No. 26951

UNITED STATES OF AMERICA and REPUBLIC OF KOREA

Arrangement for the exchange of technical information and cooperation in regulatory and safety research matters (with appendices and patent addendum). Signed at Washington on 10 November 1981

Authentic text: English.

Registered by the United States of America on 29 November 1989.

ÉTATS-UNIS D'AMÉRIQUE et RÉPUBLIQUE DE CORÉE

Arrangement relatif à l'échange de renseignements techniques et à la coopération dans les domaines de la réglementation et de la recherche en matière de sécurité (avec appendices et additif relatif aux brevets). Signé à Washington le 10 novembre 1981

Texte authentique : anglais.

Enregistré par les États-Unis d'Amérique le 29 novembre 1989.

ARRANGEMENT¹ BETWEEN THE UNITED STATES NUCLEAR REGULATORY COMMISSION (U.S.N.R.C.) AND THE MINISTRY OF SCIENCE AND TECHNOLOGY (M.O.S.T.), REPUBLIC OF KOREA, FOR THE EXCHANGE OF TECHNICAL INFORMATION AND COOPERATION IN REGULATORY AND SAFETY RESEARCH MATTERS

The United States Nuclear Regulatory Commission (hereinafter called the U.S.N.R.C.) and the Ministry of Science and Technology, Republic of Korea (hereinafter called the M.O.S.T.);

Having a mutual interest in a continuing exchange of information pertaining to regulatory matters and of standards required or recommended by their organizations for the regulation of safety and environmental impact of nuclear facilities;

Having similarly cooperated under the terms of a five-year Arrangement for the exchange of technical information in regulatory matters and cooperation in development of safety standards, originally signed on March 18, 1976, between the United States Nuclear Regulatory Commission and the Atomic Energy Bureau of the Ministry of Science and Technology, Republic of Korea,² such Arrangement including provision for its extension as mutually agreed upon by the parties;

Having indicated their mutual desire to continue the cooperation established under the aforementioned Arrangement;

Have agreed as follows:

I. Scope of the Arrangement

I.1. Technical Information Exchange

To the extent that the U.S.N.R.C. and the M.O.S.T. are permitted to do so under the laws, regulations, and policy directives of their respective countries, the parties agree to continue the exchange of the following types of technical information relating to the regulation of safety and environmental impact of, and safety research on, designated types of nuclear energy facilities:

- a. Topical reports concerning safety, safeguards, and environmental effects written by or for one of the parties as a basis for, or in support of, regulatory decisions and policies.
- b. Documents relating to significant licensing actions and safety and environmental decisions affecting nuclear facilities.
- c. Detailed documents describing the U.S.N.R.C. process for licensing and regulating certain U.S. facilities designated by the M.O.S.T. as similar to certain facilities being built or planned in Korea and equivalent documents on such Korean facilities.

¹ Came into force on 10 November 1981 by signature, in accordance with section IV (a).

- d. Information concerning reactor safety research results that requires early attention in the interest of public safety, along with an indication of significant implications. (See Appendices A and B.)
- e. Reports on operating experience, such as reports on nuclear incidents, accidents and shutdowns, and compilations of historial reliability data on components and systems.
- f. Regulatory procedures for the safety, safeguards, and environmental impact evaluation of nuclear facilities.
- g. Early advice of important events, such as serious operating incidents and government-directed reactor shutdowns, that are of immediate interest to the parties, as well as advice on particular questions relating to reactor safety.
- h. Copies of regulatory standards required to be used, or proposed for use, by the regulatory organizations of the parties.

I.2. Cooperation in Safety Research

The execution of joint programs and projects of safety research and development, or those programs and projects under which activities are divided between the two 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 and be the subject of a separate agreement implemented by the appropriate research organizations of the parties. Temporary assignments of personnel by one party in the other party's agency will be considered on a case-by-case basis.

