MEMORANDUM OF UNDERSTANDING BETWEEN THE LIBYAN ATOMIC ENERGY ESTABLISHMENT AND

THE DEPARTMENT OF ENERGY OF THE UNITED STATES OF AMERICA FOR INFORMATION EXCHANGE AND COOPERATION IN PEACEFUL NUCLEAR ENERGY INFRASTRUCTURE AND NONPROLIFERATION

The Libyan Atomic Energy Establishment (LAEE) and the Department of Energy of the United States of America (DOE), hereinafter referred to as the "Participants,"

Including, within their respective missions, programs for the development and application of peaceful uses of nuclear energy and associated infrastructures in their respective countries;

Recognizing the interest of Libya and the United States of America in promoting cooperation in the area of peaceful uses of nuclear energy as called for in Article IV of the Treaty on the Non-Proliferation of Nuclear Weapons; and

Noting the desire of LAEE through its research centers and laboratories, and DOE, through its National Nuclear Security Administration and its national laboratories, to exchange technical information and to cooperate in the field of peaceful nuclear energy infrastructure and nonproliferation,

Have reached the following understanding:

SECTION 1 – PURPOSE

The purpose of this Memorandum of Understanding (hereinafter Memorandum) is to establish a cooperative institutional relationship between the Participants for the exchange of unclassified, non-proprietary scientific, technological, and other information regarding the peaceful uses of nuclear energy and additional forms of cooperation, to the extent permitted by the laws, regulations, and policies of the Participants' respective countries. Under this Memorandum, cooperative activities include projects that establish effective nuclear infrastructure promoting best practices in nuclear safeguards, safety, security, and civil nuclear power development.

SECTION 2 - FORMS OF COOPERATION

- A. The activities intended to be carried out by the Participants under this Memorandum may include the following, subject to available funds and to the extent permitted by the laws, regulations, and policies of their respective Governments:
- 1. Exchange of unclassified, non-proprietary technological and scientific information;
- 2. Training of scientific and technical personnel, through technical training visits, work periods in laboratories, and seminars or specific courses, in subject areas such as but not limited to nuclear safeguards; nuclear material physical security; radiation protection; quality assurance; emergency preparedness; environment, safety, and health; low- and intermediate-level radioactive waste management; information management; and research reactor operations and utilization;
- 3. Facilitation by DOE of acquisition by the LAEE of appropriate laboratory equipment and associated materials, such as non-destructive nuclear assay or health physics equipment, to include recommendations of appropriate items for acquisition and coordination with suppliers and vendors;
- 4. Joint projects in which each Participant is, unless otherwise determined in writing, responsible for the costs it incurs;

- 5. Organization of technical seminars, workshops, and meetings; and
- 6. Other specific forms of collaboration relating to nuclear infrastructure, peaceful uses of nuclear energy, and nonproliferation as may be added in writing by the Participants.
- B. To the extent permitted by the laws, regulations, and policies of their respective Governments, the Participants' cooperation in the activities described in subparagraph (A) of this Section may include the following:
- 1. Development of the LAEE's human resources needed for civil nuclear infrastructure, with emphasis on nuclear safeguards and security;
- 2. Technical visits of either DOE's or the LAEE's personnel to the other's laboratories or other facilities;
- 3. Use by the LAEE of appropriate facilities and equipment owned and operated by DOE and its national laboratories;
- C. DOE and the LAEE should confirm in writing the details of any specific cooperation undertaken under this Memorandum, including the conduct of specific projects for which DOE may utilize its laboratories or other facilities.
- D. Although the generation of intellectual property is not foreseen at this stage of cooperation, should DOE and the LAEE desire to undertake a joint project that could result in the creation of intellectual property, they should conclude an appropriate written agreement therefor. Each such agreement should include appropriate provisions for carrying out the joint project, including such matters as technical scope, intellectual property protection and allocation, management, costs, cost-sharing, and schedule of work.

SECTION 3 – MANAGEMENT

Each Participant intends to name one Principal Coordinator to supervise activities under this Memorandum. Unless otherwise determined, the Principal Coordinators should meet or otherwise communicate annually to evaluate the status of cooperation under this Memorandum. This evaluation should include review of the achievements, problems, and effectiveness of activities under this Memorandum. The Principal Coordinators should also consider and approve proposed future collaborative opportunities with a view toward maximizing the mutual benefits of cooperation.

- A. With the exception of joint projects described in Section 2 D., the Principal Coordinators should approve an Action Sheet for each cooperative activity, such as those in Section 2 A.2. Each Action Sheet should include task description, objectives, milestones, schedule, and assignment of responsibilities for participating institutions. Action Sheets should specify start and end dates, typically being from one to three years in duration.
- B. Subject to the prior approval of the Participant to which he/she is responsible, each Principal Coordinator may appoint Technical Coordinator(s) to manage specific cooperative activities initiated under this Memorandum and to establish and maintain working contacts at the staff level.

SECTION 4 - GENERAL CONSIDERATIONS

- A. Cooperation under this Memorandum is expected to commence upon signature of both Participants.
- B. The terms of this Memorandum may be altered in writing jointly by the Participants.
- C. The Participants may discontinue this Memorandum by mutual consent at any time in writing. If either Participant wishes to discontinue its activities under this Memorandum, it should endeavor to give 90 days advance written notice to the other Participant.

- D. Each Participant should conduct the activities under this Memorandum in accordance with the laws, regulations, and policies of that Participant's Government and applicable international agreements to which that Participant's Government is party.
- E. Each Participant should handle information received from the other Participant in undertaking the activities under this Memorandum in accordance with the applicable laws, regulations, and policies of the receiving Participant's Government.
- F. The Participants understand that the cooperative activities under this Memorandum are subject to available funds and personnel. Unless otherwise determined in writing, each Participant is to be responsible for the costs it incurs in participating in activities undertaken pursuant to this Memorandum.
- G. This Memorandum is not intended to create any legally binding obligations between the Participants.

Signed, in duplicate, at Washington on the 13th day of January 2014, and at Tripoli on the 13th day of February 2014.

FOR THE LIBYAN ATOMIC ENERGY ESTABLISHMENT:

FOR THE DEPARTMENT OF ENERGY OF THE UNITED STATES OF AMERICA:

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