

AGREEMENT BETWEEN THE UNITED STATES OF AMERICA AND THE NETHERLANDS  
IN THE FIELD OF MAGNETOHYDRODYNAMIC ELECTRICAL POWER GENERATION

The United States Department of Energy (DOE) and The Netherlands Energy Research Foundation (ECN), hereinafter called the Parties;

having a mutual interest in magnetohydrodynamics (MHD) research and development;

recognizing the advantages of complementing their respective MHD programs and of avoiding duplication of effort;

desiring to engage in cooperative activities for the exchange of MHD technology;  
and

recognizing the need to establish procedures governing the protection of proprietary information provided in connection with activities under this Agreement;

have agreed as follows:

ARTICLE 1

The objective of cooperation under this Agreement is to establish, for the mutual benefit of the Parties, an exchange of technology in the field of MHD.

ARTICLE 2

The areas of cooperation in the field of MHD covered by this Agreement may include:

1. Applied Closed-Cycle MHD Research
2. System Studies of Closed-Cycle MHD
3. Channel and Diffuser Development
4. Regenerative Heat Exchangers
5. Analytical and Modeling Studies
6. Inert Gas Purification
7. Seed Injection
8. Superconducting Magnets

Cooperation shall also include those areas of open-cycle MHD program that by mutual consent in writing are considered to have direct application to the closed-cycle MHD program.

ARTICLE 3

Cooperation in accordance with this Agreement may include but is not limited to the following forms:

1. Exchange of scientists, engineers and other specialists for participation in agreed research, development, analysis, design and experimental activities conducted in scientific centers, laboratories, engineering offices and other facilities of each of the Parties or its contractors for agreed periods. Each such exchange of staff shall be the subject of a separate Subsidiary Agreement between the Parties.
2. Exchange of samples, materials, instruments and components for testing.
3. Exchange of scientific and technical information, and results and methods of research and development.
4. The organization of seminars and other meetings on specific topics concerning the areas of cooperation listed in Article 2 of this Agreement.
5. Visits by specialist teams or individuals to the research and development facilities of the other Party.
6. The use by one Party of the facilities owned or operated by the other Party. Such use of facilities shall be the subject of Subsidiary Agreements between the Parties, and may be subject to commercial terms and conditions.
7. Joint projects in which the Parties agree to share the work and/or costs. Each such joint project shall be the subject of a Subsidiary Agreement between the Parties.

Other forms of cooperation may be agreed to by the Parties and approved by the DOE/ECN Joint Committee (Article 4 of this Agreement).

ARTICLE 4

1. To supervise the execution of this Agreement, a DOE/ECN Joint Committee in the Field of MHD Electrical Power Generation shall be established with an equal number of representatives designated by each Party. This Joint Committee shall meet at least once each year alternately in the United States and in The Netherlands, or at other agreed times and places. The Head of the Delegation of the Receiving Party shall act as Chairman during meetings of the Joint Committee.
2. At its meetings, this Joint Committee shall evaluate the status of cooperation under this Agreement. This evaluation shall include a comprehensive review of each Party's MHD program status and plans, an assessment of the balance of exchanges in the various areas of cooperation listed in Article 2 of this Agreement and a consideration of measures required to correct any imbalance. In addition, this Joint Committee shall consider and act upon any major new proposals for cooperation.
3. For periods between meetings of this Joint Committee, each Party shall designate one person to act on its behalf in all matters concerning cooperation under this Agreement.
4. Day-to-day management in each area of cooperation listed in Article 2 of this Agreement shall be carried out by Program Managers appointed by the persons designated under paragraph 3 of this Article.

ARTICLE 5

Where it is decided a cooperative program or project under this Agreement should be subject to a formalized Subsidiary Agreement executed by both Parties, the Subsidiary Agreement shall be attached as an Annex to this Agreement and shall address all detailed provisions for implementation, including such matters as patents, exchange of equipment, and information disclosure specific to the particular joint program or project.

ARTICLE 6

## 1. General

The Parties support the widest possible dissemination of information provided or exchanged under this Agreement, subject to the need to protect proprietary information exchanged hereunder, and to the provisions of Article 9 of this Agreement.

