

**NUCLEAR SAFETY**

**Agreement Between the  
UNITED STATES OF AMERICA  
and the UNITED KINGDOM OF  
GREAT BRITAIN AND  
NORTHERN IRELAND**

Signed at Rockville and Merseyside  
February 7 and 12, 2007

*with*

Appendices

*and*

Annex



NOTE BY THE DEPARTMENT OF STATE

Pursuant to Public Law 89—497, approved July 8, 1966  
(80 Stat. 271; 1 U.S.C. 113)—

“ . . .the Treaties and Other International Acts Series issued under the authority of the Secretary of State shall be competent evidence . . . of the treaties, international agreements other than treaties, and proclamations by the President of such treaties and international agreements other than treaties, as the case may be, therein contained, in all the courts of law and equity and of maritime jurisdiction, and in all the tribunals and public offices of the United States, and of the several States, without any further proof or authentication thereof.”

**UNITED KINGDOM OF GREAT BRITAIN  
AND NORTHERN IRELAND**

**Nuclear Safety**

*Agreement signed at Rockville and  
Merseyside February 7 and 12, 2007;  
Entered into force February 12, 2007.  
With appendices and annex.*

TECHNICAL EXCHANGE AND COOPERATION ARRANGEMENT  
BETWEEN  
THE UNITED STATES NUCLEAR REGULATORY COMMISSION  
AND  
THE HEALTH AND SAFETY EXECUTIVE OF GREAT BRITAIN  
IN THE  
FIELD OF REACTOR SAFETY RESEARCH AND DEVELOPMENT

The Participants:

Considering that the United States Nuclear Regulatory Commission (USNRC) and the Health and Safety Executive of Great Britain (HSE);

- (a) 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 reactors on an international basis;
- (b) take note of previously exchanged research and development information in the field of nuclear safety under the Arrangement of August 3, 1977, between the USNRC and the United Kingdom Atomic Energy Authority, and the five-year Arrangements between the USNRC and the United Kingdom Health and Safety Executive in the Field of Reactor Safety Research and Development of April 4, 1995, and June 26, 2000;
- (c) indicate their mutual wish to continue the cooperation in nuclear safety research and development established by the above-mentioned Arrangement.

HAVE REACHED THE FOLLOWING UNDERSTANDINGS:

ARTICLE 1 - OBJECTIVE

The USNRC and the HSE, in accordance with the provisions of this Arrangement and subject to applicable domestic laws and regulations in force in their respective countries, will continue the cooperation established between them in the field of nuclear safety research and development on the basis of mutual benefit and reasonable equality and reciprocity.

## ARTICLE 2 - FORMS OF COOPERATION

Cooperation between the participants may take the following forms:

- 2.1 The exchange of information in the form of technical reports, experimental data, computer codes, correspondence, newsletters, visits, joint experts meetings, and such other means as the participants, or their designated representatives, consider appropriate.
- 2.2 The organization of meetings on specific agreed topics; such meetings normally to be held alternately in the U.S. and the UK for each topic.
- 2.3 Visits by specialist teams or individuals to the facilities of the other participant or to facilities in which the participant is sponsoring research.
- 2.4 Possible temporary assignment of personnel of one participant or of its contractors to the laboratory or facilities owned by the other participant 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 the participants.
- 2.5 The execution of joint programs and cooperative research projects, including those involving a division of activities between the participants, including the use of test facilities and/or computer programs sponsored by either participant, will be agreed on a case-by-case basis and may be the subject of a separate arrangement between the participants, if determined to be necessary by the research organizations of one or both of the participants. Otherwise, it will be accomplished by an exchange of letters between the research organizations of the participants, subject at least to the terms and conditions of the present Arrangement.
- 2.6 The use by one participant of facilities which are owned by the other participant or in which research is being sponsored by the other participant; such use of facilities will be the subject of separate arrangements between the participants and subject to the terms and conditions of this Arrangement, and may be subject to commercial terms and conditions.
- 2.7 If either participant wishes to visit, assign personnel or use the facilities owned or operated by entities other than the participants to this Arrangement, such entities must give their prior written approval to the terms upon which such visit, assignment or use will be made.
- 2.8 Any other form considered appropriate between the participants.

