

PROTOCOL

**FOR COOPERATION IN THE FIELD OF FOSSIL
ENERGY TECHNOLOGY DEVELOPMENT AND UTILIZATION
BETWEEN
THE DEPARTMENT OF ENERGY
OF THE UNITED STATES OF AMERICA
AND
THE MINISTRY OF SCIENCE AND TECHNOLOGY
OF THE PEOPLE'S REPUBLIC OF CHINA**

The Department of Energy of the United States of America (DOE) and the Ministry of Science and Technology (MOST) of the People's Republic of China (PRC) (hereinafter referred to as "the Parties"):

Considering the progress of cooperation between the Parties' countries in science and technological development under 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 January 31, 1979, as amended and extended (hereinafter referred to as the "Umbrella Agreement");

Noting that DOE and the former PRC Ministry of Coal Industry, now the State Administration of Coal Industry, have been cooperating under the Protocol on Cooperation in the Field of Fossil Energy Research and Development, signed April 16, 1985, as extended (the "1985 Protocol");

Taking into account recent organizational changes in the PRC Government as well as a re-prioritization of fossil energy areas of mutual interest by the Parties;

Believing that the 1985 Protocol no longer meets the needs of the Parties in the pursuit of fossil energy cooperation; and

Recognizing that there is a mutual interest in continuing to cooperate in scientific and technological research and development in the field of fossil energy, and to promote commercialization of technologies developed through such activities;

HAVE AGREED AS FOLLOWS:

**ARTICLE 1
SCOPE AND OBJECTIVE**

- A. The objective of cooperation under this Protocol is to promote scientific and technological cooperation between the Parties in the field of fossil energy, particularly activities related to research, development, demonstration, and deployment.

- B. This Protocol is subject to and governed by the Umbrella Agreement.
- C. This Protocol replaces the 1985 Protocol, as extended.
- D. All currently active annexes under the 1985 Protocol shall be subject to this Protocol, following approval by the Permanent Coordinating Group.

ARTICLE 2 AREAS OF COOPERATION

Cooperation under this Protocol may take place in the areas of coal, oil, gas, and other carbonaceous materials as they relate to extraction, processing, utilization, environment, and transportation.

ARTICLE 3 FORMS OF COOPERATION

Cooperative activities undertaken pursuant to this Protocol may include the following:

- A. Exchange of technical information and data on science and technical activities and methods and results of research and development;
- B. Short term visits by specialist teams or individual staff to DOE facilities in support of the programs of the other Party, as may be agreed by the Parties, subject to the prior written agreement on each occasion by the receiving Party;
- C. Assignment of Staff (Article 8), which includes scientists, engineers, and other specialists for agreed periods of time for cooperative training, participation in experiments, analysis, design and other research, development and demonstration activities at scientific centers, academic institutions, laboratories and other facilities of the Parties, or of contractors of the Parties;
- D. Exchange or loan of samples, materials and equipment, for experiments, testing, and evaluation;
- E. The use by one Party of the facilities owned or operated by the other Party. Such use of facilities shall be the subject of a separate written agreement between the Parties.
- F. Assistance in facilitating shipment of purchased laboratory equipment in a timely manner;

- G Organization of, and participation in, technological demonstrations and seminars, conferences and other meetings on specific mutually agreed topics for involving a broad spectrum of organizations and participants;
- H. Exchanges of information concerning commercialization and market potentials;
- I. Joint projects in which the Parties agree to share the work and costs; and
- J. Such other cooperation as may be agreed by the Parties, in advance, in writing.

ARTICLE 4 ANNEXES

The Parties shall execute an Annex for each area identified in Article 2 in which they agree to undertake joint cooperation under this Protocol. Each Annex shall be subject to this Protocol, and shall contain provisions covering its technical scope. Joint Tasks to be performed under a particular Annex shall, as appropriate, cover such things as exchange of proprietary information, management, total costs, cost sharing and schedule, and any undertakings, obligations or conditions necessary to the proposed Task.

ARTICLE 5 MANAGEMENT

- A. A Permanent Coordinating Group shall be established, in which each Party shall name one Co-Chairman to supervise implementation of activities under this Protocol.
- B. The Permanent Coordinating Group shall meet, on an annual basis, or otherwise as mutually agreed, alternately in the People's Republic of China and in the United States.
- C. In addition to the Co-Chairmen, the Permanent Coordinating Group shall be composed of at least one representative from each of the organizations that are parties to the Annexes under this Protocol. In addition, each Party shall have the right to invite advisors to such meetings, as necessary.
- D. The Permanent Coordinating Group shall review ongoing activities and shall consider future program opportunities with a view to maximizing the mutual benefits of cooperation.
- E. Decisions of the Permanent Coordinating Group shall be by consensus of the Co-Chairs.

- F. Each Annex shall have an Annex Coordinator from each of the signatory organizations to the Annex, to oversee all activities under it. Individual Tasks under each Annex shall have a Task Coordinator from each of the signatory organizations participating in the Task, to manage specific cooperative activities initiated under it, and to establish and maintain working contacts at the staff level.

