

**PROTOCOL**

BETWEEN

THE NUCLEAR REGULATORY COMMISSION OF  
THE UNITED STATES OF AMERICA  
(USNRC)

AND

THE NATIONAL NUCLEAR SAFETY ADMINISTRATION  
OF THE PEOPLE'S REPUBLIC OF CHINA  
(NNSA)

ON COOPERATION IN NUCLEAR SAFETY MATTERS

JANUARY 07, 2008

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The Nuclear Regulatory Commission of the United States of America (USNRC) and the National Nuclear Safety Administration of the People's Republic of China (NNSA), hereinafter the Parties;

In accordance with and subject to the "Agreement Between the Government of the United States of America and the Government of the People's Republic of China on Cooperation in Science and Technology," signed in Washington on January 31, 1979, as amended and extended (hereinafter the Agreement);

Considering also the "Protocol Between the Nuclear Regulatory Commission of the United States of America and the National Nuclear Safety Administration of the People's Republic of China on Cooperation in Nuclear Safety Matters," signed in Washington on October 17, 1981; as amended and extended in Vienna on September 26, 1986; as amended and extended in Shanghai on January 11, 1993; as amended and extended in Vienna, Austria, on September 24, 1998; and as renewed in Beijing on April 23, 2004.

In view of the joint cooperative efforts and results achieved by the Parties, the Parties' reaffirmation of the importance of continued close cooperation in nuclear safety matters, and the Parties intent to expand significantly the scope of the existing cooperation between them;

Have agreed as follows.

## **ARTICLE 1**

### **Technical Information Exchange**

To the extent that the USNRC and the NNSA are permitted to do so under the laws, regulations, [and policy directives of their respective governments], the Parties will exchange technical and regulatory information relating to the safety, safeguards, and environmental impacts of civil nuclear installations, materials, and activities on the basis of equality, reciprocity, and mutual benefit.

- A. The cooperation on nuclear safety regulation of civil nuclear installations may include the following areas:
1. Topical reports concerning safety, safeguards, decommissioning, and waste management written by or for one of the Parties as a basis for, or in support of, regulatory decisions and policies.
  2. Documents relating to significant licensing actions and safety and environmental decisions affecting civil nuclear installations.
  3. Detailed documents describing the USNRC process for licensing and regulating certain U.S. facilities mutually determined to be similar to certain facilities being built or planned in China and equivalent documents on such Chinese facilities.
  4. Information in the field of confirmatory safety research which the Parties have the right to disclose, either in the possession of one of the Parties or available to it. Cooperation in the safety research areas will require a separate letter of agreement.
  5. Reports on operating experience, such as reports on nuclear incidents, accidents and shutdowns, and compilations of historical reliability data on components and systems.
  6. Regulatory procedures for the safety, safeguards (materials accountancy and control and physical protection), waste management, and environmental impact evaluation of civilian nuclear facilities.
  7. Early notification of nuclear accidents in accordance with the related provisions under the "Convention on Early Notification of a Nuclear Accident".
  8. Copies of regulatory standards required to be used, or proposed for use, by the regulatory organizations of the Parties.
  9. Other areas as mutually agreed.

B. Emergency Exercises

The Parties may collaborate on emergency exercises to be conducted, as the Parties jointly decide is useful and appropriate. This could include observation of the exercises and participation in their critique.

C. Training and Assignments

1. Within the limits of available resources and legal authority, the USNRC will assist the NNSA in providing certain training and experience for its nuclear safety personnel. The following are typical of the kinds of on-the-job training and experience that may be provided under this Protocol:

- a. NNSA nuclear safety personnel accompaniment of USNRC inspectors on operating reactor and reactor construction (if available) inspections in the U.S.
- b. Participation by NNSA nuclear safety personnel in USNRC staff training courses conducted at the USNRC's Technical Training Center in Chattanooga, Tennessee; and
- c. Assignment of NNSA nuclear safety personnel to work within the USNRC staff to gain experience in the practices and procedures followed by the USNRC in its regulation of U. S. nuclear facilities.

2. Within the limits of available resources and legal authority, the NNSA will receive nuclear safety personnel of the USNRC under the following typical forms:

- a. The Chinese side will welcome U.S. nuclear safety personnel in specific fields to visit China and hold joint discussions on nuclear safety regulatory matters; and
- b. The Chinese side will invite U.S. nuclear safety experts to China to give lectures and hold joint discussions on nuclear safety regulatory matters.

3. Temporary assignments of qualified nuclear safety experts by one Party in the other Party's agency will be considered on a case-by-case basis and will, in general, be the subject of separate letters of agreement.