## ARTICLE 3 - SCOPE OF INFORMATION EXCHANGE

- 3.1 The USNRC will make available to the HSE, or its designated representative, information in the field of nuclear reactor safety research and development which it has the right to disclose, either in its possession or available to it, in the technical areas (listed in Appendix A) in which the USNRC is performing nuclear safety research.
- 3.2 The HSE, or its designated representative, will make available to the USNRC information in the field of nuclear safety research and development which it has the right to disclose, either in its possession or available to it, in the technical areas (listed in Appendix B) in which the HSE, or its designated representative, is performing nuclear safety research.

- 3.3 Each participant will promptly transmit and call to the other participant's attention any information on its research results appearing to have significant safety implications.
- 3.4 The participants may also exchange information on any other topic related to nuclear reactor safety by mutual agreement.
- 3.5 Nothing in this Arrangement will prevent either participant from withholding, in accordance with applicable domestic laws, information including, but not limited to:
- a) information whose disclosure is restricted in accordance with the legal system of that participant's country;
  - b) information that would cause or risk prejudice to the national security or defense of the U.S. or of the UK including its Crown dependencies or overseas territories;
  - c) information that would cause or risk prejudice to the economic interests of the U.S. or of the UK;
  - d) information that would cause or risk prejudice to the international relations of the U.S. or of the UK;
  - e) confidential information obtained from a state which is not a participant to this Arrangement or from an international organization or international court;
  - f) information that would cause or risk prejudice to any investigation or legal or other proceedings, being conducted by the authorities of either participant's country, including by any police, prosecuting or other enforcing authority;
  - g) information that would cause or risk prejudice to the prevention or detection of crime, the apprehension or prosecution of offenders, or the administration of justice or any other law enforcement or regulatory activity;
  - h) information that is contained in any document relating to legal or administrative proceedings;
  - i) information that relates to the formulation or development of policy by the government of either participant's country;
  - j) information that would cause or risk prejudice to the effective conduct of public affairs in either participant's country, or would be likely to inhibit the free and frank provision of advice (including legal advice), or the free and frank exchange of views for the purpose of deliberation by or communication between holders of public office;
  - k) personal information about any person (including a deceased person) or information disclosure of which would constitute or could facilitate an unwarranted invasion of privacy;
  - l) information obtained by either participant from any other person (including another public authority), where the disclosure of information by the participant would constitute a breach of confidence;
  - m) information relating to a claim of legal or professional privilege (or equivalent) in either participant's country, information related to legal proceedings, or information - disclosure of which would constitute or be punishable by contempt of court;

- n) information which is prohibited by or under any enactment, rule of law, or international obligation, including, in the case of the UK, any European Community or European union obligations;
- o) information relating to a matter outside the participant's authority to disseminate;
- p) information which would cause or risk prejudice to relations between any administration in the UK and any other such administration;
- q) information relating to public audit functions;
- r) information which is required to be withheld for the purpose of avoiding an infringement of the privileges of either House of the UK Parliament.

However, any information that is made public in either participant's country will be available to the other participant.

Each participant may provide abridged documents, if necessary.

#### ARTICLE 4 - ADMINISTRATION OF THE ARRANGEMENT

Each participant will designate as Administrator a senior representative to coordinate its participation in the overall exchange. On an annual basis, the Administrators, or their designated representatives, will meet to review the status of exchange and cooperation provided for by 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 participants support the widest possible dissemination of information provided, created or exchanged under this Arrangement, subject to the requirements of each participant'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 (As used in this Arrangement)

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, confidential 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 participant) except on the basis that it be held in confidence;
- d. is not otherwise available to the receiving participant from another source without restriction on its further dissemination; and
- e. is not already in the possession of the receiving participant.

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 participant providing the information, or is otherwise restricted by the provider.

