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POLICY ISSUE (Notation Vote)

December 17, 1992

SECY-92-414

For: The Commissioners

From: Harold R. Denton, Director
Office of International Programs

Subject: PROPOSED RENEWAL OF THE PROTOCOL ON COOPERATION IN NUCLEAR
SAFETY MATTERS BETWEEN THE NRC AND THE PRC

Purpose: To forward to the Commission the proposed renewal of the
Protocol between the NRC and the National Nuclear Safety
Administration (NNSA) for cooperation in nuclear safety
matters, and to recommend positive Commission action.

Background: The second five-year renewal of the Protocol Between the NRC
and the State Scientific and Technological Commission (now
the National Nuclear Safety Administration, NNSA) of the
People's Republic of China on Cooperation in Nuclear Safety
Matters expired on October 17, 1991 (although informal
cooperation has continued). At that time the Chinese, by
letters to both International Programs and the U.S. Embassy
in Beijing, indicated their interest to extend it. While the
Department of State supported an extension, it suggested that
the renewal be handled in a low-key manner, due to the lack
of an umbrella Science and Technology Agreement between the
two countries, and Congressional concerns following the
Tienanmen riots in June 1989. Although the NRC forwarded the
draft text to the State Department for U.S. interagency
review and clearance in September 1991, the Chinese did not
pursue the matter either at or subsequent to the
International Atomic Energy Agency's September 1991 General
Conference, nor did the NRC perceive any direct benefit in
encouraging the agreement, given other pressing international
priorities.

Contact:
Karen Henderson, OIP/ESSC
504-2337

NOTE: TO BE MADE PUBLICLY AVAILABLE
WHEN THE FINAL SRM IS MADE
AVAILABLE

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Background:
(continued)

The Chinese, by consultation with the U.S. Embassy in Beijing (Beijing 028659, 9/11/92; Beijing 028053, 9/4/92) and the Department of State (on September 22, 1992 with M. Prochnik), have now indicated their strong interest to renew this Protocol.

Despite continuing concerns about the human rights situation in China, in spring 1991 the Congress agreed to the renewal of the overall U.S.-China Agreement on Science and Technology (Attachment 3). The House Government Operations Subcommittee has already been informally advised of the NRC's proposed extension of the Protocol and has raised no fundamental objection. The Department of State agrees with the staff that the protection of the public health and safety is paramount and that all cooperative efforts to help assure this should be supported. China's Qinshan reactor was commissioned in December 1991. The Guangdong 1 and 2 (French-supplied) reactors are due to become operational in late 1993 and mid-1994, respectively. The Chinese have also begun planning for a third power station and are said to be considering Westinghouse as the vendor.

This paper has been coordinated with the Office of the General Counsel and the Office of the Executive Director for Operations.

Resources:

Most of the cooperation which will take place under the Protocol will be nuclear safety information exchange. Costs of this are absorbed under general NRC international program funding. Funding for other projects will be decided on a case-by-case basis by mutual written agreement and will generally be "benefitting side pays" or supported by the International Atomic Energy Agency technical assistance program.

Recommendation:

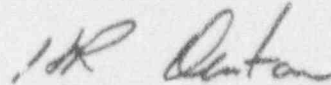
With Commission approval, the staff will forward to the State Department for final U.S. interagency review and clearance the draft at Attachment 1, which would amend and extend the NRC-NNSA Protocol (Attachment 2) for five more years, effective January 1993 or as soon thereafter as possible. We would simultaneously give an advance copy to the NNSA and formally notify oversight committees of Congress of the NRC's intent to proceed.

Scheduling:

Chairman Selin will be in Shanghai on January 11, 1993 and would be available to sign this protocol. Therefore the Commission is requested to take positive action by

December 17, 1992

Scheduling: December 18, 1992, in order to give the Executive Branch time
(continued) to review and make its recommendation.



