NUCLEAR ENERGY

Civil Uses

Agreement Between the
UNITED STATES OF AMERICA
and the UNITED KINGDOM

Signed at Washington May 4, 2018

Entered into force December 31, 2020



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."

AGREEMENT

BETWEEN

THE GOVERNMENT OF THE UNITED STATES OF AMERICA

AND

THE GOVERNMENT OF THE UNITED KINGDOM OF GREAT BRITAIN AND NORTHERN IRELAND

FOR COOPERATION IN PEACEFUL USES OF NUCLEAR ENERGY

The Government of the United States of America ("United States") and the Government of the United Kingdom of Great Britain and Northern Ireland ("United Kingdom"), hereinafter referred to as the Parties;

RECOGNIZING that the partnership between the United States and the United Kingdom in the field of civilian nuclear energy contributes to continued international stability as well as promotes political and economic progress;

MINDFUL of their respective rights and obligations under the Treaty on the Non-Proliferation of Nuclear Weapons of July 1, 1968 ("NPT"), to which both the United States and the United Kingdom are states parties;

AFFIRMING their desire to promote universal adherence to the NPT;

REAFFIRMING their commitment to the international development and peaceful use of nuclear energy consistent with the provisions of the NPT;

ACKNOWLEDGING that the United States and the United Kingdom are members of the International Atomic Energy Agency ("IAEA");

AFFIRMING their support for the IAEA and its safeguards system, including the Additional Protocol;

RECOGNIZING that the United States and the United Kingdom have achieved an advanced level in the use of nuclear energy for the production of electric power and in the development of nuclear industry and scientific research in this field;

ACKNOWLEDGING their close cooperation in the development, use, and control of peaceful nuclear energy pursuant to the Agreement for the Cooperation in the Peaceful Uses of Nuclear Energy between the United States of America and the European Atomic Energy Community, done at Brussels on November 7, 1995, and March 29, 1996, which entered into force on April 12, 1996 (the "1996 U.S.-EURATOM Agreement"), and desiring to continue such cooperation following the United Kingdom's withdrawal from the European Atomic Energy Community;

RECOGNIZING that the United States, a nuclear-weapon State, entered into the Agreement between the United States of America and the International Atomic Energy Agency for the Application of Safeguards in the United States of America, done at Vienna on November 18, 1977, and the Protocol Additional to the Agreement between the United States of America and the International Atomic Energy Agency for the Application of Safeguards in the United States of America, done at Vienna on June 12, 1998, hereinafter collectively referred to as "the United States-IAEA Safeguards Agreement";

RECOGNIZING that the United Kingdom, as a nuclear-weapon State, entered into the Agreement between the United Kingdom of Great Britain and Northern Ireland, the European Atomic Energy Community and the International Atomic Energy Agency for the Application of Safeguards in the United Kingdom of Great Britain and Northern Ireland in Connection with the Treaty on the Non-Proliferation of Nuclear Weapons, done at Vienna on September 6, 1976, and the Protocol Additional to the Agreement, done at Vienna on September 22, 1998 ("the Trilateral Safeguards Agreement"), and has made a clear commitment to enter into a new Safeguards Agreement with the IAEA, supplemented by an Additional Protocol, for the application of safeguards in connection with the NPT ("the Bilateral Safeguards Agreement"), that will be in force from the date on which the Trilateral Safeguards Agreement is no longer in force;

AFFIRMING their ongoing cooperation under the Agreement between the Government of the United States of America and the Three Governments of the Federal Republic of Germany, the Kingdom of the Netherlands and the United Kingdom of Great Britain and Northern Ireland regarding the Establishment, Construction, and Operation of a Uranium Enrichment Installation in the United States, done at Washington on July 24, 1992, which entered into force on February 1, 1995;

RECALLING the Agreement between the Government of the United States of America and the Four Governments of the French Republic, the United Kingdom of Great Britain and Northern Ireland, the Kingdom of the Netherlands, and the Federal Republic of Germany Regarding the Establishment, Construction and Operation of Uranium Enrichment Installations Using Gas Centrifuge Technology in the United States of America, done at Paris on February 24, 2011, which entered into force on January 31, 2012;

SEEKING to expand and enhance their mutually beneficial cooperation in the field of the peaceful uses of nuclear energy on a stable, reliable, and predictable basis;

AFFIRMING their commitment to the Guidelines of the Nuclear Suppliers Group and the NPT Exporters Committee;

ACKNOWLEDGING the need for measures for the physical protection of nuclear material and facilities and affirming compliance with the obligations set forth in the Convention on the Physical Protection of Nuclear Material and Nuclear Facilities, adopted at Vienna on October 26, 1979, as amended on July 8, 2005 ("CPPNM"), as well as subsequent amendments to that Convention that enter into force for the United States and the United Kingdom; and

MINDFUL that peaceful nuclear activities must be undertaken with a view to protecting the international environment from radioactive, chemical, and thermal contamination;