I.3. Collaboration in Regulatory Standards

The U.S.N.R.C. has worked closely with the International Atomic Energy Agency (I.A.E.A.) to develop fundamental reactor safety standards adaptable to all countries initiating nuclear power programs. Subject to available resources, the U.S.N.R.C. will work in close cooperation with the M.O.S.T. to tailor these I.A.E.A. standards and other related standards to Korean circumstances. This includes review and comment by the U.S.N.R.C. of standards being proposed by the M.O.S.T. Copies of regulatory standards required to be used, or proposed for use, by the regulatory organizations of a party will be made available to the other party on a timely basis.

1.4. Personnel Training Assignments

On request, the U.S.N.R.C. will assist the M.O.S.T. in providing certain training and experience for M.O.S.T. safety personnel. Costs of salary, allowances and travel of M.O.S.T. participants will be paid by the M.O.S.T. Participation will be permitted to the maximum extent within the limits of available resources. The following are typical of the kinds of training and experience that may be provided:

- a. M.O.S.T. inspector accompaniment of U.S.N.R.C. inspectors on operating reactor and reactor construction inspections in the U.S., including extended briefings at the U.S.N.R.C. regional inspection offices.
 - b. Participation by M.O.S.T. employees in U.S.N.R.C. staff training courses.
- c. Assignment of M.O.S.T. employees for 1-2 year periods to the U.S.N.R.C. staff, to work on U.S.N.R.C. staff duties and gain experience.
 - d. Presentation of staff training courses in Korea.

I.5. Cooperation in Nuclear Emergencies

In the case of a significant nuclear incident or accident in Korea, and particularly in those cases involving a U.S.-supplied nuclear power plant, the U.S.N.R.C. agrees, within the limits of its legislative authority and available resources, to render assistance at the request of the M.O.S.T. Examples of the types of assistance, the extent of which will be determined by the U.S.N.R.C. and the M.O.S.T. on a case-by-case basis, could include, but would not necessarily be restricted to, the following:

- a. Establishing and maintaining a channel of communication between the M.O.S.T. and the U.S.N.R.C. to monitor the severity of the accident situation and to provide technical advice to the M.O.S.T.
- b. Organizing and maintaining teams of experts, working in U.S.N.R.C. Headquarters and in other U.S. locations as required, to give technical advice on the safety problems attendant to the emergency.
- c. Sending U.S.N.R.C., and other U.S. technical experts, including experts in offsite protective measures, to Korea during emergency situations.

To activate this emergency assistance(*) the following procedures would apply:

- (1) A designated representative of the M.O.S.T. will communicate directly with the U.S.N.R.C. Headquarters Duty Officer at the U.S.N.R.C. Operations Center for the purpose of supplying initial information on the incident. A line of communication will be established and maintained by the M.O.S.T.
- (2) The U.S.N.R.C. Operations Center will follow its established procedures, including decision criteria for activating the U.S.N.R.C. Executive Team, for collecting and assessing status information and monitoring the progress of the emergency, using this established communications link.
- (3) Continuing information (in English) will be provided from Korea to the United States, preferably from the site of the incident.
- (4) As soon as practical, the Headquarters Duty Officer and the M.O.S.T. designee will arrange for conference conversations between the Director General of the M.O.S.T. Atomic Energy Bureau, or his designated representative, and the U.S.N.R.C. Executive Director for Operations, the Director of the Executive Team, when activated, or another designated official representing U.S.N.R.C., and appropriate technical experts, in which assistance measures will be discussed and plans for initiating assistance programs agreed upon.
- (5) Cooperative action will begin as soon as this verbal agreement is reached. This plan of cooperative action will be confirmed by telegraph as soon as practicable.
- (6) Questions of liability will be covered as set out in the International Convention of Nuclear Safety Cooperation when it is ratified by the U.S. and Korea. In the interim, the U.S.N.R.C., or its representatives, will not be held liable for personal injury or property damage which may result from information or assistance it provides, or fails to provide, in the course of civil nuclear emergencies. As with other

^(*) In situations requiring technical advice, but not of an emergency nature, requests for assistance will be made within the channel of communication between the U.S.N.R.C. and the M.O.S.T. Arrangement administrators which is described in Section II.b of this Arrangement.

information furnished under this Arrangement, each side is fully responsible for what use it makes of any information it receives.

