No. 4835

UNITED STATES OF AMERICA and EUROPEAN ATOMIC ENERGY COMMUNITY (EURATOM)

Agreement for co-operation concerning peaceful uses of atomic energy (with annexes). Signed at Brussels, on 8 November 1958

Official texts: English, French, German, Italian and Dutch.
Registered by the United States of America on 6 August 1959.

ÉTATS-UNIS D'AMÉRIQUE et COMMUNAUTÉ EUROPÉENNE DE L'ÉNERGIE ATOMIQUE (EURATOM)

Accord de coopération concernant les utilisations pacifiques de l'énergie atomique (avec annexes). Signé à Bruxelles, le 8 novembre 1958

Textes officiels anglais, français, allemand, italien et néerlandais.

Enregistré par les États-Unis d'Amérique le 6 août 1959.

No. 4835. AGREEMENT¹ FOR CO-OPERATION BETWEEN THE GOVERNMENT OF THE UNITED STATES OF AMERICA AND THE EUROPEAN ATOMIC ENERGY COMMUNITY (EURATOM) CONCERNING PEACEFUL USES OF ATOMIC ENERGY. SIGNED AT BRUSSELS, ON 8 NOVEMBER 1958

WHEREAS the Government of the United States of America and the European Atomic Energy Community (EURATOM) on May 29 and June 18, 1959 signed an agreement² which provides a basis for co-operation in programs for the advancement of the peaceful applications of atomic energy;

Whereas the Government of the United States of America and the European Atomic Energy Community (EURATOM) recognize that it would be to their mutual benefit to cooperate by establishing a joint program:

- (a) To bring into operation within the European Atomic Energy Community (EURATOM) large-scale power plants using nuclear reactors of types on which research and development have been carried to an advanced stage in the United States, having a total installed capacity of approximately one million kilowatts of electricity by December 31, 1963 (except that two reactors may be selected to be in operation by December 31, 1965), and under conditions which would approach the competitive range of conventional energy costs in Europe;
- (b) To initiate immediately a joint research and development program centered on these types of reactors;

The Parties agree as follows:

Article I

A. Under the joint program, reactor projects may be proposed, constructed and operated by private or governmental organizations in the Community engaged in the power industry or in the nuclear energy field. Such projects will be selected in accordance with technical standards, criteria (including those relating to radiation protection and reactor safety), and procedures developed by the United States Atomic Energy Commission (hereinafter referred to as the

¹ Came into force on 18 February 1959, the day on which each Party received from the other Party written notification that it had complied with all statutory and constitutional requirements for the entry into force of the said Agreement, in accordance with article XVI.

² United Nations, *Treaty Series*, Vol. 335, No. 4783.

- "United States Commission") and the Commission of the European Atomic Energy Community (hereinafter referred to as the "EURATOM Commission"). In the evaluation and selection of such reactor projects, the technical and economic features will be considered and approved jointly by the United States Commission and the EURATOM Commission. Other features of such reactor projects will be considered and approved by the EURATOM Commission. Reactors now being planned or constructed in Member States of the Community will be eligible for, and will receive, early consideration under the criteria established pursuant to this paragraph.
- B. The total capital cost, exclusive of the fuel inventory, of the nuclear power plants with an installed capacity of approximately one million kilowatts of electricity to be constructed under the program is estimated not to exceed the equivalent of \$350,000,000 to be financed as follows:
- 1. Approximately \$215,000,000 to be provided by the participating utilities and other European sources of capital, such financing to be arranged with the appropriate assistance of the Community; and
- 2. Up to \$135,000,000 to be provided by the Government of the United States of America to the Community in the form of a long-term line of credit on terms and conditions to be agreed, including terms and conditions satisfactory to the Parties regarding security for such loan, such funds to be re-lent by the Community for the construction of facilities under this program.
- C. The United States Commission and the EURATOM Commission will enter into special arrangements with respect to the fuel cycle of reactors to be constructed and operated under the joint program according to the principles set forth in Annex "A" to this Agreement.