ARTICLE 6 EXCHANGE OF EQUIPMENT

The following provisions shall apply concerning any exchange of equipment:

- A. A Party may provide equipment to be utilized in a joint activity, as mutually accepted in a Task under this Protocol. The sending Party shall supply, as soon as possible, a detailed list of the equipment to be provided and the necessary specifications and technical documentation. Unless otherwise agreed by the Parties, the receiving Party shall return the equipment, spare parts and documentation to the sending Party upon completion of the joint activity in accordance with the Task. Title to such equipment, spare parts and documentation shall remain in the sending Party, unless the Parties agree otherwise in writing.
- B. The receiving Party shall provide the necessary premises, shelter, and safekeeping for any equipment exchanged under this Protocol, and shall provide for electric power, water and gas and other services in accordance with any technical requirements specified in the Task.
- C. Expenses incurred for the transportation of equipment, spare parts, and documentation, including safekeeping and insurance will be addressed by prior written agreement of the Parties.
- D. Equipment exchanged under this Article shall be considered to be of a scientific character, not of a commercial character.

ARTICLE 7 ADDITIONAL ORGANIZATIONS

The Parties may invite additional organizations within their own countries to participate, at their own expense, and subject to such terms and conditions as the Parties may specify, in cooperative activities under this Protocol. Such organizations may become signatories to Annexes to this Protocol upon agreement of both Parties in writing.

**ARTICLE 8
ASSIGNMENT OF STAFF**

The following provision shall apply to assignment of staff:

- A. Each Party shall ensure that qualified staff are selected for assignment to the other Party. Each assignment of staff shall be the subject of a separate exchange of letters between the participating institutions.
- B. Each Party shall be responsible for its staffs salaries, insurance, and allowances, and for the travel and living expenses of its staff while on assignment to the receiving Party unless otherwise agreed, in advance, in writing, by the Parties.
- C. The receiving Party shall provide all necessary assistance to the visiting staff and their families as regards administrative formalities and adequate accommodations on a mutually reciprocal basis.
- D. The sending Party shall ensure that its staff conform to the general and special rules of work and safety regulations in force at the establishment of the receiving Party, unless otherwise agreed in a separate assignment agreement.

**ARTICLE 9
INTELLECTUAL PROPERTY AND BUSINESS-CONFIDENTIAL INFORMATION**

The protection and allocation of intellectual property and the use of business-confidential information obtained in the course of cooperative activities under this Protocol shall be governed by Annex I to the Umbrella Agreement.

**ARTICLE 10
AVAILABLE INFORMATION**

- A. Each Party shall make available to the other technical information that is: (1) relevant to or necessary for projects under this Protocol; and (2) either in the Party's possession or available to it, and which it has the right to disclose.
- B. Any scientific and technical information provided by one Party to the other Party pursuant to this Protocol shall be accurate to the best of the providing Party's knowledge and belief; however, neither Party warrants the suitability of the information for any particular use or application by the receiving Party or any third party.

- C. The application or use of any scientific and technical information developed and exchanged under this Protocol is to be given wide distribution. Such information, except as provided in Annex I to the Umbrella Agreement, may be made available to the public by either Party through customary channels and in accordance with normal procedures of that Party.

ARTICLE 11 SECURITY OBLIGATION

If a Party believes that an activity, information or equipment to be shared, or any anticipated result of a cooperative activity, undertaken pursuant to this Protocol, may require protection in the interests of national defense or foreign relations of either Party, that Party shall so notify the other prior to undertaking the activity or sharing the information or equipment. The Parties shall consult to identify and agree upon appropriate measures for the protection of the information or equipment.

ARTICLE 12 COSTS

Unless otherwise agreed in writing, costs resulting from activities under this Protocol shall be the responsibility of the Party that incurs them.

ARTICLE 13 APPLICABLE LAW

Each Party shall conduct the activities provided for in this Protocol subject to its applicable laws and regulations, and shall provide resources subject to the availability of personnel and appropriated funds.

ARTICLE 14 DISPUTES

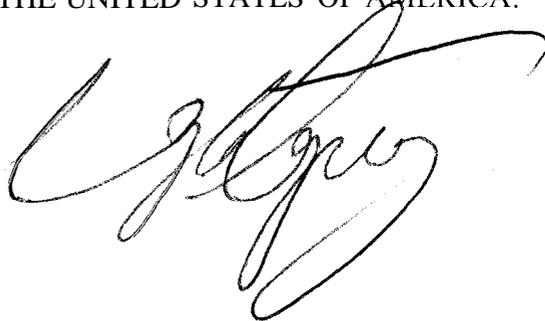
Any disputes concerning the interpretation or application of this Protocol shall be settled by agreement of the Parties.

**ARTICLE 15
GENERAL PROVISIONS**

- A. This Protocol shall enter into force upon signature and shall remain in force for five (5) years or so long as the Umbrella Agreement remains in force, whichever is shorter.
- B. This Protocol may be extended for additional (5) year terms by written agreement of the Parties following joint review at the end of each 5-year period, so long as the Umbrella Agreement remains in force.
- C. This Protocol may be amended by written agreement of the Parties.
- D. Either Party may terminate this Protocol at any time upon six (6) months advance written notice to the other Party. Such termination shall be without prejudice to the rights that may have accrued to either Party under this Protocol up to the date of termination.

Done at Washington, D.C., in duplicate, in the English and Chinese languages, each text being equally authentic, this 20th day of April, 2000.

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



FOR THE MINISTRY OF SCIENCE AND
TECHNOLOGY OF THE PEOPLE'S
REPUBLIC OF CHINA:

