

Agreement between the  
UNITED STATES DEPARTMENT OF ENERGY  
and the Belgian  
CENTRE D'ETUDE DE L'ENERGIE NUCLEAIRE  
STUDIECENTRUM VOOR KERNENERGIE  
in the field of  
RADIOACTIVE WASTE MANAGEMENT

The United States Department of Energy (DoE) and the Belgian Centre d'Etude de l'Energie Nucléaire/Studiecentrum voor Kernenergie (CEN/SCK), hereinafter called the Parties;

sharing non-proliferation objectives and consequently having a mutual interest in the development of radioactive waste management techniques in such a manner as not to contribute to the proliferation of nuclear weapons;

recognizing the advantages of sharing information derived from their respective experiences and capabilities;

noting the respective statutory authority of DoE and CEN/SCK to disseminate information related to nuclear energy; and

desiring to engage in specific cooperative arrangements to exchange a broad range of information concerning radioactive waste management; that includes the alternatives of disposal of separated waste products and the disposal of spent fuel;

have agreed as follows :

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## ARTICLE 1

1. The objective of cooperation under this Agreement is to establish, for the mutual benefit of the Parties, a reasonably balanced exchange of technology in the field of radioactive waste management.
2. The parties agree to use their best efforts to balance and maximize the exchange of information under this Agreement, subject to the provisions of Article 13.
3. The Parties agree to use their good offices to facilitate activities under this Agreement, particularly those involving exchange, visits or assignment of personnel, recognizing that there are established requirements and procedures governing such visits and assignments to facilities of the respective Parties, including contractor facilities, and recognizing that such requirements and procedures are not affected by this Agreement.
4. The Parties agree to establish jointly any detailed procedures required to carry out this Agreement. All situations not specifically covered in this Agreement shall be settled by mutual agreement of the Parties and shall be governed by the basic principle of equivalent benefit to both Parties.
5. In the course of implementing this Agreement, the parties may exchange safeguards technology as applicable to the areas of cooperation, listed in Article 2.

## ARTICLE 2

The areas of cooperation in radioactive waste management technology covered by this Agreement may include :

1. Terminal Storage in Geological Formations
  - a. Characterization of Geologic Formations
  - b. Development and Testing of Facilities
  - c. Safety Assessment and Public Acceptance Matters
2. Technology of Retrievable Storage
  - a. Design Verification of Canister Storage
  - b. Retrievability Design in Geologic Repositories
  - c. Storage of Plutonium Contaminated Waste
3. Waste Processing Technology
  - a. High Level Waste Solidification
  - b. Fuel Hardware and Hulls
  - c. Intermediate and Low Level Liquid Waste
  - d. Contaminated Solid Waste
    - (1) Combustibles
    - (2) Non-combustibles

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- e. Airborne Waste
  - (1) Particulates and Iodine
  - (2) Noble Gases
  - (3) Tritium, Including its Separation from Water
  - (4) Carbon-14
- 4. Environmental Effects
  - a. Assessment Methodology
  - b. Burial Ground Waste Migration Models

Other areas of cooperation may be added by mutual agreement.

### ARTICLE 3

Cooperation in accordance with this Agreement may include but is not limited to the following forms :

1. Exchange of scientists, engineers and other specialists for participation in agreed research, development, analysis, design and experimental activities conducted in scientific centers, laboratories, engineering offices and other facilities of each of the Parties or its contractors for agreed periods. Each such exchange of staff shall be the subject of a separate attachment agreement between the Parties.
2. Exchange of samples, materials, instruments and components for testing.
3. Exchange of scientific and technical information, and results and methods of research and development.
4. The organization of seminars and other meetings on specific agreed topics concerning the fields of technology listed in Article 2. Such seminars shall normally be held alternately in the United States and in Belgium.
5. Short visits by specialist teams or individuals to the research and development facilities of the other Party.
6. The use by one Party of the facilities owned or operated by the other Party. Such use of facilities shall be the subject of Subsidiary Agreements between the Parties, and may be subject to commercial terms and conditions.
7. Joint projects in which the Parties agree to share the work and/or costs. Each such joint project shall be the subject of a Subsidiary Agreement between the Parties.

Other forms of cooperation may be agreed to by the Parties and approved by the Joint Committee (Article 4).

