PROTOCOL ON COOPERATION IN THE FIELD OF FAST NEUTRON BREEDER-REACTORS BETWEEN THE U.S. ATOLIC ENERGY COLLISSION AND THE USSR STATE COMMITTEE FOR UTILIZATION OF ATOMIC ENERGY

The U.S. Atomic Energy Commission (AEC) and the USSR State Committee for the Utilization of Atomic Energy (State Committee):

* Wishing to establish closer and long-term cooperation in the field of fast breeder reactor research and development;

Recognizing the roles of the AEC and the State Committee in fast breeder reactor research and development;

Noting that the solution of the problems of obtaining energy from fast breeder reactors will also provide for a significant smelioration of environmental problems;

In implementation of Article 2 of the Agreement between the USA and the USSR on Scientific and Technical Cooperation in the Field of Peaceful Uses of Atomic Energy of June 21, 1975;

Have agreed as follows:

ARENOLE I

Cooperation in the development of fast breeder reactors will be directed toward finding solutions to mutually agreed upon basic and applied problems connected with the design, development, construction and operation of nuclear power plants utilizing fast breeder reactors. This cooperation may include the joint exchange of experience and results of theoretical, experimental, and

design projects and also, joint research and experiments. This cooperation will be realized on the basis of mutual benefit, equality and reciprocity.

ARTICLE II

The areas of cooperation in fast breeder reactors may include the following:

- 1. Research and development of materials and engineering technology applicable to component and systems development.
- 2. Design, research and development, construction and peration of nonnuclear test facilities in support of the fast breeder reactor program.
- 3. Research and development and testing of components and systems for experimental reactor plants and power reactor demonstration plants, including quality assurance practices.
- 4. Research and development, design, construction, operational reactor plants and power reactor demonstration plants.
 - 5. Economic, environmental and safety considerations in the research and development of fast breeder reactors.

ARTICLE III

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Committee on Cooperation of the AEC and State Committee

established a Joint Fast Breeder Reactor Coordinating Committee

Rules and regulations for the operation of the Joint Coordinatin

Committee will be developed as an annex to this Protocol.

- 2. The Joint Coordinating Committee will implement, coordinate and review all aspects of this Protocol, and make recommendations to the AEC and the State Committee concerning additions and changes to this Protocol through the American-Boviet Joint Committee on Cooperation in the Field of the Peaceful Utilization of Atomic Energy.
- 3. The Joint Coordinating Committee shall consist of 18 representatives, nine to be appointed by each of the agreeing Parties and shall meet, as a rule, once a year in the USA and the USSR, alternately. The time and place for each meeting will be mutually agreed upon in advance, but shall be scheduled so as to provide adequate time in advance of meetings of the Joint Committee on Cooperation to permit their consideration of the Joint Coordinating Committee proposals.
 - 4. The Joint Coordinating Committee may organize and convene (ad hoc) scientific and engineering working groups and panels for the study of specific areas of research and development in the field of fast breeder reactors.

ARTICLE IV

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The cooperation in accordance with this Protocol may be realized in the following forms:

L. Organization of joint consultations, seminars and meetings on basic problems of research, construction and design projects regarding the building of nuclear power installations with fast neutron breeder-reactors. Meetings of

this kind will take place not more than three times a year in accientific centers of both Parties, alternately, in conformity with an agreed-upon program. The number of participants from each Party can comprise up to IO people and the length of the resting - up to 15 days.

- 2. Participation of scientists and specialists of one of the Parties in research and experiments in corresponding scientific centers and laboratories of the other Party for period to be agreed upon in each case.
- 3. Tests of samples, materials, instruments and separate elements of reactor installations of the one Party on the stands and installations of the other Party.
- technical documentation, results and methods of research and development.
- 5. Detailed review of specific proposals such as experiment and tests made by either country. Such review would be made by scientists, engineers and other specialists with up to seven parsons represented in the review group from each of the two countries, and the length of stay of such persons shall be up to three weeks in the receiving country.

