### **AGREEMENT**

# BETWEEN

### THE AMERICAN INSTITUTE IN TAIWAN

#### AND

# THE TAIPEI ECONOMIC AND CULTURAL REPRESENTATIVE OFFICE IN THE UNITED STATES

### REGARDING

TERMS AND CONDITIONS FOR
THE ACCEPTANCE OF
FOREIGN RESEARCH REACTOR SPENT NUCLEAR FUEL
AT THE DEPARTMENT OF ENERGY'S SAVANNAH RIVER SITE

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MD085-3

THIS Agreement, by and between the Taipei Economic and Cultural Representative Office in the United States (TECRO) the and the American Institute In Taiwan (AIT) provides the terms and conditions applicable to shipments to the Savannah River Site (SRS) of Authorized Material. Shipments may include degraded, failed, or otherwise materially damaged Authorized Material if it is properly Canned prior to shipment as specified in Appendix B.

#### WITNESSETH THAT:

WHEREAS, the National Defense Authorization Act for Fiscal Year 1994 authorizes receipt and management of foreign research reactor spent nuclear fuel in the United States subsequent to completion by the United States Department of Energy (DOE) of an Environmental Impact Statement (EIS) covering such fuel; and

WHEREAS, Special Nuclear Material, as defined herein, of United States origin has been irradiated in the nuclear research reactor THOR operated at National Tsing Hua University, Hsinchu 30043. Taiwan; THAR, a decommissioned and dismantled nuclear research reactor, formerly located at National Tsing Hua University, Hsinchu 30043, Taiwan; and the nuclear research reactor ZPRL operated at the Institute of Nuclear Energy Research (INER), in Taoyuan 325, Taiwan; and

WHEREAS an EIS has been completed covering spent nuclear fuel from THOR, THAR, and ZPRL, (No. DOE/EIS-0218F); and

WHEREAS, AIT's designated representative, DOE, has indicated its willingness, as set forth in a Record of Decision (ROD) issued by the Department on May 13, 1996, and revised on July 22, 1996, to accept for management and disposition, under certain conditions specified in the ROD, Authorized Material as defined herein, which has been discharged from the THOR, THAR, and ZPRL and which is covered by the eligibility criteria specified in the EIS; and

WHEREAS, the parties have agreed to the terms and conditions set forth in this Agreement applicable to the receipt of Authorized Material; and

WHEREAS, this Agreement is entered into under the authority of the Taiwan Relations Act, Public Law 96-8, dated April 10, 1979; and

WHEREAS, it is the intent of AIT's designated representative, DOE, to treat similarly situated reactor operators and participating facilities fairly, equitably and in accordance with the principles of the Reduced Enrichment for Research and Test Reactors (RERTR) program while maintaining DOE's flexibility to address unanticipated circumstances; and

WHEREAS, TECRO agrees not to use and agrees to require its designated representative(s) not to use Highly Enriched Uranium (HEU) in THOR after the execution of this Agreement. Further,

TECRO agrees not to use and agrees to require its designated representative(s) not to use HEU in ZPRL after January 1, 2006; and

NOW, THEREFORE, the parties hereto mutually agree as follows:

#### ARTICLE I - DEFINITIONS

The following terms, as used herein, shall have the following meanings:

- A. "AIT": The American Institute in Taiwan. AIT is a signatory party to this Agreement.
- B. "Appendix A": A document describing the physical and chemical characteristics, approximate isotopic composition, and dimensions and weight of a homogeneous batch of Authorized Material for transport to SRS in a Shipment Batch as defined herein. A sample Appendix A is attached to this document. An "Appendix A" shall be submitted by TECRO or its designated representative(s) to AIT's designated representative DOE for each batch of Authorized Material with different material characteristics.
- C. "Appendix B": A document, attached to this Agreement, describing transportation package acceptance criteria for a Transport Package, as defined herein.
- D. "Appendix C": A document describing the history of the Authorized Material designated for shipment to SRS in the applicable Appendix A. including any available information concerning its fabrication, use and the conditions under which the Authorized Material heretofore has been stored.
- E. "Authorized Material": Irradiated spent nuclear fuel elements, fresh nuclear fuel elements, and target materials from THOR, THAR or ZPRL containing uranium enriched in the United States that meet the requirements set forth in the EIS and the ROD. Designation of material as "Authorized Material" becomes effective upon approval by AIT's designated representative, DOE, of an Appendix A submitted by TECRO, or its designated representative(s), which approval shall not be unreasonably withheld.
- F. "Canned" or "Canning": The placing of degraded or failed fuel in sealed aluminum canisters (i.e., "Cans") prior to shipment as specified in Appendix B.
- G. "Davs": All references to days herein shall refer to calendar days.
- H. "Degraded Fuel": Fuel which does not meet the criteria as specified in Appendix B and therefore requires Canning.
- 1. "Designated Officer": The person authorized by DOE to represent DOE in its role as AIT's designated representative for purposes of this Agreement.

- J. "DOE": The United States Department of Energy. For purposes of this Agreement DOE shall serve as AIT's designated representative.
- K. "DOE customer": An entity entering into a contract or agreement with DOE, similar to the DOE-AIT agreement, to ship authorized material to DOE from its reactor(s) or facility.
- L. <u>"Equipment"</u>: International Standards Organization (ISO) containers and any special handling tools/devices provided by TECRO or its designated representative(s) that are necessary to facilitate shipment and unloading of Authorized Material.
- M. "Failed Fuel": Fuel which does not meet the criteria as specified in Appendix B and therefore requires Canning.
- N. "Highly enriched uranium (HEU)": Uranium with more than 20 percent of the uranium-235 isotope, usable for making nuclear weapons and also fuel for some isotope-production, research, naval propulsion, and power reactors.
- O. "Joint Shipment": A shipment which consists of Transport Packages from different DOE customers on one or more ocean-going vessels designed to arrive and be offloaded at the Charleston Naval Weapons Station at the same agreed upon date.
- P. "Low enriched uranium (LEU)": Uranium enriched until it consists of up to 20 percent uranium-235. Usable as nuclear reactor fuel.
- Q. "Materially Damaged Fuel": Fuel which does not meet the criteria as specified in Appendix B and therefore requires Canning.
- R. "Mitigation Action Plan" or "MAP": The "Mitigation Action Plan for the Implementation of a Nuclear Weapons Nonproliferation Policy Concerning Foreign Research Reactor Spent Fuel." dated August 1996, or latest revision issued by the DOE Office of Spent Fuel Management. This document sets forth a plan to minimize the likelihood that any individual involved in the transportation and handling of spent fuel from research reactors will receive a radiation dose in excess of the United States regulatory limit.
- S. <u>"Shipment Batch"</u>: The Authorized Material from TECRO, or its designated representative(s), designated in one or more Appendix A's to be shipped in a single ocean vessel and delivered to SRS.
- T. "Shipment Combination": The combination within a single Transport Package of TECRO's, or its designated representative(s), Authorized Material and other DOE customers' authorized material.

