

No. 8725

**UNITED STATES OF AMERICA
and
SWEDEN**

**Agreement for co-operation concerning civil uses of atomic
energy (with appendix). Signed at Washington, on
28 July 1966**

Official text: English.

Registered by the United States of America on 14 August 1967.

**ÉTATS-UNIS D'AMÉRIQUE
et
SUÈDE**

**Accord de coopération concernant l'utilisation de l'énergie
nucléaire à des fins civiles (avec appendice). Signé à
Washington, le 28 juillet 1966**

Texte officiel anglais.

Enregistré par les États-Unis d'Amérique le 14 août 1967.

No. 8725. AGREEMENT¹ FOR COOPERATION BETWEEN THE GOVERNMENT OF THE UNITED STATES OF AMERICA AND THE GOVERNMENT OF SWEDEN CONCERNING CIVIL USES OF ATOMIC ENERGY. SIGNED AT WASHINGTON, ON 28 JULY 1966

Whereas the Government of the United States of America and the Government of Sweden signed an "Agreement for Cooperation Between the Government of the United States of America and the Government of Sweden Concerning Civil Uses of Atomic Energy" on January 18, 1956² which was amended by the Agreement signed on August 3, 1956,³ the Agreement signed on April 25, 1958,⁴ and the Agreement signed on July 20, 1962;⁵ and

Whereas the Government of the United States of America and the Government of Sweden desire to pursue a research and development program looking toward the realization of peaceful and humanitarian uses of atomic energy, including the design, construction, and operation of power-producing reactors and research reactors, and the exchange of information relating to the development of other peaceful uses of atomic energy; and

Whereas the Government of the United States of America and the Government of Sweden are desirous of entering into this Agreement to cooperate with each other to attain the above objectives; and

Whereas the Parties desire this Agreement to supersede the "Agreement for Cooperation Between the Government of the United States of America and the Government of Sweden Concerning Civil Uses of Atomic Energy" signed on January 18, 1956, as amended;

The Parties agree as follows:

Article I

The "Agreement for Cooperation Between the Government of the United States of America and the Government of Sweden Concerning Civil Uses of Atomic Energy", signed on January 18, 1956, as amended, is superseded on the date this Agreement enters into force.

¹ Came into force on 15 September 1966, the date on which each Government received from the other Government written notification that it had complied with all statutory and constitutional requirements for the entry into force of the Agreement, in accordance with article XIV.

² United Nations, *Treaty Series*, Vol. 240, p. 413.

³ United Nations, *Treaty Series*, Vol. 279, p. 332.

⁴ United Nations, *Treaty Series*, Vol. 316, p. 364.

⁵ United Nations, *Treaty Series*, Vol. 460, p. 306.

Article II

A. Subject to the provisions of this Agreement, the availability of personnel and material, and the applicable laws, regulations, policies, and license requirements in force in their respective countries, the Parties shall cooperate with each other in the achievement of the uses of atomic energy for peaceful purposes.

B. Restricted Data shall not be communicated under this Agreement and no materials or equipment and devices shall be transferred, and no services shall be furnished, under this Agreement, if the transfer of any such materials or equipment and devices or the furnishing of any such services involves the communication of Restricted Data.

C. This Agreement shall not require the exchange of any information which the Parties are not permitted to communicate.

Article III

Subject to the provisions of Article II, the Parties shall exchange unclassified information with respect to the application of atomic energy to peaceful uses and the problems of health and safety connected therewith. The exchange of information provided for in this Article shall be accomplished through various means including reports, conferences, and visits to facilities, and shall include information in the following fields:

(1) Development, design, construction, operation, and use of research, materials testing, experimental, demonstration power, and power reactors;

(2) Health and safety problems related to the operation and use of the types of reactors listed in subparagraph (1) above; and

(3) The use of radioactive isotopes and radiation in physical and biological research, medical therapy, agriculture, and industry.

Article IV

A. Materials of interest in connection with the subjects of agreed exchange of information, as provided in Article III and subject to the provisions of Article II, including special nuclear materials for purposes other than fueling reactors and reactor experiments, source materials, heavy water, by-product materials, other radioisotopes, and stable isotopes may be transferred between the Parties for defined applications in such quantities and under such terms and conditions as may be agreed when such materials are not commercially available.

B. Subject to the provisions of Article II and under such terms and conditions as may be agreed, specialized research facilities and reactor materials testing facilities of the Parties shall be made available for mutual use consistent with the limits of space, facilities, and personnel conveniently available when such facilities are not commercially available.

