

No. 5790

**INTERNATIONAL ATOMIC ENERGY AGENCY
and
NORWAY**

Agreement (with annexes and exchange of letters) 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". Signed at Vienna, on 10 April 1961

Official text: English.

Registered by the International Atomic Energy Agency on 15 August 1961.

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

Accord (avec annexes et échange de lettres) relatif à l'exécution en commun d'un programme de recherches sur la physique des réacteurs à l'aide du réacteur de puissance nulle « NORA ». Signé à Vienne, le 10 avril 1961

Texte officiel anglais.

Enregistré par l'Agence internationale de l'énergie atomique le 15 août 1961.

No. 5790. AGREEMENT¹ 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". SIGNED AT VIENNA, ON 10 APRIL 1961

WHEREAS the Government of Norway (hereinafter called "Norway") has proposed to the International Atomic Energy Agency (hereinafter called "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,² under which the United States undertook to make available to the Agency pursuant to its Statute³ 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");⁴

WHEREAS the Agency and the Commission are entering into a contract for research in reactor physics, pursuant to which the Commission will make certain

¹ Provisionally applied from 10 April 1961, in accordance with the provisions of the exchange of letters (see p. 274 of this volume) and definitively came into force on 15 June 1961, upon receipt by the Agency of written notification that the Agreement had been approved by the Norwegian Storting, in accordance with the provisions of the reservation made by Norway upon signature.

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

³ United Nations, *Treaty Series*, Vol. 276, p. 3; Vol. 293, p. 359; Vol. 312, p. 427; Vol. 316, p. 387; Vol. 356, p. 378, and Vol. 394, p. 276.

⁴ See p. 281 of this volume.

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 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 A¹ (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.

¹ See p. 270 of this volume.

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 B¹ 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.²

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

¹ See p. 270 of this volume.

² See p. 272 of this volume.

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 Agency¹ 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

¹ United Nations, *Treaty Series*, Vol. 374, p. 147; Vol. 396, p. 352, and Vol. 399.

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

Director General

Vienna, April 10, 1961

For the Government of Norway :

(Signed) Torfinn OFTEDAL

Vienna, 10/4 1961

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.

ANNEX 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 U²³⁵, in the form of uranium oxide (UO₂) 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.

ANNEX 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.¹

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.

¹ See p. 256 of this volume.

(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.

EXCHANGE OF LETTERS

I

AMBASSADE ROYALE DE NORVÈGE¹

Vienna, 10 April 1961

Sir,

With reference to the 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" ("Project Agreement")² and to the Contract for the lease of enriched uranium ("Supply Agreement"),³ both of which were signed today, I have the honor to call your attention to the reservation which I have had to make, according to Norwegian constitutional law, that the Agreements will only enter into force upon the receipt by the Agency of a notification from my Government that they have been approved by our Parliament.

¹ Royal Norwegian Embassy.

² See p. 256 of this volume.

³ See p. 281 of this volume.

It is understood that the Agency is not required to accept the notification pursuant to which the Project and Supply Agreements will enter into force, unless such notification is received before 1 July 1961 and provides for the simultaneous entry into force of both Agreements.

Pending such approval and pursuant to our previous understanding, which was also communicated to the Board of Governors of the Agency, I hereby propose that the Project Agreement, with the exception of Article V thereof, be applied on a provisional basis, subject to the understanding that the obligation pursuant to Section 21 to hold the Agency harmless shall be assumed by the Norwegian Institutt for Atomenergi instead of by the Government of Norway, in accordance with the attached letter¹ from the Institute. As soon as the Project Agreement enters into force the provisional application shall cease. Should the approval of the Norwegian Parliament not be obtained by 1 July 1961, it is understood that the Agency may terminate the provisional application of the Project Agreement.

With assurances of my highest consideration

Torfinn OFTEDAL
Resident Representative of Norway
to the International Atomic Energy Agency

The Honourable Sterling Cole
Director General
International Atomic Energy Agency
Vienna

INSTITUTT FOR ATOMENERGI
MANAGING DIRECTOR

Kjeller. Lillestrom. Norway, 4th April 1961

International Atomic Energy Agency
Vienna 1, Austria

Whereas the 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" ("Project Agreement") between the Government of Norway and the International Atomic Energy Agency have been signed today and will enter into force upon receipt by the Agency of the notification by the Norwegian Government of its approval by the Norwegian Parliament.

¹ See below.

Whereas it is agreed between the Norwegian Government and the Agency that the Project Agreement, with the exception of Article V thereof, shall be provisionally applied pending parliamentary approval, and

Whereas the Institutt for Atomenergi is in full agreement with such arrangement,

The Institutt for Atomenergi hereby assumes the obligation, specified in Section 21 of the Project Agreement, to hold the Agency harmless in place of the Government of Norway for such time as the Agreement is provisionally applied.

Yours sincerely

Gunnar RANDERS

II

INTERNATIONAL ATOMIC ENERGY AGENCY

10 April 1961

Sir,

In a letter dated today you were good enough to communicate to me the following :

[*See letter I*]

and to attach a letter from the Norwegian Institutt for Atomenergi.

I have the honor to inform you that the Agency agrees to the proposal in your letter and accepts the undertaking of the Institute contained in the attached letter.

I am sending a copy of this letter to the United States Atomic Energy Commission for its information and I would appreciate it if you would similarly inform the Institute of the Agency's acceptance of its undertaking.

With assurances of my highest consideration.

(*Signed*) Sterling COLE
Director General

Mr. Torfinn Oftedal
Resident Representative of Norway
to the International Atomic Energy Agency
Permanent Mission of Norway
Vienna III