

TECHNICAL EXCHANGE AND COOPERATION ARRANGEMENT
BETWEEN
THE UNITED STATES NUCLEAR REGULATORY COMMISSION
AND
THE INSTITUT DE RADIOPROTECTION ET DE SÛRETÉ NUCLÉAIRE
OF FRANCE
IN THE
FIELD OF NUCLEAR SAFETY RESEARCH

The Parties: the United States Nuclear Regulatory Commission, hereinafter referred to as the USNRC, and the Institut de Radioprotection et de Sûreté Nucléaire of France, hereafter referred to as IRSN;

Considering that:

- (1) They have a mutual interest in cooperation in the field of nuclear reactor safety research, with the objective of improving and thus ensuring the safety of nuclear facilities on an international basis;
- (2) They have cooperated in the field of LWR safety under the terms of successive five-year technical exchange Arrangements, originally concluded September 23 and October 16, 1974, between the United States Atomic Energy Commission (USAEC) and the Commissariat à l'Energie Atomique (CEA), continued after January 19, 1975, as between the USNRC and the Institut de Protection et de Sûreté Nucléaire (IPSN), currently known as the Institut de Radioprotection et de Sûreté Nucléaire (IRSN);
- (3) They have indicated their mutual wish to continue the cooperation established by the previous Arrangement and, accordingly, will continue their cooperation pending the execution of this Arrangement;

HEREBY AGREE AS FOLLOWS:

ARTICLE 1 - OBJECTIVE

The USNRC and the IRSN will continue their cooperation in the field of nuclear safety research in accordance with the provisions of this Arrangement and on the basis of a reasonably balanced exchange. Nothing contained in this Arrangement will require either Party to take any action which would be inconsistent with its laws, regulations and national policy. Should any conflict arise between the terms of this Arrangement and those laws, regulations and national policy, the Parties agree to consult before any action is taken.

ARTICLE 2 - FORMS OF COOPERATION

Cooperation between the Parties may take the following forms:

- 2.1 The exchange of information in the form of technical reports, experimental data, correspondence, newsletters, visits, joint experts meetings, and such other means as the Parties agree.
- 2.2 The temporary assignment of personnel of one Party or of its contractors to the laboratory or facilities owned by the other Party or in which it sponsors research. Each such assignment will be considered on a case-by-case basis and generally be the subject of a separate attachment-of-staff agreement between appropriate representatives of the recipient and assigning organizations.
- 2.3 The execution of joint programs and projects, including those involving a division of activities between the Parties. Each such joint program and project will be considered on a case-by-case basis and may be the subject of a separate agreement between the Parties, if determined to be necessary by the research organizations of one or both of the Parties. Otherwise, it will be accomplished by an exchange of letters between the research organizations of the Parties, subject at least to the terms and conditions of this Arrangement.
- 2.4 The use by one Party of facilities which are owned by the other Party or in which research is being sponsored by the other Party; such use of facilities will be the subject of separate agreements between the relevant entities and may be subject to commercial terms and conditions.
- 2.5 If either Party wishes to visit, assign personnel or use the facilities owned or operated by entities other than the Parties to this Arrangement, the Parties recognize that the prior approval of such entities will be required with respect to the terms upon which such visit, assignment or use shall be made.
- 2.6 Any other form agreed between the Parties.

ARTICLE 3 - SCOPE OF INFORMATION EXCHANGE

- 3.1 Each Party will make available to the other information in the field of nuclear safety research which it has the right to disclose, either in its possession or available to it, in the technical areas (listed in Appendices A and B) in which the Parties are sponsoring nuclear safety research. These Appendices may be modified by common agreement of the Administrators (see Article 4).
- 3.2 Each Party will promptly transmit and call to the other Party's attention any information on its research results appearing to have significant safety implications. If the transmitting Party denotes such information to be of a proprietary nature, the recipient Party will control the further dissemination of the information in accordance with the provisions of Article 5.
- 3.3 As agreed upon, the Parties may also exchange information on any other topic related to nuclear safety.

- 3.4 Information furnished by one Party to the other under this Arrangement will be accurate to the best knowledge and belief of the Party supplying the information. However, neither Party gives any warranty as to the accuracy of such information nor will have any responsibility for the consequences of any use to which such information may be put by the other Party or by any third Party.