Have agreed as follows:

ARTICLE 1 – DEFINITIONS

For the purposes of this Agreement, the terms listed below shall have the following meanings:

- 1. "Agreed Minute" means the minute annexed to this Agreement, which is an integral part hereof;
- 2. "Byproduct material" means any radioactive material (except special fissionable material) yielded in or made radioactive by exposure to the radiation incident to the process of producing or utilizing special fissionable material;

- 3. "Competent authorities" means, in the case of the United States, the Department of State, the Department of Energy, and the Nuclear Regulatory Commission. For the United Kingdom, the competent authorities are the Department for Business, Energy, and Industrial Strategy and the Office for Nuclear Regulation. Each Party may change its competent authority/authorities or add additional competent authorities by written notice to the other Party;
- 4. "Component" means a component part of equipment or other item so designated by written agreement of the competent authorities of the Parties;
- 5. "Decommissioning" means the actions taken at the end of a facility's useful life to retire the facility from service in a manner that provides adequate protection for the health and safety of the decommissioning workers and the general public, and for the environment. These actions can range from closing down the facility and a minimal removal of material coupled with continuing maintenance and surveillance to a complete removal of residual radioactivity in excess of levels acceptable for unrestricted use of the facility and its site;
- 6. "Equipment" means any reactor as a complete unit (other than one designed or used primarily for the production of plutonium or uranium-233), reactor pressure vessel, reactor calandria, complete reactor control rod drive system, reactor primary coolant pump, on-line reactor fuel charging and discharging machine or any other item so designated by written agreement of the competent authorities of the Parties;
- 7. "High enriched uranium" means uranium enriched to twenty percent or greater in the isotope uranium-235;

- 8. "Information" means data or information of a scientific, commercial, technical, or other nature in any form that is appropriately designated by written agreement of the competent authorities of the Parties to be provided or exchanged under this Agreement;
- 9. "Intellectual property" shall have the meaning set out in Article 2 of the Convention establishing the World Intellectual Property Organization, done at Stockholm on July 14, 1967, as amended on September 28, 1979, and may include other subject matter as mutually agreed by the Parties;
- 10. "Low enriched uranium" means uranium enriched to less than twenty percent in the isotope uranium-235;
- 11. "Major critical component" means any part or group of parts essential in the operation of a sensitive nuclear facility;
- 12. "Material" means nuclear material, byproduct material, non-nuclear material, or any other such substance so designated by written agreement of the competent authorities of the Parties;
- 13. "Non-nuclear material" means heavy water or nuclear-grade graphite for nuclear use, or any other such material so designated by written agreement of the competent authorities of the Parties;
- 14. "Nuclear material" means source material and special fissionable material;
- 15. "Persons and undertakings" means any natural person who, and any undertaking or institution (whatever its public or private legal status) that, pursues activities within the scope of this Agreement within the territory, jurisdiction or control of the United Kingdom or of the United States;

- 16. "Reactor" means any apparatus, other than a nuclear weapon or other nuclear explosive device, in which a self-sustaining fission chain reaction is maintained by utilizing nuclear material;
- 17. "Restricted Data" means all data concerning (1) design, manufacture or utilization of nuclear weapons; (2) the production of special fissionable material; or (3) the use of special fissionable materials in the production of energy, but shall not include data that the United States has declassified or removed from the category of Restricted Data;
- 18. "Sensitive nuclear facility" means any facility designed or used primarily for uranium enrichment, reprocessing of irradiated nuclear material, heavy water production, or fabrication of nuclear fuel containing plutonium;
- 19. "Sensitive nuclear technology" means any information, including information that is incorporated in equipment or an important component, that is not in the public domain and is important to the design, construction, fabrication, operation or maintenance of any sensitive nuclear facility, or any other such information that may be so designated by written agreement of the competent authorities of the Parties;
- 20. "Source material" means uranium containing the mixture of isotopes occurring in nature; uranium depleted in the isotope uranium-235; thorium; any of the foregoing in the form of metal, alloy, chemical compound, or concentrate; any other material containing one or more of the foregoing in such concentration as the Board of Governors of the IAEA shall from time to time determine; and such other materials as the Board of Governors of the IAEA shall from time to time determine or as may be agreed in writing by the Parties. Any determination by the Board of Governors of the IAEA under Article XX of the IAEA Statute or otherwise that amends the list of materials considered to be source material shall only have effect under this Agreement when both Parties to this Agreement have informed each other in writing that they accept such an amendment;

- 21. "Special fissionable material" means plutonium, uranium-233, uranium enriched in the isotopes 233 or 235; any material containing one or more of the foregoing; and such other fissionable material as the Board of Governors of the IAEA shall determine or as may be agreed in writing by the Parties. "Special fissionable material" does not include "source material." Any determination by the Board of Governors of the IAEA under Article XX of the IAEA Statute or any determination by the Board of Governors of the IAEA that otherwise amends the list of materials considered to be "special fissionable material" shall only have effect under this Agreement when both Parties to this Agreement have informed each other in writing that they accept such an amendment;
- 22. "UK Atomic Information" means information, data, materials, services or any other matter designated by the Government of the United Kingdom as "ATOMIC"; and
- 23. "United Kingdom-IAEA Safeguards Agreement" means whichever of the Trilateral Safeguards Agreement or the Bilateral Safeguards Agreement is in force at any particular time.