D. Cooperation in Confirmatory Nuclear 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 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 will be the subject of separate, specific letters of agreement which, while they are in effect, are to be appended to the Protocol.

Each Party, based on its own research, will transmit immediately to the other Party information of which it becomes aware concerning research results known to have urgent safety implications for nuclear facilities operating in the country of the other Party.

E. Other Technical Advice and Assistance

To the extent that the documents and other technical assistance provided by the USNRC are not adequate to meet the needs of the NNSA for technical advice, the Parties will consult on the best means for meeting such needs.

To the extent possible, the NNSA will make every effort to assist the USNRC in meeting its requests for information on nuclear regulatory activities, or the Parties will consult on the best means for meeting such needs. This may include inviting USNRC nuclear safety experts to accompany/observe NNSA inspectors on operating reactor or reactor construction inspections in China.

## **ARTICLE 2**

### **Administration**

A. The exchange of information under this Protocol will be accomplished through letters, reports, and other documents, and by visits and meetings arranged in advance on a case-by-case basis. Meetings will be held at such times as mutually agreed to review the exchange of information and cooperation under this Protocol, to recommend revisions to the provisions of the Protocol, and to discuss topics coming within the scope of the cooperation. The time, place, and agenda for such meetings will be agreed upon in advance. The terms of the visits which take place under the Protocol, including their schedules, will have the prior approval of the administrators referred to in paragraph 2.B.

B. An administrator will be designated by each Party to coordinate its participation in the overall exchange under this Protocol. The administrators will 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 will 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 will 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. Recognizing that some information of the type covered in this Protocol is not available within the agencies which are Parties to this Protocol, 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 will not constitute a commitment of other agencies to furnish such information or to receive such visitors.

**ARTICLE 3**  
**Information Exchange and Use**

Exchanges of information and technology undertaken in connection with these cooperative efforts will be limited to those which are useful in the development of a nuclear safety regulatory program. Neither Party is required to take any action under this Protocol which would be inconsistent with that Party's applicable domestic laws and regulations. No nuclear information related to proliferation-sensitive technologies will be exchanged. The exchange and use of information under this Protocol are further governed by the terms specified in Addendum A, "Exchange and Use of Information", attached hereto and made an integral part of this Protocol.

**ARTICLE 4**  
**Intellectual Property Rights**

This Protocol will be subject to the Agreement and Annex on the protection of intellectual property described in the IPR Annex, attached hereto and made an integral part of this document.

**ARTICLE 5**

Implementation of this Protocol will be subject to the availability of appropriated funds and the budgetary approval of each Party. The payment of costs will be decided by mutual written agreement on a case-by-case basis. In principle, the sharing of costs between the Parties will be decided according to the extent of the benefit received by each Party.

**ARTICLE 6**

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

**ARTICLE 7**

The application or use of any information exchanged or transferred between the Parties under this Protocol will 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.

**ARTICLE 8**

A. This Protocol will enter into force upon signature, and, subject to paragraph B of this section, will remain in force for a five-year period or for the duration of the Agreement, whichever is shorter. It may be amended or extended by mutual written agreement. The April 23, 2004 Protocol will be superseded upon entry into force of this Protocol.

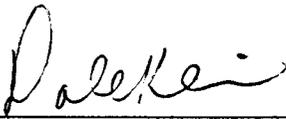
B. This Protocol may be terminated at any time at the discretion of either Party upon at least six months' advance notification in writing by the Party seeking to terminate the Protocol.

C. All information protected by provisions of this Protocol as proprietary or other confidential or privileged information will remain so protected for the duration of this Protocol and after this Protocol has expired or been terminated, unless otherwise specifically agreed by the Parties in writing.

D. The termination of this Protocol will not affect the validity or duration of specific activities being undertaken hereunder.

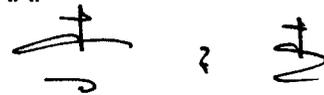
DONE at Beijing this 7th day of January 2008, in duplicate, in the English and Chinese languages, both texts being equally authentic.

FOR THE NUCLEAR REGULATORY  
COMMISSION OF THE  
UNITED STATES OF AMERICA:



\_\_\_\_\_  
Dale E. Klein, Chairman

FOR THE NATIONAL NUCLEAR  
SAFETY ADMINISTRATION OF  
THE PEOPLE'S REPUBLIC OF  
CHINA:



\_\_\_\_\_  
LI Ganjie, Administrator

**ADDENDUM A**

**EXCHANGE AND USE OF INFORMATION**

Pursuant to Article 3 of this Protocol:

A. General

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

B. Definitions

For the purposes of this Protocol:

1. The term "information" means 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 Protocol.

2. The term "proprietary information" means information provided, created or exchanged under this Protocol 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 such information 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 restrictions on its further dissemination; and
- (e) is not already in the possession of the receiving Party.

