MEMORANDUM OF UNDERSTANDING

BETWEEN

THE UNITED STATES DEPARTMENT OF ENERGY

AND

THE KOREAN MINISTRY OF SCIENCE AND TECHNOLOGY
PROVIDING FOR A COOPERATIVE LABORATORY RELATIONSHIP
BETWEEN

THE U.S. DEPARTMENT OF ENERGY SOLAR ENERGY RESEARCH INSTITUTE

AND

THE KOREA INSTITUTE OF ENERGY AND RESOURCES

The U.S. Department of Energy (DOE), and the Korean Ministry of Science and Technology (MOST), hereinafter referred to as the Parties, recognizing their mutual interest in advancing the development and use of solar energy, agreed at the September 6-8, 1978 meeting of the United States - Korean Joint Standing Committee on Nuclear and Other Energy Technology Matters to foster cooperation between the two countries in the solar energy area. To this end, DOE and MOST agree that the U.S. Solar Energy Research Institute (SERI) and the Korea Institute of Energy & Resources (KIER) shall undertake the activities as set forth below. This Memorandum of Understanding is pursuant to the Agreement for Scientific and Technical Cooperation between the United States and Korea, signed at Seoul, November 22, 1976.

1. Exchange of Information

SERI, with the concurrence of DOE, and KIER with the concurrence of MOST agree to exchange on a reciprocal basis scientific and technical information and results and methods of research and development which they have the right to disclose in those solar areas of mutual interest to the two organizations. Seminars and other meetings on specific agreed topics on solar energy may be organized by the Coordinators (See Section 4, Coordinators). In no case will there be an exchange of proprietary information.

2. Interchange of Personnel

As mutually agreed between KIER and SERI, KIER with the concurrence of MOST may send one or more staff members per year to SERI for work experience in such fields as may be agreed to. Such assignments will normally be for periods of up to one year. Such Assignments will be made at no expense to SERI, all travel and living expenses to be borne by KIER. The Assignment must have the concurrence of the United States Department of Energy. When appropriate, SERI staff members, with the concurrence of DOE, could be assigned to KIER as visiting scientists. Travel and living expenses for those visits made at the request of KIER will be born by KIER in a manner agreeable to KIER, MOST, SERI, DOE and the visiting scientist. The salary of SERI staff members visiting Korea will be paid by SERI.

Assignments to facilities in the United States shall be subject to an assignment of personnel agreement. Assignments to KIER or SERI may be terminated by either Party any time prior to expiration of the expected period at the discretion of either Party.

3. Advice and Consultation

Advice and consultation will be provided by SERI to KIER as mutually agreed in the areas in which the necessary expert advice resides in SERI staff members. If the necessary expert advice is not available at SERI, DOE will attempt to identify other expert sources and may assist, if desired, in making arrangements for obtaining the desired advice and consultation from other U.S. Government laboratories. Advice and consultation may take the form of answers to inquiries by mail or may involve short visits to KIER or SERI. If visits are necessary, the travel and living expenses will be provided by KIER.

4. Coordinators

To supervise the execution of this Memorandum of Understanding, SERI and KIER will name Coordinators through whom all requests and arrangements will be made. The Coordinators may hold meetings as deemed necessary to discuss matters of mutual interest.

5. Rights to Inventions or Discoveries

A. With respect to any invention or discovery made or

conceived in the course of or under this Memorandum of Understanding:

- (1) If made or conceived by personnel of one Party
 (the Assigning Party) or its contractors while
 assigned to the other Party (Receiving Party)
 or its contractors, in connection with exchanges
 of scientists, engineers and other specialists:
 - (a) The Receiving Party will 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 non-exclusive 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.
 - (b) The Assigning Party will acquire all right, title and interest in and to any such invention or discovery in its own country, subject to a non-exclusive, 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.

- (2) 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 Memorandum of Understanding by one of the other Parties, or its contractors, or communicated during seminars or other joint meetings, the Party making the invention will 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, non-exclusive, irrevocable license and under any such invention or discovery and any patent application, patent or other protection relating thereto in all countries.
- B. The Parties will provide all necessary cooperation from its inventors to carry out the provisions of paragraphs(a) and (b) above.
- C. Each Party will assume the responsibility to pay awards or compensation required to be paid to its own nationals according to its own laws.
- D. Copyrights of either Party or of cooperating organizations and persons will be accorded treatment consistent with internationally recognized standards of protection.

- E. Any material which may be subject to copyright developed in any cooperative activity may be copyrighted. A Party securing a copyright or rights thereto will grant a royalty-free license to the other Party to reproduce the copyrighted material.
- F. With regard to other specific forms of cooperation, as contemplated by paragraph 7, hereof, the Parties will 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 non-exclusive, 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 will be agreed by the Parties on an equitable basis.

6. Liability

No warranty of any kind is made by either side for any materials, information or services that may be furnished to the other side under this Memorandum of Understanding. Compensation for damages incurred during the implementation of this Memorandum of Understanding will be in accordance with the applicable laws and regulations of the countries of the Parties.

7. Joint Projects

If it should be determined by the Parties that a joint project of any type should be undertaken, such a project would be the subject of a separate Memorandum of Understanding executed by DOE and MOST covering the detailed provisions for implementing that project including such matters as patents, exchange of equipment and information disclosure specific to that particular project.

8. Entry into Force and Termination

This Memorandum will enter into force on the later date of signature of a Party, will continue in force for five (5) years and may be amended or extended by mutual written agreement of the Parties. The Memorandum may be terminated at any time at the discretion of either Party upon ninety (90) days advance notification in writing by the Party seeking to terminate the Memorandum of Understanding. Such termination will be without prejudice to the rights which may have accrued under this Memorandum of Understanding to the Parties up to the date of such termination.

