# MODIFICATION NUMBER 1

# TO THE AGREEMENT BETWEEN THE AMERICAN INSTITUTE IN TAIWAN

# AND

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

# FOR THE SHIPMENT OF SPENT NUCLEAR FUEL

## U.S. DEPARTMENT OF ENERGY SAVANNAH RIVER OPERATIONS OFFICE

THIS MODIFICATION, entered into this  $\int_{-\infty}^{\infty} day$  of  $\int_{-\infty}^{\infty} J_{\alpha} \int_{-\infty}^{\infty} 200 \frac{9}{2}$ , by and between the American Institute In Taiwan (hereinafter referred to as "AIT") and the Taipei Economic and Cultural Representative Office in the United States (TECRO) (hereinafter referred to as "TECRO").

### WITNESSETH THAT:

WHEREAS, the parties hereto entered into the terms and conditions applicable to the receipt of reactor material elements which have been discharged from reactor(s) fueled with material produced or enriched by the United States; 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, July 10, 2000, November 22, 2004, August 13, 2008, and January 13, 2009 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;

NOW THEREFORE, the contract is hereby modified in the following particulars:

 The fourth paragraph under WITNESSETH THAT is revised from the original contract as follows:

### FROM:

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

#### TO:

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, July 10, 2000, November 22, 2004, August 13, 2008, and January 13, 2009 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

(2) Article I, Definitions, paragraph B is revised as follows:

FROM:

B. "<u>Appendix A</u>": 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.

TO:

B. "<u>Appendix A</u>": 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 the Savannah River Site (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. The current revision is Revision 9, July 2007.

(3) Article I, Definitions, paragraph C is revised as follows:

FROM:

C. <u>"Appendix B"</u>: A document, attached to this Agreement, describing transportation package acceptance criteria for a Transport Package, as defined herein.

TO:

C. <u>"Appendix B"</u>: A document, attached to this Agreement, describing transportation package acceptance criteria for a Transport Package, as defined herein. The current revision is Revision 10, July 2007.

(4) Article I, Definitions, add a new paragraph E and renumber subsequent paragraphs:

E. <u>"Authorization to Ship"</u>: A document issued by AIT's designated representative, DOE, Technical Point of Contact, listed in Article XIX, <u>Communications</u>, to the Customer specifying that all prerequisites for receipt of the Authorized Material has been met and the Customer is authorized to commence a shipment of the Authorized Material in accordance with the provisions of this Agreement.

(5) Article I, Definitions, add a new paragraph H and renumber subsequent paragraphs:

H. <u>"Crop or Cropping"</u>: The removal of aluminum material by sawing or other mechanical means from the top and/or bottom of nuclear fuel assemblies without disturbing the fuel meat, fuel meat cladding, or the assembly's core configuration.

(6) Article I, Definitions, paragraph J is revised as follows:

FROM:

H. <u>"Degraded Fuel"</u>: Fuel which does not meet the criteria as specified in Appendix B and therefore requires Canning.

TO:

J. <u>"Degraded Fuel"</u>: Spent nuclear fuel with cladding breaches which result from corrosion, pitting, nodules, mechanical alterations or other mechanisms which cause the fuel meat to be exposed to its surroundings. Special treatment for handling, transportation or storage may be required depending on cask certificate requirements. Fuel with cladding defects which do not penetrate to the fuel meat are *not* considered "Failed Fuel" or "Degraded Fuel".

(7) Article I, Definitions, paragraph O is revised as follows:

FROM:

M. <u>"Failed Fuel"</u>: Fuel which does not meet the criteria as specified in Appendix B and therefore requires Canning.