Harold R. Denton, Director
Office of International Programs

Attachments:

1. Proposed Ltr to State-OES/SCT forwarding draft Protocol
Extension and Amendment for review and clearance
2. NRC-NSA Protocol, 1986
3. U.S-PRC Umbrella S&T Agreement, 1991

Commissioners' comments or consent should be provided directly
to the Office of the Secretary by COB Friday, December 18, 1992.

Commission Staff Office comments, if any, should be submitted
to the Commissioners NLT Thursday, December 17, 1992, with an
information copy to the Office of the Secretary. If the paper
is of such a nature that it requires additional review and
comment, the Commissioners and the Secretariat should be
apprised of when comments may be expected.

DISTRIBUTION:

Commissioners
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ATTACHMENT 1

Mr. Martin Prochnik, Director
Office of Cooperative Science
and Technology Programs
Bureau of Oceans and International
Environmental and Scientific Affairs
U.S. Department of State
Washington, DC 20520

Dear Mr. Prochnik:

Enclosed for Executive Branch review and clearance is a draft "Agreement to Extend and Amend the Protocol Between the Nuclear Regulatory Commission of the United States of America and the State Scientific and Technological Commission of the People's Republic of China on Cooperation in Nuclear Safety Matters," which has received all required NRC concurrences, including that of our Office of General Counsel.

Explanation of Protocol Extension and Amendment Benefits

This extension and amendment provides a vehicle for formally continuing the timely exchange of nuclear safety information on the design, construction, and operation of nuclear power plants in the U.S. and China, begun in 1981 with signature of the original five-year Protocol and first renewed in 1986. China's first nuclear power plant [300 MW(e) PWR at Qinshan] was commissioned in December 1991. The NRC, with over 30 years of experience regulating the U.S. civilian uses of nuclear facilities and materials to assure the protection of the public health and safety and the integrity of the environment, believes it to be in the interest of the world nuclear community that we share information we have compiled and cooperate in the safety area with countries actively engaged in peaceful nuclear programs.

The primary change made to the two-page proposal, which has been crafted as simply as possible in line with Department of State guidance, is the specific incorporation of the protection and allocation of intellectual property provisions of the "Agreement Between the Government of the United States of America and the Government of the People's Republic of China on Cooperation in Science and Technology," as amended and extended (last signed in Washington in May 1991).

Source of Funding

Most of the cooperation which will take place under the Protocol will be nuclear safety information exchange. Costs of this are absorbed under general NRC international program funding. Funding for other projects will be decided

Source of Funding (continued)

on a case-by-case basis by mutual written agreement and will generally be "benefitting side pays" or supported by the International Atomic Energy Agency technical assistance program.

Foreign Policy Considerations

Despite continuing U.S. concerns about the human rights situation in China, this Protocol is consistent with the Federal Government's current relationship with China which, on March 9, 1992 became a party to the Treaty on the Non-Proliferation of Nuclear Weapons (NPT). It is also consistent with the NRC's objective to cooperate with other countries toward the improvement of the safety of civilian nuclear power and materials programs worldwide.

Environmental Review Under NEPA or E.O. 12114

The proposed Protocol will not have significant effects on the environment of the U.S. that would require the preparation of an Environmental Impact Statement under the National Environmental Policy Act (NEPA) or an environmental assessment under E.O. 12114.

Congressional Consultations

The Congress during appropriation hearings has encouraged the NRC to seek actively the exchange of information with its foreign counterparts as well as foreign participation in its research program to make maximum use of U.S. safety research dollars. The NRC's oversight committees are being formally notified as this package is submitted for Circular 175A clearance to proceed.

Legal Authority

Atomic Energy Act of 1954, as amended, 68 Stat. 919; 42 U.S.C. 2011 et seq. [specifically Sections 42 U.S.C. 2013(e), and 2051(a)]. The authority set forth in these sections was specifically passed on to the NRC by the Energy Reorganization Act of 1974, as amended, 88 Stat. 1233; 42 U.S.C. 5801, 5841(f).

