

ARRANGEMENT
FOR THE EXCHANGE OF TECHNICAL INFORMATION AND
COOPERATION IN NUCLEAR SAFETY AND RESEARCH MATTERS

BETWEEN

THE NUCLEAR REGULATORY COMMISSION
OF THE UNITED STATES OF AMERICA
(U.S.N.R.C.)

AND

THE COMISION NACIONAL DE SEGURIDAD NUCLEAR Y SALVAGUARDIAS
OF THE UNITED MEXICAN STATES
(C.N.S.N.S.)

March 5, 1997

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The Nuclear Regulatory Commission of the United States of America (U.S.N.R.C.) and the Comision Nacional de Seguridad Nuclear y Salvaguardias (C.N.S.N.S), an independent administrative organization of the Secretary of Energy of the United Mexican States, hereinafter called the parties;

Aware of the importance of a continuing exchange of information pertaining to regulatory matters and of standards required or recommended by their organizations for the regulation of safety and radiological environmental impact of nuclear facilities;

Having similarly cooperated under an Arrangement effected by an exchange of letters of July 30 and October 15, 1980, with implementing procedures for The Exchange of Technical Information and Cooperation in Nuclear Safety Matters signed on April 8, 1981;

Recognizing the benefit of their cooperative effort and having replaced their initial implementing procedures by other implementing procedures signed on September 8 and October 6, 1989;

Taking into consideration the provisions of the Science and Technology Agreement for Cooperation Between the United States and Mexico, signed June 15, 1972 and modified by an Exchange of Diplomatic Notes on August 10 and September 22, 1994;

Have agreed as follows.

ARTICLE I

OBJECTIVE

The objective of this Arrangement is to exchange technical information between the parties related to the regulation of safety and radiological environmental impact of designated nuclear facilities and to the program of nuclear safety research to the extent that the parties are permitted to do so under the laws, regulations, and policy directives of their respective countries.

ARTICLE II

AREAS AND FORMS OF COOPERATION

In order to meet the objective referred to in Article I, the parties intend to undertake cooperative activities in the areas indicated below:

II.1 Technical Information Exchange

- a. Topical reports concerning technical safety and radiological environmental effects written by or for one of the parties as a basis for, or in support of, regulatory decisions and policies.
- b. Documents relating to significant licensing actions and safety and radiological environmental decisions affecting nuclear facilities.
- c. Information relating to designated facilities in the U.S. and Mexico, such as plant safety analysis reports of such facilities, radiological environmental impact evaluations, preliminary proposals, approved emergency procedures, and other important licensing documents.
- d. Detailed documents describing the U.S.N.R.C. process for licensing and regulating certain U.S. facilities designated by the C.N.S.N.S as similar to the Laguna Verde Nuclear Power Plant (P.N.L.V.) and facilities of this type being operated, built or planned in Mexico and equivalent documents on such Mexican facilities.

- e. Information in the field of reactor safety research, either in the possession of one of the parties or available to it, including light water reactor safety information from the technical areas described in Addenda "A" and "B," attached hereto and made a part hereof. Exchanges in the field of reactor safety research may require a separate agreement, as determined to be necessary by the research organizations of one or both of the parties. Each party will transmit immediately to the other information concerning research results that requires early attention in the interest of public safety, along with an indication of significant implications. Also, although neither party commits to full disclosure of all information pertaining to reactors of non-U.S. origin, each party undertakes to advise the other of any known problems which might affect the safety of U.S. or Mexican reactors, regardless of the source of this information.
- f. Reports on operating experience, such as reports on nuclear incidents, accidents and shutdowns; compilations of historical reliability data on components and systems; and notices of effluent releases that could have transboundary effects.
- g. Regulatory procedures for the safety, safeguards (materials accountancy and control and physical protection), waste management, and radiological environmental impact evaluation of nuclear facilities.
- h. Early notification of important events, such as serious operating incidents and government-directed reactor shutdowns, that are of immediate interest to the parties.
- i. Non-sensitive information concerning waste management and storage, but specifically excluding reprocessing technology.
- j. Timely copies of regulatory standards required to be used or proposed for use by the parties.

