissionable material, Annex B would require appropriate review and revision by agreement of the parties; if such agreement cannot be reached, either party may terminate this Agreement.

Section 16. Nuclear materials to which Agency safeguards are attached pursuant to Annex B may only be used or stored in facilities to which Agency safeguards are applied, except if the Agency agrees to the suspension of the attachment of safeguards to such nuclear materials.

Section 17. Norway shall return the supplied material and any special fissionable material produced within it if required to do so by the Board of Governors of the Agency in accordance with Articles XII. A.7 and XII. C of its Statute.

## ARTICLE VII

### Health and Safety Measures

Section 18. The relevant health and safety measures are specified in Annex C.

## ARTICLE VIII

### Information and Rights to Inventions and Discoveries

Section 19. Norway shall make available to the Agency without charge all scientific information developed as a result of the assistance extended by the Agency under this Agreement.

Section 20. All results of the Joint Program, including any inventions or discoveries arising out of it, shall be made available for the development and practical application of atomic energy for peaceful uses throughout the world. To accomplish this purpose it is agreed that the parties shall co-operate by prompt and extensive publication and by other appropriate means to prevent restrictions of the free use of such results and further that either party, and persons under the control of either, may obtain any patent or similar protection for such results, provided that the owner of such patent undertakes to make the invention freely usable without charge or any other restriction throughout the world. The parties shall assist each other in obtaining any patent or similar protection that either may wish to obtain under the above conditions and shall co-operate to avoid any conflicting applications for such patents.

## ARTICLE IX

### Liability

Section 21. Neither the Agency nor any person acting on its behalf shall bear any liability in connection with the Joint Program or the reactor facility and Norway shall hold them harmless against any such liability.

## ARTICLE X

### Privileges and Immunities

Section 22. In so far as the Joint Program is concerned, Norway shall apply the Agreement on the Privileges and Immunities of the International Atomic Energy Agency

approved by its Board of Governors on 1 July 1959 to the Agency, including its inspectors, and to the persons appointed by the Agency as members of the NORA Committee, and similarly to the Chairman of the NORA Committee. If the Chairman is a Norwegian national but not an official of the Agency, sections 18(a)(ii) to (vi) of that Agreement shall not apply to him. Payments from Agency funds to non-Norwegian scientists shall not be subject to taxation.

Section 23. Norway agrees to facilitate, as far as possible, payments made in foreign currencies from abroad to scientists approved in accordance with Article IV.

## ARTICLE XI

### Settlement of Disputes

Section 24. Any dispute concerning the interpretation or application of this Agreement which is not settled by negotiation or as may otherwise be agreed, and whose substance has not been made the subject of a procedure pursuant to Article XI of the Supply Agreement, shall on the request of either party be submitted to an arbitral tribunal composed as follows:

The Agency and Norway 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 may request the President of the International Court of Justice to appoint an arbitrator. The same procedure shall apply if the third arbitrator has not been appointed within thirty days of the designation or appointment of the second arbitrator.

A majority of the members of the arbitral tribunal shall constitute a quorum, and all decisions shall be made by majority vote. The procedure of the arbitration shall be fixed by the tribunal. The decisions of the tribunal, including all rulings concerning procedure, jurisdiction and the division of the expenses of arbitration between the parties, shall be binding on both 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.

Section 25. In case of any dispute involving the application of Articles VI or VII, decisions of the Board of Governors of the Agency shall, if they so provide, immediately be given effect by Norway, pending the conclusion of any consultation, negotiation or arbitration that may be or may have been invoked with regard to the dispute.

## ARTICLE XII

### Entry into Force and Duration

Section 26. This Agreement shall enter into force upon signature by the Director General of the Agency and the duly authorized representative of Norway.

Section 27. This Agreement shall continue in force for three years, unless terminated by either party upon one year's notice to the other, or unless extended by mutual agreement. If the Supply Agreement or the leases of the supplied material thereunder are terminated or canceled pursuant to Article II thereof or if the Research Contract is terminated in accordance with the terms thereof, then either party to this Agreement may terminate this Agreement as of the effective date of such termination or cancellation.

DONE in duplicate in the English language:

For the INTERNATIONAL ATOMIC ENERGY AGENCY:

(signed) Sterling Cole

Vienna

10 April 1961

For the GOVERNMENT OF NORWAY:

With the reservation that the agreement shall enter into force only upon receipt by the Agency of written notification that the agreement has been approved by the Norwegian Storting.

(signed) Torfinn Oftedal

Vienna

10 April 1961



A N N E X A

THE REACTOR FACILITY TO BE MADE  
AVAILABLE BY NORWAY

1. The Reactor NORA:

NORA, consisting of core vessel, headerbox, graphite reflector, shielding, control system, pipes and pumps which, together with the moderator and the fuel specified below, can sustain a controlled chain reaction.

