

AGREEMENT FOR COOPERATION BETWEEN THE
GOVERNMENT OF THE UNITED STATES AND THE
GOVERNMENT OF THE UNITED ARAB EMIRATES

MESSAGE

FROM

THE PRESIDENT OF THE UNITED STATES

TRANSMITTING

THE TEXT OF A PROPOSED AGREEMENT FOR COOPERATION BETWEEN THE GOVERNMENT OF THE UNITED STATES OF AMERICA AND THE GOVERNMENT OF THE UNITED ARAB EMIRATES CONCERNING PEACEFUL USES OF NUCLEAR ENERGY, PURSUANT TO 42 U.S.C. 2153(b), (d)



MAY 21, 2009.—Message and accompanying papers referred to the
Committee on Foreign Affairs and ordered to be printed

U.S. GOVERNMENT PRINTING OFFICE

To the Congress of the United States:

I am pleased to transmit to the Congress, pursuant to sections 123 b. and 123 d. of the Atomic Energy Act of 1954, as amended (42 U.S.C. 2153(b), (d)) (the "Act"), the text of a proposed Agreement for Cooperation Between the Government of the United States of America and the Government of the United Arab Emirates Concerning Peaceful Uses of Nuclear Energy. I am also pleased to transmit my written approval, authorization, and determination concerning the Agreement, and an unclassified Nuclear Proliferation Assessment Statement (NPAS) concerning the Agreement. (In accordance with section 123 of the Act, as amended by Title XII of the Foreign Affairs Reform and Restructuring Act of 1998 (Public Law 105-277), a classified annex to the NPAS, prepared by the Secretary of State in consultation with the Director of National Intelligence summarizing relevant classified information, will be submitted to the Congress separately.) The joint memorandum submitted to me by the Secretary of State and the Secretary of Energy and a letter from the Chairman of the Nuclear Regulatory Commission stating the views of the Commission are also enclosed.

The proposed Agreement has been negotiated in accordance with the Act and other applicable law. In my judgment, it meets all applicable statutory requirements and will advance the nonproliferation and other foreign policy interests of the United States.

The Agreement provides a comprehensive framework for peaceful nuclear cooperation with the United Arab Emirates (UAE) based on a mutual commitment to nuclear nonproliferation. The United States and the UAE are entering into it in the context of a stated intention by the UAE to rely on existing international markets for nuclear fuel services as an alternative to the pursuit of enrichment and reprocessing. Article 7 will transform this UAE policy into a legally binding obligation from the UAE to the United States upon entry into force of the Agreement. Article 13 provides, *inter alia*, that if the UAE at any time following entry into force of the Agreement materially violates Article 7, the United States will have a right to cease further cooperation under the Agreement, require the return of items subject to the Agreement, and terminate the Agreement by giving 90 days written notice. In view of these and other nonproliferation features, the Agreement has the potential to serve as a model for other countries in the region that wish to pursue responsible nuclear energy development.

The Agreement has a term of 30 years and permits the transfer of technology, material, equipment (including reactors), and components for nuclear research and nuclear power production. It does not permit transfers of Restricted Data, sensitive nuclear technology, sensitive nuclear facilities, or major critical components of such facilities. In the event of termination of the Agreement, key

nonproliferation conditions and controls continue with respect to material, equipment, and components subject to the Agreement.

In addition to the UAE's obligation to forgo enrichment and reprocessing—the first instance of such an obligation on the part of a U.S. cooperating partner in an agreement of this type—the Agreement contains certain additional nonproliferation features not typically found in such agreements. These are modeled on similar provisions in the 1981 U.S.-Egypt Agreement for Peaceful Nuclear Cooperation and include (a) a right of the United States to require the removal of special fissionable material subject to the Agreement from the UAE either to the United States or to a third country if exceptional circumstances of concern from a nonproliferation standpoint so require, and (b) confirmation by the United States that the fields of cooperation, terms, and conditions accorded by the United States to the UAE shall be no less favorable in scope and effect than those that the United States may accord to any other non-nuclear-weapon State in the Middle East in a peaceful nuclear cooperation agreement. The Agreement also provides, for the first time in a U.S. agreement for peaceful nuclear cooperation, that prior to U.S. licensing of exports of nuclear cooperation, that prior to U.S. licensing of exports of nuclear material, equipment, components, or technology pursuant to the Agreement, the UAE shall bring into force the Additional Protocol to its safeguards agreement.

The UAE is a non-nuclear-weapon State party to the Treaty on the Non-Proliferation of Nuclear Weapons (NPT). The United States is a nuclear-weapon State party to the NPT. Article 12 of the proposed Agreement provides that the Agreement shall not be interpreted as affecting the inalienable rights of the United States and the UAE under the NPT. A more detailed discussion of the UAE's intended civil nuclear program and its nonproliferation policies and practices is provided in the NPAS and in a classified Annex to the NPAS to be submitted to the Congress separately.

The Agreed Minute to the Agreement provides U.S. prior approval for retransfers by the UAE of irradiated nuclear material subject to the Agreement to France and the United Kingdom, if consistent with their respective policies, laws, and regulations, for storage or reprocessing subject to specified conditions, including that prior agreement between the United States and the UAE is required for the transfer of any special fissionable material recovered from any such reprocessing to the UAE. The transferred material would also have to be held within the European Atomic Energy Community subject to the Agreement for Cooperation in the Peaceful Uses of Nuclear Energy Between the United States of America and the European Atomic Energy Community (EURATOM).

In view of the fact that this consent would constitute a subsequent arrangement under the Act if agreed separately from the proposed Agreement, the Secretary of State and the Secretary of Energy have ensured that the advance approval provisions meet the applicable requirements of section 131 of the Act. Specifically, they have concluded that the U.S. advance approval for retransfer of nuclear material for reprocessing or storage contained in the Agreed Minute to the proposed Agreement is not inimical to the

common defense and security. An analysis of the advance approval given in the Agreed Minute is contained in the NPAS.

This transmission shall constitute a submittal for purposes of both sections 123 b. and 123 d. of the Act. My Administration is prepared to begin immediately the consultations with the Senate Foreign Relations Committee and the House Foreign Affairs Committee as provided in section 123 b. Upon completion of the period of 30 days of continuous session provided for in section 123 b., the period of 60 days of continuous session provided for in section 123 d. shall commence.

BARACK OBAMA.

THE WHITE HOUSE, *May 21, 2009.*

**AGREEMENT FOR COOPERATION BETWEEN
THE GOVERNMENT OF
THE UNITED STATES OF AMERICA AND
THE GOVERNMENT OF
THE UNITED ARAB EMIRATES
CONCERNING PEACEFUL USES OF NUCLEAR
ENERGY**

The Government of the United States of America and the Government of the United Arab Emirates,

MINDFUL of their respective rights and obligations under the Treaty on the Non-Proliferation of Nuclear Weapons ("NPT") to which both the United States of America and the United Arab Emirates are parties;

REAFFIRMING their commitment to ensuring that the international development and use of nuclear energy for peaceful purposes are carried out under arrangements that will to the maximum possible extent further the objectives of the NPT;

AFFIRMING their desire to promote universal adherence to the NPT;

AFFIRMING their support for the International Atomic Energy Agency ("IAEA") and its safeguards system, including the Additional Protocol;

DESIRING to cooperate in the development, use and control of peaceful uses of nuclear energy;

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

RECALLING the Memorandum of Understanding between them concerning cooperation in nuclear energy and other energy fields, signed at Manama, Bahrain, on April 21, 2008;

AFFIRMING in particular the goal of pursuing the safe, secure and environmentally sustainable development of civil nuclear energy for peaceful purposes and in a manner that supports nuclear nonproliferation and international safeguards;

AFFIRMING also the commitment of the United Arab Emirates, embodied in its March 2008 White Paper entitled "UAE Policy on the Evaluation and Potential Development of Peaceful Nuclear Energy," to pursue a renunciation of the development of domestic enrichment and reprocessing capabilities in favor of long-term commitments for the secure external supply of nuclear fuel, and the intent of the United States of America to support international markets in order to ensure reliable fuel supply for the United Arab Emirates;

HAVE AGREED AS FOLLOWS:

ARTICLE 1 — DEFINITIONS

For the purposes of this Agreement and the Agreed Minute:

(A) "Agreed Minute" means the minute annexed to this Agreement, which is an integral part hereof;

(B) "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;

(C) "Component" means a component part of equipment or other item, so designated by agreement of the Parties;

(D) "Conversion" means any of the normal operations in the nuclear fuel cycle, preceding fuel fabrication and excluding enrichment, by which uranium is transformed from one chemical form to another -- for example, from UF₆ to UO₂ or from uranium oxide to metal;

(E) "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 nuclear 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;

(F) "Equipment" means any reactor, other than one designed or used primarily for the formation of plutonium or uranium 233, or any other item so designated by agreement of the Parties;

(G) "High enriched uranium" means uranium enriched to twenty percent or greater in the isotope 235;

(H) "Information" means scientific, commercial or technical data or information in any form that is appropriately designated by agreement of the Parties or their competent authorities to be provided or exchanged under this Agreement;

(I) "Low enriched uranium" means uranium enriched to less than twenty percent in the isotope 235;

(J) "Major critical component" means any part or group of parts essential to the operation of a sensitive nuclear facility;

(K) "Material" means source material, special fissionable material, byproduct material, radioisotopes other than byproduct material, moderator material, or any other such substance so designated by agreement of the Parties;

(L) "Moderator material" means heavy water or graphite or beryllium of a purity suitable for use in a reactor to slow down high velocity neutrons and increase the likelihood of further fission, or any other such material so designated by agreement of the Parties;

(M) "Parties" means the Government of the United States of America and the Government of the United Arab Emirates;

(N) "Peaceful purposes" include the use of information, material, equipment and components in such fields as research, power generation, medicine, agriculture and industry but do not include use in, research on, or development of any nuclear explosive device, or any military purpose. Military purposes shall not include the supply of electricity to a military base from any power network;

(O) "Person" means any individual or any entity subject to the jurisdiction of either Party but does not include the Parties to this Agreement;

(P) "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 uranium, plutonium or thorium or any combination thereof;

(Q) "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 material in the production of energy, but shall not include data of a Party that it has declassified or removed from the category of Restricted Data;

(R) "Sensitive nuclear facility" means any facility designed or used primarily for uranium enrichment, reprocessing of nuclear fuel, heavy water production, or fabrication of nuclear fuel containing plutonium;

(S) "Sensitive nuclear technology" means any information (including information incorporated in equipment or an important component) that is not in the public domain and that 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 agreement of the Parties;

(T) "Source material" means (1) uranium, thorium, or any other material so designated by agreement of the Parties, or (2) ores containing one or more of the foregoing materials in such concentration as the Parties may agree from time to time;

(U) "Special fissionable material" means (1) plutonium, uranium 233, or uranium enriched in the isotope 235, or (2) any other material so designated by agreement of the Parties.