C. With respect to the subjects of agreed exchange of information as provided in Article III and subject to the provisions of Article II, equipment and devices may be transferred from one Party to the other under such terms and conditions as may be agreed. It is recognized that such transfers will be subject to limitations which may arise from shortages of supplies or other circumstances existing at the time.

Article V

The application or use of any information (including design 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, material, equipment, and devices for any particular use or application.

Article VI

With respect to the subjects of agreed exchange of information referred to in Article III, it is understood that arrangements may be made between either Party or authorized persons under its jurisdiction and authorized persons under the jurisdiction of the other for the transfer of materials, including special nuclear material, and equipment and devices, and for the performance of services. Such arrangements shall be subject to the limitations in Articles II and VIII.

Article VII

A. During the period of this Agreement, the United States Commission will transfer to the Government of Sweden, under such terms and conditions as the Parties may agree, uranium enriched in the isotope U-235 for use in the fueling of defined research applications, including research reactors, materials testing reactors, reactor experiments, and reactor prototypes, as the Commission may agree to upon request of the Government of Sweden.

B. In addition, the United States Commission will sell to the Government of Sweden under such terms and conditions as the Parties may agree, all of Sweden's requirements for uranium enriched in the isotope U-235 for use in the power reactor program described in the Appendix to this Agreement, which Appendix,

subject to the quantity limitation established in Article VIII, may be amended from time to time by mutual consent without modification of this Agreement.

C. The Commission may also transfer to the Government of Sweden, under such terms and conditions as the Parties may agree, special nuclear material for the performance in Sweden of conversion or fabrication services, or both, and for subsequent transfer to a nation or group of nations with which the Government of the United States of America has an Agreement for Cooperation within the scope of which such subsequent transfer falls.

D. The United States Commission is also prepared, to such extent and under such conditions as it may establish, to enter into contracts to provide after December 31, 1968, for the production or enrichment, or both, in facilities owned by the Commission, of special nuclear material for the account of the Government of Sweden for the uses specified in paragraphs A, B and C of this Article.

E. With respect to transfers of uranium enriched in the isotope U-235 provided for in paragraphs A, B, C and D of this Article, it is understood that:

- (1) contracts specifying quantities, enrichments, delivery schedules and other terms and conditions of supply or service will be executed on a timely basis between the United States Commission and the Government of Sweden, and
- (2) prices for uranium enriched in the isotope U-235 sold or for services performed and the advance notice required for delivery will be those in effect at the time of delivery for users in the United States. The United States Commission may agree to supply enriched uranium or perform enrichment services upon shorter notice, subject to assessment of such surcharge to the usual base price as the United States Commission may consider reasonable to cover abnormal production costs incurred by the United States Commission by reason of such shorter notice.

F. It is agreed that, should the total quantity of enriched uranium which the United States Commission has agreed to provide pursuant to this and other Agreements for Cooperation reach the maximum quantity of enriched uranium which the Commission has available for such purposes, and should the Government of Sweden not have executed contracts covering the adjusted net quantity specified in Article VIII, the Commission may request, upon appropriate notice, that the Government of Sweden execute contracts for all or any part of such enriched uranium as is not then under contract. It is understood that, should the Government of Sweden not execute contracts in accordance with a request by the Commission hereunder, the Commission shall be relieved of all obligations to the Government of Sweden with respect to the enriched uranium for which contracts have been so requested.

G. The enriched uranium supplied hereunder may contain up to twenty per cent (20%) in the isotope U-235. The Commission, however, may make available a portion of the enriched uranium supplied hereunder as material containing more than 20% in the isotope U-235 when there is a technical or economic justification for such a transfer.

H. It is understood, unless otherwise agreed, that in order to assure the availability of the entire quantity of enriched uranium allocated hereunder for a particular reactor project described in the Appendix, it will be necessary for the construction of the project to be initiated in accordance with the schedule set forth in the Appendix and for the Government of Sweden to execute a contract for that quantity in time to allow for the United States Commission to provide the material for the first fuel loading. It is also understood that if the Government of Sweden desires to contract for less than the entire quantity of enriched uranium allocated for a particular project or terminates the supply contract after execution, the remaining quantity allocated for that project shall cease to be available and the maximum adjusted net quantity of U-235 provided for in Article VIII shall be reduced accordingly, unless otherwise agreed.