Article II

A. The United States Commission and the EURATOM Commission under mutually agreed arrangements intend to initiate a program of research and development to be conducted both in the United States and in Europe on the types of reactors to be constructed under the joint program. This research

¹ See p. 156 of this volume.

and development program will be aimed primarily at the improvement of the performance of these reactors, and at lowering fuel cycle costs. It will also deal with plutonium recycling and other problems relevant to these reactors.

- B. The research and development program will be established for a ten (10) year period. During the first five (5) years the financial contribution of the Government of the United States of America and the Community will amount to about \$50,000,000 each. Prior to the completion of the first five-year period the Parties will determine the financial requirements for the remaining five-year period and will undertake to procure funds necessary to carry out the program. Funds for the second five-year period may be in the same order of magnitude.
- C. The administration of this program will be conducted under arrangements to be mutually agreed.

Article III

- A. The United States Commission will sell to the Community uranium enriched in the isotope U-235 for use in projects designated by the Parties pursuant to the joint program up to a net amount of thirty thousand (30,000) kilograms of contained U-235 in uranium. This net amount shall be the gross quantity of contained U-235 in uranium sold to the Community less the quantity of contained U-235 in recoverable uranium which has been resold or otherwise returned to the Government of the United States of America or transferred to any other nation or international organization with the approval of the Government of the United States of America. The United States Commission will also from time to time sell to the Community such quantities of special nuclear material, in addition to the quantities of enriched uranium set forth above, as may be agreed.
- B. Contracts for the sale of special nuclear materials will specify the quantities to be supplied, composition of material, compensation for material, delivery schedules and other necessary terms and conditions. Such contracts for the sale of enriched uranium for fueling power reactors under the joint program may also provide, under terms and conditions to be agreed, that payment for such enriched uranium may be made on a deferred basis. Such terms and conditions will include an obligation that the Community return to the United States Commission enriched uranium to the extent that there is default in payment. The Community will grant no rights to third parties that may be inconsistent with such obligation. The uranium supplied hereunder for use in reactors designed for production of electric power may be enriched up to twenty percent (20%) by weight in the isotope U-235. The United States Commission, however, may, upon request and in its discretion, make a portion of the foregoing

enriched uranium available as material enriched up to ninety percent (90%) for use in materials testing reactors and research reactors, each capable of operating with a fuel load not to exceed eight (8) kilograms of contained U-235 in uranium, and as highly enriched material for use for research purposes.

- C. It is agreed that the Community may distribute special nuclear material to authorized users in the Community; the Community will retain, pursuant to the Treaty establishing the European Atomic Energy Community, title to any special nuclear material which is purchased from the United States Commission.
- D. The United States Commission is prepared to perform while such services are available from the Commission to its licensees in the United States. and on terms and conditions to be agreed, chemical reprocessing services with respect to any source or special nuclear material received by the Community from the United States under this program. It is agreed that such reprocessing will be performed at established United States domestic prices in effect upon delivery of such material. It is understood, except as may be otherwise agreed, that the form and content of any irradiated fuel elements shall not be altered after their removal from reactors and prior to delivery to the United States Commission or to other facilities. Special nuclear material and other material recoverable from material returned to the United States for reprocessing will be returned to the Community unless otherwise agreed. It is anticipated that any withdrawal by the United States Commission of chemical reprocessing services will be based upon the availability of commercial facilities to meet requirements for such services at reasonable prices, including the requirements of projects in the joint program. The United States Commission will give written notice to the Community of non-availability of its chemical reprocessing services twelve (12) months prior to such non-availability.
- E. With respect to any special nuclear material produced in reactors fueled with materials obtained from the United States under this Agreement which is in excess of the need of the Community for such material for the peaceful uses of atomic energy, the International Atomic Energy Agency is granted the right of first option to purchase such material at the announced fuel value price in effect in the United States at the time of purchase. In the event this option is not exercised by the International Atomic Energy Agency, the Government of the United States of America is prepared to purchase such material at the United States announced fuel value price in effect at the time of purchase. However, with respect to plutonium produced in any reactor

¹ United Nations, Treaty Series, Vol. 298, p. 167.

constructed under the joint program, no purchase commitment shall extend for a period beyond ten (10) years of operation of such reactor, or December 31, 1973 (or December 31, 1975, for not more than two reactors selected under Article I, A), whichever is earlier. Extension of such period will be the subject of negotiation on the request of either Party.