- U. "Special Nuclear Material": (1) Plutonium or uranium enriched in the isotope U-233 or in the isotope U-235, and any other material which AIT's designated representative, DOE, pursuant to the provisions of the Atomic Energy Act of 1954, as amended, determines to be Special Nuclear Material, but does not include source material; or (2) any material artificially enriched by any of the foregoing, but does not include source material.
- V. <u>"SRS"</u>: The DOE Savannah River Site facility located in Aiken, Allendale and Barnwell counties in the State of South Carolina.
- W. "TECRO": The Taipei Economic and Cultural Representative Office in the United States. TECRO is a signatory party to this Agreement.
- X. "THAR": A decommissioned and dismantled reactor, formerly located at National Tsing Hua University, Hsinchu 30043, Taiwan. Spent nuclear fuel from THAR is stored within the THOR facilities.
- Y. "THOR": The nuclear research reactor currently operated at National Tsing Hua University. Hsinchu 30043. Taiwan.
- Z. "Transport Package": A packaging receptacle, which may include radioactive contents, used for transportation of the Authorized Material.
- AA. "ZPRL": The nuclear research reactor operated at the Institute of Nuclear Energy Research (INER), Taoyuan 325, Taiwan.

#### ARTICLE II - SCOPE

This Agreement provides the terms and conditions applicable to shipments to SRS of Authorized Material. Shipments may include degraded, failed, or otherwise materially damaged Authorized Material if it is properly Canned prior to shipment as specified in Appendix B.

# ARTICLE III - DELIVERY OF AUTHORIZED MATERIAL BY TECRO OR ITS DESIGNATED REPRESENTATIVE(S)

A. TECRO, shall directly deliver, or shall require its designated representative(s) directly to deliver, Authorized Material to SRS via the planned route referenced in Article IV. <u>Prerequisite for Commencement of Shipment</u>, herein and, except as otherwise provided in this Agreement, AIT's designated representative, DOE, shall receive Authorized Material at SRS. Unless otherwise mutually agreed by the parties, in writing, or specified herein, delivery of Authorized Material shall be made and paid for by TECRO "Delivered Duty Paid" (DDP), destination SRS. Under this Agreement, DDP means that TECRO shall pay, or shall cause its designated representative(s) to pay, all costs associated with packaging, loading, preliminary transport, customs clearance for export, transport insurance, handling outbound, ocean transport, import customs clearance duties

and taxes, and final land transport in the United States. Excluded under this term are costs for handling, unloading, and loading at the Charleston Naval Weapons Station, and unloading at SRS which will be borne by AlT's designated representative, DOE.

- B. TECRO shall submit, or shall cause its designated representative(s) to submit, to the Designated Officer a proposed Appendix A not less than one-hundred eighty (180) days in advance of a delivery date proposed by DOE for a Shipment Batch, unless otherwise agreed between DOE and TECRO's designated representative(s) in writing. AIT agrees to require that its designated representative, DOE, subject to the provisions of Article IV, Prerequisite for Commencement of Shipment, herein, not less than ninety (90) days prior to the proposed delivery date, by confirmed facsimile to TECRO, or its designated representative(s), either confirm the proposed delivery date or suggest a reasonable alternate date, unless otherwise agreed between DOE and TECRO or TECRO's designated representative(s) in writing.
- C. TECRO shall make a good faith effort to provide, or cause its designated representative(s) to provide, an Appendix C for each Shipment Batch. However, unavailability of an Appendix C shall not constitute grounds for AIT's designated representative, DOE, to postpone or refuse receipt of a Shipment Batch.
- D. Neither AIT nor its designated representative, DOE, shall be under any obligation by virtue of this Agreement to accept material which was previously designated as Authorized Material, but which (1) is incorrectly described in Appendix A; (2) is delivered other than in accordance with an agreed-upon delivery date. (3) is delivered other than in accordance with Appendix B, (4) does not meet any other requirements for delivery or receipt of Authorized Material in this Agreement, or (5) is not delivered in accordance with the approved plan implementing the requirements of the MAP.
- E. Neither AIT, nor its designated representative. DOE, shall be under any obligation to accept material that is not Authorized Material.
- F. TECRO or its designated representative(s) may deliver the Authorized Material though Joint Shipments with other participants desiring to ship Authorized Material to SRS. When Joint Shipments are conducted, DOE is not responsible for costs incurred due to a delay by another participant, unless DOE has directed the delay in accordance with Article VII.C, herein. In the presence of such delay, DOE will use its best efforts to coordinate and adjust the arrival date of the Joint Shipment at the Charleston Naval Weapons Station for the earliest available arrival date.