(7) M.O.S.T. will send copies of final safety analysis reports and other documentation describing Korean nuclear power plants and approved emergency procedures to U.S.N.R.C. These will be kept by U.S.N.R.C. for use in interpretation and analysis of information received during emergency and other assistance actions.

I.6. Additional Safety Advice

To the extent that the documents, training, and other assistance provided by the U.S.N.R.C., as described in I.1 through I.5, above, are not adequate to meet M.O.S.T. needs for technical advice, the parties will consult on the best means for fulfilling such needs.

II. ADMINISTRATION

- a. The exchange of information under this Arrangement will be accomplished through letters, reports, and other documents, and by visits and meetings arranged in advance on a case-by-case basis. A meeting will be held annually, or at such other times as mutually agreed, to review the exchange and cooperation under this Arrangement, to recommend revisions, and to discuss topics coming within the scope of the cooperation. The time, place, and agenda for such meetings shall be agreed upon in advance. Visits which take place under the Arrangement, including their schedules, shall have the prior approval of the two administrators appointed by the parties.
- b. An administrator will be designated by each party to coordinate its participation in the overall exchange. The administrators shall be the recipients of all documents transmitted under the exchange, including copies of all letters unless otherwise agreed. Within the terms of the exchange, the administrators shall be responsible for developing the scope of the exchange, including agreement on the designation of the nuclear energy facilities subject to the exchange, and on specific documents and standards to be exchanged. One or more technical coordinators may be appointed as direct contacts for specific disciplinary areas. These technical coordinators will assure that both administrators receive copies of all transmittals. These detailed arrangements are intended to assure, among other things, that a reasonably balanced exchange giving access to equivalent available information is achieved and maintained.
- c. The administrators shall determine the number of copies to be provided of the documents exchanged. Each document will be accompanied by an abstract in English, 250 words or less, describing its scope and content.
- d. The application or use of any information exchanged or transferred between the parties under this Arrangement shall be the responsibility of the receiving party, and the transmitting party does not warrant the suitability of such information for any particular use or application.
- e. Recognizing that some information of the type covered in this Arrangement is not available within the agencies which are parties to this Arrangement, but is available from other agencies of the governments of the parties, each party will assist the other to the maximum extent possible by organizing visits and directing inquiries concerning such information to appropriate agencies of the government

concerned. The foregoing shall not constitute a commitment of other agencies to furnish such information or to receive such visitors.

- f. Nothing contained in this Arrangement shall require either party to take any action which would be inconsistent with its existing laws, regulations, and policy directives. No nuclear information related to proliferation-sensitive technologies will be exchanged under this Arrangement. Should any conflict arise between the terms of this Arrangement and those laws, regulations, and policy directives, the parties agree to consult before any action is taken.
- g. Information exchanged under this Arrangement shall be subject to the patent provisions in the Patent Addendum of this document.

III. EXCHANGE AND USE OF INFORMATION

- a. The term "information", as used in Article III, means nuclear energy-related regulatory, safety, safeguards, scientific, or technical data, results or methods of research and development, and any other knowledge intended to be provided or exchanged under this Arrangement.
- b. The term "proprietary information" means information which contains trade secrets or commercial or financial information which is privileged or confidential.
- c. The term "other confidential or privileged information" means information, other than "proprietary information", which is protected from public disclosure under the laws and regulations of the country providing the information and which has been transmitted and received in confidence.
- d. In general, information received by each party to this Arrangement may be disseminated freely without further permission of the other party.
- e. Proprietary and other confidential or privileged information received under this Arrangement may be freely disseminated by the receiving party without prior consent to persons within or employed by the receiving party, and to concerned Government departments and Government agencies in the country of the receiving party.
- f. In addition, proprietary and other confidential or privileged information may be disseminated without prior consent
- (1) To prime or subcontractors or consultants of the receiving party located within the geographical limits of that party's nation, for use only within the scope of work of their contracts with the receiving party in work relating to the subject matter of the proprietary or other confidential or privileged information; and
- (2) To organizations permitted or licensed by the receiving party to construct or operate nuclear production or utilization facilities, or to use nuclear materials and radiation sources, provided that such proprietary or other confidential or privileged information is used only within the terms of the permit or license; and
- (3) To contractors or organizations identified in (2), above, for use only in work within the scope of the permit or license granted to such organizations,

Provided that any dissemination of proprietary or other confidential or privileged information under (1), (2), and (3), above, shall be on an as-needed, case-by-case basis, and shall be pursuant to an agreement of confidentiality.