ARTICLE 4 - ADMINISTRATION OF THE ARRANGEMENT

Each Party will designate, as Administrator, a senior representative to coordinate its participation in the overall exchange. The Administrators will establish agreed-upon procedures for implementing the Arrangement. Approximately annually, the Administrators will meet to review the status of exchange and cooperation established under this Arrangement, to recommend revisions for improving and developing the cooperation, and to discuss topics within the scope of the cooperation. The time, place, and agenda for such meetings will be agreed upon in advance.

ARTICLE 5 - EXCHANGE AND USE OF INFORMATION AND INTELLECTUAL PROPERTY

5.1 General

The Parties support the widest possible dissemination of information provided, created or exchanged under this Arrangement, subject to the requirements of each Party's national laws, regulations and policies and the need to protect proprietary and other sensitive or privileged information, and subject to the provisions of the Intellectual Property Annex, hereby incorporated into this Arrangement.

5.2 Definitions

5.2.1 The term "information" means unclassified nuclear energy-related regulatory, safety, safeguards, waste management, scientific, or technical data, including information on results or methods of assessment, research, and any other knowledge provided, created or exchanged under this Arrangement.

5.2.2 The term "proprietary information" means information created or exchanged under this Arrangement which contains trade secrets or other privileged or sensitive commercial information (such that the person having the information may derive a commercial benefit from it or may have a commercial advantage over those who do not have it), and may only include information which:

- a. has been held in confidence by its owner;
- b. is of a type which is customarily held in confidence by its owner;
- c. has not been transmitted by the owner to other entities (including the receiving Party) except on the basis that it be held in confidence;
- d. is not otherwise available to the receiving Party from another source without restriction on its further dissemination; and

e. is not already in the possession of the receiving Party.

5.2.3 The term "other confidential or privileged information" means non-classified information, other than "proprietary information," which has been transmitted and received in confidence under this Arrangement and is protected from public disclosure under the laws, regulations, or policies of the country of the Party providing the information, or is otherwise restricted by the provider.

5.3 Marking Procedures for Documentary Proprietary Information

A Party receiving documentary proprietary information pursuant to this Arrangement will respect the privileged nature of such information, provided that such proprietary information is clearly marked with the following (or substantially similar) restrictive legend:

"This document contains proprietary information furnished in confidence under an Arrangement dated _____ between the United States Nuclear Regulatory Commission and the Institut De Radioprotection et De Sûreté Nucléaire of France and will not be disseminated outside these organizations, their consultants, contractors, and licensees, or concerned departments and agencies of the Government of the United States and the Government of France, without the prior written approval of (name of transmitting Party). This notice will be marked on each page of any reproduction hereof, in whole or in part. These limitations will automatically terminate when the proprietary information is disclosed by the owner without restriction."

This restrictive legend shall be respected by the Parties to this Arrangement. Proprietary information bearing this restrictive legend shall not be made public or otherwise disseminated in any manner unspecified or contrary to the terms of this Arrangement without the prior written consent of the transmitting Party. Proprietary information bearing this restrictive legend shall not be used by the receiving Party or its contractors and consultants for any commercial purposes without the prior written consent of the transmitting Party.

5.4 Dissemination of Documentary Proprietary Information

5.4.1 In general, proprietary information received under this Arrangement may be 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, provided

- a. such dissemination is made on a case-by-case basis to persons or departments and agencies having a legitimate need for the proprietary information; and
- b. such proprietary information shall bear the restrictive legend appearing in section 5.3 of this Arrangement.

5.4.2 Proprietary information received under this Arrangement may be disseminated by the receiving Party without prior consent to contractors and consultants of the

receiving Party located within the geographical limits of that Party's nation, provided

- a. that the proprietary information is used by such contractors and consultants only for work within the scope of their contracts with the receiving Party relating to the subject matter of the proprietary information, and shall not be used by such contractors and consultants for any other private commercial purposes; and
- b. that such dissemination is made on a case-by-case basis to contractors and consultants having a legitimate need for the proprietary information and who have executed a non-disclosure agreement; and
- c. that such proprietary information shall bear the restrictive legend appearing in Article 5.3 of this Arrangement.