# ARTICLE IV - PREREQUISITE FOR COMMENCEMENT OF SHIPMENT

The parties agree that neither AIT, nor its designated representative, DOE, is under any obligation to accept Authorized Material for which any segment of its transport from THOR, THAR or ZPRL to SRS commences prior to AIT's designated representative's, DOE's, issuance to TECRO, or its designated representative(s), of a written "Authorization to Ship" indicating DOE's approval

of the applicable Appendix A's and SRS's readiness to safely receive the Authorized Material. AIT shall require its designated representative, DOE, to use its best efforts to provide a written "Authorization to Ship" to TECRO, or its designated representative(s), no later than thirty (30) days prior to the scheduled departure of a Shipment Batch. TECRO, or its designated representative(s), shall notify AIT's designated representative, DOE, of the planned route, any scheduled ports of call and the schedule for transporting a Shipment Batch at least fourteen (14) days before any Authorized Material is shipped from THOR or ZPRL. Subject to Article XIV, Excused Non-Performance, herein, AIT shall require its designated representative. DOE not to withhold its "Authorization to Ship" for reasons that would be contrary to the nonproliferation objectives specified in the EIS and ROD or inconsistent with the principles of the RERTR program, and in determining whether and when to issue such an authorization, AIT shall require DOE to take into account the reasonable operational needs and constraints of the parties and their designated representatives.

#### ARTICLE V - OPERATIONAL ASPECTS OF SHIPMENTS

- A. TECRO, shall provide, or require its designated representative(s) to provide, to AIT's designated representative, DOE, at least thirty (30) days prior to commencement of shipping a Shipment Batch, the name of the shipping agent(s) for such Shipment Batch. Such agent(s) shall possess appropriate qualifications and experience in the transport and traffic management of radioactive materials.
- B. TECRO shall comply with, and shall require any designated representative(s) of TECRO to comply with, all applicable international and United States Federal and State laws and regulatory requirements governing shipments made under this Agreement. These laws and requirements include, but are not limited to, the EIS. ROD, and MAP: regulations of the nations or economies in which the Authorized Material is located or through which it will be transported; International Atomic Energy Agency (IAEA) regulations; International Maritime Organization (IMO) regulations in force and adopted by the United States at the time of shipment; and the applicable regulations, directives and orders of DOE, the United States Nuclear Regulatory Commission (NRC), the United States Coast Guard (USCG) and the United States Department of TECRO shall also adhere to and shall require its designated Transportation (DOT). representative(s) to adhere to applicable requirements of origin, interim, and destination and applicable laws of the state of South Carolina; provided however, that AIT shall require its designated representative, DOE, to bear the full and complete costs incurred by TECRO or its designated representative(s) for compliance with additional requirements as specified in Article V.N herein that are imposed by AIT's designated representative, DOE.
- C. TECRO shall identify, or require its designated representative(s) to identify, any material which is Degraded. Failed, or Materially Damaged which must be Canned prior to shipment. For any fuel that TECRO, or its designated representative(s) will not Can, TECRO shall provide, or shall require its designated representative(s) to provide, written certification to AIT's designated representative, DOE, that the material is not Degraded, Failed or Materially Damaged. This

certification shall be provided no later than ninety (90) days prior to the scheduled departure of a Shipment Batch. Certification shall include a statement that the Authorized Material was not removed from the core of THOR, THAR, or ZPRL as a result of cladding failure or any other failure that would require special handling or packaging for transportation or storage.

- D. TECRO shall provide, or require its designated representative(s) to provide, one or more TRANSCOM transponder(s) to allow continuous monitoring of the land transport system carrying any Shipment Batch from the time it leaves the Charleston Naval Weapons Station until such time as the Authorized Material arrives at SRS. TECRO shall ensure, or shall require its designated representative(s) to ensure, that the TRANSCOM transponder(s) is properly affixed to the shipment or transport system, and is continuously used while the Authorized Material is transported from the Charleston Naval Weapons Station to SRS.
- E. TECRO shall ensure, or shall require its designated representative(s) to ensure, that the ocean-going vessel that transports a Shipment Batch to the Charleston Naval Weapons Station remains at the Naval Weapons Station and is available to re-load the Shipment Batch until such time as the Shipment Batch leaves the Charleston Naval Weapons Station. The expense of TECRO or its designated representative(s) shall be limited to a maximum of 24 hours from the time the last Transport Package is off-loaded. AIT shall require its designated representative DOE to bear any expense caused by vessel delay exceeding 24 hours.
- F. TECRO shall at its expense provide, or require its designated representative(s) to provide at their expense, to AIT's designated representative, DOE, a five hundred milliliter (500) water sample drawn from the THOR or ZPRL storage basin as appropriate and as specified in Appendix B. This water sample shall be drawn within 24 hours of loading a Shipment Batch into the Transport Package(s) in accordance with Appendix B, refrigerated immediately, and sent to DOE as soon as possible, but not later than within five days of obtaining the sample.
- G. TECRO shall provide, or require or its designated representative(s) to provide, to AIT's designated representative, DOE, a written description of the observable physical condition of the Authorized Material and a signed certificate stating that the Authorized Material meets the requirements contained in the Appendix B along with a cask certification. TECRO, or its designated representative(s), shall provide the above information to AIT's designee, DOE, either by hand delivery or by facsimile, at the time the Transport Package(s) is loaded.
- H. TECRO shall adhere to, and require its designated representative(s) to adhere to, the requirements specified in Appendix B.
- 1. AIT shall require its designated representative, DOE, to comply with all applicable NRC, DOT, and IAEA regulations governing public disclosure of any shipping plans or shipment information, or the individual details comprising such plans or information, unless such agency provides written relief from any otherwise applicable regulation.