I. Within the limitations contained in Article VIII, the quantity of uranium enriched in the isotope U-235 transferred by the United States Commission under this Article and in the custody of the Government of Sweden for the fueling of reactors or reactor experiments shall not at any time be in excess of the quantity thereof necessary for the loading of such reactors or reactor experiments, plus such additional quantity as, in the opinion of the Parties, is necessary for the efficient and continuous operation of such reactors or reactor experiments.

J. It is agreed that when any special nuclear material received from the United States of America requires reprocessing, such reprocessing shall be performed at the discretion of the Commission in either Commission facilities or facilities acceptable to the Commission, on terms and conditions to be later agreed; and 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 the reactor prior to delivery to the Commission or the facilities acceptable to the Commission for reprocessing.

K. With respect to any special nuclear material not owned by the Government of the United States of America which is produced through the use of special nuclear materials obtained from the United States of America and which is in excess of the need of the Government of Sweden for such materials in its program for the peaceful uses of atomic energy, the Government of the United States of America shall have and is hereby granted (a) a first option to purchase such material at prices then prevailing in the United States of America for special nuclear material produced in reactors which are fueled pursuant to the terms of an

Agreement for Cooperation with the Government of the United States of America, and (b) the right to approve the transfer of such material to any other nation or a group of nations in the event the option to purchase is not exercised.

L. Special nuclear material produced, as a result of irradiation processes, in any part of the fuel leased under this or the superseded Agreement shall be for the account of the Government of Sweden and, after reprocessing as provided in paragraph J of this Article, shall be returned to the Government of Sweden, at which time title to such material shall be transferred to that Government, unless the Government of the United States of America shall exercise the option, which is hereby granted, to retain, with a credit to the Government of Sweden based on the prices in the United States of America referred to in paragraph K of this Article, any such special nuclear material which is in excess of the needs of Sweden for such material in its program for the peaceful uses of atomic energy.

M. Some atomic energy materials which the Government of Sweden may request the Commission to provide in accordance with this Agreement, or which have been provided to the Government of Sweden under the superseded Agreement, are harmful to persons and property unless handled and used carefully. After delivery of such materials to the Government of Sweden, the Government of Sweden shall bear all responsibility, insofar as the Government of the United States of America is concerned, for the safe handling and use of such materials. With respect to any special nuclear materials or fuel elements which the Commission may lease pursuant to this Agreement, or may have leased pursuant to the superseded Agreement, to the Government of Sweden or to any private individual or private organization under its jurisdiction, the Government of Sweden shall indemnify and save harmless the Government of the United States of America against any and all liability (including third party liability) for any cause whatsoever arising out of the production or fabrication, the ownership, the lease, and the possession and use of such special nuclear materials or fuel elements after delivery by the Commission to the Government of Sweden or to any private individual or private organization under its jurisdiction.

Article VIII

The adjusted net quantity of U-235 in enriched uranium transferred from the United States of America to Sweden under Articles IV, VI, or VII during the period of this Agreement for Cooperation, or under the superseded Agreement, shall not exceed in the aggregate 50,000 kilograms. The following method of computation shall be used in calculating transfers, within the ceiling quantity of kilograms of U-235, made under said Articles or the superseded Agreement:

From:

- (1) The quantity of U-235 contained in enriched uranium transferred under said Articles or the superseded Agreement, minus

- (2) The quantity of U-235 contained in an equal quantity of uranium of normal isotopic assay,

Subtract:

- (3) The aggregate of the quantities of U-235 contained in recoverable uranium of United States origin either transferred to the United States of America or to any other nation or group of nations with the approval of the Government of the United States of America pursuant to this Agreement or the superseded Agreement, minus
- (4) The quantity of U-235 contained in an equal quantity of uranium of normal isotopic assay.

Article IX

A. The Government of Sweden guarantees that:

(1) Safeguards provided in Article X shall be maintained.

(2) No material, including equipment and devices, transferred to the Government of Sweden or authorized persons under its jurisdiction by purchase or otherwise pursuant to this Agreement or the superseded Agreement, and no special nuclear materials produced through the use of such material, equipment and devices will be used for atomic weapons, or for research on or development of atomic weapons, or for any other military purpose.

(3) No materials, including equipment and devices, transferred to the Government of Sweden or authorized persons under its jurisdiction pursuant to this Agreement, or the superseded Agreement, and no special nuclear material produced through the use of such material, equipment, or devices, will be transferred to unauthorized persons or beyond the jurisdiction of the Government of Sweden, except as the United States Commission may agree to such a transfer to another nation or group of nations, and then only if, in the opinion of the United States Commission, the transfer of the material is within the scope of an Agreement for Cooperation between the Government of the United States of America and the other nation or group of nations.