Article IV

The United States Commission will assist the EURATOM Commission in obtaining reactor materials other than special nuclear material from private organizations located in the United States if the EURATOM Commission desires such assistance. If no commercial sources are available, specific arrangements may be made by the Parties, from time to time, under terms and conditions to be agreed, for the transfer of such materials.

Article V

Persons under the jurisdiction of the Government of the United States of America or within the Community will be permitted to make arrangements to transfer and export material, including equipment and devices, to, and perform services for, the other Party and such persons under the jurisdiction of the Government of the United States of America or within the Community (as the case may be) as are authorized by the appropriate Party to receive and possess such material and utilize such services, subject to applicable laws, directives, regulations and license requirements of the Government of the United States of America, the Community and the Member States of the Community.

Article VI

A. 1. Under mutually agreed arrangements, all non-patentable information developed in connection with the joint program of research and development, and all non-patentable information developed in connection with the selected projects, concerning designs, plans and specifications, construction costs, operations and economics, will be delivered currently to the Parties as developed and may be used, disseminated, or published by each Party for any and all purposes as it sees fit without further obligation or payment. There will be no discrimination in the dissemination or use of such information for the reason that the proposed recipient or user is a national of the United States or of any Member State of the Community.

- 2. Both Parties shall have access to the records of the participating contractors pertaining to their participation in research and development projects under the joint research and development program, or pertaining to the performance of fuel elements that are the subject of United States guarantees.
- B. The United States Commission and the EURATOM Commission shall also exchange other unclassified information in fields related to the peaceful uses of atomic energy to further the joint program. Such exchange of information shall include technical advice in the design and construction of future reprocessing plants which the Community may decide to design and construct or sponsor.
- C. The Parties will expedite prompt exchange of information through symposia, exchange of personnel, setting up of combined teams, and other methods as may be mutually agreed.
- D. Except as otherwise agreed, the application or use of any information (including designs, drawings and specifications) and any material, equipment, and devices, exchanged or transferred between the Parties under this Agreement, shall be the responsibility of the Party receiving it, and the other Party does not warrant the accuracy or completeness of such information, nor the suitability of such information, materials, equipment, and devices for any particular use or application.

Article VII

- A. As to any invention made or conceived in the course of or under the joint program of research and development:
- 1. The Government of the United States of America shall without further obligation or payment be entitled to assignment of the title and rights in and to the invention and the patents in the United States subject to a non-exclusive, irrevocable, and royalty-free license, with the right to grant sublicenses, to the Community for all purposes.
- 2. The Community shall without further obligation or payment be entitled to assignment of the title and rights in and to the invention and the patents in the Community subject to a non-exclusive, irrevocable, and royalty-free license, with the right to grant sublicenses, to the Government of the United States of America for all purposes.
- 3. With respect to title and rights in and to the invention and patents in third countries:

