AGREEMENT

between

## THE UNITED STATES DEPARTMENT OF ENERGY

and

# THE COMMISSARIAT A L'ENERGIE A'TOMIQUE OF FRANCE

for

AN EXCHANGE OF

NUCLEAR CRITICALITY SAFETY INFORMATION

The COMMISSARIAT A L'ENERGIE ATOMIQUE (CEA) OF FRANCE AND THE UNITED STATES DEPARTMENT OF ENERGY (DOE), hereinafter the "Parties," desiring to achieve greater safety in the operation of nuclear facilities by examining the behavior of fissile solutions, in the reactivity region of delayed critical and supercritical, in order to improve the understanding of neutron physics applied to hypothetical accident conditions.

Have agreed as follows:

#### ARTICLE 1 - OBJECT

The object of this Agreement is to establish the conditions for an exchange and sharing of nuclear criticality information on the topics described in Article 2 hereunder.

### ARTICLE 2 - CEA and DOE OBLIGATIONS

- 1. To meet the object of this Agreement CEA shall, at its own expense:
  - a. provide to DOE nuclear excursion data derived from the operation of CEA's research reactor SILENE, located at Valduc, including but not limited to data on pressure waves and radiolytic gas formation;
  - analyze nuclear excursion data derived from the operation of DOE's aqueous research reactor SHEBA located at Los Alamos, making use of CEA's existing mathematical models or developing new mathematical models;
  - c. provide the results of its anlaysis to DOE; and
  - d. provide a copy of the mathematical model used to conduct its analysis to DOE.
- 2. To meet the object of this Agreement DOE shall, at its own expense:
  - a. provide to CEA nuclear excursion data derived from the operation of DOE's aqueous research reactor SHEBA, located at Los Alamos;
  - b. analyze the SILENE data received from CEA, making use of DOE's existing mathematical models or developing new mathematical models;
  - c. provide the results of its analysis to CEA; and
  - d. provide a copy of the mathematical model used to conduct its analysis to CEA.
- 3. The Parties shall consult regarding the instrumentation and the dosimetry used to obtain data from SILENE and SHEBA, as necessary to analyze such data.
- 4. Each Party, at its own expense, shall have the right to observe at the facilities of the other Party the data collection or analytical

activities that are undertaken pursuant to this Agreement. This right may be exercised by short-term visits or by the attachment of staff, subject to the provisions of Article 5 of this Agreement.

#### ARTICLE 3 - INFORMATION - PATENTS

- 1. The Parties shall exchange information, which they have a right to disclose, that is necessary to carry out the activities under this Agreement.
- 2. Information to be exchanged between the Parties shall not be of a category important to the design, construction, fabrication, operation, or maintenance of a uranium enrichment or nuclear fuel reprocessing facility, or a facility for the production of heavy water.
- 3. Information arising from this Agreement shall be promptly exchanged between the Parties.
- 4. Reports of activities carried out under this Agreement shall be published as joint publications, as mutually agreed by the Parties.
- 5. Information exchanged under and arising from this Agreement may be distributed by either Party after it independently verifies the technical validity of such information. Such information, except as noted in paragraph 6 of this Article, may be made available to the public by either Party through customary channels and in accordance with normal procedures of the Parties.
- 6. Proprietary Information (in French "Informations Privilegieec") shall not be accepted for or utilized in the activities under this Agreement without the express written agreement of the Parties. For the purposes of this Agreement, Proprietary Information shall mean information of a confidential nature such as trade secrets and know-how, or commercial or financial information (for example, computer programs, design procedures and techniques, chemical composition of materials, or manufacturing methods, processes, or treatments) which is appropriately marked, provided such information:
  - a. is of a type customarily held in confidence by its owner;
  - b. is not generally known or publically available from other sources;
  - c. has not been made available previously by the Transmitting Party to others without an agreement concerning its confidentiality; and
  - d. is not already in the possession of the Receiving Party or its contractors.
- 7. Copyrights of either Party or of cooperating organizations and persons shall be accorded treatment consistent with internationally recognized standards of protection. As to copyrights of material within the scope of paragraph 1 of this Article owned or controlled by a Party, each Party shall make efforts to grant to the other a license to reproduce the copyrighted material.