B. The Government of the United States of America guarantees that no equipment or devices transferred from the Government of Sweden to the Government of the United States of America or authorized persons under its jurisdiction pursuant to this Agreement or the superseded Agreement, no material purchased by the Government of the United States of America pursuant to paragraph K of Article VII of this Agreement, and no material retained by the Government of the United States of America pursuant to paragraph L of Article VII of this Agreement, or an equivalent amount of material of the same type of such purchased

or retained material substituted therefor, will be used for atomic weapons, or for research on or development of atomic weapons, or for any other military purpose.

Article X

A. The Government of the United States of America and the Government of Sweden emphasize their common interest in assuring that any material, equipment, or device made available to the Government of Sweden or any person under its jurisdiction pursuant to this Agreement, or the superseded Agreement, shall be used solely for civil purposes.

B. Except to the extent that the safeguards provided for in this Agreement are supplanted, by agreement of the Parties as provided in Article XI, by safeguards of the International Atomic Energy Agency, the Government of the United States of America, notwithstanding any other provisions of this Agreement, shall have the following rights:

(1) With the objective of assuring design and operation for civil purposes and permitting effective application of safeguards, to review the design of any

(a) reactor, and

(b) other equipment and devices, the design of which the United States Commission determines to be relevant to the effective application of safeguards,

which are, or have been, made available to the Government of Sweden or any person under its jurisdiction under this or the superseded Agreement, or which are to use, fabricate, or process any of the following materials so made available: source material, special nuclear material, moderator material, or other material designated by the United States Commission;

(2) With respect to any source or special nuclear material made available to the Government of Sweden or any person under its jurisdiction under this or the superseded Agreement, by the Government of the United States of America or any person under its jurisdiction and any source or special nuclear material utilized in, recovered from, or produced as a result of the use of any of the following materials, equipment or devices so made available:

(a) source material, special nuclear material, moderator material, or other material designated by the United States Commission,

(b) reactors,

(c) any other equipment or device designated by the United States Commission as an item to be made available on the conditions that the provisions of this subparagraph B (2) will apply,

- (i) to require the maintenance and production of operating records and to request and receive reports for the purpose of assisting in ensuring accountability for such materials; and
- (ii) to require that any such material in the custody of the Government of Sweden or any person under its jurisdiction be subject to all of the safeguards provided for in this Article and the guaranties set forth in Article IX;

(3) To require the deposit in storage facilities designated by the United States Commission of any of the special nuclear material referred to in subparagraph B (2) of this Article which is not currently utilized for civil purposes in Sweden and which is not purchased or retained by the Government of the United States of America pursuant to Article VII of this Agreement, transferred pursuant to Article VII, paragraph K (b), or otherwise disposed of pursuant to an arrangement mutually acceptable to the Parties;

(4) To designate, after consultation with the Government of Sweden, personnel who, accompanied, if either Party so requests, by personnel designated by the Government of Sweden, shall have access in Sweden to all places and data necessary to account for the source and special nuclear materials which are subject to subparagraph B (2) of this Article, to determine whether there is compliance with this Agreement, and to make such independent measurements as may be deemed necessary;

(5) In the event of non-compliance with the provisions of this Article or the guaranties set forth in Article IX and the failure of the Government of Sweden to carry out the provisions of this Article within a reasonable time, to suspend or terminate this Agreement and to require the return of any materials, equipment, and devices referred to in subparagraph B (2) of this Article;

(6) To consult with the Government of Sweden in the matter of health and safety.

C. The Government of Sweden undertakes to facilitate the application of the safeguards provided for in this Article.

Article XI

A. The Government of the United States of America and the Government of Sweden, recognizing the desirability of making use of the facilities and services of the International Atomic Energy Agency, agree that the Agency will be promptly requested to assume responsibility for applying safeguards to materials and facilities subject to safeguards under this Agreement. It is contemplated that the necessary arrangements will be effected without modification of this Agreement

through an agreement to be negotiated between the Parties and the Agency which may include provisions for suspension of the safeguard rights accorded to the United States Commission by Article X of this Agreement, during the time and to the extent that the Agency's safeguards apply to such materials and facilities.

