

No. 16251

**UNITED STATES OF AMERICA
and
SWEDEN**

Technical Exchange and Co-operative Arrangement between the United States Atomic Energy Commission (U.S.A.E.C) and Aktiebolaget Atomenergi (A.E.S) of Sweden in the field of research and development on reactor safety (with appendices and patent addendum). Signed at Studsvik, Sweden, on 21 November 1974 and at Washington on 16 December 1974

Authentic text: English.

Registered by the United States of America on 27 January 1978.

**ÉTATS-UNIS D'AMÉRIQUE
et
SUÈDE**

Arrangement entre la Commission de l'énergie atomique des États-Unis (U.S.A.E.C.) et l'Aktiebolaget Atomenergi (A.E.S.) de Suède concernant l'échange de renseignements techniques et la coopération en matière de recherche-développement dans le domaine de la sûreté des réacteurs (avec appendices et additif relatif aux brevets). Signé à Studsvik (Suède) le 21 novembre 1974 et à Washington le 16 décembre 1974

Texte authentique : anglais.

Enregistré par les États-Unis d'Amérique le 27 janvier 1978.

TECHNICAL EXCHANGE AND COOPERATIVE ARRANGEMENT¹
BETWEEN THE UNITED STATES ATOMIC ENERGY COMMISSION
(USAEC) AND AKTIEBOLAGET ATOMENERGI (AES) OF SWEDEN
IN THE FIELD OF RESEARCH AND DEVELOPMENT ON REACTOR
SAFETY

The United States Atomic Energy Commission (AEC) and Aktiebolaget Atomenergi of Sweden (AES):

- a. having a mutual interest in cooperation in the field of research and development on reactor safety;
- b. with the objective of improving and thus ensuring the safety of reactors on an international basis; and
- c. considering the arrangement in preparation on cooperation in the field of Licensing and Regulation between the Swedish Nuclear Power Inspectorate and the AEC;

hereby agree as follows:

1. The AEC will make available to the AES information in the field of reactor safety research and development which it has the right to disclose, either in its possession or available to it, including the LWR safety information from the technical areas described in Appendix "A". Other Appendices may be added, as agreed, to provide for cooperation in safety areas of other reactor types.

2. The AES will make available to the AEC information in the field of reactor safety research and development which it has the right to disclose, either in its possession or available to it, including the LWR safety information from the technical areas described in Appendix "B". Other Appendices may be added, as agreed, to provide for cooperation in safety areas of other reactor types.

3. The information exchange will be in the form of technical reports, experimental data, correspondence, newsletters, visits, joint experts meetings, and such other means as the Parties agree. Periodic and topical reports generated by the Parties and falling within the technical scope of this Arrangement will be exchanged. Each Party will transmit immediately to the other information concerning research results, indicating significant safety implications.

4. The execution of joint programs and projects, or those programs and projects under which activities are divided between both Parties, including the use of test facilities and/or computer programs owned by either Party, will be agreed upon on a case-by-case basis. Long-term assignments of personnel can be accommodated on the same basis.

5. In general, information received pursuant to this Arrangement may be disseminated freely in the country of the recipient. However, privileged (private, proprietary, company confidential) information received by either Party under this Arrangement and bearing a restrictive designation may not, except as may be required by laws of the respective Parties, be publicly disseminated by the receiving Party without the prior written consent of the transmitting Party, but such information may be disseminated as follows:

- (a) to persons within or employed by the recipient, and to other concerned government agencies;

¹ Came into force on 16 December 1974 by signature, in accordance with paragraph 14.

(b) to prime or subcontractors of the recipient party for use only within the framework of its contract(s) with the respective Parties engaged in work relating to the subject matter of the information so disseminated;

provided that privileged information disseminated to any person under subparagraphs (a) or (b) above bear the marking "NOT FOR DISSEMINATION OUTSIDE RECIPIENT'S ORGANIZATION WITHOUT PRIOR WRITTEN APPROVAL OF THE(AEC OR AES)".

Each Party will use its best efforts to ensure that the dissemination of privileged information received under this Arrangement is controlled as prescribed herein.

6. Information exchanged under this Arrangement shall be subject to the patent provisions in the Patent Addendum to this document.

7. A coordinator or coordinators for each reactor type will be designated by each Party, who will develop and control the arrangements and procedures for implementing the cooperation, in particular the effective exchange of information under this Arrangement. Approximately annually, the coordinators will organize joint working sessions at which the achievements, problems, effectiveness, future programs, etc., will be discussed with the objective of improving the cooperation.

8. The application or use of any information exchanged or transferred between the Parties under this Arrangement shall be the responsibility of the Party receiving it, and the transmitting Party does not warrant the suitability of such information for any particular use or application.

9. Each Party will be prepared to the best of its ability, upon specific request, to advise the other on particular questions relating to reactor safety.