II.2 Nuclear Emergency Cooperation

The U.S.N.R.C. and the C.N.S.N.S. reaffirm the nuclear emergency cooperation obligations undertaken by each of their respective governments, particularly concerning the provision of prompt notification of accidents covered in the International Conventions on Early Notification of a Nuclear Accident and on Assistance in the Case of a

Nuclear Accident or Radiological Emergency which were adopted in Vienna September 26, 1986

To facilitate the initial notification and ensuing emergency communication and/or cooperative activities undertaken, the parties agree:

- a. To exchange telephone and telefacsimile numbers to be used for emergency communications and to keep these numbers up-to-date,
- b. To exchange information related to emergency action levels and emergency response classifications,
- c. To exchange information on emergency planning regulations and response organizations,
- d. To exchange and update plant- and site-specific information on the Laguna Verde reactor for the U.S.N.R.C. and on U.S. facilities designated by the C.N.S.N.S.,
- e. To advise each other of any changes which would modify the scope, content, or timing of emergency communications, and
- f. To test communications capabilities on no less than an annual basis.

Applicable international conventions and national laws, policies, and administrative requirements will govern any activities undertaken following the initial notifications with regard to the development/offering of technical advice, the exchange of technical experts, and the provision of equipment or other technical assistance by both parties. Such activities would be decided by the parties on a case-by-case basis.

II.3

Plans for Locating Commercial Nuclear Facilities Near the Frontier

Each party will advise the other promptly of plans under consideration to locate commercial nuclear facilities in the border area, in accordance with provisions of Articles 2, 4, 5, and 6 of the "Agreement Between the United Mexican States and the United States of America on Cooperation for the Protection and Improvement of the Environment in the Border Area," which was signed in La Paz, Baja California, August 14, 1983.

II.4 Cooperation in Nuclear Safety Research

The terms of cooperation for joint programs and projects of nuclear safety research and development, or those programs and projects under which activities are divided between the two parties, including the use of test facilities and/or computer programs owned by either party, will be considered on a case-by-case basis and may be the subject of a separate agreement, if determined to be necessary by the research organizations of one or both of the parties. When not the subject of a separate agreement, the terms of cooperation may be established by an exchange of letters between the research organizations of the parties, subject at least to the terms and conditions of the present Arrangement. Temporary assignments of personnel by one party in the other party's agency will also be considered on a case-by-case basis and will, in general, require a separate letter of agreement.

II.5 Training and Assignments

Within the limits of available resources and subject to the availability of appropriated funds, the U.S.N.R.C. will cooperate with the C.N.S.N.S. in providing certain training and experience for C.N.S.N.S. safety personnel. Unless otherwise agreed, costs of salary, allowances, and travel of C.N.S.N.S. participants will be paid by the C.N.S.N.S. The following are typical of the kinds of training and experience that may be provided:

- a. C.N.S.N.S. inspector accompaniment of U.S.N.R.C. inspectors on operating reactor and reactor construction inspections in the U.S., including extended briefings at U.S.N.R.C. regional inspection offices.
- b. Participation by C.N.S.N.S. employees in U.S.N.R.C. staff training courses.
- c. Assignment of C.N.S.N.S. employees for 6-24 month periods to the U.S.N.R.C. staff, to work on U.S.N.R.C. staff duties and gain on-the-job experience.
- d. Possible training assignments within the radiation control programs of interested U.S.N.R.C. Agreement States.

II.6 Additional Nuclear Safety Advice

To the extent that the documents and other information provided by the U.S.N.R.C. as described in Sections II.1 through II.5, above, are not adequate to meet the C.N.S.N.S. needs for technical advice, the parties will consult on the best means for fulfilling such needs. The U.S.N.R.C. will attempt, within the limits of appropriated resources and statutory authority, to assist the C.N.S.N.S. in meeting these needs. For example, within these limits, the U.S.N.R.C. will attempt to meet requests that come through the International Atomic Energy Agency for technical assistance missions to the C.N.S.N.S. by U.S.N.R.C. safety experts.