The Chinese, by consultation with the U.S. Embassy in Beijing (Beijing 028659, 9/11/92; Beijing 028053, 9/4/92) and the Department of State (on September 22, 1992 with M. Prochnik), have indicated their strong desire to renew this Protocol. In addition, the Chinese have acknowledged that Westinghouse is being considered as the supplier of choice for the projected third nuclear power station. I therefore ask to receive your clearance to proceed as soon as possible. We expect that the Chinese will want to sign simultaneously a Chinese language version of the agreed-upon text as before. We will be forwarding this to you for verification of textual authenticity as soon as we receive it (unless the Embassy handles this for us in Beijing).

Mr. Martin Prochnik

3

You should contact Dr. Karen Henderson (301/504-2337) with any questions or clearances on this package.

Sincerely,

Ronald D. Hauber, Assistant Director
Exports, Security, and Safety Cooperation
Office of International Programs

Enclosure:
Draft Protocol Extension
and Amendment (2nd Renewal)

cc w/enclosure:
C. R. Stoiber, State-OES/NTS

REDRAFT
12-01-92

AGREEMENT TO EXTEND AND AMEND THE PROTOCOL BETWEEN
THE NUCLEAR REGULATORY COMMISSION
OF THE UNITED STATES OF AMERICA
AND
THE STATE SCIENTIFIC AND TECHNOLOGICAL COMMISSION
OF THE PEOPLE'S REPUBLIC OF CHINA
ON COOPERATION IN NUCLEAR SAFETY MATTERS

The Nuclear Regulatory Commission of the United States of America and the National Nuclear Safety Administration of the People's Republic of China (NNSA) (hereinafter referred to as the Parties);

Considering the Agreement Between the Government of the United States of America and the Government of the People's Republic of China on Cooperation in Science and Technology signed in Washington, D.C. on January 31, 1979, as amended and extended (hereinafter referred to as the Agreement);

Noting that the NNSA of the People's Republic of China has responsibility for Nuclear Safety Matters and serves as Executive Body on the Chinese side;

Acknowledging the cooperative efforts of the Parties and reaffirming the importance of continued close cooperation in nuclear safety matters;

Have agreed as follows:

1. The Protocol Between the Nuclear Regulatory Commission of the United States of America and the State Scientific and Technological Commission of the People's Republic of China on Cooperation in Nuclear Safety Matters of October 17, 1981, as amended and extended, shall be amended and extended for a third five year period, effective January ____, 1993.
2. The Protocol shall be subject to the Agreement, including the Annex on the protection and allocation of intellectual property.
3. The title of the Protocol shall be amended to read as follows:

PROTOCOL BETWEEN
THE NUCLEAR REGULATORY COMMISSION
OF THE UNITED STATES OF AMERICA
AND
THE NATIONAL NUCLEAR SAFETY ADMINISTRATION
OF THE PEOPLE'S REPUBLIC OF CHINA
ON COOPERATION IN NUCLEAR SAFETY MATTERS

Done at Rockville on January _____, 1993, and at Beijing on January _____, 1993, in duplicate, in the English and Chinese languages, both texts being equally authentic.

FOR THE NUCLEAR REGULATORY
COMMISSION OF THE UNITED
STATES OF AMERICA:

FOR THE NATIONAL NUCLEAR SAFETY
ADMINISTRATION OF THE PEOPLE'S
REPUBLIC OF CHINA:

ATTACHMENT 2

AGREEMENT

TO EXTEND AND AMEND THE PROTOCOL BETWEEN

THE NUCLEAR REGULATORY COMMISSION
OF THE UNITED STATES OF AMERICA

AND

THE STATE SCIENTIFIC AND TECHNOLOGICAL COMMISSION
OF THE PEOPLE'S REPUBLIC OF CHINA

ON COOPERATION IN NUCLEAR SAFETY MATTERS

AGREEMENT
TO EXTEND AND AMEND THE PROTOCOL BETWEEN
THE NUCLEAR REGULATORY COMMISSION
OF THE UNITED STATES OF AMERICA
AND
THE STATE SCIENTIFIC AND TECHNOLOGICAL COMMISSION
OF THE PEOPLE'S REPUBLIC OF CHINA
ON COOPERATION IN NUCLEAR SAFETY MATTERS