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#### ARTICLE 4

1. To supervise the execution of this Agreement, a Joint DoE-CEN/SCK Committee in the Field of Radioactive Waste Management shall be established. This Committee shall meet each year alternately in the United States and Belgium, or at other agreed times and places. The Head of the Delegation of the Receiving Party shall act as Chairman during meetings of the Committee.
2. At its meetings, the Joint Committee shall evaluate the status of cooperation under this Agreement. This evaluation shall include a comprehensive review of each Party's radioactive waste management program status and plans, an assessment of the balance of exchanges in the various areas of cooperation listed in Article 2, and a consideration of measures required to correct any imbalances. In addition, the Joint Committee shall consider and act on any major new proposals for cooperation.
3. For periods between meetings of the Joint Committee, each Party shall designate one person to act on its behalf in all matters concerning cooperation under this Agreement.
4. Day to day management of the cooperation in each of the areas listed in Article 2 shall be carried out by Correspondents appointed by the persons designated under paragraph 3 of this Article.

#### ARTICLE 5

Where it is decided a cooperative program or project under this Agreement should be subject to a formalized Subsidiary Agreement executed by both Parties, the Subsidiary Agreement should be attached as an annex to this Agreement and should address all detailed provisions for implementation, including such matters as patents, exchange of equipment, and information disclosure specific to the particular program or project.

#### ARTICLE 6

1. General  
The Parties support the widest possible dissemination of information provided or exchanged under this Agreement, subject to the need to protect proprietary information exchanged hereunder, and to the Provisions of Article 8.
2. Use of Proprietary Information
  - A. Definitions as used in this Agreement :
    - (i) The term "information" means scientific or technical data, results or methods of research and development, and any other information such as cost evaluations intended to be provided or exchanged under this Agreement;



(ii) The term "proprietary information" means information which contains trade secrets or commercial or financial information which is privileged or confidential, and may only include such information which :

- a) has been held in confidence by its owner;
- b) is of a type which is customarily held in confidence by its owner;
- c) has not been transmitted by the transmitting Party to other entities (including the receiving Party) except on the basis that it be held in confidence; and
- d) is not otherwise available to the receiving Party from another source without restriction on its further dissemination.

**B. Procedures**

(i) A Party receiving proprietary information pursuant to this Agreement shall respect the privileged nature thereof. Any document which contains proprietary information shall be clearly marked with the following (or substantially similar) restrictive legend :

"This document contains proprietary information furnished in confidence under an Agreement dated ..... between the United States Department of Energy and the Belgian Centre d'Etude de l'Energie Nucléaire/Studiecentrum voor Kern-energie (CEN/SCK) and shall not be disseminated outside these organizations, their contractors, licensees and the concerned departments and agencies of the Governments of the US and Belgium without the prior approval of .....

This notice shall be marked on any reproduction hereof, in whole or in part. These limitations shall automatically terminate when this information is disclosed by the owner without restriction."

(ii) Proprietary information received in confidence under this Agreement may be disseminated by the receiving Party to :

- a) persons within or employed by the receiving Party, and concerned Government departments and Government agencies in the country of the receiving Party;
- b) prime or subcontractors of the receiving Party located within the geographical limits of the receiving Party's nation, for use only within the framework of their contracts with the receiving Party in work relating to the subject matter of the proprietary information;
- c) organizations licensed by the receiving Party for use only within the terms of such licenses;

provided that any proprietary information so disseminated shall be pursuant to an agreement of confidentiality and shall be marked with a restrictive legend substantially identical to that appearing in subparagraph 2.B(i) above.

(iii) With the prior written consent of the Party providing proprietary information under this Agreement, the receiving Party may disseminate such proprietary information more widely than otherwise permitted in the foregoing subsection (ii). The Parties shall cooperate with each other in developing procedures for requesting and obtaining

approval for such wider dissemination, and each Party will grant such approval to the extent permitted by its national policies, regulations and laws.

- C. Each Party shall exercise its best efforts to ensure that proprietary information received by it under this Agreement is controlled as provided herein. If one of the Parties becomes aware that it will be, or may reasonably be expected to become, unable to meet the non-dissemination provisions of this Article, it shall immediately inform the other Party. The Parties shall thereafter consult to define an appropriate course of action.
- D. Information arising from seminars and other meetings arranged under this Agreement and information arising from the attachments of staff, use of facilities and joint projects shall be treated by the Parties according to the principles specified in this Article; provided, however, no proprietary information orally communicated shall be subject to the limited disclosure requirements of this Agreement unless the individual communicating such information places the recipient on notice as to the proprietary character of the information communicated.
- E. Nothing contained in this Agreement shall preclude the use or dissemination of information received by a Party other than pursuant to this Agreement.

#### ARTICLE 7

Information transmitted by one Party to the other Party under this Agreement shall be accurate to the best knowledge and belief of the Transmitting Party, but the Transmitting Party does not warrant the suitability of the information transmitted for any particular use or application by the Receiving Party or by any third Party. Information developed jointly by the Parties shall be accurate to the best knowledge and belief of both Parties. Neither Party warrants the accuracy of the jointly developed information or its suitability for any particular use or application by either Party or by any third Party.