ARTICLE III

MECHANISM OF COORDINATION

III.1 Each party has designated an administrative coordinator to oversee its participation in the overall exchange covered by this Arrangement. Any change in the designation of the coordinators will be promptly communicated to the other party. The coordinators will be the recipients of all documents transmitted under the exchange, including copies of all letters, unless otherwise agreed. Within the terms of the exchange, the coordinators will be responsible for developing the scope of the exchange, including agreement on the designation of the nuclear energy facilities subject to the exchange, and on specific documents and standards to be exchanged. One or more technical coordinators may also be appointed as direct contacts for specific disciplinary areas. These technical coordinators will assure that both administrators receive copies of all transmittals. These detailed arrangements are intended to assure, among other things, that a reasonably balanced exchange providing access to equivalent available information from both sides is achieved and maintained.

III.2 The exchange of information under this Arrangement will be accomplished through letters, reports, and other documents, and by visits and meetings arranged in advance. A meeting will be held annually, or at such other times as mutually agreed, to review the exchange of information, to recommend revisions to the provisions of this Arrangement, and to discuss topics within the scope of the exchange. The time, place, and agenda for such meetings will be agreed upon in advance. Visits which take place under this

Arrangement, including their schedules, will have the prior approval of the coordinators.

- III.3** The coordinators will determine the number of copies to be provided of the documents exchanged. Each document will be accompanied by an abstract in English, 250 words or less, describing its scope and content.
- III.4** The application or use of any information exchanged or transferred between the parties under this Arrangement will 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.
- III.5** Recognizing that some information of the type covered in this Arrangement is not available within the agencies which are parties to this Arrangement, but is available from other agencies of the governments of the parties, each party will assist the other to the maximum extent possible by organizing visits and directing inquiries concerning such information to appropriate agencies of the government concerned. The foregoing shall not constitute a commitment of other agencies to furnish such information or to receive such visitors.
- III.6** Nothing contained in this Arrangement will require either party to take any action which would be inconsistent with its laws, regulations, and policy directives. Should any conflict arise between the terms of this Arrangement and those laws, regulations and policy directives, the parties agree to consult before any action is taken. No nuclear information related to proliferation-sensitive technologies will be exchanged under this Arrangement.
- III.7** Unless otherwise agreed, all costs resulting from cooperation pursuant to this Arrangement will be the responsibility of the party that incurs them. The ability of the parties to carry out their obligations is subject to the appropriation of funds by the appropriate governmental authority and to laws and regulations applicable to the parties.

ARTICLE IV

EXCHANGE AND USE OF INFORMATION

IV.1 General

The parties support the widest possible dissemination of information provided or exchanged under this Arrangement, subject both to the need to protect proprietary and other confidential or privileged information as may be exchanged hereunder, and to the provisions of the Intellectual Property Addendum, which is an integral part of this Arrangement. The Intellectual Property Addendum incorporates the language of ANNEX I, INTELLECTUAL PROPERTY, to the Agreement Between the United States of America and the United Mexican States Relating to Scientific and Technical Cooperation (U.S.-Mexico S&T Agreement). All information protected by provisions of this Arrangement as proprietary, confidential, privileged, or otherwise subject to restriction on disclosure will remain so protected for the duration of this Arrangement and after it has expired or been terminated, unless mutually agreed otherwise in writing.

IV.2 Definitions

- a. The term "information" means nuclear energy-related regulatory, safety, safeguards, waste management, scientific, or technical data, including information on results or methods of assessment, confirmatory research, and any other knowledge intended to be provided or exchanged under this Arrangement.
- b. The term "proprietary information" means information which contains trade secrets or other privileged or confidential commercial information (such that the person having the information may derive an economic benefit from it or may have a competitive advantage over those who do not have it), and may only include information which:
 - (1) has been held in confidence by its owner;
 - (2) is of a type which is customarily held in confidence by its owner;

- (3) has not been transmitted by the owner to other entities (including the receiving party) except on the basis that it be held in confidence;
 - (4) is not otherwise available to the receiving party from another source without restriction on its further dissemination; and
 - (5) is not already in the possession of the receiving party.
- c. The term "other confidential or privileged information" means information, other than "proprietary information, which is protected from public disclosure under the laws and regulations of the country of the party providing the information and which has been transmitted and received in confidence.