- a. The Government of the United States of America, if the invention is made or conceived within the United States, or the Community, if the invention is made or conceived within the Community, shall be entitled to assignment of such title and rights, subject to a non-exclusive, irrevocable, and royalty-free license, with the right to grant sublicenses, to the other Party for all purposes.
- b. If the invention is made or conceived elsewhere, the Party contracting for the work shall be entitled to assignment of such title and rights, subject to a non-exclusive, irrevocable, and royalty-free license, with the right to grant sublicenses, to the other Party for all purposes.
- B. As to inventions and patents under paragraph A of this Article neither Party shall discriminate in the granting of any license or sublicense for the reason that the proposed licensee or sublicensee is a national of the United States or of any Member State of the Community.
- C. As to patents used in the work of the joint program, other than those under paragraph A, which the Government of the United States of America owns or as to which it has the right to grant licenses or sublicenses, the Government of the United States of America will agree to grant licenses or sublicenses, covering use either in or outside the joint program, on a non-discriminatory basis to a Member State and to industry of a Member State, if the Member State has agreed to grant licenses or sublicenses as to patents used in the work of the joint program which it owns or as to which it has the right to grant licenses or sublicenses, on a non-discriminatory basis to the Government of the United States of America and to industry of the United States, covering use either in or outside the joint program.
- D. The respective contractual arrangements of the Parties with third parties shall contain provisions that will enable each Party to effectuate the provisions of paragraphs A and B of this Article as to patentable information.
- E. It is recognized that detailed procedures shall be jointly established to effectuate the foregoing provisions and that all situations not covered shall be settled by mutual agreement governed by the basic principle of equivalent benefits to both Parties.

Article VIII

The United States Commission and the EURATOM Commission will work closely together to develop training programs to satisfy requirements of

the joint program. The Parties may under mutually agreeable terms and conditions make available their facilities for use by the other, including facilities to satisfy training needs.

Article IX

The Government of the United States of America and the Community recognize that adequate measures to protect equipment manufacturers and other suppliers as well as the participating utilities against now uninsurable risks are necessary to the implementation of the joint program. The EURATOM Commission will seek to develop and to secure the adoption, by the earliest practicable date, of suitable measures which will provide adequate financial protection against third party liability. Such measures could involve suitable indemnification guarantees, national legislation, international convention, or a combination of such measures.

Article X

The EURATOM Commission will take all action open to it under the Treaty establishing the European Atomic Energy Community to minimize the impact of customs duties on goods and products imported under the joint program.

Article XI

The Community guarantees that:

- 1. No material, including equipment and devices, transferred pursuant to this Agreement to the Community or to persons within the Community, will be used for atomic weapons, or for research on or development of atomic weapons, or for any other military purpose;
- 2. No such material will be transferred to unauthorized persons or beyond the control of the Community, except as the Government of the United States of America may agree to such transfer and then only if the transfer of the material is within the scope of an Agreement for Cooperation between the Government of the United States of America and another nation or group of nations;
- 3. No source or special nuclear material utilized in, recovered from, or produced as a result of the use of materials, equipment or devices transferred pursuant to this Agreement to the Community or to persons within the Community will be used for atomic weapons, or for research on or development of atomic weapons, or for any other military purpose;

4. The Community will establish and maintain a mutually satisfactory system of safeguards and control as provided in Article XII, to be applied to materials, equipment and devices subject to the guarantees set forth in paragraphs 1 through 3 of this Article.

Article XII

- The Community undertakes the responsibility for establishing and implementing a safeguards and control system designed to give maximum assurance that any material, equipment or devices made available pursuant to this Agreement and any source or special nuclear material derived from the use of such material, equipment and devices, shall be utilized solely for peaceful purposes. In establishing and implementing its safeguards and control system, the Community is prepared to consult with and exchange experiences with the International Atomic Energy Agency with the objective of establishing a system reasonably compatible with that of the International Atomic Energy Agency. The Government of the United States of America and the Community agree that the principles which will govern the establishment and operation by the Community of a mutually satisfactory safeguards and control system under this Agreement are those which are set forth in Annex "B" to this Agreement. The Community shall be responsible for establishing and maintaining a mutually satisfactory and effective safeguards and control system which is in accord with the principles set forth in Annex "B" to this Agreement.
- B. As has been requested by the Community, the Government of the United States of America will provide assistance in establishing the Community's safeguards and control system, and will provide continuing assistance in the operation of the system.
- C. The Parties agree that there will be frequent consultations and exchanges of visits between the Parties to give assurance to both Parties that the Community's safeguards and control system effectively meets the responsibility and principles stated in paragraph A of this Article and that the standards of the materials accountability systems of the Government of the United States of America and the Community are kept reasonably comparable.
- D. In recognition of the importance of the International Atomic Energy Agency, the Government of the United States of America and the Community will consult with each other from time to time to determine whether there are any areas of responsibility with regard to safeguards and control and matters relating to health and safety in which the Agency might be asked to assist.