The Nuclear Regulatory Commission of the United States of America and the National Nuclear Safety Administration of the People's Republic of China (hereinafter referred to as the Parties), in accordance with the Agreement between the Government of the United States of America and the Government of the People's Republic of China on Cooperation in Science and Technology, signed in Washington, DC on January 31, 1979, and extended on January 12, 1984, and Article 10 of the Protocol between the Nuclear Regulatory Commission of the United States of America and the State Scientific and Technological Commission of the People's Republic of China on Cooperation in Nuclear Safety Matters signed in Washington, DC on October 17, 1981, and in view of the smooth progress of the cooperation between the two Parties, and to further develop cooperation in nuclear safety between the two countries, have mutually agreed to extend the term of validity of the Protocol from October 17, 1986, for a second 5-year term, subject to the following amendments to the Protocol:

As decided at the 4th Meeting of the U.S.-PRC Joint Commission on Scientific and Technological Cooperation, the National Nuclear Safety Administration of the People's Republic of China is the executive body on the Chinese side of the Protocol between the Nuclear Regulatory Commission of the United States of America and the State Scientific and Technological Commission of the People's Republic of China on Cooperation in Nuclear Safety Matters.

Article I. The original text under Article I is deleted, and replaced by:

The Parties agree to conduct exchanges and cooperation in the aspects of nuclear safety science, technology and regulation on the basis of equality, reciprocity and mutual benefit.

A. The cooperation may include the following fields:

- I. Nuclear safety regulation and the compilation and implementation of safety regulations;
2. Safety review of the construction, operation and decommissioning of nuclear power plants and other civil nuclear installations;

3. Safety inspection of the construction, operation and decommissioning of nuclear power plants and other civil nuclear installations;
 4. Research on and development of nuclear safety technology;
 5. Other fields as mutually agreed.
- B. The cooperation may include the following forms:
1. Exchange of information and documentation on scientific and technical developments, activities and practices of mutual interest;
 2. Exchange of specialists, scholars, delegations, and scientific and technical personnel to lecture, study or participate in the work of the other Party;
 3. Collaborative research on subjects of mutual interest and joint research programs;
 4. Joint organization of academic symposia and seminars;
 5. Other forms of cooperation as mutually agreed.

Article 2. The original text under Article 2 is deleted, and replaced by:

A. To the extent that it is permitted to do so under its laws, regulations and policy directives, the U.S. side shall provide the following types of information pertaining to the safe regulation of civil nuclear installations to the Chinese side:

1. Code of Federal Regulations and examination and approval process and regulations for nuclear power plants;
2. Nuclear Safety Regulatory Guides;
3. Publications which describe the regulatory process, as they are available;
4. Technical reports of a generic nature;
5. Weekly compilation of news releases;
6. Power reactor current events and bulletins on construction, operating and decommissioning experience, and the analysis and evaluation reports of operational data.

B. To the extent that it is permitted to do so under its laws, regulations and policy directives, the Chinese side shall provide the following types of information pertaining to the safe regulation of civil nuclear installations to the U.S. side:

1. Nuclear safety regulatory reports;
2. Nuclear safety regulations, codes, guides and standards;
3. Publications which describe construction and operating experience, safety research and regulation of nuclear power plants after their completion.

Article 3. The original text under Article 3 is deleted, and replaced by:

A. Within the limits of available resources and legislative authority, the U.S. side shall assist the Chinese side in providing certain training and experience for its nuclear safety personnel. The following are typical of the kinds of on-the-job training and experience that may be provided:

1. Chinese personnel accompaniment of U.S. inspectors on operating reactor and reactor construction inspections in the U.S.;
2. Participation by Chinese personnel in U.S. NRC staff training courses conducted at the U.S. NRC's Technical Training Center in Chattanooga, Tennessee;
3. Assignment of permanent Chinese personnel to work within the U.S. NRC staff to gain experience in the practices and procedures followed by the U.S. NRC in its regulation of U.S. nuclear reactor safety and environmental impact.