#### ARTICLE 8

- 1. With respect to any invention or discovery made or conceived in the course of or under this Agreement :
  - a) If made or conceived by personnel of one Party (the Assigning Party) or its contractors while assigned to the other Party (Recipient Party) or its contractors, in connection with exchanges of scientists, engineers and other specialists;
    - (1) The Recipient Party shall 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, with the right to grant sublicenses, under any such invention or discovery and any patent application, patent or other protection relating thereto.

- (2) The Assigning Party shall 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 Recipient Party, with the right to grant sublicenses, under any such invention or discovery and any patent application, patent or other protection relating thereto.
  - b. 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 Agreement by the other Party or its contractors or communicated during seminars or other joint meetings, the Party making the invention shall acquire all right, title and interest in and to such invention or discovery in all countries, subject to a grant to the other Party of a royalty-free, non-exclusive, irrevocable license with the right to grant sublicenses in and to any such invention or discovery and any patent application, patent or other protection relating thereto, in all countries.
  - c. With regard to other specific forms of cooperation, including loans or exchanges of materials, instruments and equipment or special joint research projects, the Parties shall 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, and the rights to such inventions or discoveries in other countries should be agreed by the Parties on an equitable basis.
2. Neither Party shall discriminate against citizens of the country of the other Party with respect to granting any license or sublicense under any invention or discovery pursuant to paragraph 1 above.
  3. Each Party shall assume the responsibility to pay awards or compensation required to be paid to its own nationals according to its own laws.

#### ARTICLE 9

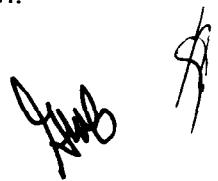
1. Whenever an exchange of staff is contemplated under this Agreement, each Party shall ensure that qualified staff are selected for attachment to the other Party.
2. Each such attachment of staff shall be the subject of a separate attachment agreement between the Parties.
3. Each Party shall be responsible 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.

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5. The host establishment shall arrange for comparable accommodations for the other Party's staff and their families on a mutually agreeable reciprocal basis.
6. Each Party shall provide all necessary assistance to the attached staff (and their families) of the other Party as regards administrative formalities (travel arrangements, etc.).
7. The 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 10

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 technical and informational documentation.
2. The equipment and necessary spare parts supplied by the sending Party for use in joint projects and experiments shall remain its property and shall be returned to the sending Party upon completion of the joint project or experiment, unless otherwise agreed.
3. The above-mentioned equipment shall be brought into operation at the host establishment only by mutual agreement between the Parties or between their senior representatives at the host establishment.
4. The host establishment shall provide the necessary premises for the equipment and will provide for electrical power, water, gas, etc., in accordance with technical requirements which shall be as mutually agreed upon.
5. The responsibility and expenses for the transport of equipment and materials from the United States by plane or ship to an authorized port of entry in Belgium convenient to the ultimate destination, and return, and also responsibility for their safekeeping and insurance en route shall rest with DoE.
6. The responsibility and expenses for the transport of equipment and materials from Belgium by plane or ship to an authorized port of entry in the United States convenient to the ultimate destination, and return, and also responsibility for their safekeeping and insurance en route shall rest with CEN/SCK.
7. The equipment provided by the sending Party for carrying out joint projects will be considered to be scientific, not having a commercial character, for the purposes of designation and import/export declarations.
8. The receiving Party shall be responsible for safekeeping and insurance en route from the authorized port of entry to the ultimate destination and return.





## ARTICLE 11

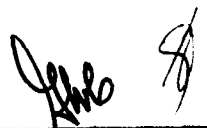
Both Parties agree that the following provisions shall apply concerning compensation for damages incurred during the implementation of joint projects. It is understood that such compensation will be in accordance with the laws of the country on whose territory damages will have been incurred, except as otherwise provided.

### 1. First and Second Party Damages

- a. Each Party shall alone be responsible for payment of compensation for damages suffered by its staff regardless of where the damages have been incurred, and will not bring suit or lodge any other claims against the other Party for damages to its property, except as noted in paragraphs 1.b. and 1.c.
- b. If the damage suffered by the staff of one of the Parties is due to the gross negligence or intentional misconduct of the staff of the other Party, the latter shall reimburse the former an agreed to sum of monies which the former would be obliged to pay to the person or persons suffering the damages.
- c. If damages to the property of one Party are due to the gross negligence or intentional misconduct of the staff of the other Party, the latter shall compensate the former for the damages suffered.