¹ See p. 158 of this volume.

E. It is understood by the Parties that a continuation of the co-operative program between the Government of the United States of America and the Community will be contingent upon the Community's establishing and maintaining a mutually satisfactory and effective safeguards and control system which is in accord with the principles set forth in Annex "B" to this Agreement.

Article XIII

The Government of the United States of America and the Community reaffirm their common interest in fostering the peaceful applications of atomic energy through the International Atomic Energy Agency and intend that the results of the joint program will benefit the Agency and the nations participating in it.

Article XIV

- A. The Parties anticipate that from time to time they may enter into further agreements providing for cooperation in the peaceful aspects of atomic energy.
- B. Article 106 of the Treaty establishing the European Atomic Energy Community contemplates that Member States which before the date of entry into force of that Treaty have concluded agreements with third countries for cooperation in the field of nuclear energy shall jointly with the EURATOM Commission enter into the necessary negotiations with third countries in order as far as possible to cause the rights and obligations arising out of such agreements to be assumed by the Community. The Government of the United States of America is prepared to enter into such negotiations with reference to any agreement to which it is a party.
- C. Existing agreements for cooperation in the field of nuclear energy between Member States and the Government of the United States of America are not modified by the joint program. Modifications may be made as necessary by mutual agreement between the Member States concerned and the United States to permit transfers of reactor projects now contemplated under existing agreements that qualify for and are accepted under the joint program.

Article XV

For the purposes of this Agreement:

(a) "Person" means any individual, enterprise, corporation, partnership, firm, association, trust, estate, public or private institution, group, government agency, or government corporation, but does not include the Parties to this Agreement.

- (b) "Special nuclear material" means (1) plutonium, uranium enriched in the isotope 233 or in the isotope 235, and any other material which either Party determines to be special nuclear material; or (2) any material artificially enriched by any of the foregoing.
- (c) "Source material" means (1) uranium, thorium, or any other material which is determined by either Party to be source material; or (2) ores containing one or more of the foregoing materials, in such concentration as either Party may determine from time to time.
- (d) "Parties" means the Government of the United States of America, including the United States Atomic Energy Commission on behalf of the Government of the United States of America, and the European Atomic Energy Community (EURATOM), acting through its Commission. "Party" means one of the Parties.

Article XVI

- A. The Parties agree that the establishment and initiation of the joint program and the undertakings of the Parties under this Agreement are subject to appropriate statutory steps, including authorization by competent bodies of the Government of the United States of America and the Community, and the provisions of applicable laws, regulations and license requirements in effect in the United States and in the Community and within the Member States.
- B. This Agreement shall enter into force on the day on which each Party shall have received from the other Party written notification that it has complied with all statutory and constitutional requirements for the entry into force of such Agreement and shall remain in force for a period of twenty-five (25) years.

In witness whereof, the undersigned representatives duly authorized thereto have signed this Agreement.

Done at Brussels on November 8, 1958, in duplicate, in the English, French, German, Italian, and Netherlands languages, each language being equally authentic.

ANNEX "A"

With the objective of assuring the success of the joint program, the United States Commission will offer guarantees designed to limit certain financial risks associated with the fuel cycle.

These guarantees will be extended in the form of maximum charges for fabrication of the fuel elements and minimum integrity of the fuel elements under irradiation. They will be offered only to the extent that equivalent or better guarantees are not available commercially.