2. Fuel:

- (a) 2600 kilograms of natural metallic uranium, contained in 30 mm diameter rods canned in aluminum.
- (b) 200 kilograms of uranium enriched to 1.7% by weight of  $U^{235}$ , in the form of uranium oxide ( $UO_2$ ) contained in fuel element stringers canned in aluminum.

3. Material:

5.5 metric tons of heavy water.

4. Associated Facilities:

Reactor building with wing containing a laboratory, reactor control room and offices.

5. Equipment:

- (a) Such measuring, counting and heating equipment as may be necessary to carry out the Joint Program, such as a wire-scanner, a sample changer, a scintillator spectrometer, a precision water height measurer and means for the controlled heating and cooling of the moderator.
- (b) Reactor oscillator set-up.
- (c) Reactor modulator set-up.
- (d) Such equipment as may be necessary to comply with the health and safety measures specified in Annex C.

A N N E X B

AGENCY SAFEGUARDS AGAINST DIVERSION

The Joint Program shall be subject to the Agency safeguards specified below, in accordance with the appropriate provisions of Agency document INFCIRC/26 (hereinafter called "the safeguards document") and with Article XII of the Statute of the Agency and Article VI of this Agreement.

Attachment and Termination of  
Agency Safeguards

1. Agency safeguards will be attached to:
  - (a) The supplied material or an appropriate portion thereof under the conditions and limits stated in sub-paragraph 32(b) of the safeguards document.
  - (b) The reactor facility, while the supplied material is in the possession of Norway, provided that it may be exempted from such attachment after assessment by the Board, pursuant to paragraph 36 of the safeguards document.
2. The attachment of Agency safeguards shall be terminated or suspended in accordance with paragraphs 38 and 39 of the safeguards document.

Application of Agency Safeguards

3. The Agency safeguards procedures specified in paragraphs 4 - 7 will be applied to:
  - (a) Nuclear material to which Agency safeguards are attached.
  - (b) The reactor facility, if Agency safeguards are attached to it or while it contains nuclear material to which Agency safeguards are attached.
4. Norway shall submit to the Agency the design and other information on the reactor facility necessary in order to enable the Agency to perform its task in accordance with paragraph 42 of the safeguards document, to the extent that this information is not yet available to the Agency.
5. Norway shall keep records in accordance with paragraphs 45 and 46 of the safeguards document and with a system established in accordance with paragraph 44 of the safeguards document.
6. Norway shall submit routine and special reports in accordance with paragraphs 48-53 of the safeguards document and with a system established in accordance with paragraph 47 of the safeguards document. The routine operating and accounting reports shall be submitted twice a year; the first report shall be submitted at the time any of the supplied material is first received at the reactor facility.
7. One inspection in accordance with paragraphs 54-57 of the safeguards document may be made annually, beginning at the time any of the supplied material is first received at the reactor facility. Special inspections may be made as necessary in accordance with paragraphs 58 and 59 of the safeguards document. The provisions concerning Agency inspectors shall be those set out in Agency document GC(IV)/INF/27, Annex.

A N N E X C

HEALTH AND SAFETY MEASURES

1. The Agency, in accordance with Article XII of its Statute and with the Agency's Health and Safety Measures approved by the Board of Governors on 31 March 1960 as set out in Agency document INFCIRC/18 (hereinafter called the "health and safety document"), has satisfied itself that the health and safety regulations of the Institute are consistent with and equally effective as the Agency safety standards.

2. The Institute's health and safety regulations, as specified in the NORA Operating Regulations, shall apply to the Joint Program. The Joint Program shall also be operated as far as possible in conformity with the Agency safety standards referred to in paragraph 2 of the health and safety document, including, in particular, the Manual on Safe Handling of Radioisotopes and the Regulations for the Transport of Radioactive Materials.

3. Norway shall submit to the Agency with respect to the following types of operations the information specified in paragraph 29 of the health and safety document, if possible before the first operation of that type is performed:

- (a) Receipt and handling of the fuel.
- (b) Loading of fuel into the reactor NORA.
- (c) Start-up of the reactor NORA.
- (d) Experimental procedures involving the reactor NORA.
- (e) Discharge of fuel from the reactor NORA.
- (f) Handling and storage of discharged cores.

4. Norway shall submit 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 coming into force of this Agreement. In addition, reports shall be submitted in accordance with paragraphs 26 and 27 of the health and safety document.

5. The Agency will inspect the reactor at the time of initial start-up, once during the first year of operation, and thereafter not more than once a year, except that special inspections may be carried out under the circumstances specified in paragraph 32 of the health and safety document. The arrangements for such inspections and the provisions concerning Agency inspectors shall be those set out in Agency document GC(IV)/INF/27, Annex.

6. Changes in the safety standards and measures specified in this Annex may be made in accordance with paragraphs 38 and 39 of the health and safety document.