## 2. Use of Proprietary Information

## A. Definitions as used in this Agreement

- (1) The term "information" means scientific or technical data, results or methods of research and development, and any other information intended to be provided or exchanged under this Agreement;

- (2) The term "proprietary information" means information which contains trade secrets or commercial or financial information which is privileged or confidential, and may only include such information which:
- (a) has been held in confidence by its owner;
  - (b) is of a type which is customarily held in confidence by its owner;
  - (c) has not been transmitted by the Sending Party to other entities (including the Receiving Party) except on the basis that it be held in confidence; and
  - (d) is not otherwise available to the Receiving Party from another source without restriction on its further dissemination.

B. Procedures

- (1) A Party receiving proprietary information pursuant to this Agreement shall respect the privileged nature thereof. Any document which contains proprietary information shall be clearly marked with the following (or substantially similar) restrictive legend:

"This document contains proprietary information furnished in confidence under an Agreement dated \_\_\_\_\_ between the United States Department of Energy (DOE) and The Netherlands Energy Research Foundation (ECN), and shall not be disseminated outside these organizations, their contractors, licensees and the concerned departments and agencies of the Governments of the United States and The Netherlands without the prior approval of \_\_\_\_\_.

This notice shall be marked on any reproduction hereof, in whole or in part. These limitations shall automatically terminate when this information is disclosed by the owner without restriction."

(2) Proprietary information received in confidence under this Agreement may be disseminated by the Receiving Party to:

- (a) persons within or employed by the Receiving Party, and concerned Government departments and Government agencies in the country of the Receiving Party;
- (b) prime contractors or subcontractors of the Receiving Party located within the geographical boundaries of the Receiving Party's nation, for use only within the framework of their contracts with the Receiving Party in work relating to the subject matter of the proprietary information;
- (c) organizations licensed by the Receiving Party for use only within the terms of such licenses;

provided that any proprietary information so disseminated shall be pursuant to an agreement of confidentiality and shall be marked with a restrictive legend substantially similar to that appearing in paragraph 2.B.(1) of this Article.

(3) With the prior written consent of the Party providing proprietary information under this Agreement, the Receiving Party may disseminate such proprietary information more widely than otherwise

permitted in paragraph 2.B.(2) of this Article. The Parties shall cooperate with each other in developing procedures for requesting and obtaining such approval for wider dissemination, and each Party shall grant such approval to the extent permitted by its national policies, regulations and laws.

- C. Each Party shall exercise its best efforts to ensure that proprietary information received by it under this Agreement is controlled as provided herein. If one of the Parties becomes aware that it shall be, or may reasonably be expected to become, unable to meet the non-dissemination provisions of this Article, it shall immediately inform the other Party. The Parties shall thereafter consult to define an appropriate course of action.
- D. Information arising from seminars and other meetings arranged under this Agreement and information arising from the attachments of staff, use of facilities and joint projects shall be treated by the Parties according to the principles specified in this Article provided, however, no proprietary information orally communicated shall be subject to the limited disclosure requirements of this Agreement unless an individual communicating such information places a recipient on notice as to the proprietary nature of the information communicated.
- E. Nothing contained in this Agreement shall preclude the use or dissemination of information received by a Party other than pursuant to this Agreement.



ARTICLE 7

Copyrights of the Parties or of cooperating organizations and persons shall be treated according to and consistent with internationally recognized standards of protection. As to copyrights or materials within the scope of paragraphs 2.B.(1), 2.B.(2) and 2.B.(3) of Article 6 of this Agreement owned or controlled by a Party, each Party shall make efforts to grant to the other a license to reproduce copyrighted materials.

ARTICLE 8

Information transmitted by one Party to the other Party under this Agreement shall be accurate to the best knowledge and belief of the Sending Party, but the Sending Party does not warrant the suitability of the information transmitted for any particular use or application by the Receiving Party or by any Third Party. Information developed jointly by the Parties shall be accurate to the best knowledge and belief of both Parties. Neither Party warrants the accuracy of the jointly developed information or its suitability for any particular use or application by either Party or by any Third Party.