The liability of the United States Commission under these guarantees will be limited to meeting guaranteed maximum charges for fabricated fuel elements and to the adjustment of charges for fabrication, chemical reprocessing, and transportation of fuel elements when required by failure to meet guaranteed integrity.

The guarantees will provide for equitable sharing of decreases in costs realized through fuel performance in excess of guaranteed levels, the United States share not to exceed costs experienced by the United States Commission under these guarantees.

The guarantees provided by the United States Commission will be applicable to all loadings made in reactors under the joint program during ten (10) years of operation or prior to December 31, 1973 (or December 31, 1975, for not more than two reactors selected under Article I, A, of this Agreement for Cooperation), whichever is earlier.

ANNEX "B"

PRINCIPLES FOR ESTABLISHING THE SAFEGUARDS AND CONTROL SYSTEM UNDER THIS AGREEMENT

The principles which will govern the establishment and operation of the safeguards and control system are as follows:

The EURATOM Commission will:

- 1. Examine the design of equipment, devices and facilities, including nuclear reactors, and approve it for the purpose of assuring that it will not further any military purpose and that it will permit the effective application of safeguards, if such equipment, devices and facilities:
- (a) are made available pursuant to this Agreement; or
- (b) use, process or fabricate any of the following materials received from the United States: source or special nuclear material, moderator material or any other material relevant to the effective application of safeguards; or
- (c) use any special nuclear material produced as the result of the use of equipment or material referred to in subparagraphs (a) and (b).
- 2. Require the maintenance and production of operating records to assure accountability for source or special nuclear material made available, or source or special nuclear material used, recovered, or produced as a result of the use of source or special nuclear material, moderator material or any other material relevant to the effective application of safeguards, or as a result of equipment, devices and facilities made available pursuant to this Agreement.
- 3. Require that progress reports be prepared and delivered to the EURATOM Commission with respect to projects utilizing material, equipment, devices and facilities referred to in paragraph 2 of this Annex.

¹ See p. 136 of this volume.

- 4. Establish and require the deposit and storage, under continuing safeguards, in EURATOM facilities of any special nuclear material referred to in paragraph 2 of this Annex which is not currently being utilized for peaceful purposes in the Community or otherwise transferred as provided in the Agreement for Cooperation between the Government of the United States of America and the Community.
 - 5. Establish an inspection organization which will have access at all times:
- (a) to all places and data, and
- (b) to any person who by reason of his occupation deals with materials, equipment, devices or facilities safeguarded under this Agreement,

necessary to assure accounting for source or special nuclear material subject to paragraph 2 of this Annex and to determine whether there is compliance with the guarantees of the Community. The inspection organization will also be in a position to make and will make such independent measurements as are necessary to assure compliance with the provisions of this Annex and the Agreement for Cooperation.

It is the understanding of the Parties that the above principles applicable to the establishment of the Community's inspection and control system are compatible with and are based on Article XII of the Statute of the International Atomic Energy Agency,¹ Chapter VII of Title Two of the Treaty establishing the European Atomic Energy Community, and those adopted by the Government of the United States of America in its comprehensive Agreements for Cooperation.

¹ United Nations, Treaty Series, Vol. 276, p. 3; Vol. 293, p. 359; Vol. 312, p. 427, and Vol. 316, p. 387.

For the Government of the United States of America:

Pour le Gouvernement des États-Unis d'Amérique :

Für die Regierung der Vereinigten Staaten von Amerika:

Per el Governo degli Stati Uniti d'America:

Voor de Regering van de Verenigde Staten van Amerika:

W. W. BUTTERWORTH John A. McCone

For the European Atomic Energy Community (EURATOM):

Pour la Communauté Européenne de l'Énergie Atomique (EURATOM):

Für die Europäische Atomenergiegemeinschaft (EURATOM):

Per la Comunità Europea dell'Energia Atomica (EURATOM):

Voor de Europese Gemeenschap voor Atoomenergie (EURATOM):

L. ARMAND
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