IMPLEMENTING ARRANGEMENT BETWEEN

THE DEPARTMENT OF ENERGY OF THE UNITED STATES OF AMERICA AND

THE MINISTRY OF EDUCATION, CULTURE, SPORTS, SCIENCE AND TECHNOLOGY OF JAPAN

CONCERNING COOPERATION IN RESEARCH AND DEVELOPMENT IN ENERGY AND RELATED FIELDS

The Department of Energy of the United States of America and the Ministry of Education, Culture, Sports, Science and Technology of Japan (hereinafter referred to as the "Participants");

Recognizing that under the Agreement between the Government of the United States of America and the Government of Japan on Cooperation in Research and Development in Energy and Related Fields signed May 2, 1979, as amended and extended, a very fruitful collaborative relationship was developed and successfully maintained, that both Participants derived great benefits from such cooperation, and the fruits of cooperation contributed to the development of science of the world;

Recognizing that energy security is one of the most important issues to be solved for world prosperity in the twenty-first century;

Believing that cooperation between the Participants in research and development in energy and related fields is of mutual advantage in ensuring a stable supply of energy resources to meet the rapidly growing requirements of not only their own people, but all the peoples of the world;

Recognizing the contribution such research and development can make to the improvement of the environment:

Affirming that close cooperation between the Participants is of vital importance to further develop and promote basic science research in energy and related fields;

Desiring to complement cooperation in energy research and development by international organizations, including the International Energy Agency;

Determined that cooperative activities between the Participants and their participating individual researchers and research organizations be smoothly executed, promoted and strengthened; and

Acting pursuant to the provisions of paragraph 3 of Article II of the Agreement between the Government of the United States of America and the Government of Japan on Cooperation in Research and Development in Science and Technology signed on June 20, 1988, as amended and extended (hereinafter referred to as "the Agreement"),

Have decided as follows:

Section 1

The cooperative activities carried out under this Implementing Arrangement are to be within the competence of each Participant, in the following areas:

- (1) Fusion energy sciences
- (2) High energy physics
- (3) Nuclear physics
- (4) Computer science and software related to current and future high performance computing for open scientific research
- (5) Quantum beam technology, including neutron sources and synchrotron sources
- (6) Basic energy sciences
- (7) Biological and environmental sciences
- (8) Other areas which may be decided upon by the Participants in writing.

- 1. Cooperation between the Participants is to be conducted on the basis of mutual benefit, equality and reciprocity.
- 2. This Implementing Arrangement is pursuant to and subject to the Agreement, in accordance with Article II, paragraph 3 of the Agreement.
- 3. The Participants may invite researchers and organizations from relevant sectors of the research establishment, including universities, national laboratories, and private sectors in their respective countries, to participate in the cooperative activities under this Implementing Arrangement.

Forms of cooperation under this Implementing Arrangement may include: conduct of joint or cooperative research projects and programs; exchange of technical information, data and experience; exchange of technical and managerial personnel for visits and short-term assignments; exchange of equipment, materials and instruments; joint conferences, seminars or workshops; and such other forms of cooperation as the Participants may decide in writing.

Section 4

- 1. Each cooperative activity under this Implementing Arrangement that may involve the sharing of costs or that may give rise to the creation of intellectual property is to be decided in writing in a Project Arrangement between the Participants or other organizations, as appropriate, which is to be subject to and refer to this Implementing Arrangement.
- 2. Each Project Arrangement should include details for carrying out the specific forms of cooperation, including such matters as technical scope, exchange of business-confidential information, intellectual property rights, management, total costs, cost sharing, and schedule; provided, however, that in the case of a conflict between terms in any such Project Arrangement and the terms of the Agreement, the terms of the Agreement will govern.

- 1. The Participants may establish a Coordination Committee to manage the cooperation identified in Section 1 hereof (hereinafter referred to as the "Committee").
- 2. Each Participant should designate an equal number of members of the Committee.
- 3. The Committee may formulate plans for cooperative activities in the areas provided for in Section 1. In addition, the Committee is responsible for:
 - (1) reporting to the Joint Working Level Committee established by paragraph 4, Article V of the Agreement, as the need arises;

- (2) other tasks needed for the smooth implementation of the cooperative activities under this Implementing Arrangement.
- 4. Other matters necessary for the effective and efficient functioning of the Committee, including the establishment of subordinate committees in any of the areas provided in Section 1, are to be determined by the Participants.

The following are to be respected concerning exchanges of personnel under this Implementing Arrangement, unless otherwise decided in a Project Arrangement:

- 1. Whenever an exchange of personnel is contemplated, each Participant will endeavor to ensure the selection of qualified personnel with skills and competence necessary to conduct the activities planned under this Implementing Arrangement. Each such exchange of personnel should be decided in advance by an exchange of letters between the Participants, referencing this Implementing Arrangement and pertinent intellectual property terms, unless otherwise decided in writing.
- 2. Each Participant is to be responsible for the salaries, insurance, and allowances to be paid to its staff or its contractors.
- 3. Each Participant is to pay for the travel and living expenses of its staff or its contractors while on assignment to the host Participant, unless otherwise decided in writing.
- 4. The host Participant is to help locate adequate accommodations for the other Participant's staff or contractors and their families on a reciprocal basis.
- 5. Each Participant should provide all necessary assistance to the assigned staff of the other Participant or its contractors and their families as regards administrative formalities, such as assistance in making travel arrangements.
- 6. The staff and contractors of each Participant are to conform to the general and specific rules of work and safety regulations in force at the host establishment.