To the extent that the documents and other technical assistance provided by the U.S. NRC are not adequate to meet the needs of the Chinese side for technical advice, the Parties shall consult on the best means for meeting such needs.

- B. Within the limits of available resources and legislative authority, the Chinese side shall receive nuclear safety personnel of the U.S. side under the following typical forms:

1. The Chinese side shall welcome U.S. personnel in specific fields to visit China and hold joint discussions on nuclear safety regulatory matters;
2. The Chinese side shall invite U.S. nuclear safety experts to China to give lectures and hold joint discussions on nuclear safety regulatory matters.

The Chinese side shall make every effort to assist the U.S. side in meeting its requests for information on nuclear regulatory activities.

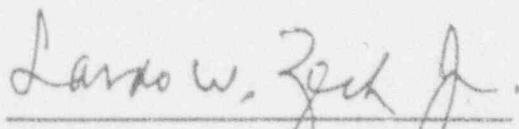
Article 4. The original text under Article 4 is deleted, and replaced by:

The execution of joint programs and projects of safety research and development, or those programs and projects under which activities are divided between the Parties, including the use of test facilities and/or computer programs owned by either Party, will be agreed upon on a case-by-case basis and will generally be the subject of separate,

specific letters of agreement which, while they are in effect, will be appended to the Protocol. Each Party, based on its own research, will transmit immediately to the other Party information concerning research results known to have urgent safety implications for nuclear facilities operating in the country of the other Party. Temporary assignments of qualified personnel by one Party in the other Party's agency will also be considered on a case-by-case basis and will, in general, be the subject of separate letters of agreement.

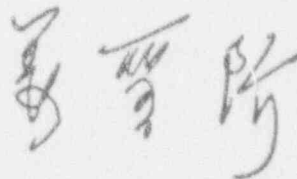
Done at Vienna, Austria on this 26th day of September 1986, in duplicate in the English and Chinese languages, both texts being equally authentic.

The agreement will go into effect from October 17, 1986.



For the Nuclear Regulatory

Commission of the United
States of America



For the National Nuclear
Safety Administration of
the People's Republic of
China



PROTOCOL BETWEEN
THE NUCLEAR REGULATORY COMMISSION
OF THE UNITED STATES OF AMERICA
AND
THE STATE SCIENTIFIC AND TECHNOLOGICAL COMMISSION
OF THE PEOPLE'S REPUBLIC OF CHINA
ON COOPERATION IN NUCLEAR SAFETY MATTERS

The Nuclear Regulatory Commission of the United States of America and the State Scientific and Technological Commission of the People's Republic of China (hereinafter referred to as the Parties), in accordance with and subject to the Agreement between the Government of the United States of America and the Government of the People's Republic of China on Cooperation in Science and Technology, signed in Washington, D.C. on January 31, 1979, and with the intent of promoting cooperation and collaboration in nuclear safety matters, have agreed as follows:

ARTICLE 1

On the basis of equality, reciprocity and mutual benefit, the Parties agree to conduct exchanges and collaborative activities in the field of nuclear safety, including as described herein, safety technology research for nuclear power plants, analysis of accidents and regulation of nuclear safety (e.g. examination and approval, regulations and inspections for nuclear power plants).

ARTICLE 2

To the extent that it is permitted to do so under its laws, regulations, and policy directives, the U.S. side shall provide the following types of information contributing to the safe regulation of peaceful nuclear power installations to the Chinese side:

1. Code of Federal Regulations and examination and approval process and regulations for nuclear power plants;
2. Safety Regulatory Guides;
3. Publications which describe the regulatory process, as they are available;
4. Technical reports of a generic nature;
5. Weekly compilation of news releases;
6. Power reactor current events and construction and operating experience bulletins.

To the extent that it is permitted to do so under its laws, regulations and policy directives, the Chinese side shall provide the following types of information contributing to the safe regulation of peaceful nuclear power installations to the U.S. side:

1. Nuclear regulatory reports;
2. Copies of safety guides and standards;
3. Publications which describe construction and operating experience, safety research and regulation of nuclear power plants after their completion.