### 5.3 Marking Procedures for Documentary Proprietary Information

A participant 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 Health and Safety Executive of Great Britain 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 the United Kingdom, without the prior written approval of (name of transmitting participant). 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 participants 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 participant. Proprietary information bearing this restrictive legend shall not be used by the receiving participant or its contractors and consultants for any commercial purposes without the prior written consent of the transmitting participant.

### 5.4 Dissemination of Documentary Proprietary Information

5.4.1 In general, proprietary information received under this Arrangement may be disseminated by the receiving participant without prior consent to persons within or employed by the receiving participant, and to concerned Government departments and Government agencies in the country of the receiving participant, 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 participant without prior consent to contractors and consultants of the receiving participant located within the geographical limits of that participant'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 participant 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 participant furnishing proprietary information under this Arrangement, the receiving participant may disseminate such proprietary information more widely than otherwise permitted under the terms set forth in this Arrangement. The participants 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 participant 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 participant 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 participant, 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 Sensitive or Privileged Information of a Documentary Nature

A participant receiving under this Arrangement other sensitive or privileged information will respect its sensitive nature, provided such information is clearly marked so as to indicate its sensitive 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 participant; and

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

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

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

5.7 Non-Documentary Proprietary or Other Sensitive or Privileged Information

Non-documentary proprietary or other sensitive 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 participants according to the principles specified for documentary information in this Arrangement; provided, however, that the participant communicating such proprietary or other sensitive 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 participants 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 participant. The participants will thereafter consult to define an appropriate course of action.

In the event that either participant receives a request under their respective freedom of information legislation (in the case of the United Kingdom the Freedom of Information Act 2000, and the Freedom of Information (Scotland) Act 2002, and in the case of the United States of America, 5 U.S.C. 552) each participant will consult the other participant before disclosing any information provided by the other participant pursuant to a request for information.

5.9 Other

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

5.9.2 All USNRC computer codes disseminated under this Arrangement are to be considered privileged information unless otherwise noted, are protected as such by the USNRC, and will be treated likewise by the HSE. They are, in particular, subject to all the provisions of this ARTICLE in both object and source forms and as recorded in any media.

5.9.3 The USNRC 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 the USNRC.

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 participants 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 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.

- 5.9.4 The USNRC 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 has endorsed any particular analyses or techniques.

## ARTICLE 6 - COSTS

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

## ARTICLE 7 - DISCLAIMER

Information given by one participant to the other under this Arrangement will be accurate to the best knowledge and belief of the participant giving it, but neither participant gives any warranty as to the accuracy of such information or will have any responsibility for the consequences of any use to which such information may be put by the other participant or by any third participant.

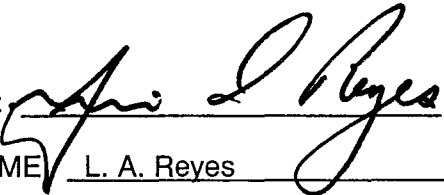
## ARTICLE 8 - FINAL PROVISIONS

- 8.1 This Arrangement will enter into force upon the last date of signature, and, subject to ARTICLE 8.2, will remain in force for a period of five years, unless extended for a further period of time by agreement of the participants.
- 8.2 Either participant may withdraw from the present Arrangement after providing the other participant written notice at least six months prior to its intended date of withdrawal.
- 8.3 All information protected by provisions of this Arrangement as proprietary, sensitive, privileged, or otherwise subject to restriction on disclosure will remain so protected indefinitely, consistent with the laws and regulations of the participants, unless and until

the removal of such restriction is agreed to by the participants in writing or unless the information has been made publicly available.