ARTICLE 2 - SCOPE OF COOPERATION

1. The Parties shall cooperate in the use of nuclear energy for peaceful purposes in accordance with the provisions of this Agreement and their applicable treaties, national laws, regulations and license requirements.

2. Transfer of information, material, equipment and components under this Agreement may be undertaken directly between the Parties or through authorized Persons. Such transfers shall be subject to this Agreement and to such additional terms and conditions as may be agreed by the Parties.

3. The Parties intend to cooperate in the following areas:

(A) Development of requirements for grid-appropriate power reactors and fuel service arrangements for the United Arab Emirates;

(B) Promotion of the establishment of a reliable source of nuclear fuel for future civil light water nuclear reactors deployed in the United Arab Emirates;

(C) Development of the United Arab Emirates' civil nuclear energy use in a manner that supports global efforts to prevent nuclear proliferation, including, for example, the Global Nuclear Energy Partnership;

(D) Civil nuclear energy training, human resource and infrastructure development, and appropriate application of civil nuclear energy and related energy technology, consistent with IAEA guidance and standards on milestones for infrastructure development;

(E) Application of radioisotopes and radiation in industry, agriculture, medicine and the environment;

(F) Radiation protection and management of radioactive waste and spent fuel;

(G) Nuclear safety, security, safeguards and nonproliferation, including physical protection, export control and border security;

(H) Identification of uranium mining and milling resources; and

(I) Other areas of cooperation as may be determined by agreement of the Parties.

4. Cooperation may be undertaken in the following forms:

(A) Exchange of scientific and technical information and documentation;

- (B) Exchange and training of personnel;
- (C) Organization of symposia and seminars;
- (D) Provision of relevant technical assistance and services;
- (E) Transfers between the Parties or their authorized Persons of material, equipment and components; and
- (F) Other forms of cooperation as may be mutually agreed by the Parties.

ARTICLE 3 - TRANSFER OF INFORMATION

1. Information concerning the use of nuclear energy for peaceful purposes may be transferred. Transfers of information may be accomplished through various means, including reports, data banks, computer programs, conferences, visits, and assignments of staff to facilities. Fields that may be covered may include, but shall not be limited to, the following:

- (A) 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 physical protection of material, equipment, and components;
- (E) Health, safety and environmental considerations related to the foregoing; and
- (F) Assessing the role nuclear power may play in national energy plans.

2. This Agreement does not require the transfer of any information that the Parties are not permitted under their respective treaties, national laws, and regulations to transfer.

3. Restricted Data and Sensitive Nuclear Technology shall not be transferred under this Agreement.

ARTICLE 4 - TRANSFER OF MATERIAL, EQUIPMENT AND COMPONENTS

1. Material, equipment and components may be transferred for applications consistent with this Agreement. Any special

fissionable material transferred to the United Arab Emirates under this Agreement shall be low enriched uranium, except as provided in paragraph 4. Sensitive nuclear facilities and major critical components thereof shall not be transferred under this Agreement.

2. Low enriched uranium may be transferred, including inter alia by sale or lease, for use as fuel in reactors and reactor experiments, for conversion or fabrication, or for such other purposes as may be agreed by the Parties.

3. The quantity of special fissionable material transferred under this Agreement shall not at any time be in excess of that quantity the Parties agree is necessary for any of the following purposes: use in the loading of reactors or 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 for storage or disposition; and the accomplishment of such other purposes as may be agreed by the Parties. In determining appropriate quantities of special fissionable material to be transferred, the Parties shall take into account the supply constraints imposed upon the United Arab Emirates by the latter's voluntary decision to forego any enrichment or reprocessing of nuclear material within its territory.

4. Small quantities of special fissionable material may be transferred for use as samples, standards, detectors, targets or for such other purposes as the Parties may agree. Transfers pursuant to this paragraph shall not be subject to the quantity limitations in paragraph 3.

5. The Government of the United States of America shall endeavor to take such actions as are necessary and feasible to ensure a reliable supply of nuclear fuel to the United Arab Emirates, including the export of nuclear fuel on a timely basis during the period of this Agreement. The Government of the United States of America shall also consider such actions as are feasible to assist the United Arab Emirates in safe and secure management, storage and disposition of irradiated special fissionable material produced through the use of material or equipment transferred pursuant to this Agreement.

ARTICLE 5 - STORAGE AND RETRANSFERS

1. Material transferred pursuant to this Agreement and material used in or produced through the use of any material or equipment transferred pursuant to this Agreement may be stored by either Party, except that each Party guarantees that no such special fissionable material over which it has jurisdiction shall be stored in any facility that has not been agreed to in advance by the Parties. In the selection of a storage facility, due consideration shall be given to non-proliferation and physical protection aspects as well as to the economics of the storage and its implications for the cost of energy.

2. Material, equipment and components transferred pursuant to this Agreement and any special fissionable material produced through the use of any such material or equipment shall not be transferred to unauthorized Persons or, unless the Parties agree, beyond the recipient Party's territorial jurisdiction.

ARTICLE 6 — REPROCESSING, OTHER ALTERATION IN FORM OR CONTENT, AND ENRICHMENT

1. Material transferred pursuant to this Agreement and material used in or produced through the use of material or equipment so transferred shall not be reprocessed unless the Parties agree.
2. Plutonium, uranium 233, high enriched uranium and irradiated source or special fissionable material transferred pursuant to this Agreement or used in or produced through the use of material or equipment so transferred shall not be otherwise altered in form or content, except by irradiation or further irradiation, unless the Parties agree.
3. Uranium transferred pursuant to this Agreement or used in any equipment so transferred shall not be enriched after transfer unless the Parties agree.

ARTICLE 7 – SENSITIVE NUCLEAR FACILITIES WITHIN THE TERRITORY OF THE UNITED ARAB EMIRATES

The United Arab Emirates shall not possess sensitive nuclear facilities within its territory or otherwise engage in activities within its territory for, or relating to, the enrichment or reprocessing of material, or for the alteration in form or content (except by irradiation or further irradiation or, if agreed by the Parties, post-irradiation examination) of plutonium, uranium 233, high enriched uranium, or irradiated source or special fissionable material.

ARTICLE 8 - PHYSICAL PROTECTION

1. Adequate physical protection shall be maintained with respect to any material and equipment transferred pursuant to this Agreement and any special fissionable material used in or produced through the use of material or equipment so transferred.
2. To comply with the requirement in paragraph 1, each Party shall apply at a minimum measures in accordance with (i) levels of physical protection at least equivalent to the recommendations published in IAEA document INFCIRC/225/Rev.4 entitled "The Physical Protection of Nuclear Material and Nuclear Facilities" and in any subsequent revisions of that document agreed to by the Parties, and (ii) the provisions of the 1980 Convention on the Physical Protection of Nuclear Material and any amendments to the Convention that enter into force for both Parties.
3. The adequacy of physical protection measures maintained pursuant to this Article shall be subject to review and consultations by the Parties from time to time and whenever either Party is of the view that revised measures may be required to maintain adequate physical protection.

4. The Parties shall keep each other informed through diplomatic channels of those agencies or authorities having responsibility for ensuring that levels of physical protection for nuclear material 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 material subject to this Article. The Parties shall inform each other through diplomatic channels, as well, of the designated points of contact within their national authorities to cooperate on matters of out-of-country transportation and other matters of mutual concern.

5. The provisions of this Article shall be implemented in such a manner as to avoid undue interference in the Parties' nuclear activities, to comply with the physical protection measures required by paragraph 2, and to be consistent with prudent management practices required for the safe and economic conduct of their nuclear programs.

ARTICLE 9 - NO EXPLOSIVE OR MILITARY APPLICATION

Material, equipment and components transferred pursuant to this Agreement and material used in or produced through the use of any material, equipment or components 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. Military purposes shall not include the supply of electricity to a military base from any power network.

ARTICLE 10 - SAFEGUARDS

1. Cooperation under this Agreement shall require the application of IAEA safeguards with respect to all nuclear activities within the territory of the United Arab Emirates, under its jurisdiction or carried out under its control anywhere. Implementation of a Safeguards Agreement concluded pursuant to Article III (4) of the NPT shall be considered to fulfill this requirement.

2. Source material or special fissionable material transferred to the United Arab Emirates pursuant to this Agreement and any source material or special fissionable material used in or produced through the use of material, equipment or components so transferred shall be subject to safeguards in accordance with the agreement between the United Arab Emirates and the IAEA for the application of safeguards in connection with the NPT, signed on December 15, 2002, which entered into force on October 9, 2003 (but not including the Small Quantities Protocol thereto dated December 15, 2002), and, upon its entry into force, the Additional Protocol thereto.

3. Source material or special fissionable material transferred to the United States of America pursuant to this Agreement and any source or special fissionable material used in or produced through the use of any material, equipment or components so transferred shall be subject to the agreement between the United States of America and the IAEA for the

application of safeguards in the United States of America, signed on November 18, 1977, which entered into force on December 9, 1980, and the Additional Protocol thereto, which entered into force on January 6, 2009.