10. It is the intent of both Parties to assure that a reasonably balanced exchange is achieved and maintained.

11. It is understood that the ability of the Parties to carry out their obligations is subject to the availability of appropriated funds.

12. No provision has been made for reciprocal cost reimbursement between the Parties. Both Parties shall bear the costs incurred in their area of competence, including travel expenses and subsistence allowances for their staff members and transport costs for apparatuses and other equipment transported under the cooperation program into the territory of the other Party in each case.

13. This Arrangement shall remain in operation for five (5) years after its effective date, which shall be the latter date of signature, and may be extended by mutual agreement. However, this Arrangement may be terminated at any time, at the discretion of either Party, upon six months' advance written notification by the Party seeking to terminate to the other Party.

14. This Arrangement shall enter into force on the latter date of signature.

DONE at Washington, D.C., and Studsvik, Sweden, in duplicate, each equally authentic.

For the United States
Atomic Energy Commission:

By: [Signed]
A. S. FRIEDMAN

Title: Director
Division of International Programs

Date: Dec. 16, 1974

For Aktiebolaget Atomenergi of Sweden:

By: [Signed]
BO ALER

Title: President

Date: November 21st, 1974

APPENDIX "A"

AEC-AES REACTOR SAFETY RESEARCH EXCHANGE AREAS IN WHICH THE AEC IS PERFORMING LWR SAFETY RESEARCH

1. Primary Coolant System Rupture Studies
2. Heavy Section Steel Technology Program
3. LOFT Program
4. Power Burst Facility — Subassembly Testing Program
5. Separate Effects Testing — Loss of Coolant Accident Studies
6. Loss of Coolant Accident Analyses — Analytical Model Development
7. Design Criteria for Piping, Pumps and Valves
8. Alternate ECCS Studies
9. Core Meltdown Studies
10. Fission Product Release and Transport Studies
11. Probabilistic Studies
12. Zirconium Damage
13. All computer codes applicable to the above at whatever stage of development they may be*
14. Data from all experiments applicable to the above*

* Data and computer codes will be "as is" at the time of the request. AEC or contractor manpower will generally not be available for interpretation of uncompleted work.

APPENDIX "B"

AEC-AES REACTOR SAFETY RESEARCH EXCHANGE AREAS IN WHICH THE AES IS PERFORMING LWR SAFETY RESEARCH

1. Primary Coolant System Integrity
2. Emergency Core Cooling Experiments
3. Blowdown Experiments
4. Fuel Behaviour
5. Safety Related Component Behaviour
6. Fission Product Release and Transport
7. All computer codes applicable to the above at whatever stage of development they may be*
8. Data from all experiments applicable to the above*

* Data and computer codes will be "as is" at the time of the request. AES or contractor manpower will generally not be available for interpretation of uncompleted work.

PATENT ADDENDUM

A. With respect to any invention or discovery made or conceived during the period of, or in the course of or under, this technical exchange and cooperative Arrangement on reactor safety research and development between the U.S. Atomic Energy Commission (AEC) and the Aktiebolaget Atomenergi (AES) of Sweden:

(1) If made or conceived by personnel of one Party (the assigning Party) or its contractors while assigned to the other Party (recipient Party) or its contractors:

- (a) the recipient Party shall acquire all right, title, and interest in and to any such invention, discovery, patent application or patent in its own country and in third countries, subject to a non-exclusive, irrevocable, royalty-free license to the assigning Party, with the right to grant sublicenses, under any such invention, discovery, patent application or patent for use in the production or utilization of special nuclear material or atomic energy; and
- (b) the assigning Party shall acquire all right, title, and interest in and to any such invention, discovery, patent application, or patent in its own country, subject to a non-exclusive, irrevocable, royalty-free license to the recipient Party, with the right to grant sublicenses, under any such invention, discovery, patent application or patent, for use in the production or utilization of special nuclear material or atomic energy.

(2) If made or conceived while in attendance at meetings or when employing information which has been communicated under this exchange arrangement by one Party or its contractors to the other Party or its contractors, the Party making the invention shall acquire all right, title, and interest in and to any such invention, discovery, patent application or patent in all countries, subject to the grant to the other Party of a royalty-free, non-exclusive, irrevocable license, with the right to grant sublicenses, in and to any such invention, discovery, patent application, or patent, in all countries, for use in the production or utilization of special nuclear material or atomic energy.

B. Neither Party shall discriminate against citizens of the country of the other Party with respect to granting any license or sublicense under any invention pursuant to subparagraphs A(1) and A(2) above.

C. Each Party waives any and all claims against the other Party for compensation, royalty or award as regards any such inventions or discovery, patent application, or patent, and releases the other Party with respect to any and all such claims, including any claims under the provisions of the U.S. Atomic Energy Act of 1954, as amended, and Swedish "*Lag den 18 juni 1949 om rätten till arbetstagares uppfinningar*" (Swedish law of June 18th, 1949, regarding the right to employees' inventions.)