5.4.3 With the prior written consent of the Party furnishing proprietary information under this Arrangement, the receiving Party may disseminate such proprietary information more widely than otherwise permitted under the terms set forth in this Arrangement. The Parties will endeavor to grant such approval to the extent permitted by their respective national laws, regulations and policies, provided

- a. that the entities receiving proprietary information under Article 5.4.3 of this Arrangement, including domestic 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, have a legitimate need for the proprietary information and have executed a non-disclosure agreement; and
- b. that the entities receiving proprietary information under Article 5.4.3 of this Arrangement, including domestic organizations permitted or licensed by the receiving Party to construct or operate nuclear production or utilization facilities, shall not use such proprietary information for any private commercial purposes; and
- c. that those entities receiving proprietary information under Article 5.4.3 of this Arrangement that are domestic organizations permitted or licensed by the receiving Party, agree to use the proprietary information only for activities carried out under or within the terms of their specific permit or license.

5.5 Marking Procedures for Other Confidential or Privileged Information of a Documentary Nature

A Party receiving under this Arrangement other confidential or privileged information will respect its confidential nature, provided such information is clearly marked so as to indicate its confidential or privileged nature and is accompanied by a statement indicating:

- 5.5.1 that the information is protected from public disclosure by the Government of the transmitting Party; and

5.5.2 that the information is transmitted under the condition that it be maintained in confidence.

5.6 Dissemination of Other Confidential or Privileged Information of a Documentary Nature

Other confidential or privileged information may be disseminated in the same manner as that set forth in paragraph 5.4, Dissemination of Documentary Proprietary Information.

5.7 Non-Documentary Proprietary or Other Confidential or Privileged Information

Non-documentary proprietary or other confidential or privileged information provided in seminars and other meetings arranged under this Arrangement, or information arising from the attachments of staff, use of facilities, or joint projects, will be treated by the Parties according to the principles specified for documentary information in this Arrangement; provided, however, that the Party communicating such proprietary or other confidential or privileged information has placed the recipient on notice as to the character of the information communicated.

5.8 Consultation

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 non-dissemination provisions of this Arrangement, it will immediately inform the other Party. The Parties will, thereafter, consult to define an appropriate course of action.

5.9 Codes

5.9.1 All USNRC and IRSN computer codes disseminated under this Arrangement are to be considered privileged information unless otherwise noted, are protected as such by the USNRC and IRSN respectively, and shall be treated likewise by the Parties. They are, in particular, subject to all the provisions of this Article including the requirements for an agreement of confidentiality (Article 5.4) prior to dissemination, with the exception that they need not be marked with the restrictive designation. The codes are subject to this protection in both object and source forms and as recorded in any media.

5.9.2 The USNRC and IRSN codes and other related analytical techniques covered under this Arrangement and any improvements, modifications or updates to such codes or techniques, are for the purpose of reactor and plant systems safety research and licensing and will not be used for commercial purposes, or for other benefits not related to the study of reactor safety without the prior consent of USNRC or IRSN as appropriate.

Among the code uses that will be permitted under this Arrangement are those related to research in the reactor safety area and analyses performed by the Parties or their contractors that can assist regulators and plant personnel in assessing the safety of the plant, analyzing operating events, and training of operators. Specific examples of permitted analyses include: design basis accidents (e.g., loss-of-coolant accidents), anticipated transients, accident management and emergency operating procedures, mid-loop operation, analyses to support PRA success criteria, power upgrades and reload.

Prohibited uses of the USNRC code include: (1) analyses to develop a new reactor design and (2) analyses to support power upgrades and reload in the U.S. unless performed by a U.S. subsidiary.

Prohibited uses of the IRSN code include: (1) analyses to develop a new reactor design and (2) analyses to support power upgrades and reload in France unless performed by a French subsidiary.

- 5.9.3 The USNRC and IRSN codes and other related analytical techniques will not be advertised directly or by implication to obtain contracts related to the construction or servicing of nuclear facilities, nor will advertising imply that the USNRC or IRSN has endorsed any particular analyses or techniques.

5.10 Other

Nothing contained in this Arrangement will preclude a Party from using or disseminating information received without restriction by a Party from sources outside of this Arrangement.

ARTICLE 6 - COSTS

Except when otherwise specifically agreed upon by the Parties, all costs arising in the implementation of this Arrangement will be borne by the Party that incurs them. It is understood that the ability of the Parties to carry out their obligations covered by Article 2 of the present Arrangement is subject to the appropriation of funds by the appropriate governmental authority and to the laws and regulations applicable to the Parties.

