NUCLEAR SAFETY

Arrangement Between the UNITED STATES OF AMERICA and the REPUBLIC OF KOREA

Signed at Vienna September 18, 2012

with

Addenda



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."

REPUBLIC OF KOREA

Nuclear Safety

Arrangement signed at Vienna September 18, 2012; Entered into force September 18, 2012. With addenda.

ARRANGEMENT BETWEEN

THE UNITED STATES NUCLEAR REGULATORY COMMISSION

AND

THE NUCLEAR SAFETY AND SECURITY COMMISSION OF
THE REPUBLIC OF KOREA
FOR THE EXCHANGE OF TECHNICAL INFORMATION
AND

COOPERATION IN NUCLEAR SAFETY MATTERS

September 18, 2012

ARRANGEMENT BETWEEN THE UNITED STATES NUCLEAR REGULATORY COMMISSION AND THE NUCLEAR SAFETY AND SECURITY COMMISSION OF THE REPUBLIC OF KOREA

FOR THE EXCHANGE OF TECHNICAL INFORMATION AND COOPERATION IN NUCLEAR SAFETY MATTERS

The Nuclear Regulatory Commission of the United States of America (hereinafter called the USNRC), and the Nuclear Safety and Security Commission of the Republic of Korea (hereinafter called the NSSC); both hereinafter referred to as the Parties;

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 in mind the spirit of mutual cooperation of the Agreement for Cooperation Between the Government of the Republic of Korea and the Government of the United States of America Concerning Civil Uses of Atomic Energy done at Washington on November 24, 1972, and amended on May 15, 1974;

Have agreed as follows:

I. SCOPE OF THE ARRANGEMENT

A. <u>Technical Information Exchange</u>

To the extent that the Parties are permitted to do so under the laws, regulations, and policy directives of their respective countries, they will exchange the following types of unclassified technical information relating to the regulation of safety, safeguards, physical protection, waste management, radiological safety, and environmental impact of designated nuclear energy facilities and to nuclear safety research programs:

- Topical reports concerning safety, safeguards, physical protection, waste management, radiological safety, and environmental effects 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 nuclear facilities.
- 3. Detailed documents describing the USNRC process for licensing and regulating certain U.S. facilities designated by the NSSC as similar to certain facilities being built or planned in the Republic of Korea and equivalent documents on such facilities owned by the Republic of Korea.
- 4. Information in the field of reactor safety research that the Parties have the right to disclose, either in the possession of one of the Parties or available to it, including light water reactor safety information from the technical areas described in Addenda "A" and "B", attached hereto and made integral parts of this Arrangement. Cooperation in these itemized research areas may require a separate agreement, as determined to be necessary by the research organizations of one or both of the Parties. Each Party will transmit immediately to the other information concerning research results that requires early attention in the interest of public safety, along with an indication of significant implications.
- 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, physical protection, waste management, radiological safety, and environmental impact evaluation of nuclear facilities.
- 7. Early advice of important events, such as serious operating incidents, government-directed reactor shutdowns, and emerging technical issues, that are of immediate interest to the Parties.

B. Cooperation in Nuclear Safety Research

The terms of cooperation for joint programs and projects of nuclear 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 considered on a case-by-case basis and may be the subject of a separate letter of agreement, if determined to be necessary by the research organizations of one or both of the Parties. When not the subject of a separate agreement, the terms of cooperation may be established by an exchange of letters between the research organizations of the Parties, and will be subject to the terms and conditions of the present Arrangement.

Technical areas specified by such exchanges of letters may be modified subsequently by mutual consent. Temporary assignments of personnel by one Party in the other Party's Agency will also be considered on a case-by-case basis and will, in general, require a separate letter of agreement between the research organizations of the Parties.

C. <u>Training and Assignments</u>

Within the limits of available resources and subject to the availability of appropriated funds, the Parties will cooperate in providing certain training and experience for safety personnel of the Parties. Unless otherwise agreed, costs of salary, allowances, and travel of participants will be paid by the sending country. The following are typical of, but not necessarily exclusive of, the kinds of training and experience that may be provided:

- One Party's designated inspector accompaniment of the other Party's inspectors on reactor operation and reactor construction inspection visits in the United States and the Republic of Korea, including extended briefings at regional inspection offices.
- Participation by one Party's employees in the other Party's staff training courses.
- 3. Assignment of one Party's experts for certain periods to be determined by the Parties within the staff of the other Party to work on staff duties of the Parties and gain on the job experience.
- 4. Training assignments of the Parties within the radiation control program in the United States and Republic of Korea.

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. Annual meetings will be held at such times as mutually agreed to review the exchange of information and cooperation under this Arrangement, to recommend revisions to the provisions of the Arrangement, 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. Visits which take place under the Arrangement, including their schedules, will have the prior approval of the administrators referred to in paragraph II.B.
- B. An administrator will be designated by each Party to coordinate its participation in the overall exchange under this Arrangement. 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 ensure that both administrators receive copies of all transmittals. These detailed arrangements are intended to ensure, 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. The application or use of any information exchanged or transferred between the Parties under this Arrangement 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.
- E. Recognizing that some information of the type covered in this Arrangement is not available within the agencies that 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 will not constitute a commitment of other agencies to furnish such information or to receive such visitors.