ARTICLE 2 – SCOPE OF COOPERATION

- 1. The Parties intend to cooperate in the peaceful use of nuclear energy in accordance with the provisions of this Agreement and their respective international agreements, national laws, regulations, and license requirements.
- 2. Transfer of information, material, equipment, components, sensitive nuclear facilities, and major critical components under this Agreement may be undertaken directly between the Parties, between their competent authorities, or through their respective persons and undertakings. Such transfers shall be subject to this Agreement and to such additional terms and conditions as may be agreed in writing by the Parties or their competent authorities.

ARTICLE 3 - TRANSFER OF INFORMATION

- 1. Information concerning the peaceful use of nuclear energy may be transferred under this Agreement. Transfers of information may be accomplished through various means, including but not limited to reports, data banks, computer programs, conferences, visits, and assignments of staff to facilities. Fields that may be covered may include the following:
 - (A) Research, development, design, construction, operation, maintenance and use of reactors, reactor experiments, and decommissioning;
 - (B) The use of material in physical and biological research, medicine, agriculture, and industry;
 - (C) Fuel cycle studies of ways to meet future world-wide civil nuclear needs, including multilateral approaches to guaranteeing nuclear fuel supply and appropriate techniques for management of nuclear wastes;
 - (D) Safeguards and nuclear security of material, equipment, and components;
 - (E) Health, safety and environmental considerations related to the foregoing subparagraphs;
 - (F) Assessing the role nuclear power may play in national energy plans; and
 - (G) Any other field of cooperation as may be agreed in writing by the Parties.
- 2. This Agreement does not require the transfer of any information that the Parties are not permitted to transfer under their respective international agreements, national laws, and regulations.

- 3. Restricted Data shall not be transferred by the United States under this Agreement.
- 4. UK Atomic information shall not be transferred by the United Kingdom under this Agreement.
- 5. Sensitive nuclear technology may be transferred under this Agreement pursuant to conditions as agreed in writing by the Parties. Such conditions shall include, at a minimum, a guarantee that any special fissionable material, equipment, sensitive nuclear facilities, or major critical components produced or constructed under the jurisdiction of a Party by or through the use of any sensitive nuclear technology transferred under this Agreement shall be subject to the requirements of paragraph 2 of Article 4 and of Articles 5, 6, 7, 8, 9, and 10.

ARTICLE 4 – TRANSFER OF MATERIAL, EQUIPMENT, COMPONENTS, SENSITIVE NUCLEAR FACILITIES, AND MAJOR CRITICAL COMPONENTS

- 1. Material, equipment, components, sensitive nuclear facilities, major critical components, and other items as may be agreed in writing by the Parties, may be transferred for applications consistent with this Agreement.
- 2. Material, equipment, sensitive nuclear facilities, and major critical components transferred pursuant to this Agreement and any special fissionable material produced through the use of any nuclear material, non-nuclear material, equipment, sensitive nuclear facilities, or major critical components so transferred shall be transferred only to duly authorized persons and undertakings.

3. The quantity of special fissionable material that may be transferred under this Agreement shall be the quantity that the Parties or their competent authorities agree is necessary for any of the following purposes: the loading of reactors or use in reactor experiments; the reliable, efficient and continuous operation of reactors or conduct of reactor experiments; the storage of special fissionable material necessary for the efficient and continuous operation of reactors or conduct of reactor experiments; the transfer of irradiated nuclear material; or use as samples, standards, detectors, targets, radiation sources, or for such other purposes as the Parties may agree in writing.

ARTICLE 5 - STORAGE

1. Plutonium and uranium-233 (except as contained in irradiated fuel elements) and high enriched uranium transferred pursuant to this Agreement; plutonium, uranium-233, and high enriched uranium recovered from nuclear material transferred pursuant to this Agreement or recovered from nuclear material used in equipment, sensitive nuclear facilities, or major critical components transferred pursuant to this Agreement; and plutonium, uranium-233, and high enriched uranium used in or produced through the use of nuclear material, non-nuclear material, equipment, sensitive nuclear facilities, or major critical components so transferred may only be stored in facilities that are recorded on a list provided to the other Party. Such facilities at all times shall be subject, at a minimum, to the levels of physical protection that are set out in INFCIRC/225/Revision 5 as it may be revised and accepted by the Parties from time to time. A Party's list shall be held confidentially if that Party so requests.