- J. TECRO shall ensure that all shipments of Authorized Material from THOR, THAR, or ZPRL to SRS shall be made in Transport Packages and Equipment furnished by TECRO, or its designated representative(s).
- K. Unless otherwise authorized by AIT's designated representative. DOE, TECRO shall ship, or require its designated representative(s) to ship, all Transport Packages to the final destination in duly approved International Standards Organization (ISO) containers.
- L. TECRO agrees to implement, or require its designated representative(s) to implement, the provisions of the MAP. TECRO shall obtain, or shall require its designated representative(s) to obtain, approval from AIT's designated representative DOE of a plan to implement MAP requirements if a plan has not been previously approved by DOE. Approval by AIT's designated representative, DOE, is required prior to DOE's issuance of the "Authorization to Ship" as discussed in Article IV. Prerequisite For Commencement of Shipment, herein.
- M. TECRO shall require, or cause its designated representative(s) to require, that their shipping agent(s) maintain records of the ships used to transport Authorized Material and the names of ship crew members and land transportation workers who are involved in the transport of Authorized Material. Such records shall be made available for inspection by AIT's designated representative, DOE, upon DOE's request, consistent with the MAP.
- N. In addition, TECRO shall comply with, or shall require its designated representative(s) to comply with, the following requirements if requested by AIT's designated representative, DOE:
  - 1. At DOE's request. TECRO shall require its designated representative(s) to participate with DOE in the transportation planning process for each Shipment Batch as discussed in Appendix H to the EIS. TECRO shall provide or require its designated representative(s) to provide or ensure that its shipping agent(s) provide(s), information regarding the shipment as required to support completion of the transportation planning effort, including but not limited to elements of the transportation plan for the shipment.
  - 2. DOE, at its discretion and expense, may provide in a timely fashion to TECRO, or its designated representative(s), one or more INMARSAT transponder(s) to allow continuous monitoring of the ocean transport vessel carrying any Shipment Batch from the time it leaves the port of the shipment's origin until such time as the Shipment Batch arrives at the Charleston Naval Weapons Station. At DOE's request and expense, TECRO shall ensure, or shall require its designated representative(s) to ensure, that such INMARSAT transponder(s) is/are properly affixed to the shipment or transporting vessel, is/are used throughout the ocean transport, and is/are returned to DOE at the end of the ocean crossing.
  - 3. At DOE's request and expense. TECRO shall take such action(s), or cause its designated representative(s) to take such action(s), as DOE may require to adjust the arrival time of a Shipment Batch to the Charleston Naval Weapons Station.

4. At DOE's request and expense. TECRO shall provide, or shall ensure its designated representative(s) provide, all reasonable security escorts, equipment, and/or communications capability in addition to those otherwise required by applicable law or regulation.

#### ARTICLE VI - SHIPMENT NOT YET IN TRANSIT

- A. For a shipment previously authorized under Article IV, <u>Prerequisite for Commencement of Shipment</u>, herein, but where the Authorized Material has not yet left the final (THOR or ZPRL) site, AIT's designated representative, DOE, may postpone shipment of Authorized Material from departing the (THOR or ZPRL) site for transport to the United States for reasonable cause, including, but not limited to, the following:
  - 1. Changes to the approved Appendix A provided by TECRO, or its designated representative(s), that AIT's designated representative, DOE, determines may invalidate DOE's criticality analysis or dropped fuel analysis. Changes that may invalidate DOE's criticality analysis or dropped fuel analysis include, but are not limited to:
    - a) changes in the specific Transport Package scheduled to be used to transport the Authorized Material less than 60 days prior to the scheduled shipping date;
    - b) discovery of an error in the approved Appendix A; or
    - c) discovery of the need to Can fuel not previously identified as requiring Canning.
  - 2. Failure by TECRO, or its designated representative(s), to load the Authorized Material and prepare the Transport Package(s) in a manner consistent with: (a) the scheduled delivery date for such Authorized Material, or (b) acceptance criteria of AIT's designated representative. DOE, described in Appendix B.
  - 3. Where AIT's designated representative, DOE, determines that bona fide United States national security concerns require that an urgent shipment of spent fuel, fresh fuel or target material meeting the acceptance criteria of the ROD must first be made from another specific facility.
  - 4. Where AIT's designated representative, DOE, determines that commencing the shipment at the time authorized may present unacceptable security risks.
  - 5. Failure by TECRO, or its designated representative(s), to permit AIT's designated representative, DOE, to conduct the onsite inspection described in Article X.D herein.
  - 6. Failure by TECRO, or its designated representative(s), to provide the information required to be submitted by Article V.G herein.
  - 7. Delay in schedule caused by another DOE customer within a Joint Shipment.

- B. Any shipment postponed under this section shall be rescheduled for the earliest practicable shipment date.
- C. TECRO shall pay for, or cause its designated representative(s) to pay for, any costs attendant to postponement of a shipment under this Article.

#### ARTICLE VII - SHIPMENT IN TRANSIT

- A. If the delivery of Authorized Material to, or the receipt of Authorized Material by, AIT's designated representative, DOE, is prevented by any reason set forth in Article XIV, Excused Non-Performance, herein, after such Authorized Material has left the final reactor (THOR or ZPRL) site and is in transit to SRS, AIT shall require its designated representative, DOE, to use and TECRO shall use, or shall require its designated representative(s) to use, their best efforts to provide a location for the temporary safe storage of such Authorized Material. The duration of such temporary storage shall be only for so long as the impediment giving rise to the excused non-performance exists, unless AIT's designated representative DOE, and TECRO or its designated representative(s), agree in writing otherwise. AIT agrees to require its designated representative, DOE, to share, and TECRO agrees to share, or to require its designated representative(s) to share, equally all reasonable costs associated with the temporary storage and redirection of the shipment.
- B. If the impediment giving rise to the excused non-performance identified in Article VII. A. above, continues to exist beyond ninety (90) days. AIT shall require its designated representative, DOE, to arrange for relocation of the Authorized Material from temporary storage to a location where the Authorized Material shall be managed and dispositioned in a manner agreed to by the parties. TECRO agrees to continue to equally share with AIT's designated representative, DOE, all reasonable costs associated with the temporary storage and redirection of the shipment for an additional ninety (90) days, for a total of one hundred eighty (180) days, from the time the impediment arises. If the shipment delay exceeds one hundred eighty (180) days, AIT shall require its designated representative, DOE, to bear all additional costs associated with the delay.
- C. AIT's designated representative. DOE, may direct TECRO, or its designated representative(s), for any reason, to delay a shipment of Authorized Material while such Authorized Material is in transit. In such event, and in the absence of an impediment giving rise to an excused non-performance under Article XIV, Excused Non-Performance, herein, AIT shall require its designated representative, DOE, to pay all costs reasonably incurred by TECRO, or its designated representative(s), as a result of the direction of AIT's designated representative, DOE, except that TECRO shall be obligated to take all reasonable steps to mitigate, or to require its designated representative(s) to mitigate, such costs.
- D. Once Authorized Material has been exported from Taiwan at Taiwan's port of export, provided the conditions for non-acceptance described in Article III.D herein are not present, the Authorized Material will not be returned to TECRO, or its designated representative(s).