TO:

O. "Failed Fuel": Spent nuclear fuel that has either been removed from a reactor due to operational concerns; has some physical damage such as warpage, deformations, nodules, corrosion, or pitting that exposes the fuel meat; exceeds radioactivity levels; or has any other condition identified by the Customer which may require special treatment for handling, storage or transportation. "Failed Fuel" is a generic term used to represent any spent fuel which is suspected of having a condition which may require special treatment to meet the requirements for handling, storage and/or transportation. Special treatment may include, but is not limited to configuration changes, canning, change of cask type or change in baskets, etc. Any special treatment such as canning shall be consistent with the cask, transport certificate, and/or storage requirements. Degraded Fuel and Materially Damaged Fuel are subsets of the generic "Failed Fuel", but are more descriptive of the actual fuel condition. Acceptance of Failed Fuel discharged from the reactor after May 12, 2006 or shipped to SRS after May 12, 2009, requires specific approval by DOE. Approval will be granted only if the Failed Fuel can be stored safely for the period of time that interim storage is required prior to ultimate disposition. Fuel identified for the THOR and ZPRL reactors for the shipment to be conducted in Calendar Year 2009 are acceptable for return.

(8) Article I, <u>Definitions</u>, paragraph S is revised as follows:

FROM:

Q. <u>"Materially Damaged Fuel"</u>: Fuel which does not meet the criteria as specified in Appendix B and therefore requires Canning.

TO:

S. <u>"Materially Damaged Fuel"</u>: Spent nuclear fuel whose physical condition is warped, deformed, not structurally sound, or whose arrangement or physical condition prohibits or restricts normal handling operations. Materially Damaged Fuel does not cause fuel meat to be exposed. This term is used to describe any spent fuel where the physical condition requires special treatment for handling, transportation, or storage purposes only.

(9) Article II, SCOPE, is revised as follows:

FROM:

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.

TO:

This Agreement provides the terms and conditions applicable to shipments to DOE of Authorized Material. Shipments covered by this Agreement may include Degraded Fuel, Failed Fuel, or otherwise Materially Damaged Fuel that is Authorized Material if it is shipped in accordance with the requirements of Appendix B.

## (10) Article III, <u>DELIVERY OF AUTHORIZED MATERIAL BY TECRO OR ITS</u> <u>DESIGNATED REPRESENTATIVE(S)</u>, paragraph A is revised as follows:

#### FROM:

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 AIT's designated representative, DOE.

TO:

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, import customs clearance duties and taxes, and final land transport in

the United States. Excluded under this term are costs for ocean-transport if included in a Joint Shipment with Indonesia in the Calendar Year 2009; handling, unloading, and loading at the Charleston Naval Weapons Station; and unloading at SRS which will be borne by DOE.

## (11) Article V, <u>OPERATIONAL ASPECTS OF SHIPMENTS</u>, paragraph E is revised as follows:

### FROM:

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.

TO:

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. For a Joint Shipment conducted in Calendar Year 2009 with the research reactor in Indonesia. AIT shall require its designated representative, DOE, to manage the ocean-going vessel without cost to TECRO.

## (12) Article VIII, <u>TITLE</u>, is revised as follows:

#### FROM:

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.

TO:

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. For the Joint Shipment conducted with Indonesia in Calendar Year 2009, title to the Authorized Material shall vest in AIT's designated representative, DOE, upon placement of the Authorized Material on the DOE controlled ocean-going vessel at the port in Taiwan. However, TECRO shall require its representative to continue to provide appropriate maritime security while the ocean-going vessel is within Taiwan's territorial waters and farther if a pre-shipment security analysis require an increased security posture that shall be agreed upon by AIT and its designated representative, DOE and TECRO and its designated representative.

## (13) Article XIII, PAYMENT FOR AIT SERVICES, paragraph A is revised as follows:

#### FROM:

In addition to any costs assessed against TECRO and its designated Α. representative(s) under Article XI.B herein, TECRO shall pay to AIT, in accordance with Article XV, Payments by TECRO, 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.

TO:

In addition to any costs assessed against TECRO and its designated Α. representative(s) under Article XI.B herein, TECRO shall pay to AIT, in accordance with Article XV, Payments by TECRO, 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. AIT's representative, 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. However, AIT's designated representative, DOE will waive the DOE management fee for all fresh (never irradiated to any amount) HEU fuel contained in the shipment.