Done in duplicate.

FOR THE UNITED STATES
DEPARTMENT OF ENERGY

FOR THE KOREAN MINISTRY OF SCIENCE AND TECHNOLOGY

Assistant Secretary for Conservation and Renewable Energy

Vice President
Korea Institute for Energy
TITLE and Resources

BY Thyo Jan Achn

DATE Nov. 6, 1981

DATE ____Nov. 6, 1981



Department of Energy

Washington, DC 20585

DEC 5 1986

Honorable Young-Hwan Choi Assistant Minister for Technology Policy and Development Ministry of Science and Technology Republic of Korea Gwacheon 171-11, Korea

Dear Mr. Choi:

Subject: Memoranda of Understanding: 5-year Extension

- 1) USDOE/ANL and ROK MOST/KIER Energy Conservation
- 2) USDOE/PETC and ROK MOST/KIER & KAIST Coal Tech.
- 3) USDOE/SERI and ROK MOST/KIER Solar Energy

Thank you for your three letters of November 5, 1986, accepting my proposals of October 7, 1986, to extend the three subject Memoranda of Understanding for five years beginning November 6, 1986.

May I call to your attention that we received one letter concerning the energy conservation cooperation and two letters with slightly different wording but both concerned with coal technology cooperation. Copies of the correspondence we received are labeled 1, 2, and 3 and are attached for your reference. The acknowledgment letter for solar energy cooperation was not in your November 5, 1986, transmittal and letter number 3 appears redundant. We would appreciate receiving a letter from you dealing with the extension of the Solar Energy Memorandum of Understanding to complete our documentation file. Meanwhile, let me assure you that there will not be any interruption in the solar energy cooperation activities.

incerely,

David B. Waller

Assistant Secretary for International Affairs and Energy Emergencies



Department of Energy Washington, DC 20585

OCT 7 1986

Honorable Tae-Sup Lee Minister Ministry of Science and Technology Republic of Korea

Dear Minister Lee:

The Memorandum of Understanding between the U.S. Department of Energy and the Korea Ministry of Science and Technology for a cooperative laboratory relationship between the USDOE Solar Energy Research Institute (SERI) and the Korea Institute of Energy and Resources (KIER) in advancing the **development** and use of solar energy expires November 6, 1986.

In accordance with Paragraph 8 of the **Memorandum** of Understanding, and in response to KIER's proposal during the U.S. -Korea Joint Standing Committee on Nuclear and Other Energy Technologies meeting held on June 26, 1986 in Washington, the U.S. Department of Energy agrees that the Memorandum of Understanding be extended for another five years from November 6, 1986, to November 6, 1991, under the same terms and conditions.

I am, therefore, pleased to **propose** on behalf of the United States Department of Energy that this letter and your favorable reply shall have the effect of extending the Memorandum of Understanding between our organizations.

Assistant Secretary for International Affairs and

Energy Emergencies

MINISTRY OF SCIENCE AND TECHNOLOGY

REPUBLIC OF KOREA GWACHEON 171-11, KOREA

Cable Address: MOSTROK

Telex: MIOST K24230

Mr. David B. Waller Assistant Secretary for International Affairs and Energy Emergencies Department of Energy Washington, DC 20585 U.S.A. December 23, 1986

Dear Mr. Waller:

Please refer to your letter of Dec.5, 1986 concerning the extension of the MOU between LJSDOE/SERI and ROK MOST/KIER. As you well pointed out, there was a redundancy in our correspondence of Nov.5, 1986 (letter #2 per your labelling). Our original letter should be changed to read as follows for lines 5-9:

for the cooperative laboratory relationship between the LJSDOE Solar Energy Research Institute (SERI) and the Korea Institute of Energy and Resources (KIER) in advancing the development of solar technology.

Attached please find a corrected copy for your files. I hope this will alleviate any confusion arising from our original letter.

I look forward to our continued cooperation in the promotion of science and technology in the future.

Sincerely yours,

7.1. Cho Young-Hwan Choi

Assistant Minister for Technology

Policy and Development

MINISTRY OF SCIENCE AND TECHNOLOGY

REPUBLIC OF KOREA
GWACHEON 171-11, KOREA

Cable Address: MOSTROK
Telex: MIOST K 24230

November 5, 1986

Mr. David B. Waller
Assistant Secretary for
International Affairs and
Energy Emergencies
Department of Energy
Washington, DC 20585
U.S.A.

Dear Mr. Waller:

This refers to your letter dated Oct.7, 1986 addressed to Minister Tae-Sup Lee, concerning the extension of the Memorandum of Understanding between the U.S. Department of Energy and the Korea Ministry of Science and Technology for the cooperative laboratory relationship between the USDOE Solar Energy Research Institute (SERI) and Korea Institute of Energy and Resources (KIER) in advancing the development of solar technology.

I would like to express my pleasure for your continuing interest in the promotion of scientific and technological cooperation between our two countries.

In accordance with Paragraph 8 of the Memorandum of Understanding, and in response to your letter dated Oct.7, 1986, I am pleased to inform you of my agreement on behalf of the Korea Ministry of Science and Technology to the extension of the Memorandum of Understanding for another five years from November 6, 1986, under the same terms and conditions.

I sincerely wish for this Memorandum of Understanding to continue greatly contributing to the promotion of science and technology in our two countries.

Sincerely yours,

Young-Hwan Choi

Assistant Minister for Technology

Policy and Development

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