4. If either Party becomes aware of circumstances that demonstrate that the IAEA for any reason is not or will not be applying safeguards in accordance with the agreement as provided for in paragraph 2 or paragraph 3, to ensure effective continuity of safeguards the Parties shall consult and immediately enter into arrangements with the IAEA or between themselves that conform with IAEA safeguards principles and procedures, that provide assurance equivalent to that intended to be secured by the system they replace, and that conform with the coverage required by paragraph 2 or paragraph 3.

5. Each Party shall take such measures as are necessary to maintain and facilitate the application of safeguards applicable to it provided for under this Article.

6. Each Party shall establish and maintain a system of accounting for and control of source material and special fissionable material transferred pursuant to this Agreement and source material and special fissionable material used in or produced through the use of any material, equipment or components so 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.

7. Upon the request of either Party, the other Party shall report or permit the IAEA to report to the requesting Party on the status of all inventories of material subject to this Agreement.

8. The provisions of this Article shall be implemented in such a manner as to avoid hampering, delay or undue interference in the Parties' nuclear activities and so as to be consistent with prudent management practices required for the safe and economic conduct of their nuclear programs.

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 Article 5 or Article 6 with respect to material, equipment or components subject to this Agreement, the Parties may, upon request of either of them, agree that the implementation of any such rights will be accomplished by such other nation or group of nations.

ARTICLE 12 — USE OF NUCLEAR ENERGY FOR PEACEFUL PURPOSES

Nothing in this Agreement shall be interpreted as affecting the inalienable right of the Parties to develop research, production and use of nuclear energy for peaceful purposes without discrimination and in

conformity with Articles I and II of the NPT as well as the safeguards required by Article III of the NPT.

ARTICLE 13 -- CESSATION OF COOPERATION
AND RIGHT OF RETURN

1. If either Party at any time following entry into force of this Agreement:

(A) materially violates the provisions of Article 5, 6, 7, 8, 9 or 10; or

(B) terminates, abrogates or materially violates a safeguards agreement with the IAEA;

the other Party shall have the rights to cease further cooperation under this Agreement; to require the return of any material, equipment or components transferred under this Agreement and any special fissionable material produced through their use; and to terminate the Agreement by giving 90 days written notice.

2. If the United Arab Emirates at any time following entry into force of this Agreement detonates a nuclear explosive device, the United States of America shall have the same rights as specified in paragraph 1.

3. If either Party exercises its rights under this Article to require the return of any material, equipment or components, it shall promptly, after removal from the territory of the other Party, reimburse the other Party for the fair market value of such material, equipment or components.

4. In determining whether to exercise its rights under paragraph 1 of this Article based on a "material violation," a Party shall consider whether the facts giving rise to the right to take such action in accordance with paragraph 1 were caused deliberately. In the event that it finds such material violation not to be deliberate, and to the extent that it judges that such material violation can be rectified, the non-breaching Party shall endeavor, subject to its national legislation and regulations, to afford the breaching Party an opportunity to cure the violation within a reasonable period.

ARTICLE 14 — CONSULTATIONS, REVIEW AND
ENVIRONMENTAL PROTECTION

1. The Parties undertake to consult at the request of either Party regarding the implementation of this Agreement and the development of further cooperation in the field of peaceful uses of nuclear energy.

2. This Agreement shall be reviewed at any time at the request of either Party to take into account regional and international nonproliferation developments, international technological developments and institutional arrangements, the energy needs of the United Arab Emirates, or such other circumstance as may warrant such a review. The terms of this Agreement may, however, only be amended as agreed between the Parties.

3. 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 15 - SETTLEMENT OF DISPUTES

The Parties shall seek to resolve any dispute in relation to this Agreement (including its interpretation or implementation) by negotiation, consultation at the diplomatic level, or through other peaceful means of dispute resolution, including via expert inquiry by expert bodies such as the IAEA, as may be mutually agreed by the Parties.

ARTICLE 16 — ADMINISTRATIVE ARRANGEMENT

1. The appropriate authorities of the Parties shall, by mutual consent, establish an Administrative Arrangement in order to provide for the effective implementation of the provisions of this Agreement.
2. The principles of fungibility and equivalence shall apply to nuclear material and moderator material subject to this Agreement. Detailed provisions for applying these principles shall be set forth in the Administrative Arrangement.
3. The Administrative Arrangement established pursuant to this Article may be amended by agreement of the appropriate authorities of the Parties.

ARTICLE 17 - ENTRY INTO FORCE AND DURATION

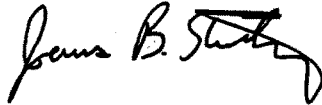
1. This Agreement shall enter into force on the date on which the Parties exchange diplomatic notes informing each other that they have completed all applicable requirements for its entry into force.
2. This Agreement shall remain in force for a period of 30 years. This term may be extended for such additional periods as may be agreed between the Parties.
3. Notwithstanding the termination or expiration of this Agreement or any cessation of cooperation hereunder for any reason, Articles 5, 6, 7, 8, 9, 10 and 13 and the Agreed Minute shall continue in effect so long as any material, equipment or components subject to Article 5, 6, 8, 9, 10 or 13 remains in the territory of the Party concerned or under its jurisdiction or

control anywhere, or until such time as the Parties agree that such material, equipment or components are no longer usable for any nuclear activity relevant from the point of view of safeguards.

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

DONE at Washington, this twenty-first day of May, 2009, in duplicate, in the English and Arabic languages, both texts being equally authentic.

FOR THE GOVERNMENT OF
THE UNITED STATES OF
AMERICA:



FOR THE GOVERNMENT OF
THE UNITED ARAB
EMIRATES:



AGREED MINUTE

During the negotiation of the Agreement for Cooperation between the Government of the United States of America and the Government of the United Arab Emirates Concerning Peaceful Uses of Nuclear Energy ("the Agreement") signed today, the following understandings, which shall be an integral part of the Agreement, were reached.

The Parties intend to cooperate under the Agreement under terms that will assure that neither Party is placed at an economic disadvantage and that will not adversely affect the scope of cooperation. They also recognize their respective rights to cooperate with other countries or international organizations in a manner that is supportive of the objectives of the NPT.

Coverage of Agreement

Material, equipment and components transferred from the territory of one Party to the territory of the other Party, whether directly or through a third country, shall be regarded as having been transferred pursuant to the Agreement only upon confirmation, by the appropriate government authority of the recipient Party to the appropriate government authority of the supplier Party, that such material, equipment or components shall be subject to the Agreement.

With respect to the definition of "Restricted Data" in subparagraph (Q) 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."

For the purposes of implementing the rights specified in Article 5 and Article 6 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 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.

Safeguards

The Parties understand that the safeguards agreement referenced in paragraph 2 of Article 10 of the Agreement refers to such agreement without the existing Small Quantities Protocol. Prior to the licensing by the Government of the United States of America of exports of nuclear material, equipment, components, or technology pursuant to this Agreement, the Government of the United Arab Emirates shall terminate the existing Small Quantities Protocol and bring into force the Additional Protocol approved by the IAEA Board of Governors on March 3, 2009 and referred to in Article 10.2 of the Agreement.

If either Party becomes aware of circumstances referred to in Paragraph 4 of Article 10 of the Agreement with respect to the safeguards agreement referred to in paragraph 2 of Article 10 of the Agreement, the Parties shall immediately consult with a view to implementing a safeguards system equivalent in scope and effect to that previously applied by the IAEA, under which the Government of the United States and, if the Parties agree, a government of another state that is approved by the Government of the United Arab Emirates and is party to an appropriate bilateral cooperation agreement with the United States concerning peaceful uses of nuclear energy (the Government of the United States and the government of such other state each being hereinafter referred to as a "safeguarding state") shall have the rights listed below, which rights shall be suspended if both Parties agree that the need to exercise such rights is being satisfied by the application of IAEA safeguards under arrangements pursuant to paragraph 4 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 such material or equipment;

(2) To require the maintenance and production of records and of relevant reports for the purpose of assisting in ensuring accountability for material transferred pursuant to the Agreement and any source material or special fissionable material used in or produced through the use of any material, equipment or components so transferred; and

(3) To designate personnel acceptable to the Government of the United Arab Emirates, who shall have access to all places and data necessary to account for the material referred to in paragraph 2, to inspect any equipment or facility referred to in paragraph 1, and to install any devices and make such independent measurements as may be deemed necessary to account for such material. The United Arab Emirates shall not unreasonably withhold its acceptance of personnel designated by the United States of America or, as the case may be, by both safeguarding states together. Such personnel shall, if the United Arab Emirates, the United States of America, or both safeguarding states together so request, be accompanied by personnel designated by the United Arab Emirates. To the extent permitted by its national law and regulations, the Government of the United States of America shall cooperate fully with any other safeguarding state, including facilitating joint review of all designs, joint conduct of inspections and full sharing of information derived from analysis of records, relevant reports and independent measurements, as well as any information obtained from surveillance devices installed to assist in ensuring accountability for material transferred pursuant to the Agreement.

The simultaneous application of safeguards by the IAEA and by a safeguarding state or states is not anticipated. If such an exceptional situation should occur, the Parties will consult with a view to minimizing the duration of any simultaneous application of safeguards, with a preference for restoring full and independent implementation by the IAEA

of its safeguarding role to the exclusion of that of the safeguarding state or states.

Upon the request of the Government of the United States of America, the Government of the United Arab Emirates will authorize the IAEA to make available to the Government of the United States of America requested information on the implementation of the applicable safeguards agreement with the IAEA within the scope of U.S.-United Arab Emirates cooperation under the Agreement. To the extent consistent with its applicable national legislation and regulations, the Government of the United States of America shall ensure that all information provided to the Government of the United States of America by the United Arab Emirates or the IAEA will not be publicly disclosed, and will be accorded appropriate protections, with a view to providing the same level of protection accorded to such information by the Government of the United Arab Emirates or the IAEA, as the case may be. The Parties shall consult regarding the appropriate protection of such information.