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

FOR THE UNITED STATES NUCLEAR  
REGULATORY COMMISSION:


BY:   
NAME: L. A. Reyes

TITLE: Executive Director  
for Operations

DATE: 2/7/07

PLACE: Rockville, Maryland

FOR THE HEALTH AND SAFETY  
EXECUTIVE OF GREAT BRITAIN:

BY:   
NAME: M. W. Weightman

TITLE: Director, HSE, HM Chief Inspector  
Of Nuclear Installations

DATE: 12 February 2007

PLACE: Bootle, Merseyside

## APPENDIX A

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

1. Reactor Vessel and Piping Integrity
2. Aging of Reactor Components
3. Reactor Equipment Qualification
4. Thermal Hydraulic Code Application and Maintenance
5. Plant Performance
6. Human Performance
7. Core Melt and Reactor Coolant System Failure
8. Reactor Containment Safety
9. Containment Structural Integrity
10. Seismic Safety
11. Probabilistic Risk Assessment
12. Severe Accident Analysis
13. Radiation Protection and Health Effects
14. Radionuclide Transport and Waste Management
15. Nuclear Fuel Analysis
16. Dry Cask Storage and Transport
17. Decommissioning
18. Advanced Reactor Designs
19. Fire Protection
20. Pressurized Water Reactor Containment Sump and Recirculation
21. Knowledge Management

## APPENDIX B

### REACTOR SAFETY RESEARCH AREAS IN WHICH THE HSE IS CURRENTLY PERFORMING SAFETY RESEARCH

- 1a. Plant Life Management - steel components
- 1b. Plant Life Management - civil engineering
2. Chemical Processes
3. Fuel and Core
4. Fission Products
5. Reactor Physics, Criticality and Shielding
6. Heat Transfer and thermal Hydraulics
7. Severe Accidents
8. External Events
9. Control and Instrumentation
10. Human Factors
11. Probabilistic Safety Assessment
12. Radiological Protection
13. Waste and Decommissioning
14. Nuclear Systems and Equipment
15. Graphite

## INTELLECTUAL PROPERTY ANNEX

Pursuant to ARTICLE 5 of this Technical Exchange Arrangement:

The participants shall take such steps as are in its control to adequately and effectively protect the intellectual property created or furnished under this Arrangement and relevant implementing arrangements. The participants agree to notify one another in a timely fashion of any inventions or copyrighted works arising under this 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. This Annex is applicable to all cooperative activities undertaken pursuant to this Arrangement, except as otherwise specifically agreed by the participants 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 participants. Each participant shall take such steps as are in its control to ensure that the other participant can obtain rights to intellectual property allocated in accordance with the Annex. This Annex does not otherwise alter or prejudice the allocation between a participant and its nationals, which shall be determined by that participant's laws and practices.
- D. Disputes concerning intellectual property arising under this Arrangement should be resolved through discussions between the concerned participating institutions or, if necessary, the participants. Upon mutual agreement of the participants, a dispute shall be submitted to an arbitral tribunal for binding arbitration in accordance with the applicable rules of international law. Unless the participants 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 Arrangement shall not affect rights or obligations under this Addendum.

## II. ALLOCATION OF RIGHTS

- A. Each participant shall be entitled to a non-exclusive, irrevocable, royalty-free license in all countries to reproduce, and publicly distribute and translate scientific and technical journal articles, reports, and books directly arising from cooperation under this 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 participant 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. 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 participants shall jointly develop a technology management plan. The technology management plan shall consider the relative contributions of the participants and their cooperative entities, the benefits of licensing by territory or for fields of use, requirements imposed by the participants' domestic laws, and other factors deemed appropriate. The initial research cooperation arrangement may include the technology management plan for that specific cooperation.
    - (b) If the participants cannot reach agreement on a joint technology management plan within a reasonable time not to exceed six months from the time a participant becomes aware of the creation of the intellectual property in question, the participants or cooperative entities shall resolve the matter in accordance with the provisions of ARTICLE I(D). Pending resolution of the matter, such intellectual property shall be owned jointly by the Participants or their cooperative entities, but shall be commercially exploited (including product development) only by mutual agreement.
    - (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 Arrangement. Otherwise the allocation of rights to intellectual property will be in accordance with ARTICLE II(B)(1).
    - (d) In the event that either participant believes that a particular joint research project under this Agreement will lead to the creation or furnishing of intellectual property of a type not protected by the applicable laws of one of the participants, the participants 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 participants thereto.