IV.3

Marking Procedures for Documentary Proprietary Information

A party receiving documentary proprietary information pursuant to this Arrangement will respect the privileged nature thereof, provided such proprietary information is clearly marked with the following (or other substantially similar) restrictive legend:

"This document contains proprietary information furnished in confidence under an Arrangement dated March 5, 1997, Between the United States Nuclear Regulatory Commission and the Mexican National Nuclear Safety and Safeguards Commission and will not be disseminated outside these organizations; their consultants, contractors, and licensees, and concerned departments and agencies of the Government of the United States and the Government of Mexico without the prior approval of (name of transmitting party). This notice will be marked on any reproduction hereof, in whole or in part. These limitations will automatically terminate when this information is disclosed by the owner without restriction."

This restrictive legend will be respected by the receiving party and proprietary information bearing this legend will not be used for commercial purposes, made public, or disseminated in any manner unspecified by or contrary to the terms of this Arrangement without the consent of the transmitting party.

IV.4

Dissemination of Documentary Proprietary Information

- a. In general, proprietary information received under this Arrangement may be freely disseminated by the receiving party without prior consent to persons within or employed by the receiving party, and to concerned government departments and government agencies in the country of the receiving party.

- b. In addition, proprietary information may be disseminated without prior consent
 - (1) to contractors or consultants of the receiving party located within the geographical limits of that Party's nation, for use only within the scope of work of their contracts with the receiving party in work relating to the subject matter of the proprietary information;

 - (2) to domestic organizations permitted or licensed by the receiving party to construct or operate nuclear production or utilization facilities, or to use nuclear materials and radiation sources, provided that such proprietary information is used only within the terms of the permit or license; and

 - (3) to domestic contractors of organizations identified in IV.4.b.(2), above, for use only in work within the scope of the permit or license granted to such organizations,

Provided that any dissemination of proprietary information under IV.4.b. (1), (2), and (3), above, will be on an as-needed, case-by-case basis, will be pursuant to an agreement of confidentiality, and will be marked with a restrictive legend substantially similar to that appearing in Section IV.3, above.

- c. With the prior written consent of the party furnishing proprietary information under this Arrangement, the receiving party may disseminate such proprietary information more widely than otherwise permitted in subsections a. and b. of Section IV.4. The parties will cooperate 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 laws, regulations, and policies.

IV.5 Marking Procedures for Other Confidential or Privileged Information of a Documentary Nature

A party receiving under this Arrangement other confidential or privileged information will respect its confidential nature, provided such information is clearly marked so as to indicate its confidential or privileged nature and is accompanied by a statement indicating

- a. that the information is protected from public disclosure by the government of the transmitting party; and
- b. that the information is submitted under the condition that it be maintained in confidence.

IV.6 Dissemination of Other Confidential or Privileged Information of a Documentary Nature

Other confidential or privileged information may be disseminated in the same manner as that set forth in Section II.4, Dissemination of Documentary Proprietary Information.

IV.7 Non-Documentary Proprietary or Other Confidential or Privileged Information

Non-documentary proprietary or other confidential or privileged information provided in seminars and other meetings arranged under this Arrangement, or information arising from the attachments of staff, use of facilities, or joint projects, will be treated by the parties according to the principles specified for documentary information in this Arrangement; provided, however, that the party communicating such proprietary or other confidential or privileged information has placed the recipient on notice as to the character of the information communicated.

IV.8 Consultation

If, for any reason, one of the parties becomes aware that it will be, or may reasonably be expected to become, unable to meet the nondissemination provisions of this Arrangement, it will immediately inform the other party. The parties will thereafter consult to define an appropriate course of action.