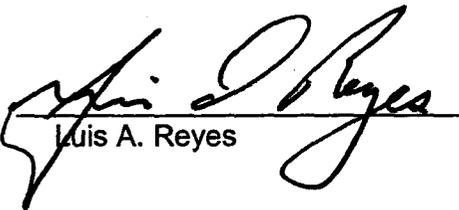
ARTICLE 7 - FINAL PROVISIONS

- 7.1 This Arrangement will enter into force upon the last date of signature, and, subject to paragraph 7.2, will remain in force for a period of five years, unless extended for a further period of time by agreement of the Parties.
- 7.2 Either Party may withdraw from the present Arrangement after providing the other Party written notice six months prior to its intended date of withdrawal.
- 7.3 All information protected by provisions of this Arrangement as proprietary, confidential, privileged, or otherwise subject to restriction on disclosure will remain so protected indefinitely, unless and until the removal of such restriction is agreed to by the Parties in writing.

7.4 Any dispute or questions, between the Parties concerning the interpretation or application of this Arrangement arising during its term will be settled by mutual agreement of the Parties.

FOR THE UNITED STATES NUCLEAR REGULATORY COMMISSION:

FOR THE INSTITUT DE RADIOPROTECTION ET DE SÛRETÉ NUCLÉAIRE OF FRANCE:

BY: 
Luis A. Reyes

BY: 
Jacques Repussard

TITLE: Executive Director
for Operations

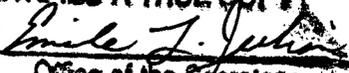
TITLE: Director General

DATE: 7/26/06

DATE: 8/4/06

PLACE: Rockville, Maryland

PLACE: Clamart

CERTIFIED A TRUE COPY
BY 
Office of the Secretary

APPENDIX A

NUCLEAR SAFETY RESEARCH AREAS IN WHICH THE USNRC IS CURRENTLY PERFORMING OR SPONSORING RESEARCH

- Reactor Vessel and Piping Integrity
- Aging of Reactor Components
- Reactor Equipment Qualification
- Thermal Hydraulic Code Application and Maintenance
- Plant Performance
- Human Performance
- Core Melt and Reactor Coolant System Failure
- Reactor Containment Safety
- Containment Structural Integrity
- Seismic Safety
- Probabilistic Risk Assessment
- Severe Accident Analysis
- Radiation Protection and Health Effects
- Radionuclide Transport and Waste Management
- Nuclear Fuel Analysis
- Dry Cask Storage and Transport
- Decommissioning
- Advanced Reactor Designs
- Fire Protection
- PWR Containment Sump and Recirculation
- Knowledge Management

APPENDIX B

IRSN'S NUCLEAR SAFETY RESEARCH AREAS

1. Operating Reactors: Lessons Learned from Reactor Operations
2. Thermal Hydraulic Transients and Simulators for Analysis
3. Fuel Degradation and Fission Products Release in Accident Conditions
4. Equipment Qualification
5. Seismic and External Hazards
6. Probabilistic Risk Assessment
7. Accident Management and Mitigation
8. Safety of Nuclear Waste Repository
9. Radiation Protection and Health Effects
10. Containment Safety
11. Aging of Reactor Components
12. Reactor Vessel and Piping Integrity
13. Criticality
14. Nuclear Fuel Behavior Under Reactivity Insertion Accident, Loss of Coolant Accident and Storage Pool Accident conditions.
15. Fire Propagation and Protection
16. Safety and Severe Accident Analysis for Research Reactors and Operating Reactors
17. Knowledge Management
18. Containment Sump and Recirculation

INTELLECTUAL PROPERTY ANNEX

Pursuant to Article 5 of this Technical Exchange and Cooperation Arrangement:

The Parties shall ensure adequate and effective protection of intellectual property created or furnished under this Technical Exchange and Cooperation Arrangement and relevant implementing arrangements. The Parties agree to notify one another in a timely fashion of any inventions or copyrighted works arising under this Technical Exchange and Cooperation Arrangement and to seek protection for such intellectual property in a timely fashion. Rights to such intellectual property shall be allocated as provided in this Annex.