III. EXCHANGE AND USE OF INFORMATION

A. General

The Parties support the widest possible dissemination of information provided 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 confidential or privileged information, and subject to the provisions of the Intellectual Property Rights Annex, which is an integral part of this Arrangement.

B. Definitions

- 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.
- 2. The term "proprietary information" means information made available under this Arrangement that contains trade secrets or other privileged or confidential 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 that:
 - a. has been held in confidence by its owner;
 - b. has not been transmitted by the owner to other entities (including the receiving Party), except on the basis that it be held in confidence;
 - c. is not otherwise available to the receiving Party from another source without restriction on its further dissemination; and
 - d. is not already in the possession of the receiving Party.
- 3. The term "other confidential or privileged information" means information, other than "proprietary information," that 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.

C. <u>Marking Procedures for Documentary Proprietary Information</u>

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 September 18th, 2012, between the Nuclear Safety and Security Commission (NSSC) of Republic of Korea and the United States Nuclear Regulatory Commission (USNRC) will not be disseminated outside these organizations, their consultants, contractors, and licensees, or concerned departments and agencies of the Government of the

Republic of Korea and the Government of the of the United States 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 will be respected by the Parties to this Arrangement. Proprietary information bearing this restrictive legend will 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 will 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

- 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, and
 - b. such proprietary information bears the restrictive legend appearing in Section III.C. of this Arrangement.
- 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 country 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 will not be used by such contractors and consultants for any other private commercial purposes;
 - b. that such dissemination is made on a case-by-case basis to contractors and consultants who have executed a non-disclosure agreement; and
 - c. that such proprietary information will bear the restrictive legend appearing in Section III.C. of this Arrangement.
- 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 Section III.D.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 and materials radiation sources, have executed a non-disclosure agreement;
- b. that the entities receiving proprietary information under Section III.D.3. of this Arrangement, including domestic organizations permitted or licensed by the receiving Party to construct or operate nuclear production or utilization facilities, will not use such proprietary information for any private commercial purposes; and
- c. that those entities receiving proprietary information under Section III.D.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.

E. <u>Marking Procedures for Other Confidential or Privileged Information of a Documentary Nature</u>

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:

- 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. <u>Dissemination of Other Confidential or Privileged Information of a Documentary</u> Nature

Other confidential or privileged information may be disseminated in the same manner as that set forth in Section III.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 organized 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.

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 this Arrangement, 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 Arrangement will preclude a Party from using or disseminating information received without restriction by a Party from sources outside of this Arrangement.

IV. FINAL PROVISIONS

- A. Nothing contained in this Arrangement will require either Party to take any action that would be inconsistent with its existing laws, regulations, or policy directives. Should any conflict arise between the terms of this Arrangement and those laws, regulations, or policy directives, the Parties agree to consult before any action is taken. No nuclear information related to proliferation-sensitive technologies will be exchanged under this Arrangement.
- B. Unless otherwise agreed, all costs resulting from cooperation pursuant to this Arrangement will be the responsibility of the Party that incurs them. The ability of the Parties to carry out their obligations is subject to the appropriation of funds by the appropriate governmental authority and to policies, laws and regulations applicable to the Parties.
- C. Cooperation under this Arrangement will be in accordance with the laws and regulations of their respective countries. Any dispute or questions between the Parties concerning the interpretation or application of this Arrangement will be settled by mutual agreement of the Parties.
- D. This Arrangement will enter into force upon signature and, subject to paragraph E of this Section, will remain in force for a period of five years. It may be extended for a further period of time by written agreement of the Parties.

Either Party may terminate this Arrangement after providing the other Party E. written notice 180 days prior to its intended date of termination.

DONE at Vienna, Austria on this 18th day of September, 2012.

FOR THE NUCLEAR REGULATORY COMMISSION OF THE UNITED STATES OF AMERICA

FOR THE NUCLEAR SAFETY AND SECURITY COMMISSION OF THE REPUBLIC OF KOREA

Allison M. Macfarlane.