(14) Article XV, PAYMENTS BY TECRO, paragraph C is revised as follows:

FROM:

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 Name of TECRO representative: Dr. Thomas T. Tseng

### TO:

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 Name of TECRO representative: June-Yuan Huang

## (15) Article XVI, TERM OF AGREEMENT, is revised as follows:

### FROM:

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; <u>provided</u>, <u>however</u>, that all Authorized Material must be discharged from THOR prior to execution of this agreement or discharged from ZPRL prior to January 1, 2006.

TO:

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 December 31, 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.

### (16) Update Article XIX, COMMUNICATIONS, to read as follows:

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: 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: Contracts Management Division ATTN: Angela S. Morton

United States Department of Energy

Savannah River Operations Office P.O. Box A Aiken, SC 29802 Voice number: (803) 952-9236 Facsimile Number: (803) 952-9452 E-mail: angela.morton@srs.gov

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

Program Manager United States Department of Energy National Nuclear Security Administration Foreign Research Reactor Spent Nuclear Fuel Acceptance Program Savannah River Operations Office P.O. Box A Aiken, SC 29802 Facsimile Number: (803) 952-6115

Technical Point of Contact: Chuck Messick Voice Number: (803) 952-5873 Email: <u>charles.messick@srs.gov</u>

TO TECRO:

June-Yuan Huang Taiwan AEC Representative in Washington, DC Science and Technology Division Taipei Economic and Cultural Representative Office (TECRO) 4201 Wisconsin Ave. NW Washington, DC 20016 Phone: 202-895-1932 Facsimile: 202-895-1939 Cell: 240-393-9320 e-mail: juneyuan.huang@yahoo.com 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

All other provisions of the contract, and any previous modifications, remain unchanged as of the date written above.

IN WITNESS WHEREOF, this Modification is executed on the day and year first above written.

American Institute in Taiwan

Taipei Economic and Cultural Representative Office in the United States

BY: Dev TITLE: N ying Director DATE: 5 09

BY: TITLE: DATE:

# MODIFICATION NUMBER 1

# TO THE AGREEMENT BETWEEN THE

# TAIPEI ECONOMIC AND CULTURAL REPRESENTATIVE OFFICE IN THE UNITED STATES

## AND

# THE AMERICAN INSTITUTE IN TAIWAN

# FOR THE SHIPMENT OF SPENT NUCLEAR FUEL

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## U.S. DEPARTMENT OF ENERGY SAVANNAH RIVER OPERATIONS OFFICE

THIS MODIFICATION, entered into this  $\frac{g^{th}}{Jaly}$  day of Jaly, 2009, by and between the Taipei Economic and Cultural Representative Office in the United States (TECRO) (hereinafter referred to as "TECRO") and the American Institute In Taiwan (hereinafter referred to as "AIT").

### WITNESSETH THAT:

WHEREAS, the parties hereto entered into the terms and conditions applicable to the receipt of reactor material elements which have been discharged from reactor(s) fueled with material produced or enriched by the United States; 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, July 10, 2000, November 22, 2004, August 13, 2008, and January 13, 2009 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;

NOW THEREFORE, the contract is hereby modified in the following particulars:

 The fourth paragraph under WITNESSETH THAT is revised from the original contract as follows:

FROM:

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

TO:

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,

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1996, and revised on July 22, 1996, July 10, 2000, November 22, 2004, August 13, 2008, and January 13, 2009 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

(2) Article I, Definitions, paragraph B is revised as follows:

FROM:

B. "<u>Appendix A</u>": 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.

TO:

B. "<u>Appendix A</u>": 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 the Savannah River Site (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. The current revision is Revision 9, July 2007.

(3) Article I, <u>Definitions</u>, paragraph C is revised as follows:

FROM:

C. <u>"Appendix B"</u>: A document, attached to this Agreement, describing transportation package acceptance criteria for a Transport Package, as defined herein.

TO:

C. <u>"Appendix B"</u>: A document, attached to this Agreement, describing transportation package acceptance criteria for a Transport Package, as defined herein. The current revision is Revision 10, July 2007.