I. SCOPE

- A. Annex is applicable to all cooperative activities undertaken by the Parties pursuant to this Technical Exchange and Cooperation Arrangement, except as otherwise specifically agreed by the Parties or their designees.
- B. For purposes of this Arrangement, "intellectual property" shall have the meaning found in Article 2 of the Convention Establishing the World Intellectual Property Organization, done at Stockholm, July 14, 1967; viz., 'intellectual property' shall include the rights relating to:
 - literary, artistic and scientific works,
 - performances of artists, phonograms, and broadcasts,
 - inventions in all fields of human endeavor,
 - scientific discoveries,
 - industrial designs,
 - trademarks, service marks, and commercial names and designations,
 - protection against unfair competition, and all other rights resulting from intellectual activity in the industrial, scientific, literary or artistic fields."
- C. This Annex addresses the allocation of rights, interests, and royalties between the Parties. Each Party shall ensure that the other Party can obtain rights to intellectual property allocated in accordance with the Annex. The allocation between a Party and participants on behalf of this Party in the cooperative activities, which shall be determined by the Party's laws and practices, shall not be altered or prejudiced by this Annex.
- D. Disputes concerning intellectual property arising under this Technical Exchange and Cooperation Arrangement should be resolved through discussions between the concerned participating institutions or, if necessary, the Parties or their designees. Upon mutual agreement of the Parties, a dispute shall be submitted to an arbitral tribunal for binding arbitration in accordance with the applicable rules of international law. Unless the Parties or their designees agree otherwise in writing, the arbitration rules of the United Nations Commission on International Trade Law (UNCITRAL) shall govern.
- E. Termination or expiration of this Technical Exchange and Cooperation Arrangement shall not affect rights or obligations under this Annex.

II. ALLOCATION OF RIGHTS

- A. Each Party shall be entitled to a non-exclusive, irrevocable, royalty-free license in all countries to translate, reproduce, and publicly distribute scientific and technical journal articles, publicly available reports and books directly arising from cooperation under this Technical Exchange and Cooperation Arrangement. All publicly distributed copies of copyrighted work prepared under this provision shall indicate the names of the authors of the work unless an author explicitly declines to be named. Each Party shall have the right to review a translation prior to public distribution.
- B. Rights to all forms of intellectual property, other than those rights described in Section II.A. above, shall be allocated as follows:
1. Visiting researchers, for example, scientists visiting primarily in furtherance of their education, shall receive intellectual property rights under the policies of the host institution, unless a specific agreement is or has been signed between the host and forwarding institution. In addition, each visiting researcher named as an inventor shall be entitled to treatment as a national of the host country with regard to awards, bonuses, benefits, or any other rewards, in accordance with the policies of the host institution.
 2.
 - (a) For intellectual property created during joint research, the Parties shall jointly develop a technology management plan either prior to the start of their cooperation, for example in research areas likely to lead rapidly to industrial applications, or within a reasonable time from the time a party becomes aware of the creation of the intellectual property. The technology management plan shall consider the relative contributions of the Parties, the benefits of exclusive or nonexclusive licensing by territory or for fields of use, requirements imposed by the Parties' domestic laws, and other factors deemed appropriate. If needed, the technology management plan shall be jointly modified or completed in a timely fashion subject to approval of both parties.
 - (b) If the Parties cannot reach agreement on a joint technology management plan within a reasonable time not to exceed six months from the time a Party becomes aware of the creation of the intellectual property in question, each party may designate one co-exclusive licensee to have world wide rights to said intellectual property. Each party should notify the other two months prior to making a designation under this paragraph. When both Parties (or their licensees) exploit the intellectual property in a country, they shall share equally the reasonable cost of intellectual property protection in that country. The Parties will designate licensees to commercially exploit and protect intellectual property resulting from this Arrangement.
 - (c) A specific program of research will be regarded as joint research for purposes of this Annex when it is designated as such in the relevant implementing arrangements. Otherwise the allocation of rights to intellectual property will be in accordance with paragraph II.B.1.

(d) In the event that either Party believes that a particular joint research project under this Arrangement will lead or has led to the creation or furnishing of intellectual property of a type not protected by the applicable laws of one of the Parties, the Parties shall immediately hold discussions to determine the allocation of the rights to the said intellectual property; the joint activities in question will be suspended during the discussions unless otherwise agreed by the parties thereto. If no agreement can be reached within a three month period from the date of the request for discussions, the Parties shall cease the cooperation in the project in question; notwithstanding paragraphs II.B.2(a) and 2(b), rights to any intellectual property which has been created will be resolved in accordance with provisions of paragraph I.D.