

ANNEX I

*ANNEX I TO THE JANUARY 25, 1983
EXCHANGE OF LETTERS BETWEEN THE
MONBUSHO OF JAPAN
AND THE
DEPARTMENT OF ENERGY OF THE
UNITED STATES OF AMERICA
ON COOPERATION IN
FUSION RESEARCH AND DEVELOPMENT*

*MONBUSHO-DOE
COLLABORATION IN FUNDAMENTAL STUDIES OF
IRRADIATION EFFECTS IN FUSION MATERIALS
UTILIZING FISSION REACTORS*

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UTILIZING FISSION REACTORS

1. INTRODUCTION AND TERMS OF REFERENCE

Whereas, under Article III-2 of the January 25, 1983 Exchange of Letters between the Monbusho of Japan and the Department of Energy of the United States of America on Cooperation in Fusion Research and Development (hereinafter referred to as "Monbusho-DOE Exchange of Letters"), any specific details to implement activities within the scope of this Exchange of Letters may be determined as Annexes to this Exchange of Letters,

Whereas, the Director of the Institute of Plasma Physics of Nagoya University (hereinafter referred to as IPP) is endowed by Monbusho as a responsible person with the authority to establish this Annex for executing the specific Program on Cooperation in Fusion Research and Development,

Therefore, IPP and DOE (hereinafter collectively referred to as the Parties) agree to establish this Annex to define the detailed provisions of a collaborative research program on Fundamental Studies of Irradiation Effects in Fusion Materials Utilizing Fission Reactors (hereinafter referred to as the Collabora-

tive Program) subject to the provisions contained in the Monbusho-DOE Exchange of Letters, including those pertaining to intellectual property rights, as follows:

2. COLLABORATIVE PROGRAM

2.1 Objective

The objective of the Collaborative Program is to understand materials behavior in fusion reactor irradiation environments with particular attention to the correlation of the effects of fission and fusion environments and high and low fluence phenomena.

2.2 Scope of Activities

The activities of the Collaborative Program shall include: (1) planning of the experimental program, (2) design and conduct of the irradiation experiments, (3) post-irradiation testing, examination, and evaluation, (4) exchange of personnel and information necessary to carry out the Collaborative Program, and (5) prompt exchange of data and results arising from the Collaborative Program.

2.2.1 Execution The activities of the Collaborative Program shall be planned by the Steering Committee and implemented through an Annual Program of Work as specified in Article 3.

2.3 The Facility

The irradiation experiments of the Collaborative Program shall be conducted in the Fast Flux Test Facility (FFTF). FFTF is a multi-purpose research reactor operated by the Westinghouse Hanford Company, Hanford Engineering Development Laboratory (HEDL), for DOE under contract DE-AC-06-76FF02170 at Richland, Washington. The irradiation vehicle at FFTF shall be a Materials Open Test Assembly (MOTA). The Collaborative Program shall be one of several programs using the FFTF/MOTA.

2.4 Irradiation Volume

IPP shall be entitled to use one-third of the in-core canisters of the MOTA irradiation volume in conformity with the fraction of the total expenses of the MOTA defrayed by IPP, or other fraction as otherwise agreed to by the Parties. DOE, after consultation with IPP, shall be responsible for construction, operation, and maintenance of the MOTA and ancillary equipment.

2.5 Equipment and Post-Irradiation Experiments

Post-irradiation experiments shall be performed at DOE laboratories or at Japanese laboratories as determined in the Annual Program of Work or as otherwise specified by the Steering Committee. When experiments on Japanese materials are to be done in DOE laboratories it may be necessary for IPP to provide appropriate equipment as determined by the Steering Committee.

2.5.1 Japanese Supplied Equipment DOE shall confirm to US Customs authorities that the equipment provided by IPP is of a scientific character and not of a commercial character. DOE shall make its best effort to obtain tax-free clearance from the US Customs authorities. The equipment provided by IPP is the property of IPP and Japanese researchers shall have preference in using the equipment. Such equipment shall be available to DOE experimenters under conditions mutually agreed upon by the Steering Committee.

2.6 Safety and Operational Requirements

The Collaborative Program must conform to the safety and operational requirements of the host reactor and of the host facility.

3. MANAGEMENT

3.1 General Management

The general management of the Collaborative Program shall be carried out by the Steering Committee.