### 2. Third Party Damages

- a. Defective Equipment  
Damages caused to the staff or property of a Third Party by defective equipment of a Party will be compensated for by the Party to which the equipment belongs, except as noted in paragraph 2.c.
- b. By Staff  
Damages caused to the staff or property of a Third Party by the staff of a Party will be compensated for by the Party in whose territory the damages occurred, except as noted in paragraph 2.c.
- c. Gross Negligence or Intentional Misconduct  
If damages referred to in paragraphs 2.a. and 2.b. were due to the gross negligence or intentional misconduct of the staff of a Party, that Party will bear the financial responsibility in regard to the Third Party.
- d. Damage by Third Party  
In the event of damage of any kind caused by a Third Party to the staff or property of one or both of the Parties, each of these, upon the request of the other Party will render it aid in the corroboration of claims on the Third Party.
- e. Resolution of Questions  
The Party on whose territory the damage was incurred will, in consultation with the other Party, take upon itself the resolution, with the Third Party, of all questions connected with the determination of the causes, extent and necessity for compensation for damages incurred. Any such resolution shall have the concurrence of the other Party. After determining the extent of the damages, both Parties will decide, between themselves, the questions relating to compensation for damages incurred.



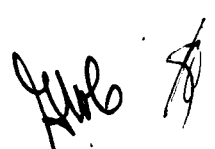
3. In the event of any dispute between the two Parties, a Committee shall be appointed by the Parties, with equal representation. The conclusions of the Committee will be presented to DoE and CEN/SCK who will review the conclusions and arrive at a mutual agreement concerning final disposition.
4. The foregoing provisions of this Article shall have no applicability to damages caused by a nuclear incident, as defined by the laws of the Parties. Compensation for damage caused by such a nuclear incident shall be in accordance with the laws of the Parties.
5. Definitions
  - a. "Staff" of a Party means the employees of the Party, its contractors and subcontractors performing services under this Agreement, and employees of these contractors and subcontractors performing services under this Agreement.
  - b. "Equipment" or "Property" of a Party means the equipment or property owned by that Party, or by the contractor and subcontractors of that Party who perform services in connection with joint projects under this Agreement.

## ARTICLE 12

1. The provisions of this Agreement shall not affect the rights or duties of the Parties under other agreements or arrangements. This Agreement also in no way precludes commercial firms or other legally constituted enterprises in each of the two countries from engaging in commercial dealings in accordance with applicable laws of each country; nor does it preclude the Parties from engaging in activities with other governments or persons, except that "proprietary information" shall have limited dissemination as set forth in Article 6 of this Agreement.
2. DoE shall act as the point of coordination for contracts and arrangements involving US commercial firms when such firms or enterprises act on behalf of the US Government under terms of this Agreement. CEN/SCK shall act as the point of coordination for contracts and arrangements involving Belgian commercial firms when such firms or enterprises act on behalf of or under contract to the Belgian Government under the terms of this Agreement. It is understood that all such contracts and arrangements shall conform with applicable laws and regulations under which each Party operates.

## ARTICLE 13

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



#### ARTICLE 14

Except when otherwise specifically agreed, all costs resulting from cooperation under this Agreement shall be borne by the Party that incurs them. It is understood that the ability of the Parties to carry out their obligations is subject to the availability of appropriated funds.

#### ARTICLE 15

The Parties agree to engage in discussions, at an appropriate time, with the common purpose of seeking a multinational approach to the treatment and/or terminal storage of radioactive waste and, if found to be an acceptable further step, to undertake jointly funded projects.

#### ARTICLE 16

1. This Agreement shall enter into force upon the later date of signature by a Party, shall continue for a four-year period, and may be extended or amended by mutual consent. The implementation of, and progress under, this Agreement may be subject to annual review by the Parties.
2. This Agreement may be terminated at any time at the discretion of either Party, upon six month's advance notification in writing by the Party seeking to terminate the Agreement. Such termination shall be without prejudice to the rights which may have accrued under this Agreement to either Party up to the date of such termination.
3. In the event that, during the period of this Agreement, the nature of either Party's radioactive waste management program should change substantially, whether this be by expansion, reduction, transformation or amalgamation of major elements with the radioactive waste management programs of a third Party, either Party to this Agreement shall have the right to request revisions in the scope and/or terms of this Agreement.
4. All joint efforts and experiments not completed at the termination of this Agreement shall be continued until their completion under terms of this Agreement.

Done in duplicate,

For the UNITED STATES  
DEPARTEMENT OF ENERGY

  
Name

Date JAN 19, 1981

For the Belgian CENTRE D'ETUDE  
DE L'ENERGIE NUCLEAIRE/  
STUDIECENTRUM VOOR KERN-  
ENERGIE

Name

  
S. AMELINCKX  
Director General

Date 7/1/1981