(4) Article I, Definitions, add a new paragraph E and renumber subsequent paragraphs:

E. <u>"Authorization to Ship"</u>: A document issued by AIT's designated representative, DOE, Technical Point of Contact, listed in Article XIX, <u>Communications</u>, to the Customer specifying that all prerequisites for receipt of the Authorized Material has been met and the Customer is authorized to commence a shipment of the Authorized Material in accordance with the provisions of this Agreement.

(5) Article I, <u>Definitions</u>, add a new paragraph H and renumber subsequent paragraphs:

H. <u>"Crop or Cropping"</u>: The removal of aluminum material by sawing or other mechanical means from the top and/or bottom of nuclear fuel assemblies without disturbing the fuel meat, fuel meat cladding, or the assembly's core configuration.

(6) Article I, Definitions, paragraph J is revised as follows:

FROM:

H. <u>"Degraded Fuel"</u>: Fuel which does not meet the criteria as specified in Appendix B and therefore requires Canning.

TO:

J. <u>"Degraded Fuel"</u>: Spent nuclear fuel with cladding breaches which result from corrosion, pitting, nodules, mechanical alterations or other mechanisms which cause the fuel meat to be exposed to its surroundings. Special treatment for handling, transportation or storage may be required depending on cask certificate requirements. Fuel with cladding defects which do not penetrate to the fuel meat are *not* considered "Failed Fuel" or "Degraded Fuel".

(7) Article I, Definitions, paragraph O is revised as follows:

FROM:

M. <u>"Failed Fuel"</u>: Fuel which does not meet the criteria as specified in Appendix B and therefore requires Canning.

TO:

O. "Failed Fuel": Spent nuclear fuel that has either been removed from a reactor due to operational concerns; has some physical damage such as warpage, deformations, nodules, corrosion, or pitting that exposes the fuel meat; exceeds radioactivity levels; or has any other condition identified by the Customer which may require special treatment for handling, storage or transportation. "Failed Fuel" is a generic term used to represent any spent fuel which is suspected of having a condition which may require special treatment to meet the requirements for handling, storage and/or transportation. Special treatment may include, but is not limited to configuration changes, canning, change of cask type or change in baskets, etc. Any special treatment such as canning shall be consistent with the cask, transport certificate, and/or storage requirements. Degraded Fuel and Materially Damaged Fuel are subsets of the generic "Failed Fuel", but are more descriptive of the actual fuel condition. Acceptance of Failed Fuel discharged from the reactor after May 12, 2006 or shipped to SRS after May 12, 2009, requires specific approval by DOE. Approval will be granted only if the Failed Fuel can be stored safely for the period of time that interim storage is required prior to ultimate disposition. Fuel identified for the THOR and ZPRL reactors for the shipment to be conducted in Calendar Year 2009 are acceptable for return.

(8) Article I, <u>Definitions</u>, paragraph S is revised as follows:

FROM:

Q. <u>"Materially Damaged Fuel"</u>: Fuel which does not meet the criteria as specified in Appendix B and therefore requires Canning.

TO:

S. <u>"Materially Damaged Fuel"</u>: Spent nuclear fuel whose physical condition is warped, deformed, not structurally sound, or whose arrangement or physical condition prohibits or restricts normal handling operations. Materially Damaged Fuel does not cause fuel meat to be exposed. This term is used to describe any spent fuel where the physical condition requires special treatment for handling, transportation, or storage purposes only.

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(9) Article II, <u>SCOPE</u>, is revised as follows:

FROM:

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.

TO:

This Agreement provides the terms and conditions applicable to shipments to DOE of Authorized Material. Shipments covered by this Agreement may include Degraded Fuel, Failed Fuel, or otherwise Materially Damaged Fuel that is Authorized Material if it is shipped in accordance with the requirements of Appendix B.

## (10) Article III, <u>DELIVERY OF AUTHORIZED MATERIAL BY TECRO OR ITS</u> <u>DESIGNATED REPRESENTATIVE(S)</u>, paragraph A is revised as follows:

FROM:

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 AIT's designated representative, DOE.