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 Protocol and is protected from public disclosure under the laws, regulations, or policies of the Party providing the information, or is otherwise restricted by the provider.

C. Marking Procedures for Documentary Proprietary Information

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

This document contains proprietary information furnished in confidence under a Protocol dated January 07, 2008 between the Nuclear Regulatory Commission of the United States of America and the National Nuclear Safety Administration of the People's Republic of China and will not be disseminated outside these organizations, their consultants, contractors and licensees, and concerned departments and agencies of the Government of the United States and the Government of China without the prior approval of (name of the 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 this information is disclosed by the owner without restrictions.

This restrictive legend will be respected by the Parties to this Protocol. 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 Protocol without 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.

D. Dissemination of Documentary Proprietary Information

1. In general, proprietary information received under this Protocol 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 C of this Addendum .

2. Proprietary information received under this Protocol may be disseminated by the receiving Party without prior consent [of the transmitting party] to contractors and consultants of the receiving Party located within the geographical limits of that Party's territory, provided

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- 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 paragraph C of this Addendum.

3. With the prior written consent of the Party furnishing proprietary information under this Protocol, the receiving Party may disseminate such proprietary information more widely than otherwise permitted under the terms set forth in this Protocol. 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 paragraph D.3 of Addendum A of this Protocol, 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 paragraph D. 3 of Addendum A of this Protocol, 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 paragraph D. 3 of Addendum A of this Protocol, 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.

**E. Marking Procedures for Other Confidential or Privileged Information of a Documentary Nature**

A Party receiving under this Protocol 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

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1. that the information is protected from public disclosure by the government of the transmitting Party, and
2. that the information is transmitted under the condition that it be maintained in confidence.

### F. 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 D., "Dissemination of Documentary Proprietary Information."

### G. 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 Protocol, or information arising from 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 Protocol; 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.

### H. 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 Addendum A to this Protocol, it will immediately inform the other Party. The Parties will thereafter consult to define an appropriate course of action.

### I. Other

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

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### INTELLECTUAL PROPERTY ADDENDUM

Pursuant to Article 4 of this Arrangement:

The Parties shall ensure adequate and effective protection of intellectual property created or furnished under this 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 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 Addendum.

#### I. SCOPE

1. This Addendum is applicable to all cooperative activities undertaken pursuant to this Arrangement, except as otherwise specifically agreed by the Parties or their designees.
2. For purposes of this Arrangement, "intellectual property" shall mean the subject matter listed in Article 2 of the Convention Establishing the World Intellectual Property Organization, done at Stockholm, July 14, 1967, and may include other subject matter as agreed by the Parties.
3. This Addendum 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 this Addendum by obtaining those rights from its own participants through contracts or other legal means, if necessary. This Addendum does not otherwise alter or prejudice the allocation between a Party and its nationals, which shall be determined by that Party's laws and practices.
4. Disputes concerning intellectual property arising under this 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.
5. Termination or expiration of this Arrangement shall not affect rights or obligations under this Addendum.

II. ALLOCATION OF RIGHTS

1. 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, 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.
2. Rights to all forms of intellectual property, other than those rights described in Section II.1., above, shall be allocated as follows:
  - a. 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 share in a portion of any royalties earned by the host institution from the licensing of such intellectual property.
  - b. (1) For intellectual property created during joint research, for example, when the Parties, participating institutions, or participating personnel have agreed in advance on the scope of work, each Party shall be entitled to obtain all rights and interests in its own country. Rights and interests in third countries will be determined in implementing arrangements. If research is not designated as "joint research," rights to intellectual property arising from the research will be allocated in accordance with paragraph II.2.a, above. In addition, each person named as an inventor shall be entitled to share in a portion of any royalties earned by either institution from the licensing of the property.  
  
(2) Notwithstanding paragraph II.2.b. (1), above, if a type of intellectual property is available under the laws of one Party but not of the other Party, the Party whose laws provide for this type of protection shall be entitled to all rights and interests worldwide. Persons named as inventors of the property shall nonetheless be entitled to royalties as provided in paragraph II.2.b. (1), above.

III. BUSINESS CONFIDENTIAL

In the event that information identified in a timely fashion as business-confidential is furnished or created under this Arrangement, each Party and its participants shall protect such information in accordance with applicable laws, regulations, and administrative practices. Information may be identified as "business-confidential" if a person having the information may derive an economic benefit from it or may obtain a competitive advantage over those who do not have it, the information is not generally known or publicly available from other sources, and the owner has not previously made the information available without imposing in a timely manner an obligation to keep it confidential.