E. AIT's designated representative, DOE, shall not be liable for any additional costs incurred by TECRO or its designated representative(s) when another DOE customer conducting a Joint Shipment with TECRO causes a delay to a scheduled arrival date. This delay would not be considered a result of AIT's designated representative's, DOE's, direction under Article VII.C, herein.

#### ARTICLE VIII - TITLE

Title to all Authorized Material owned by TECRO or its designated representative(s) and delivered hereunder shall vest in AIT's designated representative, DOE, upon arrival on United States soil at the Charleston Naval Weapons Station, or such other port as may be authorized by DOE, acting as AIT's designated representative.

# ARTICLE IX - EFFECT OF DELIVERY OF AUTHORIZED MATERIAL

Except as set forth in Article XI. <u>Transport Packages: Equipment: Decontamination</u>, herein, neither TECRO nor or its designated representative(s), shall be responsible for damage to facilities, equipment or property owned by AIT's designated representative. DOE, or the United States Government, or for the injury, disease, or death of any person resulting from the receipt, handling or processing in United States Government-owned facilities of Authorized Material which is delivered by TECRO, or its designated representative(s), in compliance with the provisions of this Agreement. Upon delivery to SRS, all responsibility for the Authorized Material shall rest with AIT's designated representative, DOE.

#### ARTICLE X - <u>FURTHER ASSURANCES</u>

- A. TECRO represents and warrants to AIT that it has the power and authority under the laws of Taiwan to enter into this Agreement and to consummate all of the obligations required of TECRO by this Agreement. AIT represents to TECRO that it has the power and authority under the laws of the United States to enter into this Agreement.
- B. This Agreement is, when entered into, a valid and binding obligation of TECRO and AIT, enforceable against either in accordance with its terms.
- C. TECRO warrants and represents, and shall require its designated representative(s) to warrant and represent, that any Authorized Material which is Degraded, Failed, or otherwise Materially Damaged shall be properly Canned, pursuant to the specifications contained in Appendix B, prior to commencement of shipment of Authorized Material.
- D. At the request of AIT's designated representative, DOE, TECRO shall permit, and shall require its designated representative(s) to permit, AIT's designated representative, DOE, to conduct an on-site inspection at THOR or ZPRL of Authorized Material prior to its shipment to SRS. Such an inspection may include, but is not limited to, items such as: (1) visual inspection

of the Authorized Material. Transport Package(s) and Equipment: (2) review of the Authorized Material and Transport Package(s) for consistency with the information provided in the appropriate Appendix A and the requirements of Appendix B; and (3) tests to confirm the integrity of the cladding on any spent fuel to be shipped and to confirm that no fission products are leaking from the Authorized Material. In lieu of conducting its own inspection, AIT's designated representative, DOE, shall have the option to accept the results of an inspection performed by TECRO or TECRO's designated representative(s) within thirty (30) days prior to commencement of shipment.

- E. TECRO shall request, and require its designated representative(s) to request, AIT's designated representative, DOE, to accept under the provisions of this Agreement all irradiated spent nuclear fuel elements, fresh nuclear fuel elements, and target materials from THOR. THAR or ZPRL that satisfy the acceptance criteria of AIT's designated representative, DOE, as specified in the EIS and ROD whether such spent fuel is in storage at THOR or ZPRL at the time the Agreement becomes effective; is discharged from THOR prior to the execution of this agreement; or discharged from ZPRL by January 1, 2006. Subject to the terms and conditions of this Agreement. AIT shall require its designated representative, DOE, to accept such spent fuel.
- F. AIT shall ensure its designated representative, DOE represents that, with respect to a nuclear incident within the United States as defined in Section 11 of the Atomic Energy Act of 1954, as amended (AEA), TECRO and its designated representative(s) are "persons" indemnified under Section 170d of the AEA.
- G. TECRO agrees not to use, and to cause its designated representative(s) not to use, HEU in THOR after the execution of this Agreement. Further, TECRO agrees not to use, and to cause its designated representative(s) not to use, HEU in ZPRL after January 1, 2006.

# ARTICLE XI - TRANSPORT PACKAGES: EQUIPMENT: DECONTAMINATION

- A. TECRO shall submit, or cause its designated representative(s) to submit, to AIT's designated representative. DOE, three (3) copies (in English) of: (1) those documents required to be submitted under Appendix B, and (2) the United States Certificate of Competent Authority.
- B. Whenever Authorized Material, Transport Packages, and Equipment arrive at SRS and AIT's designated representative. DOE, finds it necessary: (1) for sound technical or regulatory reasons: or (2) because of the failure of TECRO, or its designated representative(s), to meet the acceptance criteria of Appendix B; or (3) because of the failure of TECRO, or its designated representative(s), to meet applicable U.S. Federal or State health and safety requirements, to decontaminate such material, packages or equipment, or the railroad cars, trucks, or other shipping vehicles or the unloading area at SRS and machinery involved in the shipment, TECRO shall be liable for, or shall cause its designated representative(s) to be liable for, necessary clean-up and decontamination costs subject to notice from AIT's designated representative. DOE,

to TECRO, or its designated representative(s), of the need for decontamination. Charges for decontamination as a result of fault or negligence on the part of AIT's designated representative, DOE, will not be charged to TECRO or its designated representative(s). Charges assessed under this paragraph shall not include routine decontamination expenses associated with SRS receipt, unloading and preparation for return of the Transport Packages and Equipment.