IV.9 Other

Nothing contained in this Arrangement will preclude a party from using or disseminating information received without restriction by a party from sources outside of this Arrangement.

ARTICLE V

FINAL PROVISIONS

V.1 Dispute Resolution

Cooperation under this Arrangement will be governed by the laws and regulations of the respective countries. Any dispute or questions between the parties concerning the interpretation or application of this Arrangement arising during its term will be settled by mutual agreement of the parties.

V.2 Entry Into Force

This Arrangement will enter into force upon signature and will remain in force for a period of five (5) years. It may be extended for a further period of time by written agreement of the parties. Either party may withdraw from this Arrangement after providing the other party written notice 180 days prior to its intended date of withdrawal.

V.3 Modifications

This Arrangement may be modified by mutual consent of the Parties in writing, specifying the date the said modifications will enter into force.

DONE at Mexico City Federal District, in the presence of the Secretary of Energy of the United Mexican States, Dr. Jesus Reyes Heroles G.G. for this 5th day of March 1997, in two original copies, in the English and the Spanish languages, each text being equally authentic.

FOR THE UNITED STATES
NUCLEAR REGULATORY COMMISSION

FOR THE COMISION NACIONAL: DE
SEGURIDAD NUCLEAR Y
SALVAGUARDIAS, AN INDEPENDENT
ADMINISTRATIVE ORGANIZATION OF
THE SECRETARIAT OF ENERGY OF
THE UNITED MEXICAN STATES





ADDENDUM "A"

Areas in Which the U.S.N.R.C. Is Performing LWR Safety Research

1. Reactor Aging
2. Reactor Structural Performance
3. Probabilistic Risk Assessment
4. Thermal Hydraulics
5. Control, Instrumentation, and Human Factors
6. Severe Accidents
7. Radionuclide Transport and Decommissioning

ADDENDUM "B"

Areas in Which the C.N.S.N.S. Is Performing LWR Safety Research

1. THERMAL-HYDRAULICS:

- Transient Analyses
- Severe Accident Thermal-Hydraulics (Fuel and Coolant Behavior During Reflooding of the Core)
- Cooling Capacity During Core Melt
- Instability Mechanisms and Nonlinear Dynamics

2. SEVERE ACCIDENTS:

- Verification and Validation of Integral Codes
- Best Estimates for the Analyses of Severe Accidents
- Development of Severe Accident Management Bases and Guidelines

3. CONTAINMENT STRUCTURAL INTEGRITY:

- Evaluation of Containment Performance Under Severe Accident Conditions

4. PROBABILISTIC RISK ANALYSIS STUDIES, INCLUDING:

- Role of PRA During Licensing
- PRA and Safety Performance Indicators
- Fire Risk Assessment
- PRA for Shutdown and Low Power Conditions
- Source Term Estimates
- Containment Performance Analyses
- Consequence Analyses

INTELLECTUAL PROPERTY ADDENDUM

In conformance with Article IV of this Arrangement:

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 Addendum.

I. SCOPE

A. This Addendum 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 Addendum 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 Addendum, by obtaining those rights from its own participants through contracts or other legal means, if necessary. This Addendum does not otherwise alter or prejudice the allocation between a party and its nationals, which shall be determined by that party's 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 rules of international law. Unless the parties or their designees agree otherwise in writing, the arbitration rules of the United Nations Commission on International Trade Law (UNCITRAL) shall govern.

E. Termination or expiration of this Agreement shall not affect rights or obligations under this Addendum.

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 in conformity with the legislation of the receiving country and 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 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 II.B.1. In addition, each person named as an inventor shall be entitled to share in a portion of any royalties earned by either institution from the licensing of the property.

2.(b) Notwithstanding Paragraph II.B.2.(a), if a type of intellectual property is protected under the laws of one party but not the other party, the party whose laws provide for this type of protection shall be entitled to all rights and interests worldwide. Persons named as inventors of the property shall nonetheless be entitled to royalties as provided in Paragraph II.B.2.(a).

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.