Other forms of cooperation may be added in accordance with mutual agreement of the Parties.

ARTICLE V

1. This cooperation, on projects and programs mutually agreed upon by the Parties, will be conducted in scientific and technical centers and other establishments directly connected with the development of nuclear power plants utilizing fast breeder reactors. The scientific and technical centers and other establishments will be designated as specific programs and projects are agreed upon.

ARTICLE VI

- vill exchange, on a reciprocal basis, scientific and technical information, documentation and results of research and developmentated to work carried out under this Protocol.
- research and also engineering developments will be published in the form of joint reports or communications of the American and Soviet specialists. In the event that specialists of one Party do not wish to participate in such publications, the specialists of the other Party may publish in their own name.
- 3. By agreement of the Parties, alternate arrangements
 for publications relating to specific joint activities may be
 considered.

ARTICLE VII

- 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 the technical and informational documentation.
- 2. The equipment and necessary spare parts supplied by the sending Party for use in joint projects and experiments shoremain its property and shall be returned to the sending Party upon completion of the joint project or experiment, unless otherwise agreed.
- operation at the host establishment only by mutual agreement between the Parties or between their senior representatives at the host establishment.
- The host establishment shall provide the necessary premises for the equipment, and will provide for electric power vater, gas, etc., in accordance with technical requirements which shall be as mutually agreed upon.
- 5. Responsibility and expenses for the transport of requipment and materials from the United States by plane to Moscow or by ship to Leningrad, or authorized port of entry convenient to the ultimate destination, and return, and also responsibility for their safe keeping and insurance en route shall rest with the AEC.

equipment and materials from the Soviet Union by plane or ship to New York, or authorized port of entry convenient to the ultimate destination, and return, and also responsibility for their safe keeping and insurance en route shall rest with the State Committee.

7. The equipment provided by the sending Party for carrying out joint projects or experiments will be considered to be scientific, not having a commercial character.

ARTICLE VIII

- 1. Each Party shall ensure the selection of adequate staff with the skills and competence necessary to conduct agreed—
 upon joint projects. In carrying out such joint projects, selecte
 staff of both Parties shall be attached to the host establishment
- insurance and allowances to be paid to its personnel.
- 3. Each Party shall pay for the travel and living expenses of its personnel when staying at the establishment of the host Party unless otherwise agreed.
- accommodations for the other Party's personnel and their families on a mutually agreeable reciprocal basis.
- the specialists (and their ramilies) of the other Party as regards administrative formalities (obtaining visas, travel
 arrangements, etc.)

6. The personnel of each Party shall conform to the general rules of work and safety regulations in force at the host establishment.

ARTICLE IX

The USAEC and the SCAE will act as the point of coordination for all such contacts and arrangements between U.S. firms and USSR enterprises acting on behalf of their respective governments under the terms of this Protocol: it being understood that all such contacts and arrangements shall conform with applicable U.S. and Soviet laws and regulations.

ARTICLE X

The Parties shall develop additional terms, establishing the responsibility of the Parties for damages that may occur in the course of the joint activities under this Protocol.

ARTICLE XI

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The Parties shall develop additional terms covering rights to obtain patents as a result of the joint activities of the specialists of the Parties under this Protocol.

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

ARTICLE ZEEF

Each Party shall bear the costs of its participation in the cetivities under this Protocol, and shall control the expenditure of the funds necessary to meet such costs.

ARTICLE TIVE

chall continue in force for ten rears, shbject to extension as no mutually agreed by the farties. The implementation and progres under this Protocol will be subject to review by the Parties at the end of the first five-year period.

2. All joint efforts and experiments not completed at the termination of this Protocol will be continued until their completion under the terms of this Protocol.

DONE at Morcow this eighth day of October 1974, in duplicate, in the English and Russian languages, both texts being equally authentic.

For the U.S. Atomic mergy

Commission

For the USSR State Committee

for the Utilization of Atomi:

Energy