- g. With the prior written consent of the party furnishing proprietary or other confidential or privileged information under this Arrangement, the receiving party may disseminate such proprietary or other confidential or privileged information more widely than otherwise permitted. The parties shall cooperate in developing procedures for requesting and obtaining approval for such wider dissemination, and each party will grant such approval to the extent permitted by its national policies, regulations, and laws.
- h. A party receiving under this Arrangement proprietary or other confidential or privileged information shall respect its proprietary or confidential nature. Proprietary or other confidential or privileged information must be clearly marked or, if verbal, identified, so as to indicate its confidential or privileged nature. Confidential or privileged information must, in addition, be accompanied by a statement indicating that the information is protected from public disclosure by the Government of the transmitting party, and that the information is submitted under the condition that it be maintained in confidence.
- i. If, for any reason, one of the parties becomes aware that it will be, or may reasonably be expected to become, unable to meet the nondissemination provisions of this Article, it shall immediately inform the other party. The parties shall thereafter consult to define an appropriate course of action.
- j. Nothing contained in this Arrangement shall preclude a party from using or disseminating information received without restriction by a party from sources outside of this Arrangement.

IV. DURATION

- a. This renewed exchange shall enter into force upon signature and, subject to paragraph IV.b. of this Article, shall remain in force for five years unless extended for a further period of time by agreement of the parties.
- b. Either party may withdraw from the present Arrangement after providing the other party written notice 90 days prior to its intended date of withdrawal.

SIGNED in Washington, DC, on this tenth day of November 1981.

For the Korean Ministry of Science and Technology:

[Signed]

CHUNG OH LEE Minister For the United States Nuclear Regulatory Commission:

[Signed]

Nunzio J. Palladino Chairman

APPENDIX A

U.S.N.R.C.-M.O.S.T. REACTOR SAFETY RESEARCH EXCHANGE

Areas in Which the U.S.N.R.C. Is Performing LWR Safety Research

- 1. Seismic Studies
- 2. Heavy Section Steel Technology Program
- 3. LOFT Program
- 4. Severe Accident Testing Program
- 5. Separate Effects Testing Loss of Coolant Accident Studies
- 6. 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. Man-Machine Interface Studies
- 13. Fire Protection Studies
- 14. Decommissioning Studies
- 15. Radiation Health and Environment Studies
- 16. Waste Management Studies

APPENDIX B

U.S.N.R.C.-M.O.S.T. REACTOR SAFETY RESEARCH EXCHANGE

Areas in Which the M.O.S.T. Is Performing LWR Safety Research

- 1. Studies and experiments on loss-of-coolant accidents (blow-downs and emergency cooling systems).
- 2. Fuel Rod Bowing Analysis.

PATENT ADDENDUM

- With respect to any invention or discovery made or conceived during the period of, or in the course of or under, this exchange of technical information in regulatory safety research matters and cooperation in the development of safety standards between the U.S. Nuclear Regulatory Commission and the Ministry of Science and Technology, Republic of Korea, 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 (Inventor Party) making the invention shall acquire all right, title and interest in and to any such invention, discovery, patent application or patent in its own and third countries, subject to the grant to the other Party (Recipient 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 such countries for use in the production or utilization of special nuclear material or atomic energy, and the Recipient Party shall acquire all right, title and interest in such invention, patent, etc., in its own country, subject to the grant of a corresponding license to the Inventor Party.
- B. Each Party shall assume the responsibility to pay awards or compensation required to be paid to its own nationals according to its own laws.