ARTICLE 9

1. With respect to any invention or discovery made or conceived in the course of or under this Agreement:

- A. If made or conceived by personnel of one Party (the Assigning Party) or its contractors while assigned to the other Party (the Receiving Party) or its contractors, in connection with exchanges of scientists, engineers and other specialists:
- (1) The Receiving Party shall acquire all right, title and interest in and to any such invention or discovery in its own country and in third countries, subject to a nonexclusive, irrevocable, royalty-free license in all such countries to the Assigning Party, its Government and its nationals designated by it, under any such invention or discovery and any patent application, patent or other protection relating thereto.
  - (2) The Assigning Party shall acquire all right, title and interest in and to any such invention or discovery in its own country, subject to a nonexclusive, irrevocable, royalty-free license to the Receiving Party, its Government and its nationals designated by it, under any such invention or discovery and any patent application, patent or other protection relating thereto.
- B. If made or conceived by a Party or its contractors as a direct result of employing information which has been communicated to it under this Agreement by the other Party or its contractors or communicated during seminars or other joint meetings, the Party making the invention shall acquire all right, title and interest in and to such invention or discovery in all countries, subject to a grant to the other Party, its

Government and its nationals designated by it, of a royalty-free, nonexclusive, irrevocable license under any such invention or discovery and any patent application, patent or other protection relating thereto, in all countries.

- C. With regard to other specific forms of cooperation, including loans or exchanges of materials, instruments and equipment or special joint research projects, the Parties shall provide for appropriate distribution of rights to inventions or discoveries resulting from such cooperation. In general, however, each Party should normally own the rights to such inventions or discoveries in its own country with a nonexclusive, irrevocable, royalty-free license to the other Party, its Government and its nationals designated by it, and the rights to such inventions or discoveries in other countries should be agreed by the Parties on an equitable basis.

2. Each Party shall take all necessary steps to provide the cooperation from its authors and inventors required to carry out the provisions of Articles 7 and 9 of this Agreement. Each Party shall assume the responsibility to pay awards or compensation required to be paid to its own nationals according to its own national laws.

ARTICLE 10

1. Whenever an exchange of staff is contemplated under this Agreement, each Party shall ensure that qualified staff are selected for attachment to the other Party.
2. Each such attachment of staff shall be the subject of a separate attachment agreement between the Parties.
3. Each Party shall be responsible for the salaries, insurance and allowances to be paid to its staff.
4. Each Party shall pay for the travel and living expenses of its staff while on attachment to the Receiving Party unless otherwise mutually agreed.
5. The host establishment shall arrange for comparable accommodations for the other Party's staff and their families on a mutually agreeable reciprocal basis.
6. Each Party shall provide all necessary assistance to the attached staff (and their families) of the other Party as regards administrative formalities (travel arrangements, etc.).
7. The staff of each Party shall conform to the general and special rules of work and safety regulations in force at the host establishment, or as provided in a separate attachment agreement between the Parties.

ARTICLE 11

1. By mutual agreement the Sending Party may provide equipment to be utilized in joint projects and experiments. In such cases the Sending Party shall supply as soon as possible a detailed list of the equipment to be provided together with the relevant specifications and technical and administrative documentation.
2. The equipment and necessary spare parts supplied by the Sending Party for use in joint projects and experiments shall remain its property and shall be returned to the Sending Party upon completion of the joint project or experiment, unless otherwise mutually agreed.
3. The above-mentioned equipment shall be brought into operation at the host establishment only by mutual agreement between the Parties or between their senior representatives at the host establishment.
4. The host establishment shall provide the necessary premises for the equipment, and shall provide for electrical power, water, gas, etc., in accordance with technical requirements which shall be as mutually agreed upon.
5. The responsibility and expenses for the transport of equipment and materials from the United States by air or sea to an authorized port of entry in The Netherlands convenient to the ultimate destination, and return, and also responsibility for their safekeeping and insurance enroute shall rest with DOE.

6. The responsibility and expenses for the transport of equipment and materials from The Netherlands by air or sea to an authorized port of entry in the United States convenient to the ultimate destination, and return, and also responsibility for their safekeeping and insurance enroute shall rest with ECN.
7. The equipment provided by the Sending Party for carrying out joint projects or experiments shall be considered to be scientific, not having a commercial nature.
8. The Receiving Party shall be responsible for safekeeping and insurance enroute from an authorized port of entry to the ultimate destination and return.