B. In the event the Parties do not reach a mutually satisfactory agreement on the terms of the trilateral arrangement envisaged in paragraph A of this Article, either Party may, by notification, terminate this Agreement. Before either Party takes steps to terminate this Agreement, the Parties will carefully consider the economic effects of any such termination. Neither Party will invoke its termination rights until the other Party has been given sufficient advance notice to permit arrangements by the Government of Sweden, if it is the other Party, for an alternative source of power and to permit adjustment by the Government of the United States of America, if it is the other Party, of production schedules. In the event of termination by either Party, the Government of Sweden shall, at the request of the Government of the United States of America, return to the Government of the United States of America all special nuclear material received pursuant to this Agreement or the superseded Agreement and still in its possession or in the possession of persons under its jurisdiction. The Government of the United States of America will compensate the Government of Sweden for its interest in such material so returned at the United States Commission's schedule of prices then in effect domestically.

Article XII

The rights and obligations of the Parties provided for under this Agreement shall extend, to the extent applicable, to cooperative activities initiated under the superseded Agreement, including, but not limited to, material, equipment, devices, and information transferred thereunder.

Article XIII

For the purposes of this Agreement:

A. "United States Commission" or "Commission" means the United States Atomic Energy Commission.

B. "Parties" means the Government of the United States of America, including the United States Commission on behalf of the Government of the United States of America, and the Government of Sweden. "Party" means one of the above "Parties".

C. "Atomic weapon" means any device utilizing atomic energy, exclusive of the means for transporting or propelling the device (where such means is a separable and divisible part of the device), the principal purpose of which is for

use as, or for development of, a weapon, a weapon prototype, or a weapon test device.

D. "Byproduct material" means any radioactive material (except special nuclear material) yielded in or made radioactive by exposure to the radiation incident to the process of producing or utilizing special nuclear material.

E. "Equipment and devices" and "equipment or device" means any instrument, apparatus, or facility and includes any facility, except an atomic weapon, capable of making use of or producing special nuclear material, and component parts thereof.

F. "Person" means any individual, 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.

G. "Reactor" means an apparatus, other than an atomic weapon, in which a self-supporting fission chain reaction is maintained by utilizing uranium, plutonium, or thorium, or any combination of uranium, plutonium, or thorium.

H. "Restricted Data" means all data concerning (1) design, manufacture, or utilization of atomic weapons; (2) the production of special nuclear material; or (3) the use of special nuclear material in the production of energy, but shall not include data declassified or removed from the category of Restricted Data by the appropriate authority.

I. "Source material" means (1) uranium, thorium, or any other material which is determined by the United States Commission or the Government of Sweden to be source material; or (2) ores containing one or more of the foregoing materials, in such concentration as the United States Commission or the Government of Sweden may determine from time to time.

J. "Special nuclear material" means (1) plutonium, uranium enriched in the isotope 233 or in the isotope 235, and any other material which the United States Commission or the Government of Sweden determines to be special nuclear material; or (2) any material artificially enriched by any of the foregoing.

K. "Superseded Agreement" means the Agreement signed by the Parties on January 18, 1956, as amended by the Agreement signed on August 3, 1956, the Agreement signed on April 25, 1958, and the Agreement signed on July 20, 1962.

L. "Safeguards" means a system of controls designed to assure that any materials, equipment, or devices committed to the peaceful use of atomic energy are not used to further any military purpose.

Article XIV

This Agreement shall enter into force on the date on which each Government shall have received from the other Government 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 thirty (30) years.

IN WITNESS WHEREOF, the undersigned, duly authorized, have signed this Agreement.

DONE at Washington in duplicate this twenty-eighth day of July, 1966.

For the Government of the United States of America:

Walter J. STOESEL, Jr.

Glenn T. SEABORG

For the Government of Sweden:

Göran BUNDY

APPENDIX

SWEDEN'S NUCLEAR POWER PROGRAM

<i>Reactor</i>	<i>Power MW Net Electrical</i>	<i>Start of Construction</i>	<i>Criticality Date</i>	<i>Total Kgs U-235 Required</i>
A. Marviken Nuclear Power Station . . .	200	1963	1968	2932
B. Oskarshamm Nuclear Power Station .	400	1966	1969	9386
C. State Power Board, Nuclear Station II	500	1970	1974	10396
D. Atomkraftkonsortiet Nuclear Station II	500	1971	1975	9093
E. State Power Board, Nuclear Station III	500	1972	1976	9596
F. Atomkraftkonsortiet Nuclear Station III	500	1973	1977	8373
			TOTAL:	49,776