ARTICLE 3

1. Within the limits of available resources and legislative authority, the U.S. side shall assist the Chinese side in providing certain training and experience for the safety personnel. The following are typical of the kinds of on-the-job training and experience that may be provided:

- (a) Chinese inspectors accompaniment of U.S. inspectors on operating reactor and reactor construction inspections in the U.S.;
- (b) Participation by Chinese personnel in U.S. NRC staff training courses conducted in Bethesda, Maryland;
- (c) Assignment of permanent Chinese personnel to work within the U.S. NRC staff to gain experience in the practices and procedures followed by the U.S. NRC in its regulation of U.S. nuclear reactor safety and environmental impact.

To the extent that the documents and other technical assistance provided by the U.S. NRC are not adequate to meet the needs of the Chinese side for technical advice, the Parties will consult on the best means for meeting such needs.

2. The Chinese side shall welcome U.S. personnel in specific fields to visit China and hold joint discussions on nuclear safety regulatory activities. The Chinese side shall make every effort to assist the U.S. side in meeting its requests for information on nuclear regulatory activities.

ARTICLE 4

The execution of joint programs and projects of safety research and development, or those programs and projects under which activities are divided between the Parties including the use of test facilities and/or computer programs owned by either Party, will be agreed upon on a case-by-case basis. However, each Party, based on its own research, will transmit immediately to the other Party information concerning research results known to have urgent safety implications for nuclear facilities operating in the country of the other Party.

Temporary assignments of qualified personnel by one Party in the other Party's agency will also be considered on a case-by-case basis.

ARTICLE 5

It is understood that exchanges of information and technology undertaken in connection with these cooperative efforts shall be limited to those which are useful in the development of a nuclear safety regulatory program. Neither Party is required to take any action which would be inconsistent with its laws, regulations and policy directives. No nuclear information related to proliferation-sensitive technologies shall be exchanged.

ARTICLE 6

This Protocol shall be subject to the availability of funds and manpower to each Party. The payment of costs shall be decided by mutual written agreement on a case-by-case basis. In principle the sharing of costs between the Parties shall be decided according to the extent of benefit by each Party.

ARTICLE 7

All stipulated activities under the Protocol shall be conducted under the guidance of the US-PRC Joint Commission on Scientific and Technological Cooperation.

In order to coordinate the stipulated activities under this Protocol, each Party shall designate a representative. The representatives designated by each Party may, by correspondence, decide upon the adoption, coordination and implementation of cooperative activities and on other related matters. When necessary, the representatives, by mutual agreement, may call meetings on an irregular basis to consider matters related to the implementation of this Protocol.

ARTICLE 8

Scientific and technological information derived from cooperative activities under this Protocol may be made available, unless otherwise agreed in writing between the two Parties, to the world scientific community through customary channels and in accordance with the normal procedures and domestic laws of the Parties.

ARTICLE 9

The application or use of any information exchanged or transferred between the Parties under this Protocol shall be the responsibility of the receiving Party, and the transmitting Party does not warrant the suitability of such information for any particular use or application.

ARTICLE 10

1. This Protocol shall enter into force upon signature, and, unless terminated earlier in accordance with paragraph 2 of this Article, shall remain in force for a five-year period. It may be amended or extended by mutual written agreement.

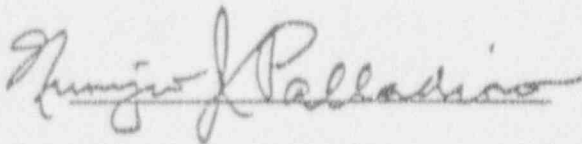
2. This Protocol may be terminated at any time at the discretion of either Party, upon 6 months advance notification in writing by the Party seeking to terminate the Protocol.

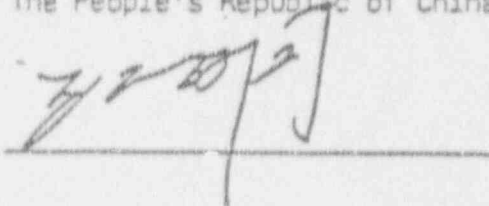
3. The termination of this Protocol shall not affect the validity or duration of specific activities being undertaken hereunder.