#### ARTICLE 12

1. Should any question of liability occur between the Parties relating to damages to staff or equipment or property or between a Party and a Third Party during the cooperation, the two Parties agree that compensation for damages shall be provided by the Party responsible in accordance with the applicable laws of the country on whose territory the said damages have been incurred.
2. Definitions as used in this Agreement
  - A. The term "staff" of a Party means the employees of the Party, its contractors and subcontractors performing services under this Agreement, and

employees of these contractors and subcontractors performing services under this Agreement.

B. The term "equipment or property" of a Party means the equipment or property owned or controlled by that Party, or by the contractor and subcontractors of that Party who perform services in connection with joint projects under this Agreement.

3. The Party on whose territory the damage was incurred shall, in consultation with the other Party, take upon itself the resolution of all questions connected with the determination of the causes, extent and necessity for compensation for damages incurred. Any such resolution shall have the concurrence of the other Party.
4. In the event of any dispute between the two Parties, a Committee shall be appointed by the Parties, with equal representation. The conclusions of the Committee will be presented to DOE and ECN who shall review the conclusions and arrive at a mutual agreement concerning final disposition.

#### ARTICLE 13

1. The provisions of this Agreement shall not affect the rights or duties of the Parties under other agreements or arrangements. This Agreement also in no way precludes commercial firms or other legally constituted enterprises

in each of the two countries from engaging in commercial dealings in accordance with applicable laws of each country nor does it preclude the Parties from engaging in activities with other governments or persons, except that "proprietary information" shall have limited dissemination as set forth in Article 6 of this Agreement.

2. DOE shall act as the point of coordination for contracts and arrangements involving U.S. commercial firms when such firms or enterprises act on behalf of the U.S. Government under terms of this Agreement. ECN shall act as the point of coordination for contracts and arrangements involving firms of The Netherlands when such firms or enterprises act on behalf of the Government of The Netherlands under the terms of this Agreement. It is understood that all such contracts and arrangements shall conform with applicable laws and regulations under which each Party operates.

#### ARTICLE 14

Cooperation under this Agreement shall be in accordance with the laws of the respective countries and the regulations of the respective Parties. All questions related to the Agreement arising during its term shall be settled by the Parties by mutual agreement.

#### ARTICLE 15

Except when otherwise specifically agreed, all costs resulting from cooperation under this Agreement shall be borne by the Party that incurs them, and shall not



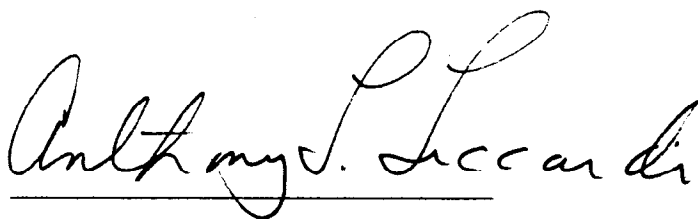
include transfer of U.S. funds to The Netherlands and of The Netherlands funds to the United States. It is understood that the ability of the Parties to carry out their obligations is subject to the availability of appropriated funds.

#### ARTICLE 16

1. This Agreement shall enter into force upon signature, shall continue for a five-year period, and may be amended or extended by mutual consent. The implementation of, and progress under, this Agreement may be subject to annual review by the Parties.
2. This Agreement may be terminated at any time at the discretion of either Party, upon 6 (six) months advance notification in writing by the Party seeking to terminate this Agreement. Such termination shall be without prejudice to the rights which may have accrued under this Agreement to either Party up to the date of such termination.
3. Upon the termination of this Agreement, for any reason whatsoever, all formalized Subsidiary Agreements cited in Article 5 of this Agreement shall be terminated forthwith.
4. In the event that during the period of this Agreement, the nature of either Party's MHD program should change substantially, whether this be by

expansion, reduction, transformation or amalgamation of major elements with the MHD program of a Third Party, either Party shall have the right to request revisions in the scope and/or terms of this Agreement.

Done in duplicate at Eindhoven this 11th day of October 1979.



For the Department of Energy  
of the United States of America (DOE)



For The Netherlands  
Energy Research Foundation (ECN)