2. Either Party may make changes to its list by notifying the other Party in writing and receiving a written acknowledgement. Such acknowledgement shall be given no later than 30 days after the receipt of the notification and the changes in question shall be deemed to have been acknowledged if no response is received from the notified Party within the 30-day period. If either Party believes that the obligations in paragraph 1 of this Article are not being fully complied with, it may request immediate consultations. Such consultations shall be held within 90 days of receipt of the request by the other Party. Following such consultations, each Party shall ensure that necessary corrective measures are taken immediately. If such measures are not feasible, the special fissionable material in question shall be transferred for storage at another appropriate, listed facility.

ARTICLE 6 - RETRANSFERS

Unless the Parties agree in writing, material, equipment, sensitive nuclear facilities, or major critical components transferred pursuant to this Agreement and any special fissionable material produced through the use of any nuclear material, non-nuclear material, equipment, sensitive nuclear facilities, or major critical components so transferred shall not be transferred beyond the territory, jurisdiction, or control of the recipient Party. The implementation of this Article shall be addressed in the Agreed Minute and Administrative Arrangement provided for in paragraph 1 of Article 18.

ARTICLE 7 – REPROCESSING, ALTERATION IN FORM OR CONTENT, AND ENRICHMENT

- 1. Nuclear material transferred pursuant to this Agreement and nuclear material used in or produced through the use of any nuclear material, non-nuclear material, equipment, components, sensitive nuclear facilities, or major critical components so transferred shall not be reprocessed, enriched, or otherwise altered in form or content (except by irradiation or further irradiation), unless the Parties agree in writing.
- 2. Pursuant to paragraph 1 of this Article, the Parties hereby agree and grant each other consent to reprocess or otherwise alter in form or content nuclear material transferred pursuant to this Agreement and nuclear material used in or produced through the use of any nuclear material, non-nuclear material, equipment, components, sensitive nuclear facilities, or major critical components so transferred. Such activities shall take place only in the territory of the recipient Party and such reprocessing of nuclear material and alteration in form or content of plutonium, uranium-233, and high enriched uranium shall take place only at facilities listed in Annex A, or as otherwise agreed by the Parties.
- 3. The Parties agree that conversion, fabrication of fuel, post-irradiation examination, blending or downblending of uranium and separation of radioisotopes from irradiated targets are permissible alterations in form or content for purposes of paragraph 2 of this Article.

- 4. The Parties hereby agree and grant each other consent within the territory of either Party, to enrich, up to twenty percent in the isotope uranium-235, uranium transferred pursuant to this Agreement, as well as uranium used in or produced through the use of nuclear material, non-nuclear material, equipment, components, sensitive nuclear facilities, or major critical components so transferred. Enrichment of such uranium to more than twenty percent in the isotope 235 and re-enrichment of such uranium already enriched to more than twenty percent in the isotope 235 may be carried out according to conditions agreed upon in writing, which shall be the subject of consultations between the Parties within 40 days of the receipt of a request from either Party.
- 5. Any reprocessing, alteration in form or content, or enrichment under paragraphs 2, 3 or 4 of this Article shall be conducted in accordance with storage standards set out in Article 5 of this Agreement, physical protection standards set out in Article 8 of this Agreement, environmental consultations set out in Article 16 of this Agreement, and such other provisions as may be agreed in writing by the Parties, including the application of safeguards.

ARTICLE 8 – NUCLEAR SECURITY

1. As specified in paragraph 2 of this Article, adequate nuclear security shall be maintained with respect to material, equipment, components, sensitive nuclear facilities, and major critical components transferred pursuant to this Agreement and special fissionable material used in or produced through the use of any material, equipment, components, sensitive nuclear facilities, or major critical components so transferred.

- 2. With respect to the obligation in paragraph 1 of this Article, each Party shall apply at a minimum measures in accordance with (i) levels of physical protection equivalent to the recommendations published in IAEA document INFCIRC/225/Revision 5 entitled "Nuclear Security Recommendations on Physical Protection of Nuclear Material and Nuclear Facilities" and in subsequent revisions of that document accepted by both of the Parties, and (ii) the provisions of the CPPNM, as well as subsequent amendments to that Convention that enter into force for the United States and the United Kingdom.
- 3. The adequacy of nuclear security measures maintained pursuant to this Article shall be subject to reviews and consultations between the Parties from time to time and whenever either Party is of the view that revised measures may be required in order to maintain adequate nuclear security.
- 4. The Parties shall keep each other informed through diplomatic channels of those competent authorities having responsibility for ensuring that levels of nuclear security for nuclear material and facilities in their territory or under their jurisdiction or control are adequately met and having responsibility for coordinating response and recovery operations in the event of unauthorized use or handling of nuclear material subject to this Article. Each Party shall inform the other Party through diplomatic channels of the designated points of contact within its competent authorities to cooperate on matters involving transportation of nuclear material outside its territory, jurisdiction or control, and on other matters of mutual concern.