- 8. Inventions or discoveries conceived or first actually reduced to practice in the course of cooperative activities undertaken by the Parties in implementing this Agreement (hereinafter referred to as "arising inventions") shall be identified and reported promptly by each Party. Information regarding inventions on which patent protection is to be obtained shall not be published or publically disclosed by the Parties until a patent application has been filed in either country of the Parties; provided, however, that this restriction on publication or disclosure shall not extend beyond six months from the date of reporting of the invention. It shall be the responsibility of the inventing Party to mark appropriately reports which disclose inventions that have not been appropriately protected by the filing of a patent application.
- 9. Arising inventions shall be owned:
  - a. by CEA in France subject to a royalty-free, nonexclusive, irrevocable license to DOE, its Government, and its nationals designated by it;
  - b. by DOE in the United States subject to a royalty-free, nonexclusive, irrevocable license to the CEA, its Government, and its nationals designated by it; and
  - c. by the Inventing Party in third countries, subject to a royalty-free, nonexclusive, irrevocable license to the other Party, its Government, and its nationals designated by it.
- 10. Each Party shall assume the responsibility to pay awards or compensation required to be paid to its own nationals according to its own laws. Each Party shall take, without prejudice to any rights of inventors and authors under its national laws, all necessary steps to provide the cooperation from its inventors and authors required to carry out the provisions of this Article.

#### ARTICLE 4 - LIABILITIES

The application or use of any information exchanged or transferred between the Parties under this Agreement shall be the responsibility of the Party receiving it, and the Transmitting Party does not warrant the suitability of such information for any particular use or application. Neither Party warrants the suitability of information arising from the cooperation under this Agreement for any particular use or application.

#### ARTICLE 5 - ATTACHMENT OF STAFF

- 1. Whenever an attachment of staff is contemplated under this Agreement, each Party shall ensure that qualified staff is selected for attachment to the other Party or its contractors.
- 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 host Party, unless otherwise agreed.
- 5. The host establishment shall arrange or do its best to arrange for comparable accommodations for the attachment staff and their families on a mutally agreeable, reciprocal basis.
- 6. Each Party shall provide all necessary assistance to the attached staff and their families as regards administrative formalities, such as travel arrangements.
- 7. The attached 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 agreed in separate attachment of staff agreements.

#### ARTICLE 6 - DAMAGES

Compensation for damages arising from cooperative activities under this Agreement shall be in accordance with the applicable laws of the countries of the Parties.

#### ARTICLE 7 - MISCELLANEOUS

- 1. Cooperation under this Agreement shall be subject to the laws and regulations of the countries of the Parties. All questions related to this Agreement arising during its term shall be settled by the Parties by mutual agreement.
- 2. Unless otherwise agreed in writing, all costs resulting from cooperation under this Agreement shall be borne by the Party that incurs them.
- 3. Cooperation under this Agreement shall be subject to the availability of appropriated funds.

#### ARTICLE $\delta$ - DURATION

- 1. This Agreement shall enter into force on the later date of signature, and shall remain in force for a period of five years unless sooner terminated.
- 2. This Agreement may be terminated at any time by either Party upon six month's notice.
- 3. This Agreement may be amended or extended at any time by mutual written agreement of the Parties.

4. All cooperative activities begun hereunder but not completed at the expiration or termination of this Agreement may be continued until their completion under terms of this Agreement as if this Agreement were still in effect.

Done at in duplicate in the English and French languages, each equally authentic.

DEPARIMENT OF ENERGY a (Signature)

Mary L. Walker (Name)

FOR THE UNTIED STATES

Assistant Secretary for Environment, Safety, and Health (Title)

FOR THE COMMISSARIAT A L'ENERGIE ATOMIQUE OF FRANCE

François Cogné (Name)

Directeur de l'Institut de Protection et de Sûreté Nucléaire

(Title)

\_\_\_\_\_June 20, 1986\_\_\_\_\_ (Date)