Done at Washington this 17th day of October 1981, in duplicate in the English and Chinese languages, both equally authentic.

For the Nuclear Regulatory
Commission of the United
States of America

For the State Scientific and
Technological Commission of
The People's Republic of China





ATTACHMENT 3

AGREEMENT TO EXTEND AND AMEND
THE AGREEMENT BETWEEN
THE GOVERNMENT OF THE UNITED STATES OF AMERICA
AND
THE GOVERNMENT OF THE PEOPLE'S REPUBLIC OF CHINA
ON COOPERATION IN SCIENCE AND TECHNOLOGY

The Government of the United States of America and the Government of the People's Republic of China (hereinafter referred to as the Parties),

In accordance with the provisions of Article 11 of the Agreement between the Governments of the two countries on Cooperation in Science and Technology (the Agreement) signed in Washington on January 31, 1979, as extended,

In view of the smooth progress of the cooperation between the Parties, and

In order to develop further scientific and technological cooperation between the two countries,

Have agreed as follows:

1. The Agreement shall be amended to include an annex on the Protection of Intellectual Property (Annex I), which is attached hereto.

2. Article 5 of the Agreement shall be amended to read:

"1. Specific arrangements implementing this Agreement may cover the subjects of cooperation, procedures to be followed, funding and other appropriate matters. With respect to funding, costs shall be borne as mutually agreed. All cooperative activities under this Agreement shall be subject to the availability of funds.

"2. Except as otherwise provided in the specific accords implementing this Agreement, protection of intellectual property and rights thereto will be as set forth in Annex I, which forms an integral part of this Agreement."

3. Article 8 of the Agreement shall be amended to read:

"Scientific and technological information derived from cooperative activities under this Agreement may be made available to the scientific community through customary channels and in accordance with the normal procedures of the participating entities and to the extent not inconsistent with the Annexes and implementing accords."

4. The Agreement shall be extended for another five years effective April 30, 1991.

This Agreement shall enter into force upon signature.

Done at Washington this 22ND day of May, 1991
in duplicate, in the English and Chinese languages, both texts
being equally authentic.

For the Government of the
United States of America:

Dan Rostenkowski

For the Government of the
People's Republic of China:

Li Rui

ANNEX I - INTELLECTUAL PROPERTY

Pursuant to Article 5 of this Agreement;

The Parties shall ensure adequate and effective protection of intellectual property created or furnished under this Agreement and relevant implementing arrangements. The Parties agree to notify one another in a timely fashion of any inventions or copyrighted works arising under this Agreement and to seek protection for such intellectual property in a timely fashion. Rights to such intellectual property shall be allocated as provided in this Annex.

I. SCOPE

- A. This Annex is applicable to all cooperative activities undertaken pursuant to this Agreement, except as otherwise specifically agreed by the Parties or their designees.
- B. For purposes of this Agreement, "intellectual property" shall have the meaning found in Article 2 of the Convention Establishing the World Intellectual Property Organization, done at Stockholm, July 14, 1967.
- C. This Annex addresses the allocation of rights, interests, and royalties between the Parties. Each Party shall ensure that the other Party can obtain the rights to intellectual property allocated in accordance with the Annex, by obtaining those rights from its own participants through contracts or other legal means, if necessary. Between a party and its nationals, the ownership of rights and interests in

intellectual property will be determined in accordance with that party's national laws and practices.

D. Disputes concerning intellectual property arising under this Agreement should be resolved through discussions between the concerned participating institutions or, if necessary, the Parties or their designees. Upon mutual agreement of the Parties, a dispute shall be submitted to an arbitral tribunal for binding arbitration in accordance with the applicable international arbitration rules. Unless the Parties or their designees agree otherwise in writing, the arbitration rules of UNCITRAL shall govern.