ARTICLE 9 - PEACEFUL USES

- 1. Cooperation under this Agreement shall be for peaceful uses only.
- 2. Material, equipment, components, sensitive nuclear facilities, major critical components, and sensitive nuclear technology transferred pursuant to this Agreement and material used in or produced through the use of any nuclear material, non-nuclear material, equipment, components, sensitive nuclear facilities, major critical components, or sensitive nuclear technology so transferred shall not be used for any nuclear explosive device, for research on or development of any nuclear explosive device, or for any military purpose.
- 3. For the purposes of this Agreement, "peaceful uses" shall include such fields as scientific research, electric power generation, medicine, agriculture, and industry, but shall not include any military purpose. For the purposes of this Agreement, "military purpose" shall include military nuclear propulsion, and munitions (including depleted uranium munitions), but shall not include provision of power for military bases drawn from any power network, production of radioisotopes to be used for medical purposes in military hospitals, and such other similar purposes as may be mutually determined by the Parties.

ARTICLE 10 - SAFEGUARDS

1. Nuclear material transferred to the United Kingdom pursuant to this Agreement and any nuclear material used in or produced through the use of any nuclear material, non-nuclear material, equipment, components, sensitive nuclear facilities, or major critical components so transferred shall be subject to the United Kingdom-IAEA Safeguards Agreement.

- 2. Nuclear material transferred to the United States pursuant to this Agreement and any nuclear material used in or produced through the use of any nuclear material, non-nuclear material, equipment, components, sensitive nuclear facilities, or major critical components so transferred shall be subject to the United States-IAEA Safeguards Agreement.
- 3. In the event that the IAEA safeguards agreement referred to in paragraph 1 or in paragraph 2 of this Article is not being implemented, the Parties shall consult and establish a mutually acceptable alternative to that safeguards agreement consistent with their status as Nuclear Weapon States parties to the NPT.
- 4. Each Party shall establish and maintain a system of accounting and control of nuclear material transferred pursuant to this Agreement and nuclear material used in or produced through the use of any nuclear material, non-nuclear material, equipment, components, sensitive nuclear facilities, or major critical components transferred. The procedures for this system shall be comparable to those set forth in IAEA document INFCIRC/153(corrected), or in any revision of that document agreed to by the Parties.

ARTICLE 11 - MULTIPLE SUPPLIER CONTROLS

If any agreement between either Party and another nation or group of nations provides such other nation or group of nations rights equivalent to any or all of those set forth under Articles 5, 6, or 7 with respect to material, equipment, components, sensitive nuclear facilities, or major critical components subject to this Agreement, the Parties may, upon request of either of them, agree that the implementation of any such rights shall be accomplished by such other nation or group of nations.

ARTICLE 12 – INTERNATIONAL OBLIGATIONS EXCHANGES

The Parties shall establish expeditious procedures to be applied when nuclear material is to be made subject to this Agreement or removed from the coverage of this Agreement. These procedures shall include provisions on international exchanges of obligations, and shall be set out in the Administrative Arrangement provided for in paragraph 1 of Article 18.

ARTICLE 13 – ONGOING COOPERATION

- 1. Any cooperation between the Parties previously subject to the 1996 U.S.-EURATOM Agreement shall continue in accordance with the provisions of this Agreement upon its entry into force, and the provisions of this Agreement shall apply to such cooperation.
- 2. The provisions of this Agreement shall apply to nuclear material, non-nuclear material, equipment, components, sensitive nuclear facilities, and major critical components included in the initial inventories jointly established by the Parties pursuant to Section 6 of the Agreed Minute to this Agreement, and such nuclear material, non-nuclear material, equipment, components, sensitive nuclear facilities, and major critical components shall be considered to have been transferred pursuant to this Agreement.

ARTICLE 14 - CONFIDENTIALITY OF INFORMATION

- 1. The Parties shall take all appropriate precautions to preserve the confidentiality of commercial and other sensitive information, such as personal data, received as a result of the operation of this Agreement.
- 2. Except as required by a receiving Party's national laws or regulations, information transferred under this Agreement shall not be disclosed to third parties without the consent in writing of the other Party, and shall be used exclusively in accordance with this Agreement and not for any other purpose.

ARTICLE 15 - INTELLECTUAL PROPERTY

On a case by case basis, the Parties shall agree on protections for and allocations of intellectual property that may be developed as a result of Government technical cooperation under this Agreement.

ARTICLE 16 – CONSULTATIONS

- 1. The Parties shall consult at any time at the request of either Party, to ensure the effective fulfilment of the obligations of this Agreement. The IAEA may be invited to participate in such consultations upon the request of both Parties.
- 2. The Parties shall consult, with regard to activities under this Agreement, to identify the international environmental implications arising from such activities and shall cooperate in protecting the international environment from radioactive, chemical or thermal contamination arising from peaceful nuclear activities under this Agreement and in related matters of health and safety.