TO:

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,

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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, import customs clearance duties and taxes, and final land transport in the United States. Excluded under this term are costs for ocean-transport if included in a Joint Shipment with Indonesia in the Calendar Year 2009; handling, unloading, and loading at the Charleston Naval Weapons Station; and unloading at SRS which will be borne by DOE.

## (11) Article V, <u>OPERATIONAL ASPECTS OF SHIPMENTS</u>, paragraph E is revised as follows:

FROM:

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.

TO:

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. For a Joint Shipment conducted in Calendar Year 2009 with the research reactor in Indonesia AIT shall require its designated representative, DOE, to manage the ocean-going vessel without cost to TECRO.

(12) Article VIII, <u>TITLE</u>, is revised as follows:

FROM:

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.

TO:

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. For the Joint Shipment conducted with Indonesia in Calendar Year 2009, title to the Authorized Material shall vest in AIT's designated representative, DOE, upon placement of the Authorized Material on the DOE controlled ocean-going vessel at the port in Taiwan. However, TECRO shall require its representative to continue to provide appropriate maritime security while the ocean-going vessel is within Taiwan's territorial waters and farther if a pre-shipment security analysis require an increased security posture that shall be agreed upon by AIT and its designated representative, DOE and TECRO and its designated representative.

### (13) Article XIII, PAYMENT FOR AIT SERVICES, paragraph A is revised as follows:

FROM:

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, Payments by TECRO, 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, <u>Operational Aspects of Shipments</u>, herein, but no earlier than ninety (90) days prior to commencement of shipping.

TO:

In addition to any costs assessed against TECRO and its designated Α. representative(s) under Article XI.B herein. TECRO shall pay to AIT, in accordance with Article XV, Payments by TECRO, 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. AIT's representative, 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. However, AIT's designated representative. DOE will waive the DOE management fee for all fresh (never irradiated to any amount) HEU fuel contained in the shipment.

(14) Article XV, PAYMENTS BY TECRO, paragraph C is revised as follows:

FROM:

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 Name of TECRO representative: Dr. Thomas T. Tseng

TO:

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

Name of TECRO representative: June-Yuan Huang

## (15) Article XVI, <u>TERM OF AGREEMENT</u>, is revised as follows:

### FROM:

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; <u>provided</u>, <u>however</u>, that all Authorized Material must be discharged from THOR prior to execution of this agreement or discharged from ZPRL prior to January 1, 2006.

TO:

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 December 31, 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.

### (16) Update Article XIX, <u>COMMUNICATIONS</u>, to read as follows:

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:

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:

Contracts Management Division

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ATTN: Angela S. Morton United States Department of Energy Savannah River Operations Office P.O. Box A Aiken, SC 29802 Voice number: (803) 952-9236 Facsimile Number: (803) 952-9452 E-mail: a.morton@srs.gov

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

Program Manager United States Department of Energy National Nuclear Security Administration Foreign Research Reactor Spent Nuclear Fuel Acceptance Program Savannah River Operations Office P.O. Box A Aiken, SC 29802 Facsimile Number: (803) 952-6115

Technical Point of Contact: Chuck Messick Voice Number: (803) 952-5873 Email: <u>charles.messick@srs.gov</u>

TO TECRO:

June-Yuan Huang Taiwan AEC Representative in Washington, DC Science and Technology Division Taipei Economic and Cultural Representative Office (TECRO) 4201 Wisconsin Ave. NW Washington, DC 20016 Phone: 202-895-1932 Facsimile: 202-895-1939 Cell: 240-393-9320 e-mail: juneyuan.huang@yahoo.com

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

All other provisions of the contract, and any previous modifications, remain unchanged as of the date written above.

IN WITNESS WHEREOF, this Modification is executed on the day and year first above written.

Taipei Economic and Cultural Representative Office in the United States

100 x 100 x

BY: TITLE: L DATE:

July 8, 2009 DATE: 5/19/09

American Institute in Taiwan