3.2 Steering Committee

The Steering Committee shall be composed of two (2) persons for each Party. These shall be Representatives of DOE and IPP and the Program Coordinator for each Party. Each Party shall have one vote in the Steering Committee and all decisions shall be approved by unanimity. The Steering Committee shall have

the functions described below:

- (1) Develop the Annual Program of Work,
- (2) Review the implementation of the Collaborative Program,
- (3) Recommend the Annual Program of Work to both Parties for approval by the US-Japan Coordinating Committee on Fusion Energy,
- (4) Select the time and place for the next Steering Committee meeting, and
- (5) Consider other matters pertinent to the execution of the Collaborative Program as mutually agreed upon.

3.2.1 Representatives and Program Coordinators Each party shall designate, in writing to the other, its Representative who shall serve as co-chairman of the Steering Committee. Each Party shall designate, in writing to the other, one Program Coordinator. Communication concerning planning and execution of the Collaborative Program, including planning and arrangements for the Steering Committee meetings and communication with the Steering Committee, shall be channeled through the Program Coordinators.

3.2.2 Alternates Both Parties shall designate alternates for their Representatives and Program Coordinators who shall serve if the assigned members are unable to do so and shall inform the other in writing of all such designations.

3.2.3 Meetings The Steering Committee shall meet annually, or more frequently on dates and locations as decided by the Committee. Steering Committee meetings shall be chaired by the host country of the meeting.

3.2.4 Observers Each Party shall be entitled to invite up to five (5) observers for each Steering Committee meeting.

3.3 Annual Program of Work

The Annual Program of Work shall include an Experimental Plan for the next Fusion Year(i.e., April-March), personnel assignments, the annual allocation of cost responsibility between the Parties, and the planned financial and other contributions of both Parties.

3.4 Reporting

Annual summary and technical reports shall be prepared.

3.4.1 Summary Report An annual summary report on the technical progress in the period shall be made by the Steering Committee for submission to the US-Japan Coordinating Committee on Fusion Energy.

3.4.2 Technical Report An annual technical report, in a form determined by the Steering Committee, shall be prepared by the Program Coordinators.

4. FINANCE

4.1 Payment

IPP shall provide to DOE payment in US dollars. The amount, term, and method of IPP payment shall be specified in a written contract between the Parties.

4.2 Financial Obligations

The ability of each Party to execute its obligations in the Collaborative Program is subject to the availability of appropriated funds. If at any time either IPP or DOE is unable to provide its financial contribution, neither Party shall be obligated to continue to expend any funds for the Collaborative Program.

5. ASSIGNMENT OF PERSONNEL

5.1 Japanese Assignees to the US

In order to carry out the Collaborative Program, IPP may assign to HEDL, or other DOE laboratories, up to two (2) Japanese scientific or technical personnel at any one time, or more as may be required by the Annual Program of Work as described in Article 3. Japanese assignees, approved by the DOE, shall be given access to necessary experimental facilities of HEDL consistent with DOE policy.

5.2 US Assignees to Japan

US scientific personnel may be assigned to Japanese laborato-

ries under the Collaborative Program with the approval of the Steering Committee.

6. ADDITIONAL PROVISIONS

6.1 Term of the Program

The Collaborative Program shall enter into force upon the signing of this Annex by both Parties and shall remain in force for five (5) years or until expiration of the Monbusho-DOE Exchange of Letters whichever occurs first. Noting that the Collaborative Program is designed for a period of eight (8) years, the Parties, by mutual agreement expressed in writing at any point, may extend the Collaborative Program for three (3) years consistent with the provisions of the Monbusho-DOE Exchange of Letters. If the Monbusho-DOE Exchange of Letters expires before the completion of the Collaborative Program, the Parties shall consult with each other without delay to identify ways and means for concluding the Program in an orderly fashion.

6.2 Extension of the Program

The term of the Collaborative Program may be further extended by written agreement between the Parties.

6.3 Termination of the Program

The Collaborative Program may be terminated at the discretion of either Party upon six (6) months advance notification in writing to the other Party.

6.4 Amendments

This Annex may be amended by written agreement between the Parties.

6.5 Regulation of Activities

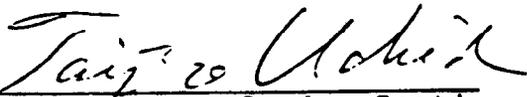
Activities under this Collaborative Program shall be subject to the applicable laws and regulations of the countries of the Parties. All questions related to this Collaborative Program arising during its term shall be settled by the Parties by mutual agreement.

Done at Nagoya, Japan

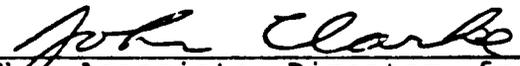
on July 17, 1987

Done at Washington, DC

on July 20, 1987



The Director of the Institute of Plasma Physics, Nagoya University, a designee by the Monbusho of Japan



The Associate Director for Fusion Energy, a designee for the Department of Energy of the United States of America