ARTICLE 17 - SETTLEMENT OF DISPUTES

Any dispute between the Parties concerning the interpretation or application of the provisions of this Agreement shall be promptly discussed by the Parties with a view to resolving that dispute. Disputes that remain unresolved following such discussions shall, if both Parties agree, be settled by mediation, conciliation or other similar procedure, or arbitration. In the event of arbitration, the Parties shall agree on procedural arrangements.

ARTICLE 18 – ADMINISTRATIVE ARRANGEMENT AND INVENTORIES

- 1. The competent authorities of the Parties shall establish an Administrative Arrangement in order to effectively apply the provisions of this Agreement.
- 2. Each Party shall establish and maintain inventories of all nuclear material, non-nuclear material, equipment, components, sensitive nuclear facilities, and major critical components subject to this Agreement.
- 3. Upon the request of either Party, the other Party shall provide a report containing such inventories. To supplement such reporting, upon request of either Party, the other Party shall request and permit the IAEA to report to the first Party on the status of relevant inventories of nuclear material subject to this Agreement.
- 4. The principles of fungibility, equivalence, and proportionality shall apply to nuclear material subject to this Agreement. Detailed provisions for applying these principles, including provisions for accounting of nuclear material, shall be set forth in the Administrative Arrangement established pursuant to paragraph 1 above.

ARTICLE 19 - CESSATION OF COOPERATION

- 1. If either Party at any time following entry into force of this Agreement does not comply with the provisions of Articles 5, 6, 7, 8, 9, or 10 of this Agreement, the other Party shall have the right to cease further cooperation under this Agreement.
- 2. If either Party at any time following entry into force of this Agreement detonates a nuclear explosive device using material transferred pursuant to this Agreement or material used in or produced through the use of material, equipment, components, sensitive nuclear facilities, or major critical components so transferred or terminates or abrogates a safeguards agreement with the IAEA and the safeguards agreement so terminated or abrogated has not been replaced in accordance with paragraph 3 of Article 10 of this Agreement, the other Party shall have the same right as specified in paragraph 1 of this Article and shall have the right to require the return of any material, equipment, components, sensitive nuclear facilities, or major critical components transferred under this Agreement and material used in or produced through the use of any nuclear material, non-nuclear material, equipment, components, sensitive nuclear facilities, or major critical components so transferred.
- 3. Before either Party takes any action described under paragraph 1 or 2 of this Article, the Parties shall consult with a view to reaching a decision on whether corrective or other measures are needed, and if so, the measures to be taken and the timeframes within which such measures shall be taken.

4. If either Party exercises its rights under this Article to require the return of any material, equipment, components, sensitive nuclear facilities, or major critical components, it shall, after removal from the territory, jurisdiction or control of the other Party, reimburse that Party for the fair market value of such material, equipment, components, sensitive nuclear facilities, or major critical components. If the return of such items is to be required, the Parties shall determine jointly the relevant quantity of such items, taking account of the circumstances involved. The Parties shall further satisfy themselves that full safety, radiological and physical protection measures, in accordance with their existing obligations, are taken in relation to the return of such items, that no unreasonable risks are incurred and that the return of such items takes place in a manner consistent with the respective laws and regulations of the Parties.

ARTICLE 20 – ENTRY INTO FORCE AND DURATION

- 1. This Agreement shall enter into force on the date specified by the Parties in an exchange of notes between the Parties indicating completion of their internal procedures necessary for its entry into force.
- 2. This Agreement shall remain in force for a period of 30 years, unless terminated by either Party with at least one year advance written notice to the other Party. The Parties shall open discussions on extension, or revision of this Agreement, as necessary, no less than two years prior to the date of expiration.

3. Notwithstanding the termination, including by expiration, of this Agreement or of any cooperation hereunder, Articles 5, 6, 7, 8, 9, and 10 of this Agreement and the Agreed Minute shall continue in effect as long as any material, equipment, component, sensitive nuclear facilities, or major critical components subject to these Articles remains in the territory or under the jurisdiction or control of either Party, or until such time as the Parties agree in writing that such nuclear material or non-nuclear material are no longer usable for any nuclear activity relevant from the point of view of international safeguards or have become practically irrecoverable, or that such equipment, components, sensitive nuclear facilities, or major critical components are no longer usable for nuclear purposes, unless otherwise agreed in writing by the Parties.

IN WITNESS WHEREOF, the undersigned, being duly authorized, have signed this Agreement.

DONE at Washington, this 4 th day of Way 2018, in duplicate.

FOR THE GOVERNMENT OF THE UNITED STATES OF AMERICA:

FOR THE GOVERNMENT OF THE UNITED KINGDOM OF GREAT BRITAIN AND NORTHERN IRELAND:

Michaelh

AGREED MINUTE

During the negotiation of the Agreement between the Government of the United States of America and the Government of the United Kingdom of Great Britain and Northern Ireland for Cooperation in Peaceful Uses of Nuclear Energy (the Agreement), signed today, the following understandings, which shall be an integral part of the Agreement, were reached.