- C. AIT shall require that its designated representative, DOE, promptly notify TECRO, or its designated representative(s), by facsimile of the availability of Transport Package(s) and Equipment from TECRO or its designated representative(s) for return once each such Transport Package is emptied, and in no event later than twenty-four (24) hours subsequent to each individual package's availability. TECRO shall be responsible or shall require its designated representative(s) to be responsible for notifying AIT's designated representative, DOE, of each Transport Package and Equipment destination and any required destination preparations. TECRO shall remove or cause its designated representative(s) at its/their expense to remove the Transport Package(s) and Equipment from the SRS boundary promptly. TECRO shall accept or require that its designated representative(s) accept the sole responsibility and expense of return shipments of the Transport Package(s) and Equipment from the SRS boundary. AIT shall require its designated representative, DOE, to be responsible for any loss of or damage to the Transport Package(s) or Equipment of TECRO or its designated representative(s) resulting from fault or negligence of AIT's designated representative, DOE.
- D. AIT shall require its designated representative, DOE, to endeavor to unload the Transport Package(s) of TECRO or its designated representative(s) as expeditiously as possible. AIT shall require its designated representative, DOE, to agree that TECRO and its designated representative(s) may expect that Transport Packages from all sources worldwide will be unloaded at SRS by DOE, at a minimum rate of four Transport Packages per month, in an order to be determined by DOE.

#### ARTICLE XII - <u>AIT OBLIGATIONS</u>

- A. Subject to the terms and conditions of this Agreement, AIT shall require its designated representative, DOE, to receive the Authorized Material delivered hereunder.
- B. TECRO agrees that AIT may fulfill its obligations through its designated representative, DOE, which in turn may fulfill its obligations either directly or through contractors or other designated representative(s).

#### ARTICLE XIII - PAYMENT FOR AIT SERVICES

A. In addition to any costs assessed against TECRO and its designated representative(s) under Article XI.B herein, TECRO shall pay to AIT. in accordance with Article XV. <u>Payments by TECRO</u>, herein: (1) the base total fee of FOUR THOUSAND FIVE HUNDRED UNITED STATES DOLLARS (\$4.500) per kilogram (kg) of total weight of Authorized Material delivered

that contains HEU; and (2) the base total fee of THREE THOUSAND, SEVEN HUNDRED AND FIFTY UNITED STATES DOLLARS (\$3.750) per kilogram (kg) of total weight of Authorized Material delivered that contains LEU. DOE may adjust the base total fee annually on February 1, or as soon thereafter as possible, to account for inflation or deflation as indicated by the calendar year Gross Domestic Product deflator (Chain-type price index) listed in Table 7.1 of the first issue of the Survey of Current Business that is published in the year in which the adjustment is made. The Survey of Current Business is published by the United States Department of Commerce, Bureau of Economic Analysis. The base total fee for each Shipment Batch shall be set at the time TECRO, or its designated representative(s), notifies DOE, AIT's designated representative, of its designated shipping agent as required by Article V, Operational Aspects of Shipments, herein, but no earlier than ninety (90) days prior to commencement of shipping.

- B. Upon receipt at SRS, if a Shipment Batch, or any portion thereof, is found to be inconsistent with the applicable Appendix A. or does not meet the requirements of Appendix B hereto, for which TECRO or its designated representatives(s) is responsible. TECRO shall pay any reasonable costs incurred by AIT or its designated representative, DOE, over the base total fee set forth above for management and disposition of such material.
- C. AIT shall require its designated representative, DOE, to commit in writing that it is DOE's intent to charge similarly situated reactor operators comparable fees subject to the policy set forth in *Establishment of the Fee Policy for Acceptance of Foreign Research Reactor Spent Nuclear Fuel*, 61 Federal Register 26.507-08 (May 28, 1996).

#### ARTICLE XIV - EXCUSED NON-PERFORMANCE

- A. Neither AIT, or its designated representative, DOE, nor TECRO, or its designated representative(s), shall be liable to the other under this Agreement for damages occasioned by the failure of AIT or TECRO or their designated representatives to perform their respective obligations under this Agreement if such failure arises out of causes beyond the control and without the fault or negligence of the party so failing to perform. Examples of such force majeure include, but are not limited to:
  - 1. Acts of God:
  - 2. War:
  - 3. Strikes:
  - 4. Weather:
  - 5. Riots or demonstrations; or
  - 6. Criminal or terrorists acts.

- B. Neither AIT, or its designated representative, DOE, nor TECRO, or its designated representative(s), shall be liable to the other under this Agreement for damages occasioned by failure to perform their respective obligations under this Agreement if such failure arises out of any of the following causes:
  - 1. Acts of either party's legislative bodies;
  - 2. Acts of U.S. Federal, State or local governments or the Taiwan authorities, whether or not reasonably foreseeable, except where such acts are preempted by the Atomic Energy Act of 1954, as amended, or other applicable Federal law or the Supremacy Clause of the United States Constitution, in which case neither party shall act to infringe upon the right to legal or other recourse available to either party; or
  - 3. Decisions of competent judicial bodies.

### ARTICLE XV - PAYMENTS BY TECRO

- A. <u>Payments for Authorized Material</u>. AIT reserves the right to provide, or cause its designated representative, DOE, to provide, both provisional and final invoices to TECRO for each Shipment Batch.
  - 1. <u>Provisional Payment</u>. TECRO's payment to AlT pursuant to Article XIII A for acceptance of each Shipment Batch shall be due within thirty (30) days after receipt by TECRO of the confirmed transmittal by SRS of a provisional invoice by facsimile. This facsimile shall constitute the official provisional invoice for payment purposes. Invoice transmittal shall occur no earlier than the date of receipt of the Shipment Batch at SRS.
  - 2. <u>Final Payment</u>. AIT's designated representative, DOE, shall inform TECRO, with a copy to AIT, within thirty (30) days after a Shipment Batch is unloaded at SRS whether or not any additional payment is required based on measurements of the Authorized Material performed by AIT's designated representative, DOE, pursuant to Article XVII, <u>Measurements of Material Quantities and Properties: Resolution of Measurement Differences</u>, herein. Any such additional payment shall be due from TECRO to AIT thirty (30) days after receipt by TECRO of the confirmed transmittal by SRS of a final invoice by facsimile. This facsimile shall constitute the official final invoice for payment purposes.
  - 3. <u>Method of Pavment</u>. Payments due under either a provisional or final invoice shall be made to AIT by TECRO in U.S. dollars. Payments shall be sent to the AIT address provided in Article XIX. <u>Communications</u>, herein, and shall be sent to the attention of the Deputy Managing Director.