Chairman

Chang Sun Kang,

Chairman and Chief Regulatory Officer

Addendum A

NRC-NSSC Safety Research Exchange Areas in Which the NRC Is Performing or Sponsoring Safety Research

Digital Instrumentation and Control
Reactor and Electrical Equipment Qualification
Environmental Transport
Radionuclide Transport and Waste Management
Dry Cask Storage and Transport
Fire Safety Research
Nuclear Fuel Analysis
Severe Accident Analysis
Operating Experience and Generic Issues
Human Factors Engineering
Organizational Factors/Safety Culture
Human Reliability Analysis (HRA)
Probabilistic Risk Assessments
Radiation Protection and Health Effects
Seismic Safety
State of the Art Risk Consequences
Reactor Containment Structural Safety
Reactor Vessel and Piping Integrity
Regulatory Guide Update
New and Advanced Reactor Designs
Decommissioning
Thermal Hydraulic Code Applications and Maintenance
Uncertainty Analysis for Thermal Hydraulic Kinetics
Coupled 3D Neutronic and Plant Thermal Hydraulics
Medical Isotope Production
Long-term Operational Management
Plant and Systems Operations

Addendum B

NRC-NSSC Safety Research Exchange Areas in Which the NSSC Is Performing or Sponsoring Safety Research

- 1. Regulatory Research on Nuclear Safety
 - Risk-informed Regulation
 - Plant Aging and Life Extension
 - Accident Analysis
 - Severe Accident Evaluation
 - Digital Instrumentation and Control
 - Structural Integrity and Seismic Safety
 - Regulatory Effectiveness
 - Code & Standard
- 2. Regulatory Research on Radiation and the Environment
 - Radiation Protection
 - Radioactive Waste Management
 - Environmental Protection and Emergency Preparedness
 - Radiation Monitoring and Survey
 - Electric Motor Condition Monitoring
- 3. Aircraft Impact Assessments
- 4. Advanced Reactor Designs (VHTR and SFR)
- 5. Spent Fuel Management
- 6. Interface between Safety and Security
- 7. Cyber Security Plan
- 8. Transportation Security Plan
- 9. Performance based Regulation
- 10. Nuclear Forensics
- 11. Force on Force Implementation

Intellectual Property Rights Annex

I. General Obligation

The Parties will ensure adequate and effective protection of intellectual property created or furnished under this Arrangement and relevant implementing arrangements. Rights to such intellectual property will be allocated as provided in this Annex.

II. Scope

- A. This Annex is applicable to all cooperative activities undertaken pursuant to this Arrangement, except as otherwise specifically agreed by the Parties or their designees.
- B. For purposes of this Arrangement, "intellectual property" will 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.
- C. Each Party will ensure, through contracts or other legal means with its own participants, if necessary, that the other Party can obtain the rights to intellectual property allocated in accordance with this Annex. This Annex does not otherwise alter or prejudice the allocation between a Party and its nationals, which will I be determined by that Party's laws and practices.
- D. Except as otherwise provided in this Arrangement, disputes concerning intellectual property arising under this Arrangement will be resolved through discussions between the concerned participating institutions, or, if necessary, the Parties or their designees. Upon mutual Arrangement of the Parties, a dispute will 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 UNCITRAL will govern.
- E. Termination or expiration of this Arrangement will not affect rights or obligations under this Annex.

III. Allocation of Rights

- A. Each Party will 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 a copyrighted work prepared under this provision will indicate the names of the authors of the work unless an author explicitly declines to be named.
- B. Rights to all forms of intellectual property, other than those rights described in paragraph III.A. above, will be allocated as follows:
 - (1) Visiting researchers will receive rights, awards, bonuses and royalties in accordance with the policies of the host institution.

- (2) Any intellectual property created by persons employed or sponsored by one Party under cooperative activities other than those covered by paragraph III.(B)(1) will be owned by that Party. Intellectual property created by persons employed or sponsored by both Parties will be jointly owned by the Parties. In addition, each creator will be entitled to awards, bonuses and royalties in accordance with the policies of the institution employing or sponsoring that person.
 - (b) Unless otherwise agreed in an implementing or other arrangement, each Party will have within its territory a right to exploit or license intellectual property created in the course of the cooperative activities.
 - (c) The rights of a Party outside its territory will be determined by mutual Arrangement considering the relative contributions of the Parties and their participants to the cooperative activities, the degree of commitment in obtaining legal protection and licensing of the intellectual property and such other factors deemed appropriate.
 - (d) Notwithstanding paragraphs III.B(2)(a) and (b) above, if either Party believes that a particular project is likely to lead to or has led to the creation of intellectual property not protected by the laws of the other Party, the Parties will immediately hold discussions to determine the allocation of rights to the intellectual property. If an Arrangement cannot be reached within three months of the date of the initiation of the discussions, cooperation on the project in question will be terminated at the request of either Party. Creators of intellectual property will nonetheless be entitled to awards, bonuses and royalties as provided in paragraph III.B(2)(a).
 - (e) For each invention made under any cooperative activity, the Party employing or sponsoring the inventor(s) will disclose the invention promptly to the other Party together with any documentation and information necessary to enable the other Party to establish any rights to which it may be entitled. Either Party may ask the other Party in writing to delay publication or public disclosure of such documentation or information for the purpose of protecting its rights in the invention. Unless otherwise agreed in writing, the delay will not exceed a period of six months from the date of disclosure by the inventing Party to the other Party.

IV. Business Confidential Information

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 will 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, and 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.