1. COVERAGE OF AGREEMENT

- A. Material, equipment, components, sensitive nuclear facilities, and major critical components transferred from the territory, jurisdiction, or control of one Party to the territory, jurisdiction, or control of the other Party, whether directly or through a third country or destination, shall be regarded as having been transferred pursuant to the Agreement only upon confirmation in writing, by the appropriate competent authority of the recipient Party to the appropriate competent authority of the supplier Party, that such material, equipment, components, sensitive nuclear facilities, and major critical components shall be subject to the Agreement.
- B. With respect to the definition of "Restricted Data" in paragraph 17 of Article 1 of the Agreement, it is the understanding of the Parties that all information on the use of special fissionable material in the production of energy from standard civilian reactors has been declassified or removed from the category of "Restricted Data."

- C. For the purposes of implementing the rights specified in Articles 5, 6, and 7 of the Agreement, with respect to special fissionable material produced through the use of nuclear material transferred pursuant to the Agreement and not used in or produced through the use of equipment, sensitive nuclear facilities, or major critical components transferred pursuant to the Agreement, such rights shall in practice be applied to that proportion of special fissionable material produced that represents the ratio of transferred material used in the production of the special fissionable material to the total amount of material so used, and similarly for subsequent generations.
- D. Material, equipment, components, sensitive nuclear facilities, major critical components, and sensitive nuclear technology shall no longer be subject to the Agreement if:
 - (1) Such items have been transferred beyond the territory of the receiving Party in accordance with the relevant provisions of the Agreement and are no longer under its jurisdiction or control;
 - (2) In the case of nuclear material, the Parties agree in writing that the nuclear material is no longer usable for any nuclear activity relevant from the point of view of safeguards, taking into account, among other factors, an IAEA determination, if any, in accordance with the provisions for the termination of safeguards in the relevant agreement referred to in paragraphs 1 or 2 of Article 10 of the Agreement, whichever is applicable, or it is otherwise agreed in writing by the Parties;
 - (3) In the case of non-nuclear material, byproduct material, equipment, and components, it is agreed in writing by the Parties; or,

(4) In the case of sensitive nuclear facilities, major critical components or sensitive nuclear technology, the Parties agree in writing that the sensitive nuclear facility, major critical component or sensitive nuclear technology will be subject to another agreement to which the Party that transferred the sensitive nuclear facility, major critical component or sensitive nuclear technology is a Party.

2. FALLBACK SAFEGUARDS

- A. If either Party becomes aware of circumstances referred to in paragraph 3 of Article 10 of the Agreement, either Party shall have the rights listed below, which rights shall be suspended if both Parties agree in writing that the need to exercise such rights is being satisfied by the application of IAEA safeguards under arrangements pursuant to paragraph 3 of Article 10 of the Agreement:
 - (1) To review in a timely fashion the design of any equipment transferred pursuant to the Agreement, or of any facility that is to use, fabricate, process, or store any material so transferred or any special fissionable material used in or produced through the use of any nuclear material, non-nuclear material, equipment, components, sensitive nuclear facilities, or major critical components so transferred;
 - (2) To require the maintenance and production of records and of relevant reports for the purpose of assisting in ensuring accountability for nuclear material transferred pursuant to the Agreement and any nuclear material used in or produced through the use of any nuclear material, non-nuclear material, equipment, components, sensitive nuclear facilities, or major critical components so transferred; and

- (3) To designate personnel acceptable to the other Party (hereinafter "the safeguarded Party"), who shall have access to all places and data necessary to account for the nuclear material referred to in paragraph (2) of this Section, to inspect any equipment or facility referred to in paragraph (1) of this Section, and to install any devices and make such independent measurements as may be deemed necessary to account for such nuclear material. The safeguarded Party shall not unreasonably withhold its acceptance of personnel designated by the safeguarding Party under this paragraph. Such personnel shall be accompanied by personnel designated by the safeguarded Party, unless otherwise agreed in writing by the Parties.
- B. Upon the request of either Party, the other Party shall authorize the IAEA to make available to the requesting Party the requested information on the implementation of the applicable safeguards agreement with the IAEA within the scope of cooperation under the Agreement.

3. TRANSFERS

The Parties shall implement paragraph 2 of Article 4 of the Agreement in accordance with procedures under their respective national laws and regulations.

4. APPROVED RETRANSFERS

- A. The Parties agree to the retransfer of material, other than irradiated nuclear material, and equipment subject to Article 6 of the Agreement to third countries or destinations identified as provided for in this subsection A:
 - (1) Upon entry into force of the Agreement, the Parties shall exchange lists of third countries or destinations to which retransfers of material, other than irradiated nuclear material, and equipment subject to Article 6 of the Agreement may be made by the other Party.