E. In order to protect copyrighted works created under this Agreement, both Parties shall protect unpublished works against their unauthorized publication and guarantee that, when published, copies of works will be marked with an agreed upon, distinguishing indication as provided in Appendix A to the IPR annex. If one Party, according to its laws, cannot provide protection to the other's works published in non-member countries of the Berne Convention or the UCC, the participating institution of that Party shall make best efforts to assist the other Party in publishing in a Berne or UCC member within 30 days of publication, unless copies of the published work are not received by that institution in a timely manner.

F. For purposes of this Agreement, the term "published works" means works published with the consent of their authors, whatever may be the means of the manufacture of the copies, provided that the availability of such copies has been such as to satisfy the reasonable requirements of the public, having regard to the nature of the work.

G. Termination or expiration of this Agreement shall not affect rights or obligations under this Annex.

H. Provision of any computer program, whether an application program or operating systems format and whether in source or object code, by one Party [the Providing Party] to the other Party [the Receiving Party] under this Agreement is contingent on the availability of copyright protection for that program in the territory of the receiving Party that is generally equivalent to the protection to which it is entitled in the territory of the Providing Party.

II. ALLOCATION OF RIGHTS

A. Each Party shall be entitled to a non-exclusive, irrevocable, royalty-free license in all countries to translate, reproduce, and publicly distribute scientific and technical journal articles, reports, and books directly arising from cooperation under this Agreement. All publicly distributed copies of a copyrighted work prepared under this provision shall indicate the names of the authors of the work unless an author explicitly declines to be named.

B. Rights to all forms of intellectual property, other than those rights described in Section II[A] above, shall be allocated as follows:

1. Visiting researchers, for example, scientists visiting primarily in furtherance of their education, shall receive intellectual property rights under the policies of the host institution. In addition, each visiting researcher named as an inventor shall be entitled to share in a portion of any royalties earned by the host institution from the licensing of such intellectual property.

2. [a] For intellectual property created during joint research, for example, when the Parties, participating institutions, or participating personnel have agreed in advance on the scope of work, each Party shall be entitled to obtain all rights and interests in its own territory. Rights and interests in third countries will be determined in implementing arrangements. If the research is not designated as "joint research" in the relevant implementing arrangements, rights to intellectual property arising from the research will be allocated in accordance with paragraph B[1]. In addition, persons named as inventors shall be entitled to share in a portion of any royalties earned by either institution from the licensing of the property.

[b] Notwithstanding the first paragraph above, if a type of intellectual property is protected under the laws of one Party but not the other Party, unless other allocation arrangements are agreed upon by both Parties, the Party whose laws provide for protection shall be entitled to all rights and interests in the Party's own territory and in third countries. Persons named as inventors shall nonetheless be entitled to share a portion of any royalties earned by the institution of the Party whose laws provide for protection from the licensing of such property.

3. [a] For inventions made as a result of a program of cooperative activity that involves only the transfer or exchange of information between the Parties, such as by joint meetings, seminars or the exchange of technical reports or papers, the Party whose personnel make the invention (the inventing Party) has the right to obtain all rights and interests in the invention in all countries.

[b] In any country where the inventing Party decides not to obtain such rights and interests, the other Party has the right to do so.

III. BUSINESS-CONFIDENTIAL INFORMATION

In the event that information identified in a timely fashion as business-confidential is furnished or created under the Agreement, each Party and its participants shall protect such

information in accordance with applicable laws, regulations, and administrative practice. Information may be identified as "business-confidential" if a person having the information may derive an economic benefit from it or may obtain a competitive advantage over those who do not have it, the information is not generally known or publicly available from other sources, and the owner has not previously made the information available without imposing in a timely manner an obligation to keep it confidential.

APPENDIX A:

The United States of America marking for the People's Republic of China works:

"This work [or article, book, computer program, etc. as appropriate] first published (date), in (country), was created in cooperative activities under the Agreement Between the United States of America and the People's Republic of China for Cooperation in Science and Technology. The authors authorize reproduction of this work, for scholarship, research, and private study, subject to any licenses granted under the Agreement."

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