By the Participants' mutual decision, a Participant may provide equipment to be utilized in a joint cooperative activity under this Implementing Arrangement. In that event, the following are to apply, unless otherwise decided in a Project Arrangement:

- 1. The sending Participant should supply, as early as possible, a detailed list of the equipment to be provided, together with the relevant specifications and appropriate technical and informational documentation related to use, maintenance, and repair of the equipment.
- 2. Title to the equipment and necessary spare parts supplied by the sending Participant for use in joint activities is to remain with the sending Participant, and the equipment is to be returned to the sending Participant upon completion of the joint activity, unless otherwise decided in writing.
- 3. Equipment provided under this Implementing Arrangement is to be brought into operation at the host establishment only by written determination of the Participants.
- 4. The host establishment is to provide the necessary premises and shelter for the equipment: utilities such as electric power, water and gas; and normally, is to provide materials to be tested, pursuant to all technical requirements, which are to be as mutually decided.
- 5. Responsibility for expenses, safekeeping, and insurance during the transport of equipment from the original location in the country of the sending Participant to the place of entry in the country of the receiving Participant is to rest with the sending Participant. If the sending Participant elects to have the equipment returned, it is to be responsible for expenses, safekeeping, and insurance during the transport of the equipment from the original point of entry in the country of the receiving Participant to the final destination in the country of the sending Participant.
- 6. Responsibility for expenses, safekeeping, and insurance during the transport of equipment from the place of entry in the country of the receiving Participant to the final destination in the country of the receiving Participant is to rest with the receiving Participant. If the sending Participant elects to have the equipment returned, the receiving Participant is to be responsible for expenses, safekeeping, and insurance during

- the transport of the equipment from the final destination in the country of the receiving Participant to the original point of entry in the country of the receiving Participant.
- 7. Responsibility for expenses, safekeeping, and insurance during the time period that the equipment is in use in the country of the receiving Participant is to rest with the receiving Participant unless otherwise decided in writing.
- 8. Equipment provided under this Implementing Arrangement for use in joint activities should be considered to be scientific, not having a commercial character.

- 1. Dissemination, use and protection of information used or generated in the cooperative activities conducted pursuant to this Implementing Arrangement, and the allocation of rights in intellectual property arising in the course of such activities, are to be governed by the provisions set forth in Annex IV to the Agreement.
- 2. Scientific and technological information of a non-proprietary nature arising from the cooperative activities under this Implementing Arrangement should normally be made available to the public by either Participant through customary channels and under the normal procedures of the Participants.
- 3. The Participants may exchange, on a mutually beneficial basis, scientific and technical information, documents, and results of research and development of work carried out under this Implementing Arrangement. Such information is to be limited to that which the Participants have a right to disclose, either in their possession or available to them, relating to the areas of cooperation listed in Section 1 hereof.
- 4. All information provided by a Participant to the other Participant pursuant to this Implementing Arrangement should be accurate to the best knowledge and belief of the providing Participant, and equipment transmitted hereunder should be appropriate to the best knowledge and belief of the transmitting Participant, but the providing Participant does not warrant the suitability of the information or equipment for any particular use or application by the receiving Participant or any third party. Information developed jointly by the Participants should be accurate, and jointly developed equipment should be appropriate, to the best knowledge and belief of the Participants. Neither Participant warrants the accuracy or appropriateness of the jointly developed information or

equipment or their suitability for any particular use or application by either Participant or any third party.

Section 9

- 1. Unless otherwise determined, each Participant is to be responsible for paying its own costs of conducting the activities contemplated by this Implementing Arrangement.
- 2. Cooperation under this Implementing Arrangement is to be implemented subject to the availability of appropriated funds, personnel, and other programmatic resources, and in accordance with applicable domestic laws and regulations, including those relating to export controls.

- 1. Cooperative activities under this Implementing Arrangement are to commence upon signature of this Implementing Arrangement, and unless discontinued under the procedure described in paragraph 2 of this Section, are to continue so long as the Agreement remains in force.
- 2. This Implementing Arrangement may be discontinued at any time by both Participants in writing, or at the discretion of either Participant, which should provide at least 6 months advance notification in writing to the other Participant.
- 3. This Implementing Arrangement may be modified at any time by written consent of the Participants.
- 4. Unless otherwise decided by the Participants, all ongoing cooperative activities not completed at the discontinuation of this Implementing Arrangement may be continued to completion under the terms of this Implementing Arrangement.

Signed at Washington, in duplicate, this 30th day of April 2013.

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

FOR THE MINISTRY OF EDUCATION, CULTURE, SPORTS, SCIENCE AND TECHNOLOGY OF JAPAN:

Hakubun Shimomera

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