- (2) To be eligible for inclusion on the list, third countries or destinations shall have made effective non-proliferation commitments, normally by being party to, and in full respect of their obligations under the NPT or the Treaty of Tlatelolco of February 14, 1967, and by being in compliance with the conditions of INFCIRC/254/Revision 13/Part 1.
- (3) In the case of retransfer from the territory, jurisdiction, or control of the United Kingdom, to be eligible for inclusion on the list, third countries or destinations shall, at a minimum, be party to a nuclear cooperation agreement with the United States.
- B. The Parties agree to the retransfer of irradiated nuclear material subject to Article 6 of the Agreement for storage and reprocessing to third countries or destinations identified as provided for in this subsection B:
 - (1) Should retransfers for storage and reprocessing of irradiated nuclear material subject to Article 6 of the Agreement be requested in the future by a Party, a list of third countries or destinations to which such retransfers may be made shall be provided by the other Party. In connection with this, the Parties shall take into account the criteria included in subsection A (2) and (3) of this section and the following additional criteria:
 - (a) Consistency of the proposed action with the guidelines contained in IAEA document INFCIRC/225/Revision 5 and with the provisions of the CPPNM, as they may be revised and accepted by the Parties from time to time;
 - (b) The nature and content of the peaceful nuclear programs of the third country or destination in question; and
 - (c) The potential proliferation and security implications of the transfer for either Party.

- C. Either Party may at any time add eligible third countries or destinations to either of the lists it has provided under subsections A and B of this Section. Either Party may delete third countries or destinations from either of such lists temporarily or permanently following consultations with the other Party. Neither Party shall delete third countries or destinations from such lists for the purpose of obtaining commercial advantage or of delaying, hampering or hindering the peaceful nuclear programs of the other Party or its peaceful nuclear cooperation with third countries or destinations. The Parties shall cooperate in efforts to obtain as soon as possible on a generic basis a confirmation from the third countries or destinations on such lists that any retransferred items will be subject to any agreement for cooperation in force between the receiving country or destination and the non-retransferring Party. The receipt of such confirmation shall not constitute a pre-condition for the addition of a third country or destination to such lists.
- D. Retransfers to third countries or destinations not included on the lists provided under subsections A and B of this Section may be considered on a case by case basis.

5. REPROCESSING OR OTHER ALTERATION IN FORM OR CONTENT

With regard to paragraph 2 of Article 7 of the Agreement, either Party, acting through its competent authorities, may change the facilities in its territory listed in Annex A by notifying the other Party in writing in accordance with the procedures set forth below and receiving a written acknowledgement. Such acknowledgement shall be given no later than 30 days after the receipt of the notification and shall be limited to a statement that the notification has been received.

- A. For an addition of a facility within its territory, a Party's notification shall contain:
 - (1) the name, type and location of the facility and its existing or planned capacity;
 - (2) a confirmation that the Party's relevant regulations regarding nuclear material control are fully applied to the facility;

- (3) for a facility at which IAEA safeguards are being applied pursuant to a safeguards agreement referred to in Article 10, paragraph 1 or 2 of the Agreement, a confirmation of those relevant safeguards which have been agreed upon with the IAEA and that those arrangements will permit the IAEA to exercise fully its rights under such safeguards agreement;
- (4) such non-confidential information as is available to the Party on the IAEA safeguards approach; and
- (5) confirmation that nuclear security measures as required by Article 8 of the Agreement will be applied.
- B. Either Party may delete a facility from Annex A by providing to the other Party a notification containing the facility name and other relevant information available.
- C. A Party may suspend its consent for the activities referred to in paragraph 2 of Article 7, in whole or in part, if it considers, pursuant to the procedures set out below, on the basis of objective evidence, that the continuation of such activities would entail a serious threat to the security of either Party, or a significant increase in the risk of nuclear proliferation. The Party considering that such objective evidence may exist shall consult with the other Party, at Cabinet level for the United States and at Minister level for United Kingdom, before reaching any decision.

6. ITEMS SUBJECT TO THE AGREEMENT

The Parties shall jointly establish initial inventories of the nuclear material, non-nuclear material, equipment, components, sensitive nuclear facilities, and major critical components that are in the territory or under the jurisdiction or control of a Party and that will be subject to the Agreement.

7. FACILITATION OF NUCLEAR TRANSFERS

The Parties note their intention to facilitate the timely and efficient transfer of nuclear items listed in IAEA document INFCIRC/254/Revision 13/Part 1 as revised from time to time and nuclear technology consistent with their national laws and regulations. The Parties may conclude a separate arrangement to facilitate transfers of such nuclear items and nuclear technology.

ANNEX A: List of Facilities for Reprocessing and Alteration in Form or Content

United Kingdom

1. Reprocessing Facilities

a. <u>Name and Location</u>: Sellafield Ltd, Cumbria, United Kingdom
 <u>Licensed Capacity</u>: 2,550 tonnes of heavy metal per year

2. Alteration in Form or Content Facilities
None

United States

1. Reprocessing Facilities

None

2. Alteration in Form or Content Facilities

a. Name and Location: Nuclear Fuel Services, PO Box 337, MS123, Erwin,

TN 37650

Type: Uranium downblending

Licensed Capacity: 7,000 kg U-235