- B. Payments for Additional Costs Incurred by AIT or its designated representative, DOE. With respect to any additional costs incurred hereunder by AIT or its designated representative, DOE, that are separate from the charges for services by AIT or its designated representative, DOE, set forth in Article XIII.A herein, such costs shall be separately invoiced to TECRO with a courtesy copy to AIT, if originated by DOE or SRS, and shall be due thirty (30) days after receipt by TECRO of the confirmed transmittal by AIT or its designated representative, DOE, of an invoice by facsimile. Any request by AIT or its designated representative, DOE, for additional payment shall include evidence to support any claim to TECRO for the additional costs incurred. This facsimile shall constitute the official invoice for payment purposes. Payments due shall be made in accordance with the method of payment specified in this Article paragraph A.3, supra."
- C. <u>Contact for Payment</u>. The phone, fax and contact information for purposes of arranging for payment by TECRO are:

Telephone Number: (202) 895-1932 Facsimile Number: (202) 895-1939

TECRO representative: Dr. Thomas T. Tseng

# D. Additional Charges to TECRO for Late Payments

- 1. Payments due from TECRO to AIT for (a) Authorized Material, or (b) additional costs, not received by AIT within the prescribed thirty (30) days of an invoice date will be assessed interest on the amount due from the invoice date through the date of payment. The rate of interest assessed shall be the rate of the current value of funds to the U.S. Treasury, as prescribed and published by the Secretary of Treasury in the Federal Register and the Treasury Fiscal Requirements Manual Bulletin annually or quarterly in accordance with 31 USC 3717. The rate of interest at the time services are rendered will be placed at the bottom of each invoice sent to TECRO.
- 2. Upon notification from TECRO to AIT that it is unable to pay for justifiable reasons the amount due within the prescribed thirty (30) days of an invoice date, AIT in consultation with its designated representative, DOE, shall give favorable consideration to extending the thirty (30) day period for an additional thirty (30) days if approved by the Deputy Managing Director of AIT, at the Washington D.C. office, or his or her representative. This is a unilateral decision to be made by AIT in consultation with DOE and shall not be subject to Article XXVII, <u>Dispute Resolution</u>, herein.
- 3. A late payment handling charge (administrative charge) to TECRO of \$20.00 shall be imposed on delinquent invoices for each 30-day period of delinquency or portion thereof.
- 4. Pursuant to 4 CFR 102.13. TECRO shall also pay a penalty of six percent (6%) per annum on any portion of debt that is delinquent. This charge shall not be calculated until the 91st day of delinquency, but shall accrue from the date that the debt became delinquent. Interest and other late payment charges duly assessed are not waived by payment of principal.

Amounts received in partial payments will be applied first to accrued penalties, then to accrued administrative charges, then to accrued interest, and finally to the principal, pursuant to 4 CFR 102.13(f), dated 1/1/96.

### ARTICLE XVI - TERM OF AGREEMENT

This Agreement shall become effective upon execution by both parties and shall continue in effect until all Authorized Material has been accepted by AIT's designated representative, DOE, at SRS and payment therefor has been received by AIT, unless earlier terminated by mutual written agreement of AIT and TECRO. Acceptance of Authorized Material by AIT's designated representative, DOE, may occur in accordance with the terms of this Agreement at any time until May 13, 2009; provided, however, that all Authorized Material must be discharged from THOR prior to execution of this agreement or discharged from ZPRL prior to January 1, 2006.

# ARTICLE XVII - <u>MEASUREMENTS OF MATERIAL QUANTITIES AND</u> PROPERTIES: RESOLUTION OF MEASUREMENT DIFFERENCES

- A. TECRO shall provide or require its designated representative(s) to provide AIT's designated representative. DOE, with evidence and documentation of the weight of the Authorized Material and any modifications to the Authorized Material.
- B. AIT reserves the right to have its designated representative, DOE, verify the weight of Authorized Material it receives from TECRO or its designated representative(s).
- C. Authorized Material delivered hereunder may be measured by AIT's designated representative, DOE, upon receipt at SRS unless DOE determines, and so notifies TECRO or its designated representative(s), that it is in the best interest of DOE to adopt other available evaluation techniques. Measurements may include, but shall not be limited to, determinations as to weight, size, chemical composition and isotopic composition, as appropriate. Measurements of composition shall be performed by the methods of Non Destructive Analysis (NDA) using the existing (or modified) Under Water Neutron Coincidence Counter (UWNCC).

## ARTICLE XVIII - MODIFICATION AUTHORITY

- A. The Agreement is not subject to modification except by written agreement signed by AIT and TECRO. Any such written modification shall be explicitly identified as a modification to this Agreement.
- B. Notwithstanding any other provision of this Agreement, AIT's designated representative DOE's duly authorized Designated Officer shall be the only individual authorized to accept Authorized Material not conforming with the Appendix A's or the requirements of Appendix B.