In assessing the compliance of the United Arab Emirates with its safeguards obligations under Article 10 of the Agreement and whether the Government of the United States of America has the right to take any action under paragraph 1 of Article 13 of the Agreement, the Government of the United States of America shall give due consideration to whether the United Arab Emirates has been subjected to measures taken by the Board of Governors of the IAEA pursuant to Article 19 of the safeguards agreement referred to in paragraph 2 of Article 10 of the Agreement.

Physical Protection

Implementing measures of physical protection is the responsibility of each Party within its jurisdiction. Nevertheless, with reference to Article 8 of the Agreement, the Government of the United States of America and the Government of the United Arab Emirates shall cooperate in establishing mutually agreed physical protection arrangements to be applied by the Government of the United Arab Emirates with a view to fulfilling the requirements of that Article. These arrangements shall take into account the Parties' respective experience and domestic regulations, as well as the guidelines that have been issued by the IAEA. Implementation of those arrangements in accordance with IAEA guidelines included in INFCIRC/225/Rev.4 entitled "The Physical Protection of Nuclear Material and Nuclear Facilities" (or any subsequent revisions of that document agreed to by the Parties), and the provisions of the 1980 Convention on the Physical Protection of Nuclear Material and any amendments to the Convention that enter into force for both Parties shall form the basis for assessing the fulfillment by the Government of the United Arab Emirates of the obligations concerning physical protection in the Agreement.

In assessing the compliance of the United Arab Emirates with its physical protection obligations under Article 8 of the Agreement and whether the Government of the United States of America has the right to take any action under paragraph 1 of Article 13 of the Agreement, the Government of the United States of America shall give due consideration

to the findings of an expert mission that may be conducted by the IAEA if so requested by either of the Parties for that purpose.

Retransfers

The Parties agree that irradiated nuclear material subject to Article 5 and Article 6 of the Agreement may be transferred by the United Arab Emirates to France or the United Kingdom, if consistent with their respective policies, laws and regulations, for storage or reprocessing subject to the following conditions:

- i. The Government of the United Arab Emirates shall keep records of any such transfers and shall upon shipment notify the Government of the United States of America of each transfer;
- ii. Prior to any such transfer, the Government of the United Arab Emirates shall confirm in writing to the Government of the United States of America that the nuclear material to be transferred will be held within the European Atomic Energy Community (Euratom) subject to the applicable agreement for cooperation between the United States of America and Euratom; and
- iii. The transfer of any special fissionable material recovered from any such reprocessing to the United Arab Emirates shall require the further agreement of the Parties.

The foregoing agreement regarding retransfers may be terminated in whole or in part by either Party if that Party considers that one or more of the above conditions is not satisfied, or if it considers that exceptional circumstances of concern from a non-proliferation or security standpoint so require. To the extent that time and circumstances permit, the Parties shall consult prior to any such termination. Such circumstances include, but are not limited to, a determination by either Party that the approval cannot be continued without a significant increase of the risk of proliferation or without jeopardizing its national security.

These arrangements concerning spent fuel transfer do not limit the right of the Parties to agree to additional activities pursuant to Article 5, Article 6 and Article 7 of the Agreement.

Reprocessing, Other Alteration in Form or Content, Enrichment, Storage, and Disposition

With respect to Article 5 and Article 6 of the Agreement, any enrichment of uranium transferred pursuant to the Agreement to which the Parties may agree, any reprocessing or other alteration in form or content (except for post-irradiation examination) of irradiated source material or special fissionable material used in or produced through the use of equipment or material transferred pursuant to the Agreement to which the Parties may agree, and any storage of special fissionable material (except

for low enriched uranium, special fissionable material contained in irradiated nuclear material, and small quantities of special fissionable material transferred pursuant to paragraph 4 of Article 4 of the Agreement) will take place outside the United Arab Emirates, in such country and facility as may be agreed by the Parties. The disposition of any special fissionable material that may result from any of the foregoing processes or that is stored outside the United Arab Emirates will be subject to mutual agreement of the Parties.

In implementing its rights under Article 5, Article 6 and Article 7 to consent to the activities covered by those articles, the Government of the United States of America will be guided by nonproliferation and safeguards considerations as well as technological and economic developments. The Government of the United States of America will not seek to gain any commercial or economic advantage from withholding consent and will give due consideration to the operational and economic requirements of programs and facilities operating within the United Arab Emirates.

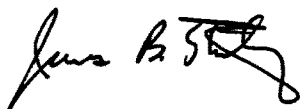
The disposition of any special fissionable material transferred to the United Arab Emirates pursuant to the Agreement, and any special fissionable material used in or produced through the use of any material or equipment so transferred, shall require agreement of the Parties as provided for in Article 5 and Article 6. Notwithstanding Article 5 and Article 6, in the event that the Government of the United States of America considers that exceptional circumstances of concern from a nonproliferation standpoint so require, it may require that the disposition of any special fissionable material which is subject to the Agreement in the United Arab Emirates be in a third country agreed to by the Parties or, if the Government of the United States of America is prepared to accept such special fissionable material, in the United States of America; if in the United States of America, the implementing arrangements referred to below shall include reimbursement to the Government of the United Arab Emirates for the fair market value of such special fissionable material. In the event the Government of the United States of America exercises its right under the Agreed Minute to require disposition of special fissionable material in a third country or in the United States of America, or exercises its rights under Article 13 to require return of any material, equipment or components, the Parties shall make appropriate implementing arrangements, which shall not be subject to any further agreement between the Parties notwithstanding Article 5 and Article 6.

Equal Terms and Condition for Cooperation

The Government of the United States of America confirms that the fields of cooperation, terms and conditions accorded by the United States of America to the United Arab Emirates for cooperation in the peaceful uses of nuclear energy shall be no less favorable in scope and effect than those which may be accorded, from time to time, to any other non-nuclear weapon State in the Middle East in a peaceful nuclear cooperation agreement. If this is, at any time, not the case, at the request of the Government of the United Arab Emirates the Government of the United States of America will provide full details of the improved terms agreed with another non-nuclear-weapon State in the Middle East, to the extent

consistent with its national legislation and regulations and any relevant agreements with such other non-nuclear weapon State, and if requested by the Government of the United Arab Emirates, will consult with the Government of the United Arab Emirates regarding the possibility of amending this Agreement so that the position described above is restored.

FOR THE GOVERNMENT OF
THE UNITED STATES OF
AMERICA:



FOR THE GOVERNMENT OF
THE UNITED ARAB
EMIRATES:



THE WHITE HOUSE
WASHINGTON

May 19, 2009

Presidential Determination
No. 2009-18

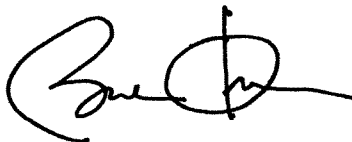
MEMORANDUM FOR THE SECRETARY OF STATE
THE SECRETARY OF ENERGY

SUBJECT: Proposed Agreement for Cooperation Between the
Government of the United States of America and the
Government of the United Arab Emirates Concerning
Peaceful Uses of Nuclear Energy

I have considered the proposed Agreement for Cooperation Between the Government of the United States of America and the Government of the United Arab Emirates Concerning Peaceful Uses of Nuclear Energy, along with the views, recommendations, and statements of the interested agencies.

I have determined that the performance of the Agreement will promote, and will not constitute an unreasonable risk to, the common defense and security. Pursuant to section 123 b. of the Atomic Energy Act of 1954, as amended (42 U.S.C. 2153(b)), I hereby approve the proposed Agreement and authorize the Secretary of State to arrange for its execution.

The Secretary of State is authorized and directed to publish this determination in the *Federal Register*.

A handwritten signature in black ink, appearing to be Barack Obama's signature, located at the bottom center of the page.

April 20, 2009

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MEMORANDUM FOR THE PRESIDENT

FROM: Hillary Clinton
Secretary of State *HCL*

Steven Chu *Chu*
Secretary of Energy

SUBJECT: Proposed Agreement for Cooperation Between the Government of the United States of America and the Government of the United Arab Emirates Concerning Peaceful Uses of Nuclear Energy

U.S. and United Arab Emirates (UAE) negotiators have produced the attached proposed Agreement for Cooperation Between the Government of the United States of America and the Government of the United Arab Emirates Concerning Peaceful Uses of Nuclear Energy ("the Agreement"). The United States and the UAE signed an earlier version of the Agreement at Washington on January 15, 2009, but the two Governments subsequently decided to re-open the text, principally to add a provision explicitly prohibiting the UAE from possessing sensitive nuclear facilities (including enrichment and reprocessing [ENR] facilities), and engaging in ENR, within its territory. If you authorize execution of the Agreement as revised, it will be signed by representatives of the United States and the UAE. After signature, in accordance with section 123 b. and d. of the Atomic Energy Act of 1954, as amended ("the Act"), the Agreement must be submitted to both houses of Congress for a review period of 90 days of continuous session. Unless a joint resolution of disapproval is enacted, the Agreement may be brought into force upon completion of the review period.

The Agreement provides a comprehensive framework for peaceful nuclear cooperation with the UAE based on a mutual commitment to nuclear nonproliferation. The United States and the UAE would enter into it in the context

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of a stated intention by the UAE to rely on existing international markets for nuclear fuel services as an alternative to the pursuit of enrichment and reprocessing. Article 7 will transform this UAE policy into a legally-binding obligation. Article 13 provides, inter alia, that if the UAE at any time following entry into force of the Agreement materially violates Article 7, the United States will have a right to cease further cooperation under the Agreement, require the return of items subject to the Agreement, and terminate the Agreement by giving 90 days written notice. In view of these and other nonproliferation features, we believe the Agreement can serve as a model for other countries in the region that wish to pursue responsible nuclear energy development.

The Agreement has a term of 30 years and permits the transfer of technology, material, equipment (including reactors) and components for nuclear research and nuclear power production. It does not permit transfers of Restricted Data, sensitive nuclear technology, sensitive nuclear facilities or major critical components of such facilities. In the event of termination of the Agreement, key nonproliferation conditions and controls continue with respect to material, equipment and components subject to the Agreement.