#### ARTICLE XIX - COMMUNICATIONS

Communications pursuant to this Agreement from either party or its designated representative(s) to the other shall be in writing and shall be sent to the following addresses, as appropriate:

To AIT: Deputy Managing Director

American Institute in Taiwan 1700 N. Moore Street, Suite 1700

Arlington, VA 22209

Telephone No.: (703) 525-8474 Facsimile Number: (703) 841-1385

To AIT's Designated

Officer, DOE:

Department of Energy

Savannah River Operations Office Contracts Management Division

ATTN: Carol R. Elliot

P.O. Box A Aiken, SC 29802

Telephone No.: (803) 725-2191 Facsimile Number: (803) 725-8573 Email: carol.elliott@srs.gov

For Technical Information Communications, send a copy of all written communications to AIT's designated representative, DOE, at the following address:

Department of Energy

Savannah River Operations Office

Director of Reactors and Spent Fuel Division

ATTN: Charles Messick

P.O. Box A Aiken, SC 29802

Telephone Number: (803) 557-3237 Facsimile Number: (803) 557-3763 Email: Charles.Messick@SRS.GOV

TO TECRO:

Dr. Taun-Ran Yeh

Institute of Nuclear Energy Research

P.O. Box 3-21

Lungtan, Taiwan 32500

866-3-471-1443

Email: ytr3@ms10.hinet.net

# ARTICLE XX - RIGHT TO USE AND PUBLISH INFORMATION

AIT's designated representative, DOE, shall have the right to publish and use information or data developed by AIT, DOE or its contractors as a result of any service, analysis, or test performed under this Agreement for TECRO, or its designated representative(s), subject to statutory or regulatory restrictions. However, unless required by law or regulation, neither AIT nor its designated representative. DOE, shall publicly disclose information properly designated by TECRO or its designated representative(s) as proprietary.

### ARTICLE XXI - ASSIGNMENT

Neither this Agreement, nor any interest herein or claim hereunder, shall be assigned or transferred by TECRO, without the express written approval of AIT.

#### ARTICLE XXII - PERMITS

TECRO shall procure or require its designated representative(s) to procure all necessary permits or licenses (including any Special Nuclear Material licenses) applicable to shipment(s) of Authorized Material hereunder.

#### ARTICLE XXIII - JOINT SHIPMENTS

- A. TECRO, or its designated representative(s), may conduct Joint Shipments with other DOE customers desiring to ship Authorized Material to SRS to arrive and be offloaded at the Charleston Naval Weapons Station at the same agreed upon date.
- B. Nothing herein shall preclude TECRO, or its designated representative(s), from combining Shipment Batches of Authorized Material with similar spent fuel, fresh fuel or target material meeting the acceptance criteria of the ROD held by other Foreign Research Reactor Operators, subject to AIT's designated representative, DOE's, written consent. Authorized Material combined within a Transport Package must be reflected accurately in Appendix A's submitted to DOE.

#### ARTICLE XXIV - APPLICABLE LAW

This Agreement and the performance thereunder shall be governed by applicable United States laws and regulations and shall be interpreted in accordance with applicable Federal law.

#### ARTICLE XXV - ENTIRE AGREEMENT

This Agreement contains the entire agreement between the parties with respect to the acceptance by AIT and its designated representative. DOE, of irradiated spent nuclear fuel elements, fresh nuclear fuel elements, and target materials that meet the requirements set forth in the EIS and

ROD from THOR, THAR, or ZPRL and supersedes all prior understandings, negotiations, oral agreements or written agreements between the parties with respect to this issue.

#### ARTICLE XXVI - AVAILABILITY OF FUNDS

- A. AIT's, and its designated representative DOE's, obligations arising as a result of this Agreement are contingent upon the availability of appropriated funds.
- B. TECRO's obligations arising as a result of this Agreement are subject to the availability of funds to TECRO, and its designated representative(s); provided that prior to initiating transport of the Shipment Batch from a Reactor, TECRO, and its designated representative(s) shall have funds available to fulfill its obligation under this Agreement for transportation of such Shipment Batch to SRS and payment to AIT under Article XIII. Payment for AIT Services, herein.

#### ARTICLE XXVII - DISPUTE RESOLUTION

- A. AIT and TECRO shall use their best efforts to resolve any dispute arising out of the formation, validity or performance of this Agreement as well as the rights of the parties relating thereto within thirty (30) days after receipt of notice of a dispute unless such time period is extended by mutual agreement of the parties. Either party shall notify the other of a "Dispute Requiring Resolution" using all of the addresses set forth in Article XIX, Communications, in writing within ten (10) days following its determination that a dispute shall exist, setting forth in the written notice the relief that is requested and the basis for such relief. The other party will respond within fifteen (15) days with a written statement and explanation of its position. If the dispute is not resolved within twenty-five (25) days after the initial notification, either party may seek agreement to enter into mediation or may elect to pursue remedy in a Federal court of the United States with jurisdiction over the parties and the subject matter of the dispute.
- B. If the parties agree to enter into mediation to resolve any dispute that may arise under this Agreement, mediation will be held in Aiken, South Carolina by a mediator agreeable to both parties. The mediator will not render a decision, but will assist the parties in reaching a mutually satisfactory agreement. All mediations are confidential and shall be treated as compromise and settlement negotiations. Each party agrees to bear its own costs associated with the mediation. The parties will divide the cost of the mediator. If an agreement between the parties cannot be reached through mediation either party may pursue a legal remedy in a U.S. Federal court of competent jurisdiction.
- C. If during the Agreement period DOE is authorized by the United States Department of Justice to utilize binding arbitration for the resolution of disputes, either party may seek to re-negotiate this clause to take advantage of arbitration as an alternative means to resolving disputes that might arise under this Agreement and which cannot be resolved through mediation, as set forth above. The Parties recognize that any modification to this contract to incorporate arbitration proceedings for dispute resolution shall be in accordance with DOE's guidance as approved by

# The U.S. Department of Justice.

IN WITNESS WHEREOF, the parties hereto have executed this Agreement in several counterparts on the day and year first above written.

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Barbar J. Jehnzi

TITLE:

Deputy Managing Diretor

DATE:

12/28/98

TAIPEI ECONOMIC AND CULTURAL REPRESENTATIVE OFFICE IN THE

**UNITED STATES** 

BY:

TITLE: Departy Representative

DATE:  $\frac{2}{2}$ 

2/25/99