In addition to the UAE's obligation to forgo enrichment and reprocessing – the first instance of such an obligation being undertaken by a U.S. cooperating partner in an agreement of this type – the Agreement contains certain additional nonproliferation features not typically found in such agreements. These are modeled on similar provisions in the 1981 U.S.-Egypt Agreement for Peaceful Nuclear Cooperation and include (a) a right of the United States to require the removal of special fissionable material subject to the Agreement from the UAE either to the United States or to a third country if exceptional circumstances of concern from a nonproliferation standpoint so require, and (b) confirmation by the United States that the fields of cooperation, terms, and conditions accorded by the United States to the UAE shall be no less favorable in scope and effect than those that the United States may accord to any other non-nuclear-weapon State in the Middle East in a peaceful nuclear cooperation agreement. The Agreement also provides, for the first time in a U.S. agreement for peaceful nuclear cooperation, that prior to U.S. licensing of exports of nuclear material, equipment, components, or technology pursuant to the Agreement, the UAE shall bring into force the Additional Protocol to its safeguards agreement with the International Atomic Energy Agency.

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The UAE is a non-nuclear-weapon State party to the Treaty on the Non-Proliferation of Nuclear Weapons ("NPT"). The United States is a nuclear-weapon State party to the NPT. Article 12 of the proposed Agreement provides that the Agreement shall not be interpreted as affecting the inalienable rights of the United States and the UAE under the NPT. A more detailed discussion of the UAE's intended civil nuclear program and its nonproliferation policies and practices is provided in the Nuclear Proliferation Assessment Statement ("NPAS") (Attachment 4), and in a classified Annex to the NPAS submitted to you separately.

The Agreed Minute to the Agreement provides U.S. prior approval for retransfers by the UAE of irradiated nuclear material subject to the Agreement to France and the United Kingdom, if consistent with their respective policies, laws and regulations, for storage or reprocessing subject to specified conditions, including that prior agreement between the United States and the UAE is required for the transfer of any special fissionable material recovered from any such reprocessing to the UAE. The transferred material would also have to be held within the European Atomic Energy Community (Euratom) subject to the 1996 U.S.-Euratom peaceful nuclear cooperation agreement.

In view of the fact that this consent would constitute a "subsequent arrangement" under the Act if agreed separately from the proposed Agreement, we have ensured that the advance approval provisions meet the applicable requirements of section 131 of the Act. (An analysis of the advance approval given in the Agreed Minute is contained in the NPAS at Attachment 4.) We have concluded that the U.S. advance approval for retransfer of nuclear material for reprocessing or storage contained in the Agreed Minute to the proposed Agreement is not inimical to the common defense and security.

In accordance with the provisions of section 123 of the Act, the proposed Agreement was negotiated by the Department of State, with the technical assistance and concurrence of the Department of Energy. The proposed Agreement has also been reviewed by the members of the Nuclear Regulatory Commission. The Commission's views are being submitted to you separately.

In our judgment, the proposed Agreement satisfies all requirements of U.S. law for agreements of this type. We believe, as well, that U.S. cooperation with the UAE in the peaceful uses of nuclear energy under the proposed Agreement will be supportive of U.S. nonproliferation, foreign policy, and commercial interests.

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We recommend, therefore, that you determine, pursuant to section 123 b. of the Act, that performance of the Agreement will promote, and will not constitute an unreasonable risk to, the common defense and security; and that you approve the Agreement and authorize its execution.

RECOMMENDATION

That you sign the determination, approval, and authorization at Attachment 1 and the transmittal to Congress at Attachment 2. (The transmittal will be held until the Agreement itself is signed.)

Attachments:

1. Draft Determination, Approval, and Authorization
2. Draft Transmittal to the Congress (To be held until after the Agreement is signed)
3. Proposed Agreement for Cooperation Between the Government of the United States of America and the Government of the United Arab Emirates Concerning Peaceful Uses of Nuclear Energy
4. Unclassified Nuclear Proliferation Assessment Statement

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Sensitive but Unclassified (SBU) – Department of State (DOS)

**UNITED STATES
NUCLEAR REGULATORY COMMISSION**
WASHINGTON, D.C. 20555-0001

March 25, 2009

The President
The White House
Washington, D.C. 20500

Dear Mr. President:

In accordance with the provisions of Section 123 of the Atomic Energy Act of 1954, as amended, the Nuclear Regulatory Commission reviewed the proposed Agreement with the United Arab Emirates for Cooperation Concerning Peaceful Uses of Nuclear Energy. It is the view of the Commission that the proposed Agreement includes all of the provisions required by law and provides a sufficient framework for civilian nuclear cooperation with the United Arab Emirates. The Commission therefore recommends that you make the requisite positive statutory determination, approve the proposed Agreement, and authorize its execution.

The Commission notes that the United Arab Emirates is at an early stage in the development of the legal, regulatory, and technical infrastructure necessary to support the safe use of nuclear power. The Commission must be satisfied that all applicable licensing criteria have been satisfied before it could issue an export license.

Respectfully,

Dale E. Klein

Sensitive but Unclassified (SBU) – Department of State (DOS)

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NUCLEAR PROLIFERATION ASSESSMENT STATEMENT

**Pursuant to Section 123 a. of the
Atomic Energy Act of 1954, as Amended,
with Respect to the Proposed Agreement for Cooperation Between
the Government of the United States of America and the
Government of the United Arab Emirates
Concerning Peaceful Uses of Nuclear Energy**

INTRODUCTION

This Nuclear Proliferation Assessment Statement ("NPAS") relates to the proposed Agreement for Cooperation Between the Government of the United States of America and the Government of the United Arab Emirates Concerning Peaceful Uses of Nuclear Energy (the "Agreement"). The Agreement is being submitted to the President jointly by the Secretary of State and Secretary of Energy for his approval and authorization for signature.

Section 123 a. of the Atomic Energy Act, as amended (the "Atomic Energy Act" or "Act"), provides that an NPAS be submitted by the Secretary of State to the President on each new or amended agreement for cooperation concluded pursuant to that section. Pursuant to section 123 a., the NPAS must analyze the consistency of the text of the proposed agreement with all the requirements of the Act, with specific attention to whether the proposed agreement is consistent with each of the criteria set forth in that subsection, and address the adequacy of the safeguards and other control mechanisms and the peaceful use assurances contained in the agreement for cooperation to ensure that any assistance furnished thereunder will not be used to further any military or nuclear explosive purpose.

With this statutory mandate in mind, this NPAS: (a) provides background information on the nonproliferation policies of the United Arab Emirates ("UAE") and its civil nuclear program and aspirations (Part I); (b) describes the nature and scope of the cooperation contemplated in the proposed Agreement (Part II); (c) describes and analyzes the advance, long-term ("programmatic") U.S. consent given in the proposed Agreement for the UAE to retransfer spent fuel subject to the

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proposed Agreement to France and the United Kingdom (UK) for reprocessing, with any separated special fissionable material to be subject to the 1996 peaceful nuclear cooperation agreement between the European Atomic Energy Community and the United States and not to be returned to the UAE without further agreement by the United States (Part III); (d) reviews the applicable substantive requirements of the Act and the Nuclear Non-Proliferation Act of 1978 (NNPA) and details how they are met by the proposed Agreement (Part IV); and (e) sets forth the net assessment, conclusions, views and recommendations of the Department of State as contemplated by section 123 a. of the Act (Part V).

I. NUCLEAR PROGRAM AND POLICIES OF THE UNITED ARAB EMIRATES

Overview

The UAE has not made a final commitment to build a nuclear power plant or plants, but has been putting in place the necessary structures to support a decision to do so. In 2008, it published its policy for the development of nuclear energy in a White Paper entitled, "Policy of the United Arab Emirates on the Evaluation and Potential Development of Peaceful Nuclear Energy." In that document, the UAE committed itself to the following policies covering "the potential establishment of a peaceful civilian nuclear energy program" in the UAE:

1. The UAE is committed to complete operational transparency;
2. The UAE is committed to pursuing the highest standards of non-proliferation;
3. The UAE is committed to the highest standards of safety and security;
4. The UAE will work directly with the International Atomic Energy Agency ("IAEA") and conform to its standards in evaluating and potentially establishing a peaceful nuclear energy program;
5. The UAE hopes to develop any peaceful domestic nuclear power capacity in partnership with the Governments and firms of responsible nations;
6. The UAE has renounced the development of domestic enrichment and reprocessing capabilities in favour of long-term commitments for the secure external supply of nuclear fuel; and
7. The UAE will approach any peaceful domestic nuclear power program in a manner that best ensures long-term sustainability.

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The White Paper went on to state that “Through the adoption/implementation of these policies and actions, the Government of the UAE hopes to establish a new model via which non-nuclear states may explore and potentially deploy nuclear energy with the full support and confidence of the international community.”

Nonproliferation Credentials

The UAE has signed and ratified, or acceded to, the following key non-proliferation treaties:

- NPT: Acceded September 26, 1995
- IAEA Safeguards Agreement (INFCIRC/622, December 22, 2003): Signed December 15, 2002; entry into force October 9, 2003
- Convention on the Physical Protection of Nuclear Material: Acceded October 16, 2003; entry into force November 15, 2003
- Comprehensive Test Ban Treaty: Signed September 25, 1996; ratified September 18, 2000
- International Convention on the Suppression of Acts of Nuclear Terrorism: Acceded January 10, 2008

The White Paper states that the UAE will continue its efforts to implement fully UNSC 1540. The UAE has also endorsed the Global Initiative to Combat Nuclear Terrorism and the Proliferation Security Initiative.

Even though the UAE has a Comprehensive Safeguards Agreement in place, it is subject to a “Small Quantities Protocol” (SQP), which remains in effect until such time as the UAE has more than one kilogram of special nuclear material (see INFCIRC/153, paragraph 37). An SQP holds in abeyance the implementation of most of the detailed provisions set out in a comprehensive safeguards agreement. The UAE has not yet accepted the modified standard SQP text approved by the IAEA Board of Governors in 2005. The UAE has no special nuclear material at this time. Article 10.2 of the Agreement requires that source material or special fissionable material transferred to the UAE pursuant thereto and any source material or special fissionable material used in or produced through the use of material, equipment or components so transferred shall be subject to safeguards in accordance with the UAE-IAEA safeguards agreement, but not including the SQP thereto. In furtherance of this provision, the Agreed Minute to the Agreement provides that prior to the licensing by the United States of exports of nuclear material, equipment, components, or technology pursuant to the

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Agreement, the United Arab Emirates shall terminate the SQP. Thus, if the Agreement enters into force, the UAE will have to terminate the SQP before the United States licenses exports under the Agreement, even if the UAE still has not acquired any special nuclear material.

In addition, the UAE has indicated in its White Paper that it will conclude the following non-proliferation instruments in tandem with its evaluation of peaceful nuclear energy:

- An Additional Protocol to its Safeguards Agreement (the text of which was approved by the IAEA Board of Governors on March 3, 2009); and
- The 2005 Amendment to the Convention on the Physical Protection of Nuclear Material.

The UAE has also stated that it will implement export and import control rules for nuclear and nuclear-related equipment and technology in strict accordance with the Nuclear Suppliers Group Guidelines for Nuclear Transfers.

The UAE has established, under Federal Law No.13 of 2007, a legal regime for commodities that are subject to import and export control procedures. Included within the scope of the law is a list of export-controlled technologies addressing nuclear materials, technologies and equipment.

Nuclear Science and Technology Base

The UAE has virtually no indigenous science and technology base in the nuclear area. However, it has a long history in its petroleum industry of hiring foreign expertise and then developing local expertise to eventually take over technical positions. The White Paper recognizes both the value of international cooperation for establishing a nuclear power program and the need to develop domestic human resources. In this regard, it has contracted with a U.S. firm, CH2M Hill, as the management agent to implement the nuclear program for the National Nuclear Energy Corporation. Former Secretary of Energy Bodman authorized CH2M Hill, under 10 CFR Part 810, to transfer certain information and assistance to the UAE in connection with its proposed civil nuclear program. The UAE expects to hire a foreign consortium to construct, operate and partially own its first nuclear power plants while local expertise is developed. The UAE is pursuing with the IAEA and partner governments programs that will allow it to develop the necessary domestic expertise in the long term.

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Nuclear Fuel Cycle

The UAE has no fuel cycle and its White Paper states that it will not be involved in nuclear fuel-cycle activities beyond those that would be required for the management and disposal of radioactive waste in the event that it deployed nuclear power plants in its territory. In particular, the White Paper states that “the UAE will not seek to develop domestic capabilities in [enrichment and reprocessing], either as part of its evaluation of nuclear energy or as a component of future UAE nuclear program.” It states further that, “[i]n lieu of domestic enrichment and reprocessing, the UAE would seek to conclude long-term arrangements with reliable and responsible governments and contractors for the secure supply of nuclear fuel, as well as the safe and secure transportation and, if available, the disposal of spent fuel via fuel leasing or other emerging fuel supply arrangements.” This commitment not to pursue enrichment and reprocessing is affirmed in the Memorandum of Understanding between the UAE and the United States signed in Manama, Bahrain, on April 21, 2008, and would be a legally-binding obligation of the UAE in the proposed U.S.-UAE Agreement for Cooperation if the latter is brought into force.

Article 7 of the proposed Agreement provides that “the United Arab Emirates shall not possess sensitive nuclear facilities within its territory or otherwise engage in activities within its territory for, or relating to, the enrichment or reprocessing of material, or for the alteration in form or content (except by irradiation or further irradiation or, if agreed by the Parties, post-irradiation examination) of plutonium, uranium 233, high enriched uranium, or irradiated source or special fissionable material.” Moreover, Article 13 of the Agreement provides, inter alia, that if the UAE at any time following entry into force of the Agreement materially violates Article 7, the United States will have the right to cease further cooperation under the Agreement, require the return of items subject to the Agreement and any special fissionable material produced through their use, and terminate the Agreement by giving 90 days written notice. The UAE’s Article 7 obligation survives any termination of the Agreement so long as nuclear items subject to the Agreement remain in the territory of the UAE or under its jurisdiction or control anywhere. This is the first time that a U.S. agreement for peaceful nuclear cooperation has contained such far-reaching provisions with respect to enrichment and reprocessing in the territory of a cooperating partner.

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Nuclear Regulations and Statutes

The UAE White Paper articulates as a primary objective of its nuclear power program, in the event that it chooses to commission a nuclear power plant within its territory, the establishment of a body authorized and competent to exercise supervision over nuclear safety independently of manufacturers and operators. The UAE has drafted a federal law concerning the peaceful uses of nuclear energy that it has indicated would codify the UAE's policy on nuclear energy and establish a Federal Authority for Nuclear Regulation (FANR) as an independent regulator. The UAE has an existing Federal Law, adopted in 2002, regarding the Regulation and Control of the Use of Radiation Sources and Protection Against their Hazards, including amendments. The Radiation Protection and Control Department of the Ministry of Energy currently regulates radioactive sources, pending the establishment of the FANR.

In addition to the above listed nonproliferation conventions, the UAE stated in its White Paper that it will accede to, as part of its evaluation of a peaceful nuclear program, the Convention on Nuclear Safety and the Joint Convention on the Safety of Spent Fuel Management and the Safety of Radioactive Waste Management. It has also committed itself to accede to international liability conventions, if it chooses to deploy nuclear power plants, including: the Vienna Convention on Civil Liability for Nuclear Damage, the Protocol to Amend the Vienna Convention on Civil Liability, the Joint Protocol on the Application of the Vienna and Paris Conventions and the Convention on Supplementary Compensation for Nuclear Damage.

II. NATURE AND SCOPE OF THE COOPERATION CONTEMPLATED BY THE PROPOSED AGREEMENT

Article 2 of the proposed Agreement describes in general terms the kinds of cooperative activities envisaged. These include:

- Transfers of information, material, equipment and components under the Agreement either directly between the Parties or through authorized persons.
- Development of requirements for grid-appropriate power reactors and fuel service arrangements for the UAE.

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- Promotion of the establishment of a reliable source of nuclear fuel for future civil light-water nuclear reactors deployed in the UAE.
- Development of the UAE's civil nuclear energy use in a manner that contributes to global efforts to prevent nuclear proliferation.
- Civil nuclear energy training, human resource and infrastructure development, and appropriate application of civil nuclear energy and related energy technology, consistent with IAEA guidance and standards on milestones for infrastructure development.
- Application of radioisotopes and radiation in industry, agriculture, medicine and the environment.
- Radiation protection and management of radioactive waste and spent fuel.
- Nuclear safety, security, safeguards and nonproliferation, including physical protection, export control and border security.
- Identification of uranium mining and milling resources.

Article 3.1 of the proposed Agreement further specifies the types of information that may be transferred. Fields that may be covered include the following:

- Development, design, construction, operation, maintenance and use of reactors, reactor experiments, and decommissioning.
- The use of material in physical and biological research, medicine, agriculture, and industry.
- 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.
- Safeguards and physical protection of material, equipment, and components.

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- Health, safety, and environmental considerations related to the foregoing.
- Assessing the role that nuclear power may play in national energy plans.

The Agreement does not permit transfers under it of Restricted Data, sensitive nuclear technology, sensitive nuclear facilities, or major critical components of such facilities (Article 3.3 and Article 4.1).

Transfers of special fissionable material to the UAE under the Agreement are limited to low enriched uranium, except for small quantities for use as samples, standards, detectors, targets or other agreed purposes (Article 4.1 and 4.4). Moreover, such transfers may not be in excess of the quantity that the Parties agree is necessary for the activities envisaged (Article 4.3).

The Agreed Minute, under "Coverage of Agreement," provides that material, equipment and components transferred from the territory of one Party to the territory of the other Party, either directly or through a third country, shall be regarded as having been transferred pursuant to the Agreement only upon confirmation by the recipient Party that such items will be subject to the Agreement.

The Agreed Minute, under "Safeguards," also provides, for the first time in a U.S. agreement for peaceful nuclear cooperation, that prior to U.S. licensing of exports of nuclear material, equipment, components, or technology pursuant to the Agreement, the UAE shall bring into force the Additional Protocol to its IAEA safeguards agreement.

Also in the Agreed Minute, under "Equal Terms and Conditions for Cooperation," the United States confirms that the fields of cooperation, terms and conditions accorded by the United States to the UAE for cooperation in the peaceful uses of nuclear energy will be no less favorable in scope and effect than those that the United States may accord to any other non-nuclear weapon state in the Middle East in a peaceful nuclear cooperation agreement. If at any time this is not the case, then at the request of the Government of the UAE, the Government of the United States of America will consult with the Government of the UAE regarding the possibility of amending the proposed Agreement to restore the UAE to a position comparable to the other non-nuclear weapon state in question. The 1981 U.S.-Egypt agreement for peaceful nuclear cooperation has a similar provision regarding equal terms and conditions.

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The proposed Agreement will have a term of 30 years from the date of its entry into force (Article 17.2). In the event of termination or expiration of the Agreement, key nonproliferation conditions and controls provided for in the Agreement will continue in effect as long as nuclear items subject to the Agreement remain in the territory of either Party or under the jurisdiction or control of either Party anywhere, or unless the Parties agree that such items are no longer usable for any nuclear activity relevant from the point of view of safeguards (Article 17.3).

III. ADVANCE, LONG-TERM ("PROGRAMMATIC") CONSENT

At the request of the UAE Government, the proposed U.S.-UAE Agreement for Peaceful Nuclear Cooperation provides advance, long-term ("programmatic") U.S. approval for retransfers by the UAE of irradiated nuclear material subject to the Agreement to France and the United Kingdom, if consistent with their respective policies, laws and regulations, for storage or reprocessing subject to specified conditions (Agreed Minute, "Retransfers"). These conditions are as follows:

- The UAE will keep records of any such transfers and will upon shipment notify the United States of each transfer;
- Prior to any such transfer, the UAE will confirm in writing to the United States that the nuclear material to be transferred will be held within the European Atomic Energy Community (Euratom) subject to the applicable agreement for cooperation between the United States of America and Euratom; and
- The transfer of any special fissionable material recovered from any such reprocessing to the UAE will require the further agreement of the Parties.

This consent regarding retransfers may be terminated in whole or in part by either Party if that Party considers that one or more of the above conditions is not satisfied, or if it considers that exceptional circumstances of concern from a non-

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proliferation or security standpoint so require. To the extent that time and circumstances permit, the Parties will consult prior to any such termination. Such circumstances include, but are not limited to, a determination by either Party that the approval cannot be continued without a significant increase of the risk of proliferation or without jeopardizing its national security.

There is precedent for an arrangement of this type (programmatic approval for retransfers of U.S.-obligated irradiated nuclear material to France and the United Kingdom, with any transfer of the recovered plutonium back to the original country requiring further U.S. approval) – specifically, U.S. agreements for cooperation negotiated with Sweden, Finland and Norway in the mid-1980s. The U.S. bilateral agreements with Sweden and Finland have been replaced by the 1996 U.S.-Euratom Agreement (signed November 7, 1995, and March 29, 1996, effective April 12, 1996 (House Document No. 104-138)), since Sweden and Finland are Member States of the European Union. The bilateral U.S.-Norway Agreement (signed January 12, 1984, effective July 2, 1984) remains in force (House Document No. 98-164). The programmatic approval provisions in the proposed U.S.-UAE Agreement are modeled on the corresponding provisions in the U.S.-Norway Agreement.

The UAE Government's request for programmatic consent for retransfers for reprocessing to France and the United Kingdom (both Euratom Member States) is premised on the UAE's policy, set forth in its 2008 White Paper, of pursuing a renunciation of the development of domestic enrichment and reprocessing capabilities in favor of long-term commitments for the secure external supply of nuclear fuel. One consequence of this policy would be a potentially significant imposition of constraints on spent fuel management, which the UAE sees as potentially alleviated by an ability to arrange for the removal of spent fuel from its territory on an assured, long-term basis.

In acceding to the UAE request, the United States considered both the argument that renouncing reprocessing constrained spent fuel management and the fact that routine removal of spent fuel from the Middle East region offered *prima facie* benefits from a nonproliferation perspective, for example by transferring the obligation to maintain adequate physical protection with regard to this nuclear material to jurisdictions with greater experience in implementing such obligations.

As detailed in Part IV below, provision in the Agreement for Cooperation of an advance U.S. programmatic consent for retransfer of irradiated material to the United Kingdom and France for reprocessing or storage is consistent with

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applicable statutory requirements. There is adequate protection of U.S. interests through the U.S. ability to terminate the agreement regarding such retransfers under certain conditions, and through continued U.S. control over any return to the UAE of the recovered special fissionable material. The United States strongly favors limiting the number of reprocessing facilities worldwide. The approach taken for the UAE permits a country with strong nonproliferation policies to be in a position to plan rationally for its intended civil nuclear power program. It does not result in the establishment of new reprocessing facilities (indeed, in Article 7 of the Agreement the UAE commits not to acquire such facilities), but relies on use of those that already exist, in a jurisdiction to which the United States has already given its prior approval for reprocessing U.S.-obligated nuclear material. Under the 1996 U.S.-Euratom Agreement the United States has given Euratom advance, long-term ("programmatic") approval for the reprocessing of spent fuel subject to that Agreement. (See House Doc. No. 104-138 for a discussion of that approval.) Any spent fuel subject to the U.S.-UAE Agreement subsequently retransferred by the UAE to Euratom would become subject to the U.S.-Euratom Agreement, including the controls that the United States would have under that agreement on the disposition of any special fissionable material recovered from reprocessing of that spent fuel to countries outside Euratom.

The programmatic arrangement for the UAE permitting retransfers of spent nuclear fuel to France and the United Kingdom for storage or reprocessing will help to ensure the continued excellent cooperation of the UAE with the United States on nonproliferation matters. Spent fuel disposition is a difficult issue for many recipients of U.S. power reactor fuel. In giving advance approval for these retransfers, the United States recognizes the importance of allowing cooperating countries to manage their fuel cycles in a predictable manner consistent with energy security and nonproliferation objectives.

It should be emphasized that the U.S. approval for the retransfer of separated plutonium *from Euratom to the UAE* following reprocessing in Euratom is *not* contained in either the proposed U.S.-UAE Agreement or the U.S.-Euratom Agreement. In addition, Article 4.1 of the U.S.-UAE Agreement does not permit the transfer to the UAE under that Agreement of special fissionable material other than low enriched uranium (except for small quantities as samples, standards, detectors, targets or for such other purposes as the Parties may agree). Approval of any such retransfer of special fissionable material permitted to be transferred to the UAE under the U.S.-UAE Agreement would need to be processed as a "subsequent arrangement" pursuant to the U.S.-Euratom Agreement and would be subject to the analysis and procedures prescribed for subsequent arrangements by section 131 of

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the Act. Moreover, under the Agreed Minute to the proposed Agreement with the UAE, the further agreement of the United States and the UAE would be required for transfer to the UAE of any special nuclear material (referred to in the U.S.-UAE Agreement as "special fissionable material") obtained from reprocessing in the UK or France.

IV. SUBSTANTIVE CONDITIONS

The proposed Agreement meets the applicable requirements of the Atomic Energy Act (AEA or Act) and the NNPA. Section 123 a. of the AEA sets forth nine specific requirements that must be met in agreements for cooperation. Sections 402 and 407 of the NNPA set forth supplementary requirements. The provisions contained in the proposed Agreement satisfy those requirements as follows:

(1) Application of Safeguards: Section 123 a.(1) of the AEA requires a guaranty from the cooperating party that safeguards in perpetuity will be maintained with respect to all nuclear materials and equipment transferred pursuant to an agreement for cooperation and with respect to all special nuclear material used in or produced through the use of such transferred nuclear materials and equipment, so long as the material or equipment remains under the jurisdiction or control of the cooperating party, irrespective of the duration of the other provisions of the agreement or whether the agreement is terminated or suspended for any reason.

This requirement is satisfied by Articles 10 and 17 of the proposed Agreement. Article 10(2) stipulates that source or special nuclear material (referred to in this Agreement as "special fissionable material") transferred to the UAE pursuant to this Agreement and any source or special fissionable material used in or produced through the use of any material (which under the Agreement includes source material, special fissionable material, byproduct material, radioisotopes other than byproduct material, moderator material, or any other such substance so designated by agreement of the Parties), equipment, or components transferred shall be subject to the agreement between the UAE and the IAEA for the application of safeguards in connection with the NPT, signed on December 15, 2002, which entered into force on October 9, 2003 (but not including the Small Quantities Protocol thereto dated December 15, 2002), and an Additional Protocol thereto upon its entry into force. Article 10(4) provides for "back-up" safeguards in

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the event the IAEA safeguards agreement with the UAE is not being implemented. Article 10 is one of the articles of the Agreement that, pursuant to Article 17, continues in effect so long as any material, equipment or component subject thereto remains in the territory of the United States of America or the UAE or under the jurisdiction or control of either Party to the Agreement anywhere, or until such time as the Parties agree that that item is no longer usable for any nuclear activity relevant from the point of view of safeguards. The Agreed Minute also provides that, prior to the licensing by the United States of exports of nuclear material, equipment, components, or technology pursuant to the Agreement, the UAE shall terminate the existing Small Quantities Protocol and bring into force the Additional Protocol to its IAEA safeguards agreement.

(2) Full-Scope Safeguards: The requirement for full-scope safeguards as a condition of cooperation mandated by section 123 a.(2) of the AEA is met by Article 10(1).

(3) Peaceful Use: The requirement of section 123 a. (3) of the Act for a guaranty against explosive or military uses of nuclear materials and equipment transferred and special nuclear material (referred to in the proposed Agreement as “special fissionable material”) produced through the use of such items is met by Article 9 of the proposed Agreement. It is not necessary to include a peaceful uses guarantee with respect to sensitive nuclear technology transferred under the Agreement or special nuclear material produced through the use of sensitive nuclear technology transferred, as would otherwise be required by section 123 a.(3), because Article 3(3) of the proposed Agreement provides that sensitive nuclear technology may not be transferred under the Agreement.

(4) Right of Return: The requirement in section 123 a.(4) of the Act that, in the event of a nuclear detonation by a non-nuclear weapon state cooperating party or termination or abrogation of an IAEA safeguards agreement by such a party, the United States have a right to the return of any nuclear materials and equipment transferred pursuant to an agreement for cooperation and any special nuclear material produced through the use of such transferred items is met by Article 13 of the Agreement. This right is triggered if the UAE should detonate a nuclear explosive device, materially violate the provisions of Articles 5, 6, 7, 8, 9, or 10 of the Agreement, or terminate, abrogate or materially violate its IAEA safeguards agreement.

Article 13(4) of the proposed Agreement provides that, in determining whether to exercise its rights under Article 13(1) based on a “material violation,” a

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Party shall consider whether the facts giving rise to the right to take such action in accordance with Article 13(1) were caused deliberately. In the event that Party finds such material violation not to be deliberate, and to the extent that it judges that such material violation can be rectified, the non-breaching Party is obligated to endeavor, subject to its national legislation and regulations, to afford the breaching Party an opportunity to cure the violation within a reasonable period.

(5) Retransfer Consent: The requirement of section 123 a.(5) of the Act for a guaranty by the cooperating party that “any material or any Restricted Data . . . and any production or utilization facility transferred pursuant to the agreement . . . or any special nuclear material produced through the use of any such facility or . . . material” will not be transferred to unauthorized persons or beyond the jurisdiction or control of the cooperating party without prior U.S. consent is met by Article 5(2) of the Agreement. A retransfer consent right over Restricted Data (RD) is not provided because RD transfers are prohibited under Article 3(3) of the Agreement.

(6) Physical Security: The requirement of section 123 a.(6) of the Act for a guaranty that adequate physical security will be maintained with respect to any nuclear material transferred pursuant to an agreement of cooperation and any special nuclear material used in or produced through the use of nuclear material, production facility or utilization facility transferred pursuant to the Agreement is met by Article 8 of the proposed Agreement.

(7) Enrichment/Reprocessing/Alteration Consent Right: The requirement of section 123 a.(7) of the Act for a guaranty that “no material transferred pursuant to the agreement for cooperation and no material used in or produced through the use of any material, production facility, or utilization facility transferred pursuant to the agreement will be reprocessed, enriched or (in the case of plutonium, uranium 233, or uranium enriched to greater than 20 percent in the isotope 235, or other nuclear materials which have been irradiated) otherwise altered in form or content without the prior approval of the United States,” is met by Article 6 of the proposed Agreement. That Article provides that material transferred pursuant to the Agreement, and material used in or produced through the use of material or equipment transferred, shall not be reprocessed unless the Parties agree, and further specifies that plutonium, uranium 233, high enriched uranium and irradiated source material or special fissionable material transferred pursuant to the Agreement or used in or produced through the use of material or equipment so transferred shall not be altered in form or context, except by irradiation or further irradiation, unless the Parties agree. The Agreement also specifies that uranium transferred pursuant to the Agreement or used in any equipment so transferred shall not be enriched after transfer unless the Parties agree. Further, Article 7 of the Agreement provides that the UAE shall not possess sensitive nuclear facilities

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within its territory or otherwise engage in activities within its territory for, or relating to, the enrichment or reprocessing of material, or for the alteration in form or content (except by irradiation or further irradiation or, if agreed by the Parties, post-irradiation examination) of plutonium, uranium 233, high enriched uranium, or irradiated source or special fissionable material.

Article 6 also satisfies section 402(a) of the NNPA, which states that, except as specifically provided in any agreement for cooperation, no source or special nuclear material exported from the United States after the date of the NNPA may be enriched after export without the prior approval of the United States for such enrichment.

(8) Storage Consent Right: The requirement of section 123 a.(8) of the Act for a guaranty of a right of prior U.S. approval over facilities for the storage of specified nuclear materials is met by Article 5(1).

(9) Sensitive Nuclear Technology: The requirement of section 123 a.(9) of the Act pertains to situations that may result when sensitive nuclear technology is transferred pursuant to a section 123 agreement for cooperation. Article 3(3) of the Agreement provides that sensitive nuclear technology shall not be transferred under the Agreement, and Article 4(1) provides that sensitive nuclear facilities and major critical components thereof shall not be transferred under the Agreement. Accordingly, the requirement in section 123 a.(9) is not relevant to the proposed Agreement, and the requirement in section 402(b) of the NNPA precluding the transfer of major critical components of facilities for uranium enrichment, nuclear-fuel reprocessing, or heavy-water production unless an agreement for cooperation "specifically designates such components as items to be exported pursuant to [such] agreement" is also satisfied.

Environmental: Article 14(3) of the proposed Agreement requires the Parties to consult, with regard to activities under the Agreement, to identify the world-wide environmental implications arising from such activities and to cooperate in protecting the international environment from radioactive, chemical or thermal contamination arising from peaceful nuclear activities under the Agreement, thereby satisfying the requirements of section 407 of the NNPA.

Article 11 of the proposed Agreement is not required by the Act or the NNPA, but it is consistent with these laws. It provides that the parties may, by mutual agreement, arrange for a third party to exercise U.S. consent rights with

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respect to particular items subject to the agreement if the third party already enjoys the same consent rights over those items. All applicable provisions of U.S. law, including section 131 of the Act governing subsequent arrangements, would have to be satisfied. Similar provisions have been included in all post-NNPA agreements for cooperation, although they have never been applied.

Proportionality: For the purpose of implementing rights specified in Articles 5 and 6 of the proposed Agreement, "produced" special nuclear material is defined in terms of proportionality in the Agreed Minute to the Agreement. Thus, if U.S. nuclear material is used in a non-U.S. reactor, the special nuclear material produced will be attributed to the United States in the proportion of the U.S. nuclear material to the total amount of nuclear material used, and similarly for subsequent generations. It has been our consistent view that sections 123 and 127 of the Act allow this concept of proportionality to be used in determining the reasonable application of U.S. consent rights. We are aware of no course of practice or legislative history to the contrary. Indeed, all of the agreements negotiated since the enactment of the NNPA in 1978 contain a similar proportionality provision.

Advance Approval of Retransfers for Storage or Reprocessing

As discussed above in Part III, a significant feature of the proposed Agreement is the advance, long-term ("programmatic") approval provided in the Agreed Minute by the United States to the UAE for the retransfer of irradiated nuclear material subject to the Agreement to France and the UK, if consistent with their respective policies, laws and regulations, for storage or reprocessing subject to specified conditions ("Retransfers" in the Agreed Minute). Such advance approval is permissible under the Act. The U.S. programmatic approval for retransfers of spent fuel subject to the U.S.-UAE Agreement to Euratom for storage or reprocessing would constitute a subsequent arrangement under section 131 of the Act if agreed to separately from the agreement for cooperation.

Sections 123 and 127 of the Act require that the United States have certain approval rights, including reprocessing and retransfer approval rights. However, no provision of the Act or the NNPA precludes the United States from giving such approvals in advance when all the requirements of the Act can be properly met. In fact, the Act clearly indicates that U.S. consent rights can be granted in advance. In that regard, section 131 a.(3) of the Act provides that:

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“The United States will give timely consideration to all requests for prior approval, when required by this Act, for the reprocessing of material proposed to be exported, previously exported and subject to the applicable agreement for cooperation, or special nuclear material produced through the use of such material or a production or utilization facility transferred pursuant to such agreement for cooperation, or to the altering of irradiated fuel elements containing such material, and additionally, to the maximum extent feasible, will attempt to expedite such consideration when the terms and conditions for such actions are set forth in such agreement for cooperation...”

The reference to “material proposed to be exported” makes clear that the consent for reprocessing or alteration of irradiated fuel may be granted prior to the export of any nuclear material. In the course of normal reactor operations, the fuel to be exported and then used in a reactor would not be reprocessed for five or more years. Therefore the “prior approval” that this section of the Act would allow the United States to give would be far in advance of the actual time that the material in question would be reprocessed or altered in form or content.

Section 131 a.(3) of the Act provides that expedited consideration will be given to requests for consent for reprocessing “... when the terms and conditions for such actions are set forth in such agreement for cooperation...” This provision authorizes the United States to specify in the proposed Agreement with the UAE the conditions that would have to be met for a subsequent approval of a request for retransfer for reprocessing or other fuel cycle activities. There is no substantive difference between that and the proposed Agreement, which makes the approval granted by the Agreed Minute of the proposed Agreement contingent on continued compliance with the conditions specified in the proposed Agreement, which are described above in Part III.

The Agreed Minute provides *inter alia* that the agreement regarding retransfers “may be terminated in whole or in part by either Party if that Party considers that one or more of the [specified] conditions is not satisfied, or if it considers that exceptional circumstances of concern from a non-proliferation or security standpoint so require. To the extent that time and circumstances permit, the Parties shall consult prior to any such termination. Such circumstances include, but are not limited to, a determination by either Party that the approval cannot be continued without a significant increase of the risk of proliferation or without jeopardizing its national security.”

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Further, advance consent in an agreement for cooperation means that under the approval provisions of section 123 b. of the Act the *President* approves and authorizes the proposed Agreement and makes a determination in writing that the performance of the proposed Agreement will promote, and will not constitute an unreasonable risk to, the common defense and security. In contrast, the subsequent arrangement procedures in section 131 of the Act require the determination of the Secretary of Energy only that the arrangement will not be inimical to the common defense and security.

Finally, the requirements under section 131 of the AEA for public notice and Congressional scrutiny for a subsequent arrangement providing approval of the retransfer of U.S.-obligated special nuclear material if such approval had been granted as a subsequent arrangement rather than, as here, in the proposed Agreement itself, will effectively be satisfied and indeed exceeded in the present case of the UAE by implementation of the procedures set forth in section 123 of the Act for Congressional review of proposed new agreements for cooperation and by publication of the proposed U.S.-UAE Agreement as a House Document. This is because section 123 of the Act permits Congress to review a new agreement for cooperation for up to ninety days of continuous session, while section 131 provides that subsequent arrangements involving retransfer of special nuclear material for reprocessing resulting from such reprocessing must lie before Congress for only fifteen days of continuous session (in addition to the section 131 requirement applicable to all subsequent arrangements of publication in the Federal Register for at least 15 days before taking effect).

Thus, although the AEA does not require that the advance consent provided for in the proposed Agreement meet the applicable standard in section 131, the advance consent granted by the United States in the proposed Agreement has been analyzed in regard to all the relevant criteria of section 131 as well as section 123 of the Act, and it has been judged that such advance consent will not be inimical to the common defense and security and will promote and will not constitute an unreasonable risk to the common defense and security.

In sum, the proposed Agreement satisfies all the substantive requirements specified for agreements for cooperation by the AEA and the NNPA.

V. CONCLUSION

Entry-into-force of the proposed U.S.-UAE Agreement will put in place a framework for mutually beneficial civil nuclear cooperation between the two

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countries and provide a foundation for continued collaboration on nuclear non-proliferation goals.

On the basis of the analysis in this NPAS and all pertinent information of which it is aware, the Department of State has arrived at the following assessment, conclusions, views, and recommendations:

1. The safeguards and other control mechanisms and the peaceful use assurances in the proposed Agreement are adequate to ensure that any assistance furnished thereunder will not be used to further any military or nuclear explosive purpose.
2. The Agreement meets all the legal requirements of the Act and the NNPA.
3. Execution of the proposed Agreement would be compatible with the non-proliferation program, policy, and objectives of the United States.
4. Therefore, it is recommended that the President approve and authorize the execution of the proposed Agreement; and that the President determine that the performance of the proposed Agreement will promote, and will not constitute an